

Promoting Resource Efficiency and Circularity to Reduce Plastic Pollution for Asia and the Pacific

Part I: Project Information
GEF ID 10628
Project Type MSP
Type of Trust Fund GET
CBIT/NGI CBIT NGI
Project Title Promoting Resource Efficiency and Circularity to Reduce Plastic Pollution for Asia and the Pacific
Countries Regional, Indonesia, Myanmar, Philippines, Thailand, Viet Nam
Agency(ies) ADB
Other Executing Partner(s) Executing Partner Type

Coordinating Ministry of Maritime Affairs (Indonesia), Ministry of Natural Resources and Environmental Conservation (Myanmar), Department of Environment and Natural Resources (Philippines), Ministry of Natural Resources and Environment (Viet Nam, Thailand), and other coordinating organization(s) to be confirmed

Government

GEF Focal Area

Multi Focal Area

Taxonomy

Sex-disaggregated indicators, Gender Mainstreaming, Gender Equality, Knowledge Generation, Focal Areas, Waste Management, Chemicals and Waste, Plastics, Pollution, International Waters, Influencing models, Transform policy and regulatory environments, Stakeholders, Gender results areas, Capacity, Knowledge and Research, Persistent toxic substances, Coastal, Biomes, Mangrove, Coral Reefs, Strategic Action Plan Implementation, Freshwater, River Basin, Strengthen institutional capacity and decision-making, Deploy innovative financial instruments, Convene multi-stakeholder alliances, Demonstrate innovative approache, Communications, Public Campaigns, Awareness Raising, Behavior change, Type of Engagement, Participation, Private Sector, Individuals/Entrepreneurs, SMEs, Large corporations, Financial intermediaries and market facilitators, Civil Society, Academia, Non-Governmental Organization, Participation and leadership, Knowledge Generation and Exchange, Capacity Development, Innovation, Knowledge Exchange

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 1

Climate Change Adaptation
Climate Change Adaptation 0

Duration

36 In Months

Agency Fee(\$) 190,000.00

Submission Date

7/29/2020

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
IW-1-3	GET	1,000,000.00	52,000,000.00
CW-1-1	GET	1,000,000.00	43,000,000.00
	Total Project Cost (\$)	2,000,000.00	95,000,000.00

B. Indicative Project description summary

Project Objective

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

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Enabling environments for reducing plastic	Technical Assistan ce	Enabling environments for reducing plastics	1.1 Government-led action plans on marine plastic pollution drafted (at least four)	GET	1,600,000.00	2,650,000.00
pollution		pollution strengthened	1.2 Policies, laws and regulations to stimulate circular economy and reduce plastic pollution advanced			
Investing in plastics pollution solutions	Investme nt	Plastics pollution investment components prepared	2.1. Investments (or components of investments) that will reduce plastic pollution prepared (at least three)	GET		88,700,000.00
			2.2 Community pilot demonstrations on circular plastics economy implemented (two countries)			

			Total Project Co	ost(\$)	2,000,000.00	95,000,000.00
			Sub To	tal(\$)	100,000.00	1,000,000.00
				GET	100,000.00	1,000,000.00
Project Management (Cost (PMC)					
			Sub Tot	tal (\$)	1,900,000.00	94,000,000.00
			3.3 Project monitoring and evaluation conducted			
			3.2 Regional knowledge products developed and disseminated (five products)			
Establishing partnerships, financing mechanisms and knowledge transfer	Technical Assistan ce	Partnerships, financing and knowledge for plastic pollution solutions enhanced	3.1 Regional knowledge-sharing and cooperation on plastic pollution issues and solutions enhanced (eight activities)	GET	300,000.00	2,650,000.00

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	Asian Development Bank	Grant	Investment mobilized	3,700,000.00
GEF Agency	Asian Development Bank	Loans	Investment mobilized	91,300,000.00
			Total Project Cost(\$)	95,000,000.00

Describe how any "Investment Mobilized" was identified

ADB will commit co-financing from its Technical Assistance Special Fund (TASF), Regional Cooperation Fund, other internal trust funds and loan resources for targeted countries based on priorities identified in respective Country Operational Business Plans.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
ADB	GET	Regional	International Waters	International Waters	1,000,000	95,000	1,095,000.00
ADB	GET	Regional	Chemicals and Waste	POPs	1,000,000	95,000	1,095,000.00
				Total GEF Resources(\$)	2,000,000.00	190,000.00	2,190,000.00

E. Project Preparation Grant (PPG)

PPG Required

PPG Amount (\$)

PPG Agency Fee (\$)

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50,000

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
ADB	GET	Regional	International Waters	International Waters	25,000	2,375	27,375.00
ADB	GET	Regional	Chemicals and Waste	POPs	25,000	2,375	27,375.00
				Total Project Costs(\$)	50,000.00	4,750.00	54,750.00

Core Indicators

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Indicator 5.1 Number of fisheries that m	eet national or international third party cer	tification that incorporates biodiversity co	nsiderations
Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Type/name of the third-party certification	n		
Indicator 5.2 Number of Large Marine Ed	cosystems (LMEs) with reduced pollutions	and hypoxia	
Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)

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LME at PIF LME at CEO Endorsement LME at MTR LME at TE

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
689,047.00			

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 of toxic chemicals reduced)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	0.00	0.00	0.00

Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected Endorsement)	at CEO	Metric Tons (Achiev MTR)	ed at	Metric Tons (Achieved at TE)
ndicator 9.2 Quantity of mercury	reduced (metric tons)					
Metric Tons (Expected at PIF)	Metric Tons (Expected at	CEO Endorsement)	Metric Tons (Ad	chieved at MTR)	Metric [*]	Tons (Achieved at TE)
ndicator 9.3 Hydrochloroflurocar	bons (HCFC) Reduced/Phase	d out (metric tons)				
Metric Tons (Expected at PIF)	Metric Tons (Expected at	CEO Endorsement)	Metric Tons (Ad	chieved at MTR)	Metric [*]	Tons (Achieved at TE)
ndicator 9.4 Number of countries with legislation and policy implemented to control chemicals and waste (Use this sub-indicator in addition to one of the sub- ndicators 9.1, 9.2 and 9.3 if applicable)						
Number (Expected at PIF)	Number (Expected at C	EO Endorsement)	Number (Ac	hieved at MTR)	Numb	per (Achieved at TE)

Indicator 9.5 Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable) Number (Expected at PIF) Number (Expected at CEO Endorsement) Number (Achieved at MTR) Number (Achieved at TE) Indicator 9.6 Quantity of POPs/Mercury containing materials and products directly avoided Metric Tons (Expected at PIF) Metric Tons (Expected at CEO Endorsement) Metric Tons (Achieved at MTR) Metric Tons (Achieved at TE) Indicator 10 Reduction, avoidance of emissions of POP to air from point and non-point sources (grams of toxic equivalent gTEQ) Grams of toxic equivalent gTEQ (Expected (Expected at PIF) at CEO Endorsement) (Achieved at MTR) (Achieved at TE) 344.00 Indicator 10.1 Number of countries with legislation and policy implemented to control emissions of POPs to air (Use this sub-indicator in addition to Core Indicator 10 if applicable) Number (Expected at PIF) Number (Expected at CEO Endorsement) Number (Achieved at MTR) Number (Achieved at TE)

Indicator 10.2 Number of emission control technologies/practices implemented (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF) Number (Expected at CEO Endorsement) Number (Achieved at MTR) Number (Achieved at TE)

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	85			
Male	100			
Total	185	0	0	0

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

Please see Annexed Worksheet on Core Indicators Breakdown on Direct Beneficiaries: Indonesia 40 M, 30 F = 70 (higher than others since we will be the Plastik Sulit going on in parallel) Philippines 15 M, 15 F = 30 Thailand 10 M, 10 F = 20 Myanmar 10 M, 10 F = 20 Viet Nam 25M, 20F = 45 (due to pilot) Total = 185 (100 M, 85 F)

Part II. Project Justification

1a. Project Description

Global environmental problems, root causes and barriers

The marine plastic pollution problem is of an enormous scale and growing. An estimated 150 million tons of plastic is already in the ocean today, and every year approximately eight to 12 million tons of plastic is added. Ten rivers, eight of which are in Asia, transport 88% to 95% of the global load of plastic into the sea. These are the Yangtze Yellow, Hai and Pearl, Amur, Mekong, Indus and the Ganges Delta, which all transport plastic debris over long distances from upper catchments into the sea. Further, of the top 12 source countries ranked by proportions of mismanaged plastic waste within the coastal zone, nine are within Asian Development Bank (ADB) Developing Member Countries (DMCs) in Asia (by ranking): People's Republic of China (PRC), Indonesia, Philippines, Viet Nam, Sri Lanka, Thailand, Malaysia, Bangladesh and India.

It is now estimated that marine plastic is causing a one to five percent decline in the benefits that humans derive from oceans, particularly those relating to fisheries, aquaculture, recreation, natural heritage and human wellbeing. This decline in benefits equates to 0.5 to 2.5 trillion dollars per year. Hundreds of marine species are affected, as are coral reefs, and quarter of all fish caught now contain microplastic. The long-term impact of microplastic on human health remains largely unknown, but exposure is clear; microplastic particles have now been identified in human stool samples across the world. With the Bangkok Declaration the ASEAN member stated that they by 2025, want to "prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution. Solving the issues with marine pollution requires upstream solutions and an integrated 'source to sea' approach, that focus on enabling the transition to a circular economy for plastics and other marine debris. The primary route for leakage of plastics to the environment is through the mismanagement of waste materials, with solid waste management being one of the most neglected municipal services across developing Asia. This is particularly apparent in developing countries where low-value plastics are observed freely entering the environment, either directly from households or during the disposal of wastes in open dumpsites, non-engineered landfills, and near or in waterways and oceans.

Plastic pollution might be most visible in the oceans, but plastic pollution occurs on many levels both marine and terrestrial and across multiple sectors. Plastic pollution also occurs with the incineration of plastic waste at recycling factories, cement kilns, waste-to-energy-facilities and open burnings in illegal dumpsites or households where it among other things results in the direct emissions of fossil CO2-pollution, besides constituting a loss of finite resources and resulting in the continuous need for new virgin resources which is also polluting and contributes to global warming.

Plastic pollution is therefore not only related to poor waste management, but also to the production itself – and plastic is expected to double over the next 20 years. This calls for circular economy approaches and solutions that address the entire lifecycle of plastics, including materials, design, use as well as waste management.

Too often plastic produced and used today is plastic with low circularity, recyclability and short use and lifetimes that follows the linear approach of take make and dispose. Barriers to an effective circular plastic economy includes the low price of virgin plastic materials, and lack of policies that stimulate circularity. Factors that are hindering increased circularity and value capturing and maintenance of plastic in the economy are: Limited use of reuse-systems such as refillable packaging whether it is primary (consumer and retail), secondary (display) and tertiary (transport) packaging. Use of unnecessary single-use plastic items where multi-use/reuse alternatives exist e.g. shopping bags, beverage cups, cutlery and plates, limited implemented design-measures in place in industry for technical and economical easy recycling, lack of high-quality plastic waste materials that can replace virgin plastics in the production.

Solutions need to focus on avoiding the use of problematic and unnecessary plastic items and packaging in the product chain, and substituting these items with smart and innovative alternatives to single-use and short lifetime items that follow the principles of the 3Rs 'reduce, reuse, recycle'. To effectively combat plastic pollution and establish a circular economy for plastics there needs to be a prioritized and strong focus on waste prevention measures (reduce and reuse). A circular plastic economy also depends on strong recycling economy which is capable of collecting and recycling plastic waste and creating a back flow of high-quality plastic materials that can be recirculated back into the economy. This requires working with producers, retailers and consumers to create and ensure a high value plastic waste fraction that contains that contain recycled plastics thus creating a market for high-quality recycling and working with stakeholders to improve solid waste management (SWM) and recycling systems in the target countries.

The wide variety of issues with plastics in the environment and in the value chain require an equally varied set of actions to support the transition to a circular economy for plastics, The project will engage with all levels of government, the private sector and civil society, developing multi-stakeholder interventions both in coastal areas but also along rivers, and throughout supply chains and life cycles (e.g. from design to recycling and end of life). Thus, implementing a 'source to sea' approach that provides for integrated and inclusive action and investment prioritization.

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Marine plastic pollution is a complex multi-sectoral problem, but one largely resulting from (i) mass volumes of low-residual value, single-use, non-degradable plastic; and (ii) inefficient and unsustainable SWM systems. Globally, plastic production has surged over the past 50 years and is expected to double over the next 20 years.³ In 2015, plastic packaging waste, which is mostly single-use material designed for immediate disposal, accounted for 47% of the plastic waste generated globally. Such low-residual-value plastic is not collected by waste pickers as it cannot be resold, and so is more likely to leak into the ocean. This is reflected in the most common items found during international coastal cleanups: plastic bottles, caps, food wrappers, grocery bags, lids, straws, stirrers and foam take-away containers. A fundamental shift is needed in the way we produce and consume as a society, from a traditional linear economy using the 'take, make, dispose' approach to a circular economy. Reduced consumption and increased private sector responsibility are both needed, along with new business models and product designs that facilitate reuse or recycling, and innovations in recovery and treatment technology.

COVID-19 has caused the volume of infectious medical waste to surge – e.g., by 600% per day in Hubei Province, PRC. This has overwhelmed the capacity of some countries to safely transport and dispose it. Fear of cross-contamination and lockdowns have increased use of single-use plastics and packaging (e.g., for personal protective equipment (PPE), food and e-commerce deliveries), while recycling and municipal waste services have stopped or become limited in some areas. There is a concern this could undermine hard-earned successes in reducing single-use plastics and marine plastic pollution, especially as some governments delay positive actions. As we move from emergency response to recovery, we have the opportunity (and need) for a green recovery that stimulates the economy, creates jobs for the future and spurs innovation, all while investing in the environment. The transition to a circular plastics economy is key to the green recovery.

