UNITED NATIONS **EP**

UN environment programme

Distr. LIMITED

UNEP(DEPI)/CAR IG.47/INF.4

20 September 2023

Original: ENGLISH

Sixth Meeting of the Conference of Parties (COP) to the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS Protocol) in the Wider Caribbean Region

Oranjestad, Aruba, 04 October 2023

Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach (GEF LAC Cities)

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Reduce marine plastics and plastic pollution in Latin American and the Caribbean cities through a circular economy approach

April 13, 2022

GEF-7 REQUEST FOR CEO ENDORSEMENT / APPROVAL

PROJECT TYPE: FULL SIZE PROJECT

TYPE OF TRUST FUND: GEF TRUST FUND

PART I: PROJECT INFORMATION

Project Title: Reduce marine plastics and plastic pollution in Latin American and the Caribbean cities through a circular economy approach			
Country(ies):	Colombia, Jamaica, Panamá	GEF Project ID:	10547
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01689
Project Executing Entity(s):	Cartagena Convention Secretariat	Submission Date:	3 Dec 2021
GEF Focal Area (s):	International Waters, Chemicals and Waste	Expected Implementation Start	1 July 2022
		Expected Completion Date	30 June 2026
Name of Parent Program		Parent Program ID:	/

A. FOCAL/NON-FOCAL AREA ELEMENTS

TABLE A. FOCAL/NON-FOCAL AREA ELEMENTS

Programming Directions	Focal Area Outcomes	Trust Fund	(in $)	
			GEF Project Financing	Confirmed Co-financing
IW-1-3	Strengthen blue economy opportunities by addressing pollution reduction in marine environments	GEFTF	3,500,000	17,703,620
CW-1-1	Strengthen the sound management of industrial chemicals and their waste through better control, and reduction and/or elimination	GEFTF	3,500,000	17,703,620
	Total project costs		7,000,000	35,407,240

B. PROJECT DESCRIPTION SUMMARY

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ( )

TABLE B. PROJECT DESCRIPTION SUMMARY

Project Objective: Reducing marine plastics and plastic pollution in the Latin America and the Caribbean region by facilitating circular actions at the city level to accelerate the transition to a circular economy, in line with government and business commitments on addressing marine plastics and plastic pollution.						
Project Components	**Financing Type**	**Project Outcomes**	**Project Outputs**	**Trust Fund**	**(in $)**	
					GEF Project Financing	**Co-financing**

Component 1: City Led Promotion of Circular Economy Policies to Reduce Marine Plastics and Plastic Pollution in Targeted Cities	TA	Outcome 1 Circular economy policies adopted or improved by city-level governments to reduce marine plastics and plastic pollution in targeted cities Please refer to Annex A for all the indicators. Only key indicators were added in table B. Indicators: -Number of cities with new policies/strategies adopted/implemented or existing policies improved (6)_ -Number of new policies adopted and existing policies improved per city (1 new policy adopted and 2 existing policies improved per city)	Output 1.1 Policy action plans developed and submitted for Approval by municipalities to promote circular economy approaches for plastics indicator: Number of city-level policy action plans developed (1 per city) Output 1.2 Targeted policy interventions carried out to improve circularity Indicators: Number of selected policies adopted (1 per city) Number of existing policies improved (2 per city) Output 1.3 Implementation plans for financial instruments developed to facilitate responsible plastics management Indicator: Number of implementation plans for financial instruments developed, improved or prepared for consideration /submission (1 per country)	GEFTF	1,920,000	5,486,533
Component 2: Private Sector Led Promotion of Circular Economy Actions to Reduce Marine Plastics and Plastic Pollution in Targeted Cities	TA	Outcome 2 Circular economy innovations and practices adopted by the private sector to reduce marine plastics and plastic pollution in targeted cities Indicators: -Number of businesses engaging in the project and/or adopting best practices or sustainable business solutions (120) -Number of business solution pilots conducted per city (2)	Output 2.1 Approaches developed and tested to facilitate more circular design, production, and consumption of plastics Indicator: Number of solutions on sustainable production and consumption pilot tested (1 per city) Output 2.2 Approaches developed and tested to improve collection and recycling of plastic waste Indicator: Number of solutions on collection, recycling and disposal of plastic waste pilot tested (1 per city)	GEFTF	2,355,000	15,779,017

			Output 2.3 Industry roundtable on plastic circular economy established and roundtable meetings organized with collaboration between business stakeholders facilitated Indicator: Number of roundtable meetings organized (12)			
Component 3. Inter-City Network on Marine Plastics and Plastic Circular Economy	TA	Outcome 3 Increased cooperation among LAC cities through the LAC Inter-city Network on marine plastics and plastic circular economy and enhanced implementation of circular economy approaches in the region Indicators: -Number of cities joining the inter-city network (15) - Number of businesses that adopted best practices or sustainable business solution (120) -Number of global and regional initiatives collaborating with the network (8)	Output 3.1 Inter-city network established and operationalized Indicators: -Number of the network meetings organized (2) -Percentage of women actively participating in the inter-city network planning board/council (40%) Output 3.2 Inter-city network expanded with more participating cities Indicator: -Number of additional cities supported with the development of policy and action plan (3)	GEFTF	814,584	3,316,056
Component 4: Capacity Development and Knowledge Management	TA	Outcome 4 Improved regional and global awareness , knowledge and capacity applied, to reduce marine plastics and plastic pollution Indicators: -Number of stakeholders with awareness raised and knowledge on circular economy for plastics increased trained (1000) -Number of knowledge assets disseminated and applied in the region (5)	Output 4.1 Information, Education and Communication (IEC) strategy for the project developed and implemented using IW: LEARN platform[1], GGKP and GPML platforms Indicators: -Number of project website established (1) -Number of selected case studies on circular policies and sustainable business practices (12) -Number of experience or best practices notes developed (3) -Number of key IW: Learn events participated (3) -Number of videos for communication (2)	GEFTF	1,269,583	6,648,996

[1] IW:LEARN related activities include the establishment of a website compliant with IW:LEARN, at least 3 experience or best practices notes shared on IW:LEARN and the participation of the project team in IWLEARN flagship events.

			Gender related indicators: -Number of surveys conducted to assess role of women in plastic value chain (1) -% of beneficiaries disaggregated by gender (40%) Output 4.2 Increased awareness of the circular economy approaches from capacity building activities Indicator: -Number of people involved in the training and communication activities with gender disaggregated target (1000) Output 4.3 Long-term monitoring program operationalized by cities on the implementation of circular economy approaches and associated reduction in plastic pollution Indicator: -Number of methodology and calculation tool to organize the data collection and assessment of chemicals for plastics (1)			
Component 5: Monitoring and Evaluation	TA	Project partners adopt and act upon project results and lessons Indicator: - Evidence of continuous improvement and changes implemented by Project SC	Output 5.1 Monitoring and evaluation of project outcomes and outputs to include quarterly financial reporting Indicator: - Number of quarterly and annual progress reports & annual workplan and budget completed Output 5.2 Mid-term and terminal evaluations results shared with stakeholders Indicator: -Number of independent reviews shared	GEFTF	307,500	2,310,521

Subtotal		6,666,667	33,541,123
Project Management Cost (PMC)		333,333	1,866,117
Total Project Cost		7,000,000	35,407,240

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

TABLE C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Investment Mobilized	Amount ($)
Donor Agency	UNEP	In-kind	Recurrent expenditures	3,163,860
	UNEP	Grant	Investment mobilized	8,546,201
Recipient Country Government	Mayor of Cartagena	In-kind	Recurrent expenditures	1,643,840
	Mayor of Barranquilla	In-kind	Recurrent expenditures	262,734
	Ministry of Environment and Sustainable Development Colombia	In-kind	Recurrent expenditures	256,313
	EPA Cartagena (urban environmental authority)	In-kind	Recurrent expenditures	1,151,405
	SENA Regional Bolivar	In-kind	Recurrent expenditures	12,900
	Waste Agency of Panama (Autoridad de Aseo)	In-kind	Recurrent expenditures	4,000,000
	Ministry of Environment Panama	In-kind	Recurrent expenditure	175,200
		Public Investment	Investment Mobilized	430,890
	Ministry of Housing, Urban Renewal, Environment and Climate Change Jamaica	In-kind	Recurrent expenditures	167,652
	National Environment and Planning Agency Jamaica	Public Investment	Investment mobilised	368,210
		In-kind	Recurrent expenditures	56,644
Private Sector	XICLO	In-kind	Recurrent expenditures	1,400,000
		Grant	Investment mobilized	2,100,000
	Trashforma	In-kind	Recurrent expenditures	400,000
		Grant	Investment mobilized	810,000
	Bliss Earth Recycling Panamá	In-kind	Recurrent expenditures	570,000
		Grant	Investment mobilized	500,000
	Algramo	In-kind	Recurrent expenditures	640,730
		Grant	Investment mobilized	2,475,000
	Pepsi Cola	Grant	Investment mobilized	1,000
	LeafSync	In-kind	Recurrent expenditures	268,000
		Grant	Investment mobilized	100,000
Other	Alliance to End Plastic Waste	Other	Investment mobilized	820,000
	GPAP	Other	Investment mobilized	835,000
		In-kind	Recurrent expenditures	83,500
	CEMPRE	In-kind	Recurrent expenditures	34,014
		Other	Investment mobilized	114,703
	EcoComputo	In-kind	Recurrent expenditures	90,000
		Other	Investment mobilized	30,000
	INVEMAR	In-kind	Recurrent expenditures	605,603
		Other	Investment mobilized	200,000
	Fundacion de Accion Social por Panama	Other	Investment mobilized	105,368
	Botellas de amor	In-kind	Recurrent expenditures	138,500
		Other	Investment mobilized	138,500
	Recycling Partners Jamaica	In-kind	Recurrent expenditures	560,000
		Other	Investment mobilized	1,310,000
	Ancon	Other	Investment mobilised	167,271
		In-kind	Recurrent expenditures	210,972
	BRS	In-kind	Recurrent expenditures	463,230
			Total Co-financing	35,407,240

Describe how any "Investment Mobilized" was identified.

Ministry of Environment Panama will contribute through the implementation of activities of the national marine litter action plan such as pilot cross-sector dialogue; organizing roundtables among different stakeholder groups to discuss implementation, present success stories to replicate, scaling up opportunities, communication material, creating awareness campaigns; education & training targeting different stakeholder groups. Furthermore, contributing through the installation of a recycling unit in remote communities, enable adequate facilities for the reception of garbage at docks and landings; mainly associated with Activity 1.1.2, 1.2.1, 1.2.2, 1.3.1 and 1.3.2

Ecocomputo will improve material sorting, treatment, recovery and the environmental sound disposal of plastic in electronics. It will also establish conditions conducive to supporting collection and recycling in order to increase recovery rates of plastic in electronic equipment, specifically those containing POPs (HBCS, PBDE, SCCP) (including informatics, entertaining, office equipment, electronic cables, etc.); mainly associated with Activities 1.2.2 and 2.2.2.

GPAP will invest in the development and deployment of a modelling tool for plastic flow assessment and scenario building; the development and utilization of the UpLink platform to support, connect and upscale upstream innovations; the development of a Reuse portal and scaling reuse work; financing innovation work by the dissemination of GPAP and its partners' insights; and support for convening knowledge and capacity building across 6 cities and the wider network of Latin American cities; mainly associated with Activity 2.1.1, 2.1.2, 2.1.3, 2.3.1 and 4.1.3.

Fundacion de Accion Social por Panama will further implement its recovery programme of recyclable solid waste and invest in the transformation of thermoplastics waste (mainly PET, HDPE and PP); mainly associated with Activity 2.1.1, 2.1.2 and 2.1.3

Recycling partners of Jamaica will fund the mobilization infrastructure by parish and transportation and logistical requirements to support a deposit refund system for plastics (PET 1 and HDPE 2) in Jamaica. It will also fund the necessary capacity building and educational activities needed to support this system. They will also fund the development of marketing and public education efforts to spread awareness among general public and schools in Jamaica on the why, how, where and what to recycle; mainly associated with Activity 2.1.1, 2.1.2 and 2.1.3

XICLO will invest in the development and implementation of the 'Pilot Project in Bogota City', the development and implementation of a reusable solution system in all the restaurants of Grupo Takami, the expansion of XICLO system service to other food & drink service business in Bogota City, and the expansion of XICLO system services to other cities in Colombia, (including Cartagena and Barranquilla). Takami is a group of Colombian investors specialized in the restaurant business. They already have twelve brands and twenty-seven establishments in Bogota and expanding in the home delivery business.

INVEMAR will contribute through different work that is being developed on marine litter, plastics and microplastics, in coordination with environmental authorities, the Ministry of Environment and Sustainable Development and other sources of funding. This work includes monitoring of marine litter pollution; awareness raising; assessing the impact of macro and microplastics in mangroves, beaches and other coastal ecosystems; capacity building activities; and prevention and protection strategies for marine litter; mainly associated with Activity 4.3.1

Algramo will set up innovative refill solutions under component 2 that transform the consumer industry, reduce waste and benefit consumers in Colombian cities. It will also share key findings on supply chain optimization and consumer behaviour change so government and other key stakeholders possess key knowledge to help make refill systems successful and scalable across Latin America.

Botellas de amor will develop a recycling plant and set-up collection points in Panama; mainly associated with Activity 2.1.1, 2.1.2 and 2.1.3

Leafsinc will finance the opening of recycling centers; recycling projects in institutions companies and residentials; and the education in the area of recycling materials with the scope of reducing plastic waste though their initiatives in Panama; mainly associated with Activity 2.2.1 and 2.2.2

Pepsi will contribute to its beach clean-up and recycling initiative where employees of the organization volunteer the time and efforts to assist with these initiatives in Jamaica.

Bliss Earth Recycling will contribute to the development, implementation and creation of products from discarded plastics; mainly associated with Activity 2.2.1 and 2.2.2

CEMPRE will use its grant co-financing for technical, operational and formalization strengthening of the recyclers' organization; implementation of their DONDE RECICLO app; and awareness and education, with the message of separation at the source and dissemination of the DONDE RECICLO app; mainly associated with Activity 2.2.1, 2.2.2 and 4.2.1,

UNEP has mobilized investment through the Cartagena Convention Secretariat, the Resources and Markets Branch (Economy Division), the Marine and Freshwater Branch (Ecosystems Division), and through the Regional Office for Latin America and the Caribbean. This investment includes different projects (e.g., Prevention of Marine Litter in the Caribbean Sea project, NFL 2020 Plastic Hotspotting project, Dominican Republic under IKI tourism project and NFL/SIDA 2021 dumpsite project), capacity building, the implementation of Extended Producer Responsibility, an LCA study, the GPML platform, and a Plastics flow model focusing on the Wider Caribbean Sea region, among others; associated with most activities

Trashforma will continue their recycling services and routes with their existing clients and future ones; participate and sponsor cultural and educational events and initiatives promoting recycling and sustainable solutions to plastic; and develop a new project of making plastic wood and products; mainly associated with Activity 2.2.1 and 2.2.2

The Alliance to End Plastic Waste will invest in two projects. The GIRO Rethinking Recycling project, is implemented by Delterra in Olavarria, Argentina and includes the development of a materials recovery facility, increasing the efficiency of collection through community engagement and source segregation, and identification of economic solutions for recyclables. The project with Instituto Recicleiros in Brazil will include the development of community-based plastic waste aggregation, sorting, and recycling systems across 60 mid-sized cities in Brazil that will be supported by community education activities to promote participation and proper segregation of waste. Through the establishment of these effective waste management and recycling systems in the locations of operation, there is an emphasis on community engagement and capacity building to effect change in the recovery and recycling of plastic waste which can be replicated in the project cities. An amount of 820,000 USD of co-financing, representing the Alliance's knowledge production costs, is placed under component 4 (improved regional and global awareness, knowledge and capacity applied, to reduce

marine plastics and plastic pollution). The knowledge, best practices and collaborative experience from these projects will feed into the knowledge management and capacity development activities in Outcome 4.

National Environment and Planning Agency Jamaica – Plastic Waste Minimization Project, enhancing legislative framework in Jamaica to support the development and implementation of a national sustainable consumption and production programme to reduce marine litter from plastics generated land-based activities; mainly associated with Activity 1.2.1, 1.2.2, 2.1.1, 2.1.2 and 2.1.3

ANCON (National Association for the conservation of nature) – Participating in a project aiming in recycling and recovery materials, through funding plastic recovery activities, community education and contribution to a circular economy; mainly associated with Activity 2.1.1, 2.1.2 and 2.1.3

Table D: TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/ Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee (b)	Total (c)=a+b
UNEP	GEFTF	Colombia	International Waters	IW	1,000,000	95,000	1,095,000
UNEP	GEFTF	Panamá	International Waters	IW	1,000,000	95,000	1,095,000
UNEP	GEFTF	Jamaica	International Waters	IW	1,000,000	95,000	1,095,000
UNEP	GEFTF	Colombia	Chemicals and Waste	POPs	1,000,000	95,000	1,095,000
UNEP	GEFTF	Panamá	Chemicals and Waste	POPs	1,000,000	95,000	1,095,000
UNEP	GEFTF	Jamaica	Chemicals and Waste	POPs	1,000,000	95,000	1,095,000
UNEP	GEFTF	Regional	Chemicals and Waste	POPs	500,000	47,500	547,500
UNEP	GEFTF	Regional	International Waters	IW	500,000	47,500	547,500
				Total GEF Resources	**7,000,000**	**665,000**	**7,665,000**

D. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? (Select)

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF Trust Fund).

No

E. PROJECT'S TARGET CONTRIBUTIONS TO GEF 7 CORE INDICATORS

Update the relevant sub-indicator values for this project using the methodologies indicated in the Core Indicator Worksheet provided in Annex F and aggregating them in the table below. Progress in programming against these targets is updated at mid-term evaluation and at terminal evaluation. Achieved targets will be aggregated and reported any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCCF.

TABLE E. PROJECT TARGET CONTRIBUTIONS TO GEF 7 CORE INDICATORS

Project Core Indicators		Expected at CEO Endorsement
1	**Terrestrial protected areas** created or under improved management for conservation and sustainable use (Hectares)	
2	**Marine protected areas** created or under improved management for conservation and sustainable use (Hectares)	
3	Area of **land restored (**Hectares)	
4	Area of **landscapes under improved practices** (excluding protected areas) (Hectares)	
5	Area of **marine habitat under improved practices** (excluding protected areas) (Hectares) 5.3 Amount of marine litter avoided (tonnes)	5,065 tonnes
6	**Greenhouse Gas Emissions Mitigated** (metric tonnes of CO2e)	9,382 metric tonnes
7	**Number of shared water ecosystems** (fresh or marine) under new or improved cooperative management	2
8	Globally over-exploited **marine fisheries** moved to more sustainable levels (metric tonnes)	
9	**Reduction**, disposal/destruction, phase out, **elimination** and avoidance of **chemicals of global concern** and their waste in the environment and in processes, materials and products (metric tonnes of toxic chemicals reduced)	54.9 (14 tonnes of HBCD and 40,9 tonnes of PBDE)

10	Reduction, avoidance of emissions of **POPs to air** from point and non-point sources (grams of toxic equivalent gTEQ)	1.16 gTEQ
11	Number of **direct beneficiaries disaggregated by gender** as co-benefit of GEF investment	990,162 (w/ 559,306 (F) and 430,856 (M))

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided.

The project is expected to reduce marine plastics by 5,065 tonnes during the project lifetime. This will be achieved cumulatively through five major intervention pathways:

1- Avoidance of 144 tonnes of marine plastics as a result of reduction in unnecessary, avoidable, and problematic plastic products (including single-use plastics), through policies (such as reducing single-use plastic products) and business innovation (reuse and redesign to reduce single-use plastic products) targeting the top 10 products that will be identified through marine plastic sampling of the six cities. The project sets a target of 1,600 tonnes reduction of those products, of which 9% is assumed to end up as marine plastics.
2- Reduction of 1,627 tonnes (10% of baseline marine plastics over the last three years of the project) as a result of improved waste management policies and business action.
3- Avoidance of 94 tonnes of marine plastics through collection and treatment of 1,480 tonnes of plastic products through recycling pilots (780 tonnes of single-use plastic products and 700 tonnes of other plastic products containing POPs). It is assumed that 9% of these single-use plastic products and 3.4% other plastic products containing POPs would have ended up as marine litter eventually without project intervention.
4- 400 tonnes reduction in marine plastics through awareness raising events, training, and clean-up campaigns in the six cities.
5- 2,800 tonnes reduction in marine plastics as a result of the inter-city network and capacity building activities at the regional level. The actual reduction data will be collected through the monitoring scheme of the inter-city network.

The project is expected to achieve a reduction of 9,382 tonnes CO_2eq emission during the project lifetime. This will be achieved cumulatively through the following seven intervention pathways:

1- Avoidance of 4,464 tonnes CO_2eq of GHG emissions as a result of banning open burning of plastics across the six cities. 992 tonnes of avoided open burnt plastic is anticipated thanks to project intervention
2- Reduction of 2,100 tonnes CO_2eq of GHG emissions as a result of reducing single-use plastic products by 1,400 tonnes.
3- Reduction of 300 tonnes CO_2eq of GHG emissions as a result of introducing reuse policies and promoting reusable products and reuse business models through circular design, which will reduce consumption of single-use plastic products in six project cities by 200 tonnes.
4- Reduction of GHG emission by 300 tonnes CO_2eq of GHG emissions through re-introducing 200 tonnes of recycled content into new products through circular design by businesses and supporting policies (such as sustainable procurement) in six cities.
5- Reduction of 574 tonnes CO_2eq of GHG emissions through supporting EPR system in two cities of Jamaica
6- Avoidance of GHG emission by 780 tonnes CO_2eq of GHG emissions through replacing virgin plastics, and collecting/treating various types of plastic products to pilot in six cities, and aims to reach the yield of 520 tonnes of recycled plastics
7- Reduction of GHG emission by 864 tonnes CO_2eq of GHG emissions through avoidance of 192 tonnes of PVC cables and other plastic waste being open burnt through the same collection and recycling pilot.

The project is expected to reduce Persistent Organic Pollutants (POPs) by 54.9 tonnes (HBCD and PBDE). This will be achieved cumulatively through:

1- **Upstream interventions** through implementing upstream policies and circular design by the private sector, such as policy on eliminating Chemicals of Concern (CoCs) in plastic products such as furniture and building materials, and circular design by producers. The project is expected to reduce at least 200 tonnes of products containing HBCD and 1,000 tonnes products containing PBDE. This will result in a net reduction of 1.2 tonnes of HBCD and 30 tonnes of PBDE by applying an average concentration of relevant chemicals in such products.
2- **Downstream interventions** through collection, recycling, and disposal pilot in six cities. The project is expected to treat and dispose of various waste plastic products containing HBCD and PBDE, and the pilot will achieve a reduction of 12.8 tonnes of HBCD and 10.9 tonnes of PBDE.

The project is expected to avoid the release of 1.16 gTEQ unintentionally produced POPs, through:

1- Avoidance of 0.3 gram of uPOPs through reducing the open burning of plastics (including packaging, PVC cables and other plastic products), in places like backyards and dumpsites. The policy action to ban open burning of plastics, as well as the pilot project to collect and recycle plastics will both contribute to the reduction of open burning. Policy to ban open burning in six cities is expected to reduce the plastics of open burning by 991.7 tonnes.
2- Avoided generation of 0.84 grams of uPOPs through the environmentally sound disposal of 100 tonnes of plastic products containing PVC which will lead to an avoidance of 70 tonnes of products being burnt.
3- Avoided generation of 0.02 grams of uPOPs through the environmentally sound disposal of 1,380 tonnes of non-PVC plastic products (such as packaging) which will lead to an avoidance of 122.2 tonnes of plastics being burnt.

The project aims to reach the direct beneficiary of 990,162 people, with 559,306 female and 430,855 males. The beneficiaries are identified by relevant project outputs and activities and is a summation of 10% of cities population influenced by new circular policies (eco-labels, procurement,

standards etc.), informal workers engaged, participants of roundtables and innovation, stakeholders, city networks participants (target of 0.01% of cities population), population expected to be reached via awareness raising campaigns, training, and associated initiatives.

More information on the methodology and calculation of GEBs can be found in section 6 on Global Environmental Benefits (GEFTF).

F. PROJECT TAXONOMY

Please update the table below for the taxonomic information provided at PIF stage. Use the GEF Taxonomy Worksheet provided in Annex G to find the most relevant keywords/topics/themes that best describe the project.

See Annex G.

TABLE F. PROJECT TAXONOMY

Level 1	Level 2	Level 3	Level 4
Influencing Models			
Stakeholders			
Capacity, Knowledge and Research			
Gender Equality			
Focal Area/Theme			
Rio Markers			

PART II: PROJECT JUSTIFICATION

DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF

The overall project structure presented in this document is consistent with the one presented in the PIF, albeit limited updates in the four components and associated budgets. The project design and activities were adapted to ensure cohesion in line with feedback received during PPG consultations with the Ministries of Environment, analysis of the policy and baseline situation in six project cities and two stakeholder workshops led by UNEP, as outline in Table 1 below.

Table 1. Changes between PIF and PPG versions

PIF	CEO endorsement	Comment
Component 1: Municipalities led governance and policy development to enact circular economy approaches in selected cities, for improved circularity and reduced marine plastics and plastic pollution Budget: 2,650,000	Component 1: City Led Promotion of Circular Economy Policies to Reduce Marine Plastics and Plastic Pollution in Targeted Cities Budget: 1,920,000	Changes to the outputs are made by merging policies targeting both the upstream and downstream of the plastic value chain to improve coherence. The budget is reduced as the key knowledge products to distil the learnings from the Component 1 will be delivered under component 4 which covers knowledge management. The pilot tests of business solutions under component 2 will also contribute to the delivery of component 1, by helping cities to understand better what policies will be needed to facilitate the uptake of relevant business solutions. But the resources for those relevant outputs is allocated under component 2. Outcome 1 was changed from "policies adopted" by city-level governments in the PIF to **"**policies adopted or improved", considering that policy adoption is usually a long process which may not be completed within the 4-year project implementation phase. The project will adopt at least the 1 policy and improve 2 existing polices in each city
Component 2: Private sector led interventions to strengthen markets for investments in innovative, scalable upstream actions, waste management and recycling solutions to reduce marine plastics and plastic pollution. Budget: 2,650,000	Component 2: Private Sector Led Promotion of Circular Economy Actions to Reduce Marine Plastics and Plastic Pollution in Targeted Cities Budget: 2,355,000	Changes to the outputs are made by merging two outputs on business solutions targeting both the production and consumption stages to improve coherence. The budget is reduced as the key knowledge products to distil the learnings from the Component 2 will be delivered under component 4 which covers knowledge management.
Component 3. Inter-city marine plastics and plastics circular economy engagement network Budget: 745,000	Component 3: Inter-City Network on Marine Plastics and Plastic Circular Economy Budget: 814,584	The component is strengthened, and additional resources are allocated to allow the inter-city network to cover more cities in the region. Output 3.1 was rephrased as "Inter-city network established and operationalized" to better reflect the nature of this output, Under this output, a framework document to define the clear, governance and goals of the Inter-city network as indicated in the PIF will be developed.

Component 4: Capacity development, visibility improvement, knowledge management and dissemination, and communications. Budget: 621,667	Component 4: Capacity development and knowledge management Budget: 1,269,583	Allocation of more resources is made to accommodate the importance of the component for learning, training, analysis, dialogue, awareness, and interaction, within and beyond the project cities.
Monitoring and Evaluation was integrated in project component, and not singled out in the PIF.	Monitoring and Evaluation is singled out in the CEO endorsement. Budget: 307,500	Monitoring and Evaluation cost is listed out separately in the CEO endorsement.

A. PROJECT DESCRIPTION

1) GLOBAL ENVIRONMENTAL AND/OR ADAPTATION PROBLEMS, ROOT CAUSES AND BARRIERS THAT NEED TO BE ADDRESSED

1.1 Problems on Marine Plastics and Plastic Pollution

1.1.1 The problems with plastics

Plastic pollution is one of the most pressing and visible environmental issues. About 388 million tonnes of plastics were produced in 2015 with 99.5% from petrol-based sources.[2] Despite all efforts to rethink, refuse, reduce, reuse, and recycle, around 7.0 billion tonnes out of the 9.2 billion tonnes of global cumulative plastic production became plastic waste between 1950 – 2017.[3] With global plastic recycling rate as low as 9%, [4] and growing global plastic production rate by an average of 9% per year,[5] a far bigger problem is unfolding with devastating consequences on oceans and coastlines worldwide. Under a business-as-usual scenario, the amount of plastics entering aquatic ecosystems could nearly triple from approximately 9-14 million tonnes per year in 2016 to a projected 23-37 million tonnes per year by 2040.[6]

While the impact on oceans is vast and rapidly growing, the threat on land is of equal significance considering that 32% of plastic waste finds its way into soils or freshwater [7]. Hotspots of microplastics were documented in the vicinity of cities, beaches, and dams,[8] while usage and disposal of plastics continue to raise concerns over excessive accumulation of plastics in landfills and natural habitat, ingestion, or entanglement in wildlife, and above all leaching of toxic chemicals. [9] The problem with plastics is multi-dimensional, with far-reaching implications on ecosystems and societies. Some highlights include:

- Plastic leakage in the environment results in ecological, eco-toxicological and economic effects, where plastics and plastic products travel long distances, transport invasive species, and severely impact marine ecosystems through entanglement, ingestion, and starvation of marine animals[10]. Plastics degrade extremely slowly in the environment, and its fragments during degradation can be digested by organisms which transfer these materials across the food value chain back to humans.

- Plastic pollution has reduced marine ecosystem services (including fisheries, aquaculture, climate regulation, pest and disease control, heritage values, and recreation) by at least 1-5%, with an annual loss of US$500-2,500 billion value of marine natural capital to society (which amounts to between US$3,300 and $33,000 per tonne of marine plastic pollution). [11]

- Some polymers are of high toxicological concerns such as polystyrene (PS), polyvinyl chloride (PVC) and those incorporating flame-retardant chemicals, some of which are POPs. These polymers are primarily used in electronics, transport, and building and construction products. Although some of these products are not prevalent in marine plastics, their potential presence is of concern due to their high toxicity. Lack of information and evidence about the content and breakdown of the various polymers used to make plastics, including biodegradable plastics,

[2] Ryberg, M., Laurent, A., Hauschild, M. (2018). "Mapping of global plastics value chain and plastics losses to the environment with a particular focus on marine environment". United Nations Environment Programme (UNEP)

[3] Geyer, R. (2020). "Production, use and fate of synthetic polymers in plastic waste and recycling. In Plastic Waste and Recycling: Environmental Impact, Societal Issues, Prevention, and Solutions. Letcher, T.M. (ed.). Cambridge, MA: Academic Press.13-32

[4] Wen, Zongguo, Yiling Xie, Muhan Chen, and Christian Doh Dinga. (2021). "China's plastic import ban increases prospects of environmental impact mitigation of plastic waste trade flow worldwide." Nature communications 12, no. 1

[5] Chen, Y., Awasthi, A. K., Wei, F., Tan, Q., & Li, J. (2020). "Single-use plastics: Production, usage, disposal, and adverse impacts". Science of The Total Environment, 141772. doi:10.1016/j.scitotenv.2020.1417

[6] Lau, W.Y., Shiran, Y., Bailey, R.M., Cook, E., Stutchey, M.R., Koskella, J. etal. (2020). "Evaluating scenarios toward zero plastic pollution". Science 369(6510), 1455-1461. https://doi.org/10.1126/science.aba9475

[7] De Souza Machado, A. A., Kloas, W., Zarfl, C., Hempel, S., & Rillig, M. C. (2018). "Microplastics as an emerging threat to terrestrial ecosystems". Global Change Biology, 24(4), 1405–1416. doi:10.1111/gcb.14020

[8] Zhang, K., Xiong, X., Hu, H. J., Wu, C., Bi, Y., Wu, Y., ... Liu, J. (2017). "Occurrence and characteristics of microplastic pollution in Xiangxi Bay of three gorges reservoir, China". Environmental Science & Technology, 51, 3794–3801. https://doi.org/10.1021/acs.est.7b00369

[9] Thompson, R. C., Moore, C. J., vom Saal, F. S., & Swan, S. H. (2009). "Plastics, the environment and human health: current consensus and future trends". Philosophical Transactions of the Royal Society B: Biological Sciences, 364(1526), 2153–2166. doi:10.1098/rstb.2009.0053

[10] Pinto da Costa, J., Rocha-Santos, T., Duarte, A. (2020). "The environmental impacts of plastics and micro-plastics use, waste and pollution: EU and national measures". Accessed 11 February 2021. http://www.europarl.europa.eu/supporting-analyses

[11] Beaumont, N., Aanesen, M., et al. (2019). "Global ecological, social and economic impacts of marine plastic". Marine Pollution Bulletin, Vol. 142, pp 189-195.

is of serious concern to many experts because these products often do not meet expectations and can lead to less effective recycling and waste disposal.[12]

- Some plastics contain property enhancing additives that are classified as POPs, which are hazardous if not adequately managed at their end of life[13]. Chemical impacts may occur due to POPs exposure, which persist for long periods of time in the environment and can accumulate and pass from one species to the next through the food chain, in a process known as biomagnification. From the POPs listed in the Stockholm Convention, Hexabromocyclododecane (HBCD), Polybrominated diphenyl ethers (PBDEs, including Penta-BDE, Octa-BDE and Deca-BDE), short chain chlorinated paraffins (SCCPs), Perfluorooctanoic acid (PFOA), and Perfluoro octane sulfonic acid (PFOS) and its salts, Perfluoro octane sulfonyl fluoride (PFOSF) are relevant to plastic products. Moreover, Polychlorinated naphthalene's (PCNs) were formerly used in plastics and cables. Plastics can also absorb POPs such as PVB, DDT and dioxins, which are frequently detected in marine plastic litter.[14] below summarizes some of the key applications of these chemical additives in plastics which are listed in the annex in the Stockholm convention.

- Some plastic products contain halogens (e.g., Polyvinyl chloride as plastic coating on electrical cables and pipes), when these are combusted at low temperatures without off-gas treatment in substandard recycling facilities (e.g., with deliberate or unintentional burning), it can lead to the formation of unintentional POPs (uPOPs) including dioxin and furans, which can cause cancer.[15]

- The level of greenhouse gas (GHG) emissions associated with the global life cycle of all conventional fossil fuel-based plastics could grow from 1.7 gigatons of carbon dioxide equivalent ($GtCO_2eq$) in 2016 to approximately 6.5 $GtCO_2e$ by 2050.[16]

- Recycling of materials containing Polybrominated diphenyl ethers (PBDEs) prolongs the exposure via new products. In 2018 the global amounts of PBDE were estimated to be 425kt in use, and 113kt for the waste stocks. More than 70% of PBDE emissions from production and use occurred in industrialized regions, while more than 70% of the emissions during waste disposal occurred in the less industrialized regions. A total of 70 kt was recycled within products since 1970. As recycling rates are expected to increase under the circular economy, an additional 45 kt of PBDEs will reappear in new products through recycling unless taken out of the loop. [17]

Table 2. Chemical additives and their common application in plastic products

Chemical additive	Linkage to the Stockholm Conv.	Common application
HBCD	Annex A	Brominated flame retardant primarily used in polystyrene building insulation (EPS and XPS), at concentrations between 0.5-2.5% (5000-10000 and 8000-25000 mg/kg respectively)[18]. Also found in high-impact polystyrene, EPS packaging and vehicle floor covering[19]
Penta-BDE	Annex A	They are mostly present in countries where flammability standards exist, in ranges between 3-5 wt.%, as they are used as a flame retardant. Articles include flame retardant PUR foam in upholstery, cushions, mattresses, carpet padding, in transportation seats for arm/head rest, carpet padding, lamination to headliner fabric [20] and car seats[19], and in electronic products such as printed circuit boards.[21]
Octa-BDE	Annex A	Used as a flame retardant with a wt.% between 12-18%, octa-BDEs are mainly found in plastic casings for electronics, including CRT monitor casings, flat screen TVs (LCD), ABS casings, HIPS casings; parts in EEE (computer & TV casings, office equipment), HIPS cold-resistant layers in refrigerators, polybutylene-terephthalate (PBT) casings for electronic appliances, PBT connectors in vehicles, PBT in household irons. Are also found in polyamide pipes & plastic foils.
Deca-BDE	Annex A	Ranging almost up to 5 kg per tonne, deca-BDE is present in products as a flame retardant, including rail vehicles as UP resin, as plastic fraction of cooling / freezing appliances & washing machines, heating appliances, household appliances, ICT equipment (w/o monitors), flat screen TVs (LCD)[19], and polyurethane foam vehicle seats with 3.4 mg/kg.[19]

[12] United Nations Environment Programme (2021). "From Pollution to Solution. A global assessment of marine litter and plastic pollution". Nairobi. https://www.unep.org/resources/pollution-solution-global-assessment-marine-litter-and-plastic-pollution

[13] United States Environmental Protection Agency. (2009). "Persistent Organic Pollutants: A Global Issue, A Global Response". U.S Environmental Protection Agency. Accessed 11 February 2021. https://www.epa.gov/international-cooperation/persistent-organic-pollutants-global-issue-global-response

[14] Stockholm Convention in Persistent Organic Pollutants. (2018). "Marine plastic litter and microplastics". Brochure Marine Litter

[15] Vaughan, M. (2011). "uPOPs Prevention and Chemical Awareness: Elements of a General Awareness Campaign". Secretariat for the Pacific Regional Environment Programme (SPREP). Accessed 20 February 2021. https://library.sprep.org/content/upops-prevention-and-chemical-awareness-elements-general-awareness-campaign

[16] Zheng, J. and Suh, S. (2019). "Strategies to reduce the global carbon footprint of plastics". Nature Climate Change 9, 374-378. Accessed 14 January 2021. https://doi.org/10.1038/s41558-019-0459-z

[17] Abbasi G. et al. (2019). "Global Historical Stocks and Emissions of PBDEs". Environmental Science & Technology, Volume 53 pages 6330-6340. https://pubs.acs.org/doi/10.1021/acs.est.8b07032

[18] European HBCD Industry Group and EUMEPS, European HBCD Industry Group and EUMEPS position on the appropriate low POP content limit for HBCD in Polystyrene Foam waste, December 2016

[19] Kajiwara, N., Takigami, H., Kose, T.; Suzuki, G., Sakai, S. (2014). "Brominated Flame retardants and related substances in the interior materials and cabin dusts of end-of-life vehicles collected in Japan". Proceedings of 34th International Symposium on Halogenated Persistent Organic Pollutants

[20] United Nations Environment Program (UNEP). (2019). "Draft guidance on preparing inventories of decabromodiphenyl ether"

[21] The Stockholm Convention (2021) Guidance on best available techniques and best environmental practices relevant to the polybrominated diphenyl ethers (PBDEs) listed under the Stockholm Convention. Available at: http://chm.pops.int/Imple- mentation/NIPs/Guidance/GuidanceonBATBEPfortherecyclingofPBDEs/tabid/3172/

SCCP	Annex A	SCCP can be found in PVC (cables and consumer goods), EVA foams, and natural synthetic rubber, in concentrations ranging up to 170,000 mg/kg.[22] Consumer products (no further materials specified) in which SCCP were found, mainly as a plasticizer or flame retardant, include sports equipment, toys, pillows, electronics, (power chords, cables, mobile phone cases, household appliances), all-purpose mats, rain covers, bathmats, shower curtains, artificial leather products (e.g., wallets, handbags, purses, toiletry bags, pencil cases)[20]. SCCP is also used in transmission belts, rubber conveyor belts, adhesives, and plasticizers as a specific exemption under the Stockholm Convention.[23]
PFOA/PFOS	Annex A/B	PFOS and PFOA are used in sports shoes, matrasses, textiles, children's clothes, PVC floors, photographic and electronic equipment, building materials, and food packaging as a dispersing agent. PFOA has been found in food packaging in concentrations up to 44 µg of PFOA/dm^2.[24] From 2002-2007, 4,442.1 kg of PFOS was used in artificial or synthetic fabric rugs and mats manufactured locally in Colombia.[25]
Dioxin & furans (uPOPs)	Annex C	These are released upon incineration of wide range of plastic products (including cables, agricultural plastics such as PVC, electric wire tube, scrap tires, municipal waste) different concentration volumes ranging from 12,000 to 40 µg TEQ/t material from highest to lowest.[26]

1.1.2 The problem in LAC cities

Latin America and the Caribbean shares 4% of total plastics production and 8% of total plastics consumption worldwide[27]. With over 600 million inhabitants, plastic waste within the municipal waste stream is significant. Yet, existing waste management systems are limited and characterized by inadequate practices and the need for improvements. Despite waste collection coverage reaching 89.9% (higher than the global average of 73.6%), [28] one third of the waste generated in LAC (equivalent to 145,000 tonnes per day) continue to end up in open dumpsites, including 17,000 tonnes/day of plastic waste. [29] Visible plastics and plastic products are frequently found along LAC coasts and marine environments, owing to intensive anthropogenic activities and poor management systems. [30]

Recycling and composting systems are still emerging across the region. Recycling rate is well below 4.5%, [31] which is in part due to the absence of comprehensive recycling programs at the region, state, and municipal levels, and the informal nature of existing recycling practices (informal sector typically recovers only the valuable fraction and their efforts are not included in official statistics). As a consequence, wastes that end up in landfills or improperly disposed in an unprotected dump sites contain enormous volumes of reusable and recyclable materials.

Colombia, Panamá, and Jamaica are coping with similar challenges posed by ever increasing volumes of plastic wastes. Marine litter within the three countries is adversely affecting the coastal waters and impacting key sectors from tourism to fisheries. Insufficient waste management capacities and practices affect millions of inhabitants whose livelihoods are based on fragile coastal marine areas. Furthermore, there is a larger context of excessive waste generation, knowledge gaps, and ineffective/absent policy and regulatory frameworks. Some highlights include:

- Costal lines are plagued by macro- and micro-plastic pollution in the three countries. A plastic pollution assessment found that the microplastics densities ranged from 3 to 1387 items per m^{-2} in 43 Colombian sandy beaches on the Caribbean and Pacific coasts.[32] Similarly, Panamanian beaches recorded high concentration of microplastics of 353 items/m^2 and 87 items/m^2 at the Caribbean and Pacific coasts respectively. [33] This was also confirmed in Jamaica by a study that documented microplastic pollution in the Kingston Harbour ranging from (0-5.73 particles/m^3.[34] While the anthropogenic activities are the main influencer behind the increase in microplastic contents, country specific factors should be also noteworthy (e.g., Panamá Canal, natural phenomena, ocean currents).

[22] Nevondo, V., Okonkwo O.J. (2021). "Status of short-chain chlorinated paraffins in matrices and research gap priorities in Africa: a review". Environmental Science and Pollution Research. https://doi.org/10.1007/s11356-021-15924-w

[23]The Stockholm Convention on Persistent Organic Pollutants. (2017). "The 16 New POPs under the Stockholm Convention: An introduction to the chemicals added to the Stockholm Convention as Persistent Organic Pollutants by the Conference of the Parties".
http://www.pops.int/TheConvention/ThePOPs/TheNewPOPs/tabid/2511/Default.aspx

[24] Schaider L.A., et al. (2017). "Fluorinated Compounds in U.S. Fast Food Packaging". Environmental Science & Technology Letters.
https://pubs.acs.org/doi/pdf/10.1021/acs.estlett.6b00435

[25] Plan Nacional de Implementación del Convenio de Estocolmo sobre Contaminantes Orgánicos Persistentes 2017

[26] United Nations Environment Program (UNEP). (2013). "Toolkit for identification and quantification of releases of dioxins, furans and other unintentional POPs"

[27] Savino, A., Quispe, C., Correal, M. (2018). "Waste Management Outlook for Latin America and the Caribbean". United Nations Environment Programme (UNEP) International Environmental Technology Centre (IETC). https://www.unep.org/ietc/resources/publication/waste-management-outlook-latin-america-and-caribbean

[28] Kaza, S., Yao, L., Bhada-Tata, P., Van Woerden, F. (2018). "What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050". World Bank.
http://hdl.handle.net/10986/30317

[29] Lasso, M. (2018). "A third of urban waste ends up in open dumpsites or environment in Latin America and the Caribbean". United Nations Environment Programme (UNEP). Accessed 20 February 2021. https://www.unep.org/news-and-stories/press-release/third-urban-waste-ends-open-dumpsites-or-environment-latin-america

[30] Kutralam-Muniasamy, G., Pérez-Guevara, F., et al. (2020). "Review of current trends, advances and analytical challenges for microplastics contamination in Latin America". Environmental Pollution, Volume 267. https://doi.org/10.1016/j.envpol.2020.115463

[31] Brooks, A., Jambeck, J., Mozo-Reyes, E. (2020). "Plastic Waste Management and Leakage in Latin America and the Caribbean". Inter-American Development Bank.
https://publications.iadb.org/publications/english/document/Plastic-Waste-Management-and-Leakage-in-Latin-America-and-the-Caribbean.pdf

[32] Garcés-Ordóñez, et al. (2020). "Plastic litter pollution along sandy beaches in the Caribbean and Pacific coast of Colombia". Environmental Pollution, 115495. doi: 10.1016/j.envpol.2020.115495

[33] Delvalle de Borrero, D., Fábrega, J., et al. (2020). "Distribution of Plastic Debris in the Pacific and Caribbean Beaches of Panamá". Air, Soil and Water Research, 13, 117862212092026. doi:10.1177/1178622120920268

[34] Rose, D., & Webber, M. (2019). "Characterization of microplastics in the surface waters of Kingston Harbour". Science of The Total Environment, 664, 753–760.
https://doi.org/10.1016/j.scitotenv.2019.01.319

- Single use plastics continue to dominate marine litter accumulated in the costal lines in the region, including the three countries. The majority of macroplastic marine litter has a lifetime less than1 year, as documented in costal lines of Colombia. Similar case exists in Jamaica confirmed by a study that documented marine litter to be mainly composed of plastic beverage bottles (32%), followed by plastic bottle caps (11%), and foam food containers (2.7%). Laws restricting single-use plastics are slowly emerging in the region as in the case of Panamá and Jamaica. Yet, there remain challenges related to law enforcement and expansion to more product categories.

- Urban environments are responsible for an estimated 60% of marine plastics[35], and polluted waterways continuously carry plastic pollution to oceans. Floating waste captured in the Matias Hernandez river basin in Panamá is primarily plastic material.[36] Around 8% of the waste generated in Barranquilla, Colombia is uncollected and eventually leaks into the ocean and waterways. There is a similar case in Jamaica, where 370 tonnes of plastics were estimated to be leaked to the ocean from Kingston in 2018, corresponding to 3.33 kg/capita/year. Furthermore. It was observed that the most polluted beaches were found in the urban Caribbean and the rural Pacific areas.[32] This can be explained due to larger population, higher waste generation, deficiencies in basic sanitation and poor waste management systems.

- The economic dimension is becoming more salient, as the effects of plastic pollution accumulate. A study estimated that clean-up costs of plastic waste in LAC range from $196 to $401 million USD, while revenue loss accounts for between $23 to $276 million USD.[37]

- Regulatory and legislative frameworks are riddled with gaps and implementation challenges. Laws restricting single-use plastics (targeting plastic consumption) are promising steps but do not substitute the need for holistic sustainable plastic life-cycle management, which is absent in the LAC region. Product stewardship initiatives (targeting the plastic industry), including extended producer responsibility, are nascent and yet to mature.

- Emissions of uPOPs is common in the region due to mismanagement of waste and resources. According to Stockholm Convention National Implementation Plans, 57.6% of Jamaica's Dioxins and Furans releases come from open burning. Similar readings are shared with Panamá (~23.2 gTEQ/year), and Colombia (~243.47g EQT/y) constituting 41.74% of country's emission.

- There exist regional knowledge gaps in mainstreaming the management of harmful chemicals and waste, and inclusion of POPs into certain institutions and policies. For instance, Colombia's vehicle disintegration and scrapping programmes do not consider vehicle polyurethane foams as hazardous wastes. To date, HBCD continues to be used as a flame retardant in construction and plastic vehicle parts. Similarly, for Panamá, where products in the form of EPS layers with HBCD content are continuously imported. Awareness about certain chemicals, specifically plastic chemical additives containing POPs, is limited, and by extension preparedness for the sound management of later phases such as end-of-life

- LAC cities are attracting rural residents in droves, which is part of the global trend driving 3 million people to urban centers every week. As cities continue to grow, the consumption patterns and consumer behavior need to be influenced. Behavioral instruments (utilising people's social preferences and/or cognitive limitations to influence behaviour in favour of lower plastic pollution) [38] had proven effective in other regions and are currently absent in the LAC region. Cross-learning and exchange of knowledge in this field is needed.

As discussed, cities are engines of economic growth. They are central drivers of unsustainable patterns of consumption, with urban consumers particularly accustomed to the convenience of on-the-go and home-delivery lifestyle. Cities need to be at the forefront of rethinking the consumption landscape.[39] A detailed analysis of key problems is included in the baseline section, where national and city specific contexts are covered.

1.2 Root causes and barriers

As presented in Figure 1, the analysis of the problematic situation of increased pollution from hazardous chemicals, mismanaged plastic waste, and leakage of plastic into the environment has identified six root causes that lead up to the key problem. Each root cause underpins specific barriers which must be addressed to reduce regional marine plastics and plastic pollution and to accelerate the transition to a circular economy. These barriers sustain the environmental problem identified in the section above (section 1.1): the unsustainable consumption and production of plastic products, increasing generation of plastics waste and insufficient management that causes plastic pollution in Latin America and Caribbean cities. This has led to the impacts at environmental, social and economic dimensions, which eventually slow down or prevent the achievement of the Sustainable Development Goals and its relevant targets by 2030. Increased circularity of plastic value chains would reduce the pollution from hazardous chemicals and mismanaged waste, and leakage into the environment.

[35] Lebreton, L., Andrady, A. (2019). "Future scenarios of global plastic waste generation and disposal". Palgrave Commun 5,6. https://doi.org/10.1057/s41599-018-0212-7

[36] Quirós, A. (2019). "Caracterizacion de residuos sólidos flotantes captados en el BOB de Marea Verde, cuenca baja del Río Matías Hernández, muestreos realizados entre mayo y septiembre del 2019". https://www.senacyt.gob.pa/wp-content/uploads/2020/03/Desechos-S%C3%B3lidos-por-Ing.-Alvaro-Quir%C3%B3s.pdf

[37] Viool, V., Gupta, A., Petten, L., Schalekamp, J. (2019). "The Price Tag of Plastic Pollution". Deloitte. https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/strategy-analytics-and-ma/deloitte-nl-strategy-analytics-and-ma-the-price-tag-of-plastic-pollution.pdf

[38] Alpizar, F., Carlsson, F., Lanza, G., Carney, B., Daniels, R. C., Jaime, M., … Wahdera, S. (2020). "A framework for selecting and designing policies to reduce marine plastic pollution in developing countries". Environmental Science & Policy, 109, 25–35

[39] Ingilizian Z. (2019). "Waste-free consumption: 3 reasons why cities will lead. World Economic Forum". World Economic Forum. Accessed 21 February 2021. https://www.weforum.org/agenda/2019/06/3-reasons-why-cities-can-stem-the-tide-of-the-plastic-crisis/

The project is structured around the mitigation of these root causes and barriers (see section 3 on the alternative scenario).

1.2.1 Root causes

The root causes leading to the unsustainable consumption and production of plastic products, increasing generation of plastics waste and insufficient management that causes plastic pollution in Latin America and Caribbean cities are the following:

1- **Linear plastics economy with increasing plastic consumption driven by population growth, urbanization, and economic development, while further intensified by COVID-19**: The fundamental cause of the plastic pollution is the linear "take-make-dispose" pattern of the current plastics economy paired with low oil prices, making the production of virgin plastics much cheaper and economically more attractive than using recycled content or other alternative materials. Demand for single-use plastic products has further increased due to COVID-19, as disposable plastic products (such as PPE and cutleries) provide affordable solutions to consumers to meet their sanitary and health requirements.[40] This needs for PPE due to COVID-19 has also increased the production and consumption of plastics specifically in the LAC region. For example, Colombia estimated an increase in the monthly manufacture of face masks (from 2 to 8–10 million), of N95 medical masks (from 60,000 to 100,000), and it imported over 2 million pairs of gloves.[41] Furthermore, urban areas continue to grow in LAC which drives the consumption of plastic products. Urban population increased by more than 35 million people between 2010 and 2015 and is expected to climb to a total of 567 million persons by 2025.[42]

2- **Hazardous additives and chemicals used in plastic products reduce circularity**: Additives (such as brominated flame retardants) and chemicals are used in large volumes of plastics. The presence of additives is potentially a serious constraint on the recycling of plastics and the move to a circular economy.

3- **Policy design, waste management and awareness are outpaced by plastic growth and challenged by weak monitoring**: Plastic waste is being generated at such a pace that far exceeds the ability of existing policies, infrastructure, and awareness raising campaigns to deal with. Existing waste reporting and monitoring systems are inadequate to bring optimal analysis of waste generation and leakages. Up to 50% of all recycling in the LAC region is undertaken by approximately two million informal recycling workers,[43] which is rarely reported on and captured by existing surveys. Therefore, LAC has as the lowest reported average recycle rate (for all waste types) across all regions at 4.5%.

4- **Alternative materials, technologies, and business models needed for a more circular plastic economy are not widely tested or financially viable**. Identifying alternative materials based on life cycle assessment can be a challenge itself. Findings from the LCA are usually context-specific, as the environmental impact of products is dependent on the sources that their raw materials come from and where the products are manufactured, which may differ over the years.[44] Many reuse solutions, which might perform well in pilots, still need to test their operational and economic viability at scale. In terms of technologies, chemical recycling technologies are not yet widespread and/or not yet economically viable for most common packaging plastics. In the context of the pandemic, reduced economic activity has seen sharp falls in global oil prices. In turn, this has made it significantly cheaper for manufacturers to produce plastic goods from virgin, fossil-based materials than to use recycled plastic materials. The economic viability of global plastics recycling market is presently under significant pressure.[45]

5- **Externalities of plastic pollution are not factored into the low production cost of plastics in the region.** The production cost of recycled plastics is often still higher than that of virgin plastics as the externalities of plastic pollution (see sections 1.1.1 and 1.1.2) are not factored into the costs[46]. In the LAC region, national economies have been heavily dependent on natural resources and commodities exports with macroeconomic vulnerabilities, thus, some countries have not been able to develop appropriate circular policies that incentive plastics recycling. There is thus a high dependence on the linear plastic economy in the region partially due to its industrial structure. The largest consumer and producer markets of plastics are Mexico and Brazil, while Colombia, Peru and Chile are the fastest growing ones.[47]

1.2.2 Barriers to be addressed

The problem of marine plastics and plastic pollution is transboundary, cross-cutting as well as regionally specific, and there are notable barriers in various aspects to solve the problem. In this context, the barriers of fully implementing a circular economy approach for plastics in LAC cities include:

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[40] Yuan, X., Wang, X., Sarkar, B. et al. (2021). "The COVID-19 pandemic necessitates a shift to a plastic circular economy". Nat Rev Earth Environ 2, 659–660. https://doi.org/10.1038/s43017-021-00223-2

[41] Vita, L. (2020). La República. Accessed 21 September 2021. https://www.laRepública.co/especiales/101-buenas-ideas/sector-plastico-aumenta-produccion-de-insumos-para-el-sector-de-la-salud-por-covid-19-2989970

[42] United Nations Environment Program (UNEP). (2016). "Rate of Environmental Damage Increasing Across the Planet but There Is Still Time to Reverse Worst Impacts if Governments Act Now". UNEP. Accessed 10 February 2021. https://www.unep.org/news-and-stories/press-release/rate-environmental-damage-increasing-across-planet-there-still-time

[43] Madi, G., Lazarini, V., et al. (2019). "Anuário da Reciclagem 2017-2018". Associação Nacional dos Catadores e Catadoras de Materiais Recicláveis (ANCAT). Accessed 21 February 2021. https://cempre.org.br/wp-content/uploads/2020/11/2-Anu%C3%A1rio-da-Reciclagem.pdf

[44] United Nations Environment Programme (UNEP). (2021). "Addressing Single-use Plastic Products Pollution Using a Life Cycle Approach". Nairobi.https://www.lifecycleinitiative.org/wp-content/uploads/2021/02/Addressing-SUP-Products-using-LCA_UNEP-2021_FINAL-Report-sml.pdf

[45] European Environment Agency (2021). Plastics, the circular economy and Europe's environment — A priority for action, file:///C:/Users/xier/AppData/Local/Temp/TH-AL-20-025-EN-N%20Plastics-%20the%20circular%20economy....pdf

[46] D'Ambrières,W. (2019) "Plastics recycling worldwide: current overview and desirable changes". Field Actions Science Reports, Special Issue 19. http://journals.openedition.org/factsreports/5102

[47] Tecnología del Plástico. (2014). The Latin American Plastics Industry Market Composition & Capital Spending Survey. Tecnología del Plástico. Accessed 10 February 2021. https://www.plastico.com/sitio/imagenes-produccion/14/pdf/The-Latin-American-Plastics-Industry-Market-Trends-And-Buying-Intention-Survey-Gio.pdf

1- Lack of regulations and policy instruments from governments to incentivize sustainable consumption and production for circular plastic products and pollution reduction at city level. This is linked to Root Causes 1, 2, 3, and 5.
   - Globally and nationally, agreements policies and action plans to support implementation of upstream solutions (such as eco-design and product lifetime extension), improve recyclability, incentivize demand for recycled plastics, and streamline downstream waste management, are uncoordinated.
   - Existing city level policy usually focuses more on the collection, recycling, and disposal of plastic waste, while lacking a comprehensive strategy and concrete targets on waste minimization and reduction, reuse and refurbishment.
   - There is a lack of standards, labelling and policy incentives on reuse and remanufacturing of products and components, as well as on the chemical content in relevant plastic products.
   - There lacks policy and enforcement to set up environmentally sound management system for plastics, considering the presence of the informal sector and prevalence of open dumpsites.

2- Lack of innovations and investment from the private sector to tackle the plastic pollution from a systemic and value chain perspective at city level. This is linked to all Root Causes.
   - Technology is a bottleneck for further improvements in linking product design, value chain management and industrial symbiosis for circularity of plastic products, and there is in general low R&D investment within businesses and in new businesses enterprises. There are no sufficient alternatives and solutions that have been proven to replace single-use and unnecessary plastic products and polymers, that are appropriate, effective, and do not result in other environmental and human health impacts.
   - Most plastic wastes are sent to dumpsites and technical solutions and infrastructure to support more efficient reuse, remanufacturing and recycling, are absent.
   - There is a lack of market, economic incentives, added value and competitiveness for product reuse and recycled materials for adopting circularity. Upcycling plastic is currently not profitable in most of the cases. The public-private partnership working on the circular solution such as financing, investment and infrastructure is usually weak.
   - The information on the chemicals of concern (CoCs) and substances in plastic products are not assessed and shared by the private sector, and the pollution from substandard recycling is not properly evaluated either.
   - The presence of the informal sector and mismanaged waste systems make formal recycling less competitive and attractive. There is a lack of tailored approaches for developing circularity strategy to match with the local reality of waste handling.
   - There is a lack of appropriate business cases to encourage the private sector to invest in circular products and service. Small and medium-sized businesses lack budget, personnel, or time to devote to researching issues around waste and circularity.
   - Coordinated systems standardizing materials for reuse and recycling are lacking, along with challenges for more efficient collection, sorting, recycling, and recovery of plastics. There is no sufficient coordinated financing, incentives, and awareness, to support upstream solutions to plastic pollution and to prevent the leakage of plastics into the environment (especially the financing of waste management).

3- Lack of a common vision, approaches, and leadership for LAC cities to act collectively under an aligned regional strategy for circular economy of plastics at the regional level. This is linked to Roots Causes 1 and 3.
   - There is no common vision and strategies for cities in LAC to work collectively on the circularity agenda of plastics.
   - There is no platform and initiative to support the exchange of experience and best practices for LAC cities.
   - There is a lack of knowledge, resources, and capacity to implement existing strategies, policies, and business plans, as well as mechanisms to upscale the influence in all LAC cities.

4- Lack of knowledge, awareness, and capacity to enable governments, businesses and other stakeholders to learn and adopt best practices at city, national and regional levels in LAC. This is linked to Root causes 1, 2, 3, and 4.
   - There is a lack of harmonized monitoring for marine litter and plastic pollution at city, national and regional levels in LAC. In addition, there are no sufficient quality data, databases and information management systems on e.g., numerous types of polymers and plastics applications along the value chain; chemical content of plastic products; stocks, flows, pathways and fates of macro- and microplastics into the environment including the oceans; consumer behavior and cultural drivers of plastics consumption; the magnitudes of environmental and socio-economic impacts of marine plastics and plastic pollution; and quantitative evaluation on the impacts of different solutions and interventions, to support the monitoring.
   - It is difficult to obtain information and track the quantity and impacts of hazardous additives and chemicals throughout the life cycle of plastics, thus making reduction of chemicals of concerns and waste difficult.
   - There is a lack of institutional capacity in the governments at city level, to address plastic pollution in a systemic way. Regulations and policies at national level face implementation challenges at municipal level sufficiently due to lack of technical expertise and resources.
   - At the business and company level, circular design and solutions are usually not well evaluated, communicated, and applied in strategic planning.
   - There is a lack of capacity to learn and adopt the latest success experience and best practices for circularity of plastics at city, national and regional levels.

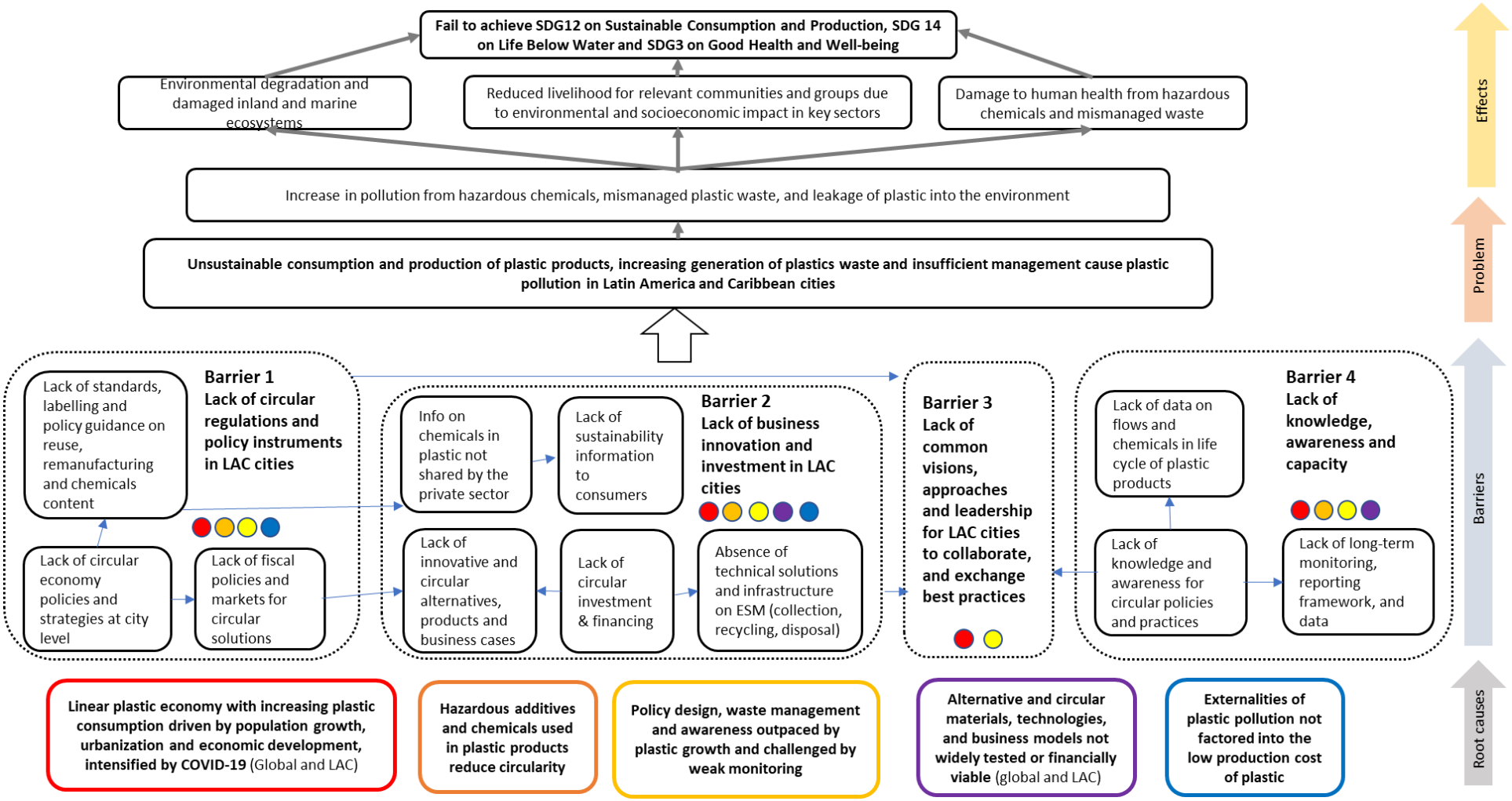


Figure 1. Problem Tree of the Project

2) THE BASELINE SCENARIOS AND ANY ASSOCIATED BASELINE PROJECTS

2.1 Global and Regional Baseline Scenario

A number of existing Multilateral Environmental Agreements (MEA) and global instruments, of both legally binding and voluntary nature, are relevant to plastics, the chemicals of concern in plastics and plastic pollution. These include:

- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (including the BAN Amendment and the Plastic wastes amendments).[48]
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on persistent organic pollutants (POPs).[49]

Table 3 presents an overview on the status of ratifying plastics related conventions in Colombia, Panamá, and Jamaica.

The United Nations Convention on the Law of the Sea (UNCLOS) is the only binding policy that requires nations to minimize pollution from both marine and land-based sources that may enter the marine environment. The Regional Seas Conventions and Action Plans are of direct relevance to reducing marine plastic pollution. The action plans target key activities and sources of plastic waste in 18 separate regions and set binding and non-binding obligations to reduce pollution from these sources. Furthermore, the Global Partnership on Marine Litter (GPML), a voluntary, multi-stakeholder platform with more than 400 members from over 70 countries, fosters collaboration on a range of activities, including building the knowledge base and facilitating the development of regional nodes as well as regional and national strategies and action plans to tackle marine litter and plastic pollution. It is also developing a digital platform aiming to integrate data and information, connecting stakeholders, and facilitating coordination on an ad hoc or regular basis.

Table 3. Status of Ratification of the relevant Conventions in three project countries

Target Country	CONVENTION				
	Basel	**Rotterdam**	**Stockholm**	**Cartagena**	**UNCLOS**
Colombia	R (1996)	R (2008)	R (2008)	R (2003)	d (1982)
Panamá	R (1991)	R (2000)	R (2003)	R (2002)	R (1996)
Jamaica	a (2003)	a (2002)	R (2007)	R (2012)	R (1983)

Key: (a) = accession; (R) = ratification; (d)=Signature, Succession to signature; N.S. = not signatory

Marine plastic pollution has been the subject of resolutions at United Nations Environment Assembly (UNEA)-1, -2, -3 and -4. In recent years, many countries have highlighted the need for a global agreement to address the issue.

Many governments are taking actions. Five of the Group of Seven (G7) nations have agreed to an Ocean Plastics Charter that commits them to act towards "a resource-efficient lifecycle management approach to plastics in the economy". The European Strategy for Plastics in a Circular Economy is a forerunner in describing the vision for a revised and sustainable plastics economy. It includes aspects on improving the economics and quality of recycling, preventing waste and littering, increasing investment and innovation in circular solutions, and increasing global action.

More than 60 countries have introduced measures to curb single-use plastic waste, and the number of governments, industry and consumer led actions continues to rise. Bans on single-use plastic bags have been especially evident in developing countries, particularly Africa and Asia, with restrictions and other disincentives (taxes or levies) motivated primarily by waste management and littering concerns. Most European Union member countries have adopted economic instruments and public-private agreements rather than directly banning single-use plastic products. There are also a number of voluntary initiatives to address plastic pollution. For instance, the New Plastics Economy Global Commitment has united more than 500 organizations, including 20 governments and more than 250 businesses across all stages of the plastic packaging value chain, representing more than 20% of all plastic packaging used globally. The Clean Seas Campaign was launched by UNEP in 2017 and now has commitments by 63 signatory countries (20 from the LAC region) which cover more than 60 per cent of the world's coastlines. Moreover, more than 111,000 people have signed the pledge worldwide.

Government policies across LAC have been taking measures to address marine plastics and plastic pollution, but efforts to introduce resource efficient production and consumption practices, that can help tackle this pollution problem, are still lacking. Also, given that the region's economies and industries are characterized by an intensive use of natural resources. In at least 27 out of 33 LAC countries, national and/or local legislation towards the reduction, prohibition, and/or elimination of single-use plastic products have been issued.[50] Fiscal policies (including taxation, incentives and

[48] In 2019, Governments amended the Basel Convention to include plastic waste in a legally binding framework which will make global trade in plastic waste more transparent and better regulated, whilst also ensuring that its management is safer for human health and the environment. At the same time, a new Partnership on Plastic Waste was established to mobilise business, government, academic and civil society resources, interests, and expertise to assist in implementing the new measures, to provide a set of practical supports – including tools, best practices, technical and financial assistance.

[49] The Stockholm Convention aims to protect human health and the environment from Persistent Organic Pollutants (POPs). POPs are organic chemicals that persist in the environment, bioaccumulate in humans and wildlife, have harmful effects and have the potential for long-range environmental transport. As of 2018, the Convention controls 28 POPs, including those which have been used as additives, flame retardants or plasticizers in plastics.

[50] United Nations Environment Program (UNEP). (2021). "Policies, Regulations and Strategies in Latin America and the Caribbean to Prevent Marine Litter and Plastic Waste". https://wedocs.unep.org/bitstream/handle/20.500.11822/34931/Marine_EN.pdf?sequence=1&isAllowed=y

subsidy removal) are applied together with other policies to tackle plastic pollution. Product lifetime extension and circular design are a step further in the direction of the circular economy but are currently not present in the region.

Existing and relevant actions on reducing marine plastics and plastic pollution at the Global level include:

1- **The Alliance to End Plastic Waste** (the "Alliance" or ''AEPW'') is a global non-profit organisation that brings together industry, government, civil society, development agencies and investors to help end plastic waste in the environment. The Alliance has 90 members and partners drawn from across the world's leading organisations in the plastic value chain to develop, accelerate and scale technologies and solutions focusing on integrated waste management systems, engaging communities and catalysing capital towards a circular economy.

2- **The ACP MEAs programme** is a partnership between the European Union, the Organization of African, Caribbean and Pacific States (OACPS), United Nations Environment Programme (UNEP) and the Food and Agriculture Organization of the United Nations (FAO). The programme aims to build capacity in 79 countries in Africa, Caribbean, and the Pacific (ACP) to support them in fulfilling their obligations as parties to Multilateral Environmental Agreements (MEAs), to address the environmental challenges they face and to reap the benefits of improved environmental governance at national and regional levels. Currently in its third phase, one of the project outputs is to reduce the influx of waste entering the marine environment in the four regions developed.

3- **Clean Seas Campaign** was launched by UNEP in 2017. Through the Campaign, UNEP is connecting and rallying individuals, civil society groups, industry and governments for catalysing change and transforming habits, practices, standards and policies around the globe to dramatically reduce marine litter and its negative impacts. It now has commitments by 63 signatory countries (20 from the LAC region) which cover more than 60 per cent of the world's coastlines. Moreover, more than 111,000 people have signed the pledge worldwide.

4- **The Global Plastic Action Partnership (GPAP)** is a multistakeholder platform dedicated to translating commitments to reduce plastic pollution, which was set up by the World Economic Forum in 2018. Currently, with expansion plans in Mexico and Colombia, contributing to upstream solutions. Colombia is a high priority country for GPAP and its partners. GPAP has received additional resources which can be directed towards activities in Colombia and Latin America. For Colombia, GPAP is open to pursue a sub-national approach and link up with other efforts in the Country and direct resources towards concrete activities.

5- **Break Free From Plastic** is a coalition movement aimed at reducing plastic waste throughout the globe. The coalition started in 2016 and grew to include nearly 1,800 partner organizations globally.

6- **The Circulate Initiative** - Solve the ocean plastic pollution challenge by supporting the incubation of circular, inclusive and investible waste management and recycling systems and generating insights that accelerate investment and scale. The Circulate Initiative brings together a highly collaborative community of innovators, investors, partners and programs to develop solutions and knowledge that reduce plastic pollution and advance inclusive and circular economies.

7- **Circulate Capital** is an emerging market investment management firm established in 2018 to finance innovations, companies, and infrastructure that scale solutions to the plastic waste and climate change crises. The firm is investing in start-ups, organizations, and SMEs across the entire plastic value chain with a regional focus on South and Southeast Asia and more recently LAC region. A new arrangement was recently established forging a partnership to catalyse capital (USD 4m) to support innovative solutions to tackle the growing problem of plastic waste ending up in the oceans and waterways of LAC. The new initiative will target early-stage start-ups and SMEs providing them with strategic support through strategic partnerships, training to improve communications, marketing, and sales, and skills development, including digitization efforts. Collectively, this support will establish a higher standard of operations, as well as provide a robust mechanism for measuring impact.

Existing actions on reducing marine plastics and plastic pollution at the LAC regional level include:

1- **The Cartagena Convention** is the only legally binding agreement in the region for the protection of the Caribbean Sea. Through the Convention and specifically the Land-Based Sources of Marine Pollution Protocol, governments receive support to control, reduce and prevent marine pollution from all sources.

2- **The UNEP Caribbean Environment Programme** (CEP), which is also the Secretariat of the Cartagena Convention, promotes best practices and shares experiences about the management of solid waste, marine litter, and plastics through various platforms such as the Caribbean Regional Node of the GPML. These include participation at regional and international conferences.

3- **The South-East Pacific Action Plan** was adopted in 1981 together with the Convention for the Protection of the Marine Environment and Coastal Zones of the South-East Pacific (Lima Convention) and its associated protocols. The Protocol for the Protection of the South-East Pacific Against Pollution from Land- Based Sources; along with the framework programme for marine litter management (2007) form the basis for the support provided to countries in the region.

4- **The Caribbean Regional Action Plan for Marine Litter (RAPMaLi)** serves as a comprehensive toolkit to assist countries of the WCR to adopt a range of practices for reducing the negative impacts of solid waste, marine litter, and plastics. A Regional Marine Litter Strategy completed in 2021 through the GPML-Caribe complement this plan.[51]

5- **The Trash Free Waters International Initiative in the WCR:** The Cartagena Convention Secretariat, with financial support from the U.S. Environmental Protection Agency (EPA) and in partnership with the Peace Corps, UNEP's Regional Office for Latin America and its Caribbean Sub-Regional Office, Governments of Jamaica and Panamá and other local partners, have implemented activities to reduce and prevent land-based trash from entering watersheds, coastal waters, and the marine environment in Jamaica and Panamá.

6- **Working Group on Marine Litter and Microplastics in Latin America and the Caribbean:** The group surges in the framework of the XXII Forum of Ministers of the Environment of Latin America and the Caribbean (Bridgetown, Barbados, February 2021), where the Member States acknowledged their concern about "*the magnitude and increasing levels of marine litter, particularly plastic litter and microplastics, and the related impacts on the ecosystems and societies"* in the region. Through Decision 1 on Pollution, the Secretariat was invited, in coordination with other entities and relevant stakeholders, and within available resources, to facilitate the establishment of a suitable mechanism to promote regional cooperation and coordination, such as a working group or regional node. So far, the group is composed by 19 countries of the region through the nomination of governmental focal points.

7- **Regional Action Plan on Marine Litter in the Northeast Pacific Region:** It proposes actions applicable to the municipal, national, and regional context for the eight countries of this region (Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panamá, and Colombia) to address the problem of marine litter and plastic pollution effectively and sustainably over time.

8- **National Action Plans on Marine Litter and Plastic Pollution in LAC countries (such as Panamá, Belize, Brazil, Costa Rica and Chile):** they include a diagnosis of the national problem of marine litter, national public policy on the management of marine litter and microplastics and provide national guidelines to focus management and actions on the reduction of waste generated on land and from marine sources. Additional efforts to develop National Action Plans (NAPs) are being made with the support of UNEP and the Global Partnership on Marine Litter, in particular with Ecuador, El Salvador, Guatemala, Mexico, Dominican Republic, and Saint Lucia, using a national source inventory approach.

9- **Latin America and the Caribbean Circular Economy Coalition** The coalition aims is to foster an imperative resilient, sustainable, and inclusive economic recovery by implementing best practices through collaborative work between governments, companies and society as a whole. The objectives include the creation of groups in plastics, including chemicals, marine litter and waste management, and the publication of the regional common vision for a Circular Economy in LAC.[52] Activities including guidance and support of new business models for environmental, financial, and social triple-win. A circular economy for plastics is important to ensure a reduction of the use of plastics, as well as ensuring those plastics being used are managed responsibly throughout their lifecycle.

10- **Coalition for the progressive closure of dumpsites in Latin America and the Caribbean** was established at the XXI meeting of the Forum of Ministers of Environment of LAC. The countries of the region agreed to make the necessary efforts to strengthen the integrated solid waste management, developing the necessary policies and strategies to phase out the unsound waste management practices, including dumpsites and open burning.

11- **Transforming Tourism Value Chains project (TTVC):** This is a project that has been developed and implemented since 2017 in four countries: Dominican Republic, Saint Lucia, Mauritius, and the Philippines with the objective of reducing greenhouse gas emissions and improving resource efficiency from a value chain approach. It has a component on beating pollution which aims to eliminate the use of single use plastic items in hotels, reduce pollution on the seas, improve solid waste management and reduce the impact of hotels on water availability.

12- **Central America Marine Litter Action Plan:** In 2021, LAC countries raised their interest in learning from experiences implemented by different countries in the region and recommended the compilation of adopted policies, regulations and strategies undertaken by Member States to prevent marine litter and enhance management of plastic waste.

13- **Regional Caribbean Action Plan on Solid Waste:** Comprehensively review, identify and map recently completed, existing and proposed regional waste management programmes, projects, and activities on waste management to identify gaps in implementing the current Caribbean Waste Management Action Plan (CWMAP). Review and update proposed targets and indicators for the current CWMAP (assess whether they are still relevant, realistic, and appropriate and support relevant regional and global commitments relating to solid waste, marine litter, and plastics management). Estimate the costs and identify potential donors/financing mechanisms for implementation of the plan, including potential for public/private sector partnerships. Prioritize areas where the Private Sector can be engaged.

[51] Countries such as Guyana, Barbados and Saint Lucia have received support to improve their national marine litter and solid waste management policies and legislation, expand monitoring and assessment programmes, and enhance their public awareness, education, and outreach activities. GPML-Caribe continues to support regional Governments in implementing priority national and regional actions identified in the RAPMaLi.

[52] Platform for Accelerating the Circular Economy (PACE). (2021) "Circular Economy Action Agenda". Plastics. https://pacecircular.org/sites/default/files/2021-02/circular-agenda-plastics-feb2021_FINAL.pdf

14- **New Plastics Economy Global Commitment** unites businesses, governments, and other organizations behind a common vision and targets to address plastic waste and pollution at its source. Signatory governments in the LAC region include Chile, Peru, Grenada, the State of Mexico (Mexico), the city of Toluca (Mexico), the city of Buenos Aires (Argentina), the city of Sao Paulo (Brazil).

15- **The Brazilian Circular Economy Hub,** launched in 2020. The organisation has promoted and prioritized circularity to create joint solutions through ongoing webinars and working groups.. The four working groups are: New Plastic Film Supply Chains; Reverse Logistics for White Goods; Application of recycled resin in high quality products; and Circular Design.

Existing GEF projects on reducing marine plastics and plastic pollution:

1- **The Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS)** programme is preventing build-up of materials and chemicals in the environment that contain POPs and mercury and other harmful chemicals in SIDS, and to manage and dispose of existing harmful chemicals and materials in SIDS. Three child projects under this programme focus on the Caribbean (GEF ID 10279, 10472, 10258) and are targeting to prevent 150,000, 7,400 and 125,000 tonnes of plastic pollution respectively in the region (see Appendix 4).

2- **Establishing a circular economy framework for the plastics sector in Ghana (FSP IW/CW) – GEF 10401 Implemented by UNIDO:** This project aims to strengthen the national capacity of Ghana to transition to a circular economy framework that addresses plastic leakage into the country's oceans and waterways, facilitates sustainable plastics management through operationalising the National Plastic Action Partnership (NPAP/GPAP) and the National Plastic Management Policy (NPMP; and ultimately ends marine plastic pollution and reduces the unintentional emissions of POPs (u-POPs).

3- **Promoting Resource Efficiency and Circularity to Reduce Plastic Pollution for Asia and the Pacific (MSP IW/CW) – GEF 10628 Implemented by ADB:** This project aims to create enabling conditions for governments and relevant stakeholders to promote actions to reduce plastic pollution from source to sea in Asia and the Pacific.

4- **"Plastik Sulit" : Accelerating Circular Economy for Di□cult Plastics in Indonesia (FSP IW/CW) – GEF 10546 Implemented by ADB:** This project aims to reduce plastic pollution and support Indonesia's transition to a circular plastics economy through a multi-stakeholder value chain approach

Additional information on these projects and identification of opportunities for synergies is discussed in the knowledge section as well as in the institutional arrangements.

2.2 National Baseline Scenarios

2.2.1 Plastics lifecycle data

Table 4 presents a summary of the plastics life cycle information in the three project countries.

