GEF-8 PROJECT IDENTIFICATION FORM (PIF)

TABLE OF CONTENTS

General Project Information

Project Title	
Chemicals and Wastes Financing Partnership Facility (CWFPF)	
Region	GEF Project ID
Global	11681
Country(ies)	Type of Project
Global	FSP
GEF Agency(ies):	GEF Agency ID
ADB UNIDO	
Executing Partner	Executing Partner Type
	Others
GEF Focal Area (s)	Submission Date
Chemicals and Waste	9/17/2024
Project Sector (CCM Only)	
Mixed & Others	
Taxonomy	
Focal Areas, Chemicals and Waste, Persistent Organic Pollutants, Disposal, Plastics, Green Chemistry, Open Burning, Best Available Technology / Best Environmental Practices, Sound Management of chemicals and waste, Industrial Emissions, Waste Management, eWaste, Hazardous Waste Management, Industrial Waste, Emissions, Mercury, Artisanal and Scale Gold Mining, Uninentional Persistent Organic Pollutants, New Persistent Organic Pollutants, Polychlorinated Biphenyls, Pesticides, Influencing models, Deploy innovative financial instruments, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Demonstrate innovative approache, Stakeholders, Private Sector, Large corporations, Capital providers, Financial intermediaries and market facilitators, SMEs, Beneficiaries, Communications, Behavior change, Awareness Raising, Civil Society, Non-Governmental Organization, Academia, Type of Engagement, Partnership, Information Dissemination, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Sex-disaggregated indicators, Gender results areas, Knowledge Generation and Exchange, Capacity Development, Access and control over natural resources, Access to benefits and services, Participation and leadership, Capacity, Knowledge and Research, Learning, Theory of change, Knowledge Generation, Knowledge Exchange, Innovation	
Type of Trust Fund	Project Duration (Months)
GET	60
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
29,083,000.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
2,617,000.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing

31,700,000.00	300,800,000.00
PPG Amount: (e) 275,300.00	PPG Agency Fee(s): (f) 24,700.00
PPG total amount: (e+f) 300,000.00	Total GEF Resources: (a+b+c+d+e+f) 32,000,000.00
Project Tags CBIT: No NGI: No SGP: No Innovation: No	

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B "project description".(max. 250 words, approximately 1/2 page)

The Chemicals and Wastes Financing Partnership Facility (CWFPF) project aims to establish a dedicated finance facility to support investments in chemicals and wastes pollution (CWP) reduction / elimination and net-zero, nature positive development in key polluting sectors to foster zero-waste societies.

The CWFPF is an operational platform designed for strategic, multi-focal, multi-stakeholder and long-term cooperation aiming to utilize technical expertise for channeling and pooling resources effectively for Chemicals and Waste (as per GEF Focal area) programs and/or projects. The CWFPF will add value through better application of a "CWP lens" towards: i) contributing to larger investment preparations, ii) enabling project expansion and scaling up, iii) supporting projects which are underfunded or yet to be funded, iv) providing technical services, v) improving project design and evaluation, and vi) mobilizing / leveraging additional financial resources for qualifying programs and projects, including private sector engagement.

The project will achieve Global Environmental Benefits (GEBs) through upstream measures at the policy level, and through the pilot/demonstration interventions at selected sectors (e.g. electronics, buildings, textiles, novel entities, environmentally persistent pharmaceuticals, and POPs/Hg in products), through project preparation or "investment readiness" support for larger investments, and through investments which have been leveraged by the proposed Trust Fund. The project also aims to align with "partner-managed funds", which may also contribute to additional GEBs.

The 'facility' in the operational sense would involve: i) establishment of a governance and steering /advisory framework, ii) links with strategic technical partners, iii) a policy hub and 'marketplace', iv) a suite of pilot / demonstration sub-projects, v) a dedicated trust fund, aligned with 'partner managed funds', and vi) a trust fund manager with investment screening function, among others.

The trust fund would finance specialized work such as: localization of CWP incidence, spot testing, monitoring, abatement / remediation strategies, natural capital assessments and valuations, abatement / remediation cost / financial and economic analyses, market analytics, detailed designs, risk assessments (including environment and social safeguards), supply chain studies and analyses to promote circularity for proposed investments, as well as feasibility/pilot studies for identified interventions focusing on POPs/mercury reduction and addressing priorities identified in the Global Chemicals Framework (GCF).

The CWFPF will internalize cross-cutting elements into its operations, including gender dimensions, climate and other risks, knowledge management and learning, including sharing and coordination with other GEF

Agencies which are multilateral development banks (MDBs) or development banks. Some work will also support awareness creation for this type of 'green finance' across selected development and commercial banking institutions.

Indicative Project Overview

Project Objective

To establish a dedicated finance facility to support investments in chemicals and wastes pollution (CWP) reduction / elimination and net-zero, nature positive development in key polluting sectors to foster zero-waste societies.