Circular economy as the solution to plastic pollution

Action, policy change, and investments are needed across the entire plastics system. Adopting true circular economy best practice, combined with increased and effective waste management, provides the solution for decoupling plastic use from the consumption of finite resources and plastic pollution in the environment.

A circular economy redefines current production and consumption patterns in a way where business and growth support positive economic, social and environmental benefits throughout supply chains, business models, and life cycles (e.g., from the choice of raw materials, design of products/services, to recycling and end-of-life).

The transition from a linear to circular economy requires collaborative rethinking of existing systems and actions across multiple sectors and industries. The New Plastics Economy Global Commitment, led by the Ellen MacArthur Foundation in collaboration with the UN Environment Programme (UNEP), unites business, governments, and civil society organizations behind a common vision of a circular economy for plastic "where plastic never becomes waste". The Global Commitment defines three actions to realize the vision by 2025:

- Eliminate all problematic, avoidable and unnecessary plastic items;
- Innovate to ensure that the plastics we do need are reusable, recyclable, or compostable;
- Circulate all the plastic items we use to keep them in the economy and out of the environment.

All three actions are important and depend on each other to achieve the vision. The waste hierarchy of the circular economy suggests an order of approach:

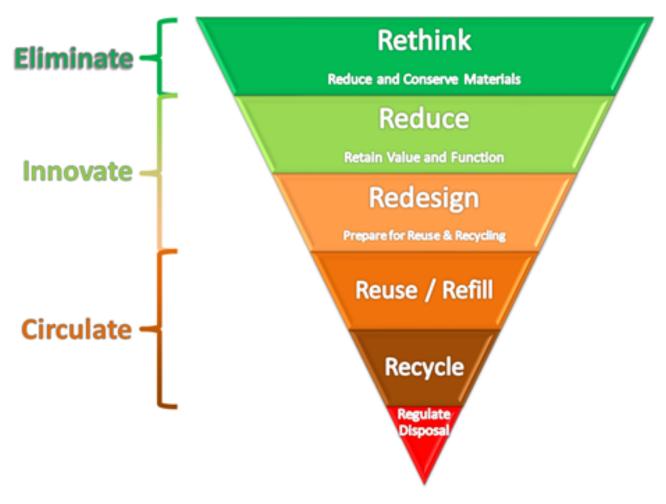


Figure 1. Action hierarchy in the circular economy

(Source: adapted from International Solid Waste Association)

As shown in Figure 1, the three actions (*Eliminate, Innovate and Circulate*) require avoiding virgin resource consumption wherever possible. Elimination and Innovation allow the circular economy to avoid the need for plastics altogether, where this cannot be immediately achieved, circulation can be enhanced through waste prevention measures and recycling aimed at keeping the produces plastic materials in the economy for as long as possible before it becomes waste.

Adopting a hierarchical and value chain approach means that uniform background knowledge and continuous exchange among actors needs to be established. All actors from the various life cycles must be represented and engaged to formulate implementable solutions and the proposed GEF project achieves this in a two-step process through creating enabling environments (Output 1.1) and the enhancement of regional knowledge sharing through Collaborative Forums (CoFos) (Output 3.1)

For plastic never to become waste, it must either be avoided completely or become a valuable material used in items where necessary, in small amounts with the longest possible projected lifespan and circularity. In a circular economy, the plastic materials used remain as a valuable commodity even at its end-of-life, and can seamlessly integrate back into the manufacturing of new plastic items in place of virgin plastic.

Importance of supporting a holistic approach

Paving the way for the Circular Plastics Economy requires a systemic shift towards sustainable resource management within the planetary boundaries. This needs policy and regulatory changes, capacity development, and investments in all three tiers (Eliminate, Innovate, Circulate). A holistic approach must be timely and coordinated to establish a fully integrated, circular economy system.

Making the transformation to a circular plastics economy requires addressing the entire lifecycle of plastics, including materials, design, use as well as waste management.

However, even the most resource-efficient future economy, with reduced plastic usage, will require systems to capture and circulate end-of-life products. The transition to a circular plastic economy requires investment and initiatives to avoid and eliminate unnecessary plastic items, innovations in the way that we plastic is used in our economy e.g. through new packaging and product delivery systems, and an efficient plastic SWM sector that is able to re-circulate plastic waste materials back into the economy. Whilst some groundwork for plastics elimination and innovation has been initiated, further development and investment is strongly required to scale-up and integrate these activities with the mainstream plastics manufacturing industry, retail and commercial sector and within policies. Near-term development and investment, and a systematic and strategic effort to promote circular economy in addition to financial and knowledge support in these sectors are necessary steps to transition to the circular economy in the medium to long term. Less use of virgin plastic resources, redesign of products for reuse and recycling, shift to reuse-able and refillable systems, increased use of recycled plastic materials in new products will in the future have to become the norm and standard in business models in a circular plastics economy.

SWM is a much more established sector, however, is one of the most neglected municipal services across developing Asia. About 75% of land-sourced ocean plastic comes from uncollected waste or litter, while the remainder comes from gaps in the collection system itself. Large amounts of plastic waste are abandoned in public places, and often into or near rivers or the marine environment. Investment and development of SWM and recycling capacity is necessary to directly impact the leakage of plastics to the environment and "stem the flow" in the short to medium term. Institutional strengthening and capacity building, policy and regulatory reform, infrastructure and technology planning and prioritization, and innovative and sustainable financing mechanisms are needed to boost investment across sectors and support the transition to a circular plastics economy.

Baseline scenario and any associated baseline projects

The enabling mechanisms, communication channels and capacities necessary to promote and support the transition to a circular plastics economy are either nascent or absent across the project target countries. Legislation and government policies are moving forward faster than the implementing systems required to achieve meaningful transition to circular economy. In many instances this gap can be addressed by effective communication and convening of open forums where learning and knowledge can be shared across stakeholder groups and value chain sectors.

There have been increasing calls for action on marine plastic in recent years, including the Statement on Combating Marine Plastic Debris by the East Asian Summit Leaders (2018) and Bangkok Declaration on Combating Marine Debris in the Association of Southeast Asian Nations (ASEAN) Region (2019) (Bangkok Declaration). These are supported by the ASEAN Framework of Action on Marine Debris (2019) and the Coordinating Body on the Seas of East Asia (COBSEA) Regional Action Plan on Marine Litter (RAP MALI, 2008, revised 2019). At the national level, many countries have announced commitments and targets, and national action plans have been prepared or are in progress in several countries. The status of national action plans in ASEAN countries that are also ADB DMCs is:

Country	Nation action plan status
Cambodia	None.
Indonesia	National Plan of Action on Marine Debris 2017
Laos	None.
Malaysia	Roadmap Towards Zero Single Use Plastics 2018-2030
Myanmar	None.
Philippines	In progress. Environment Management Bureau, Department of Environment and Natural Resour ces leading preparation. Timeframe = 2020.
Thailand	Plastic Waste Management Road Map 2018-2030
Viet Nam	National Action Plan for Management of Marine Plastic Litter by 2030

The national action plans that exist set ambitious national goals and targets and identify key action areas. They now need to be implemented at the national, provincial and municipal levels across government agencies, the private sector and civil society.

GEF projects

A number of GEF-linked programs and projects are also examining problems related to plastic pollution. For example, Partnerships in Environmental Management of the Seas of East Asia (PEMSEA), which addresses pollution reduction and waste management through its work on integrated river basin and coastal area management at priority sites in the region, under the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). Similarly, the Arafura-Timor Seas second phase, the Indonesian Seas Large Marine Ecosystem programme and the Sustainable Bay of Bengal Large Marine Ecosystem (BOBLME) Programme incorporate waste management elements. However, for all programs –PEMSEA, ISLME, ATSEA and BOBLME, direct interventions with respect to reducing plastic pollution is limited, given the technical limitations under previous GEF programming cycles – despite this being a relatively high priority for many of the member countries.

Under GEF 6, the MSP (GEF ID 9681) "Addressing Marine Plastics – A Systemic Approach" aims to capitalize on a growing baseline of knowledge on marine plastic sources, pathways and environmental impacts to inform the GEF and apply a systemic approach to global plastic issues. This project will cover Indonesia, Viet Nam and the Philippines, and is executed by the Ellen MacArthur Foundation, the Ocean Conservancy and other partners.

Within the GEF 7 cycle ADB has received PIF (concept) approval for GEF ID 10546 "Plastik Sulit: Accelerating Circular Economy for Difficult Plastics in Indonesia". This will be a 48-month project focusing on the diversion of plastics from the ocean and reduction of persistent organic pollutants (POPs) emissions by diverting plastics from combustion. With a view to create a "Circular Business Hub", the project will utilize CoFos and a Circular Economy Test Facility to catalyze and support a wide range of circular economy activities. Plastic Sulit will generate knowledge products and policy inputs applicable to the whole of Indonesia and in so doing divert an estimated 297,000 tons of plastics from the oceans.

Also, under the GEF 7 cycle the FSP (GEF ID 10095) "Environmentally Sound Use of Plastic and Management of Plastics Waste in Latin America and the Caribbean" and FSP (GEF ID 10401) "Establishing a Circular Economy Framework for the Plastics sector in Ghana" are closely aligned with the Plastik Sulit project and this proposed MSP. The opportunities for the GEF to benefit and share knowledge gained from these projects combined with the overall volumes of waste diverted from the ocean and POP avoidance will allow GEF 7 to have a significant impact on the global development of Circular Economies for Plastics.

This proposed MSP, along with the Indonesia Plastik Sulit project, will also align with another proposed ADB/GEF project in PRC on "Demonstrating Eco-Compensation Mechanisms in Yangtze River Basin (YRB)". Among other things, the proposed PRC project will focus on the management and recycling of plastic agricultural films with a specific target of avoiding POP emissions diverting agricultural plastics from uncontrolled burning. This project is a high priority, given that the Yangtze River is the largest contributing catchment to plastic pollution on the planet, with an annual input of 0.33 (range 0.31–0.48) million tons of plastic discharged into the East China Sea.

<u>Associated ADB projects</u>

The proposed regional GEF MSP will form part of a larger ADB regional technical assistance (TA) program focused on promoting circular plastics economy, improving integrated SWM and tackling marine plastic pollution. This regional program includes USD 1 million from ADB's technical assistance fund, USD 0.7 million from the ADB Regional Cooperation and Integration Fund, USD 1.5 million from the Japan Fund for Poverty Reduction and USD 0.5 million from the e-Asia Knowledge Partnership Fund.

ADB's integrated SWM investment portfolio totaled just \$344 million from 2010 to 2017, compared with a total investment of \$15.6 billion in the urban sector. This reflects the chronic underinvestment in SWM systems across the region, the challenges faced, and the lower priority of these projects for governments.

ADB currently has some ongoing and proposed investments in waste management infrastructure linked to river basin and coastal area management, which can be used as the baseline for the proposed project. These will be confirmed during project preparation, but could include elements of the following:

- Hunan Xiangjiang River Watershed Existing Solid Waste Comprehensive Treatment will address municipal SWM concerns and reduce long-term pollutants discharged to the Xiangjiang River watershed, which forms part of the Yangtze River Basin in PRC (USD 150 million).
- Guangxi-Guilin Comprehensive Ecological Rehabilitation Project will improve livelihoods in poor villages and restore the Li River, including through improving waste management and developing sustainable tourism (USD 140 million).
- Green Transformation in Heilongjiang will support green transformation of supply chain logistics, improve value chain integration for small and medium sized enterprises, and restore urban rivers (USD 500 million)
 - Secondary Cities Environment Improvement Project (SCIEP) will improve key urban infrastructures in three target cities in Viet Nam including: (i) a river embankment with public green space asking for a retention basin, (ii) new/improved wastewater and drainage systems, and (iii) solid waste landfills with pollution control measures (USD 250 million).
 - Solid Waste Management Sector Project will work with Cebu City in the Philippines to establish a public-private partnership (PPP) to manage solid waste (USD 70 million). Further, ADB has the following relevant regional TA projects in progress:
 - Supporting Implementation of Environment-Related Sustainable Development Goals (SDGs) in Asia and the Pacific. This includes SDG 12 on responsible consumption and production. The TA supported preparation of the Philippines Sustainable Production and Consumption Plan.

ADB Livable Cities program

Strategy 2030 of ADB identifies "Making Cities More Livable" as one of its seven operational priorities. Under this operational priority, ADB works to support the transformation of developing cities in the Asia and Pacific region into safe, inclusive, and sustainable urban centers.

The ADB Urban Operational Plan fosters the growth of Competitive, Inclusive, and Green Cities to improve the performance of cities on the Economic, Equity, and Environment (3Es) fronts. It focuses on three innovative approaches to guide the development of livable cities, which is a long-term process, achieved only through integrated planning and implementation of investment. These approaches include: i) economic competitiveness, ii) green growth and iii) social inclusiveness.

ADB's Livable Cities Program is active in the participating countries. For example;

- In Indonesia, discussions are currently ongoing with Indonesia's Ministry of Public Works and Housing for a possible loan of around \$ 100 million for Cirebon, Makassar, Palembang, Banjarmasin and Sorong
- In Myanmar, a proposed loan to Yangon aims to upgrade water and sanitation infrastructure
- In the Philippines, ADB is working with the government to transform Coron and El Nido into sustainable, inclusive, resilient and competitive tourism centers through a \$ 100 million loan, and
- In Viet Nam, ADB has supported a suite of projects which upgrade urban infrastructure and strengthen local government capacities. The referenced "Secondary Cities Environment Improvement Project" above, is the most recent investment which is currently being prepared.

Relevant Partner Programs and Projects

Annex D provides more details on programs and projects supported by a wide range of "Partner" organizations. Numerous donor governments, multilateral development banks (MDBs), private companies, global alliances, and non-governmental organizations (NGOs) are planning or implementing programs or projects in the region. The programs cut across sectors, levels of government, and themes/action areas. This proposed GEF project would align with and coordinate with these where possible.