Table 4. Plastics lifecycle data in the 3 project countries

Plastic production	
Colombia	▪ In 2019, around 854,723 tonnes of plastic resins were imported into Colombia. The total production capacity of plastic resins in the country during the same year was 1.6 million tonnes and more than 50% of this local production was exported.[53] ▪ HBCD continues to be used as a flame retardant in the construction sector and to produce plastic vehicle parts.[54] Its use has been restricted to EPS and XPS insulation materials in buildings and over 90% of construction and isolation materials contains HBCD.[54] ▪ The Octa-BDE content in the EEE fraction in use in the country was around 57,804 kg by the end of 2015.[54] It is estimated that only vehicles manufactured from 1975 to 2004 may contain PBDE, comprising a total of 9,045.8 kg.
Panamá	▪ According to the Stockholm Convention National Implementation Plan for Panamá in 201855, the annual PBDEs in cables estimated is 269.38 tonnes, in transportation vehicles is equivalent to 4.27 tonnes. And, in foams is 0.02 tonnes. (Note that this data is focused on imports, usage, and waste management) ▪ HBCD is currently not produced in Panamá but used for insulation in construction, specifically in layers of EPS and XPS insolation. There are 3 industrial plants where these layers are fabricated, using imported material in the form of pellets of EPS that contain additives of the flame retardant HBCD. The finished layers (with or without HBCD content) also enter the country through import. The quantities of these layers in buildings are unknown but it is a booming product due to its low cost and light weight properties. A total of 10.65 tonnes and 0.50 tonnes of HBCD are estimated to be present in EPS and XPS insolation in the country respectively.
Jamaica	▪ Jamaica does not possess an industry of plastic resins production. There is no recent NIP.
Plastic consumption	

[53] Acoplásticos. (2021). "Plásticos en Colombia 2020-2021". Accessed on 6 August 2021. https://www.acoplasticos.org/index.php/mnu-nos/mnu-pyr/mnu-pyr-pi/378
[54] Stockholm Convention (2017) NIP Colombia. http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx
[55] The Stockholm Convention. (2017). "National Implementation Plan – Panamá".
http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

Colombia	▪ The average consumption of plastics was 27.8 kg/capita/year in 2019.[53] Government statistics and WWF figures show that in Colombia, the annual average consumption of plastic bags is about 288 units per person. The largest application for plastics in this country is packaging (54% of plastic consumption) and the most consumed plastics are PE, PP, PVC, and PET in this order [56].
Panamá	▪ Panamá currently has no data on plastics consumption.
Jamaica	▪ Jamaica currently has no data on plastic consumption.
Plastic waste generation	
Colombia	▪ 13% of the total solid waste generated is plastic waste (1,789,548.22 tonnes) and on average the country is estimated to generate 57 kg of plastic waste /capita/year.[57] ▪ A trend has been observed that as the size of the population of a municipality increases, the waste generation per inhabitant also increases[57]. For example, in municipalities with less than 30 thousand inhabitants the average generation is below 240 kg /capita/year, translating to a plastic waste generation rate of below 31.2 kg/capita/year.
Panamá	▪ In 2019 the total amount of plastic waste generated in the country was 276,005.92 tonnes. This corresponds to approximately 65.4 kg of plastic waste /capita/year.[58]
Jamaica	▪ In 2019 Jamaica generated 1,297,327 tonnes of solid waste from which 17% was estimated to be plastics and the average plastic waste generation was 79 kg/capita/year. ▪ According to the National Environment and Planning Agency (NEPA)[59], 51.2% of this plastic waste was PET, 7.40% HDPE and 7% PVC.
Plastic waste management	
Colombia	▪ In Colombia the main disposal method for waste is sanitary landfill (89% of total waste)[28]. ▪ According to the sectoral report of the Public Services in Colombia[60] , Polyethylene Terephthalate-PET was the most recycled material (representing 34%) out the approximately 196,170 tonnes of plastic waste that was recycled in 2019. ▪ It is important to note that the informality of the sector results in gaps in data and traceability of plastics which is dominated by "waste pickers". ▪ In the country, 68% of the municipalities carry out collection, classification, and recycling of plastic waste material. It is estimated that proximately 300,000 to 350,000 tonnes of plastic waste are recycled per year in Colombia[61]. Furthermore, 4 out of 10 municipalities state that they have at least one ECA (Estación de Clasificación y Aprovechamiento) which is essential infrastructure for waste classification for the recycling activities in the country[57]. Around 90% of the Colombian municipalities have a single provider of the public cleaning service, Moreover, 18% of the municipalities carry out beach cleaning activities in which the municipal administration is mostly one of the main supervisors. ▪ The result from the 2013 toolkit[62] show total releases of 583.32 g EQT/y of uPOPs in Colombia in 2013. 243.47g EQT/y (41.74%) from open burning processing, 124.4g EQT/y (21.33%) coming from waste incinerated, 42.65 g EQT/y (7.31%) from production of chemical products and consumer goods, and 10.86 g EQT/y (1.86%) from disposal and sanitary landfill. There is no data specific to plastic products. ▪ The country's vehicle disintegration and scrapping programs do not consider vehicle polyurethane foams as hazardous wastes. Foam wastes containing c-penta-BDE must be identified and separated from others in order to be properly managed as hazardous wastes.
Panamá	▪ It is estimated that 74% of municipal waste ends up in landfills. Additionally, approximately 26% of the waste generated in the country is neither disposed of in sanitary landfills nor recycled. A large portion is disposed of without any treatment or are burned in the open, possibly generating uPOPs (see section 1.1)[63]. ▪ According to the AAUD[58], the country has only 2 sanitary landfills (Cerro El Patacón, located northeast of Panamá City and El Diamante) and 63 uncontrolled landfills, which serve 74% of the country's population. Moreover, according to local authorities these sanitary landfills technically do not meet the standards to be considered a sanitary landfill and are rather uncontrolled landfills without the technical measures of management and safety where hazardous waste is deposited without treatment and in more than 80% open burning takes place. Of the 63 (controlled and uncontrolled) landfills studied by INECO[63], 91% are less than 1 km away from a riverbed; 46% have mangroves less than 2.5 km away; and 89% were found dumping hazardous waste. The environmental risks were evident in the study, where they also observed cases of spills in bodies of water. ▪ The waste collection is the responsibility of the municipalities, either with their own means (46 districts) or indirectly by concession companies (13 districts), serving 66% of the population. It has been found, as confirmed by the mayors surveyed by INECO[63], that 83% of the municipalities have a waste collection service, a percentage that rises to 94% if the indigenous regions are not considered, which only have voluntary cleaning. However, another survey (developed by the same institution in 2016)[58], showed that 43% of the population were not satisfied with the waste collection services and 46% did not know what the

[56] Acoplásticos. (2020). "Plásticos en Colombia 2019-2020". Accessed on 5 July 2021. `jbOSTNKYs4831gepsfiq57DRCFws38164LXIEMFhqner/sGcWB9lkZ/PeC2020/

[57] Compromiso Empresarial para el Reciclaje (CEMPRE). (2021). "Encuesta a Municipios sobre Gestión de Residuos Sólidos Domiciliarios 2019 Colombia". https://cempre.org.co/wp-content/uploads/2021/08/Encuesta_municipios_residuos_domiciliarios_Col_2019_digital.pdf

[58] Autoridad de Aseo de la República de Panamá. (2017). "Plan Nacional de Gestión Integral de Residuos 2017 -2027". INECO. http://www.aaud.gob.pa/plangestion/pngir.pdf

[59] Government of Jamaica - National Environment and Planning Agency (NEPA). (2021). https://www.nepa.gov.jm/

[60] Superintendencia de Servicios Públicos Domiciliarios. (2020). https://www.superservicios.gov.co/

[61] Estrada, C. (2021). "La República". https://www.larepublica.co/especiales/la-revolucion-del-plastico/colombia-recicla-material-plastico-por-un-aproximado-de-300000-a-350000-toneladas-por-ano-3233728. Accessed on 1 October 2021.

[62] MinAmbiente (2017) National Implementation Plan Colombia – Stockholm Convention on Persistent Organic Pollutants

[63] República de Panamá Ministerio de Salud. (2015). "Análisis de Situación de Salud". http://www.minsa.gob.pa/informacion-salud/analisis-de-situacion-de-salud-asis

	selective collection of waste consists of. Furthermore, 21% of the surveyed population considered waste management the country's second most important issue. Thus, it can be inferred that in Panamá there are major deficiencies in the processes for collecting and disposing of MSW. ▪ Panamá has no temporary storage systems or waste treatment facilities. However, there is an informal separation carried out by the segregators, who collect recyclable materials to sell them to private companies, which is almost the only form of recovery in the present. According to the Ministry of Environment the rate of recycling is 5% (including all type of materials). ▪ There are some initiatives of recycling companies that collect and manage large amounts of usable waste, including metal, paper, and plastic. The Panamanian Chamber of Recycling, established in August 2017, is one of these companies. Its purpose is to promote recycling in the country and encourage collaboration and exchange among its members such as "Red Ecologica", "Recimetal SA", "La Casa de las Baterías", and "Felipe Motta". ▪ About 23.2 gTEQ/year of dioxins and furans are released in Panamá due to open burning practices of waste (2015), 13.9 gTEQ/year are released on landfills/dumpsites and 8.10 gTEQ/year released through incineration.[55]
Jamaica	▪ The National Solid Waste Management Authority (NSWMA)[64] stated that in 2019, the country had a waste collection coverage of 80%. However, as the country does not have sanitary landfills with engineering techniques, the waste is taken to 8 municipal dumpsites located in different parts of the island. In the same year 1,015,592 tonnes of waste were collected and disposed to these municipal dumpsites. ▪ Currently plastic waste is collected by companies that export it abroad for recycling. Recycling Partners of Jamaica (RPJ)[65] is the main company specialized in the collection of plastic waste and they export the waste mainly to the USA and Malaysia. According to them, 1,365.5 tonnes of plastic waste were collected in 2019 from which 99.8% was PET and the remaining was HDPE. However, neither The Statistical Institute of Jamaica (STATIN)[66], nor the Jamaica Customs Agency[67] were able to provide data on the amount of exported plastic waste for recycling, as they indicated that the in 2019 data had not yet been collected. ▪ 78.3% of dioxins and furans were released in residues followed by releases to air (20.6%), water (1.2%) and land (0.83%). Releases to air were dominated by burning of garbage and sugar cane fields (57.6%) and waste incineration, primarily from hospital wastes (40.9%). Releases to water were based entirely on leachate from landfill/dumpsites, while releases to land arise exclusively from residues left after uncontrolled combustions. The amounts left in residues arise mainly from disposal/landfilling (75.7%) and much less from uncontrolled combustion (24.3%). ▪ The emissions stated in the NIP, although subject to considerable uncertainties, clearly indicate that the management of dioxins and furans releases will depend on addressing hospital incineration, burning of cane fields and uncontrolled burning of garbage/household waste and accidental fires, no specific data available on plastics.[68]
Marine plastic pollution	
Colombia	▪ Coastal marine ecosystems of Colombia's main pollution source of plastic garbage are tourist activities that take place seasonally. Plastic pollution also comes from the inadequate management of solid waste (open dumps, disposal directly in bodies of water)[32]. Consequently, different types of plastics are accumulating in Colombia's ecosystems, with a general average concentration of 2.7 macro-plastic and 255 microplastic items per cubic meter being found in the beaches' sand. The areas with the highest concentrations of plastics are Cartagena, Boca Tocino and Santa Marta[69]. ▪ The most common types of polymers reported in studies on plastic pollution in coastal ecosystems of Colombia[32] [33] are: polyethylene (PE), polypropylene (PP), polystyrene (PS), polyurethane (PU), polyethylene terephthalate (PET), polyvinyl chloride (PVC), high impact polystyrene (HIPS), high density polyethylene (HDPE), polyacrylamide (PAM), and acrylonitrile butadiene styrene (ABS), which are widely used in packaging, containers, textiles, and elements of construction, among others. As mentioned in section 1.1 (Problems in LAC cities), some of these are of high toxicological concern.
Panamá	▪ Marine waste in Panamá is produced by human activity on coastal areas densely populated by residents and tourists (land sources); from industrial and recreational marine activities such as navigation, maritime transport, fishing, and aquaculture; and by marine currents. Panamá's discharge of marine waste (generated by land sources) is 102,229 tons/year, of which 61,553 tons is generated by human activities in urban areas and 40,675 in rural areas.[70] The hydrographic basin of the Panamá Canal which provides drinking water in some provinces, is affected by the generation of waste solids due to the contamination produced by landfills. ▪ ANCON [71], a non-profit non-governmental organization which promotes the conservation of the natural resources and biodiversity in Panamá, showed that due to its projects in 2019, 54 beaches were cleaned. From these cleaning activities, 164,450 objects were removed from which 82.01% was plastic waste material. Considering this 82.01% of plastic and the 102,229 tonnes/year of waste that are discharged into the sea in Panamá, it could be estimated that the amount of plastic waste discharged to the ocean corresponds to 83,838 tonnes/year. Moreover, studies of characterization of floating plastic waste were carried out in 2019 and the results revealed that the floating waste captured in the Matias Hernandez river basin, was

[64] Ministry of Local Government and Community Development - National Solid Waste Management Authority (NSWMA). (2021). http://www.nswma.gov.jm/
[65] Recycling Partners of Jamaica. (2021). https://recyclingja.com/
[66] Government of Jamaica - The Statistical Institute of Jamaica. (2021). https://statinja.gov.jm/
[67] Government of Jamaica - Jamaica Customs Agency. (2021). https://www.jacustoms.gov.jm/
[68] Stockholm convention. (2004). NIP Jamaica. http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx
[69] Rangel-Buitrago et al. (2018). "Abundance and distribution of beach litter along the Atlántico Department, Caribbean coast of Colombia". Marine Pollution Bulletin. 10.1016/j.marpolbul.2018.09.040
[70] República de Panamá, Ministerio del Medio Ambiente. (2020). "Borrador Plan de Accion Nacional de Basura Marina 2021-2026". https://www.miambiente.gob.pa/download/borrador-plan-de-accion-nacional-de-basura-marina/
[71] ANCON. (2020). "Memoria de Sostenibilidad 2019". https://ancon.org/wp-content/uploads/2020/10/ANCON_Estilos_MEMORIA-2019_VF-ok.pdf

	primarily plastic material; Polyethylene Terephthalate (PET) predominated with 29.5%, followed by Expanded Polystyrene (EPS) with 17.2% and High-Density Polyethylene (HDPE) with 6.1% of the total characterized floating waste[36].
Jamaica	▪ Plastic pollution in Jamaica results in flooding, damage to coastal and marine ecosystems and an unhealthy environment for residents. Places like Rae Town, a coastal Kingston neighbourhood, suffer the most from the wave of plastic pollution that makes its way into Kingston Harbour. According to the Ocean Conservancy, during coastal clean-ups in 2017, an average of 4,684 litter items per kilometer were found on beaches and coastal areas of Jamaica[72]. The top marine litter found was plastic beverage bottles (32%), followed by plastic bottle caps (11%), and foam food containers (2.7%). According to NSWMA[64], marine litter within the country's coastal waters has significantly impacted the tourism and fisheries industries.
Upstream Initiatives	
Colombia	▪ Upstream measures such as: encouraging prevention, rethinking the design of plastics, reduction to increase efficiency, reuse models, among others, are considered. Colombia's National Circular Economy Strategy (ENEC) promotes the circularity of plastics while improving the conditions of waste pickers. ▪ There is a strong interest of companies to work on upstream solutions in Colombia. Algramo and Xiclo plan to set up an innovative refill and reusable solution system in the food industry. GPAP is providing a platform to create awareness and share knowledge on reusable solutions, through the Reuse platform.
Panama	▪ Upstream measures in the country are reflected in programs, laws, and policies. The Zero Waste Programme 2015 – 2035 aims to reduce waste disposal through the implementation of the three R's: reduce, re-use and recycle but needs more commitment from different stakeholders to upscale results. The Sound Waste Management Plan 2017-2027 includes a proposal for a new management model and a new financial economic model based on the prevention, minimization, reuse, recycling, recovery and elimination of different materials, including plastics. In 2021, Panama established a new law (223 – 2021) on incentives to combat disposable plastics. It focuses mainly on tax exemptions, for the recycling industry but also for plastic producers to change their line of products to biodegradable items. These incentives for recycling and industrial reconversion in the plastics industry follow the framework of the Zero Waste Programme. Law 187 of December 2, 2020, regulates the reduction and progressive replacement of single-use plastics. ▪ Trashforma is a mid-size private company in Panama and is deeply involved in recycling, reuse and upcycling of plastic products. They offer a collection service to the food and tourism industry, among other services. The enterprise collects around 15 to 20 tonnes of material, which otherwise ends up in the dumpsite at Patacon. One of the main barriers to upscaling is the financial profitability of the model. In addition, Leafsync has established private partnerships that work towards recycling in collaboration with consumer good companies, such as Nestle, IBM.
Jamaica	▪ The use of polyethylene bags to transport goods and products is prohibited in supermarkets, self-service shops, retail, and commercial establishments as Jamaican law focuses on the promotion of reusable bags. ▪ An operating EPR system on PET bottles is being established together with RPJ.
Gender Dimension	
Colombia	▪ In Colombia, around 59.7% of the women and 55.2% of the male workforce are in the informal sector. A very balance situation regarding self-employment is present, around 50% for both genders generally across industries. Moreover, according to national polls, 35% of the recycling workforce are women.[57]
Panamá	▪ The informal recycling sector in terms of employment is quite balanced with around 47% for both genders, with about 53% corresponding to formal. However, self-employment is higher for male, 40.8% and 36.7% respectively.
Jamaica	▪ Currently lacking data.

2.2.2 Policy

Table 5 presents a summary of the policies on plastics in the three project countries.

Table 5. Policy overview in the 3 project countries

Policy Overview	
Colombia	▪ At the national extent and with impacts at the local level both in Barranquilla and Cartagena, the National Plan for the Sustainable Management of Single Use Plastics envisions that by 2030 100% of single-use plastics placed on the market are reusable, recyclable, or compostable. ▪ In terms of national policies, Colombia has established goals for all recyclable products but not specifically for plastics. The National Development Plan has a target of 15% of waste recycled by 2022, while CONPES 3874[73] sets it to 30% by 2030, having measured a baseline of 8% in 2018. ▪ The Extended Producer Responsibility resolution sets a target of 30% of recycled packaging by 2030, with a 2-3% annual growth rate. ▪ Colombia's National Circular Economy Strategy (ENEC) sets specific targets to increase the overall waste recycling rate, as well as of packaging waste, through instruments such as Extended Producer Responsibility. The objective of the Strategy is to strengthen the country's sustainable development model, orienting it to the efficiency of material and energy flows, technological innovation, the generation of collaborations and alliances and new business models that allow the closing of business cycles and efficient use of materials, water, and energy. This strategy emphasizes six actions with short-term and long-term goals and activities: (i)

[72] Diez, S.M., Patil, P.G., et al. (2019). "Marine Pollution in the Caribbean: Not a Minute to Waste". World Bank Group.
[73] República de Colombia Departamento Nacional de Planeación. (2016). "Política Nacional para la Gestión Integral de Residuos Sólidos". https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/3874.pdf

	industrial materials and products; (ii) container and packaging materials; (iii) optimization and use of biomass; (iv) water cycle, (v) sources and use of energy; (vi) construction materials and demolition waste. ▪ As part of the packaging line, the National Government created the National Board for Sustainable Plastic Management, aimed at articulating and executing actions in all phases of the plastic life cycle to improve environmental, economic, and social sustainability for the benefit of all Colombians, incorporating the concept and lines of action to implement the ENEC. ▪ In November 2019, the National Plan for the Sustainable Management of Single-use Plastics was introduced. It aims at sustainable management of plastics, based on upstream instruments and actions in prevention, reduction, reuse, use, responsible consumption, generation of new opportunities of business, productive chains, and jobs and technological developments, to protect natural resources and promote competitiveness and subsequently prohibited the entry of single-use plastics into the areas of the System of National Natural Parks in Colombia through Resolution 1558 of 2019. ▪ During the last months of 2020, 231 programs have submitted their environmental management plans for containers and packaging to ANLA (National Environmental Licensing Authority), comprising 51 collective programs and 180 individual programs. More details of these programs are listed in Appendix 11. ▪ In relation to policies to address marine litter, Colombia is engaged in the RAPMALI for the Wider Caribbean Region, the Framework for Marine Litter for the South Pacific. Moreover, Colombia is also part of the Marine Litter Regional Action Plan for the Northeast Pacific Region 2021 – 2025, which aims at providing countries and stakeholders with actions applicable to the local, national, and regional context that allow addressing the problem of marine litter in an effective and sustainable way over time.
Panamá	▪ Zero Waste Programme 2015 – 2035 aims to reduce waste disposal through the implementation of the three R's: reduce, re-use and recycle but needs more commitment from different stakeholders to upscale results. ▪ The Sound Waste Management Plan 2017-2027 includes a proposal for a new management model and a new financial economic model based on the prevention, minimization, reuse, recycling, recovery and elimination of different materials, including plastics ▪ This country has developed different regulations and initiatives to face the generation of plastic waste. ▪ In 2018, Panamá became the first country in Central America to ban polyethylene bags in supermarkets, self-service stores, warehouses, or shops in general to transport products or merchandise with a phase-out period of 18 to 24 months. ▪ Law No. 6 of February 6, 2017, which establishes the integrated management of solid waste in public institutions, orders the latter to classify their waste and undertake recycling plans for paper, plastic bottles, Tetrapak containers and aluminum cans. ▪ Law No. 33 of March 30, 2018, establishes the Zero Waste Policy and its framework of action for the integrated management of waste based on the concept of circular economy. ▪ In 2020, Law No. 187 was approved and came into force in 2021, as part of the public environmental policy in the state, which establishes the legal framework on single-use plastic articles in the national territory. Moreover, law 223 of June 8, 2021, was recently presented and aims to promote the recycling sector as an industry in the national territory. ▪ Panamá joined three Regional Seas Programmes – the Wider Caribbean Region and its RAPMALI for the Caribbean side, the South Pacific (Regional Action Plan framework) and Northeast Pacific (Regional Action Plan under development). In addition, the GPML, UNEP Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and UNEP Regional Office for Latin America and the Caribbean (UNEP ROLAC) have supported the development of a National Action Plan on Marine Litter together with the Ministry of Environment and Mar Viva Foundation.
Jamaica	▪ The use of polyethylene bags to transport goods and products is prohibited in supermarkets, self-service shops, retail, and commercial establishments as Jamaican law focuses on the promotion of reusable bags. ▪ Two Ministerial Orders were promulgated to ban some types of single-use plastics implemented on a phased basis over three years, commencing on January 1, 2019, with several phases. The final phase, A ban on the import, manufacture, distribution and use of all SUPP (with some exceptions) which applies to expanded polystyrene foam, commonly referred to as 'Styrofoam™', for use as finished goods in the food and beverage industry, that is, food and beverage containers. And ``24x24" single-use plastic bags and disposable drinking straws attached to drink boxes or pouches, began on January 1, 2021. The government has granted a six-month transition period to the private sector and has committed to increasing public education and awareness-raising activities. ▪ A national implementation plan for management of POPs in Jamaica provides an institutional and legislative framework relevant to the POPs issue and the status of POPs stockpiles and releases. This is followed by the strategy and action plan elements.

2.3 Selection and overview of situation in the 6 project cities

As covered in section 1.1.2 (the problem in LAC cities), urban environments are responsible for an estimated 60% of marine plastics. Solid waste management including litter prevention and collection, recycling, storm drain maintenance, tourism promotion, community health and protecting the local environment is also mainly managed at city-level while the regulatory and legislative frameworks are riddled with gaps and implementation challenges and a holistic sustainable plastic life-cycle management is absent in the LAC region. Effective policies and innovative solutions have a high chance of making positive impacts in cities, as acceptance of new concepts, policies, technologies, business models and innovations is usually more progressive in cities.

The criteria used to identify suitable cities that would highlight the benefits of circular economy approaches to addressing marine plastics and plastic pollution include the following and the selection of the cities is based on comprehensive consideration and balance among all the criteria.

- Adjacency to watershed and seas
- Population and density
- Production and consumption patterns of plastics products
- Waste management systems, including the activities from the informal sectors
- Existing action plans, policies and efforts on dealing marine litter prevention; and the

- Willingness to further explore targeted circularity approaches to prevent marine plastics and plastic pollution with a focus on problematic products which could contribute towards a circular economy.

On the basis of these criteria, the following 6 cities with impacts on the Caribbean Sea and the Pacific are selected: Cartagena (Colombia), Barranquilla (Colomia), Kingston (Jamaica), Montego Bay (Jamaica), Panama City (Panama), and Colón (Panama). All cities selected are close to watershed and seas. They are large cities by population, ranking from the 1st to the 5th largest in their respective countries. More information on their production and consumption patterns of plastics, waste management systems and existing policies are provided in table 6 on city baseline information and appendix 13 on Technical Project Specifications. During the PPG phase, these 6 cities were reconfirmed by the national focal points from the 3 project countries as the priority cities where support from this project will be needed to increase circularity for plastics. Relevant city stakeholders including city governments and key private sector entities also expressed strong interest to participate in the project in the inception workshop, validation workshop and bilateral consultation process organised by the project team.

Cartagena (Colombia) is located on the northern coast of Colombia in the Caribbean Coast Region. It is the capital of the Bolívar Department, and had a population of 914,552 in 2019 and a population density of 1,600/km^2. It is the fifth-largest city in Colombia and the second largest in the region, after Barranquilla. Major economic activities include the maritime and petrochemicals industries, as well as tourism. In Cartagena, there are twelve petrochemical manufacturing companies. According to Acoplasticos (2020), the national production of Colombia in 2019 was of 1,458,884 tonnes per annum, in which 34.41% correspond to PVC and 34.27% to PP. In addition, a total of 697,724 tonnes per annum was imported in 2019, with HDPE and PET with the highest percentages, 27.64% and 20.71% respectively. In terms of consumption, a total of 1.,400,305 tonnes were consumed in 2019. The production in Cartagena makes a total of 147,347 tonnes, around 10% of the total national production, in addition to 85,820 tonnes of plastic were imported in the city.

Barranquilla (Colombia) is the capital district of the Atlántico Department in Colombia. It is located near the Caribbean Sea and is the largest city and second port in the northern Caribbean Coast region; as of 2019 it had a population of 1,206,000 and a population density of 7,823/km², making it Colombia's fourth-most populous city after Bogotá, Medellín and Cali. Barranquilla lies strategically next to the delta of the Magdalena River, 7.5 kilometres (4.7 miles) (originally 25 kilometres (16 miles) before rapid urban growth) from its mouth at the Caribbean Sea, serving as a port for river and maritime transportation within Colombia. It is also the main industrial, shopping, educational and cultural center of the Caribbean Region of Colombia. In Barranquilla, it has been estimated that 5.9% of the total plastic production in Colombia is produced, and an additional 12,559 tonnes were imported in 2019 (Acoplasticos, 2020).

Kingston (Jamaica) is the capital and largest city of Jamaica with a population of 782,447 (2019) and a population density of 1,630/km², located on the south-eastern coast of the island. It faces a natural harbour protected by the Palisadoes, a long sand spit which connects the town of Port Royal and the Norman Manley International Airport to the rest of the island. In Jamaica, the most significant imported plastics are LDPE, PVC and PP, 33% on containers and packaging, 30% construction and 25% domestic use, making a total of 24,700 tonnes. Kingston presents most of the consumption.

Montego Bay (Jamaica) is the capital of the parish of St. James in Jamaica. The city is the fourth-largest urban area in the country by population, after Kingston, Spanish Town, and Portmore, all of which form the Greater Kingston Metropolitan Area, home to over half a million people. As a result, Montego Bay is the second largest anglophone city in the Caribbean, after Kingston and has a population of 147,374 (2019) with a population density of 247.69/km². Montego Bay is a popular tourist destination featuring a cruise line terminal and several beaches and resorts. The city is enclosed in a watershed, drained by several rivers such as the Montego River.

Panama City (Panama) is the capital and largest city of Panama. It has a population of 1,183,333 in 2019 and a population density of 4,303/km². The city is located at the Pacific entrance of the Panama Canal, in the province of Panama. The city is the political and administrative center of the country, as well as a hub for banking and commerce. In Panama, there is an industry to transform plastic rather than production of new plastic. Around 154,000 tonnes are imported to the country, primarily PVC and PS, while the export figure remains very low, mainly around 1,344 tonnes of PS. In 2019, 151,971 tonnes of plastic were consumed. In Panama City the plastic consumption is of 41,416 tonnes annually.

Colón (Panama) is the capital of Colón Province. It is the biggest port city found on the Caribbean Coast, and it has an urban population of 253,366 in 2020 and a population density of 30.71/km², It sits on the Caribbean coast, at the entrance to the Panama Canal. Colón is an important port, commercial center, and tourist destination. It was made a free trade zone in 1953 and is the world's second largest duty-free port (the principal tourist attraction). In Colon is considerably lower due to its economic activity, of 8,868 tonnes.

The following section includes a brief description of the current situation of the waste management system in the project cities, based on the National Guidance for Plastic Pollution Hotspotting and Shaping Action[74]. The main findings represent estimations based on national official documents, publications and data collection from regional, national and city stakeholders (see **Figure 2** and **Table 6**)

[74] Boucher, J., Zgola, M., et al. (2020). "The National Guidance for Plastic Pollution Hotspotting and Shaping Action: Introduction to the methodology". Shaping Environmental Action (EA) & Quantis International. https://plastichotspotting.lifecycleinitiative.org/wp-content/uploads/2020/07/National-Guidance-for-Plastic-Hotspotting-and-Shaping-Action-Final-Version-2.1.pdf

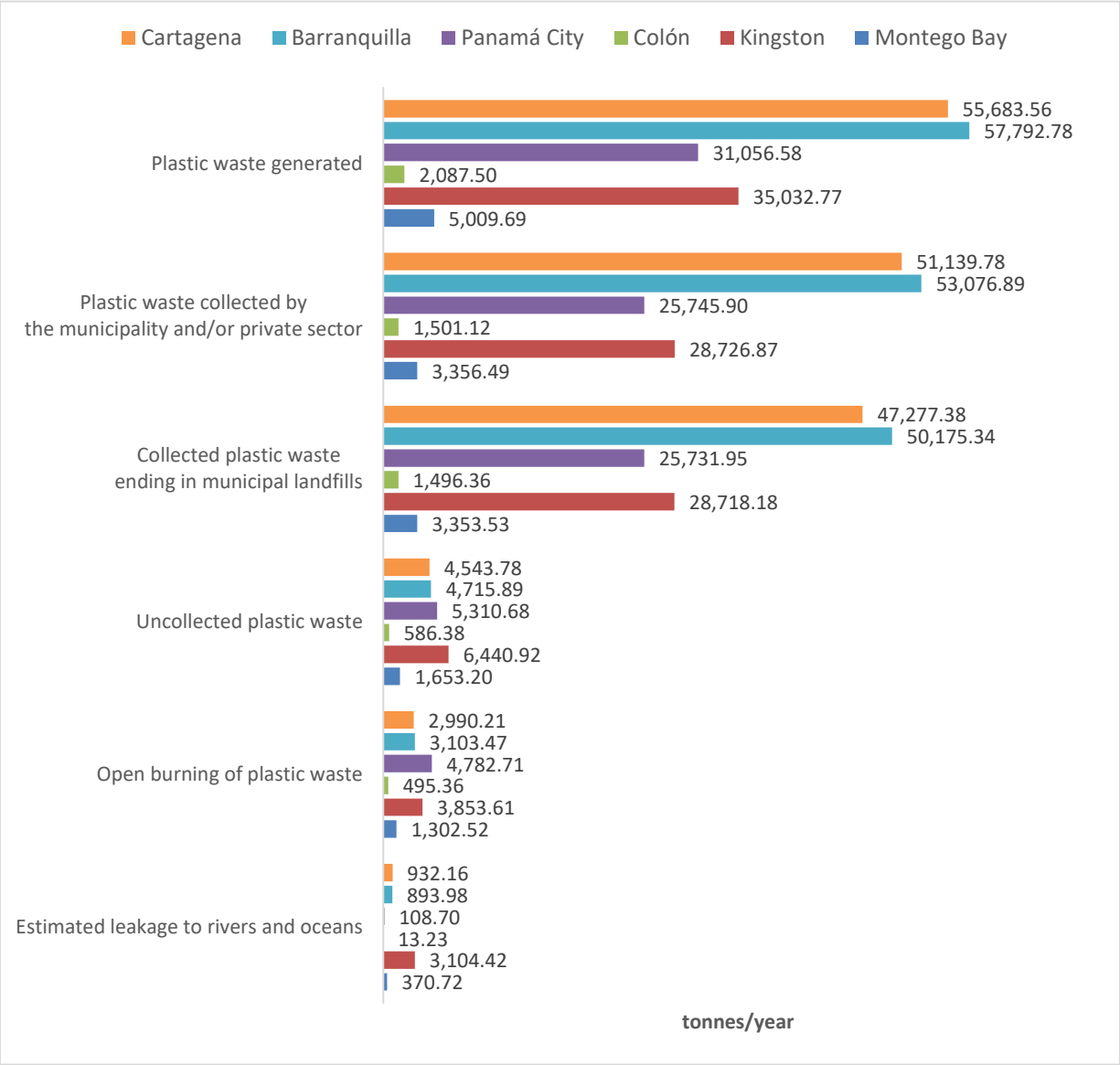


Figure 2. Comparative overview of plastic waste generation and management across the six project cities

Source: Data calculation based on the National Guidance for Plastic Pollution Hotspotting and Shaping Action[74]

The figure above compares the six project cities in terms of plastic waste generated, plastic waste collected, collected plastic waste ending up in landfills, uncollected plastic waste, open burning of plastics waste and leakage into rivers and oceans. Total plastic waste generated in the 6 project cities during 2019 was estimated to be 186,663 tonnes. From this total amount, 163,547 tonnes were collected by the municipalities and/or private sector. Based on consultations with national stakeholders it was possible to estimate the collected plastic waste ending into different type of municipal landfills (sanitary landfills, dumpsites, etc.) which in 2019 was 156,752.73 tonnes. Moreover, in the 6 project cities it was calculated that 23,2550.84 tonnes of plastic waste are uncollected. This uncollected plastic waste ends up either being open burnt, being littered into rivers and oceans or in other final disposal method used by the consumer. The estimated leakage rate was calculated based on the methodology followed by National Guidance for Plastic Pollution Hotspotting and Shaping Action[74]. From this, it was estimated that 5,423 tonnes of plastic waste were leaked to rivers and oceans from the 6 project cities.

The Colombian cites mostly possess the highest numbers of the presented data, which can be explained by the high population of Colombia and its two project cities compared to the other project cities. The sections below describe the figures of the above graph and its context in more detail (section 2.1 – 2.2). Furthermore, Table 7 gives an overview of the policy priorities identified by the six project cities, which is a result of literature review, stakeholder interview and consultation, analysis of existing policies and business interventions, as well as online webinars with key governmental representatives and businesses.

Table 6. City Baseline information of the 6 project cities

Cartagena	▪ According to the Regional Solid Waste Comprehensive Management Plan (PGIRS) of Cartagena de Indias [75], the waste generation is estimated to be 1.1 kg/capita/day in the region. Within this amount, 15% is plastic waste. There were approximately 56,000 tonnes of plastic waste generated in Cartagena in 2019, or 62 kg/capita/year. It is estimated that 92% of this generated plastic waste is collected by the municipality and disposed to sanitary landfills (47,277.38 tonnes per year). Furthermore, approximately 8% of the plastic waste collected in this city is recycled. The remainder 8% of the waste generated is uncollected and part of it leaks into the ocean and waterways. It is estimated that 932 tonnes of plastics were leaked to the ocean from Cartagena in 2018, corresponding to 1.05 kg/capita/year. ▪ According to the 2018 Colombian census compiled by DANE[76], Cartagena represented 9.76% of the municipal waste collected in Colombia. In terms of recycling, around 20% of separation is done at the source, and the other 80% is not being separated. Today mainly PET, PP and HDPE are collected and mechanically recycled using key infrastructure provided by a few large players in the recycling market. Chemical recycling is led by Andercol, who has developed a PET facility in Cartagena. ▪ Concerning the city level strategies to address plastic pollution, the mayor of Cartagena de Indias, through Agreement 039 of December 18, 2020, replaced and regulated the consumption of single-use plastics in public entities of the central and decentralized level of the Tourist and Cultural District. The agreement had different objectives such as the generation of a social transformation through the active participation of the citizens and the replacement of single-use plastic products, through a pedagogical process of environmental education in terms of sustainability. ▪ Furthermore, the city's PGIRS contains a Coastal and Riparian Beaches Cleaning Program. For the year 2021, this Program has the following two activities planned, with funding of COP $ 135,997,900 (US $36,221): Design and implementation of a training program for the different actors that provide tourist services on the beach, on the proper management of waste and the review and background check, on the generation of solid waste on beaches. More information about these initiatives and programmes at interinstitutional level in Cartagena are listed in Appendix 11.
Barranquilla	▪ As stated by the Regional Solid Waste Comprehensive Management Plan (PGIRS) of Barranquilla[77], there was a waste generation of 0.99 kg/capita/day in the region. Moreover, the Regional Solid Waste Comprehensive Management Plan (PGIRS) of the Municipality of Atlántico[76], developed a characterization of the solid waste generated and 14.25% was estimated to be plastic. From this per capita amount, and the plastic share it was estimated that 58,000 tonnes of plastic waste was generated in Barranquilla in 2018, or 52 kg/cap/year. 92% of the plastic waste generated is collected and disposed to sanitary landfills, representing 53,076 tonnes per year. Furthermore, only 5.28% of the plastic waste collected in this city is recycled. The remainder 8 % of the waste generated is uncollected and part of it leaks into the ocean and waterways. It is estimated that 893 tonnes of plastics were leaked to the ocean from Barranquilla in 2018, corresponding to 0.79 kg/capita/year. ▪ Regarding the city-level strategies, Barranquilla is part of a departmental strategy which has a recovery goal of 5%, while the EPR normative has the goal of 16% recovery for the year 2023. The city has introduced the Departmental Development Plan and the Sound Solid Waste Management Plan, with 3 main objectives: first, structure a strategy for solid waste with the active participation of all the actors involved that is technically feasible, environmentally convenient, and economically viable. Second, strengthen the educational and advertising campaigns on a permanent basis that are developed to sensitize citizens to the integral management of solid waste aimed at raising environmental awareness. Finally, develop actions in favour of the recycling population that will result in their formalization and strengthening. Further information about the initiatives in Barranquilla can be found in Appendix 11.

[75] Alcaldía Distrital de Cartagena de Indias. (2021). "Actualización del Plan de Gestión Integral de Residuos Sólidos del Distrito de Cartagena de Indias 2016-2027". https://www.cartagena.gov.co/

[76] Alcaldía Municipal de Puerto Colombia. (2016). "Plan de Gestión Integral de Residuos Sólidos 2016-2020". https://www.puertocolombia-atlantico.gov.co/Transparencia/PlaneacionGestionyControl/Plan%20de%20Gesti%C3%B3n%20Integral%20de%20Residuos%20Solidos%20(PGIRS)%202016-2020.pdf

[77] Alcaldía de Barranquilla, Distrito Especial, Industrial y Portuario. (2020). "Plan de Gestión Integral de Residuos 2021 – 2032"

Panamá City	▪ According to regional documents provided by INECO[58], a person generated in average 1.03 kg/day of solid waste in Panamá City. From this average, 17.13% is plastic. Based on this information, there were approximately 31,000 tonnes of plastic waste generated in Panamá city in 2018, or 64 kg/cap/year. 82.9% of this generated plastic waste is collected and disposed to sanitary landfills, representing 25,745 tonnes per year. It is estimated that only 0.5% of this collected plastic waste is recycled. The remainder 17.10% of the waste generated is uncollected and part of it leaks into the ocean and waterways. It is estimated that approximate 109 tonnes of plastics were leaked to the ocean from Panamá city in 2018, corresponding to 0.23 kg/capita/year. ▪ In the last years, a growing concern about the generation of waste and specifically about the plastics that enter the oceans encouraged the population, government institutions, non-governmental organizations (NGOs), companies, universities, and others to take part every year in cleaning beaches, rivers, and mangroves. They have been involved in many activities from environmental education campaigns and projects to the collection of recyclable materials segregated at the source. From 2001, the National Association for the Conservation of Nature (ANCON) in conjunction with the Foundation for the Protection of the Sea (PROMAR) led garbage collection through the annual activity called Cleaning of Beaches, Coasts and Rivers nationwide. ▪ In 2008, the ANCON Association started to raise awareness and search for solutions for waste management through its #TuPapelCuenta campaign supported by the Papelera Istmeña SA companies (today part of a multinational), TetraPak, and the Riba Smith and El Rey supermarkets. This campaign lasted until the beginning of 2014 when the organization started another campaign known as Trash Zero-Change Your Neighbourhood, called Recycle for your future from 2019. During the 2010s, new organizations emerged that seek to encourage recycling, prevention, and rational waste management, including the Ecocreando, Costa Recicla, Marea Verde, and Movimiento MiMar Foundations. In Appendix 11, the description of these initiatives and programmes can be found.
Colón	▪ There were approximately 2,087 tonnes of plastic waste generated in Colón in 2018, or 51 kg/cap/year. 72% of this generated plastic waste is collected and disposed to sanitary landfills, representing 1,501 tonnes per year. It is estimated that less than 1% of this collected plastic waste is recycled. The remainder 28% of the waste generated is uncollected and part of it leaks into the ocean and waterways. As a result, it is estimated that 13 tonnes of plastics were leaked to the ocean from Colón in 2018, corresponding to 0.32 kg/capita/year.
Kingston	▪ There were approximately 35,000 tonnes of plastic waste generated in Kingston in 2018, or 59 kg/cap/year. 82% of this generated plastic waste is collected by the municipal services. However, 100% these are disposed to unsanitary landfills, representing 28,591 tonnes per year. It is estimated that only 0.47% of this collected plastic waste is recycled. The remainder 18% of the waste generated is uncollected and part of it leaks into the ocean and waterways. As a result, it is estimated that 3,104 tonnes of plastics were leaked to the ocean from Kingston in 2018, corresponding to 5.24 kg/capita/year.
Montego Bay	▪ There were approximately 5,009 tonnes of plastic waste generated in Montego Bay in 2018, or 45 kg/cap/year. 67% of this generated plastic waste is collected. However, these 4,643 tonnes per year of plastic waste were disposed to unsanitary landfills. The remainder 33% of the waste generated is uncollected and part of it leaks into the ocean and waterways. As a result, it is estimated that 370 tonnes of plastics were leaked to the ocean from Kingston in 2018, corresponding to 3.33 kg/capita/year.

The baseline in the PPG is primarily based on modelling, and it is essential to ground truth and verify the findings of the modelling approach with in-situ monitoring data to further strengthen and confirm the findings with regards to different products and polymers. As part of the execution of this project, city-level monitoring initiatives will be implemented to strengthen and confirm the findings of the model and to allow for the calculation of the reduction of marine plastics and chemicals of concern on the ground based on primary data collected in cities, to measure the effectiveness of the interventions selected by each city.

Table 7. Summary of policy priorities in the 6 project cities

	Barranquilla and Cartagena (Colombia)	Panamá City and Colón (Panamá)	Kingston and Montego Bay (Jamaica)
Reducing unnecessary, avoidable, and problematic products, including products with chemicals of concern and single-use plastics	▪ Identify problematic and unnecessary plastics and reduce/eliminate them ▪ Identify the plastic products that contain CoC and reduce such products	▪ Identify the plastic products that contain CoC reduce such products ▪ Reduce the use of EPS containers as established by Law 33 of 2018, and other plastic containers not regulated by Law 187 of 2020.	▪ Identify the plastic products that contain CoC and reduce such products
Promote reuse and refill	▪ Implement the National Plan for the sustainable management of single-use plastics ▪ Promote reusable non-food packaging ▪ Encourage prevention, reuse and returnability of plastic products ▪ Establish and implement specific actions of the National Circular	▪ Promote the development of a regulatory framework that includes economic incentives to promote reuse and recycling	▪ Promote the development of a regulatory framework that includes economic incentives to promote reuse and recycling

	Economy Strategy (ENEC), line of action 5.2.2: Flow of packaging materials, to promote the circularity of plastics		
Eco-labels, standards and sustainable procurement	▪ Implement Sello Ambiental Colombiano (sustainable stamp) as a voluntary requirement for specific product categories ▪ Establish and implement Sustainable Procurement legislation	▪ Strengthen the measure of municipal agreement 231 of the Mayor's Office of Panamá on sustainable procurement ▪ Promote eco-labels	▪ Strengthen the ecolabel programme under the Green Business Jamaica (GBJ) ▪
Waste management	▪ Improve plastic waste management to align with the Environmental Policy for the Sound Management of Waste or Hazardous Waste ▪ Formalize the informal sector, to improve the working conditions of waste pickers	▪ Improve plastic waste management to align with the National Policy for the Sound Management of Non-Hazardous and Hazardous Waste ▪ Pilot test innovative schemes for separation at source ▪ Formalize the informal sector, to improve the working conditions of waste pickers	▪ Develop an update/review of the Regulatory Impact Assessment on plastic that was undertaken under the Plastic Waste Minimization Project ▪ Improve plastic waste management to align with the Management of Hazardous and Solid Wastes in Jamaica, and the national policy for environmentally sound management of hazardous wastes ▪ Formalize the informal sector, to improve the working conditions of waste pickers ▪ Establish waste reduction policies and solutions within the private sector

3) THE PROPOSED ALTERNATIVE SCENARIO WITH A DESCRIPTION OF COMPONENTS OF THE PROJECT

3.1 Project Rationale and Approach

The baseline section (section 2) shows that the current practice of plastic production, manufacturing, distribution, use and disposal, is not sustainable. Polymers, products, business models and treatment solutions should be designed and developed with sustainable product management and circularity in mind. Input of virgin plastics into production processes must be reduced drastically with increasing use of recycled content; meanwhile hazardous additives and chemicals being added in various plastic products must be reduced substantially. To reduce all the impacts, it is important to have a holistic and precautionary approach to tackle plastic pollution from its source to 'close the tap', while improving recycling. Countries, cities, and companies need to identify and act upon hotspots, detect leakage of plastic and chemicals in their industries and value chains, and activate the most effective interventions systematically. Such efforts will lead to more sustainable consumption and production practices and contribute significantly to the implementation of the 2030 Agenda for Sustainable Development.

Built on the lessons learnt from the GEF funded Medium Sized Project (9681): 'Addressing Marine Plastics - A Systemic Approach'[78], plastic pollution needs to be addressed along the entire value chain (including production, distribution, consumption, reuse, collection, and recycling, as well as final disposal of plastics), by making a systemic and fundamental shift from a linear to a circular economic model. GEF MSP 9681 also developed a 'A Roadmap to a Circular Economy'[79] , which calls for wider testing and application of circular interventions at city, national, regional, and global levels, to gain first-hand learning for further replication and scaling-up.

Based on the recommendations of the GEF MSP 9681, this project proposes the actions needed in specific life cycle stages along the plastic value chain, as well as the cross-cutting solutions to link upstream and downstream stakeholders to avoid actions done in isolation. It incorporates key systemic interventions from the government to create cross-cutting policies and enabling conditions (with priority on upstream interventions including sustainable consumption and production, reuse, refill, rent and repair) , actions from the private sector on innovative business models and the improvement of waste management of plastics, as well as cooperation and capacity development.

Actions proposed under this project also consider the local political, cultural, and socio-economic situation and cultural context, and are tailored according to the specific needs of the cities and the LAC region. The project will target macroplastics (defined as plastic fragments with dimensions greater than 5mm)[80] as the main source of marine plastics and plastic products containing the chemicals regulated by the Stockholm Convention.

[78] GEF project. (2017). "Addressing Marine Plastics - A Systemic Approach". GEF. Accessed on 6 August 2021. https://www.thegef.org/project/addressing-marine-plastics-systemic-approach; Project website: https://gefmarineplastics.org/

[79] Wang, F., L. Talaue McManus, R. Xie (eds.). (2019). "Addressing Marine Plastics: A Roadmap to a Circular Economy". United Nations Environment Programme (UNEP). Accessed on 15 September 2021. https://gefmarineplastics.org/resolveuid/2c1f3937-3de1-41e7-8ce4-09f1c654d465

[80] Kershaw, P. J. (2015). "Sources, fate and effects of microplastics in the marine environment: a global assessment". GESAMP. http://hdl.handle.net/123456789/735

3.2 Project Goal and Objective

The key barriers are that policy makers and businesses in LAC cities lack the necessary policy framework, innovations, technologies, incentives, capacity, and other enabling conditions to implement circular economy approaches for the plastics sector. Based on the identified barriers, the logic of the intervention is for governments to design and enforce circular policies to regulate and guide the production, consumption, and end-of-life management of plastics and to replicate them at the city level (addressing barrier 1); for the private sector to innovate, re-design and upgrade their products, service, logistics and waste management practices (addressing barrier 2); for all stakeholders to work in an orchestrated manner under a shared vision (addressing barrier 3); and to enable cities to learn from each other (addressing barrier 4).

The objective of this project is:

Reducing marine plastics and plastic pollution in the Latin America and the Caribbean region by facilitating circular actions at the city level to accelerate the transition to a circular economy, in line with government and business commitments on addressing marine plastics and plastic pollution.

The project will be delivered through four interlinked components and corresponding outputs to reach expected outcomes, which will directly address the four main barriers identified in the problem tree (section 1).

Component 1 addresses the lack of regulations and policy instruments on circular economy of plastics in target LAC cities, by supporting city governments and authorities to set up regulatory frameworks and testing key policy instruments to provide enabling conditions for developing a more circular plastic economy.

Component 2 addresses the lack of business innovation and actions in target LAC cities, by stimulating the development of circular design on products, service, business models, and collection and recycling systems, with cooperation among relevant businesses along the value chain.

Component 3 tackles the lack of a common vision, approaches, and leadership for LAC cities towards a circular economy of plastics, by setting up an inter-city network to align regional strategy and actions to stimulate cities to cooperate at the regional level.

Component 4 develops various knowledge products, capacity-building activities, and monitoring schemes, to enable governments, businesses, and other stakeholders to adopt best practices for wider replication in more cities in LAC.

The four components organically interact with each other and provide a consolidated solution to fundamentally shift the unsustainable consumption and production patterns and insufficient waste management, which is the key problem of marine plastics and plastic pollution. The project will lead to net gain at environmental, social, and economic dimensions, which eventually support the achievement of the Sustainable Development Agenda and its relevant targets by 2030.

3.3 Project Components and Expected Results

The four main components presented above, each with specific outcomes and outputs are elaborated in the Results Framework (Annex A). **Figure 3** illustrates the project's Theory of Change based on the problem tree (Figure 1, section 1) and objective tree (Appendix 1) to desired outputs and outcomes that will result in expected changes and impacts as project goals.

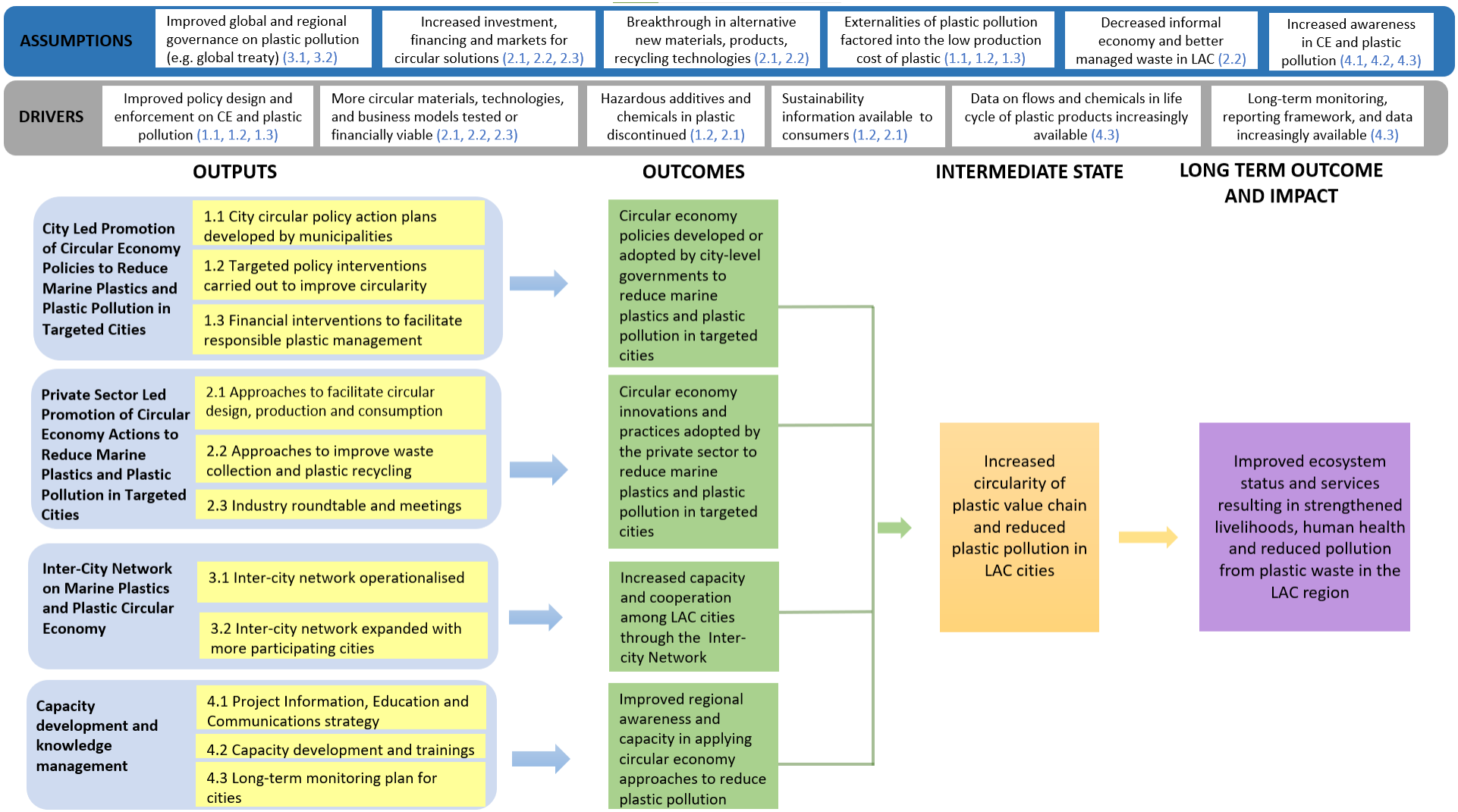


Figure 3. Theory of Change of the Project

3.3.1 Component 1: City Led Promotion of Circular Economy Policies to Reduce Marine Plastics and Plastic Pollution in Targeted Cities

Outcome 1 Circular economy policies adopted by city-level governments to reduce marine plastics and plastic pollution in targeted cities

To effectively address the impacts from marine plastics and plastic pollution, the multiple land-based sources of plastic pollution need to be understood and tackled by the development and implementation of relevant policies. This component will first support each participating city government to develop a comprehensive policy action plan on circular economy of plastics, and then test and scale up priority policies, to ensure effective implementation and/or enforcement by mayors, city councils, local authorities, municipalities, and different departments of cities. The development and implementation of policies will require effective engagement with all stakeholders (especially the private sector and civil society), to collect timely feedback and gain support.

Output 1.1 Policy action plans developed by municipalities to promote circular economy approaches for plastics

This output will support city governments, municipalities, and local authorities to develop circular economy related policy action plans for plastics. It will facilitate city-level governments and administrations to lay out the policy vision, objectives, targets, and actions, to achieve a reduction in marine plastics and plastic pollution through circular economy approaches and actions.

- **Activity 1.1.1 Conduct global review of policy framework with recommendations for LAC**

A review of existing policy framework, action plans, roadmaps, and best practices related to the macro-planning of circular economy of plastics will be conducted, including typical case studies implemented at national and regional levels. Seemingly applicable approaches and recommendations will be provided to the development of similar regulations and action plans in LAC cities, which serves as a basis for Activity 1.1.2.

- **Activity 1.1.2 Develop policy action plan for six cities**

The activity will assist the city governments to develop inclusive policy action plans for the implementation of circular economy and management of chemicals of concern for the plastic value chain in six project cities. It will start with a comprehensive analysis of the existing policy framework, and an assessment on implementation gaps and challenges. Then the project will organize stakeholder consultations to validate the analysis and seek further inputs and support to the development of policy action plans. In terms of inclusivity, it will be ensured that the social and economic inclusion of informal waste pickers are integrated in the plan and women represent at least 40% of the attendees at the consultations. The project will define vision, specific targets, key activities, roles and responsibilities of stakeholders and arrange them in a timeline (short-term, mid-term, and long-term) for implementation. As a result, the activity will develop policy action plans for the six project cities, to implement the circular economy for plastics. The project team will also support the adoption, dissemination and sensitization of the action plan towards relevant stakeholders including relevant governmental offices, municipal departments, businesses along the value chain, commercial establishments, consumers, and citizens.

Output 1.2 Targeted policy interventions carried out to improve circularity

Based on the circular policy action plan established in Output 1.1, this output will pilot test key policy instruments at the city level, prioritized by the municipalities and city-level authorities and with potential to be scaled up. The targeted policy interventions will focus around reducing plastic waste generation from the source, eliminating problematic and unnecessary plastic products and hazardous chemicals in plastic products, encouraging reuse, guiding environmentally sound collection, separation at source, recycling, and disposal, and discouraging littering, open dumping and open burning of plastics.

- **Activity 1.2.1 Identify global best policy practices and propose recommendations for LAC**

This activity will carry out a comprehensive overview of best practices for specific policy instruments at the global level, to provide reference and inspiration to the development of city-level policy pilots in LAC. Recommendations on application and adaptation of existing experience will be proposed for the pilot testing in six LAC cities.

Based on the scope of circular economy policies and the priorities that were identified during the PPG phase, the overview of the best policy practices will include the following policy topics and areas with a priority on upstream intervention for refuse, reduce and reuse:

- reduce problematic and unnecessary plastic products (such as single-use plastic products, e.g. plastic straws, stirrers, cutlery and food take-away packaging), with previous stakeholder consultation and informing;
- restriction and elimination of plastic products that contain chemicals of concern;
- policy guidance to recommend alternative materials, service and products particularly on non-plastic alternatives;
- policy encouraging and stimulating reusable packaging and refill, such as regulatory assurance to give legal clarity to refillable solutions;
- policy guidance to establish voluntary commitments on the recycled content in plastic products and in plastic pellets, to increase demand on recyclables;
- eco-labels, standards and sustainable procurement to cater sustainable consumption;
- policy to improve collection rates and recycling efficiency;

- policy to discourage or ban improper treatment (littering, dumping, and open burning); and
- waste reduction policies and solutions in commercial establishments and public entities.

The topics included in the overview will be further refined by consulting with the city governments and covering all relevant policies in the city action plans by Activity 1.1.2.

Founded on the global experience, recommendations on how to adapt best policy practices and success cases in LAC cities will be developed, considering the policy, socio-economic and local context. These recommendations will be tested and implemented by the policy pilot in Activity 1.2.2.

- **Activity 1.2.2 Support the implementation of selected policies in six cities**

Based on the best practices summarized in Activity 1.2.1, this activity will develop, test, and improve targeted policy instruments and solutions in the six cities. Policies, especially upstream policies, leading to significant GEBs will be prioritized for implementation. These include reducing plastics containing hazardous chemicals, banning and limiting open burning, policies that encourage reuse and refill, eco-label and sustainable procurement to create the market for more circular products and service system, and better collection and recycling.

The activity will first support the municipalities and city-level authorities to identify priority policy instruments to intervene in the plastic value chain at the municipal level. The priority policy instruments will be identified through a hotspot analysis (policy that can tackle the most problematic polymer, chemicals in products, plastic products, sector, waste management practices and geographical spots), stakeholder consultation, and with linkage to policy priorities identified during the PPG phase (Table 7) and the city policy action plans to be developed by Activity 1.1.2. To ensure that sufficient resources and support are provided by this project while gaining in-depth experience, it is expected that one leading policy topic will be selected per city for its test and implementation, so that six distinct policy instruments will be tested primarily to cover both upstream and downstream policies: reduce problematic, avoidable and unnecessary plastics, promote reuse including refill, eco-label and sustainable procurement, and waste management. In the meantime, beyond the leading policy for piloting, the project will also provide technical support to at least two other policies per city that are implemented by the cities with substantial local support and co-financing, so that experience from international community and peer-cities can be adapted in the project cities. The selection of the policy instrument for pilot and implementation consider quality of support, diversity of topics and novelty of the interventions, while allowing cross-reference among six cities and leads to substantial contribution to GEBs (especially on reduction of marine litter, reduction of POPs and uPOPs, and climate benefits).

For policies and instruments that already exist at the national level but with low maturity for enforcement, the project will support city governments to explore effective modalities and provisions for their adoption and implementation at city level. The activity will support the implementation by providing technical support and facilitation, while progress and impacts of the implementation will be closely monitored, to track performance and adjust implementation modalities. In the meantime, the project will link to existing and planned policy and public projects on sustainable infrastructure to ensure that project interventions match with the urban planning and infrastructure development in the targeted cities (such as the infrastructure to enable more access to clean water, facilities, and service points to support reuse and refill, provision of sanitary measures and service, and procurement of recycled plastics for construction and recreation etc.).

For policies and instruments that do not yet exist or are at early stages of development at the national level, early concept of relevant policy instruments will be tested at the city level, to inspire and support the process of their introduction and scaling-up at the country level. The activity will carry out legal analysis, financial-administrative analysis, and develop draft documents for specific policy instruments, such as draft regulations, guidance, technical specifications, or feasibility study. Then the project will support the city governments to organize stakeholder consultations to receive feedback and inputs from the private sector, NGOs, academia, and the public.

By the end of the implementation, experience and success cases will be summarized, with recommendations developed to further scale up replication in other LAC cities and at the national level (this will be developed as a knowledge product to be shared with more stakeholders in Output 4.1).

Output 1.3 Financial instruments developed to facilitate responsible plastics management

Effective financing will generate economic and market incentives for the uptake of more circular products and solutions. This output will test and develop different financial instruments at the city level, covering producer responsibility, taxation, subsidies, procurement, and investment schemes.

- **Activity 1.3.1 Identify global best practices on financial instruments**

The activity will compile the best practices of existing green fiscal policies and financial instruments applied at the global level, through desktop research and expert interviews. The overview will cover how these policies have been introduced in the local context, the detailed modality of implementation, the engagement with stakeholders, the effects and impacts of implementation on economics and the environment, as well as lessons learnt on implementation gaps, opportunities, and key success factors. The compiled best practices will provide reference to how similar instruments can be implemented in LAC cities, and recommendations will be provided on how existing instruments can be adopted at city level. These recommendations will be further tested and implemented under Activity 1.3.2.

The review will include the following financial instruments to cover the whole life cycle of plastic products:

- tax and levy for less sustainable products,
- Extended Producer Responsibility (EPR) and eco-modulation of EPR levies for packaging, fishing gear and agricultural plastics,
- deposit return schemes (in particular for beverage containers),

- financial incentives to create markets for recycled content and circular products with high reusability and recyclability, such as innovation grants, tax reduction, subsidies, sustainable procurement
- taxes or fees for landfill disposal and/or incineration to encourage recycling,
- penalties on littering, dumping and open burning,
- investment and public-private partnership to establish collection channels and waste segregation, environmentally sound recycling and disposal, and
- other instruments for specific sector and sites (such as 'no special fee' ports for the shipping industry and the tourism sector).

- **Activity 1.3.2 Develop implementation plans for selected financial instruments**

The activity will develop a comprehensive implementation plan of green fiscal policies and financial instruments to address plastic pollution prioritized by the city governments for three selected cities (one city per country), with thorough assessment of feasibility, including the readiness of legal framework and options for implementation modality. The implementation plan will include timebound targets and monitoring plan. The project will provide further technical support to the governments and relevant stakeholders (women and vulnerable groups will be prioritized) of three selected cities, in collecting and reviewing data and information, and facilitating stakeholder consultation. In the cases where city government's priority is to improve the implementation of existing financial instruments instead of developing new ones, the project will support the cities in monitoring progress and impacts of the existing instruments and proposing actions for its optimization.

Experience and success stories from the process of developing implementation plans for the cities will be summarized based on the learning in the six cities (this will be developed as a knowledge product to be shared with more stakeholders in Output 4.1). Recommendations for further scale-up replication in LAC cities will be developed as well.

3.3.2 Component 2: Private Sector Led Promotion of Circular Economy Actions to Reduce Marine Plastics and Plastic Pollution in Targeted Cities

Outcome 2 Circular economy innovations and practices adopted by the private sector to reduce marine plastics and plastic pollution in targeted cities

The private sector can play a critical role in improving the circularity and sustainability of the value chain. Efforts from producers and product designers is critical to generate upstream solutions to promote the adoption of more innovative business solutions. Producers can act as financers (or co-financers) of collection and sorting schemes (as local governments often lack the resources) and as generators of markets for the recycled materials. Waste collectors and recyclers play an indispensable role in setting up integrated solid waste management systems, where plastic wastes are processed with the least environmental cost and greatest socio-economic benefits.

The project will engage with private sector stakeholders, in particular with plastic producers (such as plastic importers and manufacturers) and fast consumer goods companies to promote the shift towards more circular alternative materials and business models, with retailers (e.g. supermarket, chain stores), commercial establishments (e.g. restaurants including fast food services, office buildings, conference, event and recreation centers) and public entities (e.g. schools, governmental offices, parks) to change the consumption pattern (such as reducing reliance on single-use products, substitution of problematic plastic products and motivating reuse). The upstream solutions will be complemented by downstream innovations and interventions to cover the whole life cycle of the plastics, so that waste plastics and residues will be handled by waste collectors and recyclers with effective take-back and recycling systems under sufficient markets and financing.

This component will focus on supporting the private sector to develop, test, and scale up circular economy innovations and practices actions along the plastic value chain. It will include exploring better design of product and business models, reuse solutions, innovations to trigger consumer behavior change, improvement of waste management (collection, sorting, recycling, and disposal), as well as cross-cutting actions. In addition, the component will facilitate the collaboration between different actors along the value chain, to ensure the developed solutions are systematically tackling the pollution without presenting false solutions (e.g., biodegradable plastic), shifting problems or generating unintended trade-offs.

Output 2.1 Approaches developed and tested to facilitate more circular design, production, and consumption of plastics

This output will work with the private sector to develop upstream interventions to improve sustainable consumption and production of plastics. The intervention will cover the following life cycle stages: manufacture, design, production, distribution, and use phase including reuse. This output aims to contribute to the elimination of problematic or unnecessary plastic products/packaging, reduction and elimination of chemicals of concern in plastic products, shift towards reuse models suggested by findings from life cycle analysis[44], increased inclusion of recycled content in new products, and better provision of sustainability information to consumers to foster more sustainable consumption practice. The interventions in this output will target the plastic products and sector which are the major contributors of marine plastics and plastic pollution on climate, toxicity and human health, and these interventions are upstream based actions aiming to achieve a more sustainable consumption and production of plastics.

- **Activity 2.1.1 Identify global best practices on business upstream innovations**

The activity will compile the best practices on existing business upstream innovations and solutions on elimination, reduction, and reuse at the global level, to provide examples and inspiration to the uptake in LAC cities. Success cases, implementation modality, achieved impacts will be

summarized for different business interventions, with a specific focus on the application at the city level. Based on the best practices, the activity will prepare recommendations on how these upstream innovations will be applied in the context of LAC cities.

The overview of best upstream practices will include the following topics:

- circular design on packaging and products (on reducing and phasing out hazardous pigments, additives and chemicals of concern in relevant sectors and product categories, improving reusability and recyclability of plastic products, and developing alternative materials and solutions),
- new business models,
- reuse (including refill) and product lifetime extension,
- collaboration with government to implement policy related to standard and quality on the use of recycled content in products,
- eco-labels and declaration to improve consumer information,
- waste reduction solutions in different commercial establishments and public entities, and
- awareness raising campaigns for consumers to adopt more sustainable consumption practices.

These best practices will be further tested and implemented by the pilots in Activity 2.1.3 on upstream solutions.

- **Activity 2.1.2 Identify business upstream interventions in six cities**

The activity will support the private sector to prioritize upstream innovation and actions in six project cities. First, the project will undertake a thorough brand audit and mapping of key business stakeholders along the plastic value chain in the six project cities, including polymer manufacturers and importers, plastic product and packaging producers, companies using packaging (such as fast-moving consumer goods companies), companies providing alternative materials and solutions other than plastics, key commercial establishments and public entities for plastic consumption (supermarkets, whole sellers, providers for bulk food or catering service, retailers, schools, shopping malls, restaurants, hotels), companies providing reuse and refill services, as well as collection and recycling companies. This mapping will also include the specific identification of women-owned businesses as they will be prioritized for the interventions under Activity 2.1.3 In the meantime, the project will also identify the most problematic and unnecessary plastics, opportunities for upstream solutions related to sustainable consumption and production, and interests from supporting companies and investors. Then, the project will develop a detailed list of targeted activities (elimination, reduction, and reuse) to be implemented by specific companies through feasibility assessment and stakeholder consultation in all six cities. This will be designed to align with the city action plan and policy actions in Component 1, and with close interaction through the industry roundtable in Output 2.3.

- **Activity 2.1.3 Pilot test business upstream interventions in six cities**

Based on the upstream interventions identified in Activity 2.1.2, the project will pilot test and implement key actions partnering with the identified companies (see below) and provide technical support to bridge existing experience to the local companies. The activity will also develop monitoring indicators to track the progress of the pilots. The activity will support targeted companies in LAC cities to re-design their packaging, products, and business models, by connecting them with the forerunner companies and innovation institutes at the global level for technical support. The pilot will also build close collaboration with organizations and companies providing co-finance to the project, with a focus on reuse (including refill), such as implementation of refillable solutions (e.g., RFID bottles owned by consumers and B2B packaging), and reduction of chemicals of concern in products (such as through integration of green and sustainable chemistry) among other topics (see the already identified partners below). The technical support will include providing feedback on adoption of existing solutions, review of product prototypes, draft design, and business models, offering feedback on small-scale testing, and giving advice on further up-scaling potential. The activity will also support the pilot companies to assess and forecast on the potential impacts and trade-offs of the new solutions based on the implementation experience in the target cities, to avoid trade-offs and problem shifting. The result of this activity is new product design and business models developed and implemented in the six project cities.

To strengthen the uptake of innovation and new design, the project will also support relevant companies to carry out consumer testing and campaigns to communicate the knowledge, information and benefits of good practices and innovation, to trigger behavior changes on sustainable consumption and lifestyles. This will be materialized in conjunction with Output 4.2 through targeted capacity building exercises.

The pilot test leading partners have already been identified. The following project co-finance partners will collaborate with the GEF LAC Plastics project on the implementation of these pilot projects:

- The company XICLO will invest in the development and implementation of a reusable solution system in all the restaurants of Grupo Takami (for instance in Bogota City, with plans to expand to Cartagena and Barranquilla).
- Algramo will set up innovative refill solutions that transform the consumer industry, reduce waste and benefit consumers in Colombian cities. It will also share key findings on supply chain optimization and consumer behavior change so government and other key stakeholders possess key knowledge to help make refill systems successful and scalable across Latin America.
- GPAP will invest in the development and utilization of the UpLink platform to support, connect and upscale upstream innovations, and the development of a Reuse Portal to empower diverse stakeholders to learn, connect, engage and scale reuse solutions globally and locally (see activity 4.1.3).

The project will work with these co-financing companies and organizations to map out the reuse ecosystem in targeted project cities (including markets and consumer behavior/preference), provide policy linkage and technical support to these countries to develop reusable schemes, liaise with partners and organizations working in reuse to identify synergies and scale up the piloted work, and develop case study to identify enablers and disablers of reusable schemes for large scale of uptake and replication. Knowledge outputs will be shared under Activity 4.1.3.

During the project implementation, the project will also work with other partners/initiatives on upstream solutions.

- The project will explore the opportunity to replicate the successful reuse cases shared on the Reuse Portal in the project cities, by identifying and assessing business models suitable for scaling up in the contexts of the project cities, and collaborating with the relevant reuse businesses and innovators.
- The project will collaborate with the Ellen MacArthur Foundation (EMF) on testing upstream innovative solutions in the project cities, based on EMF's upstream innovation guide and case gallery.[81]
- The project will also collaborate with World Economic Forum's initiative to advance circular consumption models – Consumers Beyond Waste. Under this initiative, 3 guidelines that aim to bring about a more standardized and efficient approach to reuse have been developed with UNEP's support (City Playbook; Design Guidelines; Safety Guidelines). The project will pilot test these guidelines in consultation with local stakeholders across the system, to support them design, develop, and implement innovative reuse models, bringing circular systems to scale.

Output 2.2 Approaches developed and tested to improve collection and recycling of plastic waste

This output aims to improve waste collection and plastic recycling by working closely with collectors and recyclers, with a specific focus on the informal sector, such as waste pickers and sorters. The main objective is to improve plastic collection and recycling performance, while reducing the amount of mismanaged plastic waste (such as open burning, dumping, and littering) and reducing the release and exposure to chemicals of concern in plastics during waste treatment. The key approach is to identify and pilot test new solutions, technologies, digital tools, and awareness raising means to improve collection and recycling, as well as to address core socio-economic and political considerations including gender issues.

- **Activity 2.2.1 Identify global best practices on collection and recycling**

The activity will carry out an overview of the best practices on setting up segregation at source, differentiated and diverse collection channels (supported by various collection avenues and digital tools), establishing cost-effective recycling facilities with state-of-the-art technologies, engaging with the informal sector for collaboration, as well as effective financing instruments and investment at the global level. Based on the existing experience, recommendations will be provided on how to design interventions to improve the performance of collectors and recyclers in LAC cities.

This activity will cover core topics on setting up efficient collection channels of municipalities and other collection channels for both commercial and household plastic products, such as:

- improving sorting at source,
- formulating partnerships between the private sector and municipalities to significantly improve the management of municipal solid waste (in particular plastic wastes),
- exploring the feasibility to apply best available technologies for plastics recycling (material reuse, remanufacturing, mechanical recycling, certain applications of chemical recycling, potentially upcycling plastic into new products) and disposal of hazardous fractions (including safeguards to reduce the exposure to chemicals of concern and best technologies to minimize uPOPs formation during incineration),
- implementing the Extended Producer Responsibility and management of the Producer Responsibility Organization to set up waste treatment systems,
- initiating infrastructure development (e.g., increasing the number of depots, redemption centers and drop off points) and contracts,
- engaging with the informal sector, and
- improving gender and social inclusiveness.

These best practices will be further tested and implemented by the pilots in Activity 2.1.3 on upstream solutions.

- **Activity 2.2.2 Pilot test solutions to improve collection and recycling in six cities**

The activity will first conduct a thorough mapping of all relevant companies engaging with import, export, collection, recycling, and disposal of plastic waste in the six project cities. Then the project will carry out due diligence checks (operating license, permit, certificates, labour and EHS conditions etc.), and assess the technical and environmental performance of these companies and propose key actions to reduce mismanaged waste and improve collection, recycling, and recovery rates. The activity will also develop a local baseline study to identify which chemicals/product combinations are posing a barrier to circularity/local recycling activities, which are high risk to recycling workers and to the environment, and the gap in recycling operation, technologies, and facilities in the context of the 6 cities. Based on the mapping, the assessment and the baseline study, the project will organize pilot projects to test various collection channels as well as digital tools to improve the segregation, collection, and treatment of various plastic wastes. The activity will support the municipalities to release a Request for Proposal (RFP), to contract eligible collectors and recyclers to improve existing collection and recycling practices for plastic waste from both commercial and household sources and develop innovative solutions. The activity will provide technical support to develop technical specifications and evaluation criteria of RFP, assist the review and selection of contractors, issue contracts to the selected collectors and recyclers, monitor progress

[81] https://plastics.ellenmacarthurfoundation.org/upstream

during the implementation phase, provide technical feedback to the contractors to improvement efficiency, review the data collected from the pilot project, and support relevant assessment and evaluation. Measures will be put in place to engage with female entrepreneurs in the waste sector to include them in feasibility assessment, due diligence check, and also collection tenders.

The activity aims to collect and recycle 1,480 tonnes of plastic products and packaging in total in six project cities. The plastic products to be collected and treated will need to have high relevancy to marine plastics, climate impact, as well as relevancy to POPs and uPOPs, which will have direct GEBs for the project. Some of these high relevant polymers are: PET, HDPE, LDPE, PS, PVC PU and synthetic rubber. These polymers are represented in different macroplastic products used in relevant sectors such as packaging, construction, electronics, and the automotive sector.

Table 8. Target for collection and recycling pilot

City	Collection and treatment targets of the project (tonnes of plastic products and packaging)	Activities
Barranquilla	296	The pilot project will collect and treat 1,480 tonnes of plastic products/packaging, including 780 tonnes of single-use plastic products and consumer products, 500 tonnes of construction materials, furniture, packaging, and products containing HBCD and PBDE, and 100 tonnes of cables and products containing PVC. The pilot will include the following three activities: • Improve the collection and recycling efficiency of recyclable fractions • Safely segregate and dispose of plastics containing POPs and COCs • Reduce dumping, littering and open burning through environmentally sound collection and treatment, while engaging actively with the informal sector
Cartagena	296	
Panamá City	370	
Colón	74	
Kingston	370	
Montego Bay	74	
TOTAL	**1,480**	

In the pilot, contractors will collect critical plastic products/packaging that substantially contribute to marine plastics, the release of chemicals of concern and plastic pollution. The collection pilot will test various collection channels and methods to increase the collection rate of plastic waste from both commercial and household sources. Innovative digital and information tools will be tested to increase outreach to final users to improve sorting at source and collection efficiency. The plastic waste collected will be diverted to state-of-the-art facilities for further treatment and disposal, to understand the status quo of treatment at city level, as well as testing innovative solutions to improve the recycling performance. When recycling and treatment solutions (such as for plastics containing POPs) are not available in the pilot cities, solutions will be identified at the national and regional levels for shared treatment infrastructure. If relevant and feasible, the pilots will also explore solutions for plastic waste importation and exportation for recycling. At the same time, the performance of different treatment technologies and solutions will be evaluated against their technical, environmental, and economic performances. The pilot will explore the best collection channels and treatment routes, at the same time bringing environmental and socio-economic benefits to the cities. During the pilot, an effective approach to engage the informal sector will be identified to integrate them into the existing waste management system, while improving their income, well-being, and occupational protection. Gender will be considered throughout the design and implementation of the pilot, to ensure the access to waste and jobs by female entrepreneurs and workers.

When the pilots are concluded, the project will compile all the economic and environmental data generated from the pilots for analysis and documentation, summarize the learning from contracted collectors and recyclers, and prepare recommendations to further scale up the practices in other LAC cities.

Output 2.3 Industry roundtable on plastic circular economy established and roundtable meetings organized, with collaboration between business stakeholders facilitated

This output will set up cross-sector dialogues and mechanisms to act as an incubator to stimulate business innovation and cooperation, and it will provide a collaborative structure for the private sector to participate in activities in both Component 1 and Component 2. This roundtable will ensure there is collaboration for a group of companies in the same sector and value chain stakeholders to come together to develop and catalyse solutions for shared problem on plastic pollution. This output will also organize meetings to converge businesses along the value chain for the development of new technologies, solutions, and community ideas to induce innovation. It will consequently enable industrial players to reach common vision and targets through scalable actions to promote a circular economy for plastics.

- **Activity 2.3.1 Establish the industry roundtable and organize roundtable meetings**

The activity will carry out the following actions to establish the industry roundtable: converge on a common vision and cooperation areas among the participating companies, understand shared issues and identify key gaps for industrial players to address plastic pollution, and define code of conducts, governance, and activities of the industrial roundtable. Building on the list of key businesses identified in Activity 2.1.2 and Activity 2.2.2, the project will approach the following stakeholders to join the industrial roundtable in each target city: plastic manufacturers and importers, logistics and distribution companies, consumer goods companies (using plastics as packaging), innovation companies and start-ups for eco-design and new business models, retailers, business associations, waste collectors and recyclers, and waste importers and exporters. It will be ensured that women represent at least 40% of the attendees at these meetings and events through the identification of female entrepreneurs in Activity 2.1.2 and 2.2.2.

The activity will also support the participating businesses to organize the industrial roundtable meetings and networking events at the city level every 2 years, and in all 6 cities. More technical meetings are expected to be organized by the industry at a regular basis to discuss specific

topics, innovation, and interventions. In-kind contribution is expected from the private sector to organize such technical meetings. Key learnings from the city level industrial roundtable will also be shared at the meetings hosted by the Inter-City network.

The industrial roundtable meetings will cover the following topics:

- generate and share information and data on the applications, quantities, and compositions of plastics (including CoC in plastics), as well as the leakage and impacts of different plastic packaging and products at the city level;
- brainstorm, identify and develop innovative solutions on circular design (alternative materials, reuse, refill, new business models) and sustainable production;
- create enabling conditions on regulation compliance, knowledge, and intellectual properties to support entrepreneurship and collaboration among designers, researchers, engineers, start-ups, female entrepreneurs and especially SMEs;
- channel discussion and feedback between municipalities and businesses for adopting circular policies and solutions;
- explore possible investment and financial resources to facilitate the uptake of new innovation; and
- share learning and successful cases among participating companies and with other stakeholders (such as policymakers, governments, NGOs, consumers and academics at the city and national levels) to seek collaboration and support for action scaling-up.

The activity will provide technical support to the industry roundtable meetings, by reviewing the agenda and tracking the progress of the project. Implementation gaps and opportunities for the project will be discussed in the meetings, to ensure that the project pilots (Activity 1.2.2, 1.3.2, 2.1.2, 2.1.3, 2.2.1, 2.2.2) receive assistance and support from the private sector through the roundtable meetings.

3.3.3 Component 3: Inter-City Network on Marine Plastics and Plastic Circular Economy

Outcome 3 Increased cooperation among LAC cities through the LAC Inter-city Network on marine plastics and plastic circular economy and enhanced implementation of circular economy approaches in the region

Realizing the vision of a circular economy for plastics will require unprecedented levels of collaboration, not just globally, but also at city, national and regional levels to work towards scalable and localized solutions. Led by city-level leaders, an inter-city network on marine plastics and plastic circular economy can drive collective action of LAC cities towards a common vision and a set of ambitious targets, with transparent reporting on progress. The inter-city network offers a platform for city leaders and actors to build shared infrastructure, leverage policy instruments and financial resources, improve innovation and technologies for solutions along the value chain, and exchange lessons learnt and best practices across cities in the LAC region.

Activities in this component will include the engagement of targeted LAC cities in this project to establish a collaboration platform to raise awareness on the problems and solutions to address marine plastics and plastic pollution through the development of a common vision, aligned actions, peer-to-peer learning, and capacity development. The first inter-city network meeting (which is also the launch of the network) will be organized in the second year of the project, and the second meeting will be organized in the fourth year of the project to enhance collaboration and increase impacts. The knowledge, best practices and collaborative experience shared among the cities in the network will feed into the activities of knowledge management and capacity development activities in Outcome 4.

The network is instrumental to amplify learnings and facilitate replication, adaptation and scale-up of best practices to reduce plastic pollution and accelerate the transition to a circular economy at the regional level. Besides the six target cities, additional cities in the LAC regions will be approached and invited to join the meetings and activities of the inter-city network, with relevant costs, if any, to be covered by themselves as co-finance to this project.

The budget for component 3 increased from PIF, as activity 3.2.1 will provide technical assistance to at least three more participating cities of the network in addition to the six project cities to develop the city action plan on circular economy for plastics to reduce marine plastics and plastic pollution

Output 3.1 Inter-city network established and operationalized

This output will focus on developing a framework of the inter-city network including the planning, governance, vision, and missions of the inter-city network.

- **Activity 3.1.1 Establish the inter-city network**

The activity will first work with the six target cities to discuss and draft a framework document of the intercity network, laying out the vision, missions, benefits of joining, working areas, governance, timelines, and operational cost. The vision of the inter-city network will align with existing MEAs, regional priorities and agenda (such as those defined in the LAC ministerial declaration), as well as national plans on circular economy. The project will also approach other cities in the LAC region to invite them to join the initial planning and the development of the framework document. Upon agreement with the participating cities, the project will support the network to establish its secretariat and governance structure and support the secretariat of the network to formally launch the network. A website of the network will be developed and updated regularly to document key progress, publications, events, and communication materials, while enabling cities to interact through the website.

The inter-city network will explore how to strengthen regional coordination on actions to address marine plastics and plastic pollution, through engaging with cities in the region. The experience and lessons learnt will be summarized and shared under output 4.1.