Project Components

Decision making frameworks for CWP investment

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,750,000.00	800,000.00

Outcome:

National/sub-national governments and financial institutions' decision making on CWP investments strengthened
(UNIDO)

Output:

1.1 Policy barriers on C&W management, including considerations of policy inconsistencies and coherence at national and sub-national level, identified and strategies to address the barriers developed.

1.2 Capacity building at national and subnational levels on policy formulation and implementation conducted.

1.3. Urban / peri-urban level sustainability strategies developed / updated.

1.4 Preliminary investment framework prepared through technical assistance on defining and originating potential CW pollution reduction / elimination investments.
(with ADB)

Chemicals and Wastes Pollution Partnership Finance Facility

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
198,500.00	200,000.00

Outcome:

Chemicals and Wastes Financing Partnership Finance Facility (CWFPF) established

(ADB)

Output:

2.1 Governance, institutional arrangements, structure / strategy and operational modalities for finance facility developed, including eligibility and selection criteria

2.2 Partnership development and resource mobilization initiatives for finance facility supported.

2.3 Establishment paper approved and C&W Trust fund initiated

Investment Readiness for the finance facility

Component Type	Trust Fund
Investment	GET
GEF Project Financing ($)	Co-financing ($)
8,406,500.00	15,000,000.00

Outcome:

Pipeline of 'bankable' projects for the finance facility identified / validated

(ADB, UNIDO)

Output:

3.1 Robust pipeline of investible chemicals and wastes projects in selected areas with potential financing institutions, including ADB created (linked to 1.3 and 1.4)

3.2 CWFPF policy hub and 'marketplace' created, functional, and among others, contributing to knowledge management and learning (KML)

3.3 Pilot / demonstration carried out as proof of concept in specific C&W sectors (to be confirmed):

a) Electronics
b) Buildings
c) Textiles
d) Environmentally persistent pharmaceuticals (EPP)
e) New POPs / Hg-Chemical additives in products

Investments in C&W pollution reduction / elimination projects

Component Type	Trust Fund
Investment	GET

GEF Project Financing ($)	Co-financing ($)
16,243,500.00	267,200,000.00

Outcome:

4. Investment readiness support for chemicals and wastes pollution reduction / elimination projects in selected project countries

(ADB**)**

Output:

4.1 Specialized project preparation support provided to eligible institutions, leading to formulation of **at least 6 investment projects** covering a range of priority products, processes and sectors, of which at least **2** investment projects support new approaches to facilitate access to capital by CSOs, women and youth-led businesses into in urban CWP prevention, abatement and elimination projects
:
Target:

Provide “CWP lens” overlay on at least **$ 1 billion i**n potential sovereign loan projects

4.2 At least one investment project piloting new approaches to attract private capital in CWP prevention, abatement and elimination

Knowledge management, learning and communications

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
700,000.00	1,200,000.00

Outcome:

5. Knowledge management, learning and communications strategy implemented

Output:

5.1 Communications and visibility plan implemented at operational level

5.2 KML strategy implemented (and integrated with main project outcomes/ outputs

M&E

Component Type	Trust Fund
Technical Assistance	GET

GEF Project Financing ($)	Co-financing ($)
400,000.00	900,000.00

Outcome:

6.Performance monitoring and evaluation system implemented

Output:

6.1 Project performance monitoring system in place

6.2 Mid-Term Review and Terminal Evaluation conducted

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Decision making frameworks for CWP investment	1,750,000.00	800,000.00
Chemicals and Wastes Pollution Partnership Finance Facility	198,500.00	200,000.00
Investment Readiness for the finance facility	8,406,500.00	15,000,000.00
Investments in C&W pollution reduction / elimination projects	16,243,500.00	267,200,000.00
Knowledge management, learning and communications	700,000.00	1,200,000.00
M&E	400,000.00	900,000.00
Subtotal	**27,698,500.00**	**285,300,000.00**
Project Management Cost	1,384,500.00	15,500,000.00
Total Project Cost ($)	**29,083,000.00**	**300,800,000.00**

Please provide justification

Agency Split: ADB = $ 20,046,000; UNIDO = $ 9,037,000 The project is aligned with key priorities identified in the new Global Framework for Chemicals, is supported by the BRS Convention Secretariat; and fits within the GEF 8 C&W programming priorities; and the strategic corporate directions of both ADB and UNIDO.

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Hazardous chemicals and other pollutants continue to be released into the earth's subsystems - atmosphere, biosphere, geosphere and hydrosphere – in large quantities. These chemicals, many of which are not entirely well understood, are everywhere, and can have significant negative impacts on human health, the environment as well as socio-economic development. The global chemicals industry is driven by a number of 'megatrends' (e.g construction, agriculture, electronics etc) and continues to expand into very complex supply chains, trade and distribution of chemical products or products which contain chemical elements.