In addition to GPAP referenced below, key partners, for which coordination will be close, include UNEP (via COBSEA and SBEFI) and the World Wild Fund for Nature (WWF), and possibly the Alliance to End Plastic Waste (AEPW). In 2012, UNEP launched the Global Partnership on Marine Litter, a platform that brings together actors from various stakeholders to address marine litter and microplastics. Under UNEP's Finance Initiative is the UNEP Sustainable Blue Economy Finance Initiative (SBEFI). The SBEFI provides a guiding framework for financing a sustainable ocean economy. In June 2020, ADB has announced that it will be a signatory to the SBEFI. UNEP has also led the development of the COBSEA RAP MALI. The activities of this project proposal are expected to support the RAP MALI. COBSEA has two other ongoing programs: "Reducing marine litter by addressing the management of the plastic value chain in Southeast Asia (2018-2022)" and "East Asian Seas Ghost Gear Project - Preventing and reducing marine litter from fisheries and aquaculture in East Asian Seas (2019-2022)." ADB will consult with UNEP / COBSEA throughout project preparation and implementation to ensure that its activities will build on their existing initiatives.

WWF will also be closely consulted during project preparation to clearly identify points of intersection and collaboration. Indonesia, Philippines, Thailand, and Viet Nam are project sites of WWF for their "No Plastics in Nature by 2030" initiative. WWF's objectives are similar to the proposed GEF project: (i) investment planning; (ii) corporate engagement and private sector action; and (iii) public action and awareness. WWF will implement activities such as scoping of waste flow assessments, developing city action plans, facilitating sector roundtables, and scaling entrepreneurial solutions. It will publish knowledge products on plastic packaging and extended producer responsibility. WWF is also playing a strong role in convening the NPAP committee.

ADB is currently exploring and developing a partnership with the AEPW and their Plastic Waste Free Cities program, through both its sovereign and private sector operations departments. The AEPW is following five themes: engaging with cities, creating value for recyclables, advanced recovery and recycling, design for circularity, and societal behavior. Areas for potential collaboration include: knowledge products and events where objectives and approaches align, knowledge-sharing on technologies and innovations (including through the Healthy Oceans Technology and Innovation Forum), engagement of AEPW members in city action plan collaborative forums, and co-financing of investments. This opportunity will be further explored during PPG.

Linkages with Global Plastic Action Partnership and National Plastic Action Partnerships:

The proposed GEF project will also benefit from the collaboration with the Global Plastic Action Partnership (GPAP) - including the Indonesia National Plastic Action Partnership (NPAP) through the World Resources Institute (WRI) in Indonesia; as well as the NPAP in Viet Nam.

Indonesia's NPAP was launched in April 2020. One of its aims is to support the scaling up of high-potential solutions through connecting innovators and entrepreneurs with social impact investors and will release an Investment Roadmap to complement its Multi-stakeholder Action Plan. ADB is co-chairing the Financing Task Force of the Indonesia NPAP with BAPPENAS to develop a financing roadmap for achieving Indonesia's plastic leakage reduction targets and circular economy ambitions. This will include identifying and mapping investable projects and innovations clustered around the NPAP's five points of action; detailed analysis of current funding, financing mechanisms and investment gaps; identifying barriers to financing and actions to overcome these; and, identifying sustainable and innovative financing mechanisms for further development or scaling-up. During project preparation, a more accurate estimate of co-financing will be reviewed and confirmed.

Viet Nam's NPAP was launched in May 2020. As the new chair of ASEAN in 2020, Viet Nam is committed to leading the way for the broader Southeast Asia region in developing and implementing meaningful policies to address plastic waste and pollution. Under the National Action Plan on Marine Plastic Debris Management, the country has pledged to reduce the flow of plastics into the ocean by 75% by 2030, and to boost the sustainable growth of its marine

economy. The NPAP was established in partnership with the Ministry of Natural Resources and Environment (MONRE). Similar to the Indonesia NPAP, the Viet Nam plans to convene five Task Forces: Policy, Metrics and Measurement, Investment, Innovation, Communication and Education. The first phase will focus on a baseline assessment of the plastic waste flow in Viet Nam, while the second phase will focus on scenario modelling and the development of the National Action Roadmap and Investment Roadmap. ADB could take a lead role in developing the financing strategy and establishing a Task Force in Viet Nam, similar to the one in Indonesia. This would require prioritization from the MONRE.

GPAP is currently developing a "NPAP Playbook" which outlines the steps that were taken in GPAP's pilot countries (Indonesia, Ghana and Viet Nam) to set up the NPAP platform, conduct the country analysis/baseline, build a secretariat team, develop an Action Roadmap and set up a full implementation plan (via Task Forces). The objective of the NPAP playbook is for other governments to be able to replicate the NPAP model in their country (either with or without GPAP/external support). There is an opportunity, in the context of this project, for GPAP and ADB to test this NPAP playbook with ASEAN governments interested to develop and implement their own national plastics strategy (e.g.,Myanmar, Philippines), and then foster a regular exchange of knowledge and experiences in areas related to policy, innovation, financing, behaviour change metrics, gender equality, etc.

GPAP has developed a model that allows countries to conduct a full analysis on plastics leakage into the environment (including plastics production, collection, recycling, safe/unsafe disposal etc). The model also allows countries to model different future scenarios depending on specific interventions. This helps identify an 'ideal scenario' that can predict what the best mix of solutions can be to get the country to a national target (e.g. in Indonesia, a 70% reduction of plastic pollution by 2025). GPAP is working with partners to improve the model for optimal and user-friendly use by governments and local analysis teams. Under this regional MSP, it might be possible to explore this option other ASEAN member countries, i.e., in the Philippines and/or Myanmar, subject to need and demand by Government. The terms of reference, costing and implementation modality for this type of activity will need to be determined during project preparation.

GPAP is currently developing a standardized toolkit called "GPAP in a Box" that captures all relevant resources from key partners and learnings from GPAP's pilot partnerships in Indonesia, Ghana, Viet Nam for other governments to apply an NPAP-like model in their own country or for partner organizations to support an NPAP. The toolkit will have a finance chapter. This presents an opportunity to collaborate with GPAP as a key content partner based on the lessons learned from Indonesia and Viet Nam, and develop guidelines and/or recommendations that may be replicated across other ASEAN member countries.

At the regional level, the collaboration with GPAP will focus on knowledge management. This could include building a financing strategy (based on the learnings from Indonesia and Viet Nam) which can be replicated across other ASEAN countries. ADB could also function as key content partner to support the financing chapter of GPAP in a Box (and the ASEAN angle to financing). This collaboration will be discussed and elaborated in more detail during project preparation.

.Co-financing

Additional co-financing from ADB, other donors, Governments (through recurrent expenditures) and private sector will be explored and defined during project preparation

Proposed alternative scenario

Many problems associated with plastic pollution require both significant expansion and improvement in effective SWM infrastructure and a fundamental shift to a circular economy for plastic. Both require strong leadership on strategic direction, financing, partnerships, enabling environments and investments.

Drivers

Problems

Inputs

Outcomes

Goal

- Population growth / Urbanization
- Plastic products designed for short term and single use
- Rapidly rising consumption
- Limited environmental awareness
- Lack of alternative products, services and processes
- Low market pricing for natural capital
- Limited government and business leadership
- Poor solid waste management infrastructure and related instruments

- Air quality issues from emissions due to improper disposal of plastic wastes
- Degraded river basin, coastal and marine ecosystems
- Increased flood risks
- Negatives impacts on human health
- High economic costs to key industries (fishing, tourism and shipping)

- Action plans developed and implemented at national, provincial and city level
- Policies, laws and regulations created or amended to create enabling conditions for good governance
- Infrastructure investments to reduce plastic pollution prepared
- Pilot community level demonstrations on circular plastics economy,implement ed
- Regional and national knowledge sharing /transfer and awareness created with respect to reducing plastic pollution and finding suitable alternatives
- Monitoring and evaluation

- Enabling environments for reducing plastic pollution strengthened
- Plastic pollution reduction investment components prepared
- Partnerships, financing and knowledge for plastic pollution solutions enhanced
- enabling conditions for governments and relevant stakeholders to promote actions to reduce plastic pollution from source to sea in Asia and the Pacific

Figure 2: Theory of Change

A provisional theory of change is presented above, which outlines the basic project logic. The impact objective of the proposed GEF project is to enhance actions to reduce plastic pollution focusing on resource efficiency and circular approaches, which contribute to the restoration of coastal and marine ecosystem health in Asia and the Pacific. The project will be organized around three outcome-based components, outlined below.

GEF funds will be used to support participation of Indonesia, Myanmar, Philippines, Thailand and Viet Nam (all ASEAN member states) in the project. These countries have been selected based on clear country demand for ADB support on this topic, demonstrable government commitment to addressing marine plastic, potential impact on the global marine plastic problem of interventions in the country, alignment with ADB's country programs and the potential for the project to lead to impactful investments. Any other ADB developing member countries (DMCs) that participate in the project will be supported by ADB and co-financing funds. Finally, to ensure the relevance and value-addition of this project, effort has been taken to align gaps, country needs and demand, and ADB's comparative advantage.

Outcome 1: Enabling environments for reducing plastic pollution strengthened

Output 1.1 Government-led action plans on plastic pollution developed and implementation supported

The project will support the development of at least four national/provincial/city action plans on marine plastic pollution and enablement of a circular plastics economy. These action plans will:

- Be based on baseline studies/analyses, using best available methodologies, of:
- o Circular economy potential assessments. Analysis of plastic use and consumption patterns for key sectors (e.g. food and beverage, fishing, tourism, fashion) and analysis of selected supply chains with an emphasis on identifying sectors with opportunities and highest potential for plastic pollution reduction through circular economy approaches using the three actions defined by the Global Plastic Commitment 'Eliminate, Innovate, Circulate)
- o Analysis of circular business potentials for alternatives to single-use and other difficult plastics. Including mapping of key plastic production and private sector patterns and trends, drivers, and with a specific focus on the plastic items most often encountered in the marine environment
- o Environmental assessments of alternative materials and alternative product systems to single-use short lifetime plastic items and other difficult plastics including biobased and biodegradable plastics in a South Asian context.
- o Existing programs, businesses and initiatives modeling or promoting circular plastics economy. Case catalogue of best practices with the potential of scale up in a South East Asian context.
- o Social studies on community behaviors related to plastic consumption, patterns and trends, drivers and triggers for the local context. To be used to identify barriers and efficient strategies for behavioral change as well as opportunities for innovative circular economy business services.

- o Policy and regulatory frameworks, including analyses of EPR tools and fiscal instruments and polices to stimulate a circular plastics economy
- o Plastic waste hotspots within the country/province and key leakage points
- o Existing SWM systems and infrastructure for plastics
- o Multisectoral analysis of plastic use and disposal volumes by area (national-level or provincial/city-level). Focus will be on the origins of recyclable and non-recyclable plastics most encountered in oceans and fugitive samples
- o Institutional capacity for a circular plastics economy and plastic SWM
- Identify and prioritize detailed plans and specific actions on institutional arrangements and capacity building; policy and regulation (including legal, economic, social instruments); sustainable industry/business, circular plastics economy, awareness raising and behavior change (targeting producers, industry, business, government and communities); further research and analysis; and infrastructure and technology investments.
- Assign lead roles, responsibilities and actions, including to private sector producers, manufacturers, importers and high-use industries
- Include implementation plans, including cost-recovery mechanisms and financial plans.
- Draw on national, regional and global case studies and best practices, but recommend what is feasible for the local context.
- Link to national and regional plans and frameworks, including the GPAP and the ASEAN Working Group on Coastal and Marine Environment (WGCME).

Action plan development will generally follow the CoFo approach adopted in the Plastik Sulit project. CoFos draw together stakeholders from throughout the value chain in an integrated and participatory way. This approach will focus on fully engaging and building effective partnerships with the private sector (e.g. plastic producers and manufacturers and key industries such as tourism, fisheries, food and beverage) along with civil society and the local, regional and national governments.

Action plans will look at the sources of the problem upstream in plastics production and consumption processes and identify circular economy solutions to address these e.g. eliminate, innovate and circulate. Awareness-raising and capacity-building will be incorporated into the planning process to enable full participation, informed decision-making and ownership of the plans by government departments, private sector and civil society. In addition to supporting action plan development, the project will provide support to governments for implementation of national action plans, including priority research and analysis, policy and regulatory support (see Output 1.2) and institutional strengthening. This support will be provided on a case-by-case basis, based on need to fill critical gaps and potential impact, demand from governments, and coordination with partner programs.

GEF funding will be used to undertake the data gathering and baseline studies/analysis needed to inform the action planning process; support integrated and participatory action planning workshops with government departments, private sector and civil society; and document preparation.

The indicative scope of support for action plan development is outlined below and will be confirmed during project preparation based on further analysis and field discussions and visits (where possible), readiness criteria and consultations with government.

Country	Scope of a	Target area (in	Key considerations
	ation blan	4:4:1	

	(tentative)	aicative)	
Indonesia	Provincial	Cirebon	Demand for support confirmed through three project missions wit h government, which included a request to focus on Northern Java.
			Readiness – National Plan of Action in place and Cirebon commit ted to Livable Cities program.
			 Linked to wider ADB program (Livable Cities) which improves likel ihood of project success and future investment.
		•	Context for south-south cooperation – port city, fishing industry, slum communities.
		•	Integration and alignment with the GEF "Plastik Sulit" project to ensur e maximization of value and impact
Myanmar	National	National	Demand indicated via consistent request for ADB support throug h two country missions and various other communications.
			 National Waste Management Strategy and Action Plan 2017-203 0 has just been approved. A number of priorities and targets identified, i ncluding circular economy, although implementation challenges remain.
			Concern expressed that Ayerwaddy River ranks in the top ten river s in the world for plastic pollution.
Philippines	TBD	TBD	 Demand for support confirmed through two project missions with government, which included a request to focus on Manila Bay, and to pr ovide support for implementation of the national action plan being prep ared.
			 Readiness – national action plan currently being prepared, and M anila Bay Clean Up a priority for the government. Also currently developi ng the Philippine Action Plan for Sustainable Consumption and Product ion and plan
			Linked to wider ADB program of support which improves likelihoo d of project success and future investment.
			Context for south-south cooperation – growing metropolis.
Thailand	Municipal	Coastal or river side	Demand for support confirmed through two project missions with government, including for municipality waste management and 3R pla n.
			Readiness – Plastic Waste Management Roadmap already in pla ce.
			 Locations will be selected from 23 coastal provinces such as Ray ong, Chonburi, Trad, and Phuket and detailed scope for action plan deve lopment will be confirmed during project preparation based on further a nalysis and field visits, readiness criteria and consultations with govern ment.