- **Activity 3.1.2 Develop a performance tracking mechanism and facilitate knowledge exchange among cities**

The project will support the network to set up a performance tracking mechanism with indicators and reporting procedures to monitor the progress of cities towards improving circularity of the plastic sector and reducing marine plastics and plastic pollution. The tracking of performance will contribute to the reporting of regional targets and global processes such as MEAs. This activity will also support the gathering of data from participating cities to report on progress, demonstrate lessons learnt and improve performance. Experience and knowledge sharing among cities will be facilitated under the network via joint events and dialogues. Knowledge on pilot and implementation experience (of policy and business innovation), best practices, best available technologies, successful business models, and impactful campaigns will be shared with Activity 4.1.3 to support knowledge management of the project.

Output 3.2 Inter-city network expanded with more participating cities

The output aims to approach more cities in the LAC region to join the inter-city network, and actively participate in the work of the network to achieve common vision and objectives.

It is instrumental to have a harmonized approach for participating in the network to achieve the common vision and target. This output will also develop a harmonized action plan for cities with the willingness to develop their own action plan on plastics.

- **Activity 3.2.1 Develop a harmonized action plan for cities and expand the network**

Based on the policy action plans developed (developed in Activity 1.1.2) and business actions identified (developed in Activity 2.1.2 and Activity 2.2.1), this activity will assess the key elements needed for promoting circular economy for plastics at city level. In accordance with the vision and objectives of the inter-city network, a harmonized template will be drafted to lay out the objective, approaches, key actions needed, milestones, indicators and timeline from the city-level government, the private sector, and other actors. Gender indicators will also be included. The action plan template will cover target setting, activities, timeline of implementation, and stakeholder responsibilities, and cover topics related to elimination of problematic or unnecessary plastic products/packaging, elimination of chemicals of concern in plastic products, promotion of more sustainable products (in terms of reusability, recyclability, composability, and recycled content used), reuse and waste management. The template will also provide step-by-step instructions on how to collect the necessary information, conduct analysis, organize consultation for feedback, and engage stakeholders. The development of the action plan template will be based on consultation with participating cities of the network.

To increase the impacts of the network, the project will support communication and dissemination at the regional level, to invite more cities to join the network and contribute to its expansion. At the international level, the project will also work with partners (such as UN-Habitat, the World Bank, WWF, PACE, GPAP, GPML global and regional nodes, NPEGC, Euro CITIES, HISCAP, the IW: LEARN network and the GGKP platform), to establish linkages to existing city-led initiatives for synergies and collaboration. Moreover, collaboration with the Latin-America and the Caribbean Circular Economy Coalition will be established. The coalition includes 13 countries of the LAC region and will have a working group for the circular economy of plastics which will be integrated by international organizations and specialized actors in this matter. Synergies will be set up to share experiences, best practices, technical information, and to invite cities and countries to be part of the GEF LAC project. The activity aims to have at least 15 cities connecting to the network by the end of the project.

The activity will also provide technical assistance to at least three more participating cities of the network in addition to the six project cities (possible cities include Belem in Brazil and Roatan in Honduras) to develop the city action plan on circular economy for plastics to reduce marine plastics and plastic pollution.

3.3.4 Component 4: Capacity Development and Knowledge Management

Outcome 4 Improved regional and global awareness, knowledge and capacity applied, **to reduce marine plastics and plastic pollution**

This component will increase the awareness of problems resulting from the impacts of marine plastics and plastic pollution as well as communicating the gained knowledge, learning and success stories from this project's activities. Target stakeholders for knowledge sharing and capacity building include not only peer policy makers and businesses who are directly responsible and relevant to manage plastics, but also targeted stakeholder group who can substantially influence the production and consumption of plastics projects. These target stakeholder groups encompass policy makers from the environmental domain, as well as from urban planning, procurement, finance, health, industry, infrastructure, standards, trade and education; private sector from the oil and gas, packaging and waste industry, as well as value chain actors from the tourism, retailers, fishing, construction, textiles, health, mobility and electronics sectors. The project team and local municipalities will disseminate the learning of the project to a wide range of stakeholders for maximum outreach. This component will be supported by all project activities under the other 3 components and will develop knowledge products and capacity building activities and disseminate them through various means and channels at city, national, regional, and international levels.

To ensure wider reach to and sufficient engagement with all relevant stakeholders along the plastic value chain, the knowledge generated by the project will also be disseminated through the industrial roundtable meetings to be organized under component 2 and shared with relevant stakeholders engaged by the Inter-city Network under component 3. Stakeholders involved in the industrial roundtables and the Inter-city Network will also be invited to participate in the training and capacity building events under component 4. Under component 1 and 2, consultations will be organized during the designing and implementation of the policy instruments and business solutions. Stakeholders involved in the consultations will cover the public and private sector stakeholders listed above, and the knowledge products developed under component 4 will be shared with those

stakeholders to facilitate their application and uptake. It is expected that the project will establish collaboration with relevant public authorities and industrial associations when implementing activities under component 1 and 2. All relevant stakeholders will be added into the mailing list for the project newsletter (activity 4.1.2), to be regularly updated with the project progress and knowledge produced by the project.

In addition, Within the framework of the LAC Forum of Ministers of Environment, there is a number of subsidiary working groups, networks and coalitions, hosted by UNEP Regional Office for Latin America and the Caribbean (ROLAC), that actually intend to facilitate information and knowledge sharing. Some that are relevant for this topic include: the Regional Coalition on Circular Economy; Intergovernmental Network on Chemicals and Waste; Working Group on Marine Litter and Microplastics for LAC; Regional Council on Sustainable Consumption and Production; Environmental Education Network; Coalition for the closure of dumpsites in LAC. Membership is comprised by governments and other relevant stakeholders. Communication related with this project will be channeled through distribution lists, newsletters, task forces, and focal point meetings, depending on each platform.

This component will also deliver an output to enable key city stakeholders (authorities, industry, civil society, etc.) to monitor the future impacts and benefits by implementing circular economy approaches to reduce marine plastics and plastic pollution. Through the development of a pragmatic and affordable monitoring programme, based on the baseline on marine plastics and plastic pollution established under this project, the cities are expected to be equipped with a robust mechanism to monitor and evaluate plastic pollution reduction and showcase their progress.

Output 4.1 Information, Education and Communication (IEC) strategy for the project developed and implemented using IW: LEARN platform, GGKP and GPML platforms

This output will summarize the key learning and experience from the whole project and present them in communicable formats for wider dissemination and replication.

- **Activity 4.1.1 Establish a project website**

The activity will mount a dedicated IW:LEARN compliant website for the project, as a one-stop shop to document and store project information, activities, progress, publication, and events. The project team will develop an initial structure of the website and will seek feedback from all project partners before the launch. The project team and communication experts will regularly update project information (at least on a quarterly basis) to ensure key stakeholders and partners are updated with the latest progress of the project. This activity will take advantage of the knowledge products developed in Activity 4.1.3 and all project components and share them on the website.

- **Activity 4.1.2 Develop and implement the project communication strategy**

The activity will develop an Information, Education and Communication Strategy compliant with IW:LEARN requirements, to plan the activities on the production of communication materials (such as press release, videos, web stories, content for social media) and dissemination plan (media outreach, meetings, high-level events) towards the target audience, while linking closely with the activities of the other 3 project components.

The activity will first carry out a comprehensive mapping of the target audience for project communication, including the following categories:

- Public sector: government officers (inter-ministerial, national and local), policy makers, enforcement agencies;
- Private sector: polymer, plastics and packaging producing companies, durable goods and consumer goods producers, retailers, collection, sorting and recycling industry, informal sector;
- Non-governmental organizations working on circular economy, solid waste management, recycling and recovery of plastics, awareness raising, consumer behavior and environmental education; and
- Academia, universities and research institutions working in the field of marine plastics, plastic pollution and circular economy.

Targeting different audience groups, the project will develop a comprehensive communication plan covering the following areas:

- raise awareness towards all related stakeholders by defining project visual identity and planning the objectives, approaches and targets for stakeholder outreach;
- deliver educational and awareness-raising activities targeting critical issues;
- develop consumer campaigns and partnership facilitation to encourage behavior and attitudinal change towards the circular economy of plastics, such as increasing the acceptance of refillable solutions, organizing large scale multi-channel campaigns aimed at motivating citizens to reduce plastic consumption, separating plastics waste from sources and disposing through responsible channels; and
- produce communication and IW:LEARN compliant materials including developing regular newsletters to keep relevant stakeholders and interested parties informed on the progress of the project.

To support specific training, events, and communication campaigns, the project will prepare press releases, web stories, content for social media, presentations, and videos to fit different purposes. These will be designed from a gender perspective.

After the communication plan is approved by the project steering committee, the plan will be carried out according to the milestones and timeline defined. For each communication activity, the project will document recipients and audiences in gender disaggregated data, and analyze the impacts related to behavior change.

- **Activity 4.1.3 Compile and disseminate project knowledge products via various platforms**

The activity will document and produce key knowledge products based on the learnings from Components 1, 2 and 3, to share lessons learnt to key audiences and encourage replication and scale up of successful approaches, such as EPR solutions. The main audiences for knowledge dissemination of the project include the public and private sector, non-governmental organizations, academia, universities, research institutions, informal collectors, and waste pickers, at the regional, national, and local level. For policy makers, learning experience and case studies will be compiled from Component 1, related to the best practice on developing and implementing circular policy. For the private sector, learning experience and case studies will be compiled from Component 2, related to the best practices on developing circular innovation and solutions along the value chain, including circular product design, innovative business models, and reuse, collection, and recycling. LCA studies to support reuse technologies and systems is a key enabler. The experience on setting up the inter-city network at the regional level will be summarized and presented in a case study, for the reference of other sectors and regions. A survey study will assess the role of women in the plastic value chain and a Gender Guidance Note will be developed to ensure that activities are organized in a gender responsive manner. Overall gender-disaggregated data from the project cities will be collected and tracked under this activity. Knowledge products will be disseminated through partnerships and synergies with the main partners and audiences of the project, using their web platforms (IW: LEARN platform, GGKP, GPML Digital Platform, SAICM knowledge platform, UNEP Circularity Platform, etc,) and available resources, also through media, conferences, relevant fora, and high-level events (e.g., events organised by the Latin America and the Caribbean Circular Economy Coalition).

GPAP will support Colombia as a pilot country for reuse-focused efforts with a focus on the two project cities and replicate such initiatives in other countries and regions, including Panama and Jamaica with a focus on the other 4 project cities. The cities will be building an initial ecosystem of leading stakeholders committed to enabling reuse at scale. This will be done through the Reuse Portal and UpLink. The Portal is currently in development by GPAP, in collaboration with WWF and UNEP, as a one-stop Reuse Portal to empower diverse stakeholders to learn, connect, engage and scale reuse solutions globally and locally. Stakeholders from government, business and civil society from Colombia, and later the other project countries, will join a global network of reuse champions and enablers, tapping into leading knowledge resources, expert communities and partnership opportunities for scaling reuse. Knowledge products generated under this project will be shared in that network. With UpLink, GPAP launched the Global Plastic Innovation Network, to crowdsource diverse innovations to tackle the plastic pollution at the national and regional level. The network will further build on the project outputs of Activity 2.1.3. Both Uplink and the Reuse portal will be rolled out mid-2022.

At regional level, the inter-city network to be established under component 3 will act as a platform for city leaders and actors to share the knowledge products of the project regarding policy and regulations, financial resources, technologies for solutions along the value chain, and exchange lessons learnt and best practices across cities in the LAC region. The Latin America and the Caribbean Circular Economy Coalition will share the project knowledge outputs through its working group for the circular economy of plastics (see activity 3.2.1). Besides the Latin America and the Caribbean Circular Economy Coalition, ROLAC also hosts the Secretariat of the Working Group on Marine Litter and Microplastics of Latin America and the Caribbean, which can be used as an additional channel to disseminate knowledge and results to other LAC countries.

All the project information and knowledge products will be integrated into the project website, IW: LEARN platform, GGKP, GPML Digital Platform, SAICM knowledge platform, and other relevant online repositories. Knowledge products will be shared both in English and Spanish on the project website for wider and easier dissemination in the LAC region. Links to the Spanish versions of the documents and related products will also be shared on the IW: LEARN platform, GGKP, GPML Digital Platform, SAICM knowledge platform and other relevant online repositories.

- All knowledge generated under the project will be integrated in the IW: LEARN platform,[82] which functions as a knowledge-sharing and exchange hub that has been supported by the GEF since 2000 in various tranches. The integration with IW: LEARN will help in linking and sharing internal IW learning and knowledge management efforts across GEF agencies and focal areas.
- The knowledge products of the project will also be shared on Green Growth Knowledge Platform (GGKP)'s website. The GGKP[83] is the world's largest policy platform dedicated to managing and sharing knowledge at the nexus of economics and the environment. Partnering with the GGKP will provide the project with a distinct identity while also benefitting from the GGKP's existing knowledge management system including case studies, good practices, learning materials and publications.
- When appropriate, elements of this project may also be linked to the GPML Digital Platform[84], a multi-stakeholder, mostly open-source platform that compiles and crowdsources different resources, integrates data and connects stakeholders to guide action towards the long-term elimination of marine plastics and plastic pollution.
- At the end of the project at least 3 Experience Notes/Results notes/Best Practices report on project learning will be prepared.

[82] IW: LEARN is the Global Environment Facility's (GEF) International Waters Learning Exchange and Resource Network. The IW: LEARN project was established to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters portfolio. It promotes learning among project managers, country official, implementing agencies, and other partners. https://iwlearn.net/

[83] The Green Growth Knowledge Partnership (GGKP) is a global community of policy, business, and finance professionals and organisations committed to collaboratively generating, managing, and sharing knowledge on the transition to an inclusive green economy. https://www.greengrowthknowledge.org

[84] The platform was set up in 2020 and is being developed through a phased approach, which will culminate in 2023. Phase 2 of the GPML DP was released in September 2021. Phase 1 had focused on integrating a wide range of resource databases and on the creation of the first stakeholder's database, and Phase 2 focuses on laying data hub foundations and piloting the matchmaking functionalities (for connecting stakeholders). The next steps for Phase 3 will help develop more advanced data-related functionalities, create a capacity building experience, pilot the action plan workflow and enable stakeholders to connect further. The aim is to release Phase 3 around UNEA 5.2. And then continue until the final phase is launched in 2023.

- The knowledge products related with chemicals of concern will also be shared on the SAICM knowledge platform[85] developed by the project Chemicals Without Concern funded by GEF to enhance the dissemination of relevant knowledge to stakeholders working on chemicals of concern.

Output 4.2 Increased awareness of the circular economy approaches from capacity building activities

- **Activity 4.2.1 Develop capacity building events and training**

One of the barriers to applying circular economy approaches for plastics in the LAC region is the lack of capacity to design and implement existing strategies, policies, and business plans, as well as mechanisms to upscale the Influence. Capacity building activities can help involved stakeholders obtain, improve, and retain the skills, knowledge, tools and other resources to ensure the successful delivery as well as the long-term sustainability of the project. Activity 4.2.1 will organize capacity building trainings at national and regional levels towards different types of stakeholders, in order to: 1) help government stakeholders at city and national levels equipped with the knowledge and tools in designing and implementing circular economy policies to address marine plastics and plastic pollution; 2) help private sector entities better understand business cases for sustainable solutions and learn how to manage and grow a sustainable business by incorporating circular economy principles into their business strategies and plans; 3) help collectors and recyclers understand measures to improve their waste management practices and informal sector to improve their Environment, Health and Safety performance, and take sanitary measures against COVID-19.

This output will organize different capacity building activities towards different stakeholders, based on the project experience and learning. These will include a gender balance approach and gender data will be reported. **Table 9**[86] below presents an overview of relevant meetings and training events.

Table 9. Events and trainings of the project

Events and training	Topic and goal	Time and frequency	Geographical level	Main target audience	Link to project components
A. Events					
Launch meeting of the project	Kick off project and gain visibility and support	Y1	Regional	All relevant stakeholders in LAC, GEF Secretariat and GEF agencies, and international organizations	PM and M&E
Closure meeting of the project	Share experiences of project and conclusion	Y4	Regional		PM and M&E
B. Capacity building and networking					
Training of governmental officers and stakeholders for policy development and enforcement	Disseminate the developed policy for uptake and enforcement	Y2/Y3 (1 training per country, and 3 trainings in total)	National, city	City-level governmental officers, private sector, NGOs	Component 1
Training of business partners for uptake of upstream innovation	Disseminate best practices on upstream interventions	Y2/Y3 (1 training per country, and 3 trainings in total)	National, city	Plastic producers, consumer goods companies, retailers etc., including SMEs	Component 2
Training for collectors and recyclers, including the informal sector	Provide technical guidance and best practices to the plastic collectors and recyclers	Y2/Y3 (1 training per country, and 3 trainings in total)	National, city	Plastic collectors, recyclers, and the informal workers	Component 2
Industry roundtable meetings	Discuss specific innovation and interventions organized among relevant businesses along the value chain	1st meeting in Y1 and 2nd meeting in Y3 (the project will fund the first meeting per city, and the 2nd meeting is expected to be funded by the industry itself)	City	Plastic producers, consumer goods companies, retailers, collectors, and recycler, with specific inclusion of SMEs and companies with female leaders	Component 2
1st inter-city network event	Offer a platform for city leaders and actors to build shared vision, exchange lessons learnt and best practices across cities in the LAC region	Y2	Regional	6 cities of the project and additional LAC cities	Component 3

[85] This knowledge platform is a key element of the project Chemicals Without Concern, funded by GEF, implemented by UNEP, and executed by SAICM Secretariat. It offers a repository of resources, facilitates networking among people working for a safer environment, and provides information on articles and events on chemical-related topics. https://saicmknowledge.org/

86 The table will be revisited at inception of the project.

Events and training	Topic and goal	Time and frequency	Geographical level	Main target audience	Link to project components
2nd Inter-city network event and regional training	Exchange learnings among LAC cities. Training event to share best practice from the GEF project with other cities	Y4	Regional (back-to-back with the 2nd meeting of the inter-city network)	6 cities of the project and additional LAC cities	Component 3
C. Project management					
Annual project working meetings	To plan and advance on project planning and implementation	Every year (4 in total)	Regional, city	Executive agency, implementing agency, project partners	Component 4
Project steering committee meetings	To approve project workplan and budget, and discuss critical issues	Every year (4 in total)	Regional, city	Executive agency, implementing agency, Steering Committee members	Component 4

Output 4.3 Long-term monitoring program operationalized by cities on the implementation of circular economy approaches and associated reduction in plastic pollution

This output will develop a harmonized methodology, a set of indicators and technical instructions to support cities to monitor the implementation of circular solutions for long-term impacts tracking. The methodology can facilitate the evolution of the effects of the on-going interventions introduced at the city level, while identifying gaps and opportunities for adapting the solutions according to the latest development. It will also ensure that the learning and solutions developed by the project will continue to serve the cities beyond the project lifetime, and lead to sustainable results for a longer period.

- **Activity 4.3.1 Develop monitoring indicators and methodologies for progress monitoring**

The activity will develop an overview to summarize and analyze the existing indicators and measurement approaches towards the circular economy for the plastic sector, to monitor the impacts of the actions and progress to achieve a circular economy. The overview will cover indicators related to relevant SDGs, MEAs, GEBs, indicators used in global initiatives (such as the New Plastics Economy Global Commitment and CleanSeas campaigns), indicators related to marine litter and plastic pollution action plans through national source inventories, indicators on circular economy and indicators related to gender and socio-economic performance. This activity will propose a set of core indicators (e.g. Percentage of plastics being reusable, recyclable or compostable; tonnes of marine plastics reduced; tonnes of plastics containing chemicals of concern eliminated) aiming to support plastic related GEF projects to monitor the performance and impacts of activities, based on consultation with the GEF Secretariat, GEF Scientific and Technical Advisory Panel (STAP), GEF agencies, and international experts.

The activity will apply the proposed indicators to monitor the progress in reducing marine plastics and plastic pollution in 6 cities against in-situ monitoring results around the relevant cities. The feasibility and effectiveness of the indicators will be assessed, through collecting feedback from the city governments and the private sector, as well as evaluating their actual functionality to serve for relevant SDGs and MEAs requiring monitoring. The learnings from the progress monitoring under the project will be shared with the GEF Secretariat for better understanding of the effectiveness of the indicators. Promotion of digital solutions and tools to increase data tracking and transparency along the value chain will be performed and, where relevant, this information will be incorporated into the GPML Digital Platform.

Based on the indicators and monitoring data, the activity will also provide a methodology and a tool which will enable cities to forecast on the potential impacts, costs and benefits, and trade-offs of adopting various circular strategies as possible future scenarios, by adapting relevant methodologies already developed by UNEP, IUCN and GPAP. This forecast methodology and tool will provide assessment and visualization to better understand the benefits of choosing different circular pathways (such as reduce, substitute, reuse, recycle) for strategy decisions, while avoiding problem shifting among different environmental impact categories (such as shifting from climate change to human toxicity or to marine litter) or shifting to different actors and locations.

Considering the need to collect information related to POPs and uPOPs from plastic products and their impacts, the project will develop a calculation tool to guide the collection of CoC related data at city level. Support will also be provided to cities in analyzing results generated by the tool and drawing conclusions on the management of CoC in plastics.

4) ALIGNMENT WITH GEF FOCAL AREA AND/OR IMPACT PROGRAM STRATEGIES

4.1 Impacts and effects related to plastic pollution

The environmental problem arising from plastics can be seen from two angles: one being the plastic leakage occurring across the value chain and ending up in the environment (such as land, rivers, waterways, and oceans), especially in countries where the waste management is inefficient; the other one being the chemicals of concern contained in many plastic products, releasing toxic substances during their life cycle (please see more details in the problem definition in section 1.1).

Plastic is a persistent material and thus the ecological, economic, and eco-toxicological effects of plastic pollution are all long-term. These include:

- Physical impact on marine life: entanglement, ingestion, starvation
- Chemical impact: the build-up of POPs contained in certain plastic products and from substandard recycling processes
- Transport of invasive species and pollutants from polluted rivers to remote areas in the ocean
- Economic impact: damage to fisheries, shipping, and tourism
- Social impact: informal sector working on plastic collection and recycling; human health and well-being of residents close to dumpsites

Plastic pollution threatens food safety and quality, human health, and marine ecosystems, and contributes to climate change. Plastic degrades extremely slowly and when it breaks down, bio-organisms then digest these plastic particles and transfer the plastic across the food chain, all the way back to humans. At the same time, many plastics contain additives to enhance their properties throughout their lifespan and to offer better solutions in their applications; however, this results in the release of chemicals of concern during their use known as Persistent Organic Pollutants (POPs), which are highly toxic to both humans and wildlife. Furthermore, the incineration or open burning of plastic waste produces unintended Persistent Organic Pollutants (uPOPs), mainly dioxin and furans, which are also highly toxic chemicals.

CoCs in plastics are those highly hazardous chemicals in plastic products that are a threat to humans, especially putting in danger manufacturing workers in plastic production plants, recyclers, and people who dismantle and dispose them. Also, they pose a big threat to wildlife and the environment. POPs are one of the CoCs that cause serious health effects, such as cancer, birth problems, dysfunctional immune and reproductive systems, and damage to the nervous system. As the name indicates, they persist in the environment since they are resistant to degradation, thus accumulating in living organisms and polluting our food supplies.

4.2 GEF Focal Area

The project is aligned with the GEF-7 Strategy for IW Objective 1 (Strengthening National Blue Economy Opportunities) through addressing pollution reduction in the marine environment, to address the issue of marine litter and microplastics. The project is also aligned with the GEF-7 CW-1-1 objective on strengthening the sounds management of industrial chemicals and their waste through better control, and reduction and/or elimination. Through promoting circular economy approaches, implementing upstream measures, and tackling the chemicals and waste at end of life, the project will also prevent waste/products containing persistent organic pollutants, from entering material recovery supply chains (including e-waste management with the aim of preventing e-waste from entering solid waste). The project aims to eliminate or significantly reduce chemicals subject to the Stockholm convention, including both POPs and uPOPs included in the NIPs of Colombia, Panama and Jamaica. The project is also directly relevant to the Basel Convention Technical Guidelines on the Identification and Environmentally Sound Management of Plastic Wastes and their Disposal. It will contribute to the implementation of a legally binding framework for plastic waste of the Basel Convention (introduced in May 2019) in the LAC region, to ensure global and regional trade in plastic waste is more transparent and better regulated, whilst also ensuring that its management is safer for human health and the environment. The project will also address the issues of waste dumping and littering, open burning, improper incineration, and promote best practices and technologies for waste prevention, reduction, recycling and safe disposal. The project tasks a holistic approach to design solutions along the whole life cycle of plastics and engage with key actors along the value chain (including the supply chain). The project will strengthen inter-sectoral and inter-department co-operation at the city/municipality level that will also strengthen national inter-ministerial committee activities (IMCs) in line with GEF-7 corporate indicators. The proposed actions through public-private partnerships will help transform the plastic life cycle for problematic products and polymers and contribute towards achieving the GEF-7 target on "Area of marine habitat under improved practices" by avoiding 5,125 tonnes of marine plastics which corresponds to 12,281 tonnes of avoided CO_2 emissions.

Through the activities under component 3, inter-city network, valuable know-how can be transferred to cities in different geographies under the GEF Sustainable Cities programme, and with the GPSC (Global Platform on Sustainable Cities) as well as the Regional Seas Programme. The proposed activities will minimize the impacts of marine plastics and plastic pollution, including microplastics, on the health of marine biodiversity and contribute towards outcome 7 of the Four-year Framework of Program Priorities under the GEF-7 Biodiversity strategy.

Promoting a circular economy will improve production, consumption, and environmentally sound disposal patterns, and eventually reduce plastic leakage and the release of chemicals of concern to the environment. There are clear benefits of bringing both focal points and well-established synergies.

5) INCREMENTAL/ADDITIONAL COST REASONING AND EXPECTED CONTRIBUTIONS FROM THE BASELINE, THE GEFTF, LDCF, SCCF, AND CO-FINANCING

The countries of the LAC region (including the Caribbean, the North Brazil, as well as the South Pacific and Northeast Pacific) have recognised the local issues associated with plastic pollution and their contributions to regional and global problems. They are all in the process of initiating various approaches to limit use and disposal of single use plastic products. The GEF grant USD 7,000,000 is leveraging a co-financing contribution of USD 35,407,240 that will collectively contribute to the incremental activities and the current baseline. These experiences and lessons, coupled with those gained by the 6 cities working together in this project, will be shared widely between the 6 cities, across the wider LAC region, and globally to encourage uptake of circular economy approaches to reduce marine plastics and plastic pollution.

The GEF project is expected to provide a range of outputs that will contribute to enhancing understanding on circular economy approaches and reducing marine plastics and plastic pollution from increased awareness, enhanced policies, practical interventions, sharing experiences together, and through robust post-project monitoring and reporting of the impacts of this project. Ultimately, through the application of sustainable life cycle approaches and the transition to a circular economy, the project will ensure pollution reduction to the marine environment and improve the ecosystems health of large marine systems of global significance as well as marine habitat. The resulting improvement of marine and coastal habitat will enhance the provisional services of such ecosystems and contribute to boosted economic and livelihood opportunities.

Without the GEF Grant - baseline scenario

Without the GEF grant, it is likely that the initiatives that are underway at the national and city levels (which form part of the baseline for this project) will continue, but they may lack the coordination gained through adopting a circular economy approach. In addition, the baseline scenario will lack inter-city dialogue to share experiences and lessons across the LAC region. Together, these isolated actions undertaken in the baseline will not result in the benefits expected from improved coordination and guidance, and the impacts on reducing marine plastics and plastic pollution in the LAC Region will be more limited. In addition, the experiences and lessons gained in the LAC region will not have a vehicle for enabling these to be disseminated more widely.

With the GEF Grant - incremental reasoning

The GEF grant is central to promoting circular economy by the municipalities at the city level (Component 1) and facilitating innovative interventions led by the private sector (Component 2). Component 3 will enable the sharing of experiences between the LAC cities to assist with the overall transition to the circular economy in LAC. Component 4 will provide national, regional, and global capacity development and communication mechanisms to raise awareness through the lessons and experiences generated in this project, encouraging up-scaling thereby further increasing the global environmental benefits from the GEF support. Overall, GEF funding will enable the participating cities and countries, to create the conditions for change through the implementation circular economy approaches benefiting the LAC and global environments by:

1- Reducing marine plastics and plastic pollution in the LAC region (and by future implementing upscaling actions, globally).
2- Assisting countries in LAC in meeting relevant SDGs (including SDG 6, 11, 12, 14 and 17) and other international convention targets (including the Cartagena Convention, Lima Convention, Land-based Sources of Pollution Protocols, Basel Convention, Stockholm Convention, etc.),
3- Promoting sustainable approaches to development in the region through the implementation of circularity approaches to addressing marine plastics and plastic pollution.
    - Establishing a network of cities sharing experiences and lessons on circular economy approaches to address marine plastics and plastic pollution, that will benefit the LAC region and be available as a model for upscaling globally.
    - The GEF grant will facilitate the coordination of public and private sector actions that will enhance the formation of sustainable public-private partnerships.

With substantial co-financing mobilised from the governments and the private sector, the project can achieve the following impacts through various co-financing partners:

- The national and city-led governments and municipalities have provided co-finance, which ensures that the concept of circular economy will be embedded in policies on plastics, and the solutions of circular policies and better waste management are implemented through policy development and enforcement
- The private sector has provided co-finance which will provide a very solid ground to test new business models (such as reuse) and treatment solutions (such as recycling technologies and infrastructure), by bringing the business network, forerunner experience, and to replicate it in larger scale in LAC.
- Co-financing is confirmed by international organisations and industrial associations, which connects the development and solutions in LAC with global value chain and players, to ensure consistency and harmonisation.

It is recognized that GEF resources are limited so during the project implementation phase the project team will leverage additional support and identify opportunities for future investment to key elements in the projects' designs. The project will work closely with the three beneficiary countries and six cities to leverage co-financing through public sector projects/initiatives on addressing plastic pollution. It is expected that governments will provide substantial and significant co-financing to implement the actions identified by the policy action plans to be developed under output 1.1 and develop/implement the policy instruments under output 1.2 and 1.3. Private sector stakeholders are expected to provide co-financing to the implementation of component 2 on business innovation and engagement along the plastic value chain, these leveraged contributions will include investments in piloting test innovative upstream solutions including sustainable alternatives and improving plastic waste collection, sorting and recycling as well as closed loop systems. Under component 3 on the inter-city network, the project aims to recruit new cities in the region in addition to the six project cities and support at least 3 selected new cities to develop policy action plans. These additional cities are also expected to support co-financing to the development of the inter-city network and their action plans.

There have been many projects/initiatives on plastics in the region with which the project will collaboration to share and learn from experience (both positive and negative), including in terms of stakeholder engagement and resource mobilization. The developed activities under those projects/initiatives could also supplement GEF resources as co-financing. Additionally, component 4 of the project will develop knowledge products and promote knowledge sharing by working with relevant knowledge platforms. This will extend the benefit of project investments and thereby ensure important and costly resources developed under the project are available to all relevant stakeholders.

6) GLOBAL ENVIRONMENTAL BENEFITS (GEFTF) AND/OR ADAPTATION BENEFITS (LDCF/SCCF)

The project is expected to reduce marine plastics by 5,065 tonnes during the project lifetime. The timeline for this GEB reductions is the project lifetime (four years) This will be achieved cumulatively through five major intervention pathways: 1) the project will aim to achieve a reduction of 1,600 tonnes of single-use plastic products which represent the top 10 products in marine plastics sampling of the six cities, through policies (such as reducing single-use plastic products) and business innovation (reuse and redesign to reduce single-use plastic products). It is presumed that 9% of these single-use products will be avoided becoming marine litter (i.e. 144 tonnes), because this is the average ratio of packaging and single-use plastic products that ends up as marine litter in the baseline mapping of six cities; 2) the project will aim to reduce 10% of marine plastics (compared to the baseline) in the six target cities in the last three years of the project (in total 1,627 tonnes) compared to the baseline data 2018, as a result of improved waste management from policy and business action; 3) the project will collect and treat 780 tonnes of single-use plastic products and 700 tonnes of other plastic products containing POPs from the recycling pilots. It is assumed that 9% of the single-use plastic products and 3.4% other plastic products containing POPs would have ended up as marine litter eventually, so 94 tonnes of marine plastics will be avoided thanks to the collection

and treatment activities; 4) the project is expected to reduce marine plastics by at least 400 tonnes in six cities, through awareness raising events, training, and clean-up campaigns. The actual reduction data will be collected per event organised; 5) the project is expected to reduce marine plastics by at least 2,800 tonnes, as a result of the inter-city network and capacity building activities at the regional level, and the actual reduction data will be collected through the monitoring scheme of the inter-city network.

Table 10. Project interventions to reduce marine plastics

Project intervention	Circularity strategy	Delivered by project output	Weight of plastics targeted by the intervention (tonne)	Note
Policies and business innovation leading to the reduction of single-use plastic products in the six cities (such as reducing or imposing tax on single-use plastic products and promoting reuse)	Reduce, re-design, reuse	1.1, 1.2, 2.1	144	The project will aim to achieve a reduction of 1,600 tonnes of single-use plastic products in 6 cities, through policies and business innovation. It is presumed that 9% of the single-use plastic products will be avoided leaking to the ocean as marine plastics (the baseline suggests that 3.4% of all plastic waste will become marine litter in six cities, and the single-use plastic products will have a higher leakage rate than other plastic products). Actual reduction of single-use plastic products during project implementation will be accounted by the results of specific policy and business interventions.
Policies and business actions leading to the improvement of waste management system, thus reducing the plastic leakage to the marine environment in the six cities	Reduce, recycling	1.1, 1.2, 1.3, 2.2	1,627	The interventions on waste management are expected to result in a 10% reduction of marine plastics in the six pilot cities during the last three years of the project, compared to the baseline of 2018.
Collection and recycling pilots in the six cities leading to reduction of marine plastics	Recycling	2.2	94	It is presumed that 9% of the collected single-use plastic products and 3.4% of plastics containing POPs will be avoided leaking to the ocean.
Awareness raising, training events, and clean-up campaigns in the six cities	Reduce, recycling	1.1, 4.1	400	Data on reduction of marine litter will be collected from specific awareness raising events, training, and clean-up campaigns
Awareness raising activities, training, and capacity building through the inter-city network at regional level	Reduce, Refuse, Recycling	3.2, 4.1	2,800	Data on reduction of marine litter will be collected from the monitoring scheme of participating cities in the inter-city network in the last two years of the project
TOTAL	-	-	**5,065**	

The project is expected to achieve a reduction of 9,382 tonnes CO_2eq emission during the project lifetime. This will be achieved cumulatively through the following seven intervention pathways: 1) the project will support six city governments to ban open burning of plastics, which will lead to the reduction of open burnt plastics by 992 tonnes, thus achieving an avoidance of GHG emission by 4,464 tonnes CO_2eq; 2) the project is expected to support city government to reduce single-use plastic products by 1,400 tonnes. By considering the trade-off between reducing single-use products and using new alternatives, the project uses an emission factor of 1.5 to calculate the benefits of CO_2 reduction, totalling in 2,100 tonnes CO_2eq due to this intervention; 3) the project is expected to introduce reuse policies and promote reusable products and reuse business models through circular design, which will achieve a reduction of consuming single-use plastic products in six project cities by 200 tonnes, which will result in a reduction of GHG emission by 300 tonnes CO_2eq; 4) the project is aimed to achieve a target of re-introducing 200 tonnes of recycled content into new products through circular design by businesses and supporting policies (such as sustainable procurement) in six cities, which will result in a reduction of GHG emission by 300 tonnes CO_2eq; 5) the project will also support EPR system in two cities of Jamaica, and it will result in a reduction of 574 tonnes CO_2eq of GHG emission; 6) the project will collect and treat various types of plastic products to pilot in six cities, and aims to reach the yield of 520 tonnes of recycled plastics, which will replace virgin plastics and avoid GHG emission by 780 tonnes CO_2eq; 7) the project will achieve the avoidance of 192 tonnes of PVC cables and other plastic waste being open burnt through the same collection and recycling pilot, which will end up a reduction of GHG emission by 864 tonnes CO_2eq.

Table 11. Project interventions for the reduction of CO_2eq emissions

Project intervention	Circularity strategy	Delivered by project output	Weight of plastics targeted by the intervention (tonne)	Emission Factor (EF, tonne of CO_2eq emission per tonne of plastics)	Total GHG mitigated (tonnes CO_2eq)	Note
City-level policy reducing and/or imposing penalty on open burning	Reduce, Recycling	1.1, 1.2, 1.3	992	4.5	4,464	The policy is expected to contribute to at least 2% reduction of weight of plastics being open burnt (compared to the baseline) in the six cities during the last three years of the project. The actual reduction of plastics being open burnt will be accounted though the assessment of relevant policy outcomes.

				(Source[87])		
Policy to reduce single-use plastic products	Reduce	1.1, 1.2	1,400	1.5 (Source[87])	2,100	The actual amount of avoided single-use plastics products will be accounted by the impacts of specific policy to be piloted at the city level
Policy and business innovation leading to product reuse, while avoiding the use of single-use plastic products	Re-design, Reuse	1.1, 1.2, 2.1	200	1.5 (Source[87])	300	The weight signifies the mass of plastics being reused (thus the weight of single-use products avoided). The actual weight of reused plastics achieved by the project will be accounted by evaluating the outcomes of reuse policy and business innovation
Material related policy and business innovation leading to the increase of use of recycled content, which will replace virgin plastics made from oil	Re-design, Repurpose	1.1, 1.2, 2.1	200	1.5 (Source [88])	300	The weight signifies the recycled content being applied in the production of new plastic products. The actual weight will be accounted by evaluating the outcomes of relevant product/material policy and business innovation on re-design
EPR programme (to support Jamaica EPR)	Re-design, Recycling	1.3	-	-	574	Contribute to 5% of the EPR recycling target for the two cities in Jamaica during the last three years of the project. The GHG reduction data is obtained directly from Recycling Partners of Jamaica (RPJ)
Collection and recycling pilot in cities leading to the yield of recycled plastics, which will replace virgin plastics made from oil	Recycling	2.2	520	1.5 (Source[88])	780	The weight of plastics is the output/yield from recycling process of the pilot
Collection and recycling pilot in cities leading to the avoidance of burning cables and other plastics (such as in dumpsites)	Recycling	2.2	192	4.5 (Source[87] [88])	864	9% of plastics is burnt averagely in six cities for normal plastics, and it is also presumed that 70% is burnt for PVC cables in the baseline scenario
TOTAL	-	-	-	-	**9,382**	

The project is expected to achieve the reduction of plastics containing POPs through both upstream interventions (policy on eliminating CoCs in plastic products such as furniture and building materials, and circular design by producers) and downstream interventions (collection and recycling pilot). Through implementing upstream policies and circular design by the private sector, the project is expected to reduce at least 200 tonnes of products containing HBCD and 1,000 tonnes products containing PBDE. This will result in a net reduction of 1.2 tonnes of HBCD and 30 tonnes of PBDE by applying an average concentration of relevant chemicals in such products. In the meantime, through collection, recycling, and disposal pilot in six cities, the project is expected to treat and dispose various waste plastic products containing HBCD and PBDE, and the pilot will achieve a reduction of 12.8 tonnes of HBCD and 10.9 tonnes of PBDE. Therefore, the total weight of POPs reduction in this project is expected to be 54.9 tonnes (HBCD and PBDE).

Table 12. Project interventions for the reduction of plastics containing POPs

[87] U.S. Environmental Protection Agency. (2015). "Waste Reduction Model: Plastics". WARM Version 13. https://archive.epa.gov/epawaste/conserve/tools/warm/pdfs/Plastics.pdf

[88] World Health Organization (WHO). (2008). "Protecting Health from Climate Change". https://www.who.int/globalchange/publications/factsheets/Kit2008_annex1_2.pdf?ua=1

Plastic products	Circularity strategy	Delivered by project output	Weight of plastics targeted by the intervention (tonne)	POPs concentration per plastic product (average)	POPs weight (tonne)
Reduction of using CoCs including POPs in plastics products through upstream policy (standards and requirements on chemicals in products) and business innovation (circular design of materials and products)					
Products containing HBCD (e.g., EPS packaging)	Reduce, Re-design	1.1, 1.2, 2.1	200	0.59% (Source [89])	**1.2**
Products containing PBDE (e.g., furniture and building materials)	Reduce, Re-design	1.1, 1.2, 2.1	1000	3% (Source[20])	**30**
HBCD reduction through collection and disposal pilot of plastics containing HBCD					
From EPS plastic products	Recycling, Disposal	2.2	166.7	0.5% (Source[89])	0.8
From HIP plastic products	Recycling, Disposal	2.2	166.7	7% (Source [90])	11.7
From car seat	Recycling, Disposal	2.2	50	0.000017% (Source[19])	0.0
From car floor	Recycling, Disposal	2.2	50	0.59% (Source [91])	0.3
Sub-total of HBCD reduction through disposal pilot					**12.8**
PBDE reduction through collection and disposal pilot of plastics containing PBDE					
From furniture and building materials	Recycling, Disposal	2.2	167	5% (Source[20])	8.3
From car seat	Recycling, Disposal	2.2	50	5.2% (Source[19])	2.6
Sub-total of PBDE reduction through disposal pilot					**10.9**
GRAND TOTAL of POPs	-	-	-	-	**54.9**

The project is expected to achieve the avoidance of releasing 1.16 gTEQ unintentionally produced POPs, through reducing the open burning of plastics (including packaging, PVC cables and other plastic products), in places like backyards and dumpsites. The policy action to ban open burning of plastics, as well as the pilot project to collect and recycle plastics will both contribute to the reduction of open burning. Policy to ban open burning in six cities is expected to reduce the plastics of open burning by 991.7 tonnes, which results in an avoidance of 0.30 gram of uPOPs. The environmentally sound disposal of 100 tonnes of plastic products containing PVC will lead to an avoidance of 70 tonnes of products being burnt, thus achieving an avoided generation of 0.84 grams of uPOPs. The environmentally sound disposal of 1,380 tonnes of non-PVC plastic products (such as packaging) will lead to an avoidance of 122.2 tonnes of plastics being burnt, thus achieving an avoided generation of 0.02 grams of uPOPs.

Table 13. Project interventions for the avoidance of releases of unintentionally produced POPs

	Delivered by project output	Weight of plastics targeted by the intervention (tonne)	EF (µg TEQ/t material burned) (Source[26])	eTEQ (gram)	Note
City-level policy banning and/or imposing penalty on open burning	1.1, 1.2, 1.3	991.7	300	0.30	This will be achieved through ban and penalty on open burning of cables and other plastics product, which contribute to at least 2% reduction of plastic being openly burnt (compared to the baseline) for six cities during the last three years of the project. The actual reduction of plastics being open burnt will be accounted though the assessment of relevant policy outcomes.
Collection and recycling pilot in cities leading to the avoidance of burning cables and products containing PVC	2.2	70	12000	0.84	This will be achieved through the collection and recycling pilot on plastic products containing PVS (such as cables)

[89] Abdallah, M., Sharkey, M., et al. (2018). "Hexabromocyclododecane in polystyrene packaging: A downside of recycling?". Chemosphere, ISSN: 0045-6535, Vol: 199, Page: 612-616. https://doi.org/10.1016/j.chemosphere.2018.02.084

[90] United Nations Environment Program (UNEP). (2019). "Guidance for the inventory of hexabromocyclododecane (HBCD)"

[91] Liu et al. (2019). "Dynamic stock, flow and emissions of brominated flame retardants for vehicles in Japan". Journal of Cleaner Production, Volume 232, Pages 910-924. https://doi.org/10.1016/j.jclepro.2019.05.370

Collection and recycling pilot in cities leading to the avoidance of burning non-PVC plastics	2.2	122.2	300	0.02	This will be achieved through the collection and recycling pilot on plastic waste including single-use plastic products and packaging (1,380 tonnes). 9% of such products is burnt averagely in six cities for normal plastics as a baseline.
TOTAL				**1.16**	

The project aims to reach 990,162 people as direct beneficiaries, with 559,306 females and 430,855 males. The estimation has been based on the project activities across different stakeholder groups, with their scope, as it can be seen in Table 14. Those activities with largest reach are relating to the new circular policies, including eco-labels, procurement, standards, etc, to be most effective in reaching consumers, a 10% of population per city has been estimated, assuming consumers will be affected by these policies. And, even more effective to reach direct beneficiaries is the communication material, which has a regional scope, estimations of 0.01% of LAC population, assuming people will come across the material via social media, the news, reports, etc. More direct beneficiaries are being reach through other project activities but with a significant lower impact, however these other activities may have a potential impact in translating to indirect beneficiaries as some of these stakeholders will build capacity and knowledge which will potentially transfer to others. Consultation meetings will be involving mainly private sector together with policy makers, those related businesses in sustainable solutions and best practices will be engaged. Informal workers will be engaged, one such recent example in the Rae Town pilot under the recently concluded Plastic Waste Minimization Project. Finally, a number of trainings will engage the entire value chain of plastics, across different sectors.

Table 14. Project activities and targeted beneficiates

Project Activities	Targeted beneficiates	Project Output	Total	Female	Male
Consultation meetings on policy and business solutions under component 1 and 2	participants of consultation/meetings	1.1, 1.2, 1.3, 2.1, 2.2	500	200	300
10% of cities population influenced by new circular policies (eco-labels, procurement, standards etc.)	consumers	1.1, 1.2	323,439	226,407	97,032
120 businesses engaging in the project and/or adopting best practices or sustainable business solutions (*5 employees)	employees of businesses	2.1, 2.2. 2.3	600	240	360
number of informal workers engaged	informal workers	2.2	200	80	120
number of women entrepreneurs participating in the industrial roundtable and innovation	entrepreneurs	2.3	40	40	0
government stakeholders supported by the inter-city network	government	3.1	120	36	84
network estimation of 0.01% of cities population	targeted network	3.1	3,235	1,294	1,941
0.01% of total LAC population reached by communication materials (incl. social media, reports, news, etc.)	communication	4.1	660,978	330,489	330,489
number of employees of NGOs and new initiatives involved	campaigns / NGOs	4.1	50	20	30
trained people	All relevant stakeholders as trainees	4.2	1,000	500	500
Total			**990,162**	**559,306**	**430,856**

7) INNOVATIVENESS, SUSTAINABILITY AND POTENTIAL FOR SCALING UP

Innovation

The project will promote innovative solutions to problematic and unnecessary plastic products, reuse, waste collection, recycling, and disposal at the city level. This will also involve the informal sector where relevant. The project will build on the approaches gained from the previous GEF MSP (GEF ID 9681 Addressing Marine Plastics - A Systemic Approach). One of the four building blocks recommended by the previous GEF MSP is to establish a circular economy for plastics, called for 'Introducing innovative design, production and business models to ensure that the plastics we do need are reusable, recyclable, or compostable, and free of toxic additives".

The project will work with a wide range of innovation initiatives (such as Upstream Innovation of the Ellen MacArthur Foundation, and UpLink of the Global Plastic Action Partnership), forerunner companies along the value chain (e.g., Coca-Cola, Nestlé, Unilever, Algramo, XICLO, Recycling Partners of Jamaica, Trashforma, BlissPanamá, LeafSync), and academia to develop, test and validate different technologies, tools, and solutions to speed up the uptake of innovation in the context of LAC.

Different outputs and activities of the project will serve as an important basis for the development of long-term innovative approaches and technologies in the project countries. Specific project outputs that will be encouraging the introduction of innovative policies and business solutions include:

- Output 1.2 that will identify and pilot test policies aiming at creating an enable environment for circular economy, including policies that creates more market demands, uptake, and awareness for circular products (such as eco-labels, and sustainable procurement), policies that will lead to actual reduction of plastic consumption and waste generation from sources, and policies stimulating reuse of product. The concept of these policies is not new, however, their actual implementation at city level in the context of developing countries has not happened at large scale yet. Piloting these policies in LAC cities will lead to first-hand knowledge and learning.

- Output 1.3 will identify and pilot test financial instruments that will provide economic incentives and financial support to circular solutions. Extended Producer Responsibility will be a key policy instrument to be further developed to cultivate public-private partnership, as it has not been fully implemented in LAC countries and cities.
- Under Output 2.1, a series of upstream solutions on alternative solutions, eco-design, sustainable production, business models will be developed and tested to address problematic and unnecessary plastic products/packaging, including:
    - Innovate and set up pilots to scale up the most viable new product/packaging designs to achieve three circular economy strategies: Elimination, Reuse, Material. The key innovation will include circular design such as package-less products, reusable, or refillable containers (such as smart water bottles connecting with refill stations, compostable and edible cutlery, using resins from organic material to make plastic, refillable solutions in the fast-moving consumer goods, upcycling recyclable plastic into valuable products such as a plastic desk, chair, etc.)
    - Algramo is developing an innovative platform (IoT) solution for retailers, brands, and consumers to plug into a market-based, low-cost refill system.
    - Create new business models and strategies to stimulate reuse or encourage durable goods with product life extension strategies (such as leasing products, shared ownership of products, provide service and functions instead of selling actual products), to shift from single use to reusable plastic packaging and products. This will be delivered through collaboration with by working closely with the private sector (companies like Algramo, XICLO who provides co-finance to the project).

- Output 2.2 on collection and recycling will first test different collection methods and means, to increase awareness, segregation, and collection efficiency through various channels, especially through the application of digital tools and social media towards different users. Output 2.2 will also carry out feasibility studies on different treatment solutions and innovations at city level (such as environmentally sound recycling technologies, composting, chemical recycling), and pilot test different recycling techniques to identify the best treatment methods and technical routes for potential shipment in the LAC region. This output will also look into the opportunities and feasibility of specific reuse and upcycling technologies and innovation for recycled plastics (using recycled plastics to produce higher value products such as apparel, furniture, tableware, game, and sport equipment).
- Output 2.3 on the industrial roundtable will facilitate the exchange of best practices on innovative options for eco-design and sustainable production, business models for plastic production; and promote the development of strategic partnerships among private sector stakeholders to identify financing options for innovative waste management solutions. The round table will support companies along the value chain to scale and deploy new technologies, solutions, and innovation in domestic and global markets.

Sustainability

The project will actively assist cities/municipal authorities to develop sustainable partnerships with the private sector involved in plastic waste collection and recycling (both formal and informal sectors). The sustainability will also be encouraged through improving understanding and awareness to assist key stakeholders attract new sources of financing to adopt circular economy approaches to reduce marine plastics and plastic pollution. The project will facilitate this increased understanding and awareness through the inter-city networks, round-table discussions, etc. This will also enhance the overall governance and improve engagement of stakeholders to address the issue of plastic pollution. The project will also support the sharing of lessons, experiences, and benefits from the circular economy approaches within the LAC region (including ecosystem benefits and socio-economic benefits) to reducing marine plastics and plastic pollution, which will help ensure the uptake of the knowledge generated by the project in the region and the long-term impacts of the project.

To promote the sharing of knowledge and lessons learnt generated by the project, knowledge products generated by the project will be shared through the IW: Learn platform, the Green Growth Knowledge Platform (GGKP)'s website, the SAICM knowledge platform, and the GPML Digital Platform. Please refer to the section on knowledge management.

Potential for scaling-up

A mechanism will exist to facilitate the up scaling of the results from this project to other cities within the LAC region and globally. In the PPG phase, key stakeholders from city governments and private sector have been reached out to and convinced of the value of the proposed activities under the project and the linkage of the project with their own agendas. In the implementation phase, the project will also create ownership of stakeholders to the project by supporting city governments and businesses to design and pilot test policies and solutions. When it comes to innovations, generally a new set of interventions, it is fundamental that plans for scaling up consider a broad range of factors and balance what is desirable with what is feasible. The success of scaling up depends on actual implementation. When developing policies and solutions, the project will also advise partners on how to scale these up, which is particularly important for the pilot tests under component 1 and 2. The communication strategy to be developed under the project will take into consideration how the communication efforts could help generate at an early stage a positive environment for scaling up and at later stage sustain the results achieved by the project. Engaging actively with relevant stakeholders identified by the project will also open-up channels for dissemination and promote the scaling-up based on sufficient coordination of interests.

The experience gained through the different phases of the project can be very helpful for other countries in the LAC region. Different methodologies, procedures and approaches can be replicated in similar economies. One specific project activity is Output 2.1 that will compile the best practices on existing business upstream innovations and solutions on elimination, reduction, and reuse at the global level, to provide examples and inspiration to the work in LAC cities. Based on the best practices, the activity will prepare recommendations on how these upstream innovations will be applied in the context of LAC cities. The overview of best practices will include some of the following topics: circular design on packaging and products, new business models to enable waste reduction, reuse and product lifetime extension, eco-labels, declaration to improve consumer information, etc. Under output 2.1, experience and lessons learnt from the pilot test of the upstream solutions in the target cities will also be summarized and disseminated with other cities in the region. It will be crucial for city governments and other businesses to consider these experience and lessons learnt when developing policies or business practices to support relevant upstream solutions.

Moreover, Output 4.1 will document and produce key knowledge to promote the benefits and lessons from the GEF LAC project to key audiences and encourage replication of successful approaches. Towards policy makers, learning experience and case studies will be compiled from Component 1, related to the best practice on developing circular policy and enabling conditions. Towards the private sector, learning experience and case studies will be compiled from Component 2, related to the best practice on developing circular innovation and solutions along the value chain. As mentioned in the sustainability section, knowledge products generated by the project will be shared through the IW: Learn platform, the Green Growth Knowledge Platform (GGKP)'s website, the SAICM knowledge platform, and the GPML Digital Platform, to facilitate the scaling-up.

In addition, the implemented inter-city network can drive collective action of LAC cities towards a common vision and a set of ambitious targets, with public reporting on progress. This network will act as a platform for city leaders and actors to leverage policy instrument and financial mechanism, discuss innovation and technologies for solutions along the value chain, exchange lessons learnt and best practices across cities in the LAC region.

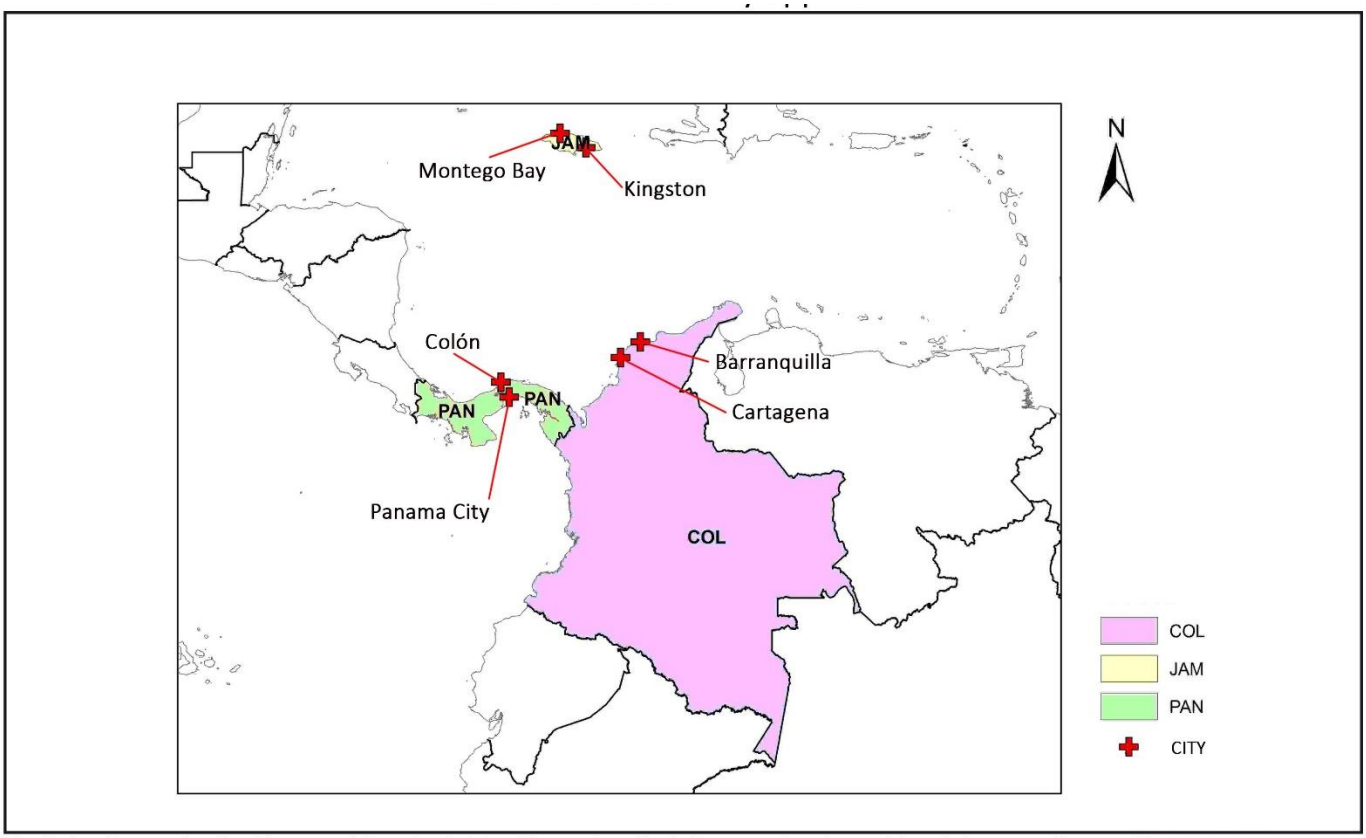
In most cases it is anticipated that the scaling-up will require incremental adaptation rather than fundamental transformative change, sustaining the approaches promoted by the project more widely. Output 4.2 on the training activities will support strengthening the capacity of relevant stakeholders in adaptation. Output 4.3 to support long-term monitoring will track and showcase the progress made under the project and help keep the momentum to scale up the project activities by achieving more measurable progress.

B. PROJECT MAP AND GEO-COORDINATES

Please provide geo-referenced information and map where the project interventions will take place.

- *Cartagena (Colombia): 10°24'N 75°30'W*
- *Barranquilla (Colombia): 10°57'50"N 74°47'47"W*
- *Kingston (Jamaica): 17°58'17"N 76°47'35"W*
- *Montego Bay (Jamaica): 18°28'N 77°55'W*
- *Panamá City (Panamá): 8°59'N 79°31'W*
- *Colón (Panamá): 9° 21' 26" N, 79° 53' 55" W*

Figure 4. Geographical map of the project countries and cities



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries

This map is intended for illustrative purposes only and should NOT be used to derive any information regarding the project's operations. No activities planned in any disputed territories

2. STAKEHOLDERS

Provide the Stakeholder Engagement Plan or equivalent assessment. In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

Select what role civil society will play in the project:

- ☐ *Consulted only.*
- ☐ *Member of Advisory Body; contractor.*
- ☐ *Co-financier.*
- ☒ *Member of project steering committee or equivalent decision-making body.*
- ☐ *Executor or co-executor.*
- ☐ *Other (Please explain)*

This project will collaborate with various stakeholders from the public and private sector and the civil society. The collaboration and participation of key stakeholders has been analyzed through consultation meetings with 114 potential actors from Colombia, Panamá, and Jamaica. During the mentioned consultations, it became clear that the effective implementation of the project will depend on the strengthening of technical and institutional capacities, and on the participation of these stakeholders. In this context, it is essential that the activities programmed consider specific interests and influence of different stakeholder groups.

Appendix 6A provides a detailed description of the different stakeholders and their engagement processes in these six project cities. Moreover, the analysis provides a framework for conducting and evaluating stakeholder engagement efforts to enhance the experience and results of the engagement process. To identify the main public, private, academic, and non-governmental actors and their interest and influence on the implementation of the project, a stakeholder matrix was developed. Please refer to Appendix 6B for this information. It should be highlighted that the stakeholder analysis and engagement is an ongoing process, which may evolve as new stakeholders are introduced to the project.

Table 15. Stakeholders at the Global Level

Stakeholder Name	Interest	Influence	Linkage to project component	Linkage to project output	Strategy for engaging the stakeholder
Global Plastic Action Partnership (GPAP)	High	High	Component 1, 2, 3, 4	Output 1.1, 2.1, 2.2, 3.1, 4.1, 4.2, 4.3	Networking, capacity, and knowledge exchange: to be invited to meetings/workshops (and potentially PSC). Information shared with these bodies include experiences, papers, guidance for peer review etc. Dissemination of project learning and success stories will be done in collaboration with these organizations and initiatives.
Platform for Accelerating the Circular Economy (PACE)	High	High			
Basel Convention Secretariat	High	High			
Stockholm Convention Secretariat	High	High			
Scale 360	Low	Low			
The Strategic Approach to International Chemicals Management (SAICM)	High	High			
The Inter-Organization Programme for the Sound Management of Chemicals (IOMC)	High	High			
Beyond Oil and Gas Alliance	Medium	Low			
Euro CITIES	Medium	Low			
Plastics Europe	Medium	Medium			
International Union for Conservation of Nature (IUCN)	Medium	Medium			
German Society for International Cooperation (GIZ)	Medium	Medium			
UNHABITAT	High	Medium			
SYSTEMIQ	High	Medium			
Plastic Pollution Coalition	Medium	Low			
The Ocean Cleanup	Medium	Low			
InterAmerican Development Bank	Medium	Medium			
Environmental Investigation Agency	Medium	Low			
Green Growth Knowledge Platform (GGKP)	High	Medium			
The Global Partnership of Marine Litter (GPML)	High	High			
Ellen MacArthur Foundation (EMF)	High	Medium			
World Bank	Medium	Medium			
Consumer Beyond Waste	High	Medium			
Alliance to End Plastic Waste	High	High			
Circulate Capital	Medium	Medium			
Regional coalition on circular economy in Latin America and the Caribbean	High	High			
WWF	Medium	Medium			

Table 16. Stakeholders at the Regional Level

Stakeholder Name	Interest	Influence	Linkage to project component	Linkage to project output	Strategy for engaging the stakeholder
Production Petrochemical company and plastic production (e.g., BASF, Braskem S.A, Alpek S.A, Évora S.A, Covestro, others, Carvajal S.A and PROPLAS S.A. in Colombia	Medium	High	Component 2	Output 2.1, 2.2, 2.3	Engage through roundtables, workshops, and participation of events, to enable upstream solutions and promote upstream innovation. Different innovations and solutions will be consulted and tested in this companies, and success stories will be derived from them.
Use Durable goods and consumer goods producers (e.g., Coca-Cola, Nestle, Unilever, Procter & Gamble, Natura, Pepsi, Colgate)					
Logistic (packaging) eCommerce (e.g., MercadoLibre) Packaging (e.g., Plastipak)					
Consumption Retailers, food service companies, packed good companies (e.g., B2W, Arcos Dorados)					
Collection & Recycling Collection, sorting and recycling industry (e.g., Plastiweber, Tomra, PetStar, Wisewood Eco Solutions, Louisiana Chemical Equipment Co. in Colombia; Camar Plásticos Ltd, M.M.P. Plásticos, Plaskaper Termoplásticos, Raposo Plásticos, Voltoplast Indústria e Comércio de Plásticos Ltda; Terra Polyester in Honduras; ACEBRI Construcción y Procesos Plásticos, Bioplast de Antioquia S.A.S, División Ambiental SAS, Promaplast, SC Recycling SA in Colombia), AEPW					
Reuse, Upcycling other upstream Algramo GreenBricks TriCiclos TerraCycle Global Plastic Action Partnership (GPAP)	High		Component 2 and Component 4	Output 2.1, 2.2, 2.3 and Output 4.1, 4.2, 4.3	Provide co-finance and financial support (Algramo) Engage and enable upscaling of good practices by sharing key knowledge
Finance: Circulate Capital World Bank Development Bank of Latin America Inter American Development Bank	Medium		Component 1 and 3	Output 1.2 and Output 2.1, 2.2, 2.3	Provide co-finance to the project The project can support relevant financial institutes to define the priority and scope to fund circularity related project on plastics in LAC
Others Network of National Cleaner Production Centres (NCPCs) with centres in LAC	High		Component 3 and Component 4	Output 3.1, 4.1, 4.2, 4.3	UNEP is regularly interacting with NCPCs in LAC for project implementation and capacity building on cleaner production, eco-innovation, and circular economy.

Table 17. Stakeholders-Colombia

Stakeholder Name	Interest	Influence	Linkage to project component	Linkage to project output	Strategy for engaging the stakeholder
PUBLIC SECTOR					
Departamento Nacional de Planeación (DNP)	Medium	High	Component 1	Output 1.1	Support the development, implementation, and enforcement of circular policy
EPA Cartagena (urban environmental authority)	High	High	Component 1	Output 1.1, 1.2, 1.3	
Ministerio de Vivienda, Ciudad y Territorio	Medium	High	Component 1	Output 1.1	
Ministerio de Ambiente y Desarrollo Sostenible	High	High	Component 1	Output 1.1, 1.2, 1.3	
Asociación de corporaciones autónomas regionales y de desarrollo sostenible (ASOCARS)	High	High	Component 1	Output 1.1	
Vice Ministry of Tourism	High	High	Component 1	Output 1.1 , 1.2	
Ministry of Health and Social protection	Low	Low	Component 1	Output 1.1, 1.2	
Corporación Autónoma Regional del Sur de Bolívar	High	High	Component 1	Output 1.1	
Mayor of Cartagena	High	High	Component 1	Output 1.1, 1.2, 1.3	

Mayor of Barranquilla	High	High	Component 1	Output 1.1, 1.2, 1.3	
Cormagdalena	High	High	Component 1	Output 1.1, 1.2	
Corporación Autónoma Regional del Atlántico CRA	High	High	Component 1	Output 1.1 , 1.2	
Establecimiento Público Ambiental de Cartagena	Medium	Medium	Component 1	Output 1.1, 1.2	
CAR Cardique (Cartagena)	Medium	High	Component 1	Output 1.1, 1.2	
Corporación Autónoma Regional del Sur de Bolívar	Medium	High	Component 1	Output 1.1, 1.2	
Puerta de Oro	Medium	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	Provide technical assistance and support, and share existing experience
Local governments (Barranquilla, Atlantico)	High	High	Component 1, 3, 4	Output 1.1, 1.2, 1.3, 3.2, 4.1, 4.2, 4.3	Support the development and implementation of circular business solution
Local governments (Cartagena, Bolivar)	High	High	Component 1, 3, 4	Output 1.1, 1.2, 1.3, 3.2, 4.1, 4.2, 4.3	Networking, capacity, and knowledge exchange
CARDIQUE	High	High	Component 4	Output 4.1, 4.2, 4.3	Networking, capacity, and knowledge exchange
Ministry of Education of Colombia	Medium	High	Component 4	Output 4.1, 4.2	
National Natural Parks (Parque Nacionales Naturales - PNN)	Medium	Medium	Component 4	Output 4.1, 4.2	
Comisión Regional de Competitividad e Innovación	Medium	High	Component 4	Output 4.1, 4.2	
Barranquilla Verde	High	Medium	Component 4	Output 4.1, 4.2	
PRIVATE SECTOR/NGOS/Academia					
Acoplasticos	High	High	Component 2, 3, 4	Output 2.1, 2.2, 2.3, 3.1, 4.1, 4.2, 4.3	Capacity development and knowledge sharing from studies
The Environmental Chamber of Plastic (Cámara Ambiental del Plástico)	Medium	Low	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	Provide technical assistance and support, and share existing experience Support plan of action across cities
The National Association of Businessmen of Colombia (ANDI)	Low	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
CEMPRE	High	High	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Triple A S.A E.S.P	Low	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Ekored	Medium	High	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Pacaribe S.A. E.S.P	Medium	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Veolia Cartagena	Medium	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Esenttia	High	High	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Dow	Low	Low	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Andercol	Medium	Low	Component 2,3	Output 2.1, 2.2, 2.3, 3.1	
The Barranquilla Chamber of Commerce	Low	Low	Component 2,3	Output 2.1, 2.2, 2.3, 3.1	
Ecopars S.A.S	Medium	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Fenalco	Low	Low	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Ajover	Medium	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Veolia	Medium	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
Geofuturo	Medium	Medium	Component 2, 3	Output 2.1, 2.2, 2.3, 3.1	
EcoComputo	High	High	Component 2	Output 2.1, 2.2, 2.3	Improve material sorting, storing, treatment, recovery, or environmental sound disposal of plastic in electronics.

XICLO	High	High	Component 2	Output 2.1, 2.2, 2.3	Full reusable packaging service implementation in restaurants
Universidad de Cartagena	Medium	Medium	Component 4	Output 4.1, 4.2, 4.3	Networking, capacity, and knowledge exchange
INVEMAR	High	High	Component 4	Output 4.1, 4.2, 4.3	Monitoring and capacity development

Table 18. Stakeholders-Jamaica

Stakeholder Name	Interest	Influence	Linkage to project component	Linkage to project output	Strategy for engaging the stakeholder
PUBLIC SECTOR					
Ministry of Housing, Urban Renewal, Environment and Climate Change	High	High	Component 1	Output 1.1, 1.2, 1.3	Networking, capacity, and knowledge exchange
Maritime Authority of Jamaica	High	High	Component 1	Output 1.1, 1.2, 1.3	
National Solid Waste Management Authority	High	High	Component 1	Output 1.1, 1.2, 1.3	
National Environment and Planning Agency	High	High	Component 1	Output 1.1, 1.2, 1.3	
Recycling Partners Jamaica	High	High	Component 2	Output 2.1, 2.2, 2.3	Provide technical assistance and support, and share existing experience on EPR
PRIVATE SECTOR/NGOs/ Academia					
Wisynco	High	Medium	Component 2	Output 2.1, 2.2, 2.3	Provide technical assistance and support, and share existing experience
The Jamaica Environment Trust (JET)	Medium	Medium	Component 4	Output 4.1, 4.2, 4.3	Networking, capacity, and knowledge exchange (Provide information and data)
University of the West Indies: Faculty of Pure and Applied Sciences:	High	Medium	Component 4	Output 4.1, 4.2, 4.3	

Table 19. Stakeholders-Panamá

Stakeholder Name	Interest	Influence	Linkage to project component	Linkage to project output	Strategy for engaging the stakeholder
PUBLIC SECTOR					
ANCON	High	High	Component 1	Output 1.1 , 1.2 , 1.3	Support the implementation of activities related to a circular economy to reduce plastic pollution
SENA Regional Bolivar	High	High	Component 1	Output 1.1 , 1.2 , 1.3	
Ministry of Environment	High	High	Component 1	Output 1.1 , 1.2 , 1.3	Support the development and implementation of circular business solution
Autoridad del Canal de Panamá (ACP)	Medium	Medium	Component 1	Output 1.1, 1.2	
Autoridad de Aseo Urbano y Domiciliario (AAUD)	High	High	Component 1, 3,4	Output 1.1 , 1.2 , 1.3, 3.1 , 4.1 , 4.2, 4.3	Support the development and implementation of circular business solution
Municipality of Panamá	High	High	Component 1, 4	Output 1.1 ,1.2 , 4.1 , 4.2	Networking, capacity, and knowledge exchange
Municipality of San Miguelito	High	High	Component 1, 4	Output 1.1 ,1.2 , 4.1 , 4.2	
Municipality of Colón	High	High	Component 1, 4	Output 1.1 ,1.2 , 4.1 , 4.2	
Ministry of Education (MEDUCA)	High	High	Component 4	Output 4.1, 4.2	Networking, capacity, and knowledge exchange
AMP - Autoridad Marítima	High	Medium	Component 4	Output 4.1, 4.2	
Autoridad de los Recursos Acuáticos (ARAP)	Medium	Medium	Component 4	Output 4.1, 4.2	
Autoridad del Turismo de Panamá (ATP)	Medium	Medium	Component 4	Output 4.1 , 4.2	
Zona Libre de Colón (ZOLICOL)	High	Medium	Component 4	Output 4.1 , 4.2	
PRIVATE SECTOR/NGOS/Academia					
Tetra Pak S.A	High	Medium	Component 2.	Output 2.1, 2.2 , 2.3	Provide technical assistance and support, and share existing experience
Cervecería Baru/ Heineken Panamá	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Cervecería Nacional de Panamá AB-Inbev	Medium	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Sistema Coca-Cola	Medium	High	Component 2	Output 2.1, 2.2 , 2.3	
Nestlé	Medium	High	Component 2	Output 2.1, 2.2 , 2.3	
Cámara de Reciclaje de Panamá	High	High	Component 2	Output 2.1, 2.2 , 2.3	
Cámara Nacional de Turismo de Panamá (CAMTUR)	High	High	Component 2	Output 2.1, 2.2 , 2.3	
National Center for Cleaner Production (CNP + L)	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Recimetal Panamá	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	

Bliss Panamá	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
GesVil Reclycling S.A.	Low	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Aguaseo	High	High	Component 2	Output 2.1, 2.2 , 2.3	
Aseo Capital	Medium	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Panamá Waste Management	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Pronto Aseo S.A.	Low	Low	Component 2	Output 2.1, 2.2 , 2.3	
Planta de tratamiento de Aguas Residuales Juan Díaz	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
National Association for the Conservation of Nature (ANCON)	Medium	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Fundación MarViva	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Fundación Costa Recicla	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Marea Verde Foundation	High	Low	Component 2	Output 2.1, 2.2 , 2.3	
City of Knowledge Foundation	High	Low	Component 2	Output 2.1, 2.2 , 2.3	
Botellas de Amor	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Movimiento Nacional de recicladores	High	Medium	Component 2	Output 2.1, 2.2 , 2.3	
Trashforma	High	High	Component 2	Output 2.1, 2.2 , 2.3	
Waste Agency	High	High	Component 2	Output 2.1, 2.2 , 2.3	
FAS Panama	High	High	Component 2, and 4	Output 2.1, 2.2 , 2.3 Output 4.1, 4.2	Recycling project, and opening recycling centres. Awareness raising.
Universidad Santa Maria La Antigua USMA	High	Medium	Component 4	Output 4.1 , 4.2	Networking, capacity, and knowledge exchange Provide information and data

3. GENDER EQUALITY AND WOMEN'S EMPOWERMENT.

Provide the gender analysis or equivalent socio-economic assessment.
Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment? (yes ☒ /no☐) If yes, please upload gender action plan or equivalent here.

If possible, indicate in which results area(s) the project is expected to contribute to gender equality:
☐ *closing gender gaps in access to and control over natural resources;*
☒ *improving women's participation and decision making; and or*
☒ *generating socio-economic benefits or services for women.*
Does the project's results framework or logical framework include gender-sensitive indicators? (yes ☒ /no☐)

See Appendix 7 for the project Gender Analysis.

Overview

Regional

The combination of education, employment opportunities and a relatively progressive gender climate provide entry points for gender mainstreaming in the plastics sector in the LAC region. Women already play a significant role in waste management efforts, and the essential role of women in designing and implementing solutions is increasingly recognised. For example, women are playing a larger role as volunteers and women's associations are spearheading effective community engagement campaigns. Women typically manage household waste and adhere more frequently to proper disposal behaviour. Moreover, there is a growing awareness across the region about the benefits of resource efficiency and the importance of solid waste management and recycling, especially in relation to marine plastics. All 33 LAC Ministries of Environment have committed to combatting ocean plastic pollution and improving recycling efforts.[92]

What is less known is the role (and potential roles) of women across the plastics value chain. Information about the proportion of men and women working in the plastics industry is often lacking. Actual estimations on the number of employed people in the global plastic industry are not available or not accessible. As far as gender disaggregated data on the workforce in the plastic industry is available, the assumption is that about 30% of the workforce are women.[93]

Countries

Table 20. Summary of gender key figures across the three countries

[92] United States Agency for International Development (USAID). (2019). "Factsheet, Women's Economic Empowerment and Equality in Solid Waste Management and Recycling: Latin America and the Caribbean Landscape". https://banyanglobal.com/wp-content/uploads/2019/06/USAID-factsheet-_WE3-SWM-LAC_2019_09_27.pdf
[93] Lynn, H., Rech, S., Samwel-Mantingh, M. (2017). "Plastics, Gender and the Environment: Findings of a literature study on the lifecycle of plastics and its impacts on women and men, from production to litter". Women Engage for a Common Future (WECF). https://www.wecf.org/wp-content/uploads/2018/11/PlasticsgenderandtheenvironmentHighRes-min.pdf

Country	Tertiary School Enrolment[94]		Self-employment		Unemployment		Informal Sector		Global Gender Gap Index (2021)
	Female	Male	Female	Male	Female	Male	Female	Male	Rank (156 countries)
Colombia	60.8%	52.2%	49%	50.3%	12.8%	7.9%	59.7%	55.2%	59th
Panamá	58.6%	37.3%	36.7%	40.8%	5.8%	4.0%	46.8%	46.6%	31st (2020)
Jamaica	34.7%	19.9%	33.1%	44.7%	9.9%	5.8%	Not available		40th

Gender plan

A gender specialist will be engaged to support project design and preparation across the timeline of the project. The gender specialist will conduct survey to assess role of women in plastic value chain, and will be responsible of designing a gender plan, within the strategic priorities in line with the objectives and including those activities in table 21 and include responsible actors and, deliverables and timeline. The specialist will also collect gender-disaggregated data from the project cities and track the gender-related GEB, as well as support the design of communication campaigns from a gender perspective. Project budget (80,000 USD) will be allocated to support these activities.

Objectives

Various actions and activities will be put in place across the project to respond to identified gender risks, differences, gaps, or opportunities. The adoption of the gender mainstreaming will consider both women and men experiences, concerns, and needs. These proposed activities and target setting are intended to achieve the following strategic priorities: 1) increase women's involvement across the plastics value chain; 2) enhance gender equality in decision making and leadership; and 3) improve women's economic empowerment.

Indicator development

Below are the indicators used to qualitatively assess whether the participation and capacity of women and men has been increased. Given the indigenous populations in the region, indicators must be designed in a way to enable gender-sensitive monitoring and collection of accurate data in a culturally sensitive manner.

Consultation Participation:

- Number and percentage of women and men actively participating in consultations, workshops, events, training, and committee meetings; at least 40% of each gender represented
- Number and percentage of men and women, by social group, consulted in each of the four project components
- Number of women and men in decision-making positions in the related activities
- Number of steering board members disaggregated by gender and sector
- 100% of guidelines and workplans have gender inclusiveness integrated

Benefit Sharing:

- Number of women and men benefitting from organized workshops and trainings opportunities
- Number of women and men benefitting from new tools and resources
- Number of poor households that are project beneficiaries broken down by number headed by women/men
- Number of women-owned businesses that are involved in project activities
- Number of women of in a leadership position in community or sector
- Number of specific knowledge material developed on gender

Monitoring and evaluation:

Understanding whether the project is successful in mainstreaming gender will be important. Monitoring of gender related activities will occur throughout the project and will track and evaluate gender impacts and results by ensuring:

- the presence of tools/methods to ensure gender responsive design
- tracking of positive impact: sex-disaggregated indicators and targets

The Communication Strategy and the Capacity Building Activities will also be developed with considerations to ensure gender equity. The final evaluation will contain a discussion about how well the project has integrated a gender perspective, with concrete examples including learnings and recommendations related to the gender perspective of the project.

Table 21. Gender related activities in project components

Project Component	Output	Key Activities and actions
1. Policy intervention	1.1 City policy action plan	Ensure decision makers involved in the policy action plans represented both genders. Women represent at least 40% of the attendees during workshops and roundtables.
	1.2 Policy implementation	When designing and implementing specific policy intervention, the number of women citizens and stakeholders influenced by the policy will be monitored by relevant indicators

[94] Dates for tertiary school enrollment are not comparable across countries. Dates for data are as follows:
Colombia: 2018; Panamá: 2016; Jamaica: 2015.

	1.3 Financial instruments	Promote women entrepreneurship by targeting assistance and inclusiveness to vulnerable groups when facilitating responsible plastics management. Ensure a large number of women are in leadership roles.
2. Business innovation	2.1 Upstream innovations and solutions	In the process of developing and testing new circular solutions across the value chain, data on gender should be reported and ensure balance gender equality, while involving vulnerable women groups, and ensuring large number of women from households, governments, and value chain businesses are in leadership roles, and are in position of decision making on sustainable consumption, as well as being beneficiaries.
	2.2 Collection and recycling solutions	When implementing the collection and recycling pilot, measures need to be in place to engage with female entrepreneurs in the waste sector to include them in feasibility assessment, due diligence check, and also collection tenders. The improvement and upgrade of collection and recycling facilities should include the measure to improve the working conditions, health, and welfare of female workers.
	2.3 Industry roundtables	All roundtable meetings should be organised with a gender balance approach. At least 40% for each gender. At the end of meetings, workshops and events, a report should be included illustrating gender data.
3. Intercity network	3.1 Governance and strategy	When designing the strategy and governance of the intercity network, female leaders and officers in city governments will be invited for consultation Gender related indicators will be incorporated into the template of city action plans of circular economy of plastics
	3.2 City engagement	
4. Knowledge and capacity	4.1 Information, education and communication strategy	Communication material should illustrate and take gender into consideration. Specifically, addressing consumer behaviour according to gender purchasing patterns.
	4.2 Capacity building	All capacity building activities should report gender data and have a gender balance approach. Women represent at least 40% of the attendees
	4.3 Long-term monitoring	Long term monitoring plan should include gender data across the value chain. For example, if data is being collected of the number of ´waste pickers´ in certain city, then it is essential to understand the gender balance.

4. PRIVATE SECTOR ENGAGEMENT

Elaborate on the private sector's engagement in the project, if any.

Private sector organizations (large industries, SMEs, informal sector, retailers, tourism, etc.) will be key partners at the city level for this project. The project will be guided by the outcomes of brand-audits around the target cities to identify relevant sectors to engage with, existing work undertaken throughout the development of the national and regional marine litter action plans, the engagement of GPML members as well as signatories outlined in the progress reports of the New Plastics Economy Global Commitment (Global Commitment) in order to identify relevant private sector organizations to engage with on this project to reduce marine plastics and plastic pollution. By partnering with the Global commitment, the project will take advantage of its business network, which connects large global consumer goods producers and retailers that are operational in the LAC region and target cities of the project (e.g., Nestle, Coca-Cola). Global companies will be engaged where relevant in the industry roundtable and inter-city network to be established under the project, and in the activities on piloting and scaling up upstream solutions, and those that follow the CORRECT attributes suggested by the WHO[95]. A variety of organizations from the private sector expressed high interest in the project, and according to their capacities, resources, and focus along the value chain of plastics, are willing to influence and participate in it. The stakeholders to be engaged with will include upstream, mid-stream and downstream actors of the value chain, including chemical companies as the polymer producers of plastics/packaging, design and use companies (such as food and beverage producers, consumer goods companies), collectors, logistics companies, and recyclers.

The private sector will have a long-term main purpose to lead innovative interventions, sustain the circular economy approaches tested in the project and ensure the upscaling and replication of these approaches in other locations.

Private sector organizations will be involved in all components of the project, including:

- **Component 1** the private sector will be engaged in the dialogues on city level policy to: reduce and/or eliminate unnecessary and problematic plastics products; the reduction, reuse, recycling, and disposal of plastic waste, etc.
- **Component 2** will largely be directed at working with the private sector to implement the policies delivered in component 1. The private sector will lead interventions to strengthen markets for investments in innovative, scalable upstream actions, waste management and recycling solutions. Moreover, this group is aimed to work in partnership with other stakeholders along the value chain to identify, assess and implement innovative solutions for the problematic products and polymers contributing most to marine plastics and plastic pollution.
- **Component 3** the private sector will support municipality authorities to share the experiences and lessons across the network of cities to promote circular economy approach for plastics.
- **Component 4** the private sector will be actively involved in the capacity development for enhancing circular economy approaches and will be key to the long-term sustainable monitoring that will be continued post-project.