Viet Nam	Provincial	Mekong Delta	Demand for support confirmed through two project missions with government, which included request to focus on the Mekong Delta, or a Iternative Quang Ninh or Hai Phong.
			 Readiness – nation action plan on marine plastic already prepare d, and Quang Ninh is already implementing Viet Nam's Green Growth A ction Plan.
			Context for south-south cooperation – tackling pollution via trans boundary and major river, coastal/marine tourism hotspot (Ha Long Ba y), green growth.

Output 1.2 Policies, laws and regulations to stimulate circular economy and reduce plastic pollution advanced

A well-functioning circular plastics economy relies on sound regulatory measures, enforcement activities and strong institutions to deliver them at the national, provincial and city levels. The project will support policy and regulatory review and reform where Governments are committed to drive this forward. Policy and regulatory measures supported through the project will be based on robust policy analysis and regulatory impact assessment and could include product take-backs, deposit-refund schemes, advance disposal fees, materials taxes, upstream combinations of tax/subsidy, standards, minimum recycled content requirements, leasing, and extended producer responsibility etc.

utcome 2: Plastic pollution reduction investments prepared (no GEF funds)

The GEF elements of the project, particularly the knowledge products described in Outcome 3, will be closely linked to the preparation of investments by ADB and other financing institutions in participating countries. There will be two primary outputs: the first is related to large scale infrastructure development, and the second is a pilot demonstration of plastic circular economy on a small/community-scale, which can be subject to replication and scaling (possibly in the context of a larger infrastructure investment). Actions under this outcome will be funded exclusively by ADB and other co-financers.

Output 2.1 Preparatory work for investment projects that will reduce marine plastic pollution completed (ADB funds only)

Using ADB funds and other sources of co-finance (<u>not GEF funds</u>), the project will support at least three investments related to reducing marine plastic pollution. Support will be linked to ADB country partnership strategy and country operational business plan processes. This will be on a demand-driven basis and confirmed during the inception phase of the project. This work will help to inform and guide a new generation of ADB investments.

Supporting activities will include assessments such as those outlined under Output 1.1 for preparation of the city action plans, including: circular economy potential assessments; social studies on community behaviors related to plastic consumption, patterns and trends, drivers and triggers for the local context, to be used to identify barriers and efficient strategies for behavioral change as well as opportunities for innovative circular economy business services; policy and regulatory frameworks, including analyses of EPR tools and fiscal instruments and polices to stimulate a circular plastics economy; plastic waste hotspots within the country/province and key leakage points; existing SWM systems and infrastructure for plastics; multisectoral analysis of plastic use and disposal volumes by area (national-level or provincial/city-level) - focus will be on the origins of recyclable and non-recyclable plastics most encountered in oceans and fugitive samples.

Support will be targeted for preparation of circular plastics economy concept designs, pre-feasibility and feasibility studies. Findings and recommendations from these assessments, particularly viable investment opportunities, will be disseminated through targeted briefs and knowledge-sharing activities to raise awareness and earn buy-in of key stakeholders, including government agencies, donors, investors, development partners, and the private sector, and mobilize additional financing for circular economy approaches. ADB will ensure that the assessments will be shared with MDBs, bilateral agencies, private foundations and others, through various platforms (e.g., knowledge-sharing events, working groups, meetings, and communities of practice) to foster additional funding and investment opportunities

The kinds of ADB investment projects supported through the project may include: i) elimination, innovation and circulation initiatives targeted at enabling the transition to a circular plastics economy and SWM activities to control leakage to the environment and reduce pressures on landfills; ii) policy-based lending, which will help countries review and update standards, regulations and legal frameworks relevant to chemicals, agriculture, construction, manufacturing, and other industries; iii) urban planning and infrastructure investments which facilitate comprehensive land use planning, efficient materials flows, waste minimization and SWM; iv) sustainable and smart agriculture value chain development which considers avoidance of plastics in the agricultural production systems of the target countries and also support effective collection, disposal, recycling of agricultural plastic films; v) socially responsible private sector investments in food and beverage industry sub-sectors, eco-tourism sub-sectors, etc., which help companies transform their materials selection and use processes; or vi) innovative/advanced technology approaches to promote plastics elimination, innovation and circulation.

Output 2.2 Community pilot demonstrations on circular plastics economy implemented (ADB funds only)

This output will feature support for two small-scale demonstration projects on circular plastics economy and integrated SWM: one in Viet Nam and one in Indonesia – noting that these will be supported by the Government of Japan (and <u>not</u> using GEF funds. These have been requested by governments so to have practical demonstrations of how to implement a circular plastics economy and integrated SWM systems.

The demonstration projects will promote awareness of 3R approaches, circular business models and sustainable consumption patterns. The activities will follow integrated and participatory approaches, and lead to an improved local environment for approximately 2,000 to 4,000 households each.

The demonstration projects will explore the separation of wet and dry waste at the household level (source segregation) and create favorable conditions for further processing/use of plastics (this creates value for plastic, creating a currency, incentivizing and increasing collection/recovery rates and providing beneficiaries with added income); local business and community awareness raising and behavior change campaigns focused on elimination, innovation and circulation (including plastic reduction in daily activities, re-use of containers and plastic reducing circular business models); innovative PPP contracting of micro-enterprises to support the new recycling system; and partnerships with local reprocessing/recycling companies. By identifying and exposing those plastics which are most regularly found in the waste stream and in marine samples the demonstrations will provide examples for communications and engagement with product manufacturers and plastic packaging suppliers.

The pilot activities will also conduct training and design-thinking workshops targeting the most vulnerable members of the community (target 200 participants), including the informal sector and women's groups. These workshops aim to stimulate the development of new circular business models and job opportunities, combined with business development programs (including skills training, business planning and financial literacy) and potentially a microgramts/loan scheme to support elimination, innovation and recycling. The demonstrations will also provide opportunities to pilot innovative technologies and behavior change strategies, targeting a specific industry, and in collaboration with partners (to be explored during project preparation phase) pilots of circular business models.

Based on initial consultations, the potential pilot sites in Viet Nam are driven by the newly adopted NPAP foci of plastics impact on tourism and fishing. Several sites in the Gulf of Tonkin and the Northern Mekong Delta are under consideration in Viet Nam, and Northern Java in Indonesia. Several criteria will be considered during project preparation in order to finalize the site selection. These include:

- Local government support for the pilot and keenness to scale-up successes
- An identified lead agency / authority within local government
- Communities should be located on the coast or adjacent to a waterway that flows into a larger river basin or bay, with inhabitants of 5,000 10,000; or in some cases close to a dumpsite (controlled or illegal)
- Plastics are a main or significant component of solid waste collected and/or disposed in the area
- Presence of waste collectors and community recyclers (informal or formal)
- Waste quantities are of sufficient volume to be 'bankable' and representative
- A company or community-based organization is willing to devote resources to process / recycle plastic waste (i.e. collection systems, sorting facilities etc.)
- Existing recycling and circular economy initiatives and activities
- Presence of a target sector e.g. tourism in Viet Nam
- Opportunities exist for complementary waste management activities, such as processing of biodegradables (wet waste) for composting
- Links to potential infrastructure investments / co-financing

• Project preparation will include identification of specific candidate sites ideally covering 2,000 to 4,000 households; consultations with local governments, communities, local businesses and NGOs; rapid socio-economic analyses, circular economy activity assessments and waste characterization studies; defining pilot project parameters and targets; defining capital equipment requirements and operations expenditures; reviewing potential business models for different waste streams (e.g. types of plastic, organic material, aluminum); and defining institutional arrangements.

utcome 3: Partnerships, financing and knowledge for plastic pollution solutions enhanced

Output 3.1 Regional knowledge-sharing and cooperation on plastic pollution issues and solutions enhanced

During the project preparation phase, a knowledge management strategy will be developed for the project, in consultation with key stakeholders. The general approach to knowledge management will be designed within the broad framework of ADB's Finance ++ approach, the GEF Knowledge Management Approach, the GEF STAP KM guidance, the GPAP Plastic Action Playbook (GPAP in a Box), and other best practices in development and behavior change communications.

The project will support a review of existing programs, policies, plans, and solutions, as well as assessments on critical issues and opportunities to develop and scale up circular solutions in the region that reduce marine pollution and to enable the transformation to a new circular plastics economy, taking an holistic approach through the entire plastic life cycle.

The project will identify key organizations and experts for knowledge partnerships to strengthen knowledge products and activities where appropriate, particularly where this will enhance sustainability and mainstreaming of knowledge interventions. Partnerships will aim to increase knowledge dissemination by bridging gaps in stakeholder networks. Knowledge management will also facilitate south-south regional cooperation and promote action.

Lessons learned from project implementation will be documented and disseminated to support scale-up of industry collaborations, policy reforms, investments and other actions that reduce marine plastic pollution and engage the plastic value chain in the transformation to a circular plastic economy. Findings will be documented in at least five knowledge products and disseminated in regional, sub-regional, and national knowledge sharing or regional cooperation events.

The project will support participating countries and partner stakeholders to raise awareness of and facilitate cooperation on marine pollution and circular economy. Thematically, knowledge management will address marine plastic pollution through consumer, industry and business behavior change for reduced production and consumption, new circular business models, innovation of product designs and systems, and integrated SWM capable of recirculating plastics

of high-quality back into the economy this substituting virgin plastics. All knowledge products will be aimed at serving as recommendations to transition to a circular economy (eliminate, innovate and circulate). The project will support the following project led activities and participate in the following externally led activities:

Project Led Activities:

- CoFos will bring together all actors from the various life cycles of the plastic products and packaging to discuss and initiate change and catalyze action for circularity in the parts of the life cycle of plastic items. The focus of individual CoFos will be formulated in collaboration with governments, stakeholders and partners, but could include for example, single use plastics, policy for circular plastics economy, plastic use reduction and substitution through redesign of products, systems and business models and increased use of recycled content, innovation and technology, and themes relevant for all of the project target countries. The CoFos can be a route by which academic, industrial or innovative technology research groups with collaborative projects can access and contribute to the project knowledge products. The cross-value chain collaborations established within the CoFos will be able to provide a holistic view, highlight barriers and challenges, deliver recommendations and findings, and establish partnerships and initiate projects outside of the proposed GEF project.
- Innovative ("blue" or "green") financing roundtables to share strategies and finance innovations to accelerate plastics circular economy and reduce marine pollution. Participants would include ADB member countries, development partners, MDBs, impact investors and international experts.
- Healthy Oceans Technology and Innovation Forum to share the enabling environments needed to unlock the latest science, technology and innovation, as well as current trends, successes and challenges for meaningful impacts in ocean health including a circular plastics economy to reduce marine pollution. Participants will include technology providers, entrepreneurs, business, government (national, provincial, city), civil society/NGOs, academia and partners.
- Plastics and circular economy-themed hackathons under ADB's Digital Innovation Sandbox Program. Since 2018, ADB and the Asian Institute of Management (AIM) have been organizing the ADB-AIM Hackathon, presenting three challenges that seek solutions with emerging technology (see https://digital.adb.org/challenges). The winners will receive prize money to prototype and pilot their proposals, and if deemed appropriate, they may be matched with project sites under the GEF project.
- Cross-country knowledge-sharing and capacity-building events, to share successful case studies, business solutions, and action plan preparation within the project target countries as well as potentially Japan and Korea.
- Internalizing systems, knowledge, tools and approaches with relevant regional intergovernmental bodies to ensure continuity and sustainability of programs (see section below on Regional Coordination). This will be explored further during project preparation.

Externally Led Activities

• Knowledge-sharing and lessons learned through IWLEARN activities (including appropriate budget allocation) to promote learning among project managers, country officials, implementing agencies, and other partners.

- Mainstreaming action on oceans and circular economy at a high-level through sub-regional cooperation programs where ADB is already an active partner, such as the Greater Mekong Subregion Economic Cooperation Program, Brunei Darussalam-Indonesia-Malaysia-the Philippines East ASEAN Growth Area (BIMP-EAGA), Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT), Sustainable Bay of Bengal Large Marine Ecosystem Programme, Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) and others
- GPAP in a Box. Knowledge-sharing and lessons learned with other GPAP-linked initiatives in Indonesia, Viet Nam and Ghana, and the packaging of these with the proposed open source, user-centric knowledge toolkit being prepared by GPAP. The GPAP in a Box will support governments to address seven foundational elements, including: i) structure and governance, ii) knowledge curation and analysis, iii) stakeholder mapping, iv) national action roadmap development, v) implementation, vi) strategic finance, and vii) measurement and evaluation.

Output 3.2 Knowledge products developed and disseminated

A suite of multi-media, audience-segmented knowledge products will be developed specific to developing Asia and the Pacific. These will be informed by the findings and recommendations from the above-mentioned activities to cater to stakeholder needs. Knowledge products will also share innovative solutions to further accelerate and build capacity to accelerate the plastics circular economy. The main themes of research and knowledge products may include:

- Infrastructure and technology solutions and investment needs to reduce marine plastic pollution, enhance SWM and enable the transition to a circular plastics economy,; detailed analysis of current financing, financing mechanisms, and investment gaps; and recommendations for how to scale-up investment, including the enabling conditions needed. The research will provide in-depth analysis and recommendations for three DMCs, for example, in Thailand including a focused study on waste of electrical and electronic equipment (WEEE), and how to drive the value chain and promote recycling.
- Identifying the challenges; opportunities and success factors for driving institutional and systemic change at city, regional and national level necessary to support and scale-up the transition to a circular plastics economy.
- Impact and effectiveness review of city-level plastic management interventions with a practical guide for local governments on selecting and implementing interventions.
- Asia and oceans: plastic circular economy success stories.

Knowledge products will be disseminated where appropriate, through the activities listed in Output 3.1 as well as through knowledge partnership networks including CoFo partners and NGO and CSOs as well as relevant media platforms to maximize impact. There will also be direct linkages with the GEF IWLEARN (with appropriate budget allocation).

Output 3.3 Project monitoring and evaluation conducted

A project monitoring system will be created to capture key information and measure project progress throughout implementation, in line with GEF's monitoring policy. Elements of a project monitoring framework will be elaborated during the project preparation phase. Targets will have sex-disaggregated indicators. Mid-term review will be conducted during Year 2 of implementation, followed by Terminal Evaluation Review towards the end of project.

Alignment with GEF focal area and/or Impact Program strategies

The proposed project aligns with key priorities for two of the three objectives within the International Waters (IW) focal area strategy. First, it is relevant to the objective on "strengthening blue economy opportunities" as it will encourage public and private national investments consistent with sustainable oceans and coastal and marine management, including policies, legal and institutional reforms. Investments will be supported in areas where regional processes at the level of the large marine ecosystem (LME) are underway, and transboundary diagnostic analysis (or equivalent) and strategic action programs are in place. Second, it will support actions that enhance water security in freshwater ecosystems. This will assist countries in understanding how addressing plastic issues will generate positive impacts for environmental and community health, including wetland biodiversity, freshwater fish stocks and unique aquatic and terrestrial habitats.

The project will also contribute to the IW and C&W focal areas to address the challenge of marine litter and microplastics. Wastes that contain plastics can contribute to the "POPs challenge," as POPs can be released when plastics littered in the open are set on fire. A large project for collection/recovery/remanufacturing of plastic and plastic avoidance would not only reduce plastic material from the marine environment but also reduce the release of Unintentional POPs (UPOPs) (e.g., dioxine and furans) from plastic disposed through open burning. UPOPs also affect air quality. A program that aims to limit or reduce the use of plastics would directly reduce the proportion of plastics disposed of in dumpsites. This would reduce the occurrence of waste being set on fire in unproperly managed landfill sites, as waste is generally not combustible in the absence of plastics.

This project would also have direct links to the Stockholm Convention. The "Industrial Chemicals Program" aims to support investments in "improved material management initiatives, including circular economy, sound material-cycle society, and sustainable materials management approaches, which promote the adoption of improved production, consumption and environmentally sound disposal patterns." These approaches can drive the redesign of materials and products that contain or are potential generators of POPs, and the sound management of these materials and products, including plastics and electronic waste (e-waste). The project will also contribute to the reduction of key agricultural plastics; special or hazardous plastics; and/or POP waste that enter the global food supply chain, and address end-of-life and waste management issues. It is also directly relevant to the Basel Convention Technical Guidelines on the Identification and Environmentally Sound Management of Plastic Wastes and their Disposal. In particular, the most recent amendment (BC-14/13) calls on countries to undertaken further actions to address plastic waste. Among other things, countries are encouraged to address plastic pollution issues "by improving the collection, transport, treatment and recycling of plastic waste, by improving or creating markets for recycled materials made from plastic waste, by improving other means of recovery"; as well as "set time-bound targets and adopt adequate measures to ensure that plastic packaging is designed to be reusable or recyclable in a cost-effective manner, the plastic packaging recycling rate by weight is monitored and significantly improved" at all levels.

Incremental/additional cost reasoning and expected contributions from baseline, GEF and co-financing

Under current business practices and operations, most initiatives that address issues related to plastic pollution in Asia and the Pacific region are: (i) in nascent stages, (ii) spatially diverse, (iii) fragmented across different sectors, (iv) characterized by limited understanding at local and community levels, (v) not fully supported by robust and solid enabling frameworks, and (vi) not directly addressing upstream linkages in the production/supply chain. Success of these efforts may be negligible when weighed against the vested interests in the fossil fuel industry.

Fossil fuel companies are among those that have invested up to USD180 billion since 2010 into new facilities that will manufacture raw material for commonly used plastics, from packaging to bottles, trays and cartons. Companies such as Exxon Mobil Chemical and Shell Chemical will contribute to a 40% rise in plastic production in the next ten years. Plastic production is increasing at a rapid rate and if large-scale, concerted actions are not taken immediately, will dwarf plastic reduction and marine conservation efforts.

The proposed GEF project will be instrumental in enabling countries to make decisions based on research and analysis that provides a systemic understanding of the plastic problem. It will guide participating countries in designing and implementing activities in line with economic development, particularly because the emerging body of knowledge will reveal the direct and indirect costs of inaction. The project will stimulate and contribute to collaborative efforts across multiple stakeholder groups, particularly the private sector, to reshape the plastics economy in Asia and the Pacific region. It also aims to encourage a new generation of investment initiatives which internalize and implement circular economy principles and practices. It will shed light on key issues at the consumer level and further down the value chain, from the manufacture of raw materials to the finished products which contain the essential base chemicals which form plastics.

Global environmental benefits

The project will contribute to:

- Restored and sustained freshwater, coastal, and marine ecosystems, including globally significant biodiversity
- Reduced vulnerability to climate risks, and increased ecosystem resilience through reduced greenhouse gas emissions as a result of reduced plastics production and waste, and better integrated SWM (e.g. reduction of volume of wastes in illegal dumpsites, diversion of waste away from landfills and improved management of plastics related wastes), and
- Indirectly, reduced and/or avoided chemicals of global concern and their waste in the environment and in processes, materials and products.

The project will contribute to Core Sub-indicator 5.3: Amount of marine litter avoided:

For activities under Output 2.2, the two small-scale pilot demonstrations, it is estimated that 3,017 metric tons of plastics will be diverted from the ocean and 9,454 tons of plastics diverted from combustion reducing POP emissions by 14 g/TEQ over a 3 year project and 10-year extended impact period. This is based on the following assumptions for each of 2 pilot projects:

- 4,000 households concerned
- · Five family members in a household
- Per capita waste production is 0.7 kg/person/ day
- 13% of waste composition is plastic
- · Project site is chosen for its adverse impact on waterways at present
- Per capita waste production: 0.7 kg/p/day
- 100% of plastic in waste avoided at sea at the end of the pilot

The project will also contribute to marine litter avoided as the result of action plan implementation and knowledge sharing. The project has estimated that an additional impact of 686,029 tons of mismanaged plastic waste diverted from oceans [Jambeck et al] and 219,618 tons of mismanaged plastic waste diverted from combustion giving 329 g/TEQ avoided [UNEP et al]). These are based on the following assumptions

- 15% of mismanaged plastics are lost to oceans in coastal regions (reference: Jambeck, J. et al. "Plastic Waste Inputs from Land into Ocean" in Science, 13 February 2015, pp. 768-771)
- 47% of mismanaged plastics are combusted without proper emissions control (reference: SystemiQ Indonesia data analysis) resulting in POP emissions (reference UNEP, GEF, UNIDO etc. "Estimating Releases and Prioritizing Sources in the Context of the Stockholm Convention" (reference page 19) 2005
- Mismanaged plastic tonnages in coastal regions for the target countries have been projected forward from the baseline established by Jambeck et al in 2010 using 2.5% increase per year
- The project estimations are based on a 2021 start year

These calculations will be refined based on analysis undertaken during project preparation.

The Core Indicator Worksheet which provides additional details on the methodology used is annexed.

Innovation, sustainability and potential for scaling up

Innovation. The GEF project will both incorporate innovative approaches and promote innovation:

- Action planning will take a 'source to sea' approach integrated and participatory, and looking at the source of the problem, upstream on land, and upstream in production and consumption processes, varying from the usual approach to planning and designing SWM systems and projects.
- Action planning will seek to widen the range of measures and instruments used to reduce marine plastic.
- Small-scale demonstrations will test implementation of circular economy principles at the local business and community levels, and innovative technologies and approaches for reduction and management of plastic waste.
- Ocean Health Technology and Innovation Forums (output 3) will showcase and promote innovative circular economy solutions (business models, approaches, materials, technologies).
- Blue Finance Forums will showcase and promote innovative mechanisms and approaches to financing investments in oceans health, including those that will reduce marine plastic.
- Circular plastics economy-themed hackathons will encourage and recognize innovation.

Sustainability. In order to ensure that action plans are sustainable, the project will ensure that processes are primarily country- and/or community-driven; investment plans are feasible and linked to financing mechanisms and options; a 'design for the future' approach is taken to infrastructure and technology; and responsibilities and timelines are realistic and based on current and projected capacity and resources. The action plans will identify capacity needs and undertake capacity-building activities through the process, and also identify institutional reform needs. Further, the supply chain analyses will demonstrate the long-term cost/benefit of following responsible practices to the business sectors, so that there will be a market-driven element. Finally, potential investment opportunities identified through the action plans will be shared with partners such as World Bank, European Investment Bank (EIB), Circulate Capital and other potential financing organizations.

In order to ensure that the pilots are sustainable, the project will ensure that their design and implementation is primarily local government- and community-driven; linked to country and local government action plans; is practical for the local context and has a high likelihood of continued success at project end; includes elements on behavior change and livelihoods development; sustainable financing, enabling policies, and institutional capacity components to support scaling-up of the projects; and includes sufficient training and capacity-building for all those involved in implementation. By involving communities (e.g., informal waste sector, women's groups, households, local businesses), the project will build support for adopting and sustaining the project outcomes.

Sustainability will be a focus of the knowledge management and partnerships strategies and the regional cooperation activities. To this end, partnerships will be formed with key regional coordination / intergovernmental bodies (see section 6).

Scaling-up. According to a recent Circularity Gap Report, the global economy is only 9% circular; 8.4 Gt of materials are recycled input, while 84.4 Gt come from extracted resources. This shows a significant opportunity to scale-up the circular economy. The project has been designed to promote replication and scaling-up, as follows:

- The knowledge management strategy and output 3 activities will support behavior change communications, sharing of successful interventions and lessons-learned, and promote regional cooperation on actions and investment planning,
- The project will support development of blue finance frameworks as part of ADB's Oceans Financing Initiative, which will inform and guide MDBs and other financing institutions in future impactful investments.
- The small-scale demonstrations on circular economy in Indonesia and Viet Nam will be designed for replication and scaling-up.
- World Economic Forum, Ellen MacArthur Foundation and McKinsey & Company, 2016. <u>The New Plastics Economy Rethinking the future of plastics.</u>
- [2] Schmidt, C., Krauth, T. and Wagner, S., 2017. Export of plastic debris by rivers into the sea. *Environmental science & technology,* 51(21), pp.12246-12253.
- Jambeck, Jenna R., et al. "Plastic waste inputs from land into the ocean." *Science* 347.6223 (2015): 768-771.
- United European Gastroenterology, 2018. UEG Press Release UEG Week: Microplastics discovered in human stools across the globe in 'first study of its kind'.
- [5] It should also be noted that at the global scale, over 90 % of plastics produced are derived from virgin fossil feedstocks and plastics represents about 6% of global oil consumption. If growth continues as expected, plastics will account for 20% of total oil consumption by 2050.
- Ocean Conservancy & McKinsey Center for Business and Environment, 2015. <u>Stemming the Tide: Land-based strategies for a plastic-free ocean.</u>
- [7] Ocean Conservancy, 2017. <u>International Costal Cleanup Report 2017.</u>
- [8] Ellen MacArthur Foundation, 2018 New Plastics Economy Global Commitment.
- Lebreton, Laurent et al. "River Plastics Emissions to the World's Oceans". <u>Nature Communications</u>. 07 June 2017.
- [10] Op cit. Lebreton, 2017.

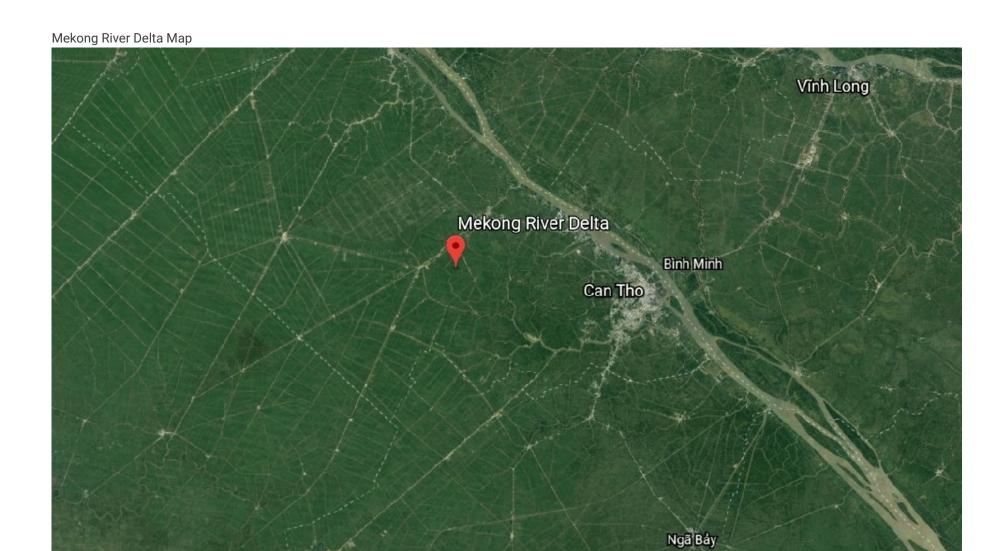
- UNEP-CHW-COP.14-BC-14-13.
- [12] Center for International Environmental Law (CIEL). "How Fracked Gas, Cheap Oil and Unburnable Coal are Driving the Plastics Boom". Washington, DC. Nd.
- [13] Marc de Wit et al. The Circularity Gap Report 2019. Platform for Accelerating the Circular Economy (PACE), 2019.