The private sector has a high interest in the project, however depending on their position in the value chain of plastics and their focus of activity, they could have a lesser or higher influence. Most relevant private sector stakeholders are consumer goods companies, plastic associations, recycling and recovery companies of plastics and other types of waste, chamber groups, and urban collection companies.

The project will also engage with the following groups of companies in the cities and in the region along the plastic value chain:

- Polymer, plastics, and packaging producing companies

[95] World Health Organization (WHO). (2010). "Nine steps for developing a scaling-up strategy" https://www.who.int/immunization/hpv/deliver/nine_steps_for_developing_a_scalingup_strategy_who_2010.pdf

- Plastics importing companies
- Durable goods and consumer goods producers (e.g., global brands: Coca-Cola, Nestle, Unilever, Procter & Gamble)
- Retailers, food service companies, packed good companies
- Logistic companies for reverse and take back schemes
- eCommerce
- Companies offering Reuse schemes (refill solutions, reusable products)
- Repurpose and upcycling companies
- Design and innovation companies for products and business models
- Collection, sorting, and recycling industry
- The informal sector working on collection and recycling of plastic waste
- Investors (investment banks, funders for start-ups, foundations)

5. RISKS

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation (table format acceptable).

Global risks

a) COVID-19

The COVID-19 pandemic has resulted in rapid changes in work routines, commercial activities, health care and other industries and social services. It had a direct impact in the volumes and types of waste generated in the countries, specifically during lockdowns. It has been estimated that waste generation has increased sharply, including plastic waste streams, such as Single Use Plastic Products (SUPP).

Data and statistics of the COVID-19 for the three countries are presented in Table 22.

Table 22. Statistics of the COVID-19 for the 3 project countries[96]

Country	Cases	Death	Vaccination
Colombia	5M	127K	21M
Panamá	473K	7.3K	2.37M
Jamaica	89K	2,2K	375.9M

Direct risks from the COVID-19 pandemic to the project include travel restrictions and the generation of additional waste streams, specifically to PPE (such as face masks). Some countries had indicated or experience lockdowns and/or travel restrictions. Although vaccines have been developed after approximately one year following the proclamation of the pandemic, the delivery and rollout of vaccination programs in LAC countries have been slow as compared to developed countries. Restrictions on traveling to and within LAC countries are therefore likely to continue and will impact project execution activities by a) physical meetings replaced by virtual meetings b) data collection on site remains challenging c) health and safety procedures and standards need to be enforced to protect workers and the most vulnerable, especially in the context of pilot projects involving recycling facilities and other similar initiatives.

The COVID-19 pandemic has shifted priorities in the countries and has made it more difficult to those businesses seeking support. Moreover, the private sector is more restrained in investing in novel technologies to replace plastic or supporting alternatives. Additionally, delivery of project resources such as equipment and materials may also be constrained by delays due to travel restrictions. Also, countries are importing COVID-specific medical equipment, leading to increased pressure on medical waste management. These medical wastes include single use plastic products and other impact-heavy waste streams that the GEF project seeks to reduce. Indirect risks caused by the COVID-19 pandemic include decreased local support due to shifted priorities and resources and impacts to the countries' economies, as well as a temporary suspension of SUPP ban and promotion of reusables. Businesses oriented to recycling have been forced to closed down, as the local restrictions were not permitting the business operations. Tourism-dependent countries are facing significant decreases in GDP, growing unemployment rates and sharp increases in state debt.

World Bank Group Country disasters - Risk Profiles. Available at: https://www.gfdrr.org/sites/default/files/Jamaica.pdf

b) Climate change

The Caribbean is the most vulnerable region to climate change, as it is an issue of survival to its people and of long-term existence to its countries. The Intergovernmental Panel on Climate Change has already concluded that sea levels will continue to rise during the next several centuries. On top of this, it is important to point out that an increase in the surface temperature of seas will result in deadlier tropical cyclone activity in the Caribbean[97].

Table 23. Risk assessment of natural hazards in the cities and their respective impacts of disasters[91]

City / Risks	Wildfire	Floods	Tsunami	Hurricane	Extreme Heat	Earthquake	Landslide	Water scarcity
Cartagena	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	LOW	LOW	LOW
Barranquilla	HIGH	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	VERY LOW	LOW

[96] This is the data repository for the 2019 Novel Coronavirus Visual Dashboard operated by the Johns Hopkins University Center for Systems Science and Engineering (JHU CSSE). Also, Supported by ESRI Living Atlas Team and the Johns Hopkins University Applied Physics Lab (JHU APL)

[97] Sempris, E. (2020). "Climate Change and Freshwater in Latin America and the Caribbean". United Nations (UN). Accessed on 25 September 2021. https://www.un.org/en/chronicle/article/climate-change-and-freshwater-latin-america-and-caribbean

Panamá City	HIGH	HIGH	HIGH	LOW	MEDIUM	HIGH	MEDIUM	VERY LOW
Colón	HIGH	HIGH-MEDIUM	MEDIUM	LOW	MEDIUM	HIGH	LOW	VERY LOW
Kingston	HIGH	MEDIUM	LOW	MEDIUM[98]	MEDIUM	MEDIUM	HIGH	MEDIUM[99]
Montego Bay	HIGH	HIGH	LOW	MEDIUM[98]	MEDIUM	MEDIUM	HIGH	MEDIUM[99]

Table: *Risk classification.*[100]

Tools such as think hazard[101] have identified risks aggravated by climate change such as an increase in flooding. The following hazards are of importance due to the associated influence with leakage of plastic waste.

Flooding can exacerbate plastic pollution due to transportation of plastic waste to the oceans and collapsing waste management by increasing waste leakage. Floods considered high risk is due to inundations depth above 0.5-2m with high probability of occurrence. Structural solutions in place to reduce plastic leakage to the environment are not as effective in the case of inundations and flash floods. Waste management practices should consider potential issues.[91]

All three (3) project countries face COVID-19 and climate change related risks as highlighted in the Risk Assessment Table. Regionally specific mitigation measures are needed to adequately address specific regional vulnerabilities, these can be found in **Tables 24 - 26** indicating main risks, ranking and mitigation strategies.

This is the data repository for the 2019 Novel Coronavirus Visual Dashboard operated by the Johns Hopkins University Center for Systems Science and Engineering (JHU CSSE). Also, Supported by ESRI Living Atlas Team and the Johns Hopkins University Applied Physics Lab (JHU APL)

Regional/country risks

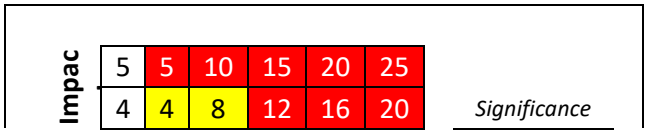
UNEP's Safeguards approach provides a holistic framework for the identification, assessment, and management of a project's potential environmental, social, and economic risks at each stage of the project cycle. Application of the Framework will help UNEP Project Managers avoid—or minimize where avoidance is not possible—potential associated negative environmental, social, and economic impacts that might otherwise arise as unintended consequences of their projects. It is expected that many UNEP projects will not significantly change due to application of the safeguard requirements t is expected that in this project the risk impacts will be minimized by implementation of mitigation measures and strategies.

The main risks lie in SS4: Community Health, Safety and Security, and SS8: Labor and Working Conditions and SS2: Climate Change and Disaster Risks as shown in the Appendix 5A – SRIF, both classified as moderate, with Impact of level 2 and Probability of level 3 (1-5). In addition, there is a risk associated with a scenario where policies are developed but not fully implemented or enforced; failure of private sector to participate in the project, with low engagement from the large corporations and small medium-sized enterprises; finally, a risk associated with the inter-city network that cannot be sustained after the end of the project.

Table 24. Description of Impacts and Risk Levels

Level / Criteria	Very Low (1)	Low (2)	Medium (3)	High (4)	Very High (5)
Probability	Very unlikely	Unlikely	Chances about even	Likely	Ver Likely
Impact	Routine procedures sufficient to deal with consequences	Could threaten results and thus, may require monitoring	May threaten results and thus, may require monitoring	Would threaten results, and thus may require review	Would prevent achievement of results, and would require close management

Table 25. Definition of Risk Levels or Significance



[98] World Bank Group Country disasters - Risk Profiles.https://www.gfdrr.org/sites/default/files/Jamaica.pdf

[99] Mullings, B. (2020) "An Opportunity To Pause And Reimagine: Jamaica's Public Water After Covid-19". Available at: https://www.tni.org/files/public-water-covid-19_chapter_13.pdf

[100] High risk - There is a potential for widespread impacts from climate change. Outcomes may be undermined by climate change, and adaptation measures may not be readily available. Financial, environmental and social underperformance or failure cannot be excluded. However, risk management activities are likely to increase resilience and adaptive capacity of households, infrastructure, communities, and ecosystems.
Moderate risk - Impact from climate change may occur, but will be limited, transient or manageable. Financial, environmental and social underperformance or failure is unlikely. The system has the capacity to manage volatility, shocks, stressors or changing climate trends.
Low Risk - No impact from climate change, or even positive impact, is expected based on best available science. Financial, environmental and social underperformance or failure appears very unlikely. (GEF, STAP guidance on climate risk screening)

[101] Think Hazard. (2021). "Identify natural hazards in your project area and understand how to reduce their impact". Global Facility for Disaster Reduction and Recovery. Accessed on 5 October 2021. https://thinkhazard.org/en/

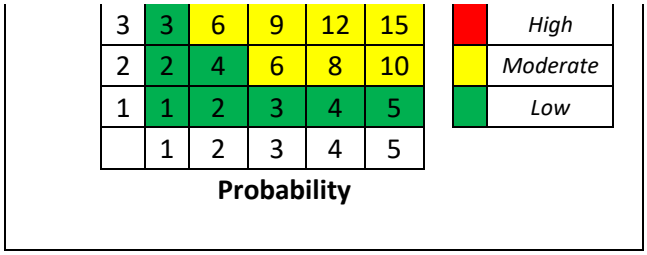


Table 26 summarises the main risks, ranking and mitigation strategies. The risk mitigation plan can be found in Appendix 8.

Table 26. Main risks, ranking and mitigation strategies

Risk	Project outputs	Environment, Social, Economic	Risk - Impact	Risk - Likelihood	Score (Risk level: Low, Moderate, High)	Proposed Mitigation Measures
Covid 19 risks						
Impacts to human health due to COVID 19	All outputs	Social (health)	4	3	12 (H)	Since the proclamation of the COVID-19 pandemic, approximately 2% of persons who have contracted the virus globally have died. Although vaccinations have become available, mutated, and new strains of the virus have emerged, some of which have been noted to be more transmissible and more aggressive as compared to the strains identified at the beginning of the pandemic. For this reason, guidelines and recommendations of government authorities and healthcare professionals must be followed. meetings will be held virtually as far as possible, and travel will be limited to minimize physical interactions. However, where face-to-face meetings are held, international health protocols, including, but not limited to, sanitization and appropriate physical distancing will be observed.
Decreasing local support and delays in actions due to restrictions	Output 1.1, 1.2, 1.3, 3.1, 3.2	Economic	3	2	6 (M)	Ensuring plastic pollution remains a priority to countries, and health and safety protocols are ensured and where possible actions should be taken in virtual manner
Temporary suspension of policies on reducing SUPPs, reversal of initiatives that supported reusables	Output 1.1	Social	4	3	12 (H)	Spurring policy acceleration to reduce disposable plastics, promote reusables, and increase recycling
Increased of plastic waste due to increased use of single use plastic products	Output 2.2	Environment	3	3	9 (M)	Awareness raising activities and campaigns under the project will create awareness on the importance of safe disposal of single use plastic products. Encouraging responsible consumption behaviour by addressing myth and misinformation on reusable plastics during COVID-19 'infodemic'. Demystifying the myths by educating and raising awareness through evidence-based harmonised consumer information and encourage embracing reuse and recycling
Restricted travel	All outputs	Social & Economic	3	3	9 (M)	Though most LAC countries have re-opened since the first wave of the COVID-19 pandemic, intermittent lockdowns continue. Considerations will be made for hosting meetings, workshops, and consultations on virtual platforms as much as possible.
Closing of recycling businesses	Output 2.2	Economic	3	3	9 (M)	Ensuring health and safety protocols to provide operating ground for recycling to occur, specifically to collection of plastic waste which may be challenging due to restrictions.

Decreased ability of private companies to participate or contribute co-financing due to COVID-19 lockdown	Output 2.1, 2.2, 2.3	Economic	3	2	6 (M)	Improvement of the COVID-19 situation and adjustment of restriction measures has been witnessed around the world, leading to the decrease in the likelihood of this risk to happen
Operational/delivery risks						
Policies only developed but not implemented or without practical solutions, which can be a risk as low policy implementation and enforcement will weaken the incentive structure for all other stakeholders to take actions	Output 1.1, 4.3	Social	4	3	12 (H)	To ensure policy recommendation(s) uptake, engagement with national and city governmental institutions will be further made from the beginning of the project. Close follow-up and ongoing monitoring of activity will be supported by the local governments
City authorities fail to mobilise private sector partners during policy development and implementation	Output 1.1, 1.2, 1.3	Economy	3	2	6 (M)	Project will engage in a range of awareness and partner-building workshops to fully explain and engage circular economy and benefits to city and specific private sector partners. Specific target setting and measures towards priority plastic products and sectors will facilitate the collaboration with specific companies.
Failure of private sector to participate in the project, with low engagement from the large corporations Lack of industry or key corporations' engagement	Output 1.3, 2.1, 2.2, 2.3	Economy	3	1	3 (L)	Engage corporations in early, principled dialogues that highlight their opportunity to be proactive in constructing solutions prior to inevitable mandates by government. Should this approach cease to work we will look for the appropriate means to apply pressure to resistant companies.
Interventions through the private sector (component 2) fail to be sustained or replicated within and between cities.	Output 2.1, 2.2, 2.3, 4.3	Economy	3	3	9 (M)	The project will continuously work closely with both the municipality authorities and a range of private sector operators to assist in identifying appropriate innovative approaches and to facilitate the identification of appropriate financing mechanisms to encourage replication. This will be supported by a proactive strategy to highlight achievements within and between the cities involved.
Failure of informal waste sector to participate	Output 2.2,	Economy	3	3	9 (M)	The project will proactively engage with the informal sector to highlight the benefits to their operations from circular economy approaches and identify their potential roles in this project, while ensuring their livelihoods and health are improved
Cultural resistance from the citizens to accept new measures or adopt innovative solutions.	Output 2.1, 4.1	Social	3	3	9 (M)	The Project will communicate information to the public on new innovative measures in a way that is sensitive to local cultures and demonstrates direct benefits for the implementation of these new measures. It will be carries in various dissemination and communication forum through different media (such as TV, radio, newspaper, social media, and consumer campaigns)
Civil society (including NGOs, CSOs, education establishments) unwilling to participate	Output 4.1	Social	3	1	3 (L)	Lack of adequate accessible information and access to the decision process will inhibit public participation. The project will encourage broad civil society involvement at all stages of the project's interventions and ensure that information released is in a form that encourages involvement.
Technical risks						
Inadequate data available to support activities	Output 4.3	n/a	3	3	9 (M)	Historically, data collection within the region has not been consistent or reliable. Consultants have been hired to collect data and UNEP has develop mechanisms to ensure that sustainable data collection mechanisms are implemented.
Risks related with HR, administrative or organizational arrangement	All outputs	n/a	4	1	4 (M)	Adequate budget has been planned for the project management team in the PPG phase to ensure enough resources for HR, administrative or organizational arrangement. Cartagena Convention Secretariat as the project executing entity has rich

						experience in managing and participating in projects on plastics in the region. UNEP as the implementing agency will also supervise the overall management of the project to ensure its successful delivery.
Climate change risks						
Flooding can exacerbate plastic pollution due to transportation of plastic waste to the oceans and collapsing waste management by increasing waste leakage. Floods considered high risk is due to inundations depth above 0.5-2m with high probability of occurrence.	Output 2.2, 4.3	Environment	4	3	12 (H)	Through project implementation, the circular economy approach for plastics will be applied by stakeholders along the value chain, which will lead to the reduction of GHG emission caused by unstainable production and consumption of plastics and the increase of efficiency of resources used by the plastic sector. It is expected that the sustainable production of plastics and sound plastic waste management practices implemented through the project (by activity 2.1.2, 2.1.3, 2.2.2) will lead to increased resilience against climate change impacts. The output 2.2 on solutions to plastic waste collection and recycling at cities will also take into account the risks of floods when designing the waste management practices.

6. INSTITUTIONAL ARRANGEMENT AND COORDINATION

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

Institutional arrangements

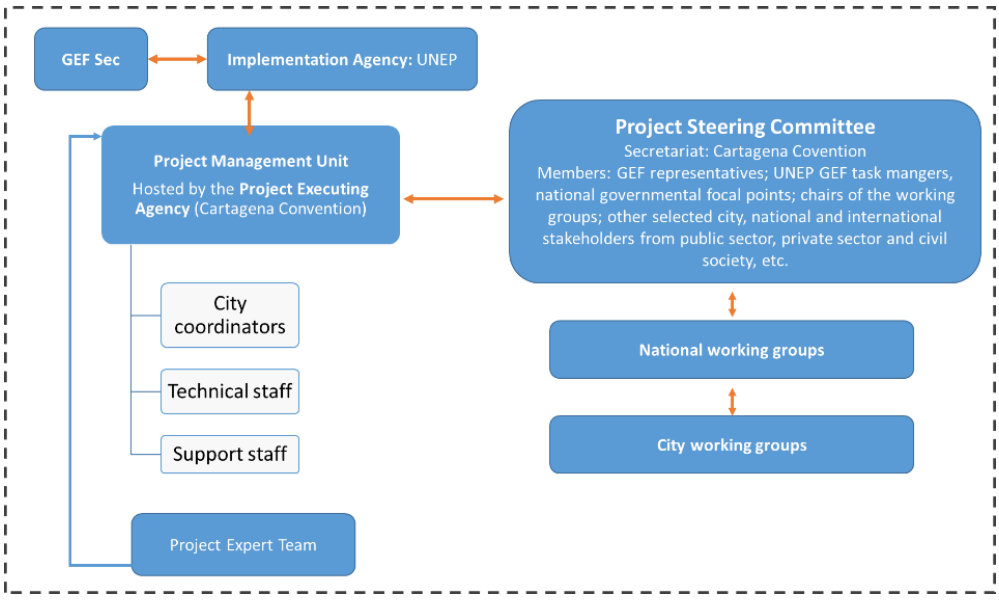


Figure 5. Project Execution Arrangement

The Cartagena Convention Secretariat will be the Executing Agency for the project and will host the Project Management Unit (PMU) which will coordinate, manage and be responsible for the project on a day-to-day basis. It is responsible for the overall management of the financial and human resources directly related to project execution in the countries. It will function as the general coordinator of the execution of the project and will be accountable to the implementing agency and the Project Steering Committee (PSC) for the achievement of project outputs and outcomes. The EA will take guidance from the GEF implementing agency and the PSC in all matters concerning the project. In the delivery of its functions, it will be a member of the PSC and the National Working Groups.

The Cartagena Convention is well positioned for this role. It was adopted by countries in the Wider Caribbean in 1983 and is the only legally binding agreement of its kind in the region for the protection of the Caribbean Sea. Through the Convention, governments receive support to control, reduce and prevent marine pollution from all sources. Marine Litter is one of the priority pollutants being targeted for improved management by the Cartagena Convention Secretariat. The Protocol Concerning Pollution from Land-Based Sources and Activities (LBS) of the Cartagena Convention which was signed in 1999 and adopted in 2010, along with the Regional Action Plan for Marine Litter (RAPMaLi) and Regional Marine Litter Strategy for the Wider Caribbean Region (see below) form the basis for the support provided to countries in the Wider Caribbean and the development and

implementation of several marine litter programmes, projects and activities in support of the implementation of the Regional Action Plan on Marine Litter and the LBS Protocol. It was determined that MESTI/EPA would meet the requirements as the Project Executing Agency.

The Implementing Agency (IA) of this project are the GEF units in the Ecosystems and Economy Divisions of the United Nations Environment Program (UNEP). The IA will be responsible for the overall project supervision, overseeing the project progress through the monitoring and evaluation of activities and progress reports of the established components. It will be responsible for quality assurance procedures, organize contracting with Executing Agency (EA), approve progress reports and clear disbursement. The GEF Agency will be responsible for contracting independent evaluators for undertaking the mid and terminal evaluations. The IA will also monitor progress to ensure the proper quality of outputs. UNEP will report project implementing progress to GEF. The IA will also take part in the Project Steering Committee (PSC) and can request PSC to meet outside of the planned schedule as deemed necessary.

UNEP's comparative advantage is its mandate to coordinate the work of the UN in the area of environment, and its experience as a successful and efficient IA specializing in regional and global activities. UNEP's expertise includes proof of concept, testing of ideas, and the best available science and knowledge to form the basis of GEF investments. UNEP also serves as the Secretariat to three of the MEAs (Stockholm, Minamata and SAICM), for which GEF is the/a financial mechanism. UNEP will take the lead in finalising the project level data flow and reporting to the GEF Secretariat as indicated in the organo-gram in Figure 5 above.

The Project Steering Committee (PSC) meeting is held annually to ensure the delivery and quality of activities and outputs and to approve budget and ensure country ownership and governance. The PSC will include relevant countries (city and national representatives), GEF Agency, partners (including private and informal sectors), civil society, etc. The PSC members will review the project execution against the scope of project activities and review annual workplans and budget in accordance with the approved project document. The members will also select and nominate relevant project stakeholders; and provide advice, policy and institutional guidance to the implementing and executing agencies. The decision-making members of the PSC will be representatives of the governments and the Implementing Agency. Further key stakeholders will participate in the PSC to provide guidance but without decision rights. The PMU will act as the secretary to the PSC and provide regular project updates to the PSC. The PSC members will support the establishment of national working groups in their respective countries, as needed for each activity assign responsibilities amongst national government departments; select and nominate relevant project stakeholders; evaluate and assess the progress of the project; and provide advice, policy and institutional guidance to the implementing and executing agencies. In this regard, relevant governmental institutions will be requested to allocate the necessary human and technical resources to support project implementation through the PSC, where it does not already exist. PSC meetings will be organised on an annual basis to discuss the progress of activities and amendments to the schedule, as needed. In recognition of the 'new normal' the project will organize only the inception meeting, mid-term and final PSC meetings face to face (COVID situation permitting) while the intermediate PSC will be held virtually or as hybrid meetings. The PSC will make decisions alongside the UNEP and GEF as part of the monitoring and evaluation activities.

National Working Groups (NWGs) will also be established to support information gathering from respective entities, review project outputs and ensure that national priorities are being met and seek synergies among the activities at city level. The NWGs will also provide advice, policy and institutional guidance to support the successful execution of project activities and the sustainability of the project. The NWG will consist of national stakeholders relevant for each activity and will be chaired by the national focal point. Members will also include representatives from CSOs/NGOs, the private sector and gender affairs groups to ensure that gender mainstreaming is considered throughout the project. Composition of the NWG will be determined at inception for each country but will include gender affairs department.

To support project execution and ensure that the outputs of the project are aligned with national and city priorities and that project activities are coordinated among stakeholders at city level within the scope of the project, each project city will also establish City Working Groups (CWGs). CWG members will not be contracted by the project and new members will be appointed by invitation of the existing members if needed. CWG members in each city will be designated at the discretion of the city government and in accordance with the Terms of Reference which will be developed at the project's inception. A Chair shall also be appointed for each CWG by its Government as per these Terms of Reference. The Chair will be responsible for arranging and chairing meetings of the CWG. Appendix 4 provides more information on the composition of the CWGs.

The PMU will be supported by the project expert team which will be comprised of the experts and consultants to be hired by the project. These will include consultants to collect international best practices and support the pilots of policy instruments and innovative business solutions in the 6 project cities; consultant to support the establishment and expansion of the inter-city network; gender and social expert; long term monitoring specialist; procurement expert, etc. The tasks and roles of these experts and consultants can be found in Appendix 13.

Coordination with relevant GEF projects

The project will build upon multiple regional projects and support global initiatives. The project will coordinate with relevant stakeholders including planned and ongoing projects and activities (GEF IW and CW and non-GEF) in the region and where relevant world-wide (see Table 1 in Appendix 4).

The existing GEF projects on circular economy of plastics apply very similar framework to address the plastic issue through a holistic approach covering policy actions, business innovation, knowledge and financing. Therefore, by working with ADB and UNIDO (close collaboration can be developed to identify common practices to establish action plans for circular economy at national and city levels, leverage private sector and financing to advance innovation on phasing out, replacing and reducing problematic plastic products while improving waste management, and exchange experience on shaping monitoring and evaluation framework. Through the development of appropriate mechanisms (described below in the Knowledge Management Section and in Component 4 activities) the results of this project will be shared widely with other peer GEF projects through regional and international knowledge platforms, UN Country Teams, political fora, events and capacity building opportunities.

As indicated in Section 6 on institutional arrangement and coordination and Appendix 11 on communication and knowledge management strategy, the project and will coordinate with relevant GEF plastics projects through the following to ensure knowledge sharing:

- A joint plastics workshop at the IW Conferences (IWC 10, 11, and 12) will be organized/ and or attended by relevant projects including ADB Southeast Asia Plastics (GEF ID 10628) and ADB Indonesia Plastics (GEF ID 10546);

- Project Steering Committees will be attended by the other projects' managers as observers to ensure cooperation and coordination;
- The development of a joint knowledge product on global/ cross regional approaches will be explored during project implementation; and
- The IW:LEARN platform will act as a joint platform for all relevant projects

7. CONSISTENCY WITH NATIONAL PRIORITIES

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:
- National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC
- National Action Program (NAP) under UNCCD
- ASGM NAP (Artisanal and Small-scale Mining) under Mercury
- Minamata Initial Assessment (MIA) under Minamata Convention
- National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD
- National Communications (NC) under UNFCCC
- Technology Needs Assessment (TNA) under UNFCCC
- National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD
- National Implementation Plan (NIP) under POPs
- Poverty Reduction Strategy Paper (PRSP)
- National Portfolio Formulation Exercise (NPFE) under GEFSEC
- Biennial Update Report (BUR) under UNFCCC
- Others

Activities of the project are consistent with the commitments and priorities of the target countries and cities, and with their current national strategies, action plans or reports under relevant conventions and programmes, including:

a) Basel, Rotterdam, and Stockholm Convention
b) International Convention for the Prevention of Pollution from Ships (MARPOL)
c) The Regional Seas Programme
d) Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention)
e) Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities
f) Global Partnership on Marine Litter (GPML)

The project is aligned with the national policies and regulations to prevent, manage, and reduce the proliferation of marine plastics and plastic pollution, which includes:

- Colombia: The Resolution 0668 established targets for gradual reduction of plastic bags, including banning single-use plastic bags smaller than 30X30 cm in 2016 and introducing a tax on this item in 2017. Since 2019, Colombia has been developing the National Strategy on Circular Economy developed in consultation with actors from the public and private sector, academic, and NGOs. Between 2019 and 2020, the National Plan for the Sustainable Management of single-use plastic items was formulated where lines of action and priority cross-cutting actions were defined. Within the framework of the Plan, Resolution 1558 was issued in 2019, which prohibits the entry of single-use plastic articles in the areas of National Natural Parks in Colombia with ecotourism activities, which seeks to positively impact 17,466,974 ha, corresponding to 8.4 % of the national territory. Decree 2198 of 2017 established innovation in the development of technologies to produce biodegradable, reusable, and recyclable bags, exempting them from the National Tax on the Consumption of Plastic Bags. In December 2020, the House of Representatives approved in the first debate the ban on single-use plastic products from 2025[102].

- Jamaica: Passed the Trade (Plastic Packaging Materials Prohibition) Order, 2018, which prohibits the import of expanded polystyrene products, distribution or import of plastic bags 24 x 24 inches or less in size, and plastic drinking straws, effective since January 1, 2019. The second phase came into effect in 2020 and included Styrofoam along with the other materials in the first phase. In January 2021, the Government of Jamaica began the implementation of the third phase, which incorporated single-use plastic bags with dimensions greater than 24 x 24 inches and thickness of 2.5 mils (Hall-Hanson, 2021)[102].

[102] United Nations Environment Program (UNEP). (2021). "Information report on policies, regulations, and strategies in Latin America and the Caribbean to prevent marine litter and plastic waste. Accessed 14 October 2021".
https://wedocs.unep.org/bitstream/handle/20.500.11822/34931/Marine_EN.pdf?sequence=1&isAllowed=y

- Panamá: The country approved a law on the ban of plastic bags in 2018, which prohibits the use of polyethylene bags in shops in general to transport products or merchandise. In December 2020, Law No. 187 was passed, which establishes the legal framework on single-use plastic items in the national territory that will enter into force in 2021 as part of the public environmental policy of the State[102].

In addition, targeted countries revealed the need to address a set of issues/priorities common across in the consultations during the PPG phase. These include:

- Better management of land-based sources of marine litter, including the potential to phase out of single use plastic products.
- Efforts should be enhanced and focus on a comprehensive waste management, fundamentally seen from the prevention and the generation to the final disposal of problematic or unnecessary plastic products.
- Strengthen the productive chain of recycling
- Almost all countries from the LAC region are facing the challenge brought by informal waste pickers. It is necessary that they are not marginalized but formalized.
- Development of articulated projects with equally articulated actors. With sustainable projects, the installed capacity of the industry can assist and further foster the business development in the region.
- It is quite relevant to work on environmental education, mainly regarding marine plastics and plastic pollution.
- Collaborate to avoid duplication of efforts, share knowledge, key information, and good practices among relevant actors, and try to build the network to achieve the same objective.

These cross-cutting priorities will be addressed by the project across all Barranquilla, Cartagena (Colombia), Montego Bay, Kingston (Jamaica), Panamá City, Colón (Panamá) with the aim of developing a uniform approach across the targeted countries and further scaling up these efforts in the LAC region.

The project will also contribute to the delivery of SDGs in the target countries, including SDG 6 on Clean water and sanitation, SDG 11 on Sustainable Cities and Communities, SDG 12 on Sustainable Consumption and Production, SDG 14 to Conserve and sustainably use the oceans, seas and marine resources for sustainable development, and SDG 17 on Partnerships for the goals.

8. KNOWLEDGE MANAGEMENT

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables, and a timeline, and explain how it will contribute to the project's overall impact.

The project will rely heavily on the management, dissemination, and scaling-up of knowledge, experiences, and results to achieve the overall project objective to reduce marine plastics and ensure long-term sustainability of the circular economy approaches in the LAC region that will also facilitate global up-scaling of the approaches.

The project can be implemented focusing on four main areas, which are complementary and parallel:

1. At the early stage of the project implementation phase, the project communication strategy will be developed, and key target audience will be further identified based on the stakeholder analysis. Communication materials (such as press release, videos, web stories) and relevant dissemination plan (media, conference, high-level events) will be developed to promote the visibility of the project and its key progress.

2. Raising awareness and cross-cutting communication activities among all related stakeholders will be conducted. These activities will raise the awareness of stakeholder on the project objective, approach, activities as well as the benefits associated with the implementation of the project at the local and national level.

3. Behaviour Change Campaigns will be developed to encourage behaviour and attitudinal change towards the circular economy of plastics, among others, through organizing large scale multi-channel campaigns aimed at motivating citizens to separate plastics waste from sources and dispose towards the responsible channels.

4. Lessons learnt, and best practices will be documented and communicated to key audiences to encourage replication of successful approaches. Key knowledge products will be developed based on the learnings from project components 1, 2 and 3. Towards policy makers, learning experience and case studies will be compiled from Component 1, related to the best practice on developing circular policy, and enabling conditions (such as financing, knowledge, and enforcement). Towards the private sector, learning experience and case studies will be compiled from Component 2, related to the best practice on developing circular innovation and solutions along the value chain, including circular product design, business models, reuse, collection and recycling. Knowledge products will be shared through:

- The IW:Learn platform, as a one-stop shop to document and store project information, activities, progress, publication and events. Information will be regularly updated at a monthly basis to maintain engagement with key stakeholders and partners.
- The Green Growth Knowledge Platform (GGKP)'s website, which the world's largest policy platform dedicated to managing and sharing knowledge at the nexus of economics and the environment. Partnering with the GGKP will provide the project with a distinct identity while also benefitting from the GGKP's existing knowledge management system including case studies, good practices, learning materials and publications. The GGKP platform has also been used by many other projects and programmes in the UNEP GEF C&W portfolio and thus the projects knowledge material can in turn be used in these other projects and programmes and vice versa.
- The SAICM knowledge platform. It was developed by the project Chemicals Without Concern, that is funded by GEF, to enhance the dissemination of relevant knowledge to stakeholders working on chemicals of concern. The knowledge products related to chemicals of concern will be shared on this platform.

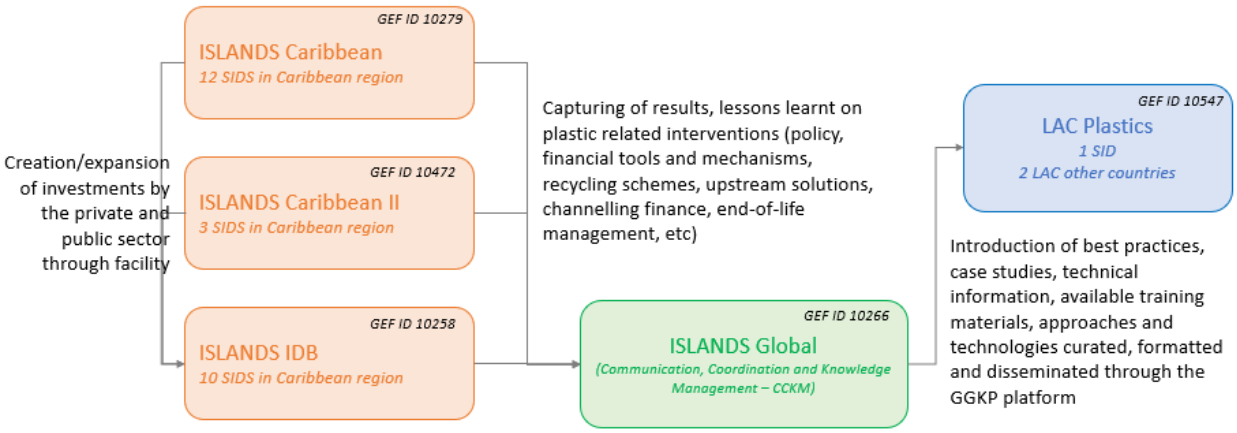
- The GPML Digital Platform, a multi-stakeholder, mostly open-source platform that compiles and crowdsources different resources, integrates data and connects stakeholders to guide action towards the long-term elimination of marine plastics and plastic pollution. When appropriate, elements of this project will also be linked to this platform.
- The inter-city network established under component 3 will act as platform for city leaders and actors to share the project's knowledge regarding policy and regulations, financial resources, technologies for solutions along the value chain, and exchange lessons learnt and best practices across cities in the LAC region.
- The Latin America and the Caribbean Circular Economy Coalition will share the project knowledge outputs through its working group for the circular economy of plastics. Besides the Latin America and the Caribbean Circular Economy Coalition, ROLAC also hosts the Secretariat of the Working Group on Marine Litter and Microplastics of Latin America and the Caribbean, which can be used as an additional channel to disseminate knowledge and results to other LAC countries.
- Relevant GEF Plastics Projects
- A number of subsidiary working groups, networks and coalitions within the framework of the LAC Forum of Ministers of Environment, hosted by UNEP Regional Office for Latin America and the Caribbean (ROLAC), that intend to facilitate information and knowledge sharing will also serve as knowledge sharing vehicle for this project. Some that are relevant for this topic include: the Regional Coalition on Circular Economy; Intergovernmental Network on Chemicals and Waste; Working Group on Marine Litter and Microplastics for LAC; Regional Council on Sustainable Consumption and Production; Environmental Education Network; Coalition for the closure of dumpsites in LAC. Membership of these groups and networks is comprised by governments and other relevant stakeholders. Communication related with this project will be channeled through distribution lists, newsletters, task forces, and focal point meetings, depending on each platform. The dissemination and sharing of knowledge will also be facilitated at regular meetings of focal points and at higher level at the intersessional meetings of the LAC Forum of Ministers of Environment as appropriate.

The GEF action on plastic pollution is gaining momentum through a number of new projects, including this one, as listed in the baseline section. Knowledge sharing across these projects is of fundamental importance to not only scaling up the action but also ensuring that GEF projects continue to deliver more than the sum of their parts. The illustrations below (Figure 6) is intended to capture the general landscape within which GEF plastic projects operate and further indicate the expected knowledge flow and cross-agency collaboration. Despite the unique design of the different GEF projects, the knowledge generated will be mainstreamed through identified channels while nurturing and fostering a culture of knowledge sharing in an integrated way.

With multiple interventions planned in Asia, Ghana, LAC region, and potentially elsewhere with additional GEF financing, there is an opportunity to gain valuable, hands-on experience and formulate cross-case comparisons through a joint knowledge product on regional approaches. The different pilot projects embedded in the design of the different interventions can provide valuable information regarding implementation issues useful to other agencies planning future work.

Additionally, building on other GEF substantial regional work under the ISLANDS programme and its child projects is planned. The project can learn from the best practices from ISLANDS on establishment of plastic recycling system and sharing of infrastructure, the measure to reduce and dispose of POPs containing plastic products (such as vehicles), and reduce plastic waste from its source through sustainable consumption in key sectors (tourism, food and beverages, recreation, fishery etc.). Relevant countries and cities involve in the ISLANDS programme will be invited to join the LAC inter-city network to share experience as well (such as Caribbean countries in the ISLANDS programme: Antigua and Barbuda, Barbados, Belize, Dominican Republic, Guyana, Saint Kitt and Nevis, Saint Lucia, Suriname, and Trinidad and Tobago). The dissemination of results will be guided by a communication strategy (Appendix 11) and updated within the first few months of project execution. The illustration below highlights the linkages that will be established with ISLANDS programme.

Knowledge flow between the ISLANDS projects and the LAC Plastics project



Information and data flow diagram

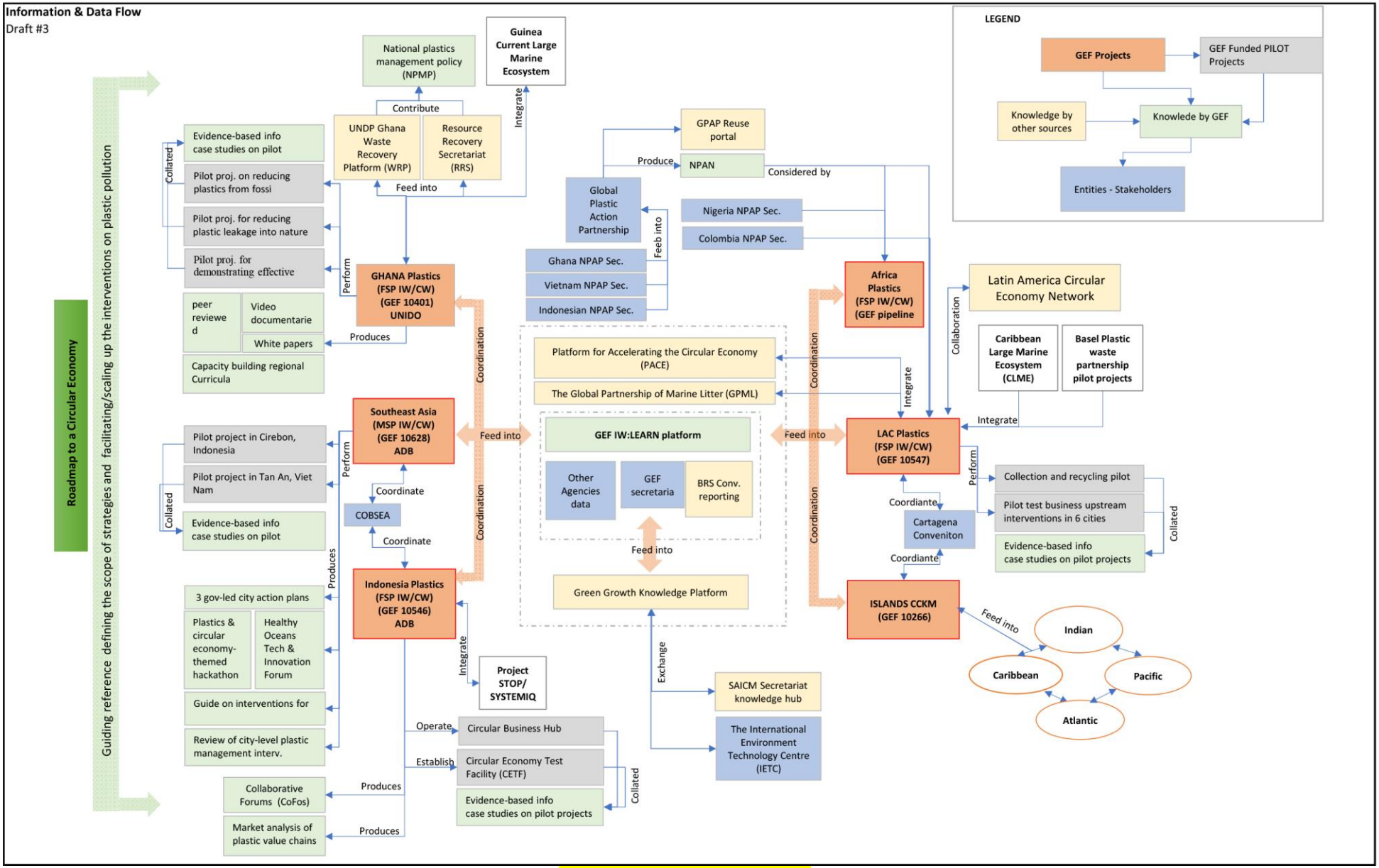


Figure 6: Information and data flow

9. MONITORING AND EVALUATION

Describe the budgeted M & E plan.

Periodic monitoring by the Cartagena Convention, as Executing Agency, will be undertaken to ensure the timely implementation of the project activities. All monitoring activities will be in line with the requirements for Full-Sized Projects outlined in the GEF's revised Policy on Monitoring[103] (2019).

The Cartagena Convention will be responsible for monitoring day-to-day project activities under the guidance of UNEP as the implementing agency and will develop and submit annual and quarterly progress and financial reports. These reports will track the progress according to the workplan and budget and identify any obstacles faced during implementation and mitigating actions to be taken.

The Cartagena Convention will develop the annual Project Implementation Report following a format provided by UNEP as lead implementing agency. The annual report will include progress towards project outcomes and major milestones achieved through overall project implementation as means to advance the overall project goal.

In line with the GEF Evaluation requirements and UNEP's Evaluation Policy, GEF Full-Sized Projects and any project with a duration of 4 years or more will be subject to an independent Mid-Term Evaluation or management-led Mid-Term Review at mid-point. All GEF funded projects are subject to a performance assessment when they reach operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Review.

In case a Review is required, the UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review's performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report.

However, if an independent Terminal Evaluation (TE) of the project is required, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness, and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learnt among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget. The TE will typically be initiated after the project's operational completion If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalisation of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

Table 27. Costed M&E Workplan

Type of M&E activity	Responsible Parties	Budget from GEF	**Time Frame**
Inception Meeting	EA	35,000	Within two months of project start. Likely to be conducted virtually or in a hybrid manner due to COVID-19
Inception Report	EA	Included in PMC	1 month after project inception meeting
Measurement of project progress and performance indicators	EA with inputs from implementation partners	The cost for EA included in PMC	Annually
Baseline measurement of project outcome indicators, GEF Core indicators	EA based on PPG documents	The cost for EA included in PMC	Project inception. In the PPG phase baselines have been prepared. See Annex A.
Mid-point measurement of project outcome indicators, GEF Core indicators	Led by IA but supported by EA and project management unit	The cost for EA included in PMC	Mid-Point
End-point measurement of project outcome indicators, GEF Core indicators	EA with inputs from implementation partners	The cost for EA included in PMC	End Point
Quarterly Progress/ Operational Reports to UNEP	EA	Included in PMC	Quarterly
Project Steering Committee (PSC) meetings, national working group meetings and city working group meetings	EA	153,000	Annually (likely to be organised virtually or in a hybrid manner depending on the COVID 19 situation)
Reports of PSC meetings	EA	Included in PMC	Annually

[103] Global Environment Facility (GEF). (2019). "Policy on Monitoring (GEF/C.56/03/Rev.01)". GEF. https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.56.03.Rev_.01_Policy_on_Monitoring.pdf

Type of M&E activity	Responsible Parties	Budget from GEF	**Time Frame**
Project Implementation Review (PIR) report	EA and IA	Included in PMC	Annually, part of reporting routine
Monitoring visits to field sites	EA	Included in the travel budget	As appropriate
Mid Term Review/Evaluation	Consultant/IA	35,000	At mid-point of project implementation
Terminal Review/Evaluation	UNEP Evaluation Office	40,000	Typically initiated after the project's operational completion
Terminal Closing Meeting	EA and IA	40,000	Before operational closure
Audit	EA to ensure partners with whom the Programme Cooperation Agreements are signed to conduct audits where needed	Included in the budget for sub-contracts	Annually
Project Operational Completion Report	EA	Included in PMC	Within 2 months of the project completion date
Co-financing report (including supporting evidence for in-kind co-finance)	EA to collect from co-financiers	Included in PMC	Within 1 month of the PIR reporting period
Publication of Lessons Learnt and other project documents	EA with inputs from implementation partners	Included in PMC	Annually, part of Semi-annual reports & Project Final Report
Office stationary/supplies	EA	1,500	Throughout the implementation phase
IT equipment	EA	3,000	At the beginning of the implementation phase
	Total	307.500	

10. BENEFITS

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The problems that result from marine plastics and plastic pollution are outlined above in section "1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed". These problems have been recognized by multiple organizations at global and regional level, supported by national governments. For example, the following statement has been made by António Guterres.

'Our world is swamped by harmful plastic waste. Microplastics in the seas now outnumber stars in our galaxy. From remote islands to the Arctic, nowhere is untouched. If present trends continue, by 2050, our oceans will have more plastic than fish. The message is simple: reject single use plastic products. Refuse what you can't reuse. Together, we can chart a path to a cleaner, greener world.'

Seventy to eighty-five percent of marine litter in the Caribbean Sea is from land-based sources. Marine litter is one of three priority pollutants (the others being agrochemical run-off and domestic wastewater) that are being targeted for improved management. The previous GEF MSP identified the benefits of a circular economy model for plastics beyond improving marine ecosystems, with clear co-benefits of improved human health and livelihoods. There are also economic benefits, with significant opportunities for innovation in new materials and product systems. The project identified both the environmental and socio-economic benefits of adopting a circular economy approach to reducing marine plastics and plastic pollution.

Expected environmental benefits

The actions proposed by the project will bring benefits to the environment, including:

- Marine environments: Reduced marine litter and microplastics in the environment will greatly reduce the impacts on ecosystems and the ecosystem services they provide, national economies and health.
- Biodiversity and ecosystem services: Reducing plastics in the marine environment will help to protect threatened and endangered species due to less entanglement and ingestion of plastics and promote enhanced fish stocks for subsistence and commercial harvest.
- Resource Efficiency: Keeping key plastic products and polymers at its highest value, reducing the production and consumption of unnecessary plastic products, and improving reuse and recycling will ensure that resources are used in an efficient manner, at their highest potential, and reduce virgin plastic production and related fossil feedstock extraction.
- Climate change: More circularity in the plastics value chain will mitigate the effects from the consumption of fossil fuels to produce virgin polymers and reduce the emission from incineration of plastics at their end-of-life. For example: 45% of GHG emissions emanate from consumer goods production (cement, aluminum, steel, plastics and food); 55% from energy generation.
- Toxicity and human and ecosystem health: Eco-design, green manufacturing, state-of-the-art recycling of plastics will reduce the emissions of chemicals (such as POPs) to the environment from different life cycle stages of plastic products and thus the associated impacts on human and ecosystem health.

Expected socio-economic benefits

Most plastic packaging is used only once; 95% of the value of plastic packaging material, worth USD 80-120 billion annually, is lost to the economy. The cost of negative externalities generated by plastic packaging, plus the cost associated with GHG emissions from its production, is conservatively estimated at USD 40 billion annually.

The actions proposed by the project will benefit communities and industries that are currently impacted such as the fishing and tourism sectors. They will improve the livelihoods of people whose life and living environment are vulnerable to plastic pollution, such as the informal recyclers of plastics, residents in the SIDS and coastal areas, and fishing communities. Innovations in the delivery of plastic products and in recycling (upcycling)

plastics waste will generate novel livelihoods and institutional arrangements, which have the potential to add value to quality of life and community well-being. Reduction of marine plastics and plastic pollution will indirectly save costs for clean-up operations and clean-up activities, and other measures of ecological remediation, climate adaptation and mitigation. Communication campaigns targeting the consumers and activities on improving product labels will generate more reliable and transparent consumer information which will further trigger consumer behavior change towards a more sustainable consumption choice. The gender strategy to be developed under the project will ensure gender mainstreaming and the provision of training towards women. The pilots on collection and recycling under the project will improve the working conditions of collectors and recyclers and the ESG standards in the sector.

PART III: LIST OF ANNEXES AND APPENDICES

ANNEXES

Annex A – Project Results Framework
Annex B – Response to project reviews
Annex C – PPG status
Annex D – Reflow (not applicable for this project)
Annex E – Maps
Annex F – Core indicators (GEB)
Annex G – Taxonomy

APPENDICES

Appendix 1 – Problem Tree, Objectives Tree and Theory of Change
Appendix 2 – GEF Budget and Workplan
Appendix 3 – Co-finance letters and co-finance budget
Appendix 4 – Implementation Arrangement and Coordination
Appendix 5 – SRIF (5a) and COVID Screens (5b)
Appendix 6 – Stakeholder Engagement Plan
Appendix 7 – Gender Analysis Report
Appendix 8 – Risk Mitigation Plan
Appendix 9 – List of figures and Tables
Appendix 10 – Acronyms
Appendix 11– Communication and knowledge management strategy
Appendix 12 – Staff, consultants and subcontracts for the project using GEF resource
Appendix 13– Technical project specific annexes

ANNEXES

Annex A – Project Results Framework

Outcome/Output	Indicators	Baseline	Targets and monitoring milestones	Means of verification	Risks and Assumptions	UNEP MTS 2022-2025 expected result and UNEP POW output reference number
Objective: Reducing marine plastics and plastic pollution in the Latin America and the Caribbean region by facilitating circular actions at the city level to accelerate the transition to a circular economy, in line with government and business commitments on addressing marine plastics and plastic pollution.	GEBs: Indicator 5.3 Amount of Marine Litter Avoided Indicator 6.2 Emissions Avoided Outside AFOLU Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministerial Committees Indicator 7.4 Level of engagement in IWLEARN through participation and delivery of key products Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type) Indicator 10 Reduction, avoidance of emissions of POPs to air from point and non-point sources Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	See baseline for each output below	5,065 metric tons/tonnes Marine Litter Avoided (indicator 5.3) 9,382 tonnes of CO_2e indirect Emissions Avoided Outside AFOLU (indicator 6.2) At least 2 shared water ecosystems benefiting from local reform on the management of plastic pollution (indicator 7.3) At least 2 shared water ecosystems engaged in IWLEARN through participation and delivery of key products (Indicator 7.4) 54,9 tonnes of Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type) (Indicator 9.1) 1.16 grams of toxic equivalent gTEQ emission eliminated (Indicator 10) 990,162 direct beneficiaries disaggregated by gender as co-benefit of GEF investment (Indicator 11) (w/ 559,306 (F) and 430,856 (M))	Mid Term and Final Evaluation reports; quarterly reports; websites and public awareness resources; publications	Assumptions: Continued support from city and national governments to the project Improved knowledge on plastic material flow, environmental and health impacts of plastic pollution and associated economic and social costs Improved coordination on policy, finance, technology transfer, etc. at global, regional, national and city level Risks: Policies are developed but not fully implemented or enforced Failure of private sector to participate in the project, with low engagement from the large corporations and small medium-sized enterprises The inter-city network cannot be sustained after the end of the project	The Project primarily contributes to the 2025 outcomes under the pollution pillar in the MTS 2022-2025, but there are important linkages to the climate and nature pillar as well. It contributes directly to the following outcomes in the MTS and POW: 2025 outcome 3b, 3c Direct outcomes: 3.2, 3.3, 3.5, 3.6, 3.7, 3.8, 3.9, 3.12, 3.13
COMPONENT 1. City Led Promotion of Circular Economy Policies to Reduce Marine Plastics and Plastic Pollution in Targeted Cities						
Outcome 1 Circular economy policies adopted or improved by city-level governments to reduce marine plastics and plastic pollution in targeted cities	Number of cities with new policies/strategies adopted or existing policies improved[104] Number of new policies adopted and existing policies improved per city		6 cities with new policies/strategies adopted/ implemented or existing policies improved, with municipal capacity in policy planning strengthened 1 new policy adopted and 2 existing policies improved per city	Documented evidence to show policies improved or approved at the city level (such as draft policy documents, press release, news, web stories)	See below	3.2, 3.3, 3.5, 3.6, 3.8, 3.9, 3.13
Output 1.1 Policy action plans developed by municipalities and submitted for approval to promote circular economy approaches for plastics	Number of city-level policy action plans developed[105] Number of consultation meetings with city governments and relevant stakeholders organised[106] Percentage of female decision makers involved[107]	-All project countries have policy frameworks/ action plans to reduce marine plastics and plastic pollution through circular economy, but these are partially or not implemented yet. Jamaica is part of the RAPMAli 2014, and Colombia of the Regional Marine Litter Action Plan for the Northeast Pacific Region. This latter is starting its implementation in Q4-2021. Colombia also has a national plan for the sustainable management of single-use plastics. Panama has its national actional plan which will be starting its implementation by the end of 2021. -City level policy action plans do not exist.	1 global review of policy framework on circular economy for plastics with recommendations for LAC by Y1 6 city-level policy action plans (1 per city) developed by Y2 Policy development and enforcement meetings at city level At least 40% decision makers involved are female	Global review report Documented evidence to show action plans developed or approved at the city level (such as draft policy documents, press release, news, web stories) Meeting reports	Risks: Policies are developed but not fully implemented or enforced City authorities fail to mobilise private sector partners during policy development and implementation	3.2, 3.3, 3.5, 3.6, 3.8, 3.9, 3.13
Output 1.2 Targeted policy interventions carried out to improve circularity	Number of selected policies adopted[108] Number of existing policies improved Tonnes of marine plastics reduced	-The project countries do not have a legal framework to reduce or eliminate the Unintentional Persistent Organic Pollutants (UPOP's). -The 3 countries possess policies and programmes for the reduction of plastic consumption and the application of reuse models restriction on problematic and unnecessary plastics. However, these are partially implemented or has not been implemented (e.g., Colombia recently launched their programme in June 2021 and will start implementing by 2022) -The 3 countries have regulations of plastics with hazardous chemicals. (Part of the National Implementation plan for managements of POP's). However, there is a need to enhance the implementation of these National plans at city level. -Jamaica and Panama lack of an integrated waste management system or a policy framework on comprehensive waste management including actions	1 overview of global best practices on policy instruments with recommendations for LAC by Y1 6 selected policies adopted (1 per city) by Y4 12 selected existing policies improved (2 per city) by Y4 Avoidance of 144 tonnes of marine plastics as a result of reduction in unnecessary, avoidable, and problematic plastic products (including single-use plastics), through policies (such as banning single-use plastic products) and business innovation (reuse and redesign to reduce single-use plastic products)	Report on global best policy practices Documented evidence to show policies developed or approved at the city level (such as draft policy documents, press release, news, web stories) Summary of results and learning from policy development Data on the reduction of marine plastics reported by using the indicators and methodology developed under output 4.3	Assumptions: Adequate buy-in and support from city governments Risks: City authorities fail to mobilise private sector partners during policy development and implementation Lack of industry or key corporations' engagement Relevant policies blocked by stakeholders that will be affected or lobbyists	3.2, 3.3, 3.5, 3.6, 3.8, 3.9, 3.13

[104] C&W Outcome Indicator 4 - No. of countries adopting/passing new policies/strategies
[105] C&W Output Indicator 4.2 - No. of sector master / national management plans prepared
[106] C&W Output Indicator 11.2 - No. of national organizations/coordination mechanisms supported/communities organized
[107] C&W Output Indicator 7.2 - % of beneficiaries disaggregated by gender
[108] C&W Output Indicator 4.1 – No. of new policies, strategies, laws, regulations, guidance, criteria prepared

		conducive to the circular economy and a municipal plan in accordance with the local policy. - Panama and Jamaica count with legislation on Sustainable procurement with no significant implementation, and Colombia used to have a National Action Plan for Public Procurement (2016-2020) which has expired. - Regarding Ecolabeling, Colombia counts with the "Sello Ambiental Colombiano", Panama and Jamaica do not have ecolabelling.	Reduction of 1,627 tonnes as a result of improved waste management policies and business action.			
Output 1.3 Implementation plans for financial instruments developed to facilitate responsible plastics management	Number of implementation plans for financial instruments developed, improved or prepared for consideration /submission[109]	None of the countries under this project has policies, programmes or initiatives about financing mechanisms and incentives to facilitate responsible plastic management. However, Colombia and Jamaica have a policy framework of Extended Producer Responsibility (not specifically for plastics). Panama has legislation that establishes environmental and tax incentives to promote business practices, business reconversion, and the development of the recycling industry (mainly for plastics). Some of the financial instruments lacking in the 3 project countries are: incentives to reduce the use of raw materials in plastic production economic incentives to stimulate the port facilities and tourism industry to reduce the waste generation of plastic. Deposit refund schemes Incentives to reduce the use of raw materials to produce difficult-to-recycle plastic products	1 overview of global best practices on financial instruments with recommendations for LAC by Y1 3 implementation plans for financial instruments developed, improved or prepared for consideration /submission (1 per country) by Y4	Report on global best practices on financial instruments Implementation plans for the financial instruments in 6 cities Summary of results and learning from the development of the implementation plans		3.2, 3.3, 3.5, 3.6, 3.8, 3.9, 3.13
COMPONENT 2 Private Sector Led Promotion of Circular Economy Actions to Reduce Marine Plastics and Plastic Pollution in Targeted Cities						
Outcome 2 Circular economy innovations and practices adopted by the private sector to reduce marine plastics and plastic pollution in targeted cities	Number of businesses that adopted best practices or sustainable business solution [110] Number of business solution pilots conducted per city		120 businesses that adopted best practices or sustainable business solution 2 pilots conducted per city	Documented evidence to show circular economy solutions developed with the private sector at the city level (such as patent, product profiles, business model and plans, press release, news, web stories)	See below	3.2, 3.3, 3.6, 3.7, 3.8, 3.9, 3.13
Output 2.1 Approaches developed and tested to facilitate more circular design, production, and consumption of plastics	Number of solutions on sustainable production and consumption pilot tested[111]	-Colombia is the only country that possess a policy framework to promote circular design in products but this is partially implemented. -The 3 countries do not possess waste reduction policies and solutions focused on different commercial premises and business sectors.	1 compilation of global best practices on upstream business solutions, with recommendations for LAC by Y1 6 business solutions on sustainable production and consumption pilot tested (1 per city) by Y4	Report on global best practices on upstream business solutions Documented evidence to show circular economy solutions developed with the private sector at the city level (such as patent, product profiles, business model and plans, press release, news, web stories) Summary of results and learning from the pilot test of business solutions	Risks: Lack of industry or key corporations' engagement Cultural resistance from the citizens to accept new measures or adopt innovative solutions. Interventions through the private sector (component 2) fail to be sustained or replicated within and between cities.	3.2, 3.3, 3.6, 3.8, 3.9
Output 2.2 Approaches developed and tested to improve collection and recycling of plastic waste	Number of solutions on collection, recycling and disposal of plastic waste pilot tested[112] Tonnes of marine plastics reduced	-Colombia has implemented programmes and initiatives to better integrate informal waste collectors and independent sorters of plastics into the waste management systems along with the private sector and initiatives such as RedReciclo, Movimiento RE (both from CEMPRE), Recuperando Avanzo (EkoRed). Jamaica has partially implemented similar initiatives (Plastic Recycling Project), but Panama does not have a policy, a programme or initiative related to this matter (Recicla por tu futuro).	1 compilation of global best practices on plastic collection and recycling with recommendations for LAC by Y1 pilots on collection, recycling and disposal of plastic waste in 6 cities by Y4 Avoidance of 94 tonnes of marine plastics through collection and treatment of 1,480 tonnes of plastic products through recycling pilots	Report on global best practices on collection and recycling of plastic waste RFPs and contracts for collection and recycling pilots Summary of results and learning from the collection and recycling pilots Data on the reduction of marine plastics reported by using the indicators and methodology developed under output 4.3	In additional to those listed under output 2.1 Risks: Failure of informal waste sector to participate Lack of industry or key corporations' engagement Interventions through the private sector (component 2) fail to be sustained or replicated within and between cities. Flooding can exacerbate plastic pollution due to transportation of plastic waste to the oceans and collapsing waste management by increasing waste leakage.	3.2, 3.3, 3.6, 3.7
Output 2.3 Industry roundtable on plastic circular economy established and roundtable meetings organised, with collaboration between business stakeholders facilitated	Number of roundtable meetings organised [113] Number of women entrepreneurs supported by the project in promoting the circularity of their business[114]	-There is no platform to converge a common vision and coordinate activities on circular economy among the companies and industrial players in order to address plastic pollution in the 6 cities. However, an entry point in Colombia are the regional working tables on circular economy aligned with their National Strategy on CE that include Barranquilla and Cartagena. -There is no committee led by stakeholders from the private sector entities along the value chain, such as innovation companies, waste collectors, recyclers among others, to design and implement innovative actions to improve the local circularity of materials and plastic products, generate	1 strategy document elaborating the vision, approach, code of conducts, governance and activities of the industrial roundtable by Y1 12 industry roundtable meetings organised (1 per city every 2 years) 120 value chain businesses involved in the roundtable At least 40 women entrepreneurs supported by the project in promoting the circularity of their business	A strategy document elaborating the vision, approach, code of conducts, governance and activities of the industrial roundtable Roundtable meeting reports with list of participant businesses and outcomes of the roundtable meetings (m/f documented)	Risks: Lack of industry or key corporations' engagement Interventions through the private sector (component 2) fail to be sustained or replicated within and between cities.	3.6, 3.8, 3.13

[109] C&W Output Indicator 4.2 - No. of sector master / national management plans prepared
[110] C&W Outcome Indicator 3 - No. of beneficiaries adopting best practices/technologies
[111] C&W Output Indicator 3.1 - No. new technology and/or equipment upgraded/provided to developing countries
[112] C&W Output Indicator 3.1 - No. new technology and/or equipment upgraded/provided to developing countries
[113] C&W Output Indicator 11.2 - No. of national organizations/coordination mechanisms supported/communities organized
[114] C&W Output Indicator 7.2 - % of beneficiaries disaggregated by gender

		green employment in the whole chain, share ideas, experiences, information, and data, etc.				
COMPONENT 3 Inter-City Network on Marine Plastics and Plastic Circular Economy						
Outcome 3 Increased capacity and cooperation among LAC cities through the LAC Inter-city Network on marine plastics and plastic circular economy and enhanced implementation of circular economy approaches in the region	- Number of cities joining the inter-city network[115] - Number of governments, private sector stakeholders, NGOs involved in the inter-city network[116] - Number of global and regional initiatives collaborating with the network[117]		15 cities joining the inter-city network by Y4 120 governments, private sector stakeholders, NGOs involved in the inter-city network by Y4 At least 8 global and regional initiatives collaborating with the network by Y4	Official letters from cities to confirm the joining of the network List of the global and regional initiatives collaborating with the network	See below	3.5, 3.8, 3.13
Output 3.1 Inter-city network operationalised	Number of the network meetings organized [118] Percentage of women actively participating in the inter-city network planning board/council[119]	-There is no inter-city network in the region on addressing marine plastics and plastic pollution.	1 framework document including the vision, objectives, governance and activities of the inter-city network by Y1 1 functional network of LAC cities established by Y2 At least 40% of the members of the inter-city network planning boards/councils are women 2 network meetings organized (1 in Y2 and 1 in Y4) 1 network website and social media channels developed in Y2 1 reporting mechanism	Framework document Reports of the inter-city network planning board/council meeting (m/f documented), and the network meeting reports (m/f documented) Inter-city Network website Reporting mechanism	Risk: The network cannot be sustained after the end of the project	3.5, 3.8, 3.13 3.8
Output 3.2 Inter-city network expanded with more participating cities	Number of additional cities supported with the development of policy and action plan[120] Tonnes of marine plastics reduced	The project has not yet started. In the implementation phase of the project, the promotion of the action plan will be conducted.	15 cities connecting to the network (6 project cities + 9 additional cities in the region) by Y4 1 harmonised city action plan template developed for LAC cities Y3 At least 3 additional cities supported with the development of action plan by Y4 2,800 tonnes reduction in marine plastics as a result of the inter-city network and capacity building activities at the regional level. The actual reduction data will be collected through the monitoring scheme of the inter-city network.	Official letters from cities to confirm the joining of the network Harmonised city action plan template developed for LAC cities Action plans for the 3 additional cities Data on the reduction of marine plastics reported by using the reporting mechanism developed under output 3.1	Assumption: Other cities willing to participate in the network as they see the added value Risk: lack of resources to support other cities expressing the willingness to develop their own action plan	3.8, 3.13
COMPONENT 4 Capacity **Development and Knowledge Management**						
Outcome 4 Improved regional and global awareness knowledge and capacity applied, and capacity in applying circular economy approaches to reduce marine plastics and plastic pollution	Number of stakeholders with awareness raised and knowledge on circular economy for plastics increased [121] Number of knowledge assets disseminated and applied in the region		1000 stakeholders with awareness raised and knowledge on circular economy for plastics increased At least 5 knowledge assets disseminated and applied in the region	Participation list of the trainings	See below	3.5, 3.6, 3.13
Output 4.1 Information, Education and Communication (IEC) strategy for the project developed and implemented using IW: LEARN platform, GGKP and GPML platforms	Number of project website established [122] Level of engagement in IWLEARN through participation and delivery of key products % of completion on delivery of the communication strategy[123] Number of selected case studies on circular policies and sustainable business practices[124] Number of experience or best practices notes developed	The project has not yet started. Therefore, no products have been developed or placed on the website yet.	1 project website compliant with IW:LEARN established by Y1 and deliverables uploaded to the website upon completion 2 Shared water ecosystems engaged with IW:LEARN Project learnings and knowledge products integrated into IW: LEARN, GGKP, GPML and other relevant platforms by Y4 1 communication strategy compliant with IW:LEARN requirements developed by Y1 and implemented throughout the project duration 6 selected case studies on circular policies developed based on the policy instruments of component 1; and 6 selected case studies on sustainable business	Project website Deliverables uploaded to IW: LEARN, GGKP, GPML Project communication strategy (with a specific section on gender analysis and communication strategy towards female consumers, collectors, entrepreneurs) Selected case studies on circular policies Documents on the selected case studies on sustainable business practices Report/notes on the experience or best practices of the project Participation list/picture of the IW: Learn events joined by the project team	Risk: Cultural resistance from the citizens to accept new measures or adopt innovative solutions. Civil society (including NGOs, CSOs, education establishments) unwilling to participate Gender disaggregated data difficult to collect	3.13

[115] C&W Outcome Indicator 11 - No. of beneficiaries committed to stay engaged after project ends
[116] C&W Outcome Indicator 11 - No. of beneficiaries committed to stay engaged after project ends
[117] C&W Outcome Indicator 11 - No. of beneficiaries committed to stay engaged after project ends
[118] C&W Output Indicator 11.2 - No. of national organizations/coordination mechanisms supported/communities organized
[119] C&W Output Indicator 7.2 - % of beneficiaries disaggregated by gender
[120] C&W Output Indicator 4.2 - No. of sector master / national management plans prepared
[121] C&W Outcome Indicator 10 - No. of people demonstrating increased knowledge and capacity
[122] C&W Output Indicator 9.2 - No. of platforms and databases established
[123] C&W Output Indicator 8.1 - % of completion on delivery of the communication strategy
[124] C&W Output Indicator 3.2 - No. of technical tools/toolkits and best practices (BAT/BEP) developed

	Number of key IW: Learn events participated Number of videos for communication [125] Gender related indicators: Number of surveys conducted to assess role of women in plastic value chain % of documents with explicit gender mainstreaming[126] % of beneficiaries disaggregated by gender[127]		practices developed based on the business solutions of component 2 by Y4 At least 3 experience or best practices notes on project learning developed by Y4 At least 3 key IW:LEARN events with participation from the project team by Y4 At least 2 videos made 1 survey conducted to assess role of women in plastic value chain by Y1 1 Gender Guidance Note prepared to be used by the project team to ensure gender mainstreaming, by Y1 At least 40% audience of the communication campaigns are female 990,162 direct beneficiaries disaggregated by gender as co-benefit of GEF investment (Indicator 11)	Videos Survey to assess role of women in plastic value chain Gender Guidance Note Balance of male/female participation; female and male presenters/facilitators at consultations; proportion of interventions made by women at consultations documented in meeting reports Gender disaggregated data collected by the gender specialist to be hired by the project		
Output 4.2 Increased awareness of the circular economy approaches from capacity building activities	Number of people involved in the training and communication activities with gender disaggregated target[128] Tonnes of marine plastics reduced	Project cities indicated that capacity building and training activities will be beneficial to assist in addressing the challenge of marine plastics and plastic pollution, and enhancing circularity in the value chain by training all relevant stakeholders.	3 national level trainings organised and at least 50% female participants in Y2-Y3 (1 per country), targeting Policy and decision makers from governmental and municipal entities. Businesses Collectors and recyclers, including informal sector Community based organizations Academia 1 regional level training organised and at least 50% female participants by Y4 1000 stakeholders trained in total 400 tonnes reduction in marine plastics through awareness raising events, training, and clean-up campaigns in the six cities.	Training materials and participant list for the national trainings (m/f documented) Training materials and participant list for the regional trainings (m/f documented) Data on the reduction of marine plastics reported by using the indicators and methodology developed under output 4.3		3.5
Output 4.3 Long-term monitoring program operationalised by cities on the implementation of circular economy approaches and associated reduction in plastic pollution	Number of methodology and calculation tool to organize the data collection and assessment of chemicals for plastics [129]	-For the 6 project cities there is no standardized systems in place for the identification and quantification of hotspots or plastic leakage along the value chain. Moreover, there is no set of indicators to measure, and track the trends on marine plastics and plastic pollution.	1 set of indicators aiming to support plastic related GEF projects to monitor the performance and impacts of activities developed by Y3 and tested with the 6 cities by Y4 1 methodology and a tool to enable cities to forecast on the potential impacts, cost and benefits, and trade-offs of adopting various circular strategies developed by Y3 1 methodology and calculation tool to organize the data collection and assessment of chemicals for plastics developed by Y3	Indicators to monitor the performance and impacts of activities in plastics related GEF projects Methodology to forecast on the potential impacts, cost and benefits, and trade-offs of various circular strategies Methodology and calculation tool on chemicals	Risks: Policies only developed but not implemented, which will weaken the incentive structure for all other stakeholders to take actions Interventions through the private sector (component 2) fail to be sustained or replicated in cities. Inadequate data available to support activities Flooding can exacerbate plastic pollution due to transportation of plastic waste to the oceans and collapsing waste management by increasing waste leakage.	3.6
COMPONENT 5 Monitoring and Evaluation						
Outcome 5 Project partners adopt and act upon project results and lessons	Evidence of continuous improvement and changes implemented by Project SC	No reports	PSC members demonstrate learning has been integrated into programming by Y4	MTR report	Assumption: - Active participation in SC by members	3.13
Output 5.1 Monitoring and evaluation of project outcomes and outputs to include quarterly financial reporting	Number of quarterly and annual progress reports & annual workplan and budget completed	No reports yet, strong reporting and M&E procedures in place by the Implementing Agency	- 12 quarterly reports and 2 PIRs by Y2 20 quarterly reports and 4 PIRs by Y4	Quarterly reports and PIRs	Assumption: - High quality project management experience exists in the countries	3.13
Output 5.2 Mid-term and terminal evaluations results shared with stakeholders	Number of independent reviews shared	No reports available	- 1 MTR and 3 regional SC meetings (inception included) by Y2 1 TE and 5 regional SC meetings by Y4	MTR and regular reports	Assumption: - Regular reporting by EA and project countries Risk: - Lack of adequate PM support at country level	3.13

[125] C&W Output Indicator 8.3 - No. of social media and media products published on platforms and websites
[126] C&W Output Indicator 7.1 - % of documents with explicit gender mainstreaming
[127] C&W Output Indicator 7.2 - % of beneficiaries disaggregated by gender
[128] C&W Output Indicator 10.1 - No. of end-users/beneficiaries trained
[129] C&W Output Indicator 3.2 - No. of technical tools/toolkits and best practices (BAT/BEP) developed

Annex B – Response to project reviews

STAP comments	Response
While this is a good project and several aspects of the PIF were well prepared, including a detailed presentation of planned activities, there is significant concern that the estimation of expected GEBs has not been rigorously done. The proponent should complete this task before the project can proceed. There is no information on how the expected GEBs from the project were derived. Without this information, the currently projected benefits cannot be verified. For example, how was the projected 3000 metric tons of CO2e emissions reduction estimated, especially when there are no specific interventions in the project explicitly targeted at greenhouse gas emissions mitigation? What are the data and baseline information that informed this estimate? Also, what methodology was used to calculate the amount of marine litter to be avoided? Without these details, it is impossible to ascertain that the predicted GEBs are valid or can be achieved.	The GEBs have been recalculated in the PPG stage based on baseline data collected by local consultants and desktop research. The section on GEBs in the PPG document explains the calculation of the GEBs in detail. Regarding the GEB 5 (Amount of marine litter avoided), and 6 (GHG emission): **The project is expected to reduce marine plastics by 5,065 tonnes during the project lifetime.** This will be achieved cumulatively through four major intervention pathways: 1- Avoidance of 144 tonnes of marine plastic litter as a result of reduction in unnecessary, avoidable and problematic plastic products, including single-use plastics through policies (such as banning single-use plastic products) and business innovation (reuse and redesign to reduce single-use plastic products) targeting the top 10 products as will be identified through marine plastic sampling of the six cities, The project is setting a target of 1,600 tonnes reduction of those products, of which 9% is assumed to end up as marine plastics. 2- Reduction of 1,627 tonnes (10% of baseline marine plastics over the last three years of the project) as a result of improved waste management policies and business action. 3- Avoidance of 94 tonnes of marine plastic through collection/treatment of 1480 tonnes of plastic products through recycling pilots (780 tonnes of single-use plastic products and 700 tonnes of other plastic products containing POPs). It is assumed that 9% of single-use plastic products and 3.4% other plastic products containing POPs would have ended up as marine litter eventually. 4- 400 tonnes reduction in marine plastics through awareness raising events, training, and clean-up campaigns in six cities. 5- 2,800 tonnes reduction in marine plastics as a result of the inter-city network and capacity building activities at the regional level. The actual reduction data will be collected through the monitoring scheme of the inter-city network. **The project is expected to achieve a reduction of 9,382 tonnes CO_2eq emission during the project lifetime.** This will be achieved cumulatively through the following seven intervention pathways: 1- Avoidance of 4,463 tonnes CO_2eq of GHG emissions as a result of banning open burning of plastics across the six cities. 992 tonnes of open burnt plastic are anticipated 2- Reduction of 2,100 tonnes CO_2eq of GHG emissions as a result of reducing single-use plastic products by 1,400 tonnes. The calculation uses emission factor of 1.5, considering the trade-off between reducing single-use products and using new alternatives. 3- Reduction of 300 tonnes CO_2eq of GHG emissions as a result of introducing reuse policies and promote reusable products and reuse business models through circular design, which will reduce consumption of single-use plastic products in six project cities by 200 tonnes. 4- Reduction of GHG emission by 300 tonnes CO_2eq of GHG emissions through re-introducing 200 tonnes of recycled content into new products through circular design by businesses and supporting policies (such as sustainable procurement) in six cities. 5- Reduction of 574 tonnes CO_2eq of GHG emissions through supporting EPR system in two cities of Jamaica

	6- Avoidance of GHG emission by 780 tonnes CO_2eq of GHG emissions through replacing virgin plastics, and collecting/treating various types of plastic products to pilot in six cities, and aims to reach the yield of 520 tonnes of recycled plastics 7- Reduction of GHG emission by 865 tonnes CO_2eq of GHG emissions through avoidance of 192 tonnes of PVC cables and other plastic waste being open burnt through the same collection and recycling pilot.
Furthermore, this is a multi-focal area project with equal contribution of programming funds from the International Waters and Chemicals and Waste (POPs) focal areas. However, from the PIF, there is no indication of GEBs that will accrue to the chemical and waste focal area.	GEBs related to the CW focal area have been added and the project now contributes to GEB 5 (Amount of marine litter avoided), 6 (GHG emission), 7 (shared water systems), 9 (chemicals of concern), 10 (POPs to air) and 11 (direct beneficiaries). Regarding GEB 9 and 10: **The project is expected to reduce Persistent Organic Pollutants (POPs) by 54.9 tonnes (HBCD and PBDE).** This will be achieved cumulatively through: 1- Upstream interventions (policy on eliminating Chemicals of Concern (CoCs) in plastic products such as furniture and building materials, and circular design by producers): Through implementing upstream policies and circular design by the private sector, the project is expected to reduce at least 200 tonnes of products containing HBCD and 1,000 tonnes products containing PBDE. This will result in a net reduction of 1.2 tonnes of HBCD and 30 tonnes of PBDE by applying an average concentration of relevant chemicals in such products. 2- Downstream interventions (collection and recycling pilot): Through collection, recycling, and disposal pilot in six cities, the project is expected to treat and dispose various waste plastic products containing HBCD and PBDE, and the pilot will achieve a reduction of 12.8 tonnes of HBCD and 10.9 tonnes of PBDE. **The project is expected to avoid the release of 1.16 gTEQ unintentionally produced POPs,** through: 1- Avoidance of 0.30 gram of uPOPs through reducing the open burning of plastics (including packaging, PVC cables and other plastic products), in places like backyards and dumpsites. The policy action to ban open burning of plastics, as well as the pilot project to collect and recycle plastics will both contribute to the reduction of open burning. Policy to ban open burning in six cities is expected to reduce the plastics of open burning by 991.7 tonnes. 2- Avoid generation of 0.84 grams of uPOPs through the environmentally sound disposal of 100 tonnes of plastic products containing PVC which will lead to an avoidance of 70 tonnes of products being burnt. 3- Avoid generation of 0.02 grams of uPOPs through the environmentally sound disposal of 1,380 tonnes of non-PVC plastic products (such as packaging) which will lead to an avoidance of 122.2 tonnes of plastics being burnt.
Figure 3 presents a preliminary theory of change, which includes assumptions, problems, outputs, outcomes, long term outcomes, and impacts. This is good. This may be improved by adding interventions that will help achieve the outputs and outcomes as well as alternative pathways. Please see STAP's theory of change primer for further guidance (https://stapgef.org/sites/default/files/publications/STAP%20ToC%20Primer_webposting.pdf).	The theory of change (figure 4) was updated by refining the assumptions, drivers, outputs, outcomes, long term outcomes and impacts. To respond to this comment regarding showcasing the interventions that will help achieve the outputs and outcomes as well as alternative pathways, the problem tree was updated, and an objective tree was added. The updated problem tree (figure 1) provides a clearer logic on how the project will identify the linkages between the root causes, barriers, problem, and impacts. An objective tree (figure 3) was added to reflect what interventions are needed to address the barriers in order to achieve the objectives targeted by the project. For example, as indicated in the problem tree, one of the root causes identified by the project is that policy design, waste management and awareness are outpaced by the growth of plastic production and consumption. Numerous national and regional initiatives have been implemented around the world, but barriers in policy remain. In the context of the project, this corresponding policy barrier is the lack of circular regulations and policy instruments in LAC cities. Therefore, in the objective tree, the corresponding objective targeting this barrier is identified as “Circular regulations and policy instruments in LAC cities increasingly present”. And in the objective tree the inventions needed to address this barrier/ achieve the object are also identified, which include: 1) developing circular economy policies and strategies at city level; 2) developing standards, labelling

	and policy guidance on reuse, remanufacturing and chemicals content; 3) developing fiscal policies and markets for circular solutions. These interventions are targeted by output 1.1, 1.2 and 1.3 respectively.
Potential for scaling-up: According to the PIF, scaling up will be achieved through "a global framework." It is not clear what this means or how it will work. STAP recommends that more details should be presented in the PPG to show how scaling up will be achieved. STAP recommends the following resources which may be useful in this regard: "nine steps for developing a scaling-up strategy" (https://www.who.int/immunization/hpv/deliver/nine_steps_for_developing_a_scalingup_strategy_who_2010.pdf) and "scaling up in development cooperation - practical guidelines" by GIZ (2011) available at https://www.shareweb.ch/site/Learning-and-Networking/sdc_km_tools/Documents/GIZ-Scaling-up-in-development-cooperation.pdf	Relevant text was updated with useful guidance from the 2 reference shared. Key factors from the GIZ and WHO documents have been considered and integrated, including ownership and involving key stakeholders, substantiating the results achieved by pilot projects, evidence-based solution, communication and networking, and vertical and horizontal scaling-up. In the PPG phase, key stakeholders from city governments and private sector have been reached out to and convinced of the value of the proposed activities under the project and the linkage of the project with their own agendas. In the implementation phase, the project will also create ownership of stakeholders to the project by supporting city governments and businesses to design and pilot test policies and solutions. When developing policies and solutions, the project will also advise partners on how to scale these up, which is particularly important for the pilot tests under component 1 and 2. The communication strategy to be developed under the project will take into consideration how the communication efforts could help generate at an early stage a positive environment for scaling up and at later stage sustain the results achieved by the project. Engaging actively with relevant stakeholders identified by the project will also open up channels for dissemination and promote the scaling-up based on sufficient coordination of interests. Please refer to the scaling-up section in the CEO endorsement for more information. .
Sustainability: The GEF IEO's terminal evaluation of projects under the chemicals and waste focal area revealed that there is little evidence that GEF's chemicals and waste projects are successful in developing sustainable strategies and financial mechanisms to scale up achieved results or to ensure continued engagement of private sector actors (http://www.gefieo.org/sites/default/files/ieo/evaluations/files/cw-study-2017_0.pdf). According to the PIF, sustainability is expected to be achieved through assisting cities and municipalities to develop sustainable partnerships with the private sector involved in plastic waste and through improving understanding and awareness to help key stakeholders. These measures are not sufficient to guarantee the sustainability of the project. There is a danger of this project replicating the same drawback identified by the IEO. STAP recommends that more thought should be given to this.	The project will actively assist cities/municipal authorities to develop sustainable partnerships with the private sector involved in plastic waste collection and recycling (both formal and informal sectors). The sustainability will also be encouraged through improving understanding and awareness to assist key stakeholders attract new sources of financing to adopt circular economy approaches to reduce marine plastics and plastic pollution. The project will facilitate this increased understanding and awareness through the inter-city networks, round-table discussions, etc. This will also enhance the overall governance and improve engagement of stakeholders to address the issue of plastic pollution. The project will also support the sharing of lessons, experiences, and benefits from the circular economy approaches within the LAC region (including ecosystem benefits and socio-economic benefits) to reducing marine plastics and plastic pollution, which will help ensure the uptake of the knowledge generated by the project in the region and the long-term impacts of the project.
Climate change impact and risks: The PIF is entirely silent about the potential effects of projected climate change on achieving the objectives of the project. Yet, the project is taken place in coastal cities of the targeted countries. Several climate data sources, including Climate Change Knowledge Portal (https://climateknowledgeportal.worldbank.org/), Relief Web (https://reliefweb.int/), and Climate Links (https://www.climatelinks.org/) shows that the three countries and targeted cities are considered highly vulnerable to climate	In the section on risk in the PPG and appendix 8 on risk mitigation plan, the assessment of climate change related risk in the 6 project cities was added. The assessment evaluates the risk level of different natural hazards related with climate change in the cities, including wildfire, floods, tsunami, hurricane, extreme heat, earthquake, landslide and water scarcity. The highest risk from natural hazards present in all 6 cities are wildfires and floods. These are truly relevant to plastic pollution as flooding can cause transportation of plastic waste to the oceans and collapsing waste management by increasing leakage. Furthermore, wildfires can intensify floods but also end up in burning of waste. Other hazards need close attention too, depending on the location varies the degree of risk.