1b. Project Map and Coordinates

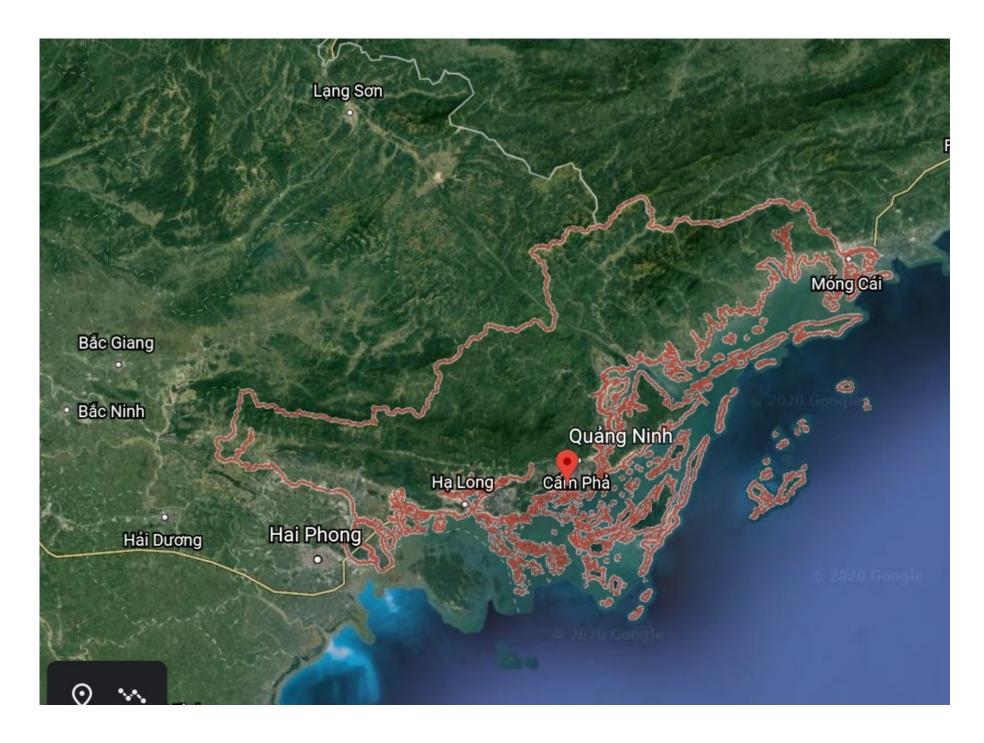
Please provide geo-referenced information and map where the project interventions will take place.

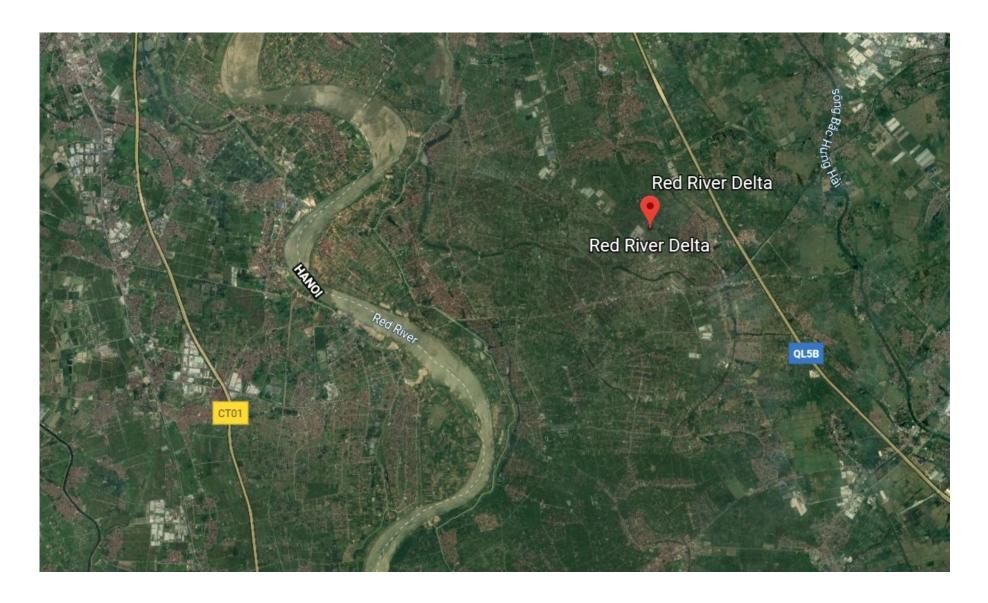
Cirebon, Indonesia Map





Quang Ninh Province, Viet Nam





PROGRAM/PROJECT MAP AND GEOGRAPHIC COORDINATES

(when possible)

Output 1.1 – city action plans may be conducted:

Cirebon, Indonesia:

Latitude: 6° 43′ 55.2″ S

Mekong River Delta:
Lat: 10° 0' 32.4" N,
Long: 105° 49' 26.4" E
Output 2.2 – small scale pilot community demonstration may be conducted:
Viet Nam
Red River Delta:
Latitude 21° 2′ 32″ N,
Longitude 105° 51' 41" E
Mekong River Delta:
Lat: 10° 0′ 32.4″ N,
Long: 105° 49' 26.4" E
Quang Ninh Province:
Latitude: 21°15′N
Longitude: 107°20'E
Indonesia

Longitude: 108° 33' 8.28" E

Cirebon:

Latitude: 6° 43′ 55.2″ S

Longitude: 108° 33' 8.28" E

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

Plastic pollution is having significant ecological and socio-economic impacts, with the poor being disproportionately impacted by both the cause of the problem (unsustainably managed waste) and its impacts. Massive volumes of unrecyclable plastics are being burnt by factories illegally, causing air pollution and public health concerns given plastic fumes are carcinogenic. Plastic waste is also blocking waterways and sewers, exacerbating flooding and creating breeding grounds for disease vectors. Further, it is also the poorest and most vulnerable coastal communities that are most reliant on coastal and marine resources for food and livelihoods, so they are most affected by environmental degradation. This project will help reduce these impacts, creating healthier livable environments for poorer communities and improving opportunities for coastal and marine livelihoods, e.g., fisheries and tourism, while creating new business and job opportunities.

Numerous civil society organizations (CSOs) and private sector entities have been consulted during project identification (see section 6 'coordination'). ADB and WWF have a Memorandum of Understanding to work together on activities and projects for the sustainable management of natural resources. A joint work program on marine plastic has been drafted to map out areas for collaboration and complimentary action, which could include co-organizing regional events and knowledge-sharing and innovation activities, building on each other's research and knowledge products, and supporting the establishment of infrastructure needs for collection, sorting, and recycling. Participating country governments will take lead roles in project preparation and implementation. So far, two consultation/scoping missions have been undertaken to each of Indonesia, Philippines, Thailand and Vietnam and one to Myanmar. The private sector will be engaged, as described in section 4, 'private sector engagement.' below.

The project is being designed to be participatory, inclusive and to have gender equality and poverty reduction elements. Local CSOs will be engaged in project preparation/implementation as key participants, consultants and beneficiaries of action planning, demonstrations and investments, and knowledge-sharing. Support will be provided to enable participation in project activities by community-leaders and champions (including women and youth). It is recognized that local participation and ownership of the project activities is critical to successful outcomes and the sustainability of interventions.

A more detailed stakeholder analysis will lead to development of a Stakeholder Engagement Plan during project preparation. The plan will adhere to the core principles of the new GEF Policy on Stakeholder Engagement (2018), supplemented by ADB principles for stakeholder engagement. In short, and to the extent possible, stakeholder engagement would: i) be constructive, responsive, accountable and transparent, ii) encourage fair, balanced and inclusive participation

of stakeholders (including women and youth), iii) apply across all GEF-financed activities, iv) be 'meaningful" in the sense that it will promote sustained commitment and action (including allocation of resources) through the project cycle, and v) be supported by accessible documentation.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

A gender perspective is critical for understanding the plastic pollution challenge and for designing effective solutions in South East Asia. Women already play a significant role in national waste management efforts, and the essential role of women in designing and implementing solutions is increasingly recognized. For example, women are playing a larger role as volunteers; women's associations are activating effective community engagement campaigns; and women manage household waste and adhere more frequently to proper disposal behavior. There are still issues that need to be addressed: (i) jobs in government-run waste management are predominantly held by men, though waste sortation is often handled by women workers; (ii) women workers in the informal sector system are more exposed to health risks; (iii) women are more directly exposed to the negative effects of plastic pollution; and (iv) women generally have limited access to finance to support business ventures associated with the circular economy.

There are various gender dimensions related to the project. These include the following:

- <u>Household consumption</u>. Plastic comprises 55% of food and beverages packaging, on a global level. Since women are often the decision makers on household purchases, plastic consumption could be reduced if women are empowered with knowledge on the impact of plastic and microplastic on health and the environment.
- <u>Solid waste management</u>. Although women are usually assigned to less profitable kinds of waste collection such as Polyethylene Terephthalate (PET), High Density Polyethylene (HDPE), or the lighter, less bulky kind of waste, they are often seen as more effective managers for material recovery facilities. Therefore, recognizing this ability and training more women in management roles will enable a more productive circular plastics economy, as well as empowering women as decision makers.
- <u>Health, gender and solid waste</u>. Exposure to solid waste health hazards are different for men and women. While there are no definitive research studies, it is surmised that men are more exposed to hazards such as waste pickers, however women may be equally exposed to hazards as well. Assessment of solid waste systems and the mapping of hazard sources at solid waste points will provide the much-needed data for the protection of women and children in this sector.
- <u>Women as agents of change</u>. Behavior change communications linked to the project will target women as household and purchasing decision-makers, youth and community influencers, active participants in natural resources management, owners of businesses that are affected by plastic pollution problems (e.g. tourism, fisheries, manufacturing etc.), policy-makers and community leaders, and as individuals eligible to benefit from, or have access to, different forms of financing which would help abate pollution issues.
- <u>Supporting female entrepreneurs</u>: Providing women access to financing opportunities has led to positively influencing women's decision-making capacities and enhancing their overall socio-economic status. The project aims to actively seek and engage women entrepreneurs and women's associations, and support them through education programs, micro business development programs, and livelihood skills programs.

During the project preparation phase, a gender specialist will be engaged to support project design and preparation to ensure it will actively support ADB's Strategy 2030 operational Priority no. 2 "Accelerating Progress in Gender Equality" and meet ADB's classification for an 'Effective Gender Mainstreaming' (EGM) project. "A Gender Action Plan will be prepared during the project preparation phase with specific gender-design features to facilitate and ensure women's participation and access to project benefits. The Gender Action Plan will include the following: (i) female participation in all project activities; (ii) project activities targeted to fully engage and benefit women; (iii) recruiting of gender specialists as part of project management consultant team; (iv) training

for project, government and partners on gender inclusive project approaches and how to support women's empowerment through the project and future initiatives on circular economy; and (v) collating sex-disaggregated data. This will help the project to achieve these strategic priorities: (i) women's economic empowerment increased; (ii) gender equality in decision making and leadership enhanced; and (iii) women's time poverty and drudgery reduced.

Targets and gender-disaggregated indicators will be allocated to each activity to ensure effective monitoring and evaluation.

A project is assigned EGM if the project outcome is not gender equality or women's empowerment, but project outputs are designed to directly improve women's access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

The project will engage the private sector on a number of fronts: (i) as active participants in the action planning processes; (ii) as active participants in design and implementation of pilot projects; (iii) as beneficiaries of actions taken to reduce/mitigate plastic pollution (e.g. the tourism and fisheries sectors); (iv) as recipients of new knowledge and applications of best practice; (v) as participants in and beneficiaries of technology and innovation promotion activities; (vi) as providers of professional services and goods for project implementation; and (vii) as potential beneficiaries of investments prepared under the project and beyond, particularly those designed to assist private sector companies to adopt and internalize circular economy within their business practices (through the ADB Private Sector Operations Department). Importantly, the GEF project will contribute towards transformational change by harnessing the private sector as an "agent of scaling", with all three components of the project being interlinked with a view to creating a new generation of investment programs and projects that integrate action on marine plastic and encourage circular economy.

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

Broader project risks and proposed mitigating measures are outlined below. These will be further analyzed during project preparation.

Risk	Mitigating Measures
Countries are not fully committ ed to participate in the GEF project	The project is focusing on countries that have shown a strong willingness to partic ipate, and the project is being scoped and designed in collaboration with governme nt agencies so that it is responsive to countries' needs.
Political will at national levels i s weak	The results of key research studies (including on social and economic costs and b enefits) will provide additional evidence-based information to support decision-ma king and policy. Political leaders and senior government officials will be engaged in action planning and output 3 activities (including economic / infrastructure / finan ce officials through regional cooperation programs) and included as a target audie nce in the knowledge management strategy.
Capacity limitations exist within key executing agencies	Capacity needs analyses will be undertaken as part of the development of action p lans and capacity-building activities will be implemented throughout the process.
Change of local government du ring project	The project will demonstrate a positive contribution to the local environment and c ommunity with strong community education and engagement activities to maintain relevance and benefit across political groups. It will also aim to engage civil service personnel, which presumably would remain in post through successive changes in political leadership.
Sources of additional investme nts in plastic pollution reductio n / elimination are difficult to find	ADB launched its Action Plan for Healthy Oceans and Sustainable Blue Economies, launched at the 2019 ADB Annual Meeting in Fiji. This has given impetus to integra te sustainable oceans management issues into the bank's lending operations. The GEF project will provide additional momentum, and through the initial investments and establishment of the blue/green financing mechanisms, there will be deliberat e outreach to capital markets including MDBs, donors, impact investors and other s.
Despite efforts, plastic producti on continues to increase at cur rent pace	Given the almost insurmountable challenge of getting the fossil fuel industry to change course, the project will look at a range of measures to reduce demand and to manage and reduce plastic waste and pollution. It will encourage the testing and a

Current high levels of interest s hown by the private sector, NG Os, and civil society in circular economy could decrease if the interest of the government changes and reduces support	doption of circular economy, promote alternative material, processes and business models, and provide credible information to challenge the status quo. The project has a significant focus on stakeholder, private sector and community e ngagement (including women) and will work to demonstrate benefits across stake holder groups, and as such will not be entirely dependent on Government interest I evels.
Challenges of COVID-19 pande mic responses and transition t o "new normal"	COVID-19 has caused the volume of infectious medical waste the use of single-us e plastics and packaging (e.g., for personal protective equipment (PPE), food and e -commerce deliveries) to surge, while recycling and municipal waste services have stopped or become limited in some areas. Some governments have delayed positi ve actions to reduce plastic pollution, and donors have reprioritized funds toward e mergency response. This increases the urgency of this project, which supports a gr een recovery through circular economy that stimulates the economy, creates jobs f or the future and spurs innovation. This message will be supported by complement ary ADB knowledge work on the case for a green recovery.
	In terms of implementation challenges during the "new normal" of lockdowns, restricted travel and social distancing, World Health Organization guidance will be followed through the project. ADB is actively promoting management strategies for CO VID-19 response and as such team members will be experienced with the standard operating procedures required for travel and project management under "new normal" conditions. Where possible interaction with stakeholders will be completed remotely. Consultations, workshops, trainings and capacity-building will be conducted online as much as possible. Engagement with communities and on-the-ground in teractions will be completed by team members experienced and trained to operate in potentially hazardous environments and involve digital contact tracing and outbreak monitoring.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

At the global level, ADB will prioritize coordination and collaboration with the GPAP, through their Secretariat. This will help to bring global experience, best-practices and possibly financial resources to support fast-tracking of circular economy solutions to the program and participating countries.

At the regional level, the GEF project will solidify engagements with several regional / intergovernmental bodies, which are supporting similar, complementary programs to promote circular economy and reduce plastic pollution. Regional bodies will likely include: PEMSEA, COBSEA, the ASEAN Working Group on Coastal and Marine Environments, Greater Mekong Subregion Economic Cooperation Program, and the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF), WWF and others (See Annex D). The GEF project will also closely coordinate with MDBs such as the World Bank and European Investment Bank. Sharing the project's outputs, actively participating in knowledge-sharing events, and continuous dialogue with the MDBs will foster additional funding or co-financing opportunities and attract other potential investors.

However, more substantive partnerships with these regional bodies and others will need to be determined during project preparation and confirmed during inception. The relationships will be detailed in the knowledge management and partnerships strategies, following further consultations and considered evaluation of the scope, mandate, relevance for each topic/theme and type of intervention, target audience, effectiveness and efficiency. For example, COBSEA may be the best forum for collaboration on national action plans, UNEP's Sea of Solutions week for some cross-country learning activities, PEMSEA and ASEAN Secretariat for cooperation and cross-learning with other countries and programs, ASEAN working groups for coordination on policy and regulatory reforms, and the ADB-supported sub-regional programs for awareness-raising of government leaders in planning and finance ministries, capacity-building of local government officials, and investment planning. WWF may be a close collaborator for the development of city action plans where sites overlap, and for engaging the private sector for extended producer responsibility. GPAP through the World Economic Forum (WEF) would be a strong collaborator on knowledge management through its "GPAP in a bo"x approach, among other areas indicated above.

At the country level, ADB will work through national focal point agencies and in close coordination with other development partners, as indicated in the provisional stakeholder engagement matrix below. In Indonesia and Viet Nam, the NPAPs would serve as key coordination bodies. ADB is represented on the Indonesia NPAP Steering Board and is co-chairing the NPAP Financing Task Force with BAPPENAS. The NPAP Viet Nam is a member of the Development Partners' Working Group (WG) co-chaired by the World Bank and Canadian Embassy in Viet Nam. ADB is a member of this WG, along with the International Union for the Conservation of Nature (IUCN), the European Union, WWF, Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), World Bank, United States Agency for International Development (USAID), ASEAN, and various UN agencies.

Coordination efforts will also include participation in various national / international fora and working groups, including:

The World Bank informal Development Partners WG on Plastics in Vietnam. The objective of the WG is to enhance the coordination, complementarity and coherence of the efforts by development partners in support of Vietnam's efforts on single-use plastics reduction, plastic pollution prevention, and sustainable plastics management. The WG meets monthly online.

The International Finance Corporation (IFC)'s informal Waste Management WG in Myanmar. The objective of the WG is to map specific interventions of development partners working on waste management in Myanmar. The WG meets monthly online. Members include World Bank, ADB Resident Mission in Myanmar, Myanmar Recycles, Thant Myanmar and other Myanmar-based organizations.

WWF and UNEP COBSEA'S Southeast Asia Policy WG. The objectives are alignment and potential collaboration in policy-related activities; implementation of a plastic circular economy; and ensure enforcement. The WG meets monthly online, focusing on one country or theme per meeting. Members include WWF country offices in Southeast Asia, IUCN, GA Circular, Institute for Global Environment Strategies, GIZ, and UNDP.

The Circulate Initiative's Impact Metrics WG in Asia. The objectives are to promote knowledge sharing, recommend metrics, and address critical gaps in ocean plastic pollution. The WG had a kick-off meeting in May and will continue correspondence via email to coordinate agreed outputs. Members include Circulate Capital, Encourage Capital, Morgan Stanley, Second Muse, USAID, and Women in Informal Employment: Globalizing and Organizing.

The Norwegian Government Development Programme to Combat Marine Litter and Microplastics. The partners' workshop held in October 2019 aimed to contribute to global coordination on marine litter both at the technical and financial level; encourage synergies between projects and programs supported by the Norwegian marine litter program; and promote better understanding of the Norwegian marine litter program. Participants included UNEP, UNDP, IUCN, WWF, Bali Partnership, Global Ghost Gear Initiative, and the World Bank. Further partners' workshops are expected.

During the WG meetings, representatives from different member organizations report plans and progress of respective in-country plastics and circular economy projects. Online platforms are also set up to share knowledge products such as reports, research outputs, and toolkits. Participation in these working groups help coordinate activities, share knowledge, avoid duplication of work, and promote cooperation and co-financing.

Coordinating mechanism

Stakeholders and partners for which this proposed GEF project will have relevance, are very diverse. At the national level, ADB will work with the identified Executing Entities through its standard modalities. At the regional level, particularly with respect to knowledge management, ADB will identify an organization to serve a coordination function, with a view to addressing concerns related institutional sustainability. This organization would play a facilitation and enabling role. In identifying the organization, there are a number of criteria which will be considered. The coordinating body would ideally have the following minimum attributes: i) existing and well-articulated corporate or institutional strategy, which includes circular economy elements and reducing plastic pollution, which aligns with the proposed GEF project(s), ii) convening power, in terms of the ability to bring together and influence multiple stakeholders and partners in the region, iii) specific, in-house technical expertise and capacity with respect to circular economy programs and projects as they apply to plastics, iv) in-country presence in most of the project countries, supplemented by established working relationships with key Government departments/ministries and agencies which are responsible for national plastic action plan policy and implementation, and v) solid legal and financial management capacity.

Schematically, the arrangement could look like this:

Coordination model Intergovernmental bodies, Multi-stakeholder coalitions, alliances Civil society / non-governmental organizations National government ministries Micro, small and medium departments and agencies enterprises Coordinating mechanism Multinational and large domestic industries Sub-national / local Multilateral / governments bilateral donors and financing Institutions

Figure 3: Conceptual Model for Coordinating Mechanism

Stakeholder Engagement

A provisional stakeholder engagement plan is presented below. This refers to entities that will be directly engaged in project implementation and is distinct from Annex D which outlines various partner organizations. Neither is mutually exclusive. During project preparation the stakeholder engagement plan and partnership coordination strategy will be fully developed.

Provisional Stakeholder Engagement Plan

Stakeholder	Possible Role(s)
-------------	------------------

UNEP	Joint project activities, coordination and information sharing through COBSEA a nd RAP MALI
	Alignment and information sharing with the SBEFI, including links with "Sea of S olutions" (Outcome 3).
ASEAN Secretariat	Project coordination and information sharing through the Working Group on Coa stal and Marine Environment, and Working Group on Environmentally Sustainabl e Cities.
	Alignment with priority areas related to recent report on "Circular Economy and Plastics: A Gap Analysis in ASEAN Member States," and support for countries to meet obligations under the Bangkok Declaration.
GPAP	Joint project activities, regional coordination, resource mobilization and informa tion sharing through GPAP (international level) as well as NPAPs in Indonesia an d Viet Nam; as well as expansion in other countries (e.g. Myanmar)
Governments	
Department of Environ ment and Natural Reso urces (DENR), Philippin es	GEF Executing Entity with Environment Management Bureau (EMB) as key focal point with corollary engagement with the Biodiversity Management Bureau (BMB) and Foreign Assisted Special Projects Service (FASPS).
	Technical and policy guidance. Convening multi-stakeholder dialogues.
Coordinating Ministry f or Maritime Affairs and Investment (CMMAI), I ndonesia	GEF Executing Entity, with links to Ministry of Environment and Forests (Director ate General for Solid Waste, Hazardous Waste and Hazardous Substance Mana gement).
	Technical and policy guidance. Convening multi-stakeholder dialogues.
Ministry of Natural Res ources and Environmen	GEF Executing Entity with Viet Nam Administration for Seas and Islands (VASI) a s key focal point.

t (MONRE), Viet Nam	
	Technical and policy guidance. Convening multi-stakeholder dialogue.
Ministry of Natural Res ources and Environmen t (MONRE), Thailand	GEF Executing Entity with Pollution Control Department (PCD) as focal point.
	Technical and policy guidance. Convening multi-stakeholder dialogue.
Ministry of Natural Res ources and Environmen tal Conservation (MON REC), Myanmar	GEF Executing Entity with Environmental Conservation Department (ECD) as foc al point.
	Technical and policy guidance. Convening multi-stakeholder dialogue.
Government of Japan	Japan has two proposed projects: "Strengthening Capacity for Marine Debris Re duction in ASEAN region through formulation of National Action Plans for ASEA N Member States and Integrated Land-to-Sea Policy Approach" and "Establishin g a Regional Knowledge Hub on Marine Plastic Debris" (for ASEAN member stat es). The first project will develop standardized templates and methodologies for developing NAPs. A planned second phase of this project may support several c ountries to prepare NAPs. The entry point for this work will be the ASEAN Working Group on Coastal and Marine Environment. In July 2019, JICA released the interim results of their Data Collection Survey on the Marine Plastic Litter and Application of Japanese Technologies for Resource Circulation.
	The proposed GEF project also envisions working with the Government of Japan through the following:
	Coordination of methodology, structure and development of national action plans (Outcome 1)
	Collaboration on pilot demonstration projects (Outcome 2)
	Collaboration on healthy oceans technology and innovation forums and select knowledge-sharing and capacity building activities (Outcome 3)
	The Government of Japan, via the Japan Fund for Poverty Reduction, is co-finan cing the broader ADB TA program, specially the pilot demonstration projects (Ou tcome 2).
Government of Korea	The proposed GEF project envisions a collaboration with the Government of Kor ea on knowledge and events around innovation and digital technologies and sha ring of experience in 3R and integrated SWM (Outcome 3). The Government of K

	orea, via the e-Asia Knowledge Partnership Fund, is co-financing the broader AD B TA program.
United States Environm ental Protection Agenc y (USEPA)	In line with the MOU between ADB and US EPA, the US EPA will serve as a resour ce and peer reviewer of relevant project outputs on the themes of environmental assessment, action planning assessment and prioritization methodologies, circ ular plastics economy standards, technologies and innovations. It could also be a collaborator to support waste characterization studies, options analysis and prioritization of integrated SWM actions (Outcome 1).
International Non-Govern	nment Organizations (NGOs) and Civil Society
World Wildlife Fund for Nature (WWF)	Joint project activities, coordination and information sharing through respective national and international programs and projects, including the "No Plastic in Na ture Initiative".
Industry	
Associations and privat e sector	Participation in project activities, information sharing and coordination with resp ective national associations in project countries. Would include such organizations as PRAISE (Indonesia), PARMS (Philippines), SWAT and Thailand PPP (Thailand) and others, those multinationals that are part of GPAP, large national corporations, and especially, MSMEs.
	Refer to Annex D on Partners.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assesments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The Convention on Biological Diversity (CBD) recognizes that marine debris is a key global environmental concern, and poses serious threats to marine and coastal biodiversity. Around 75% of all marine debris is plastic, a persistent and potentially hazardous pollutant, which fragments into microplastic that can be taken up, or bio-accumulated, by a wide range of marine organisms. Plastic production and use continue to grow, with world-wide production expected to rise markedly over the next few decades in order to meet demand. Countries that are signatories to the CBD would need to prioritize plastic-related concerns in their national biodiversity strategic action plans (NBSAPs), if they have not already. Critical among the issues is the pervasiveness of microplastic - which can have origins which are primary (deliberately manufactured) or secondary (created from fragmentation of macroplastic items). Plastic represents a persistent pollutant that is already present vertically - in all marine and freshwater habitats across the globe; and horizontally – from ocean surface to seabed – with every level of the food web exposed.

The Stockholm Convention recognizes that plastic pollution can arise at all stages during the life-cycle, from leakages during production and manufacturing, abrasion while products are in use, to dumping or poor practices in the handling of wastes. Plastic may contain hazardous substances including POPs, e.g. some plasticizers and flame retardants which may be slowly released into the sea. Plastic can also adsorb POPs such as PCB, DDT and dioxins and these are frequently present in marine plastic litter. In 2018, the Convention controls 28 POPs, including those which have been used as additives, flame retardants or plasticizers in plastic such as: Brominated diphenyl ethers; Hexabromocyclododecane; Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride; Short-chain chlorinated paraffins.

The provisions of the Basel Convention apply to plastic waste, as some plastic is listed as "hazardous wastes", much of which is generated at household level. In 2016, UNEA emphasized the importance of this elaboration, to expand the meaning of environmentally sound management of waste, including waste prevention, minimization and recovery, to address the underlying causes of marine litter and plastic. In 2017, the Conference of the Parties to the Basel Convention decided that its subsidiary body, the Open-ended Working Group, consider relevant options available under the Convention to further address marine plastic litter and microplastics. The Household Waste Partnership was created under the Convention, which included plastics in the definition of "environmentally sound management of household wastes". Regional centres of the Basel and Stockholm Conventions now work on the impact of plastic waste, marine plastic litter, microplastic, and measures for prevention and environmentally sound management. In this connection, the project will make efforts to ensure that updating of National Implementation Plans for POPs is also included, informed by, and aligned with national action plans for marine plastic under component 1 of the project; and also addressed on a case by case basis under component 2.