change impacts. It is envisaged that climate change will influence the types of solutions that can be developed and tested. STAP recommends that a detailed climate risk screening should be carried out toascertain vulnerability of the project is to climate change and what risk management options would be employed, where necessary.	Through project implementation, the circular economy approach for plastics will be applied by stakeholders along the value chain, which will lead to the reduction of GHG emission caused by unstainable production and consumption of plastics and the increase of efficiency of resources used by the plastic sector. It is expected that the sustainable production of plastics and sound plastic waste management practices implemented through the project (by activity 2.1.2,2.1.3, 2.2.2) will lead to increased resilience against climate change impacts. The benefits related with the reduction of GHG emission have been calculated in the GEB section in the project document as well. The output 2.2 on solutions to plastic waste collection and recycling at cities will also take into account the risks of floods when designing the waste management practices.
We note that this project is similar to the "Plastik Sulit: accelerating circular economy for difficult plastics in Indonesia – GEF ID: 10546" project in this same work program (June 2020). The two projects should seek to learn from each other even from the PPG stage. Also, given that the project will be implemented in cities, we encourage the project proponent to engage with the GEF Sustainable Cities Impact Program.	The project will coordinate with other GEF projects including GEF 10546 and the Sustainable Cities Impact Program during its implementation phase. Not much information about the GEF 10546 can be found on GEF website at this moment as it is in the same work programme with this project, but closer coordination will be sought with ADB once both the projects take shape. This project can benefit from the learnings and experience from the GEF Sustainable Cities Impact Program (2018-2022) in many aspects, including but not limited to: 1) adopting circular economy approaches at city level; 2) engaging with different stakeholders at city level and national level, 3) forging public-private partnership, 4) scaling up the project results to more cities/countries including through the operationalisation of city platforms. This project will also explore the possibilities to have the cities in Brazil, Peru, Mexico and Paraguay (the 4 countries covered by the Cities Program) join the inter-city network to be established under component 3. The experience and lessons learnt under this project will also be shared with other GEF projects for knowledge dissemination and synergy identification.
Country Comments	**Response**
Canada Comments: We would appreciate further details on how this project will also look at reducing plastic use and will actively seek not to produce a system that requires continued creation of plastics to support the new plastic circular economy.	Promoting sustainable consumption and production of plastics is a key dimension of the circular economy approach for plastics as well as of the project. Based on the scope of circular economy policies and the priorities that were identified during the PPG phase, policy topics and areas aiming to reducing unnecessary, avoidable, and problematic plastic consumption will be identified and developed, tested or improved in the project cities by working with local municipalities, with a priority on upstream intervention for refuse, reduce and reuse (activity 1.2.1 and 1.2.2). The project will also work with private sector entities to identify and pilot test business upstream solutions tailored to the local contexts of the 6 project cities, including but not limited to plastic packaging and products redesign, reuse promotion, reduction of chemicals of concern in products, etc. (activity 2.1.1, 2.1.2). Best practices and lessons learnt from these activities will be shared with more cities in the region via the inter-city network to be established under component 3 and the communication channels to be established under component 4, to facilitate the replication and up scaling of relevant policies and business solutions at regional and global levels.
Norway/Denmark Comments: 1. We very much welcome the “source-to-sea” approach, and the emphasis on coastal cities. The design of the project seems well aligned with the situation analysis in the three target countries. 2. The project consists of four interlinked and highly relevant components (with related outcomes, outputs and indicators), while the implementation approach could be explained in more detail.	Responses to overall comments: 1. This is well received. The same approach is still applied to the CEO Endorsement project document. 2. The CEO endorsement document enriches the content on the implementation of the 4 components, based on the consultation with the city governments, private sector as well as NGOs conducted during the PPG phase. The implementation approach for the 4 components has been further explained in the section “PART II A 3) the proposed alternative scenario with a description of components of the project”. Furthermore, section 6 and appendix 4 on “institutional arrangement and coordination” also explains the overall implementation arrangement of the project. 3. In total around 35 million co-financing has been secured at the PPG phase, including more than 9 million from private sector. A more comprehensive stakeholder mapping and private sector engagement plan have also been developed (section 2 and 4 of the CEO endorsement document, and appendix 6). During the project implementation phase, the project team will continuously engage

3. The active engagement and "buy-in" of private sector stakeholders across the value chain seems essential to the success of the project. It is encouraging that a relatively high amount of co-financing from private companies is envisaged (although yet to be confirmed). Ensuring these in-kind contributions, as well as developing partnerships which genuinely interest private sector actors, will be of essence. Detailed comments: 1. The PIF document notes that one of the Outcome Indicators for the whole project is "Reduction/ avoidance of plastics entering the environment, including the oceans», with a target of 5, 000 tonnes. How will this indicator be measured? 2. The PIF document mentions under Sustainability that the project "will actively assist cities/municipal authorities to develop sustainable partnerships with the private sector involved in plastic waste". How will this be done more concretely? It seems key to the project longevity that such partnerships are given priority, and that there are market incentives for private sector to participate. 3. Under the section "Potential for scaling up", it is mentioned "that a mechanism will exist, through a global framework, to facilitate the up-scaling of the results in this project to other cities within the LAC region and globally". Could you expand on this mechanism? We note that the risk framework is quite limited. For example, the current framework does not include internal risks that could also hamper the project developments (e.g. HR, administrative or organizational issues). Moreover, the risk framework would also benefit from an update considering the global Covid-19 pandemic (for instance the risk of private companies not having the same ability to contribute financially after the ongoing lockdowns).	with local and global private stakeholders operating in the target cities and the LAC region and explore further possibilities to collect co-financing from private sector. Responses to detailed comments: 1. For the 5000 tonnes reduction/avoidance, please see detailed explanation provided in table 10 in PART II A 6) Global Environment Benefits (currently 5,065 tonnes). 2. The project will support formulating partnerships between the private sector and municipalities to significantly improve the management of plastic wastes. The project will help increase understanding on the content and volume of the existing plastic waste stream, the appropriate technologies, relevant environmental standards for waste management and community engagement, the capacity of collectors and recyclers in the 6 cities, and the challenges faced by the municipalities as well as the collectors and recyclers in collection, sorting, and environmentally sound recycling and disposal. Based on these, the project will help facilitate collaboration between the private sector and municipalities opportunities and in terms of developing/upgrading infrastructure (e.g., increasing the number of collection centres), promoting sorting at source, exploring the feasibility to apply best available technologies for plastics recycling, engaging with informal sector, etc. In addition, the sustainability of these partnerships will also be encouraged through improving understanding and awareness to assist key stakeholders attract new sources of financing to adopt circular economy approaches to reduce marine plastics and plastic pollution. The project will facilitate this increased understanding and awareness through the inter-city networks, round-table discussions, etc. The project will also support the sharing of lessons, experiences, and benefits from the circular economy approaches within the LAC region (including ecosystem benefits and socio-economic benefits) to reducing marine plastics and plastic pollution, which will help ensure the uptake of the knowledge generated by the project in the region and the long-term impacts of the project. 3. A mechanism will exist to facilitate the up scaling of the results from this project to other cities within the LAC region and globally. The mechanism will cover the following aspects: 1) scaling up through the development and implementation of the communication strategy to be developed under component 4, which could help generate at an early stage a positive environment for scaling up and at later stage sustain the results achieved by the project. 2) scaling up through engaging actively with relevant stakeholders identified by the project, which will open-up channels for dissemination and promote the scaling-up based on sufficient coordination of interests; 3) scaling up through the expansion of the inter-city network to be established under component 3, which will facilitate the uptake of the best practices from the pilot test of the upstream solutions in the target cities in other cities in the region. 4) scaling up through sharing the knowledge generated by the project via the IW: Learn platform, the Green Growth Knowledge Platform (GGKP)'s website, the SAICM knowledge platform, and the GPML Digital Platform. The risk framework has been significantly improved in the PPG phase (see section 5 of the CEO document, appendix 5 and 8). COVID-19 related risks have been assessed in the updated risk framework, and the specific risks mentioned in the comment considered.
<u>Germany Comments:</u> Germany approves the following PIFs in the work program but asks that the following comments are taken into account: Germany welcomes this proposal which addresses a mayor contamination issue in the region	▪ Component 1: 1. Inclusivity in terms of the integration of informal sector and the participation of women in consultations for the development of the plan have been considered in the updated text under activity 1.2.1.

through a circular economy approach, including public and private actors as the main drivers of change. Suggestions for improvements to be made during the drafting of the final project proposal: ▪ Component 1: 1. City based policy frameworks and action plans should to be designed from their outset with a focus on the social and economic inclusion of waste pickers. We therefore suggest renaming them inclusive city-based policy frameworks for the circular economy. (This is connected with Output 1.1.3.3) 2. The full proposal should clarify in how far certain policies (e.g. regarding product bans, EPR) can indeed be adopted on city level. Alternatively, stronger collaboration with national government entities or a focus on the local testing of approaches (on a voluntary basis or based on adopted national policies) should be envisaged. If the link to the level of individual cities shall be maintained, it might be preferential to focus e.g. on dialogues with local retailers (and their suppliers) to develop waste prevention measures and to reduce the scope of outcome 3. Good decisions on waste flows and circularity from a public and private perspective require good data and information on the municipal level. We suggest including a data and information management system on the circular economy on a municipal level in alignment with national strategies. 4. Extended producer responsibility schemes in Colombia on the municipal level need to be aligned with national regulation (Output 1.1.4 2) Good mechanisms of communications between the municipal and national level in all	2. Concrete policies to be adopted/tested in the cities will be defined by consulting with the city governments and relevant stakeholders under Activity 1.1.2. Under 1.1.2, the project will also assess the feasibility of implementing the policies by considering the policy, socio-economic and local context. Activity 1.3.2 will develop a comprehensive implementation plan of green fiscal policies and financial instruments (including EPR) to address plastic pollution prioritized by the city governments, with thorough assessment of feasibility, including the readiness of legal framework and options for implementation modality. Activity 2.1.2 will identify business upstream interventions (waste prevention measures) to tested in the six cities. It will undertake a thorough brand audit and mapping of key business stakeholders along the plastic value chain in the six project cities, including polymer manufacturers and importers, plastic product and packaging producers, companies using packaging (such as fast-moving consumer goods companies), companies providing alternative materials and solutions other than plastics, key commercial establishments and public entities for plastic consumption (supermarkets, whole sellers, providers for bulk food or catering service, retailers, schools, shopping malls, restaurants, hotels), companies providing reuse and refill services, as well as collection and recycling companies. In the meantime, the project will also identify the most problematic and unnecessary plastics, opportunities for upstream solutions related to sustainable consumption and production, and interests from supporting companies and investors. Then, the project will develop a detailed list of targeted activities (elimination, reduction, and reuse) to be implemented by specific companies through feasibility assessment and stakeholder consultation in all six cities. 3. For the data and information management system on the circular economy on a municipal level, see activity 3.1.2 Develop a performance tracking mechanism and facilitate knowledge exchange among cities and Activity 4.3.1 Develop monitoring indicators and methodologies for progress monitoring. 4. The EPR-related project activities will ensure consultation with national government and alignment with national regulation. The section 6 and appendix 4 on “institutional arrangement and coordination” explains the overall implementation arrangement of the project, including the interaction between national and municipal levels via the national and city working groups. ▪ Component 3: 1. The national working groups to be established under the project will facilitate the sharing of the experiences and lessons learned of each city within its own national context with other cities and actors on the national level. Under Activity 4.2.1 Develop capacity building events and training, there will also be training at national levels to disseminate the learnings within the target countries. Co-financing to component 2 (15 million) is higher than that to component 1 (5.4 million). Project indicators have been significantly updated (see annex A). The calculation of marine plastics reduced and decrease in plastic waste could also be found in the PART II A 6) Global Environment Benefits.

participating countries need to be established and maintained. ▪ Component 3: 1. Besides the learning initiatives among the network of cities, there should also be a mechanism which allows to share the experiences and lessons learned of each city within its own national context with other cities and actors on the national level. (Connected with Output 4.1.2). We expect that the influence of city governments on outcome 2 is relatively limited, therefore one might expect a much higher co-financing contribution of private sector here, but a lower co-financing contribution to outcome 1. In addition, Germany suggests a revision of the outcome indicators: the last two indicators under outcome 1 rather fit to outcome 2, while the last indicator under outcome 2 better fits in outcome 1.	
<u>United States Comments:</u> ▪ The United States requests that this project is circulated to the Council for a four-week review period prior to CEO endorsement. ▪ We do not support activities within the proposed Output 1.1.2, that seek to introduce new bans and/or restriction on plastics at the municipal level. We do support Output 1.1.2 activities focused on examining the potential impacts of alternative product and recommend that such life-cycle analyses be conducted before any further policy action is taken at the municipal level. ▪ We are very supportive of the solid-waste management activities proposed under Output 1.1.3 A ▪ We would like to see a clearer distinction between marine plastics and plastic pollution in the next iteration of the proposal. We can support extended-producer-responsibility schemes only if they remain voluntary.	▪ The project will be circulated to the Council for a four-week review period prior to CEO endorsement. ▪ This is noted and applied throughout the project document. Any ban will be covered by co-financing activities in the countries and the project will not directly support it. ▪ These activities are still included under the project. ▪ As all the 6 project cities are coastal cities, and the Global Environment Benefit indicator 5 calculates specifically amount of marine litter avoided (tonnes), throughout the project document marine plastics is highlighted. In the meantime, plastic pollution is a broader term that includes pollution on land, as well as in the ocean and other environmental compartments, which will be acted upon and evaluated in the project as well. In the alternative scenario, we have designed specific actions to reduce marine plastics (such as reducing the consumption of single-use products that are mostly found in marine litter samples, and organising clean-up activities to reduce littering in rivers and along the beach), and also detailed monitoring and evaluation will be conducted to measure the GEBs to reduced or avoided marine plastics. EPR-related activities will ensure consultation with national level government and alignment with national regulation. Activity 1.3.2 will develop a comprehensive implementation plan of green fiscal policies and financial instruments (including EPR) to address plastic pollution prioritized by the city governments, with thorough assessment of feasibility, including the readiness of legal framework and options for implementation modality. The focus of the project will be to support the governments understand the feasibility, opportunities and challenges in EPR operationalization, as well as providing suggestions how to improve the EPR related regulation and management (such as existing voluntary actions). Within the 4-year project implementation period, the project does not aim to support the countries to implement mandatory EPR regulations.

Annex C – PPG status

UNEP – implemented PPG ($200,000)

Project Preparation Activities Implemented	*GETF/LDCF/SCCF Amount ($)*		
	Budgeted Amount (USD)	*Amount Spent To date (USD)*	*Amount Committed (USD)*
Circular economy expert			
Project document development, including the CEO endorsement document, annexes and appendices	*50,000.00*	*31,699.01*	*18,300.99*
Quantitative baselines for the 6 project cities	*45,000.00*	*45,000.00*	*0*
Gender mainstreaming	*10,000.00*	*10,000.00*	*0*
Sub-total	**105,000**	**86,699.01**	**18,300.99**
Technical expert LAC region baseline			
Regional Coordination consultancy (policy and stakeholder engagement) and project support	*19,000.00*	*14,000.00*	*5,000*
National support/consultants (Jamaica, Panama, and Colombia)	*28,000.00*	*28,280.00*	*-280*
Inception/validation workshops	*18,000.00*	*6,189.44*	*11,810.56*
Sub-total	**65,000.00**	**48,469.44**	**16,530.56**
Consultants on technical and country liaison	**30,000**	**15,000**	**0**
Project document development (incl. alignment with GEF Focal Area, Incremental cost reasoning, institutional arrangements, M&E)	*15,000*	*15,000*	*0*
Country consultation and liaison (incl. translation of national reports, compilation of country data, and engagement of national stakeholders including possible co-finance partners)	*15,000*	*0*	*15,000*
Sub-total	**30,000.00**	**15,000**	**15,000**
Total	**200,000**	**150,168.45**	**49,831.55**

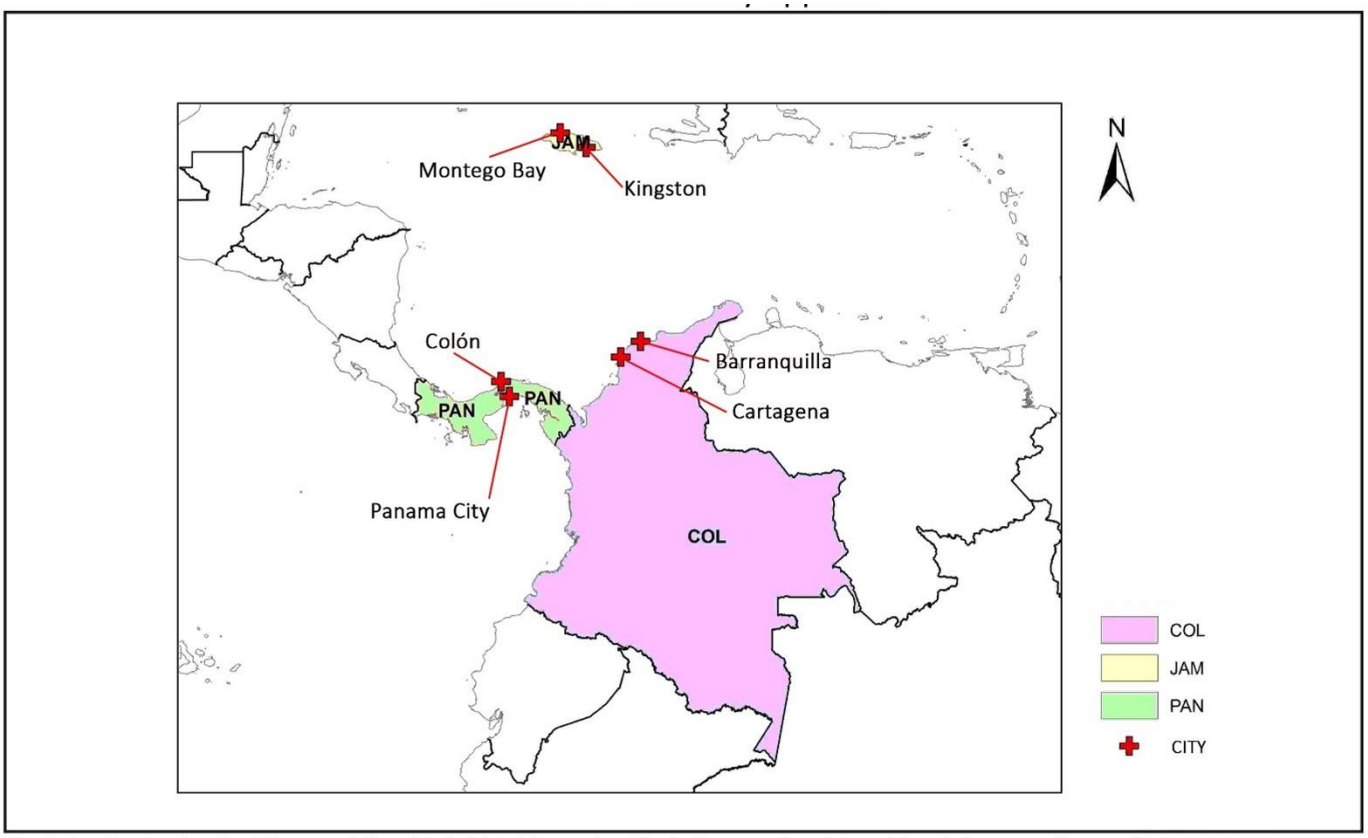
If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake exclusively preparation activities up to one year of CEO Endorsement/approval date. No later than one year from CEO endorsement/approval date. Agencies should report closing of PPG to Trustee in its Quarterly Report.

In delivering the CEO package the GEF implementing agency concluded Internal Cooperation Agreements (ICAs) with different technical teams in UNEP that have different reporting lines. The Regional Office for Latin America and the Caribbean (ROLAC) hired local and regional experts for the project baseline while the Resources and Markets Branch (RMB) hired international consultants that carried out analysis on these baselines and on circular economy.

Annex D – Reflow (not applicable for this project)

N/A

Annex E – Maps



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries

This map is intended for illustrative purposes only and should NOT be used to derive any information regarding the project's operations. No activities planned in any disputed territories

Annex F – Core indicators (GEB)

Core Indicator 5	**Area of marine habitat under improved practices to benefit biodiversity**					***(Hectares)***
Indicator 5.3	Amount of Marine Litter Avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			5,000	*5,065*		
Core Indicator 6	**Greenhouse gas emission mitigated**					***(Metric tons of CO_2e)***
			Expected metric tons of CO_2e (6.1+6.2)			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)		*3,000*	*9,382*		
Indicator 6.2	Emissions avoided Outside AFOLU					
			Expected metric tons of CO_2e			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)		*3,000*	*9,382*		
	Anticipated start year of accounting		*2021*	*2022*		
	Duration of accounting		*4*	*4*		
Core Indicator 7	**Number of shared water ecosystems (fresh or marine) under new or improved cooperative management**					***(Number)***
Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
		Caribbean sea	*2*	*2*		
		Pacific Central American Coastal	*2*	*2*		
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
		Shared water ecosystem	Rating (scale 1-4)			
			Rating		Rating	
			PIF stage	Endorsement	MTR	TE
		Caribbean sea	*2*	*2*		
		Pacific Central American Coastal	*2*	*2*		
Core Indicator 9	**Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products**					***(Metric Tons)***
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE
			0	*54.9*		
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)					
	POPs type		Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	HBCD		*0*	*14*		
	PBDE		*0*	*40.9*		
Indicator 9.6	Quantity of POPs/Mercury containing materials and products directly avoided					
			Metric Tons			
			Expected			Achieved
			PIF stage	Endorsement	PIF stage	Endorsement
		Quantity of POPs containing materials and products directly avoided	*0*	*1,200*		
Core Indicator 10	**Reduction, avoidance of emissions of POPs to air from point and non-point sources**					***(grams of toxic equivalent gTEQ)***
	Reduction, avoidance of emissions of POPs to air from point and non-point sources					*1.16*

Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					***(Number)***
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female	*513,834*	*559,306*		
		Male	*342,556*	*430,856*		
		Total	*856,390*	*990,162*		

Annex G – Taxonomy

Level 1	Level 2	Level 3	Level 4
☒**Influencing models**			
	☒**Transform policy and regulatory environments**		
	☒**Strengthen institutional capacity and decision-making**		
	☒**Convene multi-stakeholder alliances**		
	☒**Demonstrate innovative approaches**		
	☐**Deploy innovative financial instruments**		
☒**Stakeholders**			
	☐**Indigenous Peoples**		
	☒**Private Sector**		
		☐Capital providers	
		☒Financial intermediaries and market facilitators	
		☒Large corporations	
		☒SMEs	
		☒Individuals/Entrepreneurs	
		☐Non-Grant Pilot	
		☐Project Reflow	
	☐**Beneficiaries**		
	☒**Local Communities**		
	☒**Civil Society**		
		☒Community Based Organization	
		☒Non-Governmental Organization	
		☒Academia	
		☐Trade Unions and Workers Unions	

	☒**Type of Engagement**		
		☒Information Dissemination	
		☒Partnership	
		☒Consultation	
		☒Participation	
	☒**Communications**		
		☒Awareness Raising	
		☒Education	
		☒Public Campaigns	
		☒Behavior Change	
☒**Capacity, Knowledge and Research**			
	☒**Enabling Activities**		
	☒**Capacity Development**		
	☒**Knowledge Generation and Exchange**		
	☐**Targeted Research**		
	☒**Learning**		
		☐Theory of Change	
		☐Adaptive Management	
		☒Indicators to Measure Change	
	☒**Innovation**		
	☒**Knowledge and Learning**		
		☒Knowledge Management	
		☒Innovation	
		☒Capacity Development	
		☒Learning	
	☒**Stakeholder Engagement Plan**		
☒**Gender Equality**			
	☒**Gender Mainstreaming**		
		☒Beneficiaries	
		☐Women groups	
		☒Sex-disaggregated indicators	
		☐Gender-sensitive indicators	
	☒**Gender results areas**		
		☐Access and control over natural resources	
		☒Participation and leadership	
		☐Access to benefits and services	
		☒Capacity development	
		☒Awareness raising	
		☒Knowledge generation	
☒**Focal Areas/Theme**			

	☒**Integrated Programs**		
		☐Commodity Supply Chains (Good Growth Partnership)	
			☐Sustainable Commodities Production
			☐Deforestation-free Sourcing
			☐Financial Screening Tools
			☐High Conservation Value Forests
			☐High Carbon Stocks Forests
			☐Soybean Supply Chain
			☐Oil Palm Supply Chain
			☐Beef Supply Chain
			☐Smallholder Farmers
			☐Adaptive Management
		☐Food Security in Sub-Sahara Africa	
			☐Resilience (climate and shocks)
			☐Sustainable Production Systems
			☐Agroecosystems
			☐Land and Soil Health
			☐Diversified Farming
			☐Integrated Land and Water Management
			☐Smallholder Farming
			☐Small and Medium Enterprises
			☐Crop Genetic Diversity
			☐Food Value Chains
			☐Gender Dimensions
			☐Multi-stakeholder Platforms
		☐Food Systems, Land Use and Restoration	
			☐Sustainable Food Systems
			☐Landscape Restoration
			☐Sustainable Commodity Production
			☐Comprehensive Land Use Planning
			☐Integrated Landscapes
			☐Food Value Chains
			☐Deforestation-free Sourcing
			☐Smallholder Farmers
		☒Sustainable Cities	
			☐Integrated urban planning
			☐Urban sustainability framework
			☐Transport and Mobility
			☐Buildings

			☐Municipal waste management
			☐Green space
			☐Urban Biodiversity
			☐Urban Food Systems
			☐Energy efficiency
			☐Municipal Financing
			☒Global Platform for Sustainable Cities
			☐Urban Resilience
	☐**Biodiversity**		
		☐Protected Areas and Landscapes	
			☐Terrestrial Protected Areas
			☐Coastal and Marine Protected Areas
			☐Productive Landscapes
			☐Productive Seascapes
			☐Community Based Natural Resource Management
		☐Mainstreaming	
			☐Extractive Industries (oil, gas, mining)
			☐Forestry (Including HCVF and REDD+)
			☐Tourism
			☐Agriculture & agrobiodiversity
			☐Fisheries
			☐Infrastructure
			☐Certification (National Standards)
			☐Certification (International Standards)
		☐Species	
			☐Illegal Wildlife Trade
			☐Threatened Species
			☐Wildlife for Sustainable Development
			☐Crop Wild Relatives
			☐Plant Genetic Resources
			☐Animal Genetic Resources
			☐Livestock Wild Relatives
			☐Invasive Alien Species (IAS)
		☐Biomes	
			☐Mangroves
			☐Coral Reefs
			☐Sea Grasses

			☐Wetlands
			☐Rivers
			☐Lakes
			☐Tropical Rain Forests
			☐Tropical Dry Forests
			☐Temperate Forests
			☐Grasslands
			☐Paramo
			☐Desert
		☐Financial and Accounting	
			☐Payment for Ecosystem Services
			☐Natural Capital Assessment and Accounting
			☐Conservation Trust Funds
			☐Conservation Finance
		☐Supplementary Protocol to the CBD	
			☐Biosafety
			☐Access to Genetic Resources Benefit Sharing
	☐**Forests**		
		☐Forest and Landscape Restoration	
			☐REDD/REDD+
		☐Forest	
			☐Amazon
			☐Congo
			☐Drylands
	☐**Land Degradation**		
		☐Sustainable Land Management	
			☐Restoration and Rehabilitation of Degraded Lands
			☐Ecosystem Approach
			☐Integrated and Cross-sectoral approach
			☐Community-Based NRM
			☐Sustainable Livelihoods
			☐Income Generating Activities
			☐Sustainable Agriculture
			☐Sustainable Pasture Management
			☐Sustainable Forest/Woodland Management
			☐Improved Soil and Water Management Techniques
			☐Sustainable Fire Management
			☐Drought Mitigation/Early Warning

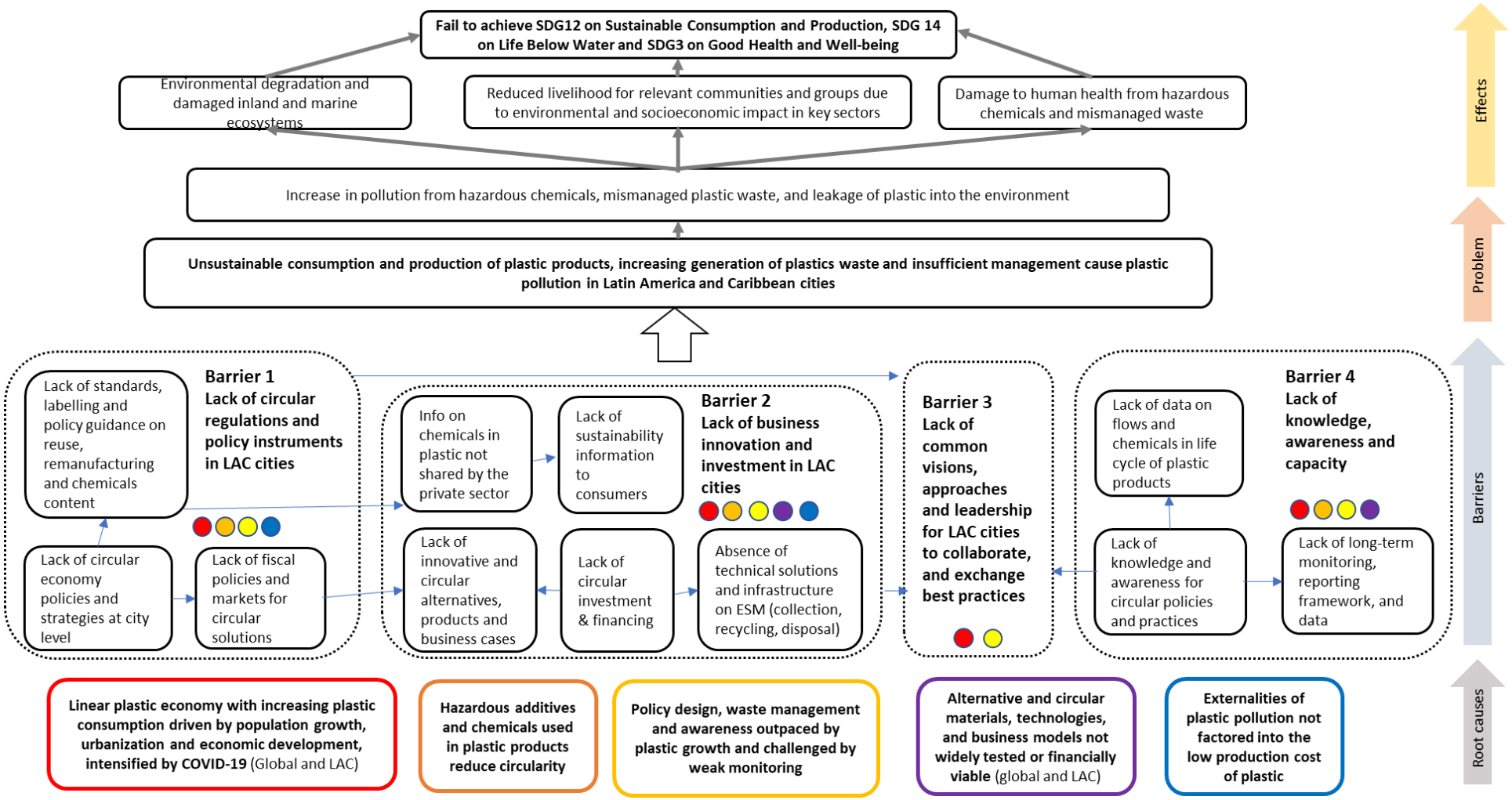
		☐Land Degradation Neutrality	
			☐Land Productivity
			☐Land Cover and Land cover change
			☐Carbon stocks above or below ground
		☐Food Security	
	☒**International Waters**		
		☐Ship	
		☒Coastal	
		☐Freshwater	
			☐Aquifer
			☐River Basin
			☐Lake Basin
		☒Learning	
		☐Fisheries	
		☒Persistent toxic substances	
		☒SIDS : Small Island Dev States	
		☐Targeted Research	
		☒Pollution	
			☒Persistent toxic substances
			☒Plastics
			☐Nutrient pollution from all sectors except wastewater
			☐Nutrient pollution from Wastewater
		☐Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		☐Strategic Action Plan Implementation	
		☐Areas Beyond National Jurisdiction	
		☒Large Marine Ecosystems	
		☐Private Sector	
		☐Aquaculture	
		☐Marine Protected Area	
		☐Biomes	
			☐Mangrove
			☐Coral Reefs
			☐Seagrasses
			☐Polar Ecosystems
			☐Constructed Wetlands
	☒**Chemicals and Waste**		
		☐Mercury	
		☐Artisanal and Scale Gold Mining	
		☐Coal Fired Power Plants	

		☐Coal Fired Industrial Boilers	
		☐Cement	
		☐Non-Ferrous Metals Production	
		☐Ozone	
		☒ Persistent Organic Pollutants	
		☒Unintentional Persistent Organic Pollutants	
		☐Sound Management of chemicals and Waste	
		☒Waste Management	
			☒Hazardous Waste Management
			☐Industrial Waste
			☐e-Waste
		☐Emissions	
		☐Disposal	
		☐New Persistent Organic Pollutants	
		☐Polychlorinated Biphenyls	
		☒Plastics	
		☐Eco-Efficiency	
		☐Pesticides	
		☐DDT - Vector Management	
		☐DDT - Other	
		☐Industrial Emissions	
		☐Open Burning	
		☒ Best Available Technology / Best Environmental Practices	
		☒ Green Chemistry	
	☐**Climate Change**		
		☐Climate Change Adaptation	
			☐Climate Finance
			☐Least Developed Countries
			☐Small Island Developing States
			☐Disaster Risk Management
			☐Sea-level rise
			☐Climate Resilience
			☐Climate information
			☐Ecosystem-based Adaptation
			☐Adaptation Tech Transfer
			☐National Adaptation Programme of Action
			☐National Adaptation Plan
			☐Mainstreaming Adaptation
			☐Private Sector
			☐Innovation

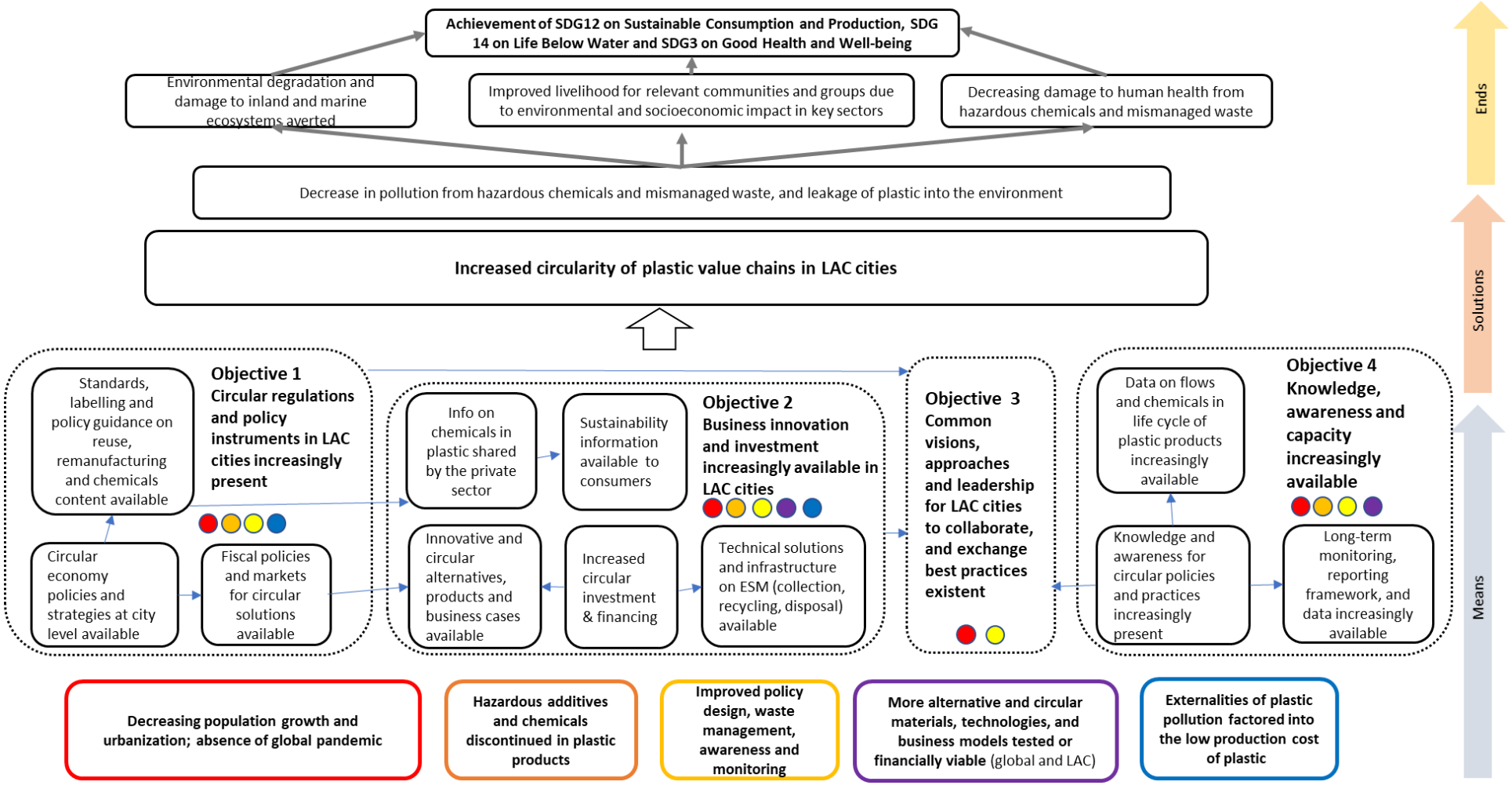
			☐Complementarity
			☐Community-based Adaptation
			☐Livelihoods
		☐**Climate Change Mitigation**	
			☐Agriculture, Forestry, and other Land Use
			☐Energy Efficiency
			☐Sustainable Urban Systems and Transport
			☐Technology Transfer
			☐Renewable Energy
			☐Financing
			☐Enabling Activities
		☐**Technology Transfer**	
			☐Poznan Strategic Programme on Technology Transfer
			☐Climate Technology Centre & Network (CTCN)
			☐Endogenous technology
			☐Technology Needs Assessment
			☐Adaptation Tech Transfer
		☐**United Nations Framework on Climate Change**	
			☐Nationally Determined Contribution

Appendix 1 – Problem Tree, Objectives Tree and Theory of Change

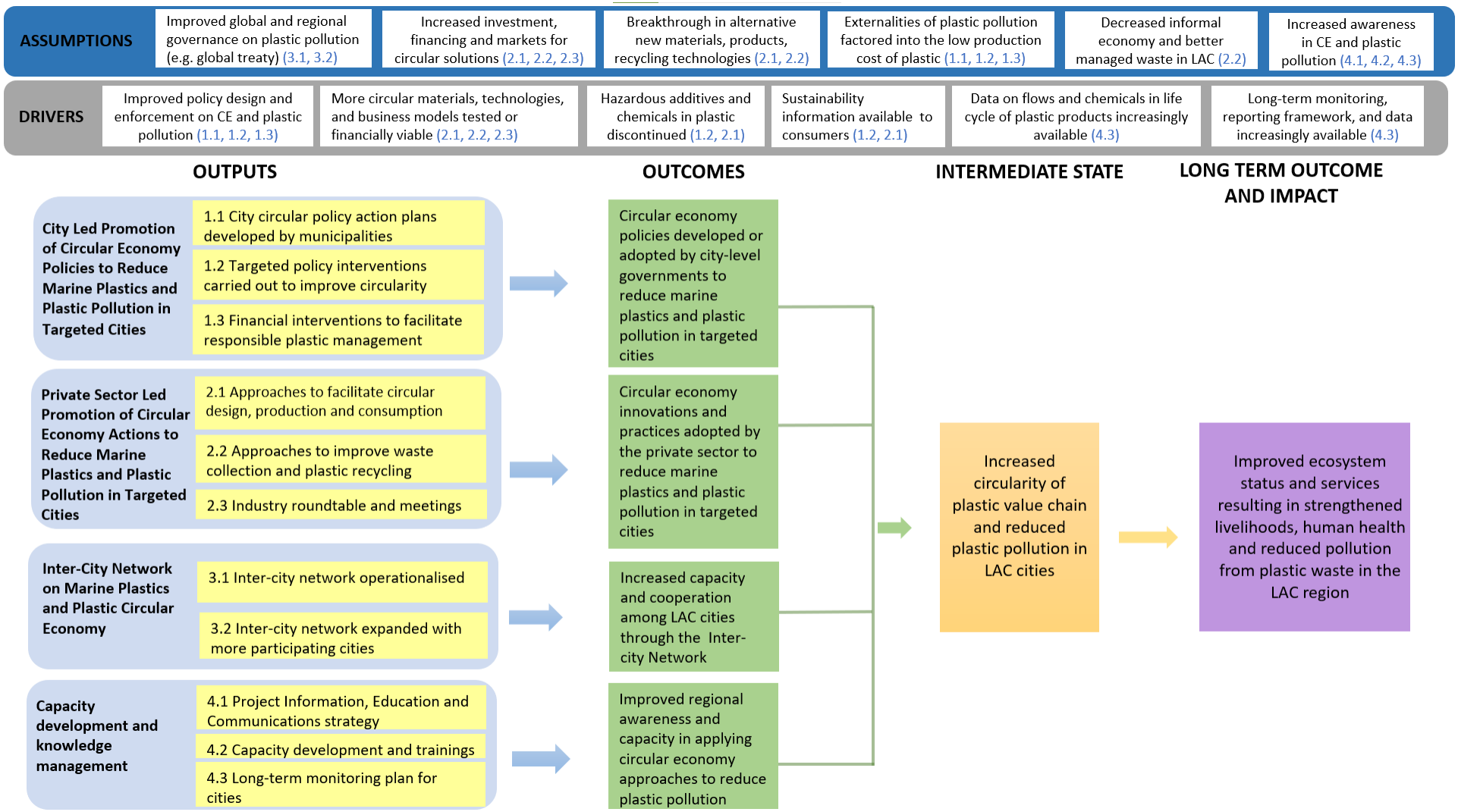
Problem Tree



Objective Tree



ToC


ASSUMPTIONS
Improved global and regional governance on plastic pollution (e.g. global treaty) (3.1, 3.2)
Increased investment, financing and markets for circular solutions (2.1, 2.2, 2.3)
Breakthrough in alternative new materials, products, recycling technologies (2.1, 2.2)
Externalities of plastic pollution factored into the low production cost of plastic (1.1, 1.2, 1.3)
Decreased informal economy and better managed waste in LAC (2.2)
Increased awareness in CE and plastic pollution (4.1, 4.2, 4.3)
DRIVERS
Improved policy design and enforcement on CE and plastic pollution (1.1, 1.2, 1.3)
More circular materials, technologies, and business models tested or financially viable (2.1, 2.2, 2.3)
Hazardous additives and chemicals in plastic discontinued (1.2, 2.1)
Sustainability information available to consumers (1.2, 2.1)
Data on flows and chemicals in life cycle of plastic products increasingly available (4.3)
Long-term monitoring, reporting framework, and data increasingly available (4.3)
OUTPUTS
OUTCOMES
INTERMEDIATE STATE
LONG TERM OUTCOME AND IMPACT
City Led Promotion of Circular Economy Policies to Reduce Marine Plastics and Plastic Pollution in Targeted Cities
1.1 City circular policy action plans developed by municipalities
1.2 Targeted policy interventions carried out to improve circularity
1.3 Financial interventions to facilitate responsible plastic management
Private Sector Led Promotion of Circular Economy Actions to Reduce Marine Plastics and Plastic Pollution in Targeted Cities
2.1 Approaches to facilitate circular design, production and consumption
2.2 Approaches to improve waste collection and plastic recycling
2.3 Industry roundtable and meetings
Inter-City Network on Marine Plastics and Plastic Circular Economy
3.1 Inter-city network operationalised
3.2 Inter-city network expanded with more participating cities
Capacity development and knowledge management
4.1 Project Information, Education and Communications strategy
4.2 Capacity development and trainings
4.3 Long-term monitoring plan for cities
Circular economy policies developed or adopted by city-level governments to reduce marine plastics and plastic pollution in targeted cities
Circular economy innovations and practices adopted by the private sector to reduce marine plastics and plastic pollution in targeted cities
Increased capacity and cooperation among LAC cities through the Inter-city Network
Improved regional awareness and capacity in applying circular economy approaches to reduce plastic pollution
Increased circularity of plastic value chain and reduced plastic pollution in LAC cities
Improved ecosystem status and services resulting in strengthened livelihoods, human health and reduced pollution from plastic waste in the LAC region

Appendix 2 – GEF Budget and Workplan

The budget has been adjusted to reduce the amount for terminal evaluation and midterm review in line with the recommendation of UNEP's Independent Evaluation
The budget has been adjusted in line with the PPO review comments. The separate budget excel (Appendix 2A) provides a more detailed overview. Changes have been highlighted in the 'Broken by Activity' sheet.

Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach
Project overall Budget

Do NOT edit the content of this page. All cells are linked to individual sheets

			Component 1: City led promotion of circular	Component 2: Private sector led promotion of circular economy	Component 3: Inter-city circularity network	Component 4: Capacity development & knowledge management	M&E	PMC	Total	Allocation per fiscal year			
UNEP BUDGET LINE/OBJECT OF EXPENDITURE			US$	US$	US$	US$	US$	US$	US$	Y1 - US$	Y2 - US$	Y3 - US$	Y4 - US$
Class_010	STAFF AND PERSONNEL												
	1100	Project Personnel (Project Management 5% of overall total)											
	1101	Project Coordination	-	-	-	-	-	233,333	233,333	58,333	58,333	58,333	58,334
		Subtotal	-	-	-	-	-	233,333	233,333	58,333	58,333	58,333	58,334
	1200	Consultants w/m											
	1201	Global circularity consultants	130,000	95,000	-	90,000	-	-	315,000	85,000	105,000	95,000	30,000
	1202	Inter-city network affairs consultants	-	-	285,000	-	-	-	285,000	100,000	100,000	55,000	30,000
	1203	Gender and social expert	-	-	-	80,000	-	-	80,000	40,000	-	-	40,000
	1204	City consultants for action plans in 3 new cities	-	-	180,000	-	-	-	180,000	-	60,000	60,000	60,000
	1205	Long term monitoring specialist	-	-	-	55,000	-	-	55,000	-	-	35,000	20,000
	1206	Consultant for the calculation tool on the chemicals for plastics	-	-	-	50,000	-	-	50,000	-	-	30,000	20,000
	1207	Project Procurement Consultant	-	-	-	-	-	100,000	100,000	25,000	25,000	25,000	25,000
	1208	Cities sustainable procurement expert	100,000	-	-	30,000	-	-	130,000	52,500	62,500	7,500	7,500
		Subtotal	230,000	95,000	465,000	305,000	-	100,000	1,195,000	302,500	352,500	307,500	232,500
	1300	Administrative Support											
	1301	HR, procurement, financial management	-	-	-	-	-	-	-	-	-	-	-
		Subtotal	-	-	-	-	-	-	-	-	-	-	-
	1600	Travel on official business (above staff)											
	1601	Travel for project personnel	60,000	70,000	90,000	-	-	-	220,000	57,500	57,500	52,500	52,500
		Subtotal	60,000	70,000	90,000	-	-	-	220,000	57,500	57,500	52,500	52,500
Class_140	SUB CONTRACT COMPONENT												
	2100	Grants issued to Implementing Partner (IP) on official business (above staff)											
	2101	Policy and business solution - Cartagena	235,000	310,000	-	-	-	-	545,000	180,000	250,000	115,000	-
	2102	Policy and business solution - Barranquilla	235,000	310,000	-	-	-	-	545,000	180,000	250,000	115,000	-
	2103	Policy and business solution - Panama City	235,000	310,000	-	-	-	-	545,000	180,000	250,000	115,000	-
	2104	Policy and business solution - Colon	235,000	310,000	-	-	-	-	545,000	180,000	250,000	115,000	-
	2105	Policy and business solution - Kingston	235,000	310,000	-	-	-	-	545,000	180,000	250,000	115,000	-
	2106	Policy and business solution - Montego Bay	235,000	310,000	-	-	-	-	545,000	180,000	250,000	115,000	-
	2107	City circularity support	90,000	130,000	-	-	-	-	220,000	55,000	55,000	55,000	55,000
	2108	Best practices for policy and business solutions	40,000	80,000	-	-	-	-	120,000	120,000	-	-	-
	2109	knowledge management and communication	-	-	-	230,000	-	-	230,000	40,000	60,000	60,000	70,000
		Subtotal	1,540,000	2,070,000	-	230,000	-	-	3,840,000	1,295,000	1,615,000	805,000	125,000
Class_120	TRAINING COMPONENT												
	3200	Group training (field trips, WS, etc.)											
	3201	national level trainings	-	-	-	175,000	-	-	175,000	-	175,000	-	-
	3202	Regional training	-	-	-	159,583	-	-	159,583	-	-	-	159,583
		Subtotal	-	-	-	334,583	-	-	334,583	-	175,000	-	159,583
	3300	Meetings/conferences											
	3301	Cities policy development and consultation	90,000	-	-	-	-	-	90,000	30,000	30,000	30,000	-
	3302	Business sectors consultations and industrial roundtable meeting	-	120,000	-	-	-	-	120,000	32,500	32,500	27,500	27,500
	3303	Inter-city network meetings	-	-	229,584	-	-	-	229,584	-	110,000	-	119,584
	3304	Inception meeting + SC meeting in Y1	-	-	-	-	40,000	-	40,000	40,000	-	-	-
	3305	Steering Committee meetings in Y2- Y4, natonal and city working group meetings	-	-	-	-	148,000	-	148,000	37,000	37,000	37,000	37,000
	3306	closing meeting	-	-	-	-	40,000	-	40,000	-	-	-	40,000
		Subtotal	90,000	120,000	229,584	-	228,000	-	667,584	139,500	209,500	94,500	224,084
Class_130/135	Supplies Commodities and Materials												
	4100	Expendable equipment (under 1,500 $)											
	4101	Office stationary/supplies	-	-	-	-	1,500	-	1,500	375	375	375	375
		Subtotal	-	-	-	-	1,500	-	1,500	375	375	375	375
	4200	Non expendable equipment											
	4201	IT equipment (laptop for project assistant)	-	-	-	-	3,000	-	3,000	3,000	-	-	-
	4202	Software	-	-	-	-	-	-	-	-	-	-	-
		Subtotal	-	-	-	-	3,000	-	3,000	3,000	-	-	-
Class_125	MISCELLANEOUS COMPONENT												
	5200	Reporting costs (publications, maps, NL)											
	5201	Translation	-	-	-	100,000	-	-	100,000	20,000	20,000	30,000	30,000
	5102	Editor	-	-	-	80,000	-	-	80,000	10,000	20,000	30,000	20,000
	5203	Graphic designer	-	-	-	80,000	-	-	80,000	10,000	20,000	30,000	20,000
		Subtotal	-	-	-	260,000	-	-	260,000	40,000	60,000	90,000	70,000
	5300	Sundry (communications, postages)											
	5301	Project website and inter-city work website	-	-	30,000	60,000	-	-	90,000	60,000	10,000	10,000	10,000
	5302	Videos	-	-	-	80,000	-	-	80,000	-	40,000	-	40,000
		Subtotal	-	-	30,000	140,000	-	-	170,000	60,000	50,000	10,000	50,000
	5400	Monitoring and evalutation											
	5401	Midterm	-	-	-	-	35,000	-	35,000	-	35,000	-	-
	5402	Terminal evaluation	-	-	-	-	40,000	-	40,000	-	-	-	40,000
		Subtotal	-	-	-	-	75,000	-	75,000	-	35,000	-	40,000
	TOTAL COSTS		1,920,000	2,355,000	814,584	1,269,583	307,500	333,333	7,000,000	1,956,208	2,613,208	1,418,208	1,012,376
										28%	37%	20%	14%
									7,000,000				7,000,000

Workplan

Project Outcomes, Outputs and Activites		Year 1				Year 2				Year 3				Year 4			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Outcome 1 Circular economy policies adopted or improved by city-level governments to reduce marine plastics and plastic pollution in targeted cities																	
Output 1.1	**Policy action plans developed by municipalities to promote circular economy approaches for plastics**																
Activity 1.1.1	Conduct global review of policy framework with recommendations for LAC																
Activity 1.1.2	Develop policy action plan for six cities																
Output 1.2	**Targeted policy interventions carried out to improve circularity**																
Activity 1.2.1	Identify global best policy practices and propose recommendations for LAC																
Activity 1.2.2	Support the implementation of selected policies in six cities																
Output 1.3	**Financial instruments developed to facilitate responsible plastics management**																
Activity 1.3.1	Identify global best practices on financial instruments																
Activity 1.3.2	Develop implementation plans for selected financial instruments																
Outcome 2 Circular economy innovations and practices adopted by the private sector to reduce marine plastics and plastic pollution in targeted cities																	
Output 2.1	**Approaches developed and tested to facilitate more circular design, production, and consumption of plastics**																
Activity 2.1.1	Identify global best practices on business upstream innovations																
Activity 2.1.2	Identify business upstream interventions in six cities																
Activity 2.1.3	Pilot test business upstream interventions in six cities																
Output 2.2	**Approaches developed and tested to improve collection and recycling of plastic waste**																
Activity 2.2.1	Identify global best practices on collection and recycling																
Activity 2.2.2	Pilot test solutions to improve collection and recycling in six cities																
Output 2.3	**Industry roundtable on plastic circular economy established and roundtable meetings organised**																
Activity 2.3.1	Establish the industry roundtable and organize roundtable meetings																
Outcome 3 Increased capacity and cooperation among LAC cities through the LAC Inter-city Network on marine plastics and plastic circular economy																	
Output 3.1	**Inter-city network operationalised**																
Activity 3.1.1	Strategy, governance, vision, and missions of the inter-city network developed																
Activity 3.1.2	Establish the inter-city network																
Output 3.2	**Inter-city network expanded with more participating cities**																
Activity 3.2.1	Develop a harmonized action plan for cities and expand the network																
Outcome 4 Outcome 4 Improved regional and global awareness, knowledge and capacity applied, to reduce marine plastics and plastic pollution																	
Output 4.1	**Information, Education and Communication (IEC) strategy for the project developed and implemented including through using IW:LEARN platform, GGKP and GPML platforms**																
Activity 4.1.1	Establish a project website																
Activity 4.1.2	Develop and implement the project communication strategy																
Activity 4.1.3	Compile and disseminate project knowledge products via various platforms																
Output 4.2	**Targeted capacity building activities conducted**																
Activity 4.2.1	Develop capacity building events and training																
Output 4.3	**Long-term monitoring conducted by cities on the implementation of circular economy approaches and associated reduction in plastic pollution**																
Activity 4.3.1	Develop monitoring indicators and methodologies for progress monitoring																

Appendix 3 – Co-finance letters and co-finance budget

Alliance to End Plastic Waste Limited
endplasticwaste.org

ALLIANCE TO END PLASTIC WASTE

26 November 2021

To:

Ms. Isabelle Van der Beck
Task Manager - GEF International Waters
UN Environment Programme
900 17th Street NW
Washington, D.C. 20006
Tel: +1 (202) 974-1314
E-mail: isabelle.vanderbeck@unep.org

Mr. Ludovic Bernaudat
Senior Task Manager - Chemicals and Health
Branch - Economy Division
UN Environment Programme
8-14 Avenue de la Paix
CH-1211 Geneva, Switzerland
Tel: +41 22 917 8312
Cell: +41 79 477 0833
E-mail: ludovic.bernaudat@un.org

Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Bernaudat,

The Alliance to End Plastic Waste (the "Alliance") is a global non-profit organisation that brings together industry, government, civil society, development agencies and investors to help end plastic waste in the environment. The Alliance has 90 members and partners drawn from across the world's leading organisations in the plastic value chain to develop, accelerate and scale technologies and solutions focusing on integrated waste management systems, engaging communities and catalysing capital towards a circular economy. The Alliance is pleased to inform you that co-financing for the project has been secured as follows:

1. Co-financing in-kind from the Alliance-supported GIRO Rethinking Recycling project, implemented by Delterra in Olavarria, Argentina which includes the development of a materials recovery facility, increasing the efficiency of collection through community engagement and source segregation, and identification of economic solutions for recyclables.	**USD**	**$1.9M**
2. Co-financing in-kind from the Alliance-supported project with Instituto Recicleiros in Brazil which will include the development of community-based plastic waste aggregation, sorting, and recycling systems across 60 mid-sized cities in Brazil that will be supported by community education activities to promote participation and proper segregation of waste.	**USD**	**$2.2M**
Total	**USD**	**$4.1M**

The USD $4.44M of in-kind co-financing from the Alliance-supported projects are based on estimated contributions of direct project costs that will establish effective waste management and recycling systems

in the locations of operation. In both projects, there is an emphasis on community engagement and capacity building to effect change in the recovery and recycling of plastic waste. The Alliance's support is not limited to cash-financing but also includes expertise from Alliance staff and representatives from the Alliance's member companies.

The Alliance's co-financing in respect to the UNEP/GEF project is subject to approval by project implementation partners and potentially other co-funders of the aforementioned projects.

With respect to the Alliance's total planned co-financing for this project, it is estimated that USD $4.44M will represent investments mobilized for the defined period of the projects covering initial capital expenditure and time-limited operational expenses.

Yours sincerely,

Jacob Duer
President and Chief Executive Officer
Alliance to End Plastic Waste

Para: Sra. Isabelle Van der Beck
Jefe – Aguas Internacionales GEF
Programa de las Naciones Unidas para el Medio Ambiente
900 17th Street NW
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Sr. Ludovic Bernaudat
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Asunto: Carta de compromiso con respecto a la cofinanciación del proyecto UNEP/GEF titulado "Reducir los plásticos marinos y la contaminación plástica en ciudades de América Latina y el Caribe a través de un enfoque de economía circular" (GEF ID 10547).

Estimados Sra. Van der Beck y Sr. Bernaudat,

En el marco del Plan de Desarrollo 2020 – 2023: "Soy Barranquilla", específicamente, bajo el reto Soy Biodiverciudad, la Alcaldía Distrital de Barranquilla busca tener una ciudad sostenible, en la cual se integren a su dinámica, todas las discusiones sobre el medioambiente, la sostenibilidad y conservación. En este mismo contexto, mediante el Decreto No. 0063 de 2021, se adopta la revisión, ajuste y actualización del Plan de Gestión Integral de Residuos Sólidos (PGIRS) del Distrito Especial Industrial y Portuario de Barranquilla 2021- 2032", en el contenido del mencionado PGIRS, se establece un conjunto ordenado de objetivos, metas, programas, proyectos, actividades y recursos para el manejo de los residuos sólidos, basado en la política de gestión integral de los mismos, basándonos en la línea base que establece la situación actual, su proyección hacia el futuro y en un plan financiero viable que permita garantizar el mejoramiento continuo del manejo de residuos y la prestación del servicio de aseo atendiendo las necesidades del Distrito, evaluado a través de la medición de resultados. En este caso se contemplan 3 programas importantes descritos a continuación:

- El Programa Institucional para la Prestación del Servicio Público de Aseo, teniendo como uno de sus propósitos, la articulación interinstitucional de estrategias que permitan direccionar la planificación y seguimiento a la gestión integral de residuos sólidos en el Distrito de Barranquilla. En este sentido, se desarrolla el Proyecto de campañas educativas de sensibilización de cultura ciudadana y manejo integral de residuos sólidos, fomentando la separación en la fuente de los residuos sólidos que permitan el uso del código de colores establecido en la normatividad, generando

conciencia en la ciudadania desde nuestro rol como generadores evitamos la contaminación plástica el mar Caribe el mar abierto en el océano Atlántico tropical que bordea el Distrito de Barranquilla. Igualmente por medio de las campañas se busca concientizar y enseñar a la ciudadania la correcta entrega de los residuos, que nos permita garantizar la acción adecuada por el tipo de residuo dispuesto, ya sea tratamiento, aprovechamiento, y disposición final.

- El Programa de disposición final, el cual contiene el Proyecto de erradicación de puntos críticos en la ciudad de Barranquilla D.E.I.P, y la consecuente acumulación de residuos en vías y áreas públicas que tiene como proposito erradicar los puntos críticos desde las causas, que afectan gravemente la ciudad desde el eje ambiental, sanitario y social por la inadecuada disposición de residuos en andes, canales, arroyos, entre otros. En este sentido la adecuada disposición de los residuos nos permite incorporar a las cadenas productivas los residuos aprovechables que actualmente se disponen en estos puntos críticos y evitamos los plásticos marinos y la contaminación plástica en el Oceano Atlantico.

- El Programa de aprovechamiento, incluye acciones enmarcadas en la gestión de fortalecer las Estaciones de Clasificación y Aprovechamiento de Residuos Sólidos - ECAS del Distrito, como estrategia para el manejo de los residuos aprovechables generados internamente desde las diferentes oficinas, instituciones y edificaciones públicas se planifica la construcción y operación de una ECA que contribuye al manejo adecuado de los residuos permitiendo el desarrollo de la economía circular desde la Alcaldía y disminuyendo los residuos plásticos que afectan el ecosistema marino del Mar caribe si no tienen una adecuada gestión.

La organización se complace en informarle que la cofinanciación del proyecto se ha asegurado de la siguiente manera:

2. Cofinanciación en especie por el tiempo equivalente en sueldo y salarios del personal de la Alcaldía de Barranquilla, desde la Oficina de Servicios Públicos encargados de coordinar y supervisar la implementación y puesta en marcha del Plan de Gestión Integral de Residuos Sólidos PGIRS del D.E.I.P. de Barranquilla.	USD	*131.367 anual*
	Total USD	***131.367 anual***

Los *131.367 dolares anual* de cofinanciación en especie para la coordinación, política y planificación nacional se basa en las contribuciones *de personal especializado en el manejo de residuos sólidos contratado en la Oficina de Servicios Públicos dependencia de la Gerencia de Ciudad, Alcaldía de Barranquilla para la implementación y seguimiento del Plan de Gestión Integral de Residuos Sólidos del Distrito. A su vez se relaciona los gastos operativos de transporte, espacio de oficinas, comunicaciones y servicios técnicos, requerimientos de apoyo para la implementación del proyecto.*

Los USD *131.367 dolares anual* del cofinanciamiento (en especie) de iniciativas existentes y en curso de *la Alcaldía de Barranquilla* en *Colombia* en la región de América Latina y el Caribe que se alinean con las metas y objetivos del área del proyecto, se desglosan de la siguiente manera:

Título de la iniciativa	**Fuente de financiamiento**	**Monto (USD)**
Desarrollo de 3 proyectos (Campañas de educación y sensibilización, Erradicación de puntos críticos y Estación de clasificación y aprovechamiento de residuos sólidos) del Plan de Gestión Integral residuos sólidos para Reducir los plásticos marinos y la contaminación plástica en el Distrito de Barranquilla a través de un enfoque de economía circular	Alcaldía de Barranquilla	*131.367*

Con respecto a la cofinanciación total planificada de la organización para este proyecto, se estima que USD *131.367 anual* representará gastos recurrentes.

JUAN CARLOS GOMEZ VALLEJO
Jefe Oficina de Servicios Públicos.
Gerencia de Ciudad
Alcaldia de Barranquilla.

AMC-OFI-0098851-2021

Cartagena de Indias D. T y C., miércoles, 18 de agosto de 2021

Oficio AMC-OFI-0098851-2021

Para: Sra. Isabelle Van der Beck
Jefe – Aguas Internacionales GEF
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Subject: **Letter of commitment regarding the co-financing of the UNEP / GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).**

Dear Mrs. Van der Beck and Mr. Bernaudat,

The Mayor's Office of Cartagena de Indias is the local authority of one of the cities in Colombia selected to implement the GEF-LAC ID10547 project, "*Reduction of marine plastics and plastic pollution in the cities of Latin America and the Caribbean through a circular economy approach* ". We are pleased to inform you that the co-financing of the project has been secured as follows:

Co-financing in kind with the nature of recurring expenses.	USD	*789,700*
	USD	***789,700***

The *USD 789,700* of co-financing in kind correspond to the support during 2022 and 2023 (during Mayor William Dau's appointment). This contribution refers to recurring expenses for coordination, policy and planning that corresponds to the Mayor's Office of Cartagena de Indias and is based on the estimated contributions of individual's time, local transportation, office space, and local, national and international communications in support of the implementation of the GEF-LAC ID10547 project and its activities aligned with the District Development Plan "Salvemos Juntos a Cartagena 2020-2023".

We will make a great effort for the sustainability of the project by prioritizing it and allocating resources during handover at the end of 2023. For this period, we have estimated the co-financing for the years 2024 and 2025 at ***USD 854,140***, which would be allocated through the 2023-2027 Development Plan.

This would imply a total estimated contribution by the city of Cartagena of approximately ***USD 1,643,840 (TRM 12 08 2021)*** during the 4 years of project implementation.

Regards,

WILLIAM DAU CHAMATT
Mayor of Cartagena de Indias

Proyectó: Ana María Gonzalez, International Cooperation
Revisó: Luis Enrique Roa Merchán, Secretary General

AMC-OFI-0098851-2021

Cartagena de Indias D. T y C., miércoles, 18 de agosto de 2021

Oficio AMC-OFI-0098851-2021

Para: Sra. Isabelle Van der Beck
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para el Medio Ambiente
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Sr. Ludovic Bernaudat
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Salud - División de Economía
Programa de las Naciones Unidas
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Asunto: **Carta de compromiso con respecto a la cofinanciación del proyecto UNEP/GEF titulado "Reducir los plásticos marinos y la contaminación plástica en ciudades de América Latina y el Caribe a través de un enfoque de economía circular" (GEF ID 10547).**

Estimados Sra. Van der Beck y Sr. Bernaudat,

La Alcaldía Mayor de Cartagena de Indias, es la autoridad local de una de las ciudades en Colombia seleccionada para implementar el proyecto GEF-LAC ID10547 "*Reducción de plásticos marinos y la contaminación plástica en las ciudades de América Latina y el Caribe a través de un enfoque de economía circular*". La Alcaldía se complace en informarle que la cofinanciación del proyecto se ha asegurado de la siguiente manera:

Cofinanciación en especie con naturaleza de gastos recurrentes.	USD	*789,700*
Total	**USD**	***789,700***

Los *USD 789,700* de cofinanciación en especie corresponden al apoyo que será ofrecido al proyecto durante los años 2022 y 2023 del periodo del señor Alcalde William Dau Chamat. Esta contribución se refiere a gastos recurrentes para la coordinación, política y planificación que corresponda a la Alcaldía Mayor de Cartagena de Indias y se basa en las contribuciones estimadas del tiempo del personal, transporte local, espacio de oficinas e instalaciones y las comunicaciones distritales, nacionales e internacionales en apoyo de la implementación del proyecto GEF-LAC ID10547 y sus actividades alineadas con el Plan de Desarrollo Distrital "Salvemos Juntos a Cartagena 2020-2023".

Haremos un esfuerzo grande de empalme y sostenibilidad del proyecto, para lo cual hemos estimado la cofinanciación adicional para los años 2024 y 2025 en ***USD 854,140***, de tal manera que se dé la continuidad sostenida del mismo.

Lo anterior implicaría un aporte total estimado de aproximadamente ***USD 1,643,840 (TRM 12 08 2021)*** por parte de la Alcaldía durante los 4 años de implementación del proyecto.

Anticorruptivamente,

WILLIAM DAU CHAMATT
Alcalde Mayor de Cartagena de Indias

Proyectó: Ana María Gonzalez, Cooperación Internacional
Revisó: Luis Enrique Roa Merchán, Secretario General

Algramo

To: Ms. Isabelle Van der Beck
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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

Algramo, a Chilean scale-up dedicated to co-developing reusable packaging distribution systems with brands like Unilever, Colgate and Nestle and retailers like Walmart will be entering Colombia in late 2022. Algramo is pleased to inform you that co-financing for the project is projected to be secured as the following:

Co-financing is primary related to FMCG brands investing in the CAPEX for Algramo dispensers and associated licencing fees and services required to enable successful in-store refill systems in Colombia.

1. Co-financing in-kind set up and improving infrastructure for in-store refill: Setting up innovative refill solutions that transform the consumer industry, reduce waste and benefit consumers in Colombian cities. **USD** [$3,115,730]

***Projected private sector in-kind funding can be seen in the screenshot below.**

The USD $3,115,730 of in-kind co-financing for point 2, Algramo and its private sector FMCG partners investments in 904 dispensers for in-store refill between 2022 and 2025 is based on estimated contributions of Capex and setup costs, developing reusable B2B cartridges for each product type and each dispenser, sales promoters, software licence fees and Algramo labour costs to support Algramo Colombia.

Algramo's FMCG partners have had discussions with *Groupo Exito* who will be our probable retail partner for Algramo Colombia. To date, Algramo has Colgate and Nestle formally interested in entering Colombia. We are confident that at least one additional FMCG will join Algramo Colombia. These projected cost estimates are based on the CAPEX costs to co-develop refill systems (dispensers, software integration and smart packaging) and all associated costs to bring Algramo Colombia to market. Other costs are for Algramo labour to support and launch Algramo Colombia.

The breakdown of the USD $3,115,730 co-financing (in-kind) from existing and ongoing initiatives of Algramo based in Santiago de Chile which align with goals and targets of the project area as follows:

Initiative title	**Funding source (optional)**	**Amount (USD)**
FMCG investments in in-store refill dispensers	**Balance sheets**	**2,827,730**
Algramo Labor costs for Algramo Colombia	**Balance sheet**	**288,000**

With respect to the organization´s total planned co-financing for this project, it is estimated that USD $2,475,00 will represent investments mobilized, with the remaining USD $640,730 being recurrent expenses.

Financial support from the GEF/UNEP for the 4 points below is key to scale up the benefits of a reusable packaging movement. If GEF funding is provided for the 4 points below, Algramo will share key findings on supply chain optimization and consumer behaviour change so government and other key stakeholders possess key knowledge to help make refill systems successful and scalable across Latin America.

- Co-financing in-kind (Openning supply chains: to secure support for refill solutions from retailers, brands and consumers, and address market viability roadblocks.)
- Co-financing in-kind (Using sales activities to understand consumer behavior change)
- Co-financing in-kind (Meetings and events to transfer knowledge and learnings and create dialogue to unlock efforts)
- Co-financing in-kind (Roundtables to share existing work, knowledge, and success stories)

Note: Algramo signs this letter contingent on the terms and conditions in the attached appendix noting this letter is not a legally binding agreement.

DocuSigned by:

F57BC33CD57949A...

José Manuel Moller

CEO & Founder

Algramo Global Corp.

Algramo

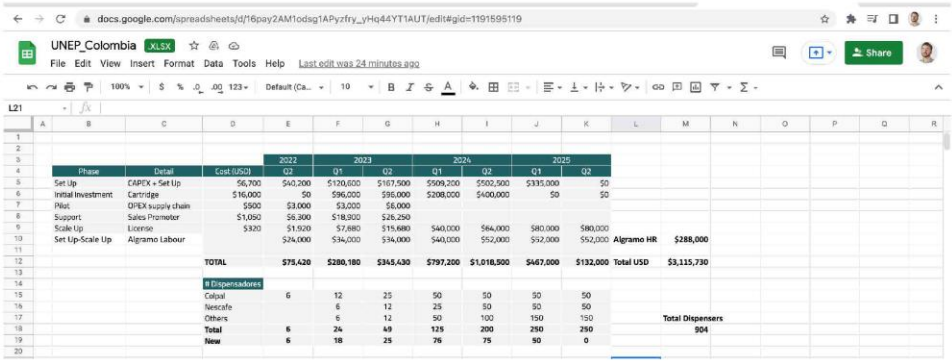
Appendix

Notwithstanding anything to the contrary contained in this letter, having secured co-financing as specified above does not in any form create or imply any obligations for Algramo Global Corp. (throughout the letter, "Algramo") or any of its Affiliates or Representatives. Future commitment by Algramo Glob Corp. or its Affiliates to invest and/or spend the specified amounts in the participating project will be duly manifested after further negotiations, clarifications, inquiries and/or agreements to follow, which may be terminated at any time prior to execution by Algramo Global Corp., its Affiliates, and any future party in their sole discretion. Algramo Global Corp. hereby declares that the issuance of this letter is without prejudice to the current non-existence of any obligations or agreements relating to possible future commitment of co-financing for the UNEP/GEF Project or the UNEP/GEF Project itself. This letter, though not in any form binding, is intended to serve as a basis for future consideration by the UN Environment Programme. A Final Agreement or any other form of commitment by Algramo Global Corp. or its Affiliates will contain material terms not mentioned in this letter.

This letter does not create an exclusive right to negotiate in good faith. Partial performance by Algramo Global Corp. or its Affiliates of the terms of this letter, or efforts carried out to perform due diligence, or other acts of contemplation of consummating a future agreement and/or any other form of a binding contract, shall not be deemed evidence of intent by Algramo Global Corp. or its Affiliates to be bound by the terms of this letter. The subsequent approval or acknowledgement of an agreement and/or any other form of a binding contract by email, text or any other electronic communication service shall not be binding unless Algramo Global Corp. and/or its Affiliates and potential future parties review, approve, execute, and deliver a final and definitive written agreement, duly signed by their corresponding Representatives.

For the purpose of this letter, Affiliates means a company which: (a) is controlled by Algramo Global Corp.; (b) controls Algramo Global Corp.; or (c) is under common control with Algramo Global Corp. For the purpose of this definition, "control" means the possession, directly or indirectly, of (a) the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract, or otherwise or (b) the power to elect or appoint at least fifty percent (50%) of the directors, managers, general partners, or persons exercising similar authority with respect to such Person.

Private Sector Financial Projections for Algramo Colombia 2022-2025



				2022	2023		2024		2025			
Phase	Detail	Cost (USD)		Q2	Q1	Q2	Q1	Q2	Q1	Q2		
Set Up	CAPEX + Set Up	$6,700		$40,200	$120,600	$167,500	$509,200	$502,500	$335,000	$0		
Initial Investment	Cartridge	$16,000		$0	$96,000	$96,000	$208,000	$400,000	$0	$0		
Pilot	OPEX supply chain	$500		$3,000	$3,000	$6,000						
Support	Sales Promoter	$1,050		$6,300	$18,900	$26,250						
Scale Up	License	$320		$1,920	$7,680	$15,680	$40,000	$64,000	$80,000	$80,000		
Set Up-Scale Up	Algramo Labour			$24,000	$34,000	$34,000	$40,000	$52,000	$52,000	$52,000	Algramo HR	$288,000
		TOTAL		$75,420	$280,180	$345,430	$797,200	$1,018,500	$467,000	$132,000	Total USD	$3,115,730
		# Dispensadores										
		Calpal	6	12	25	50	50	50	50			
		Nescafe		6	12	25	50	50	50			
		Others		6	12	50	100	150	150		Total Dispensers	
		Total	6	24	49	125	200	250	250		904	
		New	6	18	25	76	75	50	0			

Bliss Earth Recycling Panama
RUC: 8-514-796 DV 55
Ciudad de Panamá, Juan Díaz, Llano Bonito, Multistorage, local 84
Panamá, Rep. De Panamá
Teléfono 3858100/Cel.: 6112-8583 gerencia@blisspanama.com

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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

[My name is Alexei Castillo CEO of Bliss Earth Recycling Panama. My role in the project is to develop and implement the ideas and actions of the projects fulfilled by the company]. The organization is pleased to inform you that co-financing for the project has been secured as follows:

1. Co-financing in-kind (Funding for development of plastics and bottle glass sand to be part of aggregates for construction, building blocks, cement plastic mixtures collected from beaches, coastal and surrounding areas)	**USD**	[*435,000*]
2. Co-financing in-kind (Creation of plastic wood as a substitute alternative for natural wood, collected from beaches, coastal and surrounding areas)	**USD**	[*485,000*]
3. Co-financing in-kind (*Create items for personal uses from plastic wood , chairs, tables, fences, plastic pallets, cell phone holder, and souvenirs as a complementary projects*)	**USD**	[150,*000*]

Total USD 1,070,000 between 2022-2027

The USD **1,070,000** of grant co-financing will be used to fund [the development, implementation and creation of products from discarded plastics

The USD **1,070,000** of in-kind co-financing for *1…2…3* is based on estimated contributions of [the recollection, sorting, compacting, transportation, grinding, weighing, mixing, producing, packing, marketing, sales, training, *estimation of individual's time, local transport, office space and facilities, equipment and domestic and international communications in support of project implementation. Insert brief statement about the kinds of activities/support are represented by this amount, for example, estimation of individual's time, local transport, office space and facilities, and domestic and international communications in support of project implementation*].

The breakdown of the USD **1,070,000** co-financing (in-kind) from existing and ongoing initiatives of the [Bliss Earth Recycling Panama in Panama City/ Panama in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

Initiative title	**Funding source**	**Amount (USD)**
development of plastics and bottle glass sand to be part of aggregates for construction, building blocks, cement plastic mixtures collected from beaches, coastal and surrounding areas		*435,000*
Creation of plastic wood as a substitute alternative for natural wood, collected from beaches, coastal and surrounding areas		*485,000*
Create items for personal uses from plastic wood , chairs, tables, fences, plastic pallets, cell phone holder, and souvenirs as a complementary projects		*150,000*

With respect to the organization´s total planed co-financing for this project, it is estimated that USD 500,*000* will represent investments mobilized, with the remaining USD 570,*000* being recurrent expenses.

Ing. Alexei Castillo
Director Ejecutivo
Bliss Earth Recycling Panamá

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Botellas de amor

Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

The Foundation fill up a "Bottle of Love" has the compromise of closing the plastic cycle, taking it back to its useful life, generating important environmental, cultural, educational, and economical changes with positive impact in Panama while creating a circular economy, improving the quality of life of the people and vulnerable communities through the donation of furniture made of recycled plastic. We are a strategy presented as a mean so we altogether can bring plastic; which, to this point had been disposed in the environment; beaches, rivers, and dumps; back to a productive life.
The organization is pleased to inform you that co-financing for the project has been secured as follows:

1.	Co-financing in-kind (*development of recycling plant*)	**USD**	[*200,500.00*]
2.	Co-financing in-kind (*awareness campaigns and collection points*)	**USD**	[76,800.00]
Total		**USD**	[*277,300.00*]

The USD 277,300.00 The consolidation of "Bottles of Love" starts the moment of the installation of the first two Collection Points in Panama City and Arraijan in 2020; based on the reception of the method by the population, it has taken us to the increase in the installation of Collection Points monthly, which is why we are closing 2021 with 48 active Collection Points and more than 10 catholic churches as collection points. This consolidation is a primordial step because for a year we have been able to collect more than 70 tons of plastic that will be processed in our plant located in Panama Pacifico.

"Bottles of Love" Plant is the first ONG which closes the plastic cycle and return it to its useful life as furniture for building, this is a brand-new plant that counts with top notch technology which will help us to optimize several costs in production and energy.

In order to achieve this steps the following has been primordial:

1. Inverse logistic

2. International logistic for the purchase of machinery

3. Events to support and promote the education in all type of events, creating a culture for the closing of the cycle of plastic (Recycling events, Cinema, Fashion, Sports, and others)

4. A network of more than 40 allies in all Panama.

5. A very well consolidated work team with the abilities and capacity of running a recycling plant.

With respect to the organization´s total planned co-financing for this project, it is estimated that USD [*277,300.00*] will represent investments mobilized, with the remaining USD [*277,300.00*] being recurrent expenses.

President

Fundación Llena una Botella de amor

Maryorie Joudry

M Joudry
25/11/2021

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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

CEMPRE Colombia (Business Commitment for Recycling) is a Non-profit Organisation with over 12 years experience articulating relevant actors of the materials value chain on successful actions to enhance Circular Economy based on sustainable production for the country with a work horizon beyond 2030.

As the official Spokesperson and administration of RED RECICLO the most significant (Extended Producer Responsibility Plan on Packaging Waste Collective (EPR-PKG), CEMPRE represents the largest production companies in Colombia: Carvajal Empaques, Coca-Cola FEMSA, The Coca-Cola Company, Bavaria, Nestlé, Postobón, Enka, Esenttia, Peldar, Tetra Pak, Plastilene and Propal, which have been concerned about inviting smaller companies to join in this initiative to learn and get involve.

RED RECICLO´s companies have joined efforts to comply with Resolution 1407 of 2018 of EPR-PKG. Developing projects increase reuse and recyclability of post-consumer material, promoting collective awareness on the relevance of segregation at source and sustainable consumption to achieve Circular Economy. RED RECICLO initiative on the Caribbean is MOVIMIENTO RE.

MOVIMIENTO RE started in 2019 as PET-Bottles collection strategy led by the main Beverage Companies 7 Recycler Organisations strengthened in Cartagena, Barranquilla and Santa Marta according to in the Decree 596/2016; and over 416 Tons of PET.

To strength and enhance the initiative the financing companies decided to continue under CEMPRE´s operation, hence since August 2020, MOVIMIENTO RE has:

- Added 10 new Recyclers Organisations, for a total of 23.
- Implement specific development plans to each actor that contemplate: i) Technical, operational and formalization strengthening of recyclers' organizations. Ii) Technological infrastructure applied to ECAs and use of the *DONDE RECICLO* app (https://dondereciclo.co/empresas). iii) Coaching on awareness and education campaign design and implementation for segregation at the source and use of DONDE RECICLO on the impact area.

CEMPRE as operator has within the key performance indicators (KPI) for 2021 for the initiative:

1. Increase on 1000 Recyclers impacted
2. 3500 Tons of recovered waste / month, of wich 29% is expected to be plastics
3. Characterisation of the processing industry

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Bogotá, Colombia

4. Research on recyclers life quality
5. Estructure working plan for 9 local processing plants for plastic material
6. Engage with local actors, starting by the mayor office in charge of the Waste Management Public Service

MOVIMIENTO RE ACTORS

Rol	Name
Producer and lead founder	Coca Cola FEMSA, The Coca-Cola Company, Postobón, Nestlé Colombia, Tetra Pak, Bavaria
Investo ally – non Producer rol	Pepsico are ally with: Grupo Familia and Ocean Conservancy (ASPPIRE initiative).
Information Manager and operator	CEMPRE

MOVIMIENTO RE, a RED RECICLO initiative is pleased to confirms co-financing according to the meeting hold on August 12nd, where the technical committee, as follows:

1. Grant co-financing Actions focused on the actors of the value chain for their technical, operational and formalization strengthening. Citizen culture strategies to increase separation at the source	USD	114.703
2. Co-financing in-kind CEMPRE work team in Bogotá and the Caribbean Coast	USD	34.014
Total	**USD**	**148.717**[1]

The USD 114.703 of grant co-financing will be used to fund:

- Technical, operational and formalization strengthening of recyclers' organizations.
- Technological component, installation of ECA application and implementation of DONDE RECICLO platform.
- Awareness and education, with the message of separation at the source and dissemination of DONDE RECICLO App.

The USD 34.014 of in-kind co-financing for national coordination, policy and planning is based on estimated contributions of human resources to guarantee the execution of the proposed activities.

The breakdown of the USD 148.717 co-financing (in-kind) from existing and ongoing initiatives of the RED RECICLO within the framework of MOVIMIENTO RE, operated by CEMPRE Colombia in the cities of Cartagena, Barranquilla y Santa Marta in Caribbean region which align with goals and targets of the project area as follows:

[1] Official Exchange Rate Monday, August 9th 2021: 3.949,33 COP = 1 USD. https://www.banrep.gov.co

Initiative title	Funding source	Amount (USD)
MOVIMIENTO RE	CEMPRE COLOMBIA	148.717

With respect to the organization´s total planned co-financing for this project, it is estimated that USD 114.703.000 will represent investments mobilized, with the remaining USD 34.014 being recurrent expenses.

Laura Reyes
CEO CEMPRE COLOMBIA

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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

EcoCómputo is a non-profit organization, in charge of managing the System for Selective Collection and Environmental Management of Computer and Peripheral Waste,which has positioned itself as the bigger pioneer collective system in the country, and likely in Latin America, made up of fifty-one (51) companies of the information and communication technologies sector, compromised to the country, which coordinates the processes of collection, transport, storage, treatment, and final disposal of this type of waste, as a reply to the initiative of the National Government to promote the principle of Extended Producer Responsibility (EPR) and in compliance with environmental regulations. **The organization is pleased to inform you that co-financing for the project has been secured as follows:**

Co-financing in-kind (*Support the development relevant policy and enabling conditions to support collection and recycling, to increase recovery rates of plastic in electronic equipment, specifically those containing POPs (HBCS, PBDE, SCCP) (including informatics, entertaining, office equipment, electronic cables, etc.)***)**	**USD**	[*100,000*]
Co-financing in-kind (*Infrastructure development/building: Increased number of depots, redemption centres and drop-off points: at residence and company level (retailers, shopping malls, offices, schools, etc.)***)**	**USD**	[*20,000*]
Total	**USD**	[*120,000*]

The USD [*120.000***] of grant co-financing will be used to fund [***Improve material sorting, storing, treatment, recovery or environmental sound disposal of plastic in electronics***]**

The USD 100.000] of in-kind co-financing for [*Support the development relevant policy and enabling conditions to support collection and recycling, to increase recovery rates of plastic in electronic equipment, specifically those containing POPs (HBCS, PBDE, SCCP) (including informatics, entertaining, office equipment, electronic cables, etc.))***] is based on estimated contributions of [***Carrying out, collection and recycling pilot in 2 LAC cities (total amount is 200 tonnes of plastics containing POPs), and support the improvement of collection methods, treatment standards and technologies, and IT solutions***].**

The breakdown of the USD [*20.000*] co-financing (in-kind) from existing and ongoing initiatives of *[EcoCómputo]* in Barranquilla and Cartagena de Indias, Colombia in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

Initiative title	Funding source	Amount (USD)
Establishment of conditions conducive to supporting collection and recycling	EcoComputo Resources	30,000
Carrying out, collection and recycling of Ewaste	EcoComputo Resources	70,000
Locations of collection points, redemption centers and drop-off points	EcoComputo Resources	20,000

With respect to the organization´s total planned co-financing for this project, it is estimated that USD 30,000 will represent investments mobilized, with the remaining USD90,000 being recurrent expenses.

Yours faithfully,

EDGAR FERNANDO ERAZO CAMACHO
Executive Director
Corporación EcoCómputo
Email: eerazo@andi.com.co

Bogotá D.C., monday, november 8th, 2021

Oficio **EPA-OFI-007402-2021**
Cartagena de Indias D.T. y C., miércoles, 1 de septiembre de 2021

Sra. Isabelle Van der Beck
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Subject: Letter of commitment regarding the co-financing of the UNEP / GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Mrs. Van der Beck and Mr. Bernaudat,

The Establecimiento Público Ambiental de Cartagena, is the urban environmental authority of the Cartagena de Indias city, one of the cities selected in Colombia to implement the GEF-LAC ID10547 project "*Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach*". We are pleased to inform you that the co-financing of the project has been secured as follows:

Co-financing in kind with the nature of recurring expenses.	USD	***553,135***
	Total USD	***553,135***

The *USD 553,135* of co-financing in kind corresponds to the support during the years 2022 and 2023 (during Mayor William Dau´s appointment). This contribution refers to recurring expenses for coordination, policy and planning that corresponds to the Establecimiento Público Ambiental de Cartagena and is based on the estimated contributions of individual´s time, local transportation, office space, and local, national and international communications in support of the implementation of the GEF-LAC ID10547 project and its activities aligned with the District Development Plan "Salvemos Juntos a Cartagena 2020-2023".

We will make a great effort for the sustainnability of the project by prioritizing it and allocating resources during handover at the end of 2023. For this period, we have

estimated the co-financing for the years 2024 and 2025 at ***USD 598,270***, which would be allocated througth the 2023-2027 Development Plan.

This would imply a total estimated contribution by the Cartagena urban environmental authority of approximately ***USD 1,151,405 (TRM 17 08 2021)*** during the 4 years of project implementation.

Regards,

JAVIER MOUTHON BELLO
General Manager

Proyectó: Ana María González, International Cooperation

Oficio **EPA-OFI-007402-2021**
Cartagena de Indias D.T. y C., miércoles, 1 de septiembre de 2021

Sra. Isabelle Van der Beck
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Sr. Ludovic Bernaudat
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Asunto: Carta de compromiso con respecto a la cofinanciación del proyecto UNEP/GEF titulado "Reducir los plásticos marinos y la contaminación plástica en ciudades de América Latina y el Caribe a través de un enfoque de economía circular" (GEF ID 10547).

Estimados Sra. Van der Beck y Sr. Bernaudat,

El Establecimiento Público Ambiental de Cartagena, es la autoridad ambiental urbana de la ciudad Cartagena de Indias, una de las ciudades en Colombia seleccionada para implementar el proyecto GEF-LAC ID10547 "*Reducción de plásticos marinos y la contaminación plástica en las ciudades de América Latina y el Caribe a través de un enfoque de economía circular*". La organización se complace en informarle que la cofinanciación del proyecto se ha asegurado de la siguiente manera:

Cofinanciación en especie con naturaleza de gastos recurrentes.	USD	***553,135***
	Total USD	***553,135***

Los *USD 553,135* de cofinanciación en especie corresponden al apoyo que será ofrecido al proyecto durante los años 2022 y 2023 del periodo del señor Alcalde William Dau Chamat. Esta contribución se refiere a gastos recurrentes para la coordinación, política y planificación que corresponda al Establecimiento Público Ambiental de Cartagena y se basa en las contribuciones estimadas del tiempo del personal, transporte local, espacio de oficinas e instalaciones y las comunicaciones distritales, nacionales e internacionales en apoyo de la implementación del proyecto

GEF-LAC ID10547 y sus actividades alineadas con el Plan de Desarrollo Distrital "Salvemos Juntos a Cartagena 2020-2023".

Haremos un esfuerzo grande de empalme y sostenibilidad del proyecto, por lo cual hemos estimado la cofinanciación para los años 2024 y 2025 en ***USD 598,270***, de tal manera que se de la continuidad sostenida del mismo.

Lo anterior implicaría un aporte total estimado de aproximadamente ***USD 1,151,405 (TRM 17 08 2021)*** por parte de la Alcaldía durante los 4 años de implementación del proyecto.

Cordialmente,

JAVIER MOUTHON BELLO
Director General

Proyectó: Ana María González, Cooperación Internacional

FUNDACIÓN DE ACCIÓN SOCIAL POR PANAMA
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Asunto: Carta de compromiso con respecto a la cofinanciación del proyecto UNEP/GEF titulado "Reducir los plásticos marinos y la contaminación plástica en ciudades de América Latina y el Caribe a través de un enfoque de economía circular" (GEF ID 10547).

Estimados Sra. Van der Beck y Sr. Bernaudat,

[*Inserte una breve descripción del cofinanciador y su papel en el proyecto*]. La organización se complace en informarle que la cofinanciación del proyecto se ha asegurado de la siguiente manera:

1. Cofinanciación de donaciones (*Inserte una breve descripción de la contribución, por ejemplo, financiamiento para actividad/producto*)	USD	*[inserte monto]*
2. Cofinanciación en especie (*Inserte una breve descripción, por ejemplo, coordinación, política y planificación nacional*)	USD	*[inserte monto]*
3. Cofinanciación en especie a través de dos proyectos 1) Proyecto Reciclando por la Gente y el Ambiente a través del cual se recuperan varios desechos sólidos reutilizables y/o reciclables dentro de los cuales están las botellas y envases de plásticos tipo HDPE y PET y las desvía para su posterior reciclaje y 2) Proyecto INNOVAPET, que esta en fase de desarrollo, cuyo objetivo es transformar botellas y envases plásticos en materiales constructivos, construyendo un espacio para la economía circular. Ambos proyectos por sus objetivos son complementarios con el proyecto del GEF[1].	USD	*26,342*
Total	**USD**	*[inserte monto]*

Los *[inserte monto]* del cofinanciamiento de donaciones se utilizarán para financiar [*Insertar actividad/producto a ser financiado por el cofinanciador*].

Los *[inserte monto]* de cofinanciación en especie para la coordinación, política y planificación nacional se basa en las contribuciones estimadas de [*Insertar una breve declaración sobre los tipos de actividades/apoyo representados por esta cantidad, por ejemplo, la estimación del tiempo de personal,*

[1] Se estimará el valor de la contribución en especie estableciendo los gastos recurrentes asociados directamente a la cantidad de material plástico recuperado y/o transformado. Este detalle se describe en el cuadro incluido en el Excel.

el transporte local, el espacio de oficinas y las instalaciones; y las comunicaciones nacionales e internacionales en apoyo de la implementación del proyecto].

Los USD 26,342[2] del cofinanciamiento (en especie) de iniciativas existentes y en curso de *[Insertar nombre de la organización]* en la ciudad/país en la región de América Latina y el Caribe que se alinean con las metas y objetivos del área del proyecto, se desglosan de la siguiente manera:

Título de la iniciativa	**Fuente de financiamiento**	**Monto (USD)**
Reciclando por la Gente y El Ambiente, programa de recuperación de desechos sólidos reciclables ejecutado desde febrero de 1995, que se desarrolla en la actualidad desde el Centro de Acopio de Reciclables de Ciudad del Saber, operado por FAS PANAMÁ desde septiembre de 2011. Se recuperan	Autogestión	6728 estimados anuales
INNOVAPET proyecto en desarrollo, se estima un presupuesto inicial anual de 19,614 que es una inversión en economía circular dirigida 100% a la transformación de residuos de termoplásticos, principalmente PET, HDPE y PP,	SENACYT, Ciudad del Saber, FAS PANAMÁ	19,614 estimados anuales
Total estimado por año		26,342

Con respecto a la cofinanciación total planificada de la organización para este proyecto, se estima que será un estimado de USD 26,342 lo que representará inversiones movilizadas para el proyecto del GEF.

FAS PANAMA

MARISOL LANDADU H.
Presidenta y Representante Legal

Fecha: 28/7/2021

[2] Este es un valor estimado porque el proyecto INNOVAPET está todavía en desarrollo por lo que no se cuenta con cifras de referencia a diferencia del proyecto Reciclando por la Gente y el Ambiente que tiene más de 26 años en ejecución.

GLOBAL PLASTIC ACTION PARTNERSHIP

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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

The World Economic Forum, through its Global Plastic Action Partnership (GPAP) initiative, is pleased to collaborate with UNEP to support efforts in Colombia, Panama and Jamaica to address plastic pollution.

GPAP was created by a coalition of public and private sector leaders to address the worldwide explosion in plastic pollution. It aims to shape a more sustainable and inclusive world by eradicating that pollution. Through its inclusive multistakeholder platforms, GPAP is uniquely equipped to bring public, private and civil society leaders together to develop joint solutions to the plastic pollution crisis that are both pragmatic and ambitious.

GPAP is keen to support UNEP in the above-mentioned countries in key impact areas including boosting innovation, driving behaviour change, and harmonizing metrics. GPAP is pleased to inform you that co-financing for the project has been secured as follows:

1.	Co-financing in-kind for Metrics tool development/deployment	USD	225,000.00
2.	Co-financing in-kind for UpLink innovation work	USD	300,000.00
3.	Co-financing in-kind for Reuse Portal/scaling reuse work	USD	200,000.00
4.	Co-financing in-kind for financing innovation work	USD	50,000.00
5.	Co-financing in-kind for integration of global insights and convening support	USD	60,000.00
6.	Co-financing in-kind for administration/ secretariat support (10% overhead)	USD	83,500.00
	Total	**USD**	**918,500.00**

The USD 918,500 of in-kind co-financing listed above is based on the following estimated contributions:

1. Metrics tool development/deployment:
    - Investment in updated modelling tool for plastic flow assessment and scenario building
    - Local consultancy support for 3-4 month deployment of tool across 3 cities

2. UpLink innovation work:
    - UpLink platform technology development and utilization
    - Local consultancy support for implementing 4 UpLink innovation challenges supporting city-level solution scale-up both both upstream (waste prevention/reuse) and downstream (collection/recycling)

3. Reuse Portal/scaling reuse work:
    - Reuse Portal design and technology development cost
    - Local consultancy support for city/national-level application and development of Reuse Portal resources, insights and networks

4. Financing innovation work
    - Global GPAP Secretariate salary costs for supporting dissemination across 6 cities of insights from GPAP taskforce and partner networks related to financing innovation for waste mitigation

5. Integration of global insights and convening support
    - Global GPAP Secretariat salary costs for providing cross-cutting support for convening and capacity-building across 6 cities and the wider network of Latin American cities

6. Administration/ secretariat support (10% overhead)
    - Global GPAP Secretariat salary costs for general administration and management of project collaboration and consultancy support

With respect to the organization´s total planned co-financing for this project, it is estimated that USD 835,000.00 will represent investments mobilized, with the remaining USD 83,500.00 being recurrent expenses.

DocuSigned by:
D43012C1CA9B42F...
Kristin Hughes
Director, Global Plastic Action Partnership

DGI-SCI-CAM- 1260

Santa Marta DTCH, November 19th 2021

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SUBJECT: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Bernaudat,

The Marine and Coastal Research Institute "Jose Benito Vives de Andréis" - INVEMAR, is an Institute linked to the Ministry of Environment and Sustainable Development of Colombia, with more than 40 years of experience in basic and applied research on renewable natural resources and the marine environment, as well as Colombian coastal and oceanic ecosystems. INVEMAR has accompanied the Ministry of Environment in the formulation and implementation of different policy instruments on coastal zones and their problems, including marine litter pollution. Specifically, with research that shows the problem of plastic waste (macroplastics and microplastics) and its impact on mangrove ecosystems, beaches and coastal waters, which require attention from environmental authorities to prevent and reduce this type of pollution, and to conserve marine and coastal ecosystems. INVEMAR has been providing technical inputs and recommendations for the formulation of national policies and regulations for the Regional Action Plans for the Comprehensive Management of Marine Litter in the Southeast Pacific and the Northeast Pacific. The experience of INVEMAR technical team is reflected in multiple research projects, technical and scientific publications, and participation in national and international networks on pollution by marine debris, plastics and microplastics. It has also developed activities for the transfer and strengthening of knowledge of coastal communities and different key actors on the problems derived from marine litter. In addition, some of INVEMAR's researchers have been official delegates to the UNEA Expert Group on Marine Litter and Microplastic

Taking into account the experience of INVEMAR, we are pleased to inform that it is of great interest to be able to link to the UNEP/GEF Project under pillar 4 “Capacity development”; understanding that the co-financing of this project does not imply monetary transfer, but that INVEMAR can contribute to the project through the work that is being developed and that is projected on marine litter, plastics and microplastics, in coordination with environmental authorities, the Ministry of Environment and Sustainable Development and other sources of funding, which are listed below:

Iniciativa	Amount (USD)
1. Co-financing in-kind. Within the framework of *the National Marine Environmental Quality Monitoring Program* - REDCAM 2021, financed by the Ministry of Environment and Sustainable Development and the Regional Autonomous Corporations with coastal jurisdiction, samples of marine litter in the 12 departments with coastal jurisdiction of Colombia were collected during 2021, prioritizing beaches and mangrove ecosystems. The samples were analyzed in the Marine Environmental Quality Laboratory and the results will be uploaded in the Coastal Marine Information System - SIAM. With this information, a diagnostic report, a doctoral thesis and scientific publications will be prepared and submitted to indexed journals.	38.000 USD
2. Co-financing in-kind. Project "*Environmental Conditions of the Marine-Coastal Zone of the Department of Magdalena as a Tool for the Management and Protection of Marine and Coastal Ecosystems under the Jurisdiction of CORPAMAG*", co-financed by the Magdalena Regional Autonomous Corporation –CORPAMAG. Within the frame of this project INVEMAR monitored pollution by marine litter and microplastics in tourist beaches, during 2021. Awareness-raising and ocean literacy for educational institutions and librarians, as well as communication and dissemination activities were also carried out.	12.903 USD
3. Co-financing in-kind Project "*Marine and coastal water quality monitoring and environmental quality assessment of the marine pasture ecosystem in Puerto Velero, coastal area of the Atlantic Department*", co-financed by the Atlantic Regional Autonomous Corporation-CRA, with implementation 2021-2022. This project includes the diagnosis of pollution by marine litter and microplastics in 6 touristic beaches in the Atlantic department. In addition, at the Cove of Puerto Velero INVEMAR will assess the impact of macro and microplastics in mangroves, beaches and other coastal ecosystems. Also identify prevention measures with local actors and the CRA.	10.700 USD
4. Co-financing in-kind Project "*Sustainable and Resilient Management of Strategic Ecosystems and Biodiversity in the Pacific and Caribbean Regions of Colombia*", financed by the International Climate Initiative (IKI) of the Government of Germany, with a duration of 5 years and which is currently awaiting the start of the preparatory phase. The project includes the activity: “*Design and promote a value chain for the use and valuation of waste in the Archipelago of San Andrés, Providencia and Santa Catalina”. This activity* includes research, monitoring, capacity building of local actors and communities to	200.000 USD

generate productive alternatives for the use of plastics and social entrepreneurship with a circular economy approach.	
Proposal to manage resources. "*Design of the monitoring, control, evaluation and surveillance of the law 1973 of 2019 to establish measures to reduce the environmental impact due to the use of plastic materials in the Archipelago of San Andrés, Providencia and Santa Catalina*", in search of resources or approval by the Ministry of Environment and Sustainable Development of Colombia	96.000 USD
Initiative to manage resources. "*Blue Schools*", seeks to strengthen ocean culture in educational communities as a strategy to the conservation of ecosystems and reduce the pressures generated by different tensors, including plastic pollution in coastal areas.	2.500 USD
Resource management initiative. Advance in the implementation of the Roadmap for the characterization and monitoring of the environmental problems of plastics and microplastics in the coastal zones of Colombia.	350.000 USD
Resource management initiative "Generation of prevention and protection strategies to reduce pressures from marine litter on marine and coastal ecosystems in the strategic environmental areas of the department of Magdalena. It seeks to generate measures to reduce pressures for marine litter and especially plastic waste in influential human settlements in the Ciénaga Grande de Santa Marta (Tasajera, Pueblo Viejo, Palmira and Isla del Rosario)	88.000 USD
Total	**$ 805.603**

The value of USD 805.603 of co-financing in kind for the initiatives described above is based on estimated contributions in terms of time spent by technical staff, use of equipment, materials, samplings, local transport, publications and communication of the results of each initiative. With respect to INVEMAR total planned co-financing for this project, it is estimated that USD 200,000 will represent investments mobilized as defined by the GEF.

Best regards,

FRANCISCO ARMANDO ARIAS ISAZA
Director General

Leafsinc
Por un Panamá más verde

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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

LEAFSINC is a social company dedicated to creating successful recycling projects, initiating the education and recycling culture of the youngest in Educational Centers as well as in Residential, Neighborhoods, Restaurants, Companies and institutions.

The organization is pleased to inform you that co-financing for the project has been secured as follows:

Co-financing in-kind *(Opening of Recycling centres together with private sector)*	**USD**	228,000.00
Co-financing in-kind (*Recycling project together with private sector*)	**USD**	120,000.00
Co-financing in-kind (*Education in the area of recycling materials with the scope of reducing plastic waste*)	**USD**	20,000.00
Total	**USD**	***368,000.00***

The USD *368,000.00* of in-kind co-financing for *the opening of recycling centres, recycling projects in institutions, companies and residentials, and the education in the area of recycling materials with the scope of reducing plastic waste* is based on estimated contributions of *design, construction, 1,000*

hours of work of 10 workers, logistics, marketing, domestic communications in support of project implementation.

The breakdown of the USD *368,000.00* co-financing (in-kind) from existing and ongoing initiatives of the *LEAFSINC* in the city of Panama/Panama in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

With respect to the organization´s total planned co-financing for this project, it is estimated that USD *100,000.00* will represent investments mobilized, with the remaining USD *268,000.00* being recurrent expenses.

Fernando Brito Serpas
CEO

Calle 41 este, Bella Vista, Ciudad de Panamá 383-4974 www.leafsinc.com

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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

Pepsi-Cola Jamaica Bottling Co. Ltd will be taking part in a Beach Clean-up and Recycling Initiatives. The organization is pleased to inform you that co-financing for the project has been secured as follows:

Co-financing in-kind		**USD**	$1000.00
	Total	**USD**	$1000.00

The USD $1000.00 of grant co-financing will be used to fund the Beach Clean-Up and Recycling Initiative.

The USD $1000.00 of in-kind co-financing for Beach Clean-up Activity and Recycling Bottles is based on estimated contributions of the Beach Clean-Up and Recycling Initiative where employees of the Organization volunteer the time and efforts to assist with these initiatives.

The breakdown of the USD $1000.00 co-financing (in-kind) from existing and ongoing initiatives of Pepsi-Cola Jamaica Bottling Co. Ltd in Jamaica in the Latin American and Caribbean region which align with goals and targets of the projects listed above.

Best Regards,

Luz Del Alba Tejada

Head of Transformation

214 Spanish Town Road, Kingston 11
TEL: (876) 757-3839 FAX: (876) 937-8599

RECYCLING PARTNERS OF JAMAICA

79 Harbour Street, Kingston, Jamaica
876-948-7381; 876-948-2874; 876-796-3675
recyclingpartnersjaltd@gmail.com

15th November, 2021

To:

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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

Recycling Partners of Jamaica: Background

Recycling Partners of Jamaica (RPJ) is a charitable organization formed in 2015 as a result of a private/public sector partnership to build and support national awareness of the need to recycle and as such functions as an extended producer organization (EPO).

It is recognized as the designated national recycling entity by the Government of Jamaica (GOJ) and was identified as the lead body to implement the DRS (Deposit Refund System) for plastic bottles in Jamaica. RPJ's current coalition partners include: Wisynco Group Limited, Pepsi Cola Jamaica Bottling Limited, Grace Foods & Services Limited, Jamaica Beverages Limited, Lasco Manufacturing Limited, Trade Winds Citrus Limited and Seprod Limited. There is an ongoing process to onboard other manufacturers, bottlers and distributors who are importing PET (1) and HDPE (2) into Jamaica.

The selection of RPJ as the lead implementation body for the DRS is concurrent with international practices that have yielded sustainable and long-term results. The 'not-for-profit' scheme led by the private sector is the most prevalent model in countries with successful systems such as Canada, Australia, US, Finland and Denmark.

The organization is pleased to inform you that co-financing for the project has been secured as follows:

Co-financing in-kind (***Infrastructural & Logistical Development*** *for a Deposit Refund System in collaboration with the Private Sector– building of Recycling Depots, Redemption Centres, Recycling Cages &Bins and the supporting Transportation & Logistical Infrastructure)*	**USD**	**1.310M**

RECYCLING PARTNERS OF JAMAICA

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Co-financing in-kind (***Capacity Development, Recycling Education and Awareness*** – *focused on all sectors in Jamaica but with particular focus on youth & community*)	**USD**	**0.560M**
Total	**USD**	**1.870M**

The USD of **1.31M** of partners' estimated contribution per year for the first 3 years, will be used to fund the mobilization infrastructure by parish and transportation and logistical requirements to support a deposit refund system for plastics (PET 1 and HDPE 2) in Jamaica as well as the necessary capacity building and educational activities needed to support same for Jamaica

The USD **0.56M** of the partners' estimated contribution per year for the first 2 years, will be used to develop marketing and public education efforts to spread awareness on the why, how, where and what to recycle. The estimated contribution will be appropriately directed to the execution of the necessary programmes for schools and the general public education and awareness of recycling for Jamaica.

The anticipated financial contribution of USD from existing and ongoing initiatives of the *Recycling Partners of Jamaica* in Kingston, Jamaica in the Latin American and Caribbean region which align with goals and targets of the project is to be decided on. This will support specific areas or contribute to area as follows:

Initiative title	Funding source	Amount (USD)
Operational Development Contribution	**Partners' contribution**	**133,000**

With respect to the organization´s total planned contribution for this project, it is estimated that **USD 133,000.00** for the first six months will represent investments mobilized, with the remaining **USD 695,209.00** being recurrent expenses.

Kind Regards,
RECYCLING PARTNERS OF JAMAICA

Nalini Sooklal
GENERAL MANAGER

13-1010

Cartagena, 13-2-2021-002729
02/08/2021 9:38:00 p. m

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Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

The National Learning Service, SENA (for its acronym in Spanish), Regional Bolívar, is a public entity that offers free education at technical and technological levels as well as short courses in different fields. We function as job intermediaries, offer guidance for those who want to create companies, and we also perform research activities. Our connection to the GEF project will be made through ecodesign applied research and the offering of education to different actors of the GEF Project who require it. The organization is pleased to inform you that co-financing for the project has been secured as follows:

Co-financing in-kind we will make ecodesign applied research and offering of education to different actors of the GEF Project who require it. USD 12.900.

Total USD 12.900.

The USD 12.900 of in-kind co-financing for national coordination, policy and planning is based on estimated contributions of IT service, office space, local transport and staff.

The breakdown of the USD 12900 co-financing (in-kind) from existing and ongoing initiatives of the SENA, Regional Bolívar in the Cartagena/Colombia in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

Initiative title	Funding source	Amount (USD)
Participation in the applied research committee	own resources	5.160
Education or training services	own resources	7.740
Total		12.900

With respect to the organization's total planned co-financing for this project, it is estimated that USD 12.900 will represent recurrent expenses.

Best regards,

BIBIANA CECILIA PINTO TOVAR
Director Regional (E)

trashforma

Info@trashforma.com www.trashforma.com

PANAMA, 10 OCTUBER 2021

To:

Ms. Isabelle Van der Beck
Task Manager – GEF International Waters
UN Environment Programme
900 17th Street NW
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E-mail: isabelle.vanderbeck@unep.org

Mr. Ludovic Bernaudat
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8-14 Avenue de la Paix
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Cell: +41 79 477 0833
E-mail: ludovic.bernaudat@un.org

Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

My name is Lorenzo Valdes and as co-founder of TRASHFORMA, I am pleased to present to you our company and our projects on recycling, upcycling, and social entrepreneurship.
We offer recycling services for residential buildings, restaurants, hotels and companies. As part of our services, we visit our clients' locations, inspect their waste disposal, train those involved and propose the best solution. We also participate in events and initiatives that promote sustainable values and practices in Panama City. We work in alliance with REMAR, an organization that helps recovering addicts and people at social risk. We work together at our workshop where we create upcycling products.

The organization is pleased to inform you that co-financing for the project has been secured as follows:

1. Grant co-financing Continue our recycling services and routes with our existing clients and future ones. In order to keep offering recycling and upcycling alternatives. $60,000 by year	**USD**	[300,000]
2. Co-financing in-kind (*Participation and sponsorship of cultural and educactional events and initiatives promoting* recycling and sustainable solutions to plastic pollution. $12,000 by year $12,000 social networks	**USD**	[120,000]
3. Co-financing in-kind (*New project development of making plastic wood and products to offer new solutions without having to export materials in order to transform them.* Extruser $70,000, Bussiness Plan $20,000 rental warehouse, work team $60,000 by years	**USD**	[390,000]
Total	**USD**	[810,000]

LVE

The breakdown of the USD 810,000] co-financing (in-kind) from existing and ongoing initiatives of the *[TRASHFORMA]* in the PANAMA in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

Initiative title	Funding source	Amount (USD)
Continue our recycling services and routes with our existing clients and future ones. In order to keep offering recycling and upcycling alternatives.	**CLIENTS, RESIDENTIAL BUILDINGS, RESTRURANT, COMPANIES**	**300,000**
Participation and sponsorship of cultural and educactional events and initiatives promoting recycling and sustainable solutions to plastic	**CLIENTS, RESIDENTIAL BUILDINGS, RESTRURANT, COMPANIES**	**120,000**
New project development of making plastic wood and products to offer new solutions without having to export materials in order to transform them	**SEARCHING FINANCIAL SUPPORT**	**390,000**

With respect to the organization's total planned co-financing for this project, it is estimated that USD [*810,000*] will represent investments mobilized, with the remaining USD [*400,000]* being recurrent expenses.

Lorenzo Valdés Escude.

CO-Founder

(507)66134544

Date: 25th November

Reference: **Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547)**

Dear Ms. Isabelle Van der Beck and Mr. Ludovic Bernaudat,

I write to confirm UNEP will commit co-financing to support to the above-mentioned project implemented by UNEP and funded through the GEF International Waters and Chemicals & Waste focal areas.

UNEP is particularly interested in engaging substantively to support the work in these focal areas across all components of the project: City-led activities, Private sector led activities, Intercity networks and Capacity development.

UNEP will therefore account a total of **US$ 11,710,061 in-kind co-financing** to be spread over the duration of the project. The co-financing is broken down as follows.

Co-financing in-kind	Details of co-financing	Responsible UNEP office and division	Funding source	Amount in USD	Link to project Component
Recurring expenditure/ Investment Mobilised	Prevention of Marine Litter in the Caribbean Sea project	Cartagena Convention Secretariat	German Federal Ministry for the Environment and Nuclear Safety (BMU) - Euros	3,156,812	60% towards component 3 and 4, and the remainder spread across component 1 and 2.
	Capacity building related to Multilateral Environmental Agreements (MEA) in African, Caribbean and Pacific (ACP) Countries - Phase III		European Union - USD	530,000	All components
	(personnel cost, I.T. infrastructure, operating expenses)		UNEP CEP - Co-executing - USD	2,650,000	All components
	NFL 2020 Plastic Hotspotting project	Economy Division, Resources and Markets Branch	NFL 2020	52,239	All components
	Agreement with EA on plastic hotspotting		EF, NFL 2020	22,400	All components
	NFL 2021 Informing Plastic Actions		NFL 2021	155,000	All components
	NFL/SIDA 2021 dumpsite project		NFL/SIDA 2021	35,000	Component 1,2
	Other NFL projects/funding to provide co-finance each year in 2022-2025		NFL 2022-2025	90,000	All components
	Activity on upscaling the hotspot methodology and work on single use plastic products (SUPP) in Dominican Republic under IKI tourism project		International Climate Initiative (IKI)	100,000	Component 3
	Implement Extended Producer Responsibility (EPR) to reduce plastic pollution and improve resource efficiency		Handelens Miljøfond	200,000	Component 1, 4
	NFL 2021 assisting Brazil and Colombia to work on SUPP by the tourism team		NFL 2021	23,000	Component 1, 2, 3
	NFL 2021 assisting Brazil and Colombia to work on SUPP by the tourism team		NFL 2021	10,000	Component 1, 2, 3
	LCA study: Take-away food packaging; Tableware; masks; nappies; menstrual products; Outreach of the results; Supermarket food packaging		FPL, EF, USEPA	211,750	Component 1, 4
	Staff salary		EF, JPO account	271,000	All components
	Marine and Freshwater Branch, Pollution Free Ecosystems Unit Office (staff support)	Ecosystems Division / Marine and Freshwater Branch	UNEP	70,860	All components
	National and regional action plan development and implementation		NFL	200,000	1-4, especially 3 and 4
	Activities at the Caribbean Regional Node of the GPML on the Regional Action Plan on Marine Litter and Plastic Pollution			200,000	1-4, especially 3 and 4
	GPML Digital Platform			300,000	1-4, especially 3 and 4
	Plastics flow model focusing on the Wider Caribbean Sea region			50,000	4

	Project on Waste Management and the Circular Economy for Caribbean SIDS	ROLAC	European Union - USD	3,000,000	All components
	UNV support		NFL	120,000	Al components
	NFL 2021 Informing Plastic Action		SIDA/NFL	80,000	All components
	SIDA/NFL 2020 & 2021 Marine litter and plastic pollution support for NEP countries and Dom Rep		SIDA/NFL	130,000	Component 1,3,4
	ROLAC Staff salary		RB	52,000	All components
			Total	11,710,061	

We look forward to our collaboration in this important project for the international waters and chemicals & waste community.

Yours sincerely,

OiC, Elisa Tonda Chief of Branch	Leticia Carvalho Chief of Branch	Jacqueline Alvarez Director and Regional Representative	Christopher Corbin Officer in Charge
Resources and Markets Branch Economy Division	Marine and Freshwater Branch Ecosystems Division	Latin America and the Caribbean Office	The Regional Coordinating Unit (UNEP-CAR/RCU) of the Cartagena Convention

AUTORIDAD DE ASEO

REPÚBLICA DE PANAMÁ
— GOBIERNO NACIONAL —

November 19th, 2021
AAUD-779-AG-2021

To:

Ms. Isabelle Van der Beck
Task Manager - GEF International Waters
UN Environment Programme
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E-mail: isabelle.vanderbeck@unep.org

Mr. Ludovic Bernaudat
Senior Task Manager - Chemicals and Health Branch - Economy Division
UN Environment Programme
8-14 Avenue de la Paix
CH-1211 Geneva, Switzerland
Tel: +41 22 917 8312
Cell: +41 79 477 0833
E-mail: ludovic.bernaudat@un.org

Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms.Van der Beck and Mr. Ludovic,

In order to improve the solid waste collection service in the district of Panama, Autoridad de Aseo Urbano y Domiciliario (AAUD), assumes its commitment as the specialized public entity in this field, for the fulfillment of the objective of "Reducing marine plastics and plastic pollution in Panama". The entity is pleased to inform you that co-financing for the project has been secured as follows:

1. Co-financing in-kind: AAUD presented its budget for the year 2022 to the Ministry of Economy and Finance, which was approved in the National Assembly for the purposes of salaries, maintenance, and repair of equipment.	**USD**	*10,000,000.00*
	Total USD	*10,000,000.00*

The USD *40,000,000.00* of grant co-financing for four years will be used to fund solid waste collection service in the different areas of the capital district, which currently has 30 trucks in operation at the Headquarters of Carrasquilla and covers the salary of 1,200 employees of the Operations Directorate. In addition to this, educational training is carried out in Municipalities and awareness programs in communities.

With respect to the organization´s total planned co-financing for this project, it is estimated that USD *10,000,000.00* will be recurrent expenses per year.

AUTORIDAD DE ASEO
AUTORIDAD DE ASEO
ADMINISTRADOR GENERAL

PEDRO CASTILLO GARIBALDO
Administrador General
Autoridad de Aseo Urbano y Domiciliario

Noviembre 19 de 2021
Bogotá, Colombia

To:

Ms. Isabelle Van der Beck
Task Manager - GEF
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UN Environment Programme
900 17th Street NW
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Subject: Letter with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

Circular Lab SAS, Colombian Company ('XICLO'), is a full-reusable packaging system for food & drink service (ex. deliveries, take-away, food courts) that seeks a systemic shift to reusable packaging and away of disposables, reducing as a result waste and pollution. XICLO integrates a robust technology platform that enables assets' track and trace features, measures ecological impact, and delivers reward and loyalty schemes, in order to help packaging returnability become a common habit in our cities. XICLO is also a licensable technology platform that could power other returnable schemes. We are the pioneer in Colombia with this product- as-a-service solution, with no direct competition.

XICLO has partnered with Grupo Takami, one of the largest and best-known restaurant group in Colombia with 14 brands and 30 restaurants for implementation in their entire network (500K deliveries/year, 3M users). This January 2022, we will run our pilot, where we will adjust our logistics processes, tech development, quantify our working capital, and Capex requirements.

XICLO is pleased to inform you that co-financing for the project has been planned for the coming years (2022 - 2025) as follows:

1.	Co-financing in-kind the development and implementation of Pilot Project in Bogota City 2022	USD	100K
2.	Co-financing in-kind the development and implementation of XICLO system service in all the restaurants of Grupo Takami 2022-23	USD	400K
3.	Co-financing in-kind the expansion of XICLO system service to other food & drink service business in Bogota City 2023-24	USD	1.M
4.	Co-financing in-kind the expansion of XICLO system service to other cities in Colombia, (including Cartagena and Barranquilla) 2024-25	USD	2M
Total		USD	3.5M

HAGAMOS CIRCULAR EL FUTURO

hola@xiclo.app www.xiclo.app
Móvil: +57 316 3726060 NIT: 901495460-7

The USD 3.5 millions of in-kind co-financing for the activities listed above comprise our pilot and ongoing work on technology development and operational process design during 2022-2025. This amount is based on estimated contributions full time equivalent of individual's time, containers acquisitions, technology development and maintenance, washing stations, inverse logistics, LCA, marketing & communications, and educational roll out.

With respect to the organization´s total planned co-financing for this project, it is estimated that USD 2.1 millions will represent investments mobilized, with the remaining USD 1.4 million being recurrent expenses.

After 2025, we are planning to expand our system service to other cities in LATAM.

Regards,

ANA MARIA VILLEGAS
Co-founder & CEO

HAGAMOS CIRCULAR EL FUTURO

*All amounts included herein will be adjust upon analysis of the Pilot results.

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ANCON
ASOCIACIÓN NACIONAL PARA LA CONSERVACIÓN DE LA NATURALEZA

Velando por nuestra herencia natural

Panama, December 10, 2021
DE-3423-2021

To:

Ms. Isabelle Van der Beck
Task Manager - GEF International Waters
UN Environment Programme
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Mr. Ludovic Bernaudat
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E-mail: ludovic.bernaudat@un.org

Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

The Asociación Nacional para la Conservación de la Naturaleza (ANCON) is a non-profit organization whose mission is to conserve Panama's biodiversity and natural resources for the benefit of present and future generations.

ANCON has accumulated valuable experience in the last 35 years of constant work in the field of conservation. The projects carried out by the organization are mainly aimed at the conservation of natural resources, the development of economic alternatives for communities and environmental education, including awareness programs through television, radio and print media campaigns in Panama. Due to population growth and consumption habits, ANCON has dedicated itself in recent years to more urban issues such as integrated waste management, particularly recycling.

ANCON has been responsible for several campaigns and projects on solid waste management since 2008, one of them was the "Your Paper Counts" campaign. From this first campaign called "Your Paper Counts" was born another campaign with the same objectives, but including other recyclable materials. This initiative is coordinated by the National Association for the Conservation of Nature and TVN Media. Both promote the "En Ambiente" campaign on the first Thursday of each month, to promote recycling through monthly "reciclotones" and educational campaigns in the TVN group's media.

In 2015 we signed a public-private alliance with the Municipality of Panama, the Urban and Household Cleaning Authority and the National Brewery to implement the pilot project Zero Garbage-Change Your Neighborhood in three pilot municipalities. Following this project, Recicla Por tu Futuro was born in 2021, joining Coca Cola and Nestlé, as strategic partner and the governmental, Ministry of Environment.

We will contribute through the components of the following projects executed by ANCON in alliance with strategic actors:

- **Project for the transformation of plastics (Implementation of funds allocated by SENACYT) (2021-2022):** Project "DESIGN, CONSTRUCTION AND OPERATING TEST OF EQUIPMENT AND CALIBRATION FOR THE TRANSFORMATION OF PET AND OTHER TYPES OF PLASTICS IN PANAMA".
- **Recicla por tu Futuro (2020-2022)**: A public-private initiative, it consists of the implementation of a Solid Waste Management System in the district of Panama, its objective is to promote sustainable and consistent behaviors in an orderly waste management system with an important awareness program for the adoption of practices such as recycling and the sustainable use of resources in the daily life of Panamanian households.

The organization is pleased to inform you that co-financing for the project has been secured as follows:

1. Grant co-financing (**Proyecto Recicla por tu Futuro:** Human resources of projects aimed at environmental awareness for the recovery of recyclable materials).	**USD**	[*167,270.86*]
2. Co-financing in-kind (**Recicla por tu Futuro**: Development of high visibility communication for environmental education and recovery of recyclable materialsDevelopment of high visibility communication for environmental education and recovery of recyclable materials.)	**USD**	[*53,037.06*]
3. Co-financing in-kind (**Recicla port u Futuro**: Implementation of fixed and mobile structures, activities for the recovery of recyclable materials and recycling chain logistics.)	**USD**	[*81,595.48]*
4. Co-financing in-kind (**Project for the transformation of plastics**)	**USD**	[*76,400.00*]
Total	**USD**	[*378,243.32*]

The USD [*378,243.32*] of grant co-financing will be used to fund the plastics recovery, community education and contribution to the circular economy.

The USD [*378,243.32*] of in-kind co-financing for national coordination, policy and planning is based on estimated contributions of [*environmental education and implementation of environmental management systems for solid waste recovery and promotion of its transformation and circularity.*].

The breakdown of the USD [*378,243.32*] co-financing (in-kind) from existing and ongoing initiatives of the *[Asociación Nacional para la Conservación de la Naturaleza]* in Panama in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

ANCON
ASOCIACIÓN NACIONAL PARA LA CONSERVACIÓN DE LA NATURALEZA

Velando por nuestra herencia natural

Initiative title	Funding source	Amount (USD)
Recicla por tu Futuro	Public-Private Initiative	*302,023.32*
Proyecto para transformación de plástico	SENACYT	*76,400.00*

Sincerely,

George Hanily
Executive Director

BASEL CONVENTION ROTTERDAM CONVENTION STOCKHOLM CONVENTION Food and Agriculture Organization of the United Nations UN environment programme

BASEL, ROTTERDAM AND STOCKHOLM CONVENTIONS

Secretariats of the Basel, Rotterdam and Stockholm Conventions
United Nations Environment Programme
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Secretariat of the Rotterdam Convention
Food and Agriculture Organization of the United Nations
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14 December 2021

Subject: UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547)

Dear Ms. Isabelle Van der Beck and Mr. Ludovic Bernaudat,

The Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions would like to express its appreciation on the readiness of the United Nations Environment Programme (UNEP) and of the Global Environmental Facility (GEF) to develop and implement the project entitled " Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (hereinafter referred to as the "Project").

The description of the planned activities of the Project, as set out in the Project Identification Form (GEF Project ID 10547), thematically aligns with the technical assistance activities implemented by the Secretariat of the BRS Conventions, in particular the Small Grants Programme (SGP) on Plastic Waste funded by the Norwegian Agency for Development Cooperation (Norad) as well as the pilot projects of the Plastic Waste Partnership, which seek to prevent and significantly reduce marine litter and microplastics by strengthening capacity of partner countries through improved infrastructure and waste management systems, improved performance of the private sector, and strengthened global commitments and national and regional instruments.

The Secretariat of the BRS Conventions is therefore pleased to cooperate with the UNEP on the implementation of the above referred Project by means of thematically aligning the Project and the BRS activities as set out in the below table. The budgets of those activities amount to USD 463,230 (Four Hundred and Sixty-Three Thousand, Two Hundred and Thirty United States Dollars).

BRS activities	Donor	Countries	Budget (USD)
SGP on Plastic Waste, BCRC-SCRC-Panama: institutional strengthening for the control of transboundary movements (TBM) and the improvement of environmentally sound management (ESM) of plastic waste in the Central America subregion.	Norad	Honduras, Guatemala, Panama	180,000
SGP on Plastic Waste, BCRC-SCRC-Caribbean: replacing single use plastic commodities in the economy of Suriname.	Norad	Suriname	118,140
SGP on Plastic Waste, BCRC-Argentina: improving the ESM of plastic waste and preventing and minimizing the generation of plastic waste through the certification of plastic recycling industries in Argentina.	Norad	Argentina	85,200
Pilot project of the Plastic Waste Partnership: segregation efficiency: lessons to be learned and taught from the entity with the highest sorting efficiency in Brazil.	Switzerland	Brazil	79,890
TOTAL			463,230

We appreciate that UNEP acknowledges the BRS Conventions as well as the donor to the BRS project in all publications and presentations of the project. We trust that the Project will contribute to accelerating the transition to a circular economy and improving the productivity of the plastic value chain in the Latin America and the Caribbean Region and respond to national, regional and global marine litter and plastics-related action plans, resolutions and commitments.

Thank you for your cooperation.

Yours sincerely,
For:

Rolph Payet
Executive Secretary
Secretariat of the Basel, Rotterdam and Stockholm Conventions

To:

Ms. Isabelle Van der Beck
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Mr. Ludovic Bernaudat
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El ambiente es de todos | Minambiente

Bogotá, D.C. November 26th, 2021

OAI-1400-2-00180

Ms
ISABELLE VAN DER BECK
Task Manager – GEF International Waters
UN Environment Programme
Isabelle.vanderbeck@unep.org

Mr.
LUDOVIC BERNAUDAT
Senior Task Manager – Chemicals and Health Branch
UN Environment Programme
ludovic.bernaudat@unep.org

Subject: Co-financing letter for GEF 7 Project - Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach

Dear Ms. Van der Beck and Mr. Bernaudat,

In my capacity as GEF Operational Focal Point for Colombia, I hereby confirm our support for the GEF 7 Project: "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" from the Ministry of Environment and Sustainable Development.

The Ministry will contribute an amount of approximately USD 256.313 in kind using an exchange rate of COP 3.000 per dollar (equivalent to COP $768.940.000) as a contribution to the co-financing for the entire project implementation. The fund provided by the Ministry include the participation of:

- 2% Director of Environmental, Urban and Sectorial Affairs
- 5% Coordinator of the Environmental, Urban and Sectorial Affairs Direction
- 10% Specialized professional of the Environmental, Urban and Sectorial Affairs Direction
- 12% Advisor to the Environmental, Urban and Sectorial Affairs Direction
- 15% Contractor regarding plastics of the Environmental, Urban and Sectorial Affairs Direction
- 50% Contractor regarding the National Circular Economy Strategy (ENEC) of the Environmental, Urban and Sectorial Affairs Direction
- 10% Contractor regarding containers and packaging of the Environmental, Urban and Sectorial Affairs Direction
- 2% Head of the International Affairs Office
- 5% Advisor of the International Affairs Office
- 5% Contractor of the International Affairs Office

The Environmental, Urban and Sectorial Affairs Direction certifies additionally the technical support regarding:

- Participation in events, resources for the logistic operator and airplane or land tickets for our staff.
- Resources of the IADB consultancy regarding the development of local agreements for plastic and other reusable materials use for the Caribbean region.
- Resources from GIZ used to invest in the implementation of the Communication and Citizen Culture Plan, particularly the design and production of messages involving solid usable residues including plastics.

Best regards,

DAVID FELIPE OLARTE AMAYA
Head of the International Affairs Office
GEF Operational Focal Point

Copy to: Andrea Corzo – Director of Environmental, Urban and Sectorial Affairs

Proyectó: Yaisa Lorena Bejarano- OAI
Revisó: Laura Bermúdez- Asesora GEF OAI

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REPÚBLICA DE PANAMÁ
GOBIERNO NACIONAL

MINISTERIO DE AMBIENTE

Panama, november 18, 2021
DM-2136-2021

To: **Ms. ISABELLE VAN DER BECK**
Task Manager - GEF International Waters
UN Environment Programme
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Mr. LUDOVIC BERNAUDAT
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Tel: +41 22 917 8312
Cell: +41 79 477 0833
E-mail: ludovic.bernaudat@un.org

Subject: Letter of financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

Dear Ms. Van der Beck and Mr. Ludovic,

The Ministry of the Environment as the governing entity of the Panamanian state in matters of protection, conservation, preservation and restoration of the environment, and the sustainable use of natural resources, who participates as a co-financier with the role of focal point of Panama in the project. The organization is pleased to inform you that co-financing for the project has been secured as follows:

1. Co-financing in-kind (*national coordination, policy and planning*)	**USD**	175,200.00
2. Co-financing in-kind (national *action plan*)	**USD**	365,890.00
3. Co-financing in-kind (*complementary projects*)	**USD**	65,000.00
Total	**USD**	606,090.00

The USD 175,200.00 of in-kind co-financing for national coordination, policy and planning is based on estimated contributions of individual's time work, local transport, office space and facilities, and domestic and international communications in support of project implementation.

The USD 365,890.00 of in-kind co-financing for national coordination, policy and planning is based on estimated contributions of implementation of activities of the national marine litter action plan such as pilot cross-sector dialogue; organising roundtables among different stakeholder groups to discuss implementation, present success stories to replicate, scaling up opportunities; communication material, creating awareness campaigns; education targeting different stakeholder groups: families, children, academia, recycling partners, municipalities, private sector.

Albrook, Calle Broberg, Edificio 804
República de Panamá
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www.miambiente.gob.pa

Trainings targeting different stakeholder groups: families, children, academia, recycling partners, municipalities, private sector; Coordination work for relevant activities; beach clean ups; and Educational and cultural events in support of project implementation.

The USD 65,000.00 of in-kind co-financing for national coordination, policy and planning is based on estimated contributions of install recycling units with a circular economy system in remote communities (coastal and riverside), enable adequate facilities for the reception of garbage at docks and landings, creation of the commission for the management of marine litter, creation of a multifunctional web platform to share information on marine litter and implement the law for the reduction of single-use plastic in support of project implementation.

The breakdown of the USD 606,090.00 co-financing (in-kind) from existing and ongoing initiatives of the Ministry of the Environment in the Panama city and Colon city of the Panama in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

Initiative title	Funding source	Amount (USD)
Individual's time, local transport, office space and facilities, domestic and international communications in support of project implementation	own funds	175,200.00
Cross-sector dialogue	mixed funds	12,000.00
Organising roundtables among different stakeholder groups to discuss implementation, present success stories to replicate, scaling up opportunities, etc.	mixed funds	11,000.00
Communication material, creating awareness campaigns.	mixed funds	70,000.00
Education targeting different stakeholder groups: families, children, academia, recycling partners, municipalities, private sector, etc.	mixed funds	21,000.00
Coordination work for relevant activities	mixed funds	55,390.00
Trainings targeting different stakeholder groups: families, children, academia, recycling partners, municipalities, private sector, etc.	mixed funds	18,000.00
Beach clean ups	mixed funds	91,000.00
Educational and cultural events	mixed funds	87,500.00
Improving infrastructure: collection points, recycling facilities, upcycling opportunities, technological improvements	external funds EPA/Battelle	25,000.00
implement the law for the reduction of single-use plastic	own funds	40,000.00

With respect to the total co-financing planned by the organization for this project, it is estimated that US$430,890.00 will represent mobilized investments, with the remaining US$175,200.00 being recurrent expenses.

Yours truly,

MILCIADES CONCEPCIÓN
Environment Minister

MC/AGA/JJCM/db

Albrook, Calle Broberg, Edificio 804
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Tel.: (507) 500-0855
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MINISTRY OF HOUSING, URBAN RENEWAL, ENVIRONMENT AND CLIMATE CHANGE

16A HALF WAY TREE ROAD, KINGSTON 5, JAMAICA W.I.
TELEPHONE: (876) 633-7500 FAX: (876) 920-7267

ANY REPLY OR SUBSEQUENT REFERENCE TO THIS COMMUNICATION SHOULD BE ADDRESSED TO THE PERMANENT SECRETARY AND THE FOLLOWING REFERENCE NUMBER QUOTED

December 1, 2021

Ms. Isabelle Van der Beck
Task Manager - GEF International Waters
UN Environment Programme
900 17th Street NW
Washington, D.C. 20006
Tel: +1 (202) 974-1314
E-mail: isabelle.vanderbeck@unep.org

Mr. Ludovic Bernaudat
Senior Task Manager - Chemicals and Health Branch - Economy Division
UN Environment Programme
8-14 Avenue de la Paix
CH-1211 Geneva, Switzerland
Tel: +41 22 917 8312
Cell: +41 79 477 0833
E-mail: ludovic.bernaudat@un.org

Dear Ms. Van der Beck and Mr. Ludovic,

Re: Co-financing Letter for UNEP/GEF Project project entitled

The Ministry of Housing, Urban Renewal. Environment and Climate Change has oversight responsibility for, *inter alia*, for Jamaica's environmental management and climate change portfolios and is the coutnry's focal point and implementing agency for the **"Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547)."** The Ministry is pleased to inform you that co-financing for the project has been secured as follows:

1. Co-financing in-kind (national coordination, policy and planning) – US$164,126
2. Co-financing in-kind (Resource Efficiency Programme- Phase I) - US$ 3,526

In-kind co-financing of US$ 167,652 based on estimated contributions of the time of senior officers within the Ministry (coordination and planning), office space and facilities, and domestic and international communications in support of project implementation

The breakdown of the US$167,652 co-financing (in-kind) from existing and ongoing initiatives of the Ministry of Housing, Urban Renewal, Environment and Climate Change in the Jamaica in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

Initiatives	Funding Source	Amount (US$)
1. Coordination and Planning	Government of Jamaica (in-kind)	164,126
2. Strengthening of the environmental policy framework:		46,410
a. National Policy on environmental management systems;		
b. National Policy on the environmentally sound management of hazardous wastes;		
Implementation of the Resource Efficiency Programme (Phase I)	Government of Jamaica (in-kind)	$3,526
TOTAL		**$167,652**

Yours sincerely,

Alwin Hales, CD PhD JP
Permanent Secretary

NATIONAL ENVIRONMENT & PLANNING AGENCY

10 & 11 Caledonia Avenue, Kingston 5, Jamaica W.I. Tel: (876) 754-7540/3 Fax: (876) 754-7595-6 Tollfree: 1-888-991-5005
E-mail: ceo@nepa.gov.jm, Website: http://www.nepa.gov.jm

Ref. #:2020-AP-02

29 November 2021

To: Ms. Isabelle Van der Beck
Task Manager - GEF International Waters
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Mr. Ludovic Bernaudat
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UN Environment Programme
8-14 Avenue de la Paix
CH-1211 Geneva, Switzerland
Tel: +41 22 917 8312
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E-mail: ludovic.bernaudat@un.org

Dear Ms. Van der Beck and Mr. Bernaudat

Subject: Financial commitment with respect to co-financing of the UNEP/GEF project entitled "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" (GEF ID 10547).

The National Environment and Planning Agency (NEPA) writes in reference to the captioned.

The mission of the National Environment and Planning Agency (NEPA) is to promote sustainable development by ensuring protection of the environment and orderly development in Jamaica. NEPA's role in the project at caption, will include participation on the Project Steering Committee, carrying out technical review of project deliverables and the continued execution of the Green Business Jamaica Ecolabel Programme.

The Agency is pleased to inform you that co-financing for the project has been secured as follows:

1. Co-financing in-kind (participation in Project Steering Committee meetings and carrying out technical review of project deliverables) USD [14,698.78]
2. Co-financing in-kind (continued execution of the Green Business Jamaica Ecolabel Programme USD [69,345.38]

Total USD [84,044.16]

The USD 84,044.16 of in-kind co-financing for the tasks outlined above is based on estimated contributions of the technical officers' time, local transport and cost for consultancies to execute related activities.

The breakdown of the USD 340,810.66 co-financing (in-kind) from existing and ongoing initiatives of the National Environment and Planning Agency in Jamaica in the Latin American and Caribbean region which align with goals and targets of the project area as follows:

Initiative title	Funding source (optional)	Amount (USD)
Plastic Waste Minimization Project - Enhancing the legislative framework in Jamaica to support the development and implementation of a national sustainable consumption and production programme to reduce marine litter from plastics generated from land-based activities (June 2020 to June 2021)	Government of Japan	340,810.66

With respect to the organization's total planned co-financing for this project, it is estimated that USD 368,210.37 will represent investments mobilized, with the remaining USD 56,643.79 being recurrent expenses.

The Agency is fully committed to the successful execution of the project entitled 'Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach,' and looks forward to the continued partnership with UNEP.

The Co-financing for the Plastic Waste Minimization Project (PWMP) and the GEF Latin American and the Caribbean (LAC) Co-financing documents are enclosed for your information. Should you require further information, please do not hesitate to contact Ms. Kashta Graham, Manager, Projects Branch, via Tel. #: 876-754-7540, ext. 4102/e-mail: Kashta.graham@nepa.gov.jm.

Yours sincerely
National Environment and Planning Agency

Peter Knight, CD, JP
Chief Executive Officer/Government Town Planner

PK/lrj

Encl.

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Appendix 4 – Implementation Arrangement and Coordination

Execution arrangement

The Cartagena Convention Secretariat, in its capacity as the executing agency, will work as the implementing agency on the day-to-day management and monitoring of project activities and consultants under the GEF 10547 project "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach". The GEF units in the Ecosystems and Economy Divisions of the United Nations Environment Programme (UNEP) will act as the project's implementing agency.

In order to support project execution and ensure that the outputs of the project are aligned with national and city priorities and that project activities are coordinated among city stakeholders within the scope of the project, each project city will appoint members to their **City Working Group (CWG).** In this regard, there will be six (6) CWGs and each may include, but will not be limited to, representative from the following offices. There will also be representatives from the academia, private sector, NGOs.

1. Ministry of Legal Affairs (or equivalent environmental law background in the public sector);
2. Ministry of the Environment (or equivalent);
3. City majors (or equivalent);
4. National Environmental Agency;
5. Municipal Environmental Agency
6. Municipal Waste Management Authority;
7. Bureau of Standards;
8. Waste management companies;
9. Local and/or national education/academia entities
10. Private sector

In cities where inter-sectoral committees with oversight on circular economy for plastics, plastic waste management, chemicals and waste management or marine pollution control already exists, it is recommended that relevant committees be integrated into the CWG and supplemented as necessary in order to ensure correspondence with the composition suggested above. The National Focal Points of the Basel Convention will also be invited to join the CWG.

CWG members will not be contracted by the project but will serve on a co-opted basis. CWG members in each city will be designated at the discretion of the city government and in accordance with the Terms of Reference which will be developed at the project's inception. A Chair shall also be appointed for each CWG by its Government as per these Terms of Reference. The Chair will be responsible for arranging and chairing meetings of the CWG. A City Project Coordinator (CPC) will be hired by the project team and will be responsible for coordinating the management of project activities in the city on a daily basis. This will involve liaising with the project team and national stakeholders, including, but not limited to, the CWG, in order to ensure the effective and timely execution of project activities. The CWG shall provide technical guidance to the CPC in the execution of project activities and will participate in project activities.

Table 1 suggests a list of CWG members by city. This list is not exhaustive and is subject to change based on the decisions of the National Governments, City Governments and administrative changes which may occur within Governments.

Table 1: Possible Composition of the CWGs by City

City	Institution
Cartagena (Colombia)	Ministry of Environment and Sustainable Development
	Major of Cartagena
	EPA Cartagena (urban environmental authority)
	Veolia Environment S.A.
	Pacaribe S.A E.S.P
	CAR Cardique
	Corporación Autónoma Regional del Sur de Bolívar
	Consejo Nacional de Política Económica y Social *(National Council for Economic and Social Policy)*
	Comision Regional de Competitividad e Innovación Bolívar (regional committee to stimulate innovation and competition, link between MinCIT and local chamber of commerce)
Barranquilla (Colombia)	Ministry of Environment and Sustainable Development
	Major of Barranquilla
	Corporación Autónoma Regional del Atlántico CRA
	Triple AAA
	Consejo Nacional de Política Económica y Social *(National Council for Economic and Social Policy)*

	Comision Regional de Competitividad e Innovación Atlántico (regional committee to stimulate innovation and competition, link between MinCIT and local chamber of commerce)
Kingston (Jamaica)	Ministry of Housing, Urban Renewal, Environment and Climate Change
	Chambers of Commerce
	National Solid Waste Management Authority
	National Environment and Planning Agency
	Rae Town Community Based Organisation
	Maritime Authority of Jamaica
	Social Development Commission
	Kingston and St Andrew Corporation
	Jamaica Environment Trust
	Caribbean Coastal Area Management Foundation (CCAM)
	Environmental Foundation of Jamaica
	Social Investment Fund
Montego Bay (Jamaica)	Ministry of Housing, Urban Renewal, Environment and Climate Change
	National Solid Waste Management Authority
	National Environment and Planning Agency
	Maritime Authority of Jamaica
	Social Development Commission
	St. James Parish Council for Montego Bay.
	Montego Bay Marine Park Trust (MBMPT
	Jamaica Environment Trust
	Caribbean Coastal Area Management Foundation (CCAM)
	Environmental Foundation of Jamaica
	Social Investment Fund
Panama City (Panama)	Ministry of Environment
	Ministry of Health
	Major of Panama City
	Municipality of San Miguelito
	Autoridad de Aseo Urbano y Domiciliario (AAUD)
	Autoridad del Canal de Panamá (ACP)
	Asociación de Municipalidades de Panamá (AMUPA)
	Aseo Capital Panamá
	Pronto Aseo
	National Association for Nature Conservation
Colon (Panama)	Ministry of Environment
	Ministry of Health
	Major of Colon
	Autoridad de Aseo Urbano y Domiciliario (AAUD)
	Autoridad del Canal de Panamá (ACP)
	Asociación de Municipalidades de Panamá (AMUPA)
	Aguaseo
	Technological University of Panama (UTP) in Colón
	Technological University of Panama (UTP)

The CWG shall meet at their discretion and shall consult other city stakeholders with specific expertise wherever relevant, or non-governmental organisations (NGOs), as appropriate.

To facilitate the coordination at national level, three **National Working Groups (NWGs)** will also be established. The NWGs will support information gathering from respective entities, review project outputs and ensure that national priorities are being met, and seek synergies among the activities at city level. The NWGs will also provide advice, policy and institutional guidance to support the successful execution of project activities and the sustainability of the project. The NWG will consist of national stakeholders relevant for each activity and will be chaired by the national focal point.

Members will also include representatives from CSOs/NGOs, the private sector and gender affairs groups to ensure that gender mainstreaming is considered throughout the project. The Cartagena Convention Secretariat will recruit implementation partners in the three project countries to serve as the secretary to the NWGs and shall attend in an *ex officio* capacity.

A **Project Steering Committee (PSC)** will be established at the inception phase of the project. The PSC shall meet annually to review the project execution against the scope of project activities, and review annual workplans and budget in accordance with the approved project document. The members will also select and nominate relevant project stakeholders; and provide advice, policy and institutional guidance to the implementing and executing agencies. The PSC will make decisions alongside the UNEP and GEF as part of the monitoring and evaluation activities. The Chair of the CWGs and NWGs shall also belong to the membership of the PSC. The Chairs shall represent their city's and country's interests at PSC meetings.

The PSC will be comprised of the following stakeholders who will hold decision rights: GEF representatives on the International Waters and the Chemicals & Waste, UNEP GEF teams on the International Waters and the Chemicals & Waste, national governmental focal points, and chairs of the CWGs; other selected city, national and international stakeholders from the public sector, private sector and civil society.

Further to its role as secretary to the PSC, the Cartagena Convention Secretariat will also work in conjunction with CPCs and other consultants or institutes who will be contracted under the project to deliver the outputs under each of the project's components throughout the project cycle. With the support from the CPCs, the Cartagena Convention will be responsible for the city coordination of project activities as required and will serve as a liaison between the project team and other city stakeholders who are interested in or have the potential to influence or be impacted by project activities. The project will establish **a project management unit (PMU)** to coordinate all day to day activities. The PMU will serve as the secretary to the PSC and will be accountable to the PSC meeting which is organized annually to ensure the delivery and quality of activities and outputs and to approve budget and it will be hosted by the Cartagena Convention.

Project coordination with other projects and initiatives

Coordination with other GEF projects: The project will work closely with IW:LEARN to participate in regional and global workshops to ensure that the results of this project are available to the wider IW community of projects. This project will also make relevant linkages with projects and initiatives like the GEF Sustainable Cities Integrated Program, sharing experiences on plastic pollution and management at the city level.

The project will also work closely with relevant GEF C&W projects addressing plastic waste, including the recent UNIDO Ghana project and the UNEP ISLANDS programme. Opportunities will also be sought to participate with project and attend meetings (e.g., with Basel Convention activities on plastic waste) to ensure that lessons and experiences are shared within the C&W project communities.

In the LAC region, the project will coordinate with planned and ongoing GEF initiatives aimed at reducing land-based pollution (e.g., Amazon Basin SAP implementation, IWEco and CReW+) and CLME+ (implementing an SAP for the wider Caribbean region that includes the North Brazil Shelf and the Gulf of Mexico).

Table 1: Projects and GEF initiatives which are closely related to the topic

Project name	
Establishing a circular economy framework for the plastics sector in Ghana (GEF 10401)	A recently approved GEF project that is also aiming to create the right enabling environment, build capacity including through public-private partnerships, test innovation solutions in order to mainstream circular economy for plastic management in Ghana. This project will work to develop linkages with this recent UNIDO approved project which has the similar objective to strengthen the national capacity of Ghana to transition to a circular economy framework that addresses plastic leakage into the country's oceans and waterways, facilitates sustainable plastics management.
CReW+: An integrated approach to water and wastewater management using innovative solutions and promoting financing mechanisms in the Wider Caribbean Region (GEF 9601)	Panama, Honduras, Jamaica, and Colombia are the four overlapping countries with the proposed project. The new CReW+ project will implement small scale solutions for the improved management of water and wastewater that can be upscaled and replicated. An integrated water and wastewater approach will be taken with solutions also being implemented in selected watersheds and freshwater basins to ensure greater water security for vulnerable rural communities. Construction and rehabilitation measures will be complemented by (i) institutional, regulatory, legislative and regulatory reforms; (ii) sustainable and tailor-made financing options; and (iii) knowledge management and promotion to achieve the Sustainable Development Goals and in particular Goal 6 on Water and Sanitation.
Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (IWEco) (GEF 4932)	A full-size GEF-funded project implemented by the UN Environment Programme. CARPHA; Secretariat to the Cartagena Convention/CEP; LBS Regional Activity Centres–IMA and CIMAB are the executing agencies of the project. The objective of the project is to conserve the Caribbean ecosystems for sustainable livelihood of the population through improved fresh and coastal water resources management, sustainable land management and sustainable forest management that also seek to enhance resilience of socio-ecological systems to the impacts of climate change. This project follows the previous IWCAM project and out of the nine participating countries, one of relevance to this project, namely Jamaica.
Catalyzing Implementation of the Strategic Action Programme for the Sustainable Management of Shared	A project funded by GEF aims to promote the implementation of the Strategic Action Programme for the CLME+ region by facilitating ecosystem-based management and ecosystem approach to fisheries for the sustainable and climate resilient provision of

Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (CMLE+) (GEF 5542)	goods and services from shared living marine resources. The project is fostering partnership among regional and international organisations working in the fields of environment and fisheries in the WCR. Relevant outputs of this project that complement the proposed project include the State of the Marine Ecosystems and associated Economies in the CLME+ region (SOMEE) report, the Status of the marine environment and associated economies for the CLME+ region report, the development of a regional nutrient reduction strategy, action plan and investment plan, a habitat restoration strategy, action plan and investment plan and pollution and habitat research strategies.
Implementation of the Strategic Action Programme to Ensure Integrated and Sustainable Management of the Transboundary Water Resources of the Amazon River Basin Considering Climate Variability and Change (GEF 9770)	A project is a full-size project being implemented by the UN Environment Programme and executed by the Amazon Cooperation Treaty Organization (ACTO) as well as the 8 participating countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela). The project will support the participating countries in implementing the Strategic Action Programme for the Amazon River Basin, promoting Integrated Water Resources Management (IWRM) and source-to-sea approaches, to improve ecological, social and economic benefits and, enabling the countries to meet their relevant SDG and convention targets in the Amazon basin. Brazil, Belem is part of the Amazon River Basin project and as such, synergies will be sought with regard to watershed management.
Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS) (GEF 10185)	This project will develop links as appropriate with the proposed work to be undertaken by the GEF/UNEP ISLANDS programme (initiated in 2019 and currently in the process of defining child projects). The ISLANDS provides funding to help implement policies that will prevent the release of 23,200 tonnes of toxic chemicals into the environment. The initiative spans through islands in the Caribbean, the Pacific and the Indian Ocean.
Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS) (GEF 10185) and child projects (GEF ID 10279, 10472, 10258, and 10266)	The ISLANDS Programme (GEF ID 10185) is preventing build-up of materials and chemicals in the environment that contain POPs and Mercury and other harmful chemicals in SIDS, and is managing and disposing of existing harmful chemicals and materials in SIDS from the Atlantic/Caribbean, Indian Ocean and Pacific regions. Three child projects under the ISLANDS Programme take place in the Caribbean: ▪ ISLANDs Caribbean (GEF ID 10279), covering 12 SIDS; ▪ ISLANDS Caribbean II (GEF ID 10472), covering 3 SIDS; and ▪ ISLANDS IDB (GEF ID 10258), covering 10 SIDS participating in the above two projects. These first two Caribbean child projects (GEF ID 10279 and 10472) are targeting to prevent 150,000 tonnes and 7,400 tonnes of plastic pollution respectively, in the region. This will be reached through bans and phase out of the use of plastic bags and polystyrene products, plastic recycling schemes, addressing plastic waste flows in the cruise ship sector and hotel industry and, the end-of-life management of vehicles and waste electrical and electronic materials. Through the management of PVC plastic waste, uPOPs emissions will also be reduced. The third project (GEF ID 10258) will help create or expand investments by the private and public sector in ten Caribbean countries in chemical and waste management and provide direct support to these investments through potential IDB, IDB Lab or IDB Invest projects to develop and strengthen the legal, regulatory and financial frameworks, tools and instruments; and finance and co- finance public and private sector investments aimed at improving the safe management of chemicals and waste, including plastics waste. Knowledge generated from these child projects, and all other child projects under the ISLANDS programme, flows to the ISLANDS Global Communication, Coordination and Knowledge Management (CCKM) project (GEF ID 10266). Through the Green Growth Knowledge Platform (GGKP), all best practices, case studies, technical information, available training materials, approaches and technologies generated through the ISLANDS programme will be curated, formatted, and disseminated through the GGKP platform to participating SIDS, non-participating SIDS and, other non-SIDS countries with similar conditions and challenges. The project will coordinate with the ISLANDS project through applying and building on the best practices, lessons learnt, and produced outputs related to plastics of the above-mentioned ISLANDS child projects that are made available on the GGKP. The figure below presents the knowledge flow from the ISLANDS projects to the LAC Plastics project.
Promoting Resource Efficiency and Circularity to Reduce Plastic Pollution for Asia and the Pacific: SEA GEFID10628	In Indonesia, Myanmar, Philippines, Thailand and Viet Nam The key components include: Enabling environments for reducing plastic pollution, Investing in plastics pollution solutions, Establishing partnerships, financing mechanisms and knowledge transfer,

"Plastik Sulit": Accelerating Circular Economy for Difficult Plastics in Indonesia - Indonesia GEFID10546	The key components include: Circular governance and Indonesia NPAP Action Roadmap, Investments in reduction and management of commercially problematic plastics, Knowledge management

Coordination with non-GEF initiatives: There are multiple international and regional networks and groups addressing marine plastics and plastic pollution the project will coordinate with. Please refer to the tables on the stakeholders at global and regional level in the CEO endorsement document for those initiatives. The relevant existing actions have been listed below. The coordination would included but not limited to consultation meetings, identifying synergies to avoid duplication of work, accelerating efforts in the region, connect relevant groups of stakeholders, share knowledge and capacity, increase alignment, and support and upscale innovative solutions through dissemination, finance, among others.

Existing and relevant actions on reducing marine plastics and plastic pollution at the Global level include: The Alliance to End Plastic Waste, The ACP MEAs programme, Clean Seas Campaign, The Global Plastic Action Partnership (GPAP), Break Free From Plastic, The Circulate Initiative, Circulate Capital

Existing actions on reducing marine plastics and plastic pollution at the LAC regional level include: The Cartagena Convention, The UNEP Caribbean Environment Programme (CEP), The South-East Pacific Action Plan, The Caribbean Regional Action Plan for Marine Litter (RAPMaLi), The Trash Free Waters International Initiative in the WCR, Working Group on Marine Litter and Microplastics in Latin America and the Caribbean, Regional Action Plan on Marine Litter in the Northeast Pacific Region, National Action Plans on Marine Litter and Plastic Pollution in LAC countries (such as Panamá, Belize, Brazil, Costa Rica and Chile), Latin America and the Caribbean Circular Economy Coalition, Coalition for the progressive closure of dumpsites in Latin America and the Caribbean, Transforming Tourism Value Chains project (TTVC), Central America Marine Litter Action Plan, Regional Caribbean Action Plan on Solid Waste, New Plastics Economy Global Commitment, The Brazilian Circular Economy Hub, The Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS).

Appendix 5a– SRIF and COVID Screens

Safeguard Risk Identification Form (SRIF)

Section 1: Project Overview

Identification	GEF ID: 10547 UNEP IMIS: /
Project Title	GEF project "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach"
Managing Division	Ecosystem Division (International Waters); Economy Division (Chemicals and Waste)
Type/Location	Regional; City
Region	Latin America and the Caribbean
List Countries	Colombia, Panama, Jamaica
Project Description	Under the Programming Directions for the 7th funding cycle of the Global Environment Facility (GEF 7), a project "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" is under development. The project is led by UNEP and its PIF document has been approved by the GEF Secretariat in 2020 and the project is currently under the PPG phase. The full project document will be submitted to the GEF Council meeting in December 2021 for approval. The project aims to reduce marine plastics and plastic pollution in the Latin America and the Caribbean (LAC) region by facilitating circular actions and cooperation between governments and businesses at the city-level to accelerate the transition to a circular economy. It will have 4 components: Component 1 addresses the lack of regulations and policy instruments on circular economy of plastics in target LAC cities, by supporting city governments and authorities to set up regulatory frameworks and testing key policy instruments to provide enabling conditions for developing a more circular plastic economy. Component 2 addresses the lack of business innovation and actions in target LAC cities, by stimulating the development of circular design on products, service, business models, and collection and recycling systems, with cooperation among relevant businesses along the value chain. Component 3 tackles the lack of a common vision, approaches, and leadership for LAC cities towards a circular economy of plastics, by setting up an inter-city network to align regional strategy and actions to stimulate cities to cooperate at the regional level. Component 4 develops various knowledge products, capacity-building activities, and monitoring schemes, to enable governments, businesses, and other stakeholders to adopt best practices for wider replication in more cities in LAC. The 4 components organically interact with each other and provide a consolidated solution to fundamentally shift the unsustainable consumption and production patterns and insufficient management, which is the fundamental root cause of marine litter and plastic pollution. The project will lead to net gain at environmental, social, and economic dimensions, which eventually support the achievement of the Sustainable Development Agenda and its relevant targets by 2030.
Relevant Subprogrammes	Chemicals and pollution action
Estimated duration of project	48 months
Estimated cost of the project	$7 million from GEF
Name of the UNEP project manager responsible	Isabelle Vanderbeck; Ludovic Bernaudat

Funding Source(s)	GEF Trust Fund
Executing/Implementing partner(s)	Executing partner: Cartagena Convention Secretariat
SRIF submission version	This is the first submission
Safeguard-related reports prepared so far *(Please attach the documents or provide the hyperlinks)*	• *Feasibility report [ ]* • *Gender Action Plan [X] Appendix 7* • *Stakeholder Engagement Plan [X] Appendix 6* • *Safeguard risk assessment or impact assessment [X] Appendix 8* • *ES Management Plan or Framework [ ]* • *Indigenous Peoples Plan [ ]* • *Cultural Heritage Plan [ ]* • *Others ___Gender Analysis_____*

Section 2: Safeguards Risk Summary

A. Summary of the Safeguards Risk Triggered

Safeguard Standards Triggered by the Project	Impact of Risk[130] (1-5)	Probability of Risk (1-5)	Significance of Risk (L, M, H) *Please refer to the matrix below*
SS 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management	1	1	L
SS 2: Climate Change and Disaster Risks	2	3	M
SS 3: Pollution Prevention and Resource Efficiency	1	1	L
SS 4: Community Health, Safety and Security	2	3	M
SS 5: Cultural Heritage	1	1	L
SS 6: Displacement and Involuntary Resettlement	1	1	L
SS 7: Indigenous Peoples	1	1	L
SS 8: Labor and working conditions	2	3	M

[130] Refer to UNEP Environmental and Social Sustainability Framework (ESSF): Implementation Guidance Note to assign values to the Impact of Risk and the Probability of Risk to determine the overall significance of Risk (Low, Moderate or High).

B. ESS Risk Level[131] -

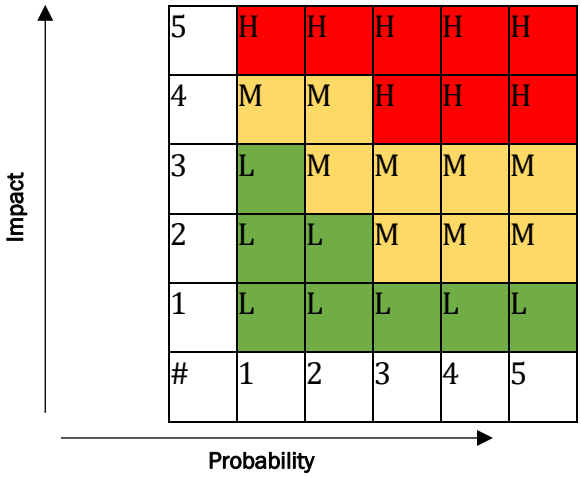
Refer to the UNEP ESSF (Chapter IV) and the UNEP's ESSF Guidelines.

Low risk ☐

Moderate risk ■

High risk ☐

Additional information required ☐



C. Development of ESS Review Note and Screening Decision

Prepared by

Name: Ludovic Bernaudat and Isabelle Vanderbeck Date: 29 November

Screening review by

Name: Yunae Yi Date: 02/12/2021

Cleared[132]

D. Safeguard Review Summary (by the safeguard team)

The project is accompanied with the gender action plan and stakeholder engagement plan and risk mitigation plan to respond to potential safeguard risk areas. Please report back through the annual PIR on the identified and emerging risks. Project-level grievance mechanism will be established. Such information can be repeated in the stakeholder engagement plan and gender action plan.

[131] **Low risk**: Negative impacts minimal or negligible: no further study or impact management required.

Moderate risk: Potential negative impacts, but limited in scale, not unprecedented or irreversible and generally limited to programme/project area; impacts amenable to management using standard mitigation measures; limited environmental or social analysis may be required to develop a Environmental and Social Management Plan (ESMP). Straightforward application of good practice may be sufficient without additional study.

High risk: Potential for significant negative impacts (e.g. irreversible, unprecedented, cumulative, significant stakeholder concerns); Environmental and Social Impact Assessment (ESIA) (or Strategic Environmental and Social Assessment (SESA)) including a full impact assessment may be required, followed by an effective comprehensive safeguard management plan.

[132] This is signed only for the full projects latest by the PRC time.