In 2019, the ASEAN leaders adopted the Bangkok Declaration and the ASEAN Framework of Action on Marine Debris. The Bangkok Declaration commits to a land-to-sea approach to prevent and reduce marine debris, strengthen national laws and regulations, enhance regional and international cooperation; promote innovative solutions to enhance plastics value chains and improve resource efficiency, and accelerate advocacy and actions to increase public awareness and participation. The Framework of Action on Marine Debris identifies four priority areas: policy support and planning, research, innovation and capacity building, public awareness, education and outreach, and private sector engagement. The proposed project directly contributes to achieving the ambitions outlined in both the Declaration and Framework.

Marine Debris: Understanding, Preventing and Mitigating the Significant Adverse Impacts on Marine and Coastal Biodiversity. Technical Series No.83. Secretariat of the Convention on Biological Diversity, Montreal, 2016. Microplastics are defined as plastic pieces or fragments less than 5 millimetres in diameter.

Communiqué from Secretariat of the Basel, Rotterdam and Stockholm Conventions. 2018.

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

During the project preparation phase, a knowledge management strategy will be developed for the project, in consultation with key stakeholders. The general approach to knowledge management will be designed within the broad framework of ADB's Finance ++ approach, the GEF knowledge management approach, the GEF STAP guidance, GPAP in a Box, and other best practices in development and behavior change communications. There will also be a direct linkage with the GEF IWLEARN (including appropriate budget allocation). More specifically, it will comprise a five-stage framework that aims to: (i) learn from and raise awareness of circular plastics economy (eliminate, innovate and circulate approach); (ii) learn from and raise awareness on existing programs and solutions to address marine plastic pollution in order to design appropriate action plans and policies and investments; and (ii) capture and disseminate lessons learned from project implementation to facilitate scale-up of interventions in the region. The framework can be broken down as follows:

Assessment. Taking stock of national and regional issues and existing programs, solutions, and opportunities to address marine pollution through reduced consumption, private sector involvement, new business models, innovative product designs and integrated SWM will contribute to recommendations to transition to a circular plastics economy. The project will support a review of existing programs, policies, plans, and solutions, as well as assessments on critical issues and opportunities to scale up circular plastics economy in the region.

Partnerships. The project will identify key organizations and experts for knowledge partnerships to strengthen knowledge products and activities where appropriate, particularly where this will enhance sustainability and mainstreaming of knowledge interventions. Partnerships will aim to increase knowledge dissemination by bridging gaps in stakeholder networks.

Awareness-raising. The project will support participating countries and partner stakeholders to raise awareness of and facilitate cooperation on marine pollution and circular plastics economy. Outputs will include high-level policy dialogue events to raise awareness of issues and facilitate collaboration and regional events/capacity building to share practical experiences and lessons learned, highlight success stories, showcase technology and innovation, and build capacity.

Application. Informed by findings from the review and assessments, the project will support the design of appropriate action plans, prepare investments to accelerate the circular plastics economy, address marine plastic pollution, and strengthen knowledge, partnerships and financing opportunities.

Appraisal. Lessons learned from project implementation will be documented and disseminated to support scale-up of policy reforms, investments and other actions to reduce marine plastic pollution. Findings will be documented in at least five knowledge products and disseminated in regional, sub-regional, and national knowledge sharing or regional cooperation events.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Low			

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Environment and Social Safeguards (ESS)

During preparation of this concept (PIF) preliminary environmental and social safeguards (ESS) screening was not possible due to the location of various project activities still to be determined in further consultation with governments. Normally ADB would build on TA or loan-related ESS screenings and assessments which are associated with the GEF financing. However, in this case the ADB co-financing is being processed in parallel, so these are not available.

However, it is possible to provide some initial risk identification and classification based on field level consultations done for this, and related ADB/GEF initiatives in the project countries. During project preparation, more detailed ESS assessment will be undertaken as part of the broader scoping and site selection process. The project will comply with ADB's Safeguard Policy Statement (2009) Environmental Safeguards and its assessment, monitoring and reporting and approval procedures. The project will be classified under ADB's Safeguard Category Environment: B, which means that the proposed project's

potential adverse environmental impacts are site-specific, few if any of them are irreversible. Mitigation measures can be readily designed. It will also adhere to ADB's Social Protection Policy (2001) as relevant. Project screening will address potential negative impacts on areas classified below, within the project's area of influence, and identify suitable measures to avoid where possible, or minimize or mitigate the impacts.

Safeguard standar d relevant to project	Risk R ating	Notes / Comments
Gender equality	Low	A gender specialist will be engaged to support project design and preparation to ensure it will actively support ADB's Strategy 2030 Operational Priority no. 2 "Accelerating Prog ress in Gender Equality" and meet ADB's classification for an 'Effective Gender Mainstre aming' project. The project will seek to actively engage and empower women in stakeho lder consultations that will inform project design, as well as in leadership roles during project implementation. These are intended to achieve the following strategic priorities: (i) women's economic empowerment increased; (ii) gender equality in decision making and leadership enhanced; and (iii) women's time poverty and drudgery reduced.
Biodiversity and n atural habitats	Low	The project will support proactive efforts to prevent waste from entering the natural environment and coastal and marine ecosystems. The project is expected to prevent 668,0 00 MT of marine litter.
Resource efficienc y, pollution prevent ion, chemicals and wastes managem ent	Low	Resource efficiency, pollution prevention and reduction are key elements in building a ci rcular economy for plastics. By creating value for waste and difficult plastics, the design and manufacturing of new products are expected to use discarded wastes as raw mate rials instead of virgin plastics and other newly extracted raw materials. Further, the activ ities contribute to national targets of the DMCs to reduce marine litter.
Involuntary resettl ement	Low	This project will not be involved in any involuntary resettlement. The project sites will be selected in close consultation with the national and local governments, and activities aim to build capacity of local communities.
Indigenous people s	Low	The project will be designed so to not have adverse impacts on indigenous peoples.
Occupational heal th, safety and labo ur conditions	Low	The project will not use child labor, nor will it decrease employment. It will aim to improve health, safety and labor conditions through capacity development and training for local communities. The Project would adhere to GEF and other internationally recognized standards, such as those of the International Labor Organization.

Physical cultural h eritage	Low	There may be historical, cultural, traditional or religious values and beliefs that will need to be recognized and protected in relation to plastic use and disposal. Strategies to iden tify and protect such values will be jointly developed through participatory processes wi th local communities.
Economic sustain ability	Low	The project will not have direct negative impacts on livelihoods for local communities. R ather, it seeks to understand the current market for plastics and create a higher value fo r plastics by engaging local communities and building governance mechanisms to supp ort the plastics circular economy through culturally appropriate and socially just regulat ory measures and policies.

Supporting Documents

Upload available ESS supporting documents.

Title Submitted

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

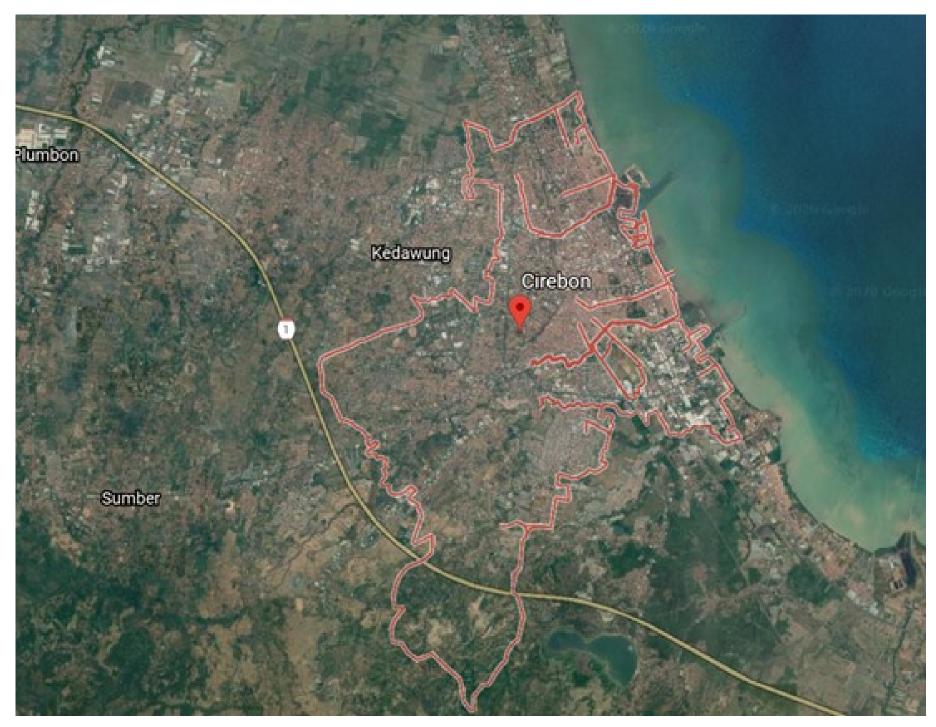
A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Laskmi Dhewanthi	Senior Advisor to the Minister on Industry and International Trade	Ministry of Environment and Forestry	
U Hla Maung Thein	Director General, Environmental Conservation Department	Ministry of Environmental Conservation and Forestry	
Analiza Rebuel ta-Teh	Undersecretary	Department of Environment and Natural Resources	
Mr. Jatuporn Buruspat	Permanent Secretary	Ministry of Natural Resources and Environment	
Thuan Duc Nguyen	Director, Viet Nam Environment Protection Fund	Ministry of Natural Resources and Environment of Viet Nam	

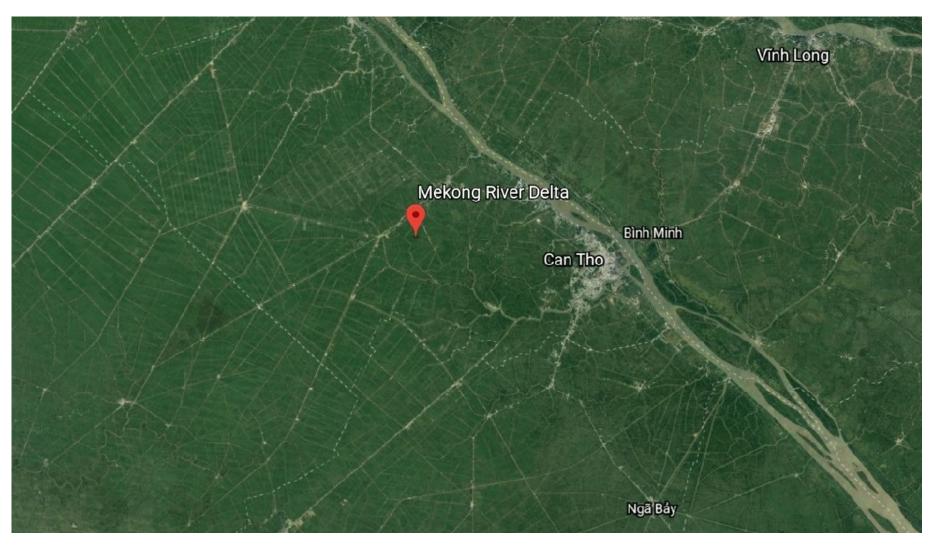
ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

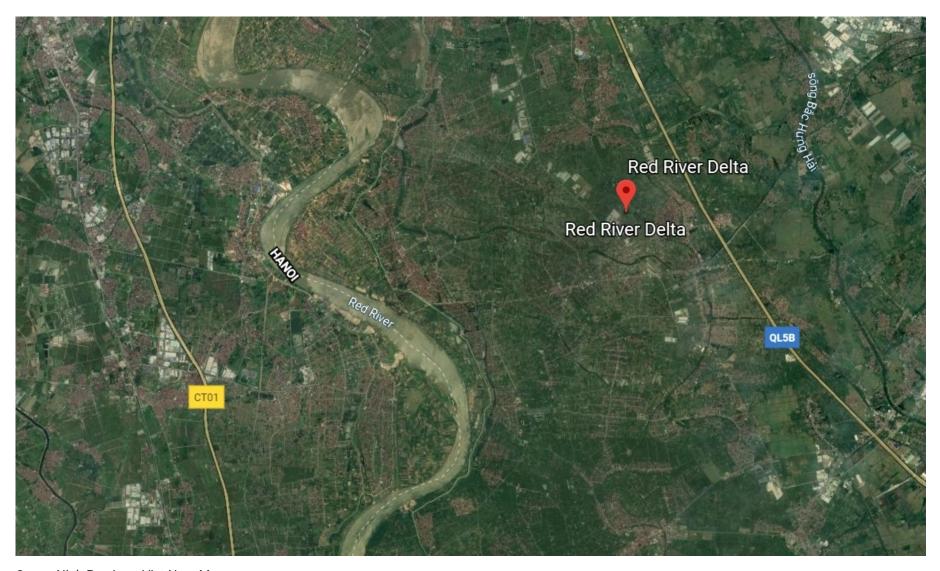
Cirebon, Indonesia Map



Mekong River Delta Map



Red River Delta, Vlet Nam Map



Quang Ninh Province, Viet Nam Map



Coordinates:

Output 1.1 – city action plans may be conducted:

Cirebon, Indonesia:
Latitude: 6° 43' 55.2" S
Longitude: 108° 33' 8.28" E
Mekong River Delta:
Lat: 10° 0' 32.4" N,
Long: 105° 49' 26.4" E
Output 2.2 – small scale pilot community demonstration may be conducted:
Viet Nam
Red River Delta:
Latitude 21° 2' 32" N,
Longitude 105° 51' 41" E
Mekong River Delta:
Lat: 10° 0' 32.4" N,
Long: 105° 49' 26.4" E
Quang Ninh Province:
Latitude: 21°15′N
Longitude: 107°20'E

Indonesia

Cirebon:

Latitude: 6° 43′ 55.2″ S

Longitude: 108° 33' 8.28" E