Section 3: Safeguard Risk Checklist

Screening checklist	Y/N/ Maybe	Justification for the response (please provide answers to each question)
Guiding Principles (these questions should be considered during the project development phase)		
GP1 Has the project analyzed and stated those who are interested and may be affected positively or negatively around the project activities, approaches or results?	Y	A wide range of stakeholders have been identified. Please refer to the stakeholder engagement plan and appendix 6 on stakeholders of the project.
GP2 Has the project identified and engaged vulnerable, marginalized people, including disabled people, through the informed, inclusive, transparent and equal manner on potential positive or negative implication of the proposed approach and their roles in the project implementation?	Y	The project has developed a Gender Analysis. Under component 2 of the project, informal collectors and recyclers will be engaged with in the plastic waste collection and recycling pilots. The pilots aim to improve plastic waste management practices in the project cities, including by exploring the approaches to formalise the waste management practices. Informal collectors and recyclers will be included in any activities that may affect their livelihoods as relevant stakeholders and they will be fully engaged with in identifying and applying the alternatives if informal collection and recycling activities are affected by project activities.
GP3 Have local communities or individuals raised human rights or gender equality concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	N	Local communities are expected to gain from the project in terms of environmental and human health and even economic benefits.
GP4 Does the proposed project consider gender-balanced representation in the design and implementation?	Y	In the design phase 10 female staff were involved in the UNEP team (53% of the project team). In the project implementation phase gender-balanced representation will also be ensured.
GP5 Did the proposed project analyze relevant gender issues and develop a gender responsive project approach?	Y	A Gender Analysis (Appendix 7) has been developed to ensure gender equality concerns are tackled appropriately, if concerns are raised. The project will explore key gender aspects of addressing plastics reduction and will identify action priorities. Over the course of the project, project team will: assess the various gender dimensions of the project and its interventions; determine entry points across the plastics value chain; and develop associated project activities that consider the impact on various occupational and population groups. Efforts will be made to collect data disaggregated by sex across the four project components. Data will be used to help adjust the design and interventions of the project so that gender equality and women empowerment can be better

			achieved throughout the project's implementation. Activities will be designed to enable participation in project activities by community-leaders and champions. Local participation and ownership of the project activities are critical to the successful outcome and the sustainability of interventions. UNEP's guidance on gender mainstreaming as well as the GEF policy on gender mainstreaming will also guide the process.
GP6	Does the project include a project-specific grievance redress mechanism? If yes, state the specific location of such information.	Y	A grievance redress mechanism will be built into the project website, which will include specific contact details (e-mail address and phone number) where persons can raise grievances.
GP7	Will or did the project disclose project information, including the safeguard documents? If yes, please list all the webpages where the information is (or will be) disclosed.	Y	In the project implementation phase, a project website will be created to share information and knowledge products developed by the project. The project website will be integrated with the IW: Learn website. The project team will also seek advice from and collaborate with the Green Growth Knowledge Platform (GGKP) on the development and management of the project website, and disseminate the knowledge products to be generated under the project on GGKP, SAICM knowledge platform, GPML Digital Platform, etc.
GP8	Were the stakeholders (including affected communities) informed of the projects and grievance redress mechanism? If yes, describe how they were informed.	Y	City, national, regional and international stakeholders were informed of the project at the PPG inception meeting on 26th January 2021. During the PPG phase the project team also has been interacting with stakeholders in particular city and national level stakeholders. Stakeholders will be informed of the grievance redress mechanism situated on the project website.
GP9	Does the project consider potential negative impacts from short-term net gain to the local communities or countries at the risk of generating long-term social or economic burden?[133]	Y	All activities will follow a sustainable economic model that should make activities financially feasible in the long term.
GP10	Does the project consider potential partial economic benefits while excluding marginalized or vulnerable groups, including women in poverty?	N	Vulnerable groups related to waste management practices (e.g. informal recyclers, waste pickers) will be informed, trained and involved in project activities to ensure equal benefits. More specifically, vulnerable groups will be approached as relevant stakeholders and collaborated with to ensure full involvement in demonstration

[133]For example, a project may consider investing incommercial shrimp farm by clearing the nearby mangrove forest to improve the livelihood of the coastal community. However, long term economic benefit from the shrip farm may be significantly lower than the mangroves if we consider full costs factoring safety from storms, soil protection, water quality, biodiversity and so on.

		activities. If their livelihoods are affected, for example through the formalisation of jobs, they will be provided affordable alternatives. In this way tangible benefits are expected beyond the executing timeline.
Safeguard Standard 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management		
Would the project potentially involve or lead to:		
1.1 conversion or degradation of habitats (including modified habitat, natural habitat and critical natural habitat), or losses and threats to biodiversity and/or ecosystems and ecosystem services?	N	The project is expected to improve marine habitats through the reduction of marine plastics and plastic pollution.
1.2 adverse impacts specifically to habitats that are legally protected, officially proposed for protection, or recognized as protected by traditional local communities and/or authoritative sources (e.g. National Park, Nature Conservancy, Indigenous Community Conserved Area, (ICCA); etc.)?	N	
1.3 conversion or degradation of habitats that are identified by authoritative sources for their high conservation and biodiversity value?	N	
1.4 activities that are not legally permitted or are inconsistent with any officially recognized management plans for the area?	N	
1.5 risks to endangered species (e.g. reduction, encroachment on habitat)?	N	
1.6 activities that may result in soil erosion, deterioration and/or land degradation?	N	
1.7 reduced quality or quantity of ground water or water in rivers, ponds, lakes, other wetlands?	N	
1.8 reforestation, plantation development and/or forest harvesting?	N	
1.9 support for agricultural production, animal/fish production and harvesting	N	
1.10 introduction or utilization of any invasive alien species of flora and fauna, whether accidental or intentional?	N	
1.11 handling or utilization of genetically modified organisms?	N	
1.12 collection and utilization of genetic resources?	N	
Safeguard Standard 2: Climate Change and Disaster Risks		
Would the project potentially involve or lead to:		
2.1 improving resilience against potential climate change impact beyond the project intervention period?	Y	It is expected that the sustainable production of plastics and sound plastic waste management practices implemented through the project will lead to increased resilience against climate change impacts.
2.2 areas that are now or are projected to be subject to natural hazards such as extreme temperatures, earthquakes, extreme precipitation and flooding, landslides, droughts, severe winds, sea level rise, storm surges, tsunami or volcanic eruptions in the next 30 years?	Y	The highest risk from natural hazards present in all 6 cities are wildfires and floods. These are truly relevant to plastic pollution as flooding can cause transportation of plastic waste to the oceans and collapsing waste management by increasing leakage. Floods considered high risk is due to inundations depth above 0.5-2m with high probability of occurrence. Furthermore, wildfires can

		intensify floods but also end up in burning of waste. See section 5 on risks in the project document. The output 2.2 on solutions to plastic waste collection and recycling at cities will also take into account the risks of floods when designing the waste management practices.
2.3 outputs and outcomes sensitive or vulnerable to potential impacts of climate change (e.g. changes in precipitation, temperature, salinity, extreme events)?	N	
2.4 local communities vulnerable to the impacts of climate change and disaster risks (e.g. considering level of exposure and adaptive capacity)?	Y	As the project countries are vulnerable to the impacts of climate change, so are the local communities. See section 5 on risks in the project document.
2.5 increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	N	The project will lead to a net reduction of GHG emission, as a result of reduced open burning of plastics, more reuse and recycling of plastic waste to avoid consumption of virgin plastics.
2.6 Carbon sequestration and reduction of greenhouse emissions, resource-efficient and low carbon development, other measures for mitigating climate change	Y	Through project implementation, it is expected that the circular economy approach for plastics will be applied by stakeholders along the value chain, which will lead to the reduction of GHG emission caused by unstainable production and consumption of plastics, and the increase of efficiency of resources used by the sector. The benefits related with the reduction of GHG emissions have been calculated in the Global Environmental Benefits section in the project document.
Safeguard Standard 3: Pollution Prevention and Resource Efficiency		
Would the project potentially involve or lead to:		
3.1 the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	N	The project will reduce marine plastics and plastic pollution in the Latin America and the Caribbean region by facilitating circular actions and cooperation between governments and businesses at the city-level to accelerate the transition to a circular economy.
3.2 the generation of waste (both hazardous and non-hazardous)?	N	The project will contribute to the reduction of waste generation through supporting local governments in setting up waste reduction policies, promoting reusable products and solutions, identifying alternatives to single-use plastic products, etc. Elimination of problematic and unnecessary plastics is a key principle to guide the design and implementation of project activities.
3.3 the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	N	The project will assist participating countries in managing the disposal of hazardous chemicals in plastic waste in an environmentally sound manner.

3.4	the use of chemicals or materials subject to international bans or phase-outs? (e.g. DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention)	N	The project will support cities to identify alternatives to plastic products containing Chemicals of Concern and develop policies to reduce single-use plastic products and products with hazardous chemicals. The project will also improve the waste management practices of POPs contained plastics. Basel Convention Secretariat will be a key stakeholder to be involved in the project implementation phase.
3.5	the application of pesticides or fertilizers that may have a negative effect on the environment (including non-target species) or human health?	N	
3.6	significant consumption of energy, water, or other material inputs?	N	
Safeguard Standard 4: Community Health, Safety and Security			
Would the project potentially involve or lead to:			
4.1	the design, construction, operation and/or decommissioning of structural elements such as new buildings or structures (including those accessed by the public)?	N	
4.2	air pollution, noise, vibration, traffic, physical hazards, water runoff?	N	
4.3	exposure to water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable or noncommunicable diseases?	N	The project will support the recycling industry and the informal sector to improve their Environment, Health and Satefy performance, and take sanitary measures against COVID-19. Furthermore, plastic pollution is known to promote vector-borne diseases as they provide breeding sites for the vectors of these diseases. As the project will reduce plastic pollution, communities are expected to see a decrease in them.
4.4	adverse impacts on natural resources and/or ecosystem services relevant to the communities' health and safety (e.g. food, surface water purification, natural buffers from flooding)?	N	Through its reduction of plastic pollution, the project is expected to reduce the risk of flooding caused by plastics as these are known to clog draining systems and have a positive impact on ecosystem services.
4.5	transport, storage use and/or disposal of hazardous or dangerous materials (e.g. fuel, explosives, other chemicals that may cause an emergency event)?	Y	The project will support the private sector to test and apply circular actions on improving collection, storage and recycling of plastic waste and hazardous fractions in plastic waste. The collection and recycling activities will follow ESG standards and guidance and will be implemented by collectors and recyclers to be selected by the project team based on technical performance and compliance to health, safety and security criteria.
4.6	engagement of security personnel to support project activities (e.g. protection of property or personnel, patrolling of protected areas)?	N	

4.7	an influx of workers to the project area or security personnel (e.g. police, military, other)?	N	
Safeguard Standard 5: Cultural Heritage			
Would the project potentially involve or lead to:			
5.1	activities adjacent to or within a Cultural Heritage site?	N	
5.2	adverse impacts to sites, structures or objects with historical, cultural, artistic, traditional or religious values or to intangible forms of cultural heritage (e.g. knowledge, innovations, practices)?	N	
5.3	utilization of Cultural Heritage for commercial or other purposes (e.g. use of objects, practices, traditional knowledge, tourism)?	N	
5.4	alterations to landscapes and natural features with cultural significance?	N	
5.5	significant land clearing, demolitions, excavations, flooding?	N	
5.6 identification and protection of cultural heritage sites or intangible forms of cultural heritage			
Safeguard Standard 6: Displacement and Involuntary Resettlement			
Would the project potentially involve or lead to:			
6.1	full or partial physical displacement or relocation of people (whether temporary or permanent)?	N	
6.2	economic displacement (e.g. loss of assets or access to assets affecting for example crops, businesses, income generation sources)?	N	
6.2	involuntary restrictions on land/water use that deny a community the use of resources to which they have traditional or recognizable use rights?	N	
6.3	risk of forced evictions?	N	
6.4	changes in land tenure arrangements, including communal and/or customary/traditional land tenure patterns (including temporary/permanent loss of land)?	N	
Safeguard Standard 7: Indigenous Peoples			
Would the project potentially involve or lead to:			
7.1	areas where indigenous peoples are present or uncontacted or isolated indigenous peoples inhabit or where it is believed these peoples may inhabit?	N	
7.2	activities located on lands and territories claimed by indigenous peoples?	N	
7.3	impacts to the human rights of indigenous peoples or to the lands, territories and resources claimed by them?	N	
7.4	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	N	
7.5	adverse effects on the development priorities, decision making mechanisms, and forms of self-government of indigenous peoples as defined by them?	N	
7.6	risks to the traditional livelihoods, physical and cultural survival of indigenous peoples?	N	
7.7	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	N	
Safeguard Standard 8: Labor and working conditions			

8.1 Will the proposed project involve hiring or contracting project staff ?	Y	The Executing Agency will be responsible for hiring project staff. As per PCA conditions, UNEP guiding principles on selection process and labour and working conditions will have to be adopted.
If the answer to 8.1 is yes, would the project potentially involve or lead to:		
8.2 working conditions that do not meet national labour laws or international commitments (e.g. ILO conventions)?	N	The Executing Agency will ensure that the recruitment of local project staff (e.g. project manager, national consultants, technical experts) meet national labour laws and international commitments.
8.3 the use of forced labor and child labor?	N	
8.4 occupational health and safety risks (including violence and harassment)?	N	The project will improve the working conditions, health and safety, well-being, income and health insurance of the informal workers on plastic collection and recycling, by setting requirements for the procurement of the collection and recycling pilots.
8.5 the increase of local or regional unemployment?	N	
8.6 suppliers of goods and services who may have high risk of significant safety issues related to their own workers?	N	The project will collect and treat plastic waste in environmentally sound manner (whereas hazards only take place during primitive recycling processes). It will also support policy development and business action to reduce substandard recycling.
8.7 unequal working opportunities and conditions for women and men	N	The collection and recycling pilots may create a risk of unequal hiring process, and the project will ensure that the selection of collection proposals considers gender balance. A gender consultant will be hired under the project to give specific support.

1. General: Describe briefly how the pandemic overall is addressed in the project, including associated impacts, risks and opportunities. Projects are required to identify and establish likely impacts and risks from COVID-19, and how they will be dealt with in the context of delivering GEBs and/or climate adaptation and resilience benefits.

- **Direct risks** from the COVID-19 pandemic to the project include travel restrictions and the generation of additional waste streams, specifically PPE (such as face masks).
- **Demand for single-use plastic products** has further increased due to COVID-19, as disposable plastic products (such as PPE and cutleries) provide affordable solutions to consumers to meet their sanitary and health requirements. This needs for PPE due to COVID-19 has also increased the production and consumption of plastics specifically in the LAC region.
- COVID-19 pandemic has resulted in rapid **changes in work routines**, commercial activities, health care and other industries and social services. It had a direct impact in the volumes and types of waste generated in the countries, specifically during lockdowns. It has been estimated that waste generation has increased sharply, including plastic waste streams, such as Single Use Plastic Products (SUPP).
- Some countries had indicated or **experience lockdowns and/or travel restrictions**. Although vaccines have been developed after approximately one year following the proclamation of the pandemic, the delivery and rollout of vaccination programs in LAC countries have been slow as compared to developed countries. Restrictions on traveling to and within LAC countries are therefore likely to continue and will impact project execution activities by:
  a) physical meetings replaced by **virtual meetings**
  b) data collection on site remains challenging, hence data collection should rely on strong networks from local stakeholders
  c) health and safety procedures and standards need to be enforced to protect workers and the most vulnerable, especially in the context of pilot projects involving recycling facilities and other similar initiatives.

- **Indirect risks** caused by the COVID-19 pandemic include decreased local support due to shifted priorities and resources and impacts to the countries' economies, as well as a temporary suspension of SUPP reduction policy and promotion of reusables. Businesses oriented to recycling have been forced to closed down, as the local restrictions were not permitting the business operations. Tourism-dependent countries are facing significant decreases in GDP, growing unemployment rates and sharp increases in state debt. In order to ensure continued support, activities will be validated with the national stakeholders and the project will focus on communication that underlines the long-term benefits and business opportunities resulting from of its proposed activities. Discussions will be held with all relevant stakeholders to ensure COVID-19 impacts are not exacerbated by the project and new economic opportunities are supported.

2. Risk analysis: Describe further how risks from COVID-19 have been analyzed and mitigation strategies incorporated into the design. Project documents are expected to include consideration to the risks that COVID-19 poses for all aspects of project design and eventual implementation.

- **Impacts to human health due to COVID 19**

Guidelines and recommendations of government authorities and healthcare professionals must be followed. Hence, meetings will be held virtually as far as possible, and travel will be limited to minimize physical interactions. However, where face-to-face meetings are held, international health protocols, including, but not limited to, sanitization and appropriate physical distancing will be observed.
In all project implementation activities (such as testing reuse models, collection and recycling pilots), strict protocols will be put in placed to ensure the health and working conditions of the personnel, staff, experts and workers involved in the project.

- **Decreasing local support and delays in actions due to restrictions**

Ensuring plastic pollution remains a priority to countries, and health and safety protocols are ensured and where possible actions should be taken in virtual manner. Temporary suspension of policies on reducing of SUPPs, reversal of initiatives

that supported reusables. Spurring policy acceleration to reduce disposable plastics, promote reusables, and increase recycling.

- **Increase of plastic waste due to increased use of single use plastic products**

Awareness raising activities and campaigns under the project will create awareness on the importance of safe disposal of single use plastic products. Encouraging responsible consumption behaviour by addressing myth and misinformation on reusable plastics during COVID-19 'infodemic'. Demystifying the myths by educating and raising awareness through evidence-based harmonised consumer information and encourage embracing reuse and recycling.

- **Restricted travel**

Hosting meetings, trainings, workshops, and consultations on virtual platforms as much as possible. Executing Agencies will use their network to facilitate and ease online interaction based on similar time zones and language requirements.

- **Closing of recycling businesses:**

Ensuring health and safety protocols to provide operating ground for recycling to occur, specifically to collection of plastic waste which may be challenging due to restrictions. The project develops circular policies and business solutions to improve the collection and recycling practices in LAC cities, which will generate more incentives for better management of the waste sector, thus can increase the working conditions, job opportunities, and recycling performance of the recycling sector.

- **Decreased ability of private companies to participate or contribute co-financing due to COVID-19 lockdown**

Improvement of the COVID-19 situation and adjustment of restriction measures has been witnessed around the world, leading to the decrease in the likelihood of this risk to happen

3. Opportunity analysis: Describe further how the project has identified potential opportunities to mitigate impacts (if any) created by COVID-19 to deliver GEBs and/or climate adaptation and resilience benefits and contribute toward green recovery and building back better.

Further discussions will be held with all relevant stakeholders to ensure COVID-19 opportunities are supported.

- There is an opportunity to hold trainings and workshops to a larger audience given the benefits of virtual platforms and the easier access from different geographic locations. Also, there are lower costs associated to travel, as most meetings will be held virtually.
- In the meantime, the interventions of the project aim to reduce the production and consumption of single-use products through policies and business innovation. With increasing use of single-use plastic products in the context of COVID-19, the growing quantities provide bigger potential for reaching relevant GEBs such as marine litter, and climate benefits.

Appendix 6B - STAKEHOLDER ANALYSIS

Colombia

GEF LAC project: Stakeholder mapping and analysis

COLOMBIA							
Stakeholder Name (partners related with circular economy, marine plastic litter and plastic pollution prevention)	**What is the role** of the stakeholder?	**Interest** How much does the project interest them?	**Influence** How much influence do they have over the project?	How could the stakeholder **contribute** to the project / involvement in the project?	Which **component** of the project could the stakehdoler be engaged with, to support its implementation?	Which project **output** could the stakeholder influence/support to ensure its implementation?	**Strategy for engaging** the stakeholder
PUBLIC SECTOR							
Departamento Nacional de Planeación (DNP)	The DNP is the technical entity that promotes the implementation of a strategic vision of the country in the social, economic and environmental fields, through the **design, orientation and evaluation of Colombian public policies**, the management and allocation of public investment and the execution of plans, programs and projects of the Government	Medium	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics	Permanent Information and feedback Strengthening of its technical capacity with training
Ministerio de Vivienda, Ciudad y Territorio	Is responsible for the public cleaning service, including the collection, transport, disposal and use of ordinary waste (domestic, commercial and industrial). In other words, this ministry is the national public entity in charge of the management of marine plastic waste.	Medium	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics	Permanent Information and feedback Strengthening of its technical capacity with training
Ministerio de Ambiente y Desarrollo Sostenible	Public entity in charge of defining the National Environmental policy and promoting the recovery, conservation, protection, ordering, management, use and exploitation of renewable natural resources. Ministry leading the National Strategy on Circular Economy and the National Plan for the sustainable management of single-use plastics	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector	Permanent Information and feedback Strengthening of its technical capacity with training Virtual meetings every 3 months
Asociación de corporaciones autónomas regionales y de desarrollo sostenible (ASOCARS)	Its mission is to articulate and represent the Regional Autonomous Corporations and Sustainable Development before different instances. The CARs of Bolívar (Cardique and Corporación Autónoma Regional del Sur de Bolívar) and Atlántico (Corporación Autónoma Regional del Atlántico) are very active entities in their departments.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics	Permanent Information and feedback Strengthening of its technical capacity with training
Vice Ministry of Tourism	They agree, execute and evaluate the tourist policy, as well as the plans and programs derived from it, in conjunction with the competent entities of the public and private sectors, in order to improve the competitiveness and sustainability of tourist products and destinations and promote domestic and receptive tourism.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training
Ministry of Education of Colombia	The National Strategy for Circular Economy contains the Citizen Communication and Culture Program for the participation of the population in waste management. This program is based on CONPES 3874 of 2016, signed between the Ministry of Education and the Ministry of Environment and Sustainable Development for Environmental Education	Medium	High	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project
National Natural Parks (Parque Nacionales Naturales - PNN)	Protect the National Natural Parks, increase their resilience and verify that there are no illegal deforestation processes. Its activities involve Territorial and Forestry Planning, Sustainable and Productive Enterprises, Indigenous Peoples and Facilitating Actions.	Medium	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform	Provide clear information on support for activities that could contribute to the project

						Output 4.1.2 Targeted capacity building exercises conducted	
Ministry of Health and Social protection	Guides the health system and social protection in health, through health promotion policies, prevention. Invima is the National Regulatory Agency, a technical-scientific surveillance and control entity that works to protect the individual and collective health of Colombians, through the application of sanitary standards associated with the consumption and use of food, medicines, medical devices and other products subject to health surveillance. Companies that manufacture recycled plastic material to have contact with food need an authorization from Invima	Low	Low	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training
The National Administrative Department of Statistics (DANE)	DANE is the entity responsible for the planning, gathering, processing, analysis and dissemination of official statistics of Colombia and plays an important role for the National Strategy of the Circular Economy. Leads the Circular Economy Information Table. The objective of said table is to integrate scientific-technical information, statistics and administrative records	Low	Low	Increasing the awareness of problems resulting from the impacts of marine plastic pollution based on scientific and technical information as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project
Local governments (Barranquilla, Atlantico)	In the department of Atlántico and Bolivar, the regional and local governments have local goals regarding waste management. In addition, the entities are working together with the Atlantic Regional Autonomous Corporation (CRA) and the Ministry of the Environment and Sustainable Development on four Sustainable Plastic Agreements.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network Component 4: Capacity development and knowledge management	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector Output 3.1.2 Harmonised city-level action plan developed Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	Permanent Information and feedback Strengthening the technical capacity with a exchange of experienes with other relevant actors in the region
Local governments (Cartagena, Bolivar)	In the department of Atlántico and Bolivar, the regional and local governments have local goals regarding waste management. In addition, the entities are working together with the Atlantic Regional Autonomous Corporation (CRA) and the Ministry of the Environment and Sustainable Development on four Sustainable Plastic Agreements.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network Component 4: Capacity development and knowledge management	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector Output 3.1.2 Harmonised city-level action plan developed Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform	Permanent Information and feedback Strengthening the technical capacity with a exchange of experienes with other relevant actors in the region

						Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	
CARDIQUE	The Regional Autonomous Corporation of Canal del Dique - CARDIQUE is the environmental authority in charge of managing the environment and natural resources in three (3) ecoregions: Canal del Dique, Marino Costera - Ciénaga de La Virgen and Montes de María Basin. The corporation develops different communication strategies regarding the separation of waste and impacts on water bodies aimed at the consumer.	High	High	Support activities of Comp. 1 and 4, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	Permanent Information and feedback Strengthening the technical capacity with a exchange of experienes with other relevant actors in the region
Corporación Autónoma Regional del Sur de Bolívar	It is in charge of executing the policies established by the National government in environmental matters, managing, protecting and conserving the environment and natural resources of the center and South of Bolívar, aiming for their sustainable development in accordance with current legal provisions.	High	High	Support activities of Comp. 1 given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics	Permanent Information and feedback Strengthening of its technical capacity with training
Comisión Regional de Competitividad e Innovación	The Regional Commission for Competitiveness and Innovation of Cartagena and Bolívar-CRCI, is the body in charge of the coordination and articulation of the different bodies at the departmental and subregional level (public, private and academic) that develop actions and activities aimed at strengthening competitiveness and the innovation; It works jointly with the petrochemical-plastic cluster of Cartagena and Bolívar in technological innovation projects aimed at making use of plastic waste and increasing productivity within the framework of the circular economy.	Medium	High	Increasing the knowledge and competitiveness of Cartagena and Barranquilla with technological innovation projects aimed at making use of plastic waste and increasing productivity within the framework of the circular economy.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Permanent Information and feedback Strengthening the technical capacity with a exchange of experienes with other relevant actors in the region
Major of Barranquilla		High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector	Permanent Information and feedback Strengthening of its technical capacity with training Virtual meetings every 3 months
Barranquilla Verde	Barranquilla Verde is a Public Environmental Establishment (EPA) of the city of Barranquilla that promotes, guides and regulates the protection of natural resources and environmental sustainability, as a guarantee of the quality of life of citizens. Among their initiatives is the eradication of open dumps and critical points of accumulation of mixed waste, in which they have collected plastics of different types.	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project
Asuntos portuarios Alcaldía Bquilla	Design and execute plans that aim at the consolidation of the Special, Industrial and Port District of Barranquilla, as a logistics center of the Caribbean, articulating the actors related to the port dynamics of the city, based on a shared vision of the growth of the sector and its vocation within the national and international context. Lead and manage before the competent authorities and entities, the execution of projects that benefit the port sector, within the framework of the District Development Plan.	Medium	Medium	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training
Cormagdalena	is the environmental authority in charge of recovering and maintaining the navigability of the Magdalena River as a contribution to the competitiveness of the country, guaranteeing its sustainable development and contributing to the improvement of the quality of life of the riverside communities. Among its initiatives is the accompaniment of the 130 municipalities in its jurisdiction in updating the PGIRS, where they have held workshops together with Minvivienda and Minambiente focused on strengthening solid waste management.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training

Corporación Autónoma Regional del Atlántico CRA	The Corporación Autónoma Regional Del Atlántico - CRA - aims to execute the policies, plans, programs and projects on the environment and renewable natural resources, as well as to give full and timely application to the current legal provisions on their disposition, administration, management and use in accordance with the regulations, guidelines and guidelines issued by the Ministry of the Environment, Housing and Territorial Development, within the area of its jurisdiction.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training
Puerta de Oro	Puerta de Oro is a simplified joint stock company, with majority public shareholding, that works to improve the quality of life in Barranquilla, its metropolitan area and the Atlantic through the structuring and development of city projects that contributes to generating economic growth sustainable .	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy Output 3.1.2 Harmonised city-level action plan developed	Provide clear information on support for activities that could contribute to the project
Establecimiento Público Ambiental de Cartagena	Execute national policies, plans and programs on environmental matters defined by the Law Approving the National Development Plan, the National Investment Plan of the Ministry of Environment and Sustainable Development and the Development Plan of the Cartagena District, as well as those of the district order that have been entrusted to it or are entrusted to it in accordance with the Law, within the scope of its jurisdiction.	Medium	Medium	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training
CAR Cardique (Cartagena)	The Corporation is a public corporate entity made up of territorial entities that, due to their characteristics, geographically constitute the same ecosystem or make up a geopolitical, biogeographic or hydrogeographic unit. Endowed with administrative and financial autonomy, its own patrimony and legal status, being the highest environmental authority in the area of its jurisdiction.	Medium	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training
Corporación Autónoma Regional del Sur de Bolívar	Execute the most effective environmental policies emanating from the Ministry of the Environment, Housing and Territorial Development, ensuring the quality of the provision of our services, achieving maximum user satisfaction through continuous improvement of processes.	Medium	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training
PRIVATE SECTOR							
Acoplasticos	Is the Colombian non-profit organization that represents companies in the chemical production chains, which include the plastic, rubber, paint and ink (coatings), fiber, petrochemical and related industries. In this sense, it is the main union in the plastic sector and represents the largest companies in the sector in the country	High	High	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy Output 3.1.2 Harmonised city-level action plan developed	Receive clear information on support for activities that could contribute to the project
The Environmental Chamber of Plastic (Cámara Ambiental del Plástico)	The Environmental Chamber of Plastic was formed as a representative union of the entire Colombian plastic industry in 2016. In contrast to Acoplasticos, the Chamber represents small companies in the sector. The Chamber is part of the National Plastics Board and has the CORA Collective Environmental Responsibility Program, which currently has 47 members, most of which are companies that sell plastic containers and packaging.	Medium	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics	Receive clear information on support for activities that could contribute to the project

				sustainable management of single-use plastics . (Comp. 2,3)	Component 3: Inter-city plastics circular economy engagement network	Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy Output 3.1.2 Harmonised city-level action plan developed	
The National Association of Businessmen of Colombia (ANDI)	ANDI promotes the creation of collective post-consumer programs, creating the most important programs that exist in the country, cooperating in the Return Group (Close the cycle, Ecocomputing, Batteries with the environment, Red Verde and Rueda Verde). The Green Wheel program is the largest post-consumer used tire program in the country.	Low	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
CEMPRE	Cempre is a non-profit civil association whose purpose is to be the strategic ally of interest groups for the design and compliance of public policy around post-consumer waste management, articulating the actors in the value chain and managing projects that affect the use, the circularity of the materials, and the change in the behavior of citizens. The main ally for the association are informal recyclers.	High	High	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Triple A S.A E.S.P	Its corporate purpose is the provision of domestic water supply, sewerage and cleaning services, as well as the treatment and use of waste. The company is the main operator of the Barranquilla's public toilet service. The solid waste collection service is provided in Barranquilla and in five municipalities: Puerto Colombia, Galapa, Sabanalarga, Ponedera (rural area) and in Tubará (rural area), with coverage of one hundred percent.	Low	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Ekored	One of the main actors in the chain of plastic use in the country. Since 2009, the company organizes the logistics, collection, purchase and transport of PET material nationwide, through a recycling network focused on the use of waste. They receive the PET bottle materials in their four warehouses (Medellin, Bogotá, Cali and Barranquilla), from their partners, the trade recyclers.	Medium	High	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Pacaribe S.A. E.S.P	Provides public cleaning service to more than 55% of the city's population, guaranteeing quality, continuity and coverage in the management of ordinary and special solid waste for domestic, industrial and commercial use, in sweeping, cleaning beaches, lawn mowing, washing public areas, maintenance and installation of public baskets and containers.	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3	Receive clear information on support for activities that could contribute to the project

						Industry roundtable established on circular economy	
Veolia Cartagena	SOUND WASTE MANAGEMENT, including the Soterrados Containerized System, among its services is the collection, transport, use and final disposal of waste	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Esenttia	Esenttia develops Circular Economy strategies through the use of plastic waste in Cartagena.	High	High	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Dow	It has a polyurethane production plant in Cartagena. Among its business goals by 2030 is to have collected, reused or recycled 1 million metric tons of plastic through its direct actions and partnerships; and enable 100% of Dow products sold in packaging applications to be reusable or recyclable.	Low	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Andercol	Develops a PET bottle recycling program in a chemical recycling plant located, to be used as raw material for UPR unsaturated polyester resins with technical-economic viability at a commercial level. To date, it has achieved consumption of 10,000 PET bottles for each ton of UPR, reducing pollution in landfills by more than 11,000 tonnes of PET per year.	Medium	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
The Barranquilla Chamber of Commerce	The Barranquilla Chamber of Commerce leads the articulation of key actors to promote prosperity and competitiveness through the activation of information, capital and knowledge flows that generate impact in the Region.	Low	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Ecopars S.A.S	Ecopars S.A.S. is a company headquartered in Galapa focused on the recovery of materials. They have a final waste disposal plant. Among the barriers that they have identified around the use of plastics is the high informality of the “plastic pulp” market, which is mostly used to produce plastic wood, and many times in the shredding process microplastics are generated that end up in the ocean; Another barrier is that there is no chain for the collection and recovery of plastics other than PET, which is why these materials are the ones that mostly arrive at the landfill and are not used.	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project

Fenalco	Is a non-profit, permanent trade union entity in charge of promoting the development of commerce, guiding, representing and protecting its interests, within a criterion of well-being and progress of the country.	Low	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Ajover	Is a group of companies that manufacture petrochemical products, products for the construction sector and products for packaging. In Colombia, it has plants in Cartagena and Madrid, and its product portfolio includes translucent tiles, roofs, multipurpose tanks, barriers and pallets, architectural sheets and systems for wastewater treatment. In Barranquilla Ajover works hand in hand with associations of recyclers in the separation and collection of PET containers and they reincorporate approximately 70% of the recovered material in their products to produce new containers. Likewise, Biocirculo, one of its allied companies, carries out cleaning and reincorporation processes of polypropylene, polyethylene and polystyrene in new products that do not have contact with food.	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Veolia	We are the Sanitation Business Unit of Veolia Colombia. Our commitment is to continue renewing the world with sustainable practices, that is why we design, build and operate solutions that help us meet our goal.	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
Geofuturo	Geofuturo, is a company committed to the comprehensive management of industrial waste. Our experience is a guarantee of environmentally friendly, innovative, safe and quality solutions. We are strategic allies in waste management in the industry.	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Receive clear information on support for activities that could contribute to the project
NGOs and Civil society							
The Fundación Bahía y Ecosistemas de Colombia	The Fundación Bahía y Ecosistemas de Colombia is a non-profit NGO created to conserve the Bay of Cartagena and its surrounding ecosystems, work with its eco-dependent communities, fight against plastic pollution in the sea and promote adaptation and / or mitigation to climate change in the city.	Low	Medium	Generation and transfer of knowledge	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	The role of non-governmental organizations will be defined at the national level in coordination with the competent authorities
WWF Colombia	WWF plays an important role in the National Plastic Board in Colombia. A few years ago he was a partner of the Ministry of Environment and Sustainable Development for the Soy ECOlombiano campaign.	Low	Low	Generation and transfer of knowledge	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3	The role of non-governmental organizations will be defined at the national level in coordination with the competent authorities

						Long-term monitoring plan developed	
The Ocean Cleanup	The Ocean Cleanup is a Dutch non-profit organization that develops advanced technologies to remove the world's plastic oceans. The organization has developed and published a numerical model of global emission of fluvial plastic in the ocean that indicates that 1000 rivers are responsible for 80 percent of the global influx of plastic, including the Magdalena River in Colombia.	High	High	Provide technologies and innovation aimed at reducing plastic waste of marine ecosystems and increasing productivity within the framework of the circular economy.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	The role of non-governmental organizations will be defined at the national level in coordination with the competent authorities
Fundación Seamec	Environmental and Ecological Services, is an environmental consulting firm created with the objective of providing advisory and support services on issues related to compliance with the legal requirements of its projects and environmental management of the activities of its companies. It has a project called Plastiban which has been carried out since 2014 with a view to protecting and conserving the environment affected by the wrong disposal of residual plastic generated in the production of bananas in the Banana Zone of the Department of Magdalena	Medium	Medium	Generation and transfer of knowledge	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	The role of non-governmental organizations will be defined at the national level in coordination with the competent authorities
Plastic Oceans	Develops the Blue Communities initiative, focused on establishing long-term relationships between local communities and partners that develop circular economy projects. In the city of Cartagena, the initiative is carried out by the Fundación Bahía y Ecosistemas de Colombia, an NGO focused on conserving the bay of Cartagena and its surrounding ecosystems, fighting against plastic pollution in the sea and promoting actions adaptation and / or mitigation to climate change.	Medium	High	Generation and transfer of knowledge	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	The role of non-governmental organizations will be defined at the national level in coordination with the competent authorities
Asociación Recicladores Baq puerta de oro	Non-profit organization that responds to the challenge of making cities sustainable, providing quality environmental services.	High	High	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy Output 3.1.2 Harmonised city-level action plan developed	Provide clear information on support for activities that could contribute to the project
Asociación Fenaciclar	Non-profit association, with the aim of recycling at all levels and making people aware of the separation of waste	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy Output 3.1.2 Harmonised city-level action plan developed	Provide clear information on support for activities that could contribute to the project
Corporacion Ecoaprovechables de la Costa	Recycling, use of solid waste, industrial symbiosis and environmental education to promote the circular economy.	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and	Provide clear information on support for activities that could contribute to the project

				sustainable management of single-use plastics . (Comp. 2,3)	Component 3: Inter-city plastics circular economy engagement network	consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy Output 3.1.2 Harmonised city-level action plan developed	
Academia and research							
Universidad de los Andes	The Universidad de los Andes has several projects to support the transition towards a circular economy. The Ministry of Environment and Sustainable Development is working with them and the UN on an Ecolabelling project for Latin America.	Medium	Medium	Generation and transfer of knowledge	The contribution of the University is associated with the capacity for knowledge generation, research, extension and scientific production. The specialized centers related to water resources usually have the personnel and conditions to provide specific support (Comp 4).	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	In the case of Universities, a contact should be established through the Rectors' Offices to present the project and identify possible areas of collaboration
Universidad de la Salle	The University of La Salle has the Observatory of Circular Economy and Innovation (OECI), which seeks to respond to the challenges of the circular economy in the country and to be a benchmark of novelty for the university community. The observatory is executing the study "Technical, economic and legal barriers present in the development of the circular economy for the management of packaging waste and single-use packaging in Colombia."	Low	Low	Generation and transfer of knowledge	The contribution of the University is associated with the capacity for knowledge generation, research, extension and scientific production. The specialized centers related to water resources usually have the personnel and conditions to provide specific support (Comp 4).	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	In the case of Universities, a contact should be established through the Rectors' Offices to present the project and identify possible areas of collaboration
EAN University	EAN University has several initiatives of interest to the project and offers a specialization in Solid Waste. However, if the university is carrying out research with 3 international universities about microplastics in coastal municipalities, in Colombia they are working in Cartagena.	Low	Medium	Generation and transfer of knowledge	The contribution of the University is associated with the capacity for knowledge generation, research, extension and scientific production. The specialized centers related to water resources usually have the personnel and conditions to provide specific support (Comp 4).	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	In the case of Universities, a contact should be established through the Rectors' Offices to present the project and identify possible areas of collaboration
Universidad de la Costa	A private higher education institution located in the city of Barranquilla, Colombia. carries out a research project together with the ARC Barranquilla Naval School of NCOs, with the aim of collecting, identifying and classifying marine litter on the beaches of the Colombian Caribbean, as well as on the island of San Andrés and the island of Cayos de Bajo Nuevo, to develop an educational booklet on the impact of these wastes on the marine environment. At the beginning of the year a study was started on Salgar beach, the University expects to present the results of this study in July 2021.	High	High	Generation and transfer of knowledge	The contribution of the University is associated with the capacity for knowledge generation, research, extension and scientific production. The specialized centers related to water resources usually have the personnel and conditions to provide specific support (Comp 4).	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	In the case of Universities, a contact should be established through the Rectors' Offices to present the project and identify possible areas of collaboration
Universidad del Norte	A private higher education institution located in the city of Barranquilla, Colombia.	High	High	Generation and transfer of knowledge	The contribution of the University is associated with the capacity for knowledge generation, research, extension and scientific production. The specialized centers related to water resources usually have the personnel and conditions to provide specific support (Comp 4).	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform	In the case of Universities, a contact should be established through the Rectors' Offices to present the project and identify possible areas of collaboration

						Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	
Universidad de Cartagena	Public university in Cartagena.	Medium	Medium	Generation and transfer of knowledge	The contribution of the University is associated with the capacity for knowledge generation, research, extension and scientific production. The specialized centers related to water resources usually have the personnel and conditions to provide specific support (Comp 4).	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	In the case of Universities, a contact should be established through the Rectors' Offices to present the project and identify possible areas of collaboration
SENA seccional Bolivar	Public establishment of the National order and with administrative autonomy, attached to the Ministry of Labor.We offer free training to millions of Colombians who benefit from technical, technological and complementary programs that focus on the economic, scientific and social development of the country, enter to strengthen the productive activities of companies and industry, to obtain better competitiveness and greater results in different markets.	Medium	Medium	Generation and transfer of knowledge	The contribution of the University is associated with the capacity for knowledge generation, research, extension and scientific production. The specialized centers related to water resources usually have the personnel and conditions to provide specific support (Comp 4).	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	In the case of Universities, a contact should be established through the Rectors' Offices to present the project and identify possible areas of collaboration

JAMAICA

JAMAICA							
Stakeholder Name (partners engaged circular economy, marine plastic litter and plastic pollution prevention)	**What is the role** of the stakeholder?	**Interest** How much does the project interest them?	**Influence** How much influence do they have over the project?	How could the stakeholder **contribute** to the project / involvement in the project?	Which **component** of the project could the stakehdoler be engaged with, to support its implementation?	Which project **output** could the stakeholder influence/support to ensure its implementation?	**Strategy for engaging** the stakeholder
PUBLIC SECTOR							
Ministry of Housing, Urban Renewal, Environment and Climate Change	Public entity in charge of defining the National Environmental policy and promoting the recovery, conservation, protection, ordering, management, use and exploitation of renewable natural resources.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector	Permanent Information and feedback Strengthening of its technical capacity with training
Maritime Authority of Jamaica	Lead the legal regime to govern maritime affairs in Jamaica and provide for the establishment of a maritime administration (MAJ) to administer and enforce its provisions. **Maritime safety, marine pollution prevention and the welfare of (Jamaican) seamen are the primary areas of focus of the Authority**	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training

						Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector	
National Solid Waste Management Authority	The National Solid Waste Management Act (2001) mandates the National Solid Waste Management Authority (NSWMA) to take all necessary steps to effect the management of solid waste in Jamaica. Fulfilling this mandate facilitates action that would safeguard public health , ensure that waste is collected, stored , transported, recycled and reused, or disposed of in an environmentally sound manner.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector	Permanent Information and feedback Strengthening of its technical capacity with training
National Environment and Planning Agency	NEPA is the lead government agency with the mandate for environmental protection, natural resource management, land use and spatial planning in Jamaica. The Agency's operations are financed by recurrent budget allocations from the Government of Jamaica (GoJ) Consolidated Fund through the Ministry of Finance;	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector	Permanent Information and feedback Strengthening of its technical capacity with training
PRIVATE SECTOR							
Wisynco	Leading Jamaican distributor and manufacturer. Import top brands of food, beverages, and paper products and produce our very own lines of high quality products including Bigga, WATA, CranWATA, and BOOM.	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project
NGOs and Civil society							
The Jamaica Environment Trust (JET)	The Jamaica Environment Trust (JET) operates a recycling collection depot for plastic bottles in partnership with Recycling Partners of Jamaica Limited.	Medium	Medium	Generation and transfer of knowledge	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	The role of non-governmental organizations will be defined at the national level in coordination with the competent authorities
Academia and Research							
University of the West Indies: Faculty of Pure and Applied Sciences:	Leading university in the country and in the Caribbean. Currently working on research on micro plastics, working with teachers to develop programs for children to help to reduce their use of single-use plastic, and preparing a submission to the Ministry of Education for national roll-out of the program	High	Medium	Generation and transfer of knowledge	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	The role of non-governmental organizations will be defined at the national level in coordination with the competent authorities

Panama

PANAMA									
Stakeholder Name (partners engaged circular economy, marine plastic litter and plastic pollution prevention)	**What is the role** of the stakeholder?	**Interest** How much does the project interest them?	**Influence** How much influence do they have over the project?	How could the stakeholder **contribute** to the project / involvement in the project?	Which **component** of the project could the stakehdoler be engaged with, to support its implementation?	Which project **output** could the stakeholder influence/support to ensure its implementation?	**Strategy for engaging** the stakeholder	How the stakeholder will **assist** with sustainability and replication of project results?	**Contact Person** Phone, Email, Website, Address
PUBLIC SECTOR									
Ministry of Environment	It is the leading institution of the Project and the coordinator of its formulation and implementation, so it is committed to achieving the success of the Project by coordinating actions and activities with public institutions, as well as monitoring and ensuring the achievement of the expected results according to the established indicators. . It will also be in charge of convening and involving all the actors associated with the project.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector	Permanent Information and feedback Strengthening of its technical capacity with training	Through the improvement and implementation of policies	Julio Casas; Director de Costas y Mares; jcasas@miambiente.gob.pa; 6671-3613
Ministerio de Salud (MINSA)	As a sector institution in environmental sanitation, MINSA will participate in monitoring the project, receive and provide information, participate in the formulation of standards, protocols, manuals, guides, and other management instruments related to the subject.	Medium	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Permanent Information and feedback Strengthening of its technical capacity with training	Through the improvement and implementation of policies	Sección de Sustancias Químicas y Desechos Peligrosos; Yoani González; ygonzalez@minsa.gob.pa

Autoridad de Aseo Urbano y Domiciliario (AAUD)	The AAUD will provide technical assistance and training to selected municipalities to better manage solid waste in particular plastics, including plastics operation, segregation and recovery services in the context of a circular economy. It will participate in the follow-up meetings and in the execution of activities regarding waste management in the cities of Panama and Colón.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network Component 4: Capacity development and knowledge management	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 1.1.3 Financial instruments developed to facilitate responsible plastics management for project stakeholders including the private sector Output 3.1.2 Harmonised city-level action plan developed Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted Output 4.1.3 Long-term monitoring plan developed	Permanent Information and feedback Strengthening the technical capacity with a exchange of experienes with other relevant actors in the region	Through the improvement and implementation of policies Strengthening and giving institutional continuity to social participation in increasing knowledge regarding marine plastics, plastic pollution prevention and circular economy	Administrador General; Pedro Castillo Garibaldi
Ministry of Education (MEDUCA)	MEDUCA will coordinate and agree with MiAmbiente, MINSA and AAUD the contents that may be included in the school curriculum, as well as the activities that they can carry out together in the context of the project.	High	High	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	Through the improvement and implementation of policies Strengthening and giving institutional continuity to social participation in increasing knowledge regarding marine plastics, plastic pollution prevention and circular economy	Directora de Educación Ambiental, Carmen Aparicio, caparicio@meduca.gob.pa
Ministry of Economy and Finance (MEF)	The Ministry of Economy and Finance (MEF) is in charge of economic and social policy, including fiscal policy, and is responsible for the national budget. The Ministry may provide information and participate in meetings on regulations related to tax exemptions in the sector of use of recyclable materials.	Medium	Medium	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Provide clear information on support for activities that could contribute to the project	Through the improvement and implementation of policies	Directora de la Unidad Ambiental; Vielka de Garzola ; vgarzola@mop.gob.pa
Ministerio de Comercio e Industrias (MICI)	The MICI focuses on the development and execution of government policies related to domestic trade and industry, foreign trade, the promotion of foreign investment, and international trade negotiations. The MICI will be able to provide guidance on the proposed regulations in relation to plastic waste and its incorporation into the value chain in a safe and viable manner.	Medium	Medium	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Provide clear information on support for activities that could contribute to the project	Through the improvement and implementation of policies	Directora General de Normas y Tecnología Industrial; Edith Cajar/José González; evcajar@mici.gob.pa dgnti@mici.gob.pa cdegonzalez@mici.gob.pa

Ministerio de Desarrollo Social (MIDES)	MIDES is the governing body of the social policies of the Panamanian State. He leads social investment to strengthen the skills and capacities of the country's human capital and ensures social protection and the regulation of the quality of services, aimed at preventing social exclusion and compensating its consequences.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Provide clear information on support for activities that could contribute to the project	They will be able to collaborate in the monitoring and improvement of the social situation of the scavengers who operate in the landfills or landfills of the cities of Panama and Colón.	María Inés Castillo de Sanmartín Minister
Autoridad del Canal de Panamá (ACP)	The ACP is exclusively responsible for the operation, administration, operation, conservation, maintenance, improvement and modernization of the Canal, as well as its activities and related services.	Medium	Medium	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Provide clear information on support for activities that could contribute to the project	The Authority may collaborate through its water resource conservation projects and activities that it carries out with the population and through the hydrographic basin committees and sub-committees under its responsibility.	Sr. Daniel Muschett, Vicepresidente de Administración del Recurso Hídrico, ljemmott@pancanal.com, Magnolia Calderón, Gerente Sección de Manejo de Cuenca, mcalderon@pancanal.com, Noel Trejos, Especialista en Protección Ambiental, Manejo de Cuencas, Supervisor, Equipo de Gestión Socioambiental, ntrejos@pancanal.com
AMP - Autoridad Marítima	The Authority proposes, coordinates and executes the National Maritime Strategy recommending policies and actions. It has the Department of Pollution Prevention and Control under the Sub-Directorate of Ports and the Directorate of Ports and Auxiliary Maritime Industries.	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	The AMP may collaborate with the transmission of educational programs to the maritime sector.	Flor Pitty, Directora general de Puertos e Industrias Marítimas Auxiliares, fpitty@amp.gob.pa, Capitán Isaías Barahona, Administrador, Autoridad Marítima de Colón, Cristobal@amp.gob.pa
Autoridad de los Recursos Acuáticos (ARAP)	The Authority is in charge of regulating, promoting and applying technical and administrative measures and processes for the rational, sustainable and responsible use of aquatic resources. In particular, ARAP processes and issues riparian fishing permits and has been running the Ghost Nets Program since 2009, with which they can contribute to the project.	Medium	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	Can contribute to the convocation of organized fishermen and to awareness-raising activities.	Flor Torrijos, Manager, ftorrijos@arap.pa
Autoridad del Turismo de Panamá (ATP)	The ATP promotes international and national tourism in the country. It addresses marketing and promotion issues with the creation of the Panama Tourism Promotion Fund (PROMTUR).	Medium	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	The ATP may be an ally in terms of awareness and dissemination of the need to prevent environmental and passenger pollution caused by plastic waste.	Iván Eskildsen, MANAGER, secretaria@atp.gob.pa kvargas@atp.gob.pa

Zona Libre de Colón (ZOLICOL)	ZOLICOL is the largest free zone and the main container hub in Latin America. It is a regional distribution center that offers a logistics platform integrated by ports, rail, road and airport. Around two thousand (2,000) companies operate in this Free Zone.	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	They will be able to provide information on the products that are marketed in this free zone, including those that are repackaged.	Manager Giovanni B. Ferrari, jyanisselli@zolicol.gob.pa
Instituto Nacional de Estadísticas y Censos (INEC) de la Contraloría General de la República	It offers a wide range of services such as: import, export, storage, sales, marketing, distribution and value-added logistics services, storage, packaging, labeling, classification, display, among others.	Low	Low		Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics	Provide clear information on support for activities that could contribute to the project	The Authority may collaborate through its water resource conservation projects and activities that it carries out with the population and through the hydrographic basin committees and sub-committees under its responsibility.	Director Nacional Instituto Nacional de Estadísticas y Censos, Samuel Moreno samoreno@contraloria.gob.pa;mdehinds@contraloria.gob.pa
Asociación de Municipalidades de Panamá (AMUPA)	AMUPA represents the interests of the municipalities of the Republic, bringing together all municipal authorities. Its main function is that of political advocacy at all levels of the State, defining the interests of its members and their institutions, within the legal and democratic frameworks that exist for municipalities and their communities. The association has been an agent of change in the definition, control and adjustment of the decentralization process.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics. Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 4: Capacity development and knowledge management	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	AMUPA will monitor the waste project and participate in the search for solutions that lead to the local well-being of the communities in the selected districts, Panama, San Miguelito and Colón. They will also participate in training relevant to their work.	Executive director Jorge Ricardo Panay jpanay@amupa.org.pa
Municipality of Panama	The Municipality of Panama carries out actions conducive to the prevention of waste and pollution. It is the only one in the country that does not manage its waste in terms of its collection and disposal. However, it has carried out the Zero Waste Program and pilots for the recovery and collection of recyclables including plastics through 31 recycling stations in various sectors of the city. It also carries out environmental education activities, negotiations with the private sector for better waste management, and seeks institutional strengthening in waste management.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics. Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 4: Capacity development and knowledge management	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	The Municipality of Panama will contribute to the effective implementation of the activities of the Pilot Project to reduce the burning of plastics in landfills, seeking a value chain so that these materials do not reach landfills or landfills. They will assist the Project in identifying information and local key stakeholders. To this end, it will coordinate with the AAUD the search for solutions and management tools necessary to carry out the project activities. It will also provide information on experiences such as the Zero Waste Program, the Zero Waste-Change Your Neighborhood pilot, and ReciclaPorTuFuturo. They will also participate in relevant trainings.	Jefe del Departamento de Basura Cero, Edward García, edward.garcia@municipio-pma.gob.pa, edward.072328@gmail.com

Municipality of San Miguelito	The Municipality of San Miguelito manages the collection of its waste through a Concession to a private company, Revisalud S.A. Disposal of the same in the Cerro Patacón Landfill managed by the AAUD.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics. Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 4: Capacity development and knowledge management	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	It will provide the available information and they will participate in the Project in the activities and in the search for solutions to reduce the volume of plastics that reach the Landfill. They will also participate in training relevant to their work.	Gestora ambiental Ariadna Arroyo, aariadna2005@yahoo.es
Municipality of Colon	The Municipality of Colón manages the collection of its waste through a concession to a private company AguaAseo. It disposes of its waste mainly in the Monte Esperanza landfill, managed by the Municipality of Colón.	High	High	Support activities of Comp. 1, given its strategic objective to promote spaces of public, social and private coordination with entities at national, departmental and municipal levels linked to the reduction of marine plastics. Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 1: City led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 4: Capacity development and knowledge management	Output 1.1.1 Policies and action plans developed to promote circular economy approaches to plastics Output 1.1.2 Targeted interventions carried out to reduce or eliminate problematic plastics Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	It will provide the available information and will participate in the Project in activities and in the search for solutions to reduce the volume of plastics that reach the landfill. They will also participate in training relevant to their work.	Gestor ambiental Colón / Director de Aseo y Ornato Jose Calderon, calderonj7777@gmail.com
PRIVATE SECTOR									
Tetra Pak S.A	Multilayer packaging distributor	High	Medium	The company can provide information and participate in follow-up and monitoring meetings. The company estimates that the Tu Papel Cuenta recycling campaign through which they promote the recycling of materials, including plastics, can be valued as a contribution in kind to the Project.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Guillermo Pugliese, Sustainability expert Sustainability Director, denise.cisneros@tetrapak.com

Cervecería Baru/ Heineken Panama	Leading brewing company in Panama. The company does not sell products packaged in plastic but uses the plastic rings to group the can containers. They have worked with Leafsinc to get them recycled.	High	Medium	The company can provide information and participate in follow-up and monitoring meetings.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Gerente de Jurídico y Asuntos Corporativos, Gabriela Orillac, Gabriela.orillac@heineken.com
Cervecería Nacional de Panamá AB-Inbev	Manufacturer and distributor of local brands of beer, soft drinks, malt and bottled water. They operate through a production plant, ten distribution centers and a corporate center.	Medium	Medium	The National Brewery of Panama AB-Inbev is interested in the project in all facets, in its validation, participating with information, in follow-up and monitoring meetings, receiving information and training. They are also available to make in-kind contributions to the project based on their contributions to the Recicla Por Tu Futuro initiative, which it finances in partnership with the Municipality of Panama, ANCON, and others.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Director of Corporate Affairs, Legal, Supplies and Sustainability, Eloy Lever Eloy.Lever@pa.ab-inbev.com
Sistema Coca-Cola	Multinational beverage manufacturer company. Currently they are co-financing the Recycle for your Future project in alliance with the Municipality of Panama and other partners. This group includes Estrella Azul S.A, a manufacturer of dairy products, among other beverages.	Medium	High	They can provide and receive information, participate in the validation of the project, in follow-up and monitoring meetings. They would also like to participate in trainings. They can contribute in kind to the Project.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Asuntos Corporativos FEMSA, Karina Hernández, karina.hernandezl@kof.com.mx, Gerente Asuntos Públicos para Centroamérica, William Segura, william.seguraz@kof.com.mx
Nestlé	Multinational company that manufactures food packaged in plastics	Medium	High	Participate in private sector dialogues	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Claudia Alvarado, Sustainability Manager, claudia.alvarado@pa.nestle.com, Quality and health coordinator: rodrigo.abrego@pepsico.com

Cámara de Reciclaje de Panamá	The Chamber groups together companies and related organizations associated with the collection and recycling of waste. They promote training and better legislation for the recovery and recycling of materials.	High	High	The Chamber will participate in the validation of the Project, in follow-up and monitoring meetings, reception and dissemination of information, and in the convocation of its members.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Gabriel Vives, President, gabriel.vives89@gmail.com
Cámara Nacional de Turismo de Panamá (CAMTUR)	CAMTUR is an organization that brings together fifteen (15) important tourism associations and tourism companies. Represents the interests of the tourism business sector before the government and other public and private entities.	High	High	It will participate by receiving information on the progress of the Project and may be a channel for disseminating information to its associates.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Ernesto Orillac, President, presidencia@cwpanama.net
Chamber of Commerce, Industries and Agriculture	The Chamber of Commerce, Industries and Agriculture of Panama provides its members with services that contribute to the full development of their commercial, industrial, agricultural and professional activities. Among the services provided, legal advice and updated information on initiatives that impact the business sector stand out.	Medium	Medium	It will participate in the consultations regarding the regulations promoted by the project.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Rafael Zuñiga, executive director, itapia@panacamara.org presidencia@panacamara.org
Sindicato de Industriales de Panamá	The Union of Industrialists of Panama (SIP), is the institution that groups, represents and defends the interests of the national industry. It serves as a communication, information and education entity among its affiliates, facilitating the orientation of Panamanian industries and improving their competitive advantages. The Union awards each year the "Green Panama" certification for companies that implement good environmental practices in areas such as energy efficiency, waste management and water resources management.	Medium	Medium	It will participate in the consultations regarding the regulations promoted by the project.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Nelly Ranegl, Chairman of the Sustainability Commission, nellyrangel@hotmail.com, Vielkis torres, Assistant to the General Directorate, vtorres@industriales.org, Melissa Miranda Executive director, mmiranda@industriales.org

National Center for Cleaner Production (CNP + L)	Attached to the National Council of Panamanian Companies (CONEP), the CNP + L promotes, develops and disseminates the concept and application of Cleaner Production. The center supports research and development programs aimed at Cleaner Production in all sectors of the economy. It also promotes and advises companies on the transfer of cleaner technologies as well as the Cleaner Production policy. It is transitioning to a Circular Economy Center.	High	Medium	The Center is interested in participating in the validation of the project and monitoring the Project, seeking solutions and advising the private sector on good waste management practices, in particular on the plastics processing industry. You would like to receive information and training, as well as provide information on experiences and products made in conjunction with the Municipality of Panama regarding a waste exchange platform, good practice manuals for construction sectors, supermarkets, restaurants, auto-workshops and food manufacturing, the development of zero waste certification, and a pre-feasibility study for a waste treatment center east of Panama City. It is transitioning to a Circular Economy Center. The center is developing the initiative, still in the design stage, called Rice 4 Pet, which could be included as financing in kind for the project.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Alfredo Du Bois, Manager, alfredodubois17@gmail.com,
Recimetal Panama	Company that collects recyclables such as cardboard, paper, cans, tetrapak, and plastics for export	High	Medium	They would like to participate in the validation of the project and in follow-up and monitoring meetings	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Deputy general manager, Cindy Riasco, c.riascos@recimetal-sa.com
Bliss Panamá	Company that collects recyclables such as cardboard, paper, cans, tetrapak, and plastics.	High	Medium	They are interested in participating in the validation of the project, in receiving information and training, as well as in proposing initiatives that may result in alternatives to plastic.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Director, Alexei Castillo , gerencia@blisspanama.com
GesVil Reclycling S.A.	Company based in Barcelona. Collaborate with ANCON and TVN Media in the EnAmbiente campaign collecting plastic and other recyclable containers once a month in Via Ricardo J. Alfaro in Panama City.	Low	Medium	They would like to participate in the validation of the project in receiving information and in training. They have a project of Circular Economy based on plastics and would be willing to include them as a contribution in kind in the project.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	José Antonio Moreno, Manager, joseantonio@gesvil.com

Leafsinc S.A	Company dedicated to the collection of recyclables in neighborhoods and companies	Medium	Medium	They want to participate in the project and venture into plastic recycling. They are interested in validating the project as well as receiving information and training.	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities.	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Fernando Brito Serpas, Director, fserpas@leafsinc.com
Aguaseo	Company contracted for the collection and disposal of waste in the city of Colón	High	High	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	Representante Legal Directora Comercial, Anibal Vallarino Danisha Lay, dlay@aguaseo.com administración@aguaseo.com
Aseo Capital	They collect waste in the district of Arraiján, Chame, Panama Pacifico and large generators in Panama City.	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	Brend Gonzalez, Directora RCC, brenda.gonzalez@aseocapital.com
Panama Waste Management	Dedicated to the collection of solid waste, maintenance of green areas. They serve companies and private areas such as Costa del Este in Panama City	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	karla iturralde, Commercial manager, kiturralde@somosemg.com

Revi-Salud S.A	Urban waste collection company which maintains a concession by the municipality of San Miguelito	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	Director de Operaciones, director of operations, decantor@interaseo.com.co
Pronto Aseo S.A.	Industrial and commercial waste collection company	Low	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	Steve Denham, Manager, steve.denham@gmail.com
Planta de tratamiento de Aguas Residuales Juan Díaz	The Juan Díaz Treatment Plant is managed by Suez Panama since 2009 and treats the wastewater of more than 1.2 million people in Panama City. The Plant is part of the Sanitation of the Bay Program initiated in 2001 by the Ministry of Health. Carry out awareness-raising activities addressing the issue of waste (many of them plastic due to the impact caused on the water collectors).	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	Public relations manager, Vincent Decap, vincent.decap@suez.com
NGOs and Civil society									
National Association for the Conservation of Nature (ANCON)	The organization, one of the oldest and largest in the country, has as its mission the conservation of nature, developing conservation plans, management of protected areas, rapid ecological evaluations, among others. It has developed several campaigns and projects related to waste management. It has also developed and implemented the Zero Basura-CambiaTuBarrio pilot in conjunction with the Municipality of Panama, Cervecería Nacional, the AAUD and the community boards. Today it carries out the ReciclaPorTuFuturo.	Medium	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	The Association would like to be a participant in the Project, share its experiences and provide information that it has. He would also like to receive training and participate in the search for solutions to the national waste problem.	George Hanily, Executive director, george.hanily@ancon.org

Fundación MarViva	The Foundation promotes and designs solutions to improve solid waste management. They also carry out environmental management actions, community projects, awareness, training and environmental education. They run a Recyclable Collection Center in the City of Knowledge where they receive a significant number of materials to recycle, including PET, HDPE and PP plastics.	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	The Foundation is interested in participating in the validation of the project, in receiving training and in channeling funds to strengthen the plastics recycling initiative that they are developing, specifically the INNOVAPET financed by SENACYT. The Project plans to turn plastic into building blocks, replicate and scale the project with social inclusion.	Tania Arosemena, Gerente de Incidencia Política tania.arosemena@marviva.net
Fundación Costa Recicla	Organization dedicated to promoting recycling. Make a Drive through once a month where the residents of Costa del Este can take their materials to be recycled, except plastics.	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They will be able to participate in the validation of the project, in receiving and disseminating information, monitoring and training.	Gabriel Vives, Chair, gabriel.vives89@gmail.com
Marea Verde Foundation	Organization based in the Costa del Este sector, Panama City. They installed the first floating barrier (BOB) in the Matías Hernández River which runs through Costa del Este before flowing into the Bay of Panama.	High	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They indicate that they will be able to provide and receive information, participate in the validation of the project as well as in follow-up and monitoring meetings. They would also like to receive trainings and run circular economy pilots. They are interested in contributing in species to the project through the project of a water wheel catching floating garbage from the river.	Felipe Motta / Mirei Heras / Sandy Watenberg, Presidente, miembros Junta Directiva, info@mareaverdepanama.org
City of Knowledge Foundation		High	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are very interested in the project. They could provide baseline information and participate in trainings. It makes its Recyclable Collection Center (CAR) available for training, operated by the FAS-Panama Foundation. They can also provide spaces for training and meetings at their facilities in the City of Knowledge. In conjunction with FAS-Panama, they have obtained funds from SENACYT for the Innova Pet project, which will share spaces with the Clandestino Entrepreneurship (a group of young people), they have installed a Recycle LAC (RELAB), a recycling transformation workshop.	Especialista/ Departamento de sostenibilidad Dirección de planeación y desarrollo urbano, Mabely Cedeño, mcedeno@cdspanama.org

Botellas de Amor	Foundation present in Colombia and Panama whose mission is to recover plastic containers to be used in the construction of social housing.	Medium	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	This Foundation is very interested in participating in the project by facilitating and receiving information, validating the project document, in follow-up meetings and in training sessions.	Maryorie Joudry mjoudry@botellasdeamor.org Chair
National Union of Consumers and Users of the Republic of Panama (UNCUREPA)	Citizen initiative whose objective is to inform and educate so that consumers are responsible in their obligations and demand their rights. They seek a society with responsible consumption, with quality products and services from responsible and law-abiding suppliers.	Medium	Low	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	UNCUREPA will be able to channel public awareness programs on the consumption of plastic, and its impact on the environment and health.	6381-5053 Pedro Acosta, Chair
Movimiento Nacional de recicladores	The National Movement of Waste Pickers is a non-profit civil society that represents the interests of waste pickers at the national level.	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	President, Jenny González jennyrecicla@gmail.com, Raul Kelly, raulkelly@hotmail.com
Go Green C3 (ARLOSA)	They promote recycling, environmental awareness and sustainable development in the province of Colón. They are part of the Hydrographic Basin Committee of basin 017 in Colón.	High	Medium	Share experiences and best practices of the industry in the strengthening of the recovery chain, promotion of reusable products (aligned with the national plan for the sustainable management of single-use plastics . (Comp. 2,3)	Component 2: Private sector led promotion of circular economy approaches to reduce marine litter and plastics pollution in targeted coastal cities. Component 3: Inter-city plastics circular economy engagement network	Output 2.1.1 Approaches developed and tested to facilitate more responsible design, production and consumption of plastics Output 2.1.2 Approaches developed and tested to promote improved waste collection and plastics recycling Output 2.1.3 Industry roundtable established on circular economy	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	Raquel de Castrellón, President, hola@gogreenc3.org raqueldecastrellon@gmail.com
Academia and research									
Universidad Santa Maria La Antigua USMA	Academic institution of higher studies. It has faculties such as Engineering and Technology; Social Sciences, Law and Political Sciences.	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	Eduardo Mitres, posgraduate teacher, 6499-9945 6499-9949

						building exercises conducted			
Universidad Marítima Internacional de Panamá	Academic institution of higher studies focused on the maritime sector. It houses the School of Environmental and Marine Resources	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	They would like to participate in the validation of the project and in meetings for follow-up and monitoring, receiving information and receiving training. They carry out actions with ARAP for the management of marine litter and volunteer students. They have supervised recent theses on evaluations for waste management. They are open for possibilities of students who wish to do thesis with the support of the project.	Director Escuela de Recursos ambientales y marinos, Arturo Dominici, adominici@umip.ac.pa
Universidad Latina	Academic institution of higher studies. It has faculties such as Communication Sciences; Education and human development; Engineering; Business; Law and political science.	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	They are interested in participating in the validation of the project and in receiving information	Gisela Guevara, gisguevara@ulatina.edu.pa
Universidad Tecnólogica UTP	Academic institution of higher studies focused on engineering and research. It has the faculties of Science and technology; Civil Engineering; industrial engineering; among other. It has regional centers in the provinces including Colón. It has Research Centers	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	It can contribute to research and technology transfer.	Denise Del Valle, Investigador CIHH, denise.borrero@utp.ac.pa
Universidad de Panamá	Academic institution of higher studies. It has the Faculty of Natural Sciences, Exact and Technology, Education, Law and Political Sciences, Economics, among many. It welcomes the Vice-rectory for Research and Postgraduate Studies. They have regional centers in the provinces.	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	It can contribute to research and technology transfer.	Profesor/Departamento de Biología Marina y Limnología (DBML), Ediniel Trejos, editrejos30@gmail.com
Secretaría Nacional de Ciencia, Tecnología e Innovación (SENACYT)	The activities, projects and programs of SENACYT aim to strengthen, support, induce and promote the development of science, technology and innovation in order to raise the level of productivity, competitiveness and modernization in the private sector, the government , the academic-research sector, and the population in general. It regularly makes calls to carry out specialization studies and to finance innovation, entrepreneurship and research projects.	High	Medium	Increasing the awareness of problems resulting from the impacts of marine plastic pollution as well as disseminating the learning from this project's activities.	Component 4: Capacity development and knowledge management	Output 4.1.1 Information, Education and Communications (IEC) strategy for the project developed and carried out including use of IW:LEARN platform Output 4.1.2 Targeted capacity building exercises conducted	Provide clear information on support for activities that could contribute to the project	They could provide and receive information, as well as participate in follow-up meetings. They could explore strengthening the lines of financing for projects or specialization studies in the area of plastics problems. They can promote dialogue by finding suitable specialists and interlocutors. They have funded a research project: FID16-044: "Current situation of Micro Plastics in Coastal Areas of the provinces of Panama and Colón-Results" -	Secretario Nacional, Dr. Eduardo Ortega, info@senacyt.gob.pa Paola Franco: pfranco@senacyt.gob.pa

Appendix 7 – Gender Analysis Report

Project: *Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach*

Introduction

Countries in Latin America and the Caribbean (LAC) have some of the fastest-growing cities in the world – with accompanying rapidly increasing rates of waste generation. Poor waste management systems coupled with expansive coastlines and extensive internal waterways that carry unmanaged waste to the ocean pose a grave threat to public health as well as for the surrounding marine environments and related tourism.

Though the visibility of women's involvement in the plastics sector is limited, and data is lacking, women work formally and informally in the sector as recyclers, waste pickers, sorters, intermediaries, business owners, and employees of municipal waste service providers. They are also involved with production and consumption of plastic products.

To combat plastic pollution and reduce marine plastics in the region, gender-diverse teams are needed to develop new approaches to advance women's economic empowerment and equality in both the formal and informal sectors and increase commitment to sustainable and environmentally friendly solutions.

1.

Regional Comparison

Most countries in LAC region are classified as Upper Middle-Income Countries.[134] According to UNFPA, there have been impressive achievements in basic education. As of 2018, 95% of all children across the region are enrolled in primary school. Secondary school enrolment rates drop slightly with enrolment rates to 76% and 79% for males and females respectively.[135] Despite these high education levels World Bank's 2019 unemployment statistics note that 9.5% of the female and 6.8% of the male labour force are unemployed.[136]

Birth rates in the region are low. The average number of children per woman in the LAC region is two; significantly lower than other world regions with the exception of OECD countries, which average 1.6 children per woman.[137,138] The LAC region also has the lowest rates of gender discrimination in the

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134 Middle Income Countries are defined as lower middle-income economies - those with a GNI per capita between $1,036 and $4,045; and upper middle-income economies - those with a GNI per capita between $4,046 and $12,535. World Bank, 2020, The World Bank in Middle Income Countries. URL: https://www.worldbank.org/en/country/mic/overview

135 UNFPA, 2018, World Population Dashboard. URL: https://www.unfpa.org/data/world-population-dashboard

136 World Bank Databank, 2019, Gender Statistics. URL: https://databank.worldbank.org/source/gender-statistics

137 UNFPA, 2021, World Population Dashboard. URL: https://www.unfpa.org/data/world-population-dashboard

138 OECD, 2019, Fertility Rates. URL: https://data.oecd.org/pop/fertility-rates.htm?utm_source=charybd.com&utm_medium=link&utm_compaign=article

Global South.[139] This is in part due to enhanced legislative frameworks and holistic approaches in areas of "Restricted physical integrity" and "Restricted civil liberties".[140] Nevertheless, discriminatory informal norms persist, restraining women's participation and leadership in the economy.

Although data available is outdated, the data illustrating the gender gap in access to land are powerful. Most countries in Latin America and the Caribbean offer gender equality with regards to the law and rights in ownership of land, however reality is different. Women are in disadvantage with respect to men in land ownership, ranging from eight percent of total landholdings in Guatemala to 30 percent in Peru.[141]

Despite overall advances in the region, poverty rates range between 40% to 60%.[142] The economic downturn in Europe and the United States (driven by COVID) is already affecting economies in the LAC region through indirect channels such as remittances, and will have long-lasting impacts on the poorest people in the region, including women. The loss of additional sources of income for the poorest households in the LAC region because of COVID has disproportionately affected women and will put many of them at risk of falling into poverty.[143]

Colombia shares many socio-economic commonalities associated with the upper middle income South American countries. Likewise, Panama is indicative of middle income Central American countries and Jamaica of those upper middle to high income countries in the Caribbean.

National Comparison

Similar to the regional LAC average, primary and secondary education rates in **Colombia** are high for both females and males[144] with primary school enrolment at 93.2% for girls and 92.7% for boys. Secondary school enrolment drops to 80.2% for females and 74.9% for males. Tertiary school enrolment further decreases but remains high with 60.8% of females enrolled compared to 52.2% of males.

Just under 49% of female and 50.3% of males are self-employed. According to 2019 World Bank data, most of this employment is in the service sector which comprises 79% of all working females and 53.5% of all working men.[145] The Colombian unemployment rate currently stands at 10%[146] with 12.8% of the female labour force unemployed verses 7.9% for men.[147] The informal sector makes up for over

139 OECD, 2019, The Social Institutions and Gender Index in the Latin America and the Caribbean region. URL: https://www.oecd-ilibrary.org/sites/2f221b88-en/index.html?itemId=/content/component/2f221b88-en

140 Ibid

141 OXFAM (2016) UNEARTHED: LAND, POWER AND INEQUALITY IN LATIN AMERICA. Available at: https://www-cdn.oxfam.org/s3fs-public/file_attachments/bp-land-power-inequality-latin-america-301116-en.pdf

142UNIDO, 2020, The Circular Economy in Latin America and the Caribbean: Opportunities for building resilience, pp 9. URL: https://www.unido.org/sites/default/files/files/2020-09/circular_economy_lac.pdf

143 OECD, 2020, The impact of coronavirus (Covid-19) crisis on LAC women. URL: https://www.oecd-ilibrary.org/docserver/cb7d45d1-en.pdf?expires=1617729461&id=id&accname=ocid54015570&checksum=14CB4173A831E2E59CCE8EE994777431

144 World Bank Databank, 2018, Gender Statistics. URL: https://databank.worldbank.org/source/gender-statistics

145 World Bank Databank, 2019, Gender Statistics. URL: https://databank.worldbank.org/source/gender-statistics

146 World Bank Databank, 2019, World Development Indicators. URL: https://databank.worldbank.org/source/world-development-indicators

147 World Bank Databank, 2019, Gender Statistics. See reference 10

half of all employment and is roughly spilt between women and men at 59.7% and 55.2% respectively.[148]

Colombia has made important strides in gender equality over the past two decades. In 2019, Colombia's SIGI score [149] —a cross-country measure of discrimination against women in social institutions (formal and informal laws, social norms, and practices)—was 15%, well below the 100% mark of absolute discrimination.

The country also rose to 59th out of 153 countries in the World Economic Forum's 2021 Global Gender Gap Index.[150] Colombia has adopted a robust normative system that protects women's rights, and legislation requiring that women candidates comprise at least 30% of party electoral lists. This Quota Law has been a crucial enabler for higher representation of women in public institutions.[151]

Notwithstanding these achievements, Colombia still faces challenges on the path to gender equality and the social and economic empowerment of women and girls. Advances are needed in the effective implementation, enforcement and evaluation of relevant gender equality policies, laws and government programmes, particularly at the local level.

Primary education rates in **Panama** are good in relation to education levels across the Global South but are low in comparison to the overall LAC average of 95%.[152] Primary school enrolment is 85.9% for girls and 86.6% for boys, dropping to 65.9% for females and 61.7% for males in secondary school. In 2016, tertiary school enrolment was at 47.8% with 58.6% of females enrolled compared to only 37.3% of males.[153]

Fewer people are self-employed in Panama than in Colombia. Approximately 36.7% of working women are self-employed and a similar level is seen for men (40.8%). According to 2019 World Bank data, 82.3% of employed females work in the service sector compared to 58.3% of employed males.[154] Unemployment stood at 7.0 % in 2019 –with 5.8% of the female labour force and 4.0% of the male labour force unemployed[155] –but jumped to 10% in 2020, driven in part by COVID. Close to 50% of the working population are employed in the informal sector with the percentage of women and men being roughly equal (46.8% for women; 46.6% for men).[156]

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[148] Ibid

[149] The OECD Development Centre's Social Institutions and Gender Index (SIGI) measures discrimination against women in social institutions across 180 countries. By considering laws, social norms and practices, the SIGI captures the underlying drivers of gender inequality with the aim to provide the data necessary for transformative policy-change. The SIGI is also one of the official data sources for monitoring SDG 5.1.1 "Whether or not legal frameworks are in place to promote, enforce and monitor gender equality and women's empowerment". URL: https://www.genderindex.org/

150 World Economic Forum, 2021 Global Gender Gap Report 2021. URL: http://www3.weforum.org/docs/WEF_GGGR_2021.pdf

151 OECD, 2020, Overview of gender equality in Colombia. URL. https://www.oecd-ilibrary.org/sites/99444453-en/index.html?itemId=/content/component/99444453-en

152 World Bank Databank, 2017, Gender Statistics. URL: https://databank.worldbank.org/source/gender-statistics

153 World Bank Databank, 2016, World Development Indicators. URL: https://databank.worldbank.org/source/gender-statistics

154 World Bank Databank, 2019, Gender Statistics. URL: https://databank.worldbank.org/source/gender-statistics

155 World Bank Databank, 2019, Gender Statistics. URL: https://databank.worldbank.org/source/gender-statistics

[156] Ibid

The SIGI score for Panama is not available. However, according to World Economic Forum's 2020 Global Gender Gap Index, Panama ranks 31st out of 156 countries when looking at progress towards gender parity across four key areas: economic participation and opportunity; educational attainment; health and survival; and political empowerment. Regionally, Panama ranked 12th out of the 25 LAC countries in the 2020 gender gap index, behind Jamaica but ahead of Colombia. Panamanian women are 27% less likely than men to have equal economic opportunities.[157]

Like Colombia, **Jamaica** has strong primary and secondary education rates for both genders. Primary school enrolment for girls is 81.3% and 80.8% for boys with secondary school enrolment at 76.3% and 71.7% for females and males accordingly.[158] Latest data on tertiary school enrolment data is from 2015 and stands at 27.1%, with 34.7% of females and 19.9% for males.[159]

About 33.1% of Jamaican women as self-employed verses 44.7% of men. According to 2019 World Bank data, the service sector dominates as the main employment. Like Colombia over 86% women employed work in this sector with just over half of the male workforce (54.4%) also participating.[160] Unemployment rate in 2020 was at approximately 7.95%, a slight decrease from previous years. Although on a steady downward trend after peaking at over 15% in 2013, Jamaica's unemployment rate is still quite high.[161] Approximately 9.9% of the female labour force are unemployed which is almost double of that of men (5.8%).[162] There is no data between 2000 and 2020 on informal employment.

Jamaica's SIGI score of 24.7% is higher than Colombia's but still ranks as "low" in comparison to the world average. On gender equity overall Jamaica surpasses both Colombia and Panama with a standing of 40th out of 153 countries.[163] Women, however, still do not enjoy economic parity. In 2020,women 23% less likely to be able to have equal economic participation and opportunities than men.[164]

Table 1: Summary key figures

157 Statista, 2021, Panama: gender gap index 2014-2020. URL: https://www.statista.com/statistics/802911/panama-gender-gap-index/#:~:text=In%202020%2C%20Panama%20scored%200.73,Panama%20amounted%20to%2078%20percent

158 World Bank Databank, 2018, Gender Statistics. URL: https://databank.worldbank.org/source/gender-statistics

159 World Bank Databank, 2015, World Development Indicators. URL: https://databank.worldbank.org/source/gender-statistics

160 World Bank Databank, 2019, See reference 10

161 Statista, 2021, Unemployment rate in Jamaica 2020. URL: https://www.statista.com/statistics/527097/unemployment-rate-in-jamaica/

162 World Bank Databank, 2019, Gender Statistics. See reference 10

163 World Economic Forum, 2021, Global Gender Gap Report 2021. URL: http://www3.weforum.org/docs/WEF_GGGR_2021.pdf

164 Statista, 2021, Jamaica: labor market gender gap index 2020, by area. URL: https://www.statista.com/statistics/803809/jamaica-gender-gap-labor-market-category/#:~:text=In%202020%2C%20Jamaica%20scored%200.77,participation%20and%20opportunities%20than%20men

	Tertiary School Enrolment[165]		Self-employment		Unemployment		Informal Sector		Global Gender Gap Index (2021)
	Female	Male	Female	Male	Female	Male	Female	Male	Rank (156 countries)
Colombia	60.8%	52.2%	49%	50.3%	12.8%	7.9%	59.7%	55.2%	59th
Panama	58.6%	37.3%	36.7%	40.8%	5.8%	4.0%	46.8%	46.6%	31st (2020)
Jamaica	34.7%	19.9%	33.1%	44.7%	9.9%	5.8%	Not available		40th

Note: Unless indicated data are for 2019

Table 2: Life expectancy in the 3 countries (2019) [166]

	Female	Male
Colombia	80.02	74.53
Panama	81.76	75.42
Jamaica	76.12	72.87

Colombia and Panama present life expectancy numbers closer to developed countries, in particular to women with only 1-2 years lower, and men 4-5 years lower. While Jamaica present numbers closer to the average but towards less developed countries.

2. Opportunities in the Plastic Value Chain

Overview

The combination of education, employment opportunities and a relatively progressive gender climate provide entry points for gender mainstreaming in the plastics sector in the LAC region. Women already play a significant role in waste management efforts, and the essential role of women in designing and implementing solutions is increasingly recognised. For example, women are playing a larger role as volunteers and women's associations are spearheading effective community engagement campaigns. Women typically manage household waste and adhere more frequently to proper disposal behaviour. Moreover, there is a growing awareness across the region about the benefits of resource efficiency and the importance of solid waste management and recycling, especially in relation to ocean plastics. All 33 LAC Ministries of Environment have committed to combatting ocean plastic pollution and improving recycling efforts.[167]

What is less known is the role (and potential roles) of women across the plastics value chain. Information about the proportion of men and women working in the plastics industry is often lacking. Actual estimations on the number of employed people in the global plastic industry are not available

165 Dates for tertiary school enrollment are not comparable across countries. Dates for data are as follows: Colombia: 2018; Panama: 2016; Jamaica: 2015.

166 https://www.statista.com/statistics/970558/life-expectancy-at-birth-in-colombia-by-gender/

167 USAID Factsheet, Women's Economic Empowerment and Equality In Solid Waste Management And Recycling: LAC https://banyanglobal.com/wp-content/uploads/2019/06/USAID-factsheet-_WE3-SWM-LAC_2019_09_27.pdf

or not accessible. As far as gender disaggregated data on the workforce in the plastic industry is available, the assumption is that about 30% of the workforce are women. [168]

According to the International Labor Organization's World Employment and Social Outlook: Trends for women 2017 report[20], women do two and a half times as much unpaid domestic and care work than men. Women, therefore, are the most involved in household management and tasks such as waste disposal. Given the burden of care and domestic work on women and girls and the simultaneous nature of additional work resulting from the COVID-19 pandemic, it would not only be challenging to change behavior, but a burden to women and girls. A study in Latin America between networks of waste pickers on recycling showed that there was a clear gender division when it came to who was allowed to recycle the waste with the highest value or occupy positions of authority. Women lose out due to their limited time and energy given their responsibility for household and childrearing (Brito, 2015).

Hazardous chemicals present a threat, and can be intensified depending on social factors, including family life, poverty, education and health. There is a large percentage of women earning their livelihoods in the informal waste and recycling sectors than in similar formal occupations. As a consequence, babies and children often accompany their mothers in the informal waste sector and are exposed to unsafe and unhygienic environments. However, as the informal systems get developed and are turned into businesses, men often seem to become beneficiaries, who take the jobs with better economic opportunities and stable. [169] Moreover, there is a large number of women who perform cleaning jobs in hospitality, health centres, private sector cleaning companies, meaning women are exposed to the effect of waste as housekeepers and also in their livelihood practices. Also, the women and children in poorer context are exposed to the toxicity of the inadequate waste management, as they remain close to their homes, they inhale toxic emissions due to the open burning practice which is common. The human system becomes affected and toxic substances produce breast cancer and reproductive issues, since women have more fatty tissue than men [170]. Also, the exposure in the work environment of the plastic industry contributes to this health problem. Recycling actors are exposed to synthetic plastics which is contaminated with dust and fumes. [171]

Having said that, waste management cannot be generally attributed to males or females, but there are gender roles, which may differ between cultures. The consequential exposure levels for men and women to microplastics and associated hazardous chemicals needs to be investigated as a basis for a reliable gender related risk assessment. There is a need for waste picker cooperatives, to create opportunities for education and social development, and reduce exposure to health risks. In particular during indoor and backyard burning, which is mostly practiced by women. Male counterpart is dominant in the formal waste management, including controlled large-scale incineration of plastic waste for energy recovery.

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168 WECF (2017) Plastics, Gender and the Environment. Available at: https://www.wecf.org/wp-content/uploads/2018/11/PlasticsgenderandtheenvironmentHighRes-min.pdf

169 UN (2019). Available at: https://www.unep.org/es/noticias-y-reportajes/reportajes/la-gestion-de-residuos-una-oportunidad-para-la-igualdad-de-genero

170 UN (2021) EL USO EXAGERADO DEL PLÁSTICO DURANTE LA PANDEMIA DE COVID-19 AFECTA A LOS MÁS VULNERABLES. Available at: https://nacionesunidas.org.co/onu-internacional/el-uso-exagerado-del-plastico-durante-la-pandemia-de-covid-19-afecta-a-los-mas-vulnerables/ (WCEF, 2006)

171 DeMatteo et al. (2013) https://nacionesunidas.org.co/onu-internacional/el-uso-exagerado-del-plastico-durante-la-pandemia-de-covid-19-afecta-a-los-mas-vulnerables/

There is a tendency of women to perceive various hazards as riskier compared to men and are less likely to impose health and environmental risks on others. Wastewater related items are gender related, like condoms and menstrual hygiene products. The lack of facilities for change, cleaning and disposal causes a threat to the sewage system and damage to the natural environment. Moreover, social and professional disadvantages are present for menstruating females, in particular to cultures where menstruation is a taboo.[172]

Consumer behaviour is different between men and women. Men tend to buy more expensive goods, including homes, cars, electronic equipment. While women often buy basic goods, including food, health items, clothing and household articles. A reason why women could play an important role in the reduction of plastic consumer goods in the household.[173] Women have a key role to be the main controllers of household spending and be better informed to consume responsibly, to demand zero or minimal plastics, alternatives in packaging in fast consuming goods. Activities including information campaigns to address possible presence of microplastics in PCCP and other cleaning products. Moreover, gender sensitive action plans should be developed and implemented to reduce and recycle plastics that do not contain POPs.[174]

Understanding the opportunities and harnessing the talents of women are central to reducing plastic pollution and to ultimately to successfully implementing a circular economy approach. To effectively mainstream gender into this project it will be necessary to first collect more information about the current roles and perception of women beyond traditional waste management roles i.e. collecting, sorting, recycling, scavenging waste. Information collected should also include indigenous women who may or may not already be integrated into the communities targeted by the project.

The following questions can be used to guide this research:

- What is the role of women in plastic production?
- How do women make purchasing decisions?
- What resources are available to women to make informed decisions about:
    - purchases involving plastics?
    - plastic waste management?
- How aware are women about plastic products, their uses and potential impacts on their health and the environment?
    - What is the impact of hazardous chemicals (POPs) in the production of plastic products on reproductive health?[175]
    - What types of household plastic products are used?
      e.g., for cleaning such as detergents, sprays, sponges and personal hygiene and cosmetics? (Opening opportunity for increased circularity, e.g., refill schemes etc.)

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[172] WECF (2017) Plastics, Gender and the Environment. Available at: https://www.wecf.org/wp-content/uploads/2018/11/PlasticsgenderandtheenvironmentHighRes-min.pdf

[173] WECF (2017) Plastics, Gender and the Environment. Available at: https://www.wecf.org/wp-content/uploads/2018/11/PlasticsgenderandtheenvironmentHighRes-min.pdf

[174] WECF (2017) Plastics, Gender and the Environment. Available at: https://www.wecf.org/wp-content/uploads/2018/11/PlasticsgenderandtheenvironmentHighRes-min.pdf

[175] https://www.wecf.org/wp-content/uploads/2018/11/PlasticsgenderandtheenvironmentHighRes-min.pdf

    - Are women aware of plastic alternatives? (Assuming that plastic alternatives are available)
    - What are the impacts of waste management on health?
- How do women dispose household plastic waste?
- What role do women play in waste management?
    - What is the level of social protection against sexual harassment?
- What is the current distribution of work across the value chain between men and women?

	Female		**Male**	
Production				
Household purchasing				
Household use				
disposal				
	Formal		**Informal**	
	Female	Male	Female	Male
Collection				
Sorting/recycling				
Handicraft				
Junk shops				
Incineration/open burning				

- What are the productivity levels between gender?
    - What are the collection rates? (e.g., xx kg/day)
    - Difference in income?
    - Difference in workload?

- What is the accessibility of equipment/vehicles to women to improve operating conditions in waste management?

3. Mainstreaming Gender in Project Implementation and Management

Drawing on preliminary data detailed above, and information collected, the project will explore key gender aspects of addressing plastics reduction and will identify action priorities.

Over the course of the project, project staff will: assess the various gender dimensions of the project and its interventions; determine entry points across the plastics value chain; and develop associated project activities that consider the impact on various occupational and population groups. Efforts will be made to collect data disaggregated by sex across the four project components. Data will be used to help adjust the design and interventions of the project so that gender equality and women empowerment can be better achieved throughout the project's implementation.

The project is designed to be participatory, inclusive and to have gender equality elements. Local organisations will be engaged in project implementation as key participants, consultants and beneficiaries of action planning, demonstrations and investments, and knowledge-sharing.

Activities will be designed to enable participation in project activities by community-leaders and champions. Local participation and ownership of the project activities are critical to the successful outcome and the sustainability of interventions. UNEP's guidance on gender mainstreaming as well as the GEF policy on gender mainstreaming will also guide the process.

Towards the end of the project, the gender assessment will be updated in order to reflect contributions from the project towards the achievement of SDG 5, achieve Gender Equality and Empower all Women and Girls. SDG 5 on gender equality has consistently been identified as a goal that is central to the achievement of all of the other goals. And in particular Target 5.5 "Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life". For example, one of the targets for the goal of gender equality is to "undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws" which is directly linked to food security, economic opportunities, and participation in protection of natural resources.

Key activities will include:

- Assessing gender roles and needs across the plastics value chain
- Performing a landscape analysis to determine key factors/barriers to secure women's involvement and support
- Asking and responding to six critical questions over the course of the project:
    1. What role do women play across the whole plastics value chain e.g.: product design; policy design; consumer behaviour (use and disposal)?
    2. What role do women play in decision making processes, both personally and professionally?
    3. What are the entry points to ensure equal participation and benefits in activities/policies developed?
    4. What role can women play in raising awareness and multiplying actions?
    5. What tools/methods could be used to ensure gender responsive design?
    6. What will gender mainstreaming success look like?

Indicator Development

Below are possible indicators that can use to qualitatively assesses whether the capacity of women and men has been increased. Given the indigenous populations in the region, indicators must be designed in a way to enable gender-sensitive monitoring and collection of accurate data in a culturally sensitive manner. Where possible data collection should be further disaggregated to include indigenous women who potentially face different challenges, not only from indigenous men (owing to the gendered division of labour in indigenous cultures) but also from other women.

Consultation Participation

- Number and percentage of women and men actively participating in consultations, workshops, events, training and committee meetings; at least 40% of each gender represented
- Number and percentage of men and women, by social group, consulted in each of the four project components
- Number of women and men in decision-making positions in the related activities
- Number of steering boards established disaggregated by gender and sector
- 100% of guidelines and workplans have gender inclusiveness integrated

Benefit Sharing

- Number of women and men benefitting from organised workshops and trainings opportunities
- Number of women and men benefitting from new tools and resources
- Number of poor households that are project beneficiaries broken down by number headed by women/men
- Number of women-owned businesses that are involved in project activities
- Number of women of in a leadership position in community or sector
- Number of specific knowledge material developed on gender

Resources

A gender specialist will be engaged to support project design and preparation across the timeline of the project. This project member will ensure that activities actively engage and empower women in core activities such as: holding stakeholder consultations to inform project design; assigning leadership roles during project implementation etc. Project budget will be allocated to support these activities. Furthermore, the specialist will be responsible of designing a gender plan in this specific context and measures found in the table under Gender Action Plan.

Monitoring and evaluation:

Understanding whether the project was successful in mainstreaming gender will be important. Monitoring of gender related activities will occur throughout the project and will track and evaluate gender impacts and results by ensuring:

- the presence of tools/methods to ensure gender responsive design
- tracking of positive impact: sex-disaggregated indicators and targets

The final evaluation will contain a discussion about how well the project has integrated a gender perspective, with concrete examples including learnings and recommendations related to the gender perspective of the project.

Gender Action Plan

Various actions and activities will put in place across the project to respond to identified gender risks, differences, gaps or opportunities. The adoption of the gender mainstreaming will consider both women and men experiences, concerns, and needs. These proposed activities and target setting are intended to achieve the following strategic priorities: 1) increase women's involvement across the plastics value chain; 2) enhance gender equality in decision making and leadership; and 3) improve women's economic empowerment.

The following conceptual framework will be used to structure the proposed gender measures.

Component	Objective(s)	Possible Activities	Means of verification: Indicators & targets
Overall Project Management			
	Reduce gender disparity across plastics value chain	Develop survey to identify the causes which are hindering the reduction of disparities among genders in the plastic manufacturing and recycling sectors	Survey developed and gender disaggregated data collected
	Promote women representation in participatory and decision-making processes and support the overall empowerment of women	Prepare a Gender Guidance Note to be used by all bodies responsible for participatory and decision making exercises to ensure that activities organised are done in a gender responsive manner	Gender Guidance Note drafted and distributed by Month 3 of project implementation
	Ensure women's participation in stakeholder consultations	Identify women's groups that can raise awareness of consultations and secure engagement	Balance of male/female participation (above 40%); female and male presenters/facilitators at consultations; proportion of interventions made by women at consultations documented in meeting reports

Component	Objective(s)	Possible Activities	Means of verification: Indicators & targets
Component 1: **City Led Promotion of Circular Economy Policies to Reduce Marine Plastics and Plastic Pollution in Targeted Cities**			
Output 1.1	Understand the role of plastic products in women's lives across personal, household and business levels to inform the drafting of policy frameworks and action plans	Carry out gender dis-aggregated surveys to assess role of plastics in women's everyday lives (household, business activities)	# of gender disaggregated surveys carried out
Output 1.2	Women are aware of proposed action plans, have a collective understanding of what these action plans are and what they aim to achieve.	Identify key communication channels that target women with appropriate messaging	# of communication channels used that count women as their primary audience
Component 2: ***Private Sector Led Promotion of Circular Economy Actions to Reduce Marine Plastics and Plastic Pollution in Targeted Cities***			
Output 2.1	Ensure women are consulted in the innovation and pilots to scale-up new product/packaging designs	Include women in consultation and testing phases. Use surveys carried out in Output 1.1 to assess role of plastics in women's everyday lives (household, business activities)	Outreach and engagement activities are carried out in places frequented by women Reports produced indicate breakdown of women/men consulted

Component	Objective(s)	Possible Activities	Means of verification
Output 2.2	Map out women's purchasing patterns (personal/household, professional)	Use surveys carried out in Output 1.1	Disaggregated data on female and male purchasing patterns
Output 2.3	Understand prevailing attitudes about waste and women's roles in waste management	Develop survey to collect data using in-person, on-line and/or mobile-based surveys	# of surveys carried out
Output 2.4	Support female entrepreneurs	Raise awareness of and provide access to financing opportunities to positively influence women's decision-making capacities	Number of women entrepreneurs engaged across plastics value chain has increased Proportion of women who have started using / made the switch to the new "sustainable consumption solutions"
Component 3: **Inter-City Network on Marine Plastics and Plastic Circular Economy**			
Output 3.1	Develop action plan to secure women's participation in the development of inter-city networks, using data collected under Project Output 1.1.1 to ensure that plan is both gender and culturally responsive	Consult with local businesses, community organisations, churches etc.	# of women actively participating in inter-city network planning boards/councils

Component	Objective(s)	Possible Activities	Means of verification
Output 3.2	Ensure female political figures and community leaders (including indigenous groups) are included in decision-making and outreach activities	Consult with local leaders; use information collected for ensuring women's participation in stakeholder consultations to identify female leaders	# of women actively participating in inter-city network planning boards/councils # of women involved in the political process
Component 4: **Capacity Development and Knowledge Management**			
Output 4.1	Ensure that communication strategy contains a gender analysis	Carry out gender analysis based on research and direct consultation	Communication strategy with gender analysis component Number of gender references in information/knowledge material produced Number of specific knowledge material developed on gender
Output 4.2	Develop and disseminate materials that illustrate/celebrate the proactive role of women in plastics management	Involve women in the conceptualisation, design and dissemination of information	# of women involved in activities
Output 4.3	Target "behaviour change" communication to women as household and purchasing decision makers, community influencers business owners, ensuring indigenous perspective is included	Involve women (including indigenous women) in the conceptualisation, design and dissemination of information	# of targeted awareness raising campaigns for both local and indigenous communities Number of communications materials (reports, press releases, newspaper articles, radio shows, etc.) specifically developed on gender issues in the circular economy

GEF 10547
Risk Mitigation Plan

This document will serve to support the impact, probability and risk values identified in the UNEP Safeguard Risk Identification Form (SRIF) for the GEF LAC project.

1. Introduction to the GEF LAC Project

Under the Programming Directions for the 7th funding cycle of the Global Environment Facility (GEF 7), a project "Reduce marine plastics and plastic pollution in Latin American and Caribbean cities through a circular economy approach" is under development. The project is led by UNEP and its PIF document has been approved by the GEF Secretariat in 2020 and the project is currently under the PPG phase. The full project document will be submitted to the GEF Council meeting in December 2021 for approval.

The project has two main focal areas, International Waters and Chemical and Waste. The funding source is the GEF trust fund, with UNEP as implementing agency. The execution will be carried out by the Cartagena Convention Secretariat, together with the local governments and city administrations. The project cities are Barranquilla and Cartagena from Colombia, Panama City and Colon from Panama, Kingston and Montego Bay from Jamaica.

The project aims to reduce marine plastics and plastic pollution in the Latin America and the Caribbean (LAC) region by facilitating circular actions and cooperation between governments and businesses at the city-level to accelerate the transition to a circular economy. It includes 4 components:

Component 1 addresses the lack of regulations and policy instruments on marine litter and circular economy of plastics in LAC cities by supporting city governments and authorities to set up regulatory frameworks and testing potential policy instruments to improve circularity in the plastic value chain.

Component 2 addresses the lack of business innovation and actions in LAC cities, by stimulating the development of circular design and innovation, with cooperation among relevant businesses along the value chain.

Component 3 tackles the lack of common visions, approaches and leadership for LAC cities, by setting up an inter-city network to align regional strategy and actions to stimulate cities to cooperate on a circular economy of plastics at the regional level.

Component 4 develops various knowledge products and capacity-building activities, to enable governments, businesses and other stakeholders to adopt best practices at city, national and regional levels for wider replication in more cities in LAC.

The 4 components organically interact with each other and provide a consolidated solution to fundamentally shift the unsustainable consumption and production patterns and insufficient management, which is the fundamental root cause of marine litter and plastic pollution. The project will lead to net gain at environmental, social, and economic dimensions, which eventually support the achievement of the Sustainable Development Agenda and its relevant targets by 2030.

2. Introduction to the SRIF

UNEP officially adopted the Environmental and Social Sustainability Framework (ESSF) on 31 December 2014. The ESSF was revised in February 2020. UNEP's Safeguards approach provides a holistic framework for the identification, assessment and management of a project's potential environmental, social and economic risks at each stage of the project cycle. Application of the Framework will help UNEP Project Managers avoid—or minimize where avoidance is not possible—potential associated negative environmental, social and economic impacts that might otherwise arise as unintended consequences of their projects. It is expected that many UNEP projects will not significantly change due to application of the safeguard requirements.

Review Notes are generated using a template available through UNEP's Project Information and Management System. The template includes a set of screening questions based on the eight (8) Safeguard Standards presented in the Framework. This checklist is used to review the potential environmental, social and economic safeguard impacts of

projects and to determine whether projects will trigger relevant safeguard policies. The eight (8) Safeguard Standards presented in the Framework are as follows:

SS1: Biodiversity, Ecosystems and Sustainable Natural Resource Management

This safeguard aims to: preserve the integrity of ecosystems; conserve biodiversity; maintain and enhance the benefits of ecosystem services; promote nature-based solutions (NBS) wherever feasible or possible; promote sustainable management and use of living natural resources; ensure the fair and equitable sharing of the benefits from the utilization of genetic resources; and respect, preserve, and maintain knowledge, innovations and practices of indigenous peoples and local communities relevant for the conservation and sustainable use of biodiversity and their customary use of biological resources.

SS2: Climate Change and Disaster Risks

This safeguard aims to: strengthen resilience of communities to address risks of climate change impacts and disasters; ensure programmes and projects integrate climate change adaptation considerations and does not exacerbate vulnerability of communities to climate change impacts or disaster risks; and minimize programme and project-related greenhouse gas (GHG) emissions and intensity and maintain carbon sinks.

SS3: Pollution Prevention and Resource Efficiency

This safeguard aims to: avoid and minimize adverse impacts on human health and the environment from pollution and the unsound management of chemicals and wastes; promote more sustainable and efficient use of resources, including circular approaches and practices of using energy, land and water; avoid or minimize programme or project-related emissions of short and long-lived climate pollutants, unintentionally produced persistent organic pollutants, and ozone-depleting substances; avoid or minimize generation of hazardous and non-hazardous waste, and promote a human rights-based approach to the environmentally sound management and disposal of hazardous substances and wastes; avoid or minimize the generation of plastic waste in view of reducing the prevalence of marine plastic litter and microplastics in the marine environment; and promote safe, effective, and environmentally sound pest management.

SS4: Community Health, Safety and Security

This safeguard aims to: anticipate and avoid adverse impacts on health and safety of affected communities during the programme or project life cycle, from both routine and non-routine circumstances; ensure quality and safety in the design and construction of programme or project-related infrastructure, preventing and minimizing potential safety risks and accidents; avoid or minimize community exposure to disaster risks, diseases and hazardous materials associated with programme or project activities; ensure the safeguarding of personnel and property minimizes risks to communities and is carried out in accordance with international human rights standards and principles; and have in place effective measures to address emergency events, whether human-made or natural hazards.

SS5: Cultural Heritage

This safeguard aims to: protect cultural heritage from damage, inappropriate alteration, disruption, removal or misuse and support its preservation and safeguarding and protection; ensure equitable sharing of benefits generated from integration and utilization of cultural heritage in programme or project; and promote meaningful consultation with stakeholders regarding preservation, protection, utilization and management of cultural heritage.

SS6: Displacement and Involuntary Resettlement

This safeguard aims to: avoid, or where avoidance is not possible, minimize and mitigate adverse impacts from land or resource acquisition or restrictions on land or resource use; prohibit forced evictions; enhance and restore the livelihoods and living standards of all displaced persons and to improve the living conditions and overall socioeconomic status of displaced poor and persons belonging to marginalized or disadvantaged groups; and ensure that resettlement activities are planned and implemented collaboratively with the meaningful and informed participation of those affected.

SS7: Indigenous Peoples

This safeguard aims to: recognize and foster full respect for indigenous peoples and their human rights, dignity, cultural uniqueness, autonomy, identity, and aspirations; promote indigenous peoples' rights to self-determination and development with culture and identity; recognize and respect the rights of indigenous peoples to their lands, territories, and resources that they have traditionally owned, occupied, or otherwise used or acquired; recognize, respect, protect and preserve indigenous peoples' culture, knowledge, and practices; promote interventions designed, managed, and implemented by indigenous peoples; ensure that programmes and projects are designed in partnership with indigenous peoples, with their full effective and meaningful consultation and participation, and respect free, prior and informed consent (FPIC); support countries to respect, protect and fulfill the rights of indigenous peoples; avoid adverse impacts on indigenous peoples from supported activities, and minimize, mitigate and remedy adverse impacts where avoidance is not possible; and ensure indigenous peoples obtain fair and equitable benefits and opportunities from supported activities in a culturally appropriate and inclusive manner.

SS8: Labour and Working Conditions

This safeguard aims to: promote, respect and realize fundamental principles and rights at work; protect and promote the safety and health of workers; ensure projects/programmes comply with national employment and labour laws and international commitments; and leave no one behind by protecting and supporting workers in disadvantaged and vulnerable situations, including a special focus, as appropriate, on women workers, young workers, migrant workers and workers with disabilities.

3. Regional and National Context

a. Regional level

There are major challenges associated with land degradation, biodiversity loss, pollution, vulnerability to climate change, and unsustainable production and consumption patterns. LAC is one of the most biodiverse regions in the world with the greatest number of marine ecoregions present in a geographical region of the world[176], together with a complex tapestry of political, social and natural contrasts. These contrasts are evident in the spectrum of the sizes of countries and economies; in the diversity of geographical and ecological features; and in the manners in which cultures continue to interact with the natural environment. Within the diversity and contrasts however, LAC economies continue to share a persistent, heavy reliance on primary products and natural resources, which account for approximately 50 per cent of all good exports. On the mainland, there has been an increase in the reliance on exports largely driven by extra-regional demands for commodities such as agricultural products (including soybean, coffee and meat) and mineral resources (ores and metals). These transformations are most prominent in South America, where there was an increase in exports from 24 to 40 per cent between 1990 and 2015 (UNEP, 2020). The Caribbean region is a hotspot of biodiversity, with vast amount of coral area, mangroves and seagrasses, all becoming deteriorated and endangered. Small island states are exposed to large losses of biodiversity and environmental depletion, causing great instability in their societies and economies as they are poorly diversified into fishing and tourism. Furthermore, risk of exposures to natural hazards which become aggravated due to climate change[177].

- **Climate change**

Even though Latin America and the Caribbean have the largest **freshwater** resources per capita, a third of the region's population is cut off from sustained access to drinking water. Latin America and the Caribbean countries have realized that global climate change has affected freshwater resources of the region with significant consequences to ecosystems and societies. The consequences to societies in Latin America and the Caribbean will increase the likelihood of conflicts over land, as nearly one sixth of the population is settled in transboundary watersheds. Along with food security and climate-induced migrations, this is probably the most pressing water governance issue that will challenge the region in the years to come. Freshwater solidarity and policy transparency will be tested as nations and

[176] Spalding et al. (2007), "Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas." BioScience (7)57: 573-583, [online] https://www.worldwildlife.org/biomes; and [online] https://unstats.un.org/ unsd/methodology/m49/overview/

[177] https://storem-erasmus-cbhe.com/root-sitio/uploads/2020/05/WP1_D1.1_National-issues-and-environmental-threats-in-coastal-territories-in-Latin-America-and-Caribbean-countries.pdf

stakeholders struggle to fast-track solutions that address the needs of their people, particularly the most vulnerable, to the adverse effects of climate change (UNEP, 2020).

The most significant extreme event in recent years in South America was the torrential rains in 1999 in Venezuela that caused **floods and mudslides**; about 30,000 people died. Hurricane Catarina in Brazil in 2004 made scientists rewrite meteorological textbooks, as it was the first hurricane ever detected by a satellite over the South Atlantic Ocean. There has been a two-fold increase in the most powerful **catastrophic hurricanes** -- category 5: from six reported in the 1950s to 12 in the 2000s (UN). Hydropower, as in Central America, is the main source of energy in most South American countries. Not everything is bad, increases in precipitation were observed in some parts of South America, leading to sustained freshwater availability for human consumption and agriculture.

The Caribbean is the most vulnerable region to climate change, as it is an issue of survival to its people and of long-term existence to its countries. The Intergovernmental Panel on Climate Change has already concluded that **sea levels** will continue to rise during the next several centuries. On top of this, it is important to point out that an increase in the surface temperature of seas will result in deadlier tropical cyclone activity in the Caribbean.[178]

LAC currently accounts for only 5 per cent of **global greenhouse gas** emissions; however, the region's contribution to global aggregates is growing, particularly because of demands from the transport and industry sectors. According to World Bank (2015), carbon dioxide emissions from the burning of fossil fuels and the manufacture of cement in LAC increased in absolute terms (+14.18%) over the period 2006 to 2011, although their levels as a proportion of GDP have declined. Reducing emissions of greenhouse gases with long residence time in the atmosphere is considered an important challenge in LAC; and contaminants such as black carbon are now a priority because of their radiative forcing action on the climate system. In the Caribbean Basin, climate change contributes an additional US$1.4 billion to Average Annual Loss based on wind damage alone. In addition, climate change exacerbates many other driving forces and therefore amplifies environmental and related socio-economic impacts. (UNEP, 2020)

- **Biodiversity**

As a result of the range and growing intensity of many driving forces, important ecosystems and ecological processes in the region continue to be affected. Data indicate that although the rate of conversion of natural systems has begun to slow, the overall rate of loss of ecosystems remains high. **Forests** have shown an overall decrease of 9.4 per cent across the region since 1990, however these regional aggregate masks a noteworthy area of success - in the Caribbean, there has been an increase in the extent of forested area by 43 per cent over the 1990 baseline. Average **coral** cover is estimated to have declined in the Caribbean from 34.8 per cent to 16.3 per cent between 1970 and 2011. **Species** continue to be lost across LAC, and what is of particular concern is that where losses are occurring, the rate at which they are happening is, more often than not, increasing. Human-induced water erosion has been reported to affect as many as 2.23 million square kilometres of land in LAC, and river networks transport these sediments and other land-based sources of pollution to the oceans, impacting **coastal ecosystems**. (UNEP, 2020)

- **Pollution**

The World's Water Quality Assessment (2016) states that about one-quarter of all river stretches in LAC are in the severe pollution class; and the number of rural people encountering **polluted surface waters** is estimated to be as high as 25 million. (UNEP, 2020)

Plastic pollution threatens food safety and quality, human health, marine ecosystem, and contributes to climate change. The plastic degrades extremely slowly and when it breaks down, bio-organisms then digest these plastic particles and transfer the plastic across the food value chain, all the way back to humans. At the same time, many plastics contain additives to enhance their properties throughout the lifespan and to offer better solution in their applications, however this results in the release of hazardous chemicals during their use known as Persistent Organic Pollutants (POPs), which are highly toxic to both humans and wildlife. Furthermore, the incineration or open burning

[178] https://www.un.org/en/chronicle/article/climate-change-and-freshwater-latin-america-and-caribbean

of plastic waste, produces Unintended Persistent Organic Pollutants (UPOPs), mainly dioxin and furans, which again are highly toxic chemicals.

Chemicals of concern (CoC) are those highly hazardous chemicals in plastic materials and products that are a threat to humans, specially putting in danger manufacturing workers in plastic production plants, recyclers, people who dismantle and dispose them. Also, they pose a big threat to wildlife and the environment. Persistent Organic Pollutants (POPs) are one of the CoC that cause serious health effects, such as cancer, birth problems, dysfunctional immune and reproductive systems, and damage to the nervous system. As its name indicates, the stay for very long time in the environment since they are resistant to degradation, thus accumulating in living organisms and polluting our food supplies.

Regarding the LAC region, the **Caribbean** is the second most plastic-contaminated sea in the world after the Mediterranean Sea. Seventy to eighty-five percent of marine pollution of the Caribbean Sea originates from land-based sources and activities. This is particularly of concern in a region that depends heavily on its marine and coastal resources for its economic development, providing livelihood through fisheries, recreation and income to industries such as tourism, manufacturing and agriculture. Marine litter, including plastic litter as well as other forms of marine pollution, is an immediate threat to economic growth, human health, food security, livelihoods, as well as habitats. It also negatively impacts economies such as tourism and fisheries, which many countries in the LAC region depend on. Estimations of the volume of plastic waste in this area range from 600 to 1,414 plastic items per square kilometre in different location. [179]As recorded in annual campaigns of marine litter collection from 2006-2012, the five materials with the greatest presence in this subregion were: plastic drink bottles (19.6%), plastic and paper bags (16.9%), caps and tops (11.4%), utensils, dishes and glasses (9.6%), and drink glass bottles (6.7%).[180]

Air quality in cities has declined, and in most cities where data are available, the concentrations of particulate matter and ozone are above the WHO guidelines. This increases the vulnerability of urban dwellers to respiratory diseases; and more than 100 million people in the region live in areas susceptible to air pollution. Moreover, the impacts of cities are not restricted to the urban area. (UNEP, 2020) Currently, dumpsites receive 40 per cent of the world's waste, particularly in developing countries. In Latin America and the Caribbean, around 145,000 tonnes of garbage ends up in dumpsites every day, where the decomposition and burning of waste generate powerful gases that pollute the atmosphere, make people sick and contribute to climate change. The open burning of garbage is especially pernicious. It is one of the region´s main sources of black carbon, a key component of fine PM2.5 particles, which can penetrate the lung barrier and enter the blood system, elevating the risk of heart and respiratory disease and cancer. An estimated 330,000 premature deaths in the Americas are attributable each year to poor air quality.[181]

- b. Country and city level

- **Colombia**

Colombia is at high risk from climate change impacts. The majority of the population lives in the elevated Andes, where water shortages and land instability are already a reality, and on the coast, where the increase in sea level and floods can affect key human settlements and economic activities. Furthermore, the country has a high incidence of extreme events with growing emergencies associated with climate conditions. Colombia has made strides in the attainment of the Millenium Development Goals. However, these goals are still fragile and marked by a scenario burdened with

[179] Report on Status of Styrofoam and Plastic Bag Bans in the Wider Caribbean, Caribbean Environment Programme, UNEP, May 2019

[180] UNEP (2018). Waste Management Outlook for Latin America and the Caribbean. United Nations Environment Programme, Latin America and the Caribbean Office. Panama City, Panama. P112.

[181] *https://www.unep.org/news-and-stories/story/latin-america-and-caribbean-closure-ageing-dumps-helping-clear-air#:~:text=In%20Latin%20America%20and%20the%20Caribbean%2C%20around%20145%2C000%20tonnes%20of,and%20contribute%20to%20climate%20change.&text=The%20open%20burning%20of%20garbage%20is%20especially%20pernicious*

social conflicts teeming with regional inequalities and social gaps, including a high percentage of vulnerable populations that may suffer serious setbacks in their human development due precisely to climate change[182]

Colombia's main environmental problems are soil erosion, deforestation, and the preservation of its wildlife. Soil erosion has resulted from the loss of vegetation and heavy rainfall, and the soil has also been damaged by overuse of pesticides. Deforestation has resulted from the commercial exploitation of the country's forests which cover approximately 45% of the country. Approximately 908,000 hectares (2,244,000 acres) of natural forest were lost annually in the 1970s to farming, erosion, and the lumber industry, but only 5,000 hectares (12,000 acres) were reforested each year; between 1981 and 1985, 820,000 hectares (2,260,000 acres) were lost each year, and 8,000 hectares (20,000 acres) were reforested. Between 1983 and 1993, Colombia lost another 5.8% of its forest and woodland. By the mid-1990s, Colombia had the tenth-largest area of mangrove swamps in the world, covering under half a million ha (1,235,500 acres). The nation ranked 43rd globally in industrial carbon dioxide emissions in the early 1990s, with a total of 61.5 million metric tons. In 1996, total emissions were at 63.3 million metric tons. Air pollution from vehicle emissions is also a problem, especially in Bogota. According to a study for the World Bank, air pollution kills 15,000 Colombians every year. Safe drinking water is available to 99% of urban dwellers and 70% of the rural population.[183]

- **Jamaica**

Biodiversity contributes positively to the social, environmental, and economic growth of Jamaica. The main industries include agriculture, tourism, mining and quarrying and all based on natural resources. The country has a rich biodiversity, marked by high endemism of species. Jamaica has been ranked fifth among islands of the world in terms of endemic plants. In 2001, four of Jamaica's mammal species were endangered, as were seven bird species and eight reptile species. About 680 plant species are also threatened. (Jamaica Encyclopedia)

Among the many factors that contribute to the loss of biodiversity in Jamaica are poverty, population growth, lack of public awareness about the importance of conserving biodiversity, The 2015 Stocktaking Report identified the main threats to biodiversity in Jamaica as habitat loss, climate change, resource over-exploitation, invasive alien species and pollution.[184]

Other factors noted in the State of the Environment Report, 2010 were population growth, coupled with agricultural, industrial and commercial expansion, which resulted in intense competition for land, leading to encroachment and fragmentation of natural habitat; natural processes and events such as erosion and hurricanes, the effects of which were often exacerbated by human activities and practices and climate change considered as being likely to further increase the negative impacts of these natural events.

The major environmental problems involve water quality and waste disposal. Jamaica has 9.4 cu km of renewable water resources with 77% used for agriculture and 7% used for industrial purposes. About 85% of the people living in rural areas and 98% of the city dwellers have access to pure drinking water. Coastal waters have been polluted by sewage, oil spills, and industrial wastes. Another major source of water pollution has been the mining of bauxite, which has contaminated the ground water with red-mud waste. Another environmental problem for Jamaica is land erosion and deforestation. Forest and woodland decreased 7% annually between 1990 and 1995. Jamaica's coral reefs have also been damaged. The nation's cities produce over 0.3 million tons of solid waste per year. Kingston has the waste disposal and vehicular pollution problems typical of a densely populated urban area.[185]

Approximately 90 percent of Jamaica’s $14 billion GDP is produced within its coastal zone, making its economically valuable tourism, industry, fisheries and agriculture assets highly vulnerable to climate variability and change.

[182] Mainstreaming Climate Change in Colombia - Project: 'Integrating climate change risks and opportunities into national development processes and United Nations country programming', United Nations Development Programme.

[183] https://www.nationsencyclopedia.com/Americas/Colombia-ENVIRONMENT.html

[184] https://www.cbd.int/doc/world/jm/jm-nbsap-v2-en.pdf

[185] https://www.nationsencyclopedia.com/Americas/Jamaica-ENVIRONMENT.html#ixzz6v8tgn3FM

Weather-related disasters over the past two decades, including those due to droughts, floods, tropical storms and hurricanes, have severely impacted Jamaica's economic growth.[186]

- **Panama**

Soil erosion and deforestation are among Panama's most significant environmental concerns. Soil erosion is occurring at a rate of 2,000 tons per year. During 1990-1995, the annual average rate of deforestation was 2.15%. Air pollution is also a problem in urban centers due to emissions from industry and transportation. In 1996, industrial carbon dioxide emissions totalled 6.6 million metric tons. Only 79% of rural dwellers have pure drinking water. Pesticides, sewage, and pollution from the oil industry cause much of the pollution. The nation's fish resources are threatened by water pollution. Panama is in the world's most biodiverse region, however, several species are endangered, including both animal and plants.[187]

Panama is considered a highly vulnerable country to climate change impacts. Panama experiences a series of extreme weather events including intense and protracted rainfalls, windstorms, floods, droughts, wildfires, earthquakes, landslides, tropical cyclones, tsunamis and ENSO/El Niño-La Niña events.

Panama is considered one of the countries with the largest water resources, approximately 35,000 m3 of renewable freshwater resources per capita. This relative abundance scenario hides a series of regional and seasonal limitations, specifically those associated to the most arid region of the country known as the "Arco Seco". This relative water abundance scenario and increasing conflicts are aggravated by climate variability and extreme weather events, mainly droughts and floods, where users and authorities have a lack of means and information to face them timely and effectively.[188]

Significant land use changes are also occurring in the country as a result of agricultural expansion, urban sprawl and tourism. Protected areas currently comprise 3.5 million hectares, accounting for 38.66% of the national area (35.85% land, 2.81% marine). The development of roads, power lines, hydroelectric plants, among other infrastructure, triggered by urban sprawl into buffer zones around protected areas, such as Chagres National Park and other protected areas in the Panama Canal watershed, is transforming natural conditions with effects on biodiversity. In addition, the buffer zones around the Volcan Baru National Park and La Amistad International Park (a transboundary protected area with Costa Rica) are particularly affected by land and water pollution resulting from the use of agrochemicals, sewage dumping, among other factors.

The results of poorly regulated tourism development are evidenced in the Bocas del Toro province, comprised mainly of islands off the Caribbean coast, where risks of pollution and degradation on marine and coastal ecosystems, overexploitation of species, such as lobster and crab, and land speculation are on the rise. Inadequate waste management on the northwestern Kuna Yala islands, including the Narganá protected area, is affecting the state of coral reefs. The Panama Canal, which is currently being expanded, provides a significant pathway for the introduction of invasive species from both the Atlantic and Pacific sides, as well as an opportunity for species to blend together, making the country particularly vulnerable to this threat type.

Although the rate of deforestation fell nationwide in the 1992-2000 period, compared to the previous 1986-1992 period, certain parts of the country are pressured today by both selective and indiscriminate extraction of hardwood species and/or by the removal of vegetation cover for agricultural purposes. These pressures are more common in the forested areas of Bocas del Toro, Darién and the Ngöbe-Buglé Comarca, including in buffer zones around protected areas. While the main causes of deforestation in Panama are linked to expansion of the agricultural frontier and habitat transformation due to infrastructure development, it is also driven to some extent by mining, mainly for gold and

[186] https://www.climatelinks.org/countries/jamaica

[187] https://www.nationsencyclopedia.com/Americas/Panama-ENVIRONMENT.html

[188] https://www.adaptation-fund.org/project/adapting-climate-change-integrated-water-management-panama/#:~:text=Panama%20is%20considered%20a%20highly,El%20Ni%C3%B1o%2DLa%20Ni%C3%B1a%20events.

copper. Also, four critical areas subject to drought and land degradation have been identified as Cerro Punta, Ngöbe-Buglé Comarca, dry forest and the Veragüense Central Savannah[189].

4. Risk of proposed interventions and management plan

The main risks lie in SS4: Community Health, Safety and Security, and SS8: Labour and Working Conditions and SS2: Climate Change and Disaster Risksas shown in the Annex 7 – SRIF, both classified as moderate, with Impact of level 2 and Probability of level 3 (1-5). In addition, there is a risk associated with a scenario where policies are developed but not fully implemented or enforced; failure of private sector to participate in the project, with low engagement from the large corporations and small medium-sized enterprises; finally, a risk associated with the inter-city network that cannot be sustained after the end of the project

Expanding on the ESSF some further considerations in the implementation of the project:

SS1: Biodiversity, Ecosystems and Sustainable Natural Resource Management

It is expected through the project, in particular the city level policy action plans to be developed and policy instruments to be piloted under the project (Activities: 1.1.2, 1.2.2, 1.3.2) as well as the business solutions (activities 2.1.2, 2.1.3, 2.2.2), the amount of plastic waste and leakage to the environment will be reduced and thus water and land quality will be improved as a result of reduced plastic pollution. The reduction of the use of hazardous chemicals in plastic products through activities under component 1 and 2 will further reduce the unwanted impacts to the environment. Finally, sustainable practices along the plastic value chain would be prioritized to enhance circularity and reduce adverse impacts on the ecosystems.

SS2: Climate Change and Disaster Risks

Risks aggravated by climate change such as an increase in flooding needs to be managed, and tools such as think hazard[190] has been implemented to identify action points. Development of guidelines, roadmap with activities is needed. The following hazards are of importance due to the associated influence with leakage of plastic waste.

Table: Risk assessment of natural hazards in the cities and their respective impacts of disasters[191]

City / Risks	Wildfire	Floods	Tsunami	Hurricane	Extreme Heat	Earthquake	Landslide	Water scarcity
Cartagena	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	LOW	LOW	LOW
Barranquilla	HIGH	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	VERY LOW	LOW
Panamá City	HIGH	HIGH	HIGH	LOW	MEDIUM	HIGH	MEDIUM	VERY LOW
Colón	HIGH	HIGH-MEDIUM	MEDIUM	LOW	MEDIUM	HIGH	LOW	VERY LOW
Kingston	HIGH	MEDIUM	LOW	MEDIUM 192	MEDIUM	MEDIUM	HIGH	MEDIUM [193]

189 https://www.cbd.int/countries/profile/?country=pa#:~:text=The%20main%20threats%20to%20Panamanian,protected%20areas%2C%20other%20human%20hazards

190 https://thinkhazard.org/en/

191 https://thinkhazard.org/en/

192 World Bank Group Country disasters - Risk Profiles. Available at: https://www.gfdrr.org/sites/default/files/Jamaica.pdf

193 Beverly Mullings (2020) AN OPPORTUNITY TO PAUSE AND REIMAGINE: JAMAICA'S PUBLIC WATER AFTER COVID-19. Available at: https://www.tni.org/files/public-water-covid-19_chapter_13.pdf

Montego Bay	HIGH	HIGH	LOW	MEDIUM [194]	MEDIUM	MEDIUM	HIGH	MEDIUM [195]

Risk classification.[196]

As it can be seen in the table 2, the highest risk from natural hazards present in all 6 cities are wildfires and floods. These are truly relevant to plastic pollution as flooding can cause transportation of plastic waste to the oceans and collapsing waste management by increasing leakage. Floods considered high risk is due to inundations depth above 0.5-2m with high probability of occurrence. Furthermore, wildfires can intensify floods but also end up in burning of waste. It is considered high when the threshold is above 30FWI (Canadian Fire Weather Index). Other hazards need close attention too, depending on the location varies the degree of risk. Awareness of those risks marked as high is needed as these can potentially cause severe damage for the project location. These disasters can occur during project lifetime and/or human lifetime.

Through project implementation, the circular economy approach for plastics will be applied by stakeholders along the value chain, which will lead to the reduction of GHG emission caused by unstainable production and consumption of plastics and the increase of efficiency of resources used by the sector. It is expected that the sustainable production of plastics and sound plastic waste management practices implemented through the project (activity 2.1.2,2.1.3, 2.2.2) will lead to increased resilience against climate change impacts. The benefits related with the reduction of GHG emission have been calculated in the Global Environmental Benefits section in the project document.

SS3: Pollution Prevention and Resource Efficiency

The project will reduce marine plastics and plastic pollution in the Latin America and the Caribbean (LAC) region by facilitating circular actions and cooperation between governments and businesses at the city-level to accelerate the transition to a circular economy. The project will contribute to the reduction of waste generation through supporting local governments to set up waste reduction policies (activity 1.1.2, 1.2.2), promoting reusable products and solutions (activity 1.2.2, 2.1.2, 2.1.3), identifying alternatives to single-use plastic products and plastic products containing Chemicals of Concern (activity 1.2.2, 2.1.2), etc. Elimination of problematic and unnecessary plastics is a key principle to guide the design and implementation of project activities. The project will also support cities to identify alternatives to develop policies to reduce single-use plastic products and products with hazardous chemicals (activity 1.2.2).

The project will also improve the waste management practices of POPs contained plastics. Basel Convention Secretariat will be a key stakeholder to be involved in the project implementation phase. The project will assist participating cities in managing the disposal of hazardous chemicals in plastic waste in an environmentally sound manner (activity 2.2.2), through banning of illegal burning practices of household waste, including plastics, and managing the import of plastic products containing POPs listed in the Stockholm convention. Furthermore, the project will discourage incineration of plastics, but ensure the best available technology will be used in case these are developed (activity 2.2.2).

There is a risk of increased greenhouse gas emissions due to alternative solutions to plastics which may have a higher emission factor, and/or increase transportation due to the development of take back schemes and other reverse logistic solutions. However, the project will identify the alternatives based on full life cycle assessment to avoid unintended trade-offs and impacts shifting among different life cycle stages (activity 1.2.1, 1.2.2, 2.1.2). .

194 World Bank Group Country disasters - Risk Profiles. Available at: https://www.gfdrr.org/sites/default/files/Jamaica.pdf

[195] Beverly Mullings (2020) AN OPPORTUNITY TO PAUSE AND REIMAGINE: JAMAICA'S PUBLIC WATER AFTER COVID-19. Available at: https://www.tni.org/files/public-water-covid-19_chapter_13.pdf

[196] *High risk* - There is a potential for widespread impacts from climate change. Outcomes may be undermined by climate change, and adaptation measures may not be readily available. Financial, environmental and social underperformance or failure cannot be excluded. However, risk management activities are likely to increase resilience and adaptive capacity of households, infrastructure, communities, and ecosystems. *Moderate risk* - Impact from climate change may occur, but will be limited, transient or manageable. Financial, environmental and social underperformance or failure is unlikely. The system has the capacity to manage volatility, shocks, stressors or changing climate trends. *Low Risk* - No impact from climate change, or even positive impact, is expected based on best available science. Financial, environmental and social underperformance or failure appears very unlikely. (GEF, STAP guidance on climate risk screening)

SS4: Community Health, Safety and Security

The end-of-life stage is a key stage along the plastic value chain with high environmental impacts. The project will promote sound management of plastic waste including plastics containing POPs. It will support the private sector to test and apply circular actions on improving collection, storage and recycling of plastic waste and hazardous fractions in plastic waste (activity 2.2.1, 2.2.2). The collection and recycling activities will follow ESG standards and guidance, and will be implemented by collectors and recyclers to selected by the project team based on technical performance and compliance to health, safety and security criteria. Emphasis will be be put in the protection of vulnerable communities to hazardous chemicals and plastic waste, in particular to the informal sector. The project will also support the recycling industry and the informal sector to improve their Environment, Health and Satefy performance, and take sanitary measures against COVID-19.

SS5: Cultural Heritage

The GEF LAC Project will not be involved in the handling of cultural heritage or include activities in cultural heritage areas.

SS6: Displacement and Involuntary Resettlement

The GEF LAC Project will not be involved in displacement and involuntary resettlement. .

SS7: Indigenous Peoples

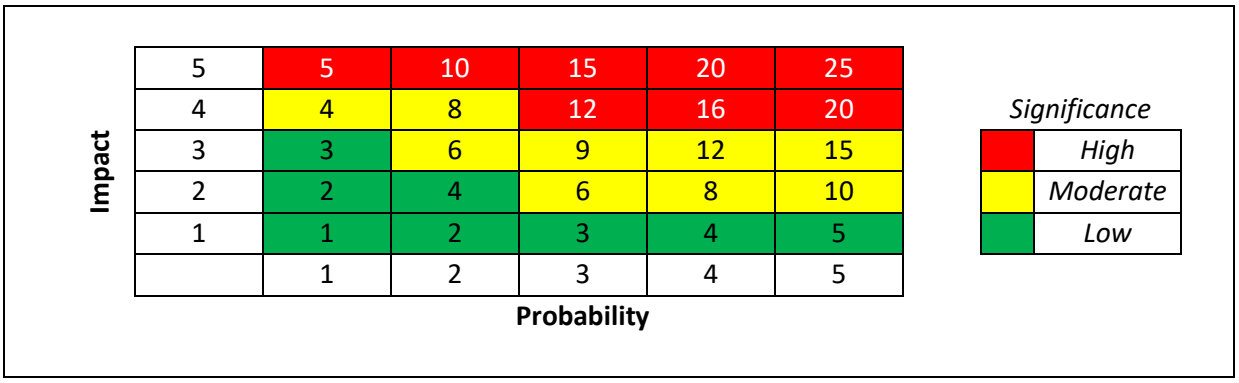
The LAC region has a significant indigenous population which must be according to the safeguard, and involve with representatives where livelihoods might be affected across the plastic vale chain. This project will not have activities in areas where indigenous peoples are present or cause impacts/risks to indigenous group.

SS8: Labour and Working Conditions

The Executing Agency will ensure that the recruitment of local project staff (e.g. project manager, national consultants, technical experts) meet national labour laws and international commitments. The livelihoods of collectors and recyclers will be improved through better waste management practices, including health, safety procedures and better working conditions. Activities will be designed in a way to positively impact the livelihood of workers across the value chain of plastics, in particular the informal sector, such as waste pickers who are most vulnerable.

The following tables summarise the main risks, ranking and mitigation strategies:

Level / Criteria	Very Low (1)	Low (2)	Medium (3)	High (4)	Very High (5)
Probability	Very unlikely	Unlikely	Chances about even	Likely	Ver Likely
Impact	Routine procedures sufficient to deal with consequences	Could threaten results and thus, may require monitoring	May threaten results and thus, may require monitoring	Would threaten results, and thus may require review	Would prevent achievement of results, and would require close management



Risk	Project outputs	Environment, Social, Economic	Risk - Impact	Risk - Likelihood	Score (Risk level: Low, Moderate, High)	Proposed Mitigation Measures
Covid 19 risks						
Impacts to human health due to COVID 19	All outputs	Social (health)	4	3	12 (H)	Since the proclamation of the COVID-19 pandemic, approximately 2% of persons who have contracted the virus globally have died. Although vaccinations have become available, mutated, and new strains of the virus have emerged, some of which have been noted to be more transmissible and more aggressive as compared to the strains identified at the beginning of the pandemic. For this reason, guidelines and recommendations of government authorities and healthcare professionals must be followed. meetings will be held virtually as far as possible, and travel will be limited to minimize physical

						interactions. However, where face-to-face meetings are held, international health protocols, including, but not limited to, sanitization and appropriate physical distancing will be observed.
Decreasing local support and delays in actions due to restrictions	Output 1.1, 1.2, 1.3, 3.1, 3.2	Economic	3	2	6 (M)	Ensuring plastic pollution remains a priority to countries, and health and safety protocols are ensured and where possible actions should be taken in virtual manner
Temporary suspension of policies on reducing SUPPs, reversal of initiatives that supported reusables	Output 1.1	Social	4	3	12 (H)	Spurring policy acceleration to reduce disposable plastics, promote reusables, and increase recycling
Increased of plastic waste due to increased use of single use plastic products	Output 2.2	Environment	3	3	9 (M)	Awareness raising activities and campaigns under the project will create awareness on the importance of safe disposal of single use plastic products. Encouraging responsible consumption behaviour by addressing myth and misinformation on reusable plastics during COVID-19 'infodemic'. Demystifying the myths by educating and raising awareness through evidence-based harmonised consumer information and encourage embracing reuse and recycling
Restricted travel	All outputs	Social & Economic	3	3	9 (M)	Though most LAC countries have re-opened since the first wave of the COVID-19 pandemic, intermittent lockdowns continue. Considerations will be made for hosting meetings, workshops, and consultations on virtual platforms as much as possible.
Closing of recycling businesses	Output 2.2	Economic	3	3	9 (M)	Ensuring health and safety protocols to provide operating ground for recycling to occur, specifically to collection of plastic waste which may be challenging due to restrictions.
Operational/delivery risks						
Policies only developed but not implemented or without practical	Output 1.1, 4.3	Social	4	3	12 (H)	To ensure policy recommendation(s) uptake, engagement with national and

solutions, which can be a risk as low policy implementation and enforcement will weaken the incentive structure for all other stakeholders to take actions						city governmental institutions will be further made from the beginning of the project. Close follow-up and ongoing monitoring of activity will be supported by the local governments
City authorities fail to mobilise private sector partners during policy development and implementation	Output 1.1, 1.2, 1.3	Economy	3	2	6 (M)	Project will engage in a range of awareness and partner-building workshops to fully explain and engage circular economy and benefits to city and specific private sector partners. Specific target setting and measures towards priority plastic products and sectors will facilitate the collaboration with specific companies.
Failure of private sector to participate in the project, with low engagement from the large corporations Lack of industry or key corporations' engagement	Output 1.3, 2.1, 2.2, 2.3	Economy	3	1	3 (L)	Engage corporations in early, principled dialogues that highlight their opportunity to be proactive in constructing solutions prior to inevitable mandates by government. Should this approach cease to work we will look for the appropriate means to apply pressure to resistant companies.
Interventions through the private sector (component 2) fail to be sustained or replicated within and between cities.	Output 2.1, 2.2, 2.3, 4.3	Economy	3	3	9 (M)	The project will continuously work closely with both the municipality authorities and a range of private sector operators to assist in identifying appropriate innovative approaches and to facilitate the identification of appropriate financing mechanisms to encourage replication. This will be supported by a proactive strategy to highlight achievements within and between the cities involved.
Failure of informal waste sector to participate	Output 2.2,	Economy	3	3	9 (M)	The project will proactively engage with the informal sector to highlight the benefits to their operations from circular economy approaches and identify their potential roles in this project, while ensuring their livelihoods and health are improved

Cultural resistance from the citizens to accept new measures or adopt innovative solutions.	Output 2.1, 4.1	Social	3	3	9 (M)	The Project will communicate information to the public on new innovative measures in a way that is sensitive to local cultures and demonstrates direct benefits for the implementation of these new measures. It will be carries in various dissemination and communication forum through different media (such as TV, radio, newspaper, social media, and consumer campaigns)
Civil society (including NGOs, CSOs, education establishments) unwilling to participate	Output 4.1	Social	3	1	3 (L)	Lack of adequate accessible information and access to the decision process will inhibit public participation. The project will encourage broad civil society involvement at all stages of the project's interventions and ensure that information released is in a form that encourages involvement.
Technical risks						
Inadequate data available to support activities	Output 4.3	n/a	3	3	9 (M)	Historically, data collection within the region has not been consistent or reliable. Consultants have been hired to collect data and UNEP has develop mechanisms to ensure that sustainable data collection mechanisms are implemented.
Climate change risks						
Flooding can exacerbate plastic pollution due to transportation of plastic waste to the oceans and collapsing waste management by increasing waste leakage. Floods considered high risk is due to inundations depth above 0.5-2m with high probability of occurrence.	Output 2.2, 4.3	Environment	4	3	12 (H)	Through project implementation, the circular economy approach for plastics will be applied by stakeholders along the value chain, which will lead to the reduction of GHG emission caused by unstainable production and consumption of plastics and the increase of efficiency of resources used by the plastic sector. It is expected that the sustainable production of plastics and sound plastic waste management practices implemented through the project (by activity 2.1.2, 2.1.3, 2.2.2) will lead to increased resilience against climate change impacts. The output 2.2 on solutions to

						plastic waste collection and recycling at cities will also take into account the risks of floods when designing the waste management practices.

Appendix 9 List of Tables and Figures

TABLES

LIST OF FIGURES

Appendix 10 Acronyms and definitions

ABS	Acrylonitrile butadiene styrene
ANCON	La Asociacion Nacional para la Conservación de la Naturaleza
ANLA	National Environmental Licensing Authority
BAT	Best Available Technologies
BCRC-Caribbean	Basel Convention Regional Centre for Training and Technology Transfer for the Caribbean
BEP	Best Environmental Practices
BRSM Conventions	Basel, Rotterdam, Stockholm and Minamata Conventions
CAF	Development Bank of Latin America
CCKM	Communication, Coordination and Knowledge Management
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
CEMPRE	Compromiso Empresarial para Reciclaje
CEP	UNEP Caribbean Environment Programme
CLiP	Commonwealth Litter Programme
CLME	Caribbean Large Marine Ecosystem
CO2eq	Carbon Dioxide Equivalent
CoC	Chemical of Concern
COP	Conference of the Parties
COVID-19	2019 Novel Coronavirus
CRT monitor	Cathode-ray tube monitor
CSOs	Civil Society Organisations
CW	Chemicals and Waste
DANE	National Administrative Department of Statistics
DDT	Dichlorodiphenyltrichloroethane
EA	Executing Agency
EEE	Electrical and Electronic Equipment
ELVs	End of Life Vehicles
ENEC	Colombia's National Circular Economy Strategy
EPA Cartagena	Establecimiento Público Ambiental de Cartagena
EPR	Extended Producer Responsibility
EPS	Expanded polystyrene
ESM	Environmentally Sound Management
EST	Environmentally Sound Technologies
EVA	Ethylene-vinyl acetate
FAO	Food and Agriculture Organization
FAS Panama	Fundacion de Accion Social Panama
GDP	Gross Domestic Product
GEBs	Global Environmental Benefits
GEF	Global Environment Facility
GEF C&W	Global Environment Facility Chemicals and Waste
GEFSEC	GEF Secretariat
GEFTF	GEF Trust Fund
GETF	Global Environment & Technology Foundation

GHG	Green House Gas
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GII	Gender Inequality Index
GMP	Global Mercury Partnership
GNI	Gross National Income
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
GPML - Caribe	The Caribbean Node of the Global Partnership on Marine Litter
gTEQ	Grams of Toxic Equivalent
HBB	Hexabromobiphenyl
HBCD	Hexabromocyclododecane
HCBD	Hexachlorobutadiene
HDI	Human Development Index
HDPE	High-density polyethylene
HHPs	Highly Hazardous Pesticides
HIPS	High Impact Polystyrene
HISCAP	Network of Historic Cities against Plastic Waste
IA	Implementing Agencies
IDB	InterAmerican Development Bank
IFC	International Finance Corporation
IMO	International Maritime Organization
IOMC	Inter-Organization Programme for the Sound Management of Chemicals
ISLANDS	Implementing Sustainable Low and Non-Chemical Development in Small Island Developing States
ISWA	International Solid Waste Association
ISWM	Integrated Solid Waste Management
IUCN	International Union for Conservation of Nature
IW	International Waters
JET	Jamaica Environment Trust
KAP	Knowledge, Attitudes and Perception Survey
KPIs	Key Performance Indicators
ktpa	kilo tonnes per annum
LAC	Latin America and Caribbean
LBS	Land-Based Sources and Activitie
LCD	Liquid crystal display
LDC	Least Developed Countries
LDCF	Least Developed Countries Fund
LDPE	Low-density polyethylene
LHA	Large Household Appliances
M&E	Monitoring and Evaluation
MARPOL	International Convention for the Prevention of Pollution from Ships
MEAs	Multilateral Environmental Agreement
MRL	Maximum Residue Limits
MSFD	Marine Strategy Framework Directive
MSP	Medium-Sized Project
MSW	Municipal Solid Waste
MT	Metric tonne
MTE	Mid Term Evaluation
NAP	National Action Plan

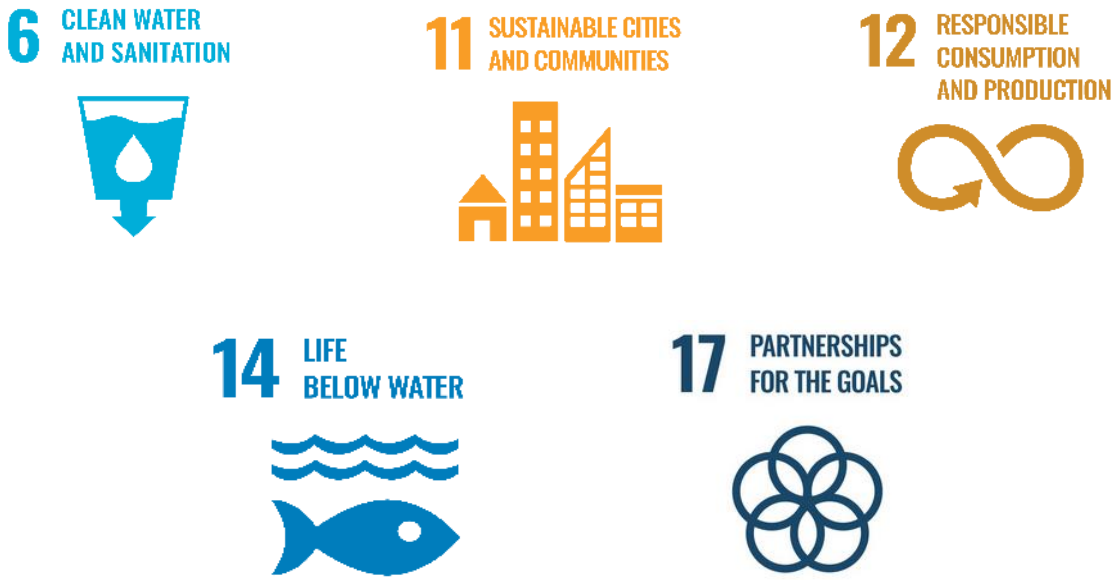
NAPA	National Action Plan for Adaptation
NBSAP	National Biodiversity Strategies and Action Plan
NCSAs	National Capacity Self-Assessment
nd	No data
NEPA	National Environment and Planning Agency
NGOs	Non-Governmental Organisations
NIP	National Implementation Plan
NORAD	Norwegian Agency for Development Cooperation
NPEGC	New Plastics Economy Global Commitment
NPEP	New Providence Ecology Park
NSWMA	National Solid Waste Management Authority
NSWMA	Solid Waste Management Authority
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OECD	Organisation for Economic Co-operation and Development
OECS	Organisation of Eastern Caribbean States
PACE & GPAP	Partnership Shaping a Circular Economy & Global Plastic Action Partnership
PBDE	Polybrominated diphenyl ethers
PBT	Polybutylene terephthalate
PCBs	Polychlorinated biphenyls
PCDD	Polychlorinated dibenzodioxins
PCDFs	Polychlorinated dibenzofurans
PCG	Programme Coordinating Group
PCNs	Polychlorinated naphthalene
PCU	Project Coordinating Unit
PE	Polyethylene
PET	Polyethylene Terephthalate
PFAS	Per- and Polyfluoroalkyl substances
PFD	Programme Framework Document
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane sulfonic acid
PFOSF	Perfluorooctanesulfonyl fluoride
PGIRS	Plan de Gestión Integral de Residuos Sólidos Regional
PIC	Prior Informed Consent
PIF	Project Identification Form
PMC	Project Management Cost
PP	Polypropylene
PPE	Personal Protective Equipment
PPG	Project Preparation Grant
PPP	Public-Private Partnership
PRO	Producer Responsibility Organisation
PRSP	Poverty Reduction Strategy Paper
PS	Polystyrene
PSC	Project Steering Committee
PTCA	Pesticides and Toxic Chemicals Act
PTCCB	Pesticides and Toxic Chemicals Control Board
PUR	Polyurethane
PVC	Polyvinyl chloride
PWC	Project Working Committee

R2 Certification	Responsible Recycling Certification
RAPMali	Regional Action Plan for Marine Litter
RFP	Request for Proposal
Roadmap	A detailed national plan for the effective implementation, execution and/or establishment of new policies, strategies, laws, regulations, guidance, criteria, standards, legislation or facilities.
RSC	Reverse Supply Chain
SAICM	Strategic Approach to International Chemicals Management
SALTRA	Regional Center, National Center for the Health, Work and Environment Program in Central America
SAMOA	SIDS Accelerated Modalities of Action
SC	Stockholm Convention on POPs
SCCF	Special Climate Change Fund
SCCPs	Short Chain Chlorinated Paraffins
SDGs	United Nations Sustainable Development Goals
SENA Regional Bolivar	Centro de comercio y Servicios Reginal Bolívar
SGP	Small Grants Programme
SIDS	Small Island Developing States
SMEs	Small and Medium Enterprises
SOCAR	State of the Convention Area Report
SOPs	Standard Operating Procedures
SPREP	Secretariat of the Pacific Regional Environment Programme
SSA	Sanitation Service Authority
STEP	Solving The E-waste Problem
SUPP	Single Use Plastic Products
TE	Terminal Evaluation
TEQ	Toxic Equivalent
TNA	Technology Needs Assessment
TOR	Terms of Reference
UBEEC	Unleashing the Blue Economy of the Eastern Caribbean
UEEE	Used Electrical and Electronic Equipment
UN	United Nations
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNCLOS	United Nations Convention on the Law of the Sea
UNDAF	UN Development Assistance Framework
UNDP	United Nations Development Programme
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UP Resin	Unsaturated Polyester Resin
uPOPs	Unintended Persistent Organic Pollutants
UPOPs	Unintentional Persistent Organic Pollutants
US$/USD	United States Dollar
USAID	United States Agency for International Development
USEPA	US Environmental Protection Agency
WCR	World Cities Report
WEEE	Waste Electrical and Electronic Equipment
WHO	World Health Organization

WM	Waste Management
wt%	Weight percentage
WWF	World Wide Fund for Nature
XPS	Extruded polystyrene foam

Appendix 11– Communication and knowledge management strategy

GEF LAC Project 10547 and related Sustainable Development Goals:



1. INTRODUCTION

Addressing marine plastics and plastic pollution is an urgent action needed, considering the rising levels of plastics in the environment and the impacts to coastal and marine ecosystems, and their related services which benefit the local and regional inhabitants. The LAC region is not unfamiliar with the marine litter problem, notably influenced by the improper waste management practices and infrastructure. Around 10% of the global waste is generated in the region. Although proper final disposal of solid waste has improved, about 145,000 tons/day end up in dumpsites, including 17,000 tons/day of plastic waste that is often discharged into the coastal and marine ecosystems.[197]

To address these barriers and challenges, the GEF project "Reduce marine plastics and plastic pollution in Latin American and the Caribbean cities through a circular economy approach" (GEF LAC project) aims to deliver effective solutions to reduce marine plastics and plastic pollution at the city level in Colombia, Jamaica and Panama with an inter-ministerial, inter-sectoral and multistakeholder participation and coordination. It is necessary to carry out an effective, coordinated and committed involvement of all relevant stakeholders at all levels. Stakeholders require a clear and consistent communication at all stages and levels to achieve the goals set for the project.

This document presents the communication and knowledge management strategy aligned with the fourth component of the GEF LAC project on capacity development and knowledge management.

2. OBJECTIVES

The objectives of this strategy include:

- To raise awareness among public and private stakeholders and the wider public about the project objectives, processes, and benefits of project implementation at the national and regional level.
- To ensure stakeholders updated with the project progress.
- To promote knowledge exchange with other cities, and to disseminate knowledge products to be generated under the project such as lessons learnt and best practices to amplify the impacts of the project
- Through the communication efforts, to engage with a broader group of stakeholders and identify collaboration opportunities with relevant stakeholders
- To trigger behavior change of targeted audience towards more sustainable practices in their plastic consumption and production

3. ELEMENTS OF THE COMUNICATION AND KNOWLEDGE MANAGEMENT STRATEGY

Every awareness and communications act takes place in a complex environment of circumstances; thus, it is necessary to understand about whom the Communications and Knowledge Management Strategy wants to influence, the elements and approaches to communicate the messages, and the activities and tools needed to deliver relevant messages. This section will provide a plan of the activities related on the production of communication materials (such as press release, videos, web stories), dissemination plan (media, conference, high-level events), and key partners by linking with different project components. All the project information and knowledge products will be integrated into IW: LEARN platform.

3.1 Preliminary target audiences of the GEF LAC Project

Based on the Stakeholder analysis (appendix 6), the following are preliminary audiences to include in the Communications and Knowledge Management Strategy:

- **Public sector:** Government Officers (inter-ministerial, national and local), policy makers.

[197] https://wedocs.unep.org/bitstream/handle/20.500.11822/34931/Marine_EN.pdf?sequence=1&isAllowed=y

- **Private sector:** will be key partners at the city level for this project. The private sector, in partnerships with the municipalities, will have a significant long-term role to sustain the circular economy approaches tested in the project and will be an important vehicle for ensuring the upscaling and replication of these approaches in other locations. The project has been designed to address the marine plastics and plastic pollution at the city and regional level with the involvement of municipality authorities and private sector organisations. Private sector organisations will be involved in all components of the project. This group might include polymer, plastics and packaging producing companies; durable goods and consumer goods producers; retailers; collection, sorting and recycling industry; informal sector working on collection and recycling of plastic waste, etc.

- **Non-governmental organizations**: There are several active non-governmental organizations (NGOs) in the countries and the LAC region that primarily focus solid waste management, recycling and recovery of plastics, education, awareness raising, and environmental education. The project will engage with these NGOs working on addressing plastic pollution by exchanging experience and learnings, seeking synergies on communication, etc.

- **Academia and research institutions:** Academic institutions, universities, research institutes and networks of researchers in the countries and the LAC region are increasingly working in the field of marine litter and plastics from a value chain and circular economy approach.

3.2 Key mediums

There needs to be a multi-pronged approach for communicating the project activities and their implementation. It needs to be remembered that different target audiences will be most effectively engaged through different mediums. The mediums will also be selected based on the type of messages to be communicated. Key mediums include:

- Communication channels will be used to convey the message (e.g., TV-campaign, Internet campaign, conferences, workshops, training, visits to key companies).

- Communication materials to be produced (e.g., newsletter, leaflet, brochure, presentation, press release, banner, testimonial and showcase, educational booklet, and ad).

3.3 4 main areas of the Communication and Knowledge Management

The project's communication and knowledge management strategy can be implemented focusing on four main areas, which are complementary and parallel:

1. At the early stage of the project implementation phase, the project communication strategy will be developed, and key target audience will be further identified based on the stakeholder analysis. Communication materials (such as press release, videos, web stories) and relevant dissemination plan (media, conference, high-level events) will be developed to promote the visibility of the project and its key progress.

2. Raising awareness and cross-cutting communication activities among all related stakeholders will be conducted. These activities will raise the awareness of stakeholder on the project objective, approach, activities as well as the benefits associated with the implementation of the project at the local and national level.

3. Behaviour Change Campaigns will be developed to encourage behaviour and attitudinal change towards the circular economy of plastics, among others, through organizing large scale multi-channel campaigns aimed at motivating citizens to separate plastics waste from sources and dispose towards the responsible channels.

4. Lessons learnt and best practices will be documented and communicated to key audiences to encourage replication of successful approaches. Key knowledge products will be developed based on the learnings from project components 1, 2 and 3. Towards policy makers, learning experience and case studies will be compiled from Component 1, related to the best practice on developing circular policy, and enabling conditions (such as financing, knowledge, and enforcement). Towards the private sector, learning experience and case studies will be compiled from Component 2, related to the best practice on developing circular innovation and solutions along the value chain, including circular product design, business models, reuse, collection and recycling. Knowledge

management will be focused through the IW:Learn platform, as a one-stop shop to document and store project information, activities, progress, publication and events. Information will be regularly updated at a monthly basis to maintain engagement with key stakeholders and partners. The knowledge products of the project will also be shared on Green Growth Knowledge Platform (GGKP)'s website, which the world's largest policy platform dedicated to managing and sharing knowledge at the nexus of economics and the environment. Partnering with the GGKP will provide the project with a distinct identity while also benefitting from the GGKP's existing knowledge management system including case studies, good practices, learning materials and publications. The GGKP platform has also been used by many other projects and programmes in the UNEP GEF C&W portfolio and thus the projects knowledge material can in turn be used in these other projects and programmes and vice versa. The knowledge products related to chemicals of concern will also be shared on the SAICM knowledge platform developed by the project Chemicals Without Concern funded by GEF to enhance the dissemination of relevant knowledge to stakeholders working on chemicals of concern. When appropriate, elements of this project may also be linked to the GPML Digital Platform, a multi-stakeholder, mostly open-source platform that compiles and crowdsources different resources, integrates data and connects stakeholders to guide action towards the long-term elimination of marine plastics and plastic pollution.

The main areas of intervention are further developed in the following section with associated activities, responsible actors, timeline, and deliverables. These will be further consulted with the main project stakeholders and fine tuned during the implementation phase of the project.

3.3.1 Communication materials development

Objective: To develop communication strategy, communication materials (such as press releases, videos, web stories), dissemination plan and identify key audiences

Activities	Responsible actors	Timeline	Deliverables
Outlining and agreeing on a **Communications and Knowledge Management Strategy**, including clearly identified objectives, processes, and benefits of the project to be conveyed to key target audiences at the local and national level and a rapid assessment of communication capacity to ensure that the communication strategy is realistic, actionable and measurable.	Communication Specialist	Y1	Communication and Knowledge Management Strategy formulated and agreed. Assessment of communication capacity conducted key targeted audiences identified, and mailing lists developed
Defining project **visual identity** and disseminating overall project information and communication products	Website developer, designer, communication specialist	Y1-Y4	Project visual identity in Spanish and English developed in Y1 Project website in Spanish and English developed in Y1 and updated regularly Media information kits, including briefing sheets on the GEF LAC project and planned interventions with contact information, and project brochure in Spanish and English developed by Y1
Developing communication products	Communication Specialist	Y1-Y4	Project newsletter disseminated in Y1-Y4 Project briefings, web stories, press releases, presentations developed Short videos in Spanish and English to introduce the project and its key progress developed

			News or web stories about the communication campaigns (with actual or estimated number of gender disaggregated audience) developed
Developing dissemination plan	Communication Specialist	Y1-Y4	Workshops, conferences, high-level events organised

3.3.2 Raising awareness and promoting cross-cutting education

Objective: To educate and raise awareness among public and private stakeholders and the wider public about the objectives, processes, and benefits of project implementation at the national and regional level. To increase the awareness of the impacts of marine plastics and plastic pollution and disseminate the learning from project activities. To ensure the visibility of the project progress and results.

Activities	Responsible actors	Timeline	Deliverables
Planning and delivering **educational and awareness-raising** activities on different thematic areas and critical issues related to marine plastics and plastic pollution.	Project Manager, Communication Specialist	Y1-Y4	Key results from the awareness raising activities integrated in the IW:Learn platform, GGKP and other platforms if relevant Awareness raising materials developed for the project by Y1 and updated regularly Feature articles and interviews with key stakeholders published in the local and national networks (social media, partners websites, etc). Educational presentations to different groups, such as recyclers associations, informal waste pickers, private sector associations, communities, etc. developed

3.3.3 Behaviour change campaigns

Objective: To encourage behavior and attitudinal change towards the circular economy of plastics, among others, organizing large scale multi-channel campaigns aimed at motivating citizens to separate plastics waste from sources and dispose towards the responsible channels.

Activities	Responsible actors	Timeline	Deliverables
Promoting behavior change campaigns	Communication Specialist, public and private sector, NGOs and other relevant organizations.	Y2-Y4	Targeted behavior changing campaigns directed to local communities designed and implemented, with participatory strategy designed and material developed Large scale multi-channel campaigns aimed at motivating citizens to separate plastics waste from sources and dispose towards the responsible channels conducted

3.3.4 Knowledge products, lessons learnt and best practices

Objective: To make information, resources and outputs developed under the project available to the stakeholders and the public and to promote the best practices and lessons learnt to key audiences, including the GEF community.

Activities	Responsible actors	Timeline	Deliverables
Promoting access to project information, resources and knowledge products, through IW:Learn Platform, GGKP, SAICM knowledge platform, GPML Digital Platform	Project Manager, Communication Specialist	Y2-Y4	Policy action plans, implementation plans for selected policy instruments and business solutions, best international practices and recommendations for the LAC region, summaries of the lessons learnt, among others, available to stakeholders and public on the project website, and integrated in IW:Learn Platform, GGKP, SAICM knowledge platform, GPML Digital Platform where relevant Monitoring data and information to measure the progress made by the project on addressing marine plastics and plastic pollution available publicly
Promoting access to and replication of project interventions on the circular economy for plastics	Communication Specialist, public and private sector, NGOs and research institutions	Y1-Y4	Presentation of project experience and knowledge products made at inter-city network meetings, training events, and relevant meetings and shared on the project website Reports of the training events and inter-city network meetings available on the project website
Disseminating experiences and lessons learnt from the project stakeholders, through IW:Learn Platform, GGKP, SAICM knowledge platform, GPML Digital Platform	Communication Specialist, municipalities, private sector, NGOs and research institutions	Y1-Y4	6 selected case studies on circular policies developed based on policy instruments of component 1 by Y4 6 selected case studies on sustainable business practices developed based on 6 business solutions of component 2 by Y4

Appendix 12 – Staff, consultants and subcontracts for the project using GEF resource

Position Titles	***$/ Person Week (estimated)***	***$/Person period (estimated)***	*****Estimated Person Weeks***	***Tasks to Be Performed***
For Project Management staff				
Project coordination	$661	$233,333	353	General coordination of project (PMC), including 1. Coordinate and support the project activities, oversee the delivery of the project, and develop the project's public profile and foster effective and productive relations with stakeholders including government, and private entities, NGOs, media organizations, etc. 2. Manage the flow of information from the field and produce periodic monitoring reports, namely financial expenditure reports and procurement plans; narrative reports of progress including the annual Project Implementation Review; annual co-finance report and participation in monthly status update calls with the UNEP Task Manager 3. Organize the meetings of the Project Steering Committee (PSC) 4. Regular reporting to the Executing Agency and Steering Committee on progress, challenges, opportunities and learnings encountered during implementation 5. Initiate, validate, sign and implement legal instruments, workplan and procurement plan with all bilateral partners including executing partners and partners from the cities where appropriate; 6. Organize meetings including travel and payment of DSA for staff and consultants as needed; 7. Regular travel to key project sites, and organize meetings, workshops and other forums as required 8. Ensure compliance with and reporting against the activities and standards described in the project document including M&E Plan; Stakeholder Engagement Plan; Risk and Mitigation table; and Gender and Communication Plan. 9. Ensure the Project governance and oversight of the financial resources from the GEF investment and the co-financing delivered by the Project stakeholders.
Justification for travel, if any: The Project Manager will be required to travel to attend PSC meetings and municipalities field visits for coordination.				
For Technical Assistance				

Global circularity consultants	$2,100	$315,000	150	1. develop out a comprehensive overview of best practices for specific policy instruments at the global level, with recommendations to the six LAC cities; support the development of city level action plans through reviewing and commenting draft versions of the action plans (output 1.1) 2. develop global best practices on financial instruments; provide technical assistance in the development of the implementation plans of the financial instruments in the selected cities by reviewing and commenting draft feasibility studies/workplans, advising on technical details in the development of the implementation plan based on international best practices, etc. (output 1.3) 3. provide technical assistance to the pilots to improve collection and recycling, by reviewing and commenting draft feasibility studies/workplans, advising on technical details in pilot design and implementation based on international best practices, etc. (output 2.2) 4. Provide comments to the training materials to be developed under the project (output 4.2) 5. Support the development of the monitoring methodology and indicators to track progress in enhancing circularity at city level (output 4.3)
Inter-city network affairs consultants	$1,900	$285,000	150	1. support the establishment of the inter-city network by drafting the framework document and organise consultations with stakeholders (output 3.1) 2. manage the inter-city network by (output 3.1) - designing a reporting mechanism for progress tracking - developing content for the network website - developing a harmonised city action plan template 3. Support the expansion of the network (output 3.2)
Gender and social expert	$2,500	$80,000	32	output 4.1 on gender: 1. conduct survey to assess role of women in plastic value chain 2. develop a Gender Guidance Note to ensure that activities organised are done in a gender responsive manner 3. collect gender-disaggregated data from the project cities and track the gender-related GEB 4. support the design of communication campaigns from a gender perspective
City consultants for action plans in 3 new cities	$1,250	$180,000	144	Identify and support 3 additional cities in the development of their city action plans on addressing marine plastics and plastic pollution, based on consultations with local stakeholders (output 3.2)
Long term monitoring specialist	$1,250	$55,000	44	develop city level monitoring methodology and indicators; support their application in cities (output 4.3)
Consultant for the calculation tool on chemicals for plastics	$1,041	$50,000	48	During the PPG phase, it was found that the existing data on chemicals of concern in plastics is limited in particular for products sold/used in the project cities, which is a barrier to establish solid baselines and will also affect the effective tracking of the progress against the GEB indicators in the project implementation phase. Thus a systemic approach for chemicals data collection and harmonization is needed. The consultant will help: 1. develop a methodology and calculation tool to organize the data collection and assessment of chemicals for plastics (output 4.3) 2. develop a user guide for the methodology and calculation tool (output 4.3) 3. Provide technical support to the collection and assessment of data on chemicals in plastic products sold/used in the project cities 4. support the tracking of the progress against the GEB indicators on chemicals by using the methodology and the tool 5. give presentations on chemicals of concern in plastics and introduction to the methodology in the regional training to be organized under the project.

Project Procurement Consultant	$400	$100,000	250	This project will manage activities in 6 project cities from 3 countries and also establish and operationalize an inter-city network, which will need the project team to sign and manage the contracts with a number of implementation partners through procurement processes. This project procurement consultant will support the management of relevant procurement processes needed at city and regional level and his/her role will be to: 1. draft ToRs of consultants and subcontracts needed by the project, as listed in this appendix 2. manage the relevant procurement processes, including advertising the call for proposals, collecting applications, supporting the project manager in interviewing candidates, signing and managing the contracts 3. ensure the procurement processes aligned with procurement guidelines/requirement of GEF, UNEP and the relevant local governments if relevant
Cities sustainable procurement expert	$520	$130,000	250	The cities sustainable procurement expert will carry out further research and share his expertise on sustainable procurement with the project cities. This will support them to in the development of sustainable procurement policies, but also on ecolabels, standards and financial instruments. This will contribute to Activities 1.2.1, 1.2.2, 1.3.1 and 4.2.1 (training of governmental officers and stakeholders for policy development).
Justification for travel, if any: The consultants will be required to travel to attend PSC meetings and municipalities field visits for coordination.				

Position Titles	***amount***	***Tasks to Be Performed***
For subcontracts		
Policy and business solution - Cartagena	$545,000	1. develop the city level policy action plan (output 1.1) 2. develop, test and improve targeted policy instruments and solutions in the city (output 1.2) 3. develop, test and improve financial instruments in the city (output 1.3) 4. identify and pilot test upstream innovation and actions in the city (output 2.1) 5. pilot test solutions on collection, recycling and disposal of plastic waste in the city (output 2.2)
Policy and business solution - Barranquilla	$545,000	1. develop the city level policy action plan (output 1.1) 2. develop, test and improve targeted policy instruments and solutions in the city (output 1.2) 3. develop, test and improve financial instruments in the city (output 1.3) 4. identify and pilot test upstream innovation and actions in the city (output 2.1) 5. pilot test solutions on collection, recycling and disposal of plastic waste in the city (output 2.2)
Policy and business solution - Panama City	$545,000	1. develop the city level policy action plan (output 1.1) 2. develop, test and improve targeted policy instruments and solutions in the city (output 1.2) 3. develop, test and improve financial instruments in the city (output 1.3) 4. identify and pilot test upstream innovation and actions in the city (output 2.1) 5. pilot test solutions on collection, recycling and disposal of plastic waste in the city (output 2.2)
Policy and business solution - Colon	$545,000	1. develop the city level policy action plan (output 1.1) 2. develop, test and improve targeted policy instruments and solutions in the city (output 1.2) 3. develop, test and improve financial instruments in the city (output 1.3) 4. identify and pilot test upstream innovation and actions in the city (output 2.1) 5. pilot test solutions on collection, recycling and disposal of plastic waste in the city (output 2.2)
Policy and business solution - Kingston	$545,000	1. develop the city level policy action plan (output 1.1) 2. develop, test and improve targeted policy instruments and solutions in the city (output 1.2) 3. develop, test and improve financial instruments in the city (output 1.3)

		4. identify and pilot test upstream innovation and actions in the city (output 2.1) 5. pilot test solutions on collection, recycling and disposal of plastic waste in the city (output 2.2)
Policy and business solution - Montego Bay	$545,000	1. develop the city level policy action plan (output 1.1) 2. develop, test and improve targeted policy instruments and solutions in the city (output 1.2) 3. develop, test and improve financial instruments in the city (output 1.3) 4. identify and pilot test upstream innovation and actions in the city (output 2.1) 5. pilot test solutions on collection, recycling and disposal of plastic waste in the city (output 2.2)
City circularity support	$220,000	1. Support the management of agreements with consultants and institutes under the guidance of the EA 2. support the EA to conduct coordination at city level, including coordination with governments, private sector entities, NGOs and other stakeholders in the 6 project cities, to ensure the delivery of component 1 and 2 3. organise the industrial roundtables in the 6 cities (output 2.3)
Best practices for policy and business solutions	$120,000	1. develop the global best practices on selected policies and recommendations for LAC cities (output 1.2) 2. develop the global best practices on upstream solutions and recommendations for LAC cities (output 2.1) 3. develop the global best practices and innovation on plastic collection and recycling at the global level and recommendations for LAC cities (output 2.2)
knowledge management and communication	$230,000	1. develop project communication strategy, develop and disseminate newsletters, design and carry out campaigns in cities, develop the scripts of project videos and the content to be uploaded onto the project website (output 4.1) 2. support the integration of project learnings and knowledge products into IW: LEARN, GGKP, GPML platforms (output 4.1) 3. develop case studies on circular policies and sustainable business practices based on outputs under component 1 and 2 (output 4.1) 4. develop training materials for the national and regional trainings (output 4.2) 5. manage the knowledge generated under the project and increase the visibility of the outputs achieved by the project (output 4.1)

Appendix 13– Technical project specific annexes