Although chemicals are part of our everyday lives, bring us enormous health, economic and social benefits, and are essential to transition to sustainable development, there are significant health and environmental risks associated with the lifecycle of hazardous chemicals, which need to be prevented and mitigated, through eliminating the use of certain hazardous chemicals, groups of chemicals, or specific applications and practices, and through reducing exposure, and more broadly better managing chemicals along their value chain so as to minimize associated risks. The ample knowledge on the risks, impacts and solutions is not matched by decisive action at the international and national levels.

While MEAs and other global frameworks such as SAICM and its successor Global Framework on Chemicals address these risks and promote solutions, implementation needs to be strengthened and un-regulated issues need to be addressed. Some of the main causes of the persistent problems associated with the current state of play of how our societies and economies use and manage chemicals of concern are detailed below.

There is a **lack of regulatory enforcement and governance**, with many countries, particularly in developing regions, suffering from weak regulatory frameworks or limited enforcement capabilities related to chemical and hazardous waste management. Even where legislation exists, the capacity to enforce laws and monitor compliance is often insufficient, leading to ongoing chemical pollution. Limited transparency and accountability mechanisms further exacerbate the situation, allowing harmful practices to continue unchecked. Strengthening governance structures and enforcement mechanisms will be essential to overcoming this challenge.

Insufficient technical capacity and knowledge gaps represent also significant barriers to managing hazardous chemicals and waste is the lack of technical expertise and knowledge in many regions. Local stakeholders, including industry players, regulatory agencies, and civil society, often lack the technical understanding necessary to properly handle hazardous substances or implement life-cycle management approaches. This is further complicated by the rapid pace of innovation in the chemicals industry, which can outstrip the ability of regulatory frameworks to keep pace with new developments. Comprehensive capacity-building efforts will be needed to close this gap.

Adequate and sustainable financing remains a critical issue in the management of chemicals and hazardous waste. Many governments and private sector entities face budgetary limitations that may delay or restrict their ability to invest in safer, more sustainable alternatives. Additionally, transitioning to circular

business models or implementing extended producer responsibility systems requires initial capital investment, which may not be readily available in all regions or industries.

Another barrier is the **complexity of global supply chains.** The global nature of the chemicals industry means that supply chains are highly complex, involving multiple stakeholders across different countries and regions. Ensuring accountability and compliance at every stage of the supply chain, particularly in the context of transboundary shipment of hazardous waste, is a considerable challenge. Different countries have varying levels of regulatory oversight, and weak points in the supply chain may lead to illegal dumping or improper disposal of hazardous chemicals. Addressing this complexity requires stronger international cooperation and harmonization of standards.

Public awareness of the risks posed by hazardous chemicals is generally low, particularly in regions where these substances have already caused long-term environmental damage. Engaging the broader public and key stakeholders, including industry players and local communities, is essential for building a shared understanding of the risks and fostering a collective commitment to addressing chemical pollution. However, achieving meaningful engagement across diverse sectors and geographies is often difficult due to competing priorities and limited access to information.

The **chemicals industry is often resistant to change,** particularly when it comes to adopting more sustainable practices that could disrupt existing profit models. In many cases, transitioning away from hazardous chemicals can be seen as costly or unnecessary, particularly when there is insufficient market demand for safer alternatives. Resistance to adopting extended producer responsibility schemes or circular business models is common, especially in industries that are heavily reliant on chemicals, such as agriculture, construction, and electronics. Overcoming this resistance will require strong incentives, both financial and regulatory, to encourage industry players to adopt more sustainable practices.

Nonetheless, there is the issue of cross-cutting impacts of climate change which poses an additional challenge to chemical and hazardous waste management. Extreme weather events, such as floods or hurricanes, can lead to the unintentional release of hazardous chemicals into the environment, exacerbating pollution. Additionally, the pressure on governments and industries to prioritize climate change mitigation and adaptation may divert resources away from addressing chemical pollution. Ensuring that chemical management is integrated into broader climate resilience efforts will be essential for long-term success.

Multilateral Environmental Agreements (MEAs) such as the Basel, Rotterdam and Stockholm Conventions, the Minamata Convention (BRS-M), and other voluntary instruments have reduced some of the risks, but progress is uneven, with significant implementation gaps, including a pace which cannot keep up with advanced developments and marketing forces associated with the global chemicals industry. Ongoing research and development by chemists across a wide range of industries makes increasingly revolutionary contributions to every aspect of daily lives. This continual process of identification, synthesis, marketing, and end use has led to increased safety, utility, productivity, and convenience across all sectors of industrial and consumer goods.

Despite parallel development of approvals and monitoring capacity, the lifetime impact of these chemicals is often not understood before they are already in wide use. In some cases, less persistent or hazardous materials can be easily substituted. In other cases, the use of specific hazardous chemicals cannot be easily avoided or rapidly transitioned away from.

Even when a substitution or transition can be achieved the legacy of these chemicals can exist in the environment forever. The BRS-M conventions operate to identify, measure, monitor, control, and educate the use, transport, and fate of these chemicals however the supporting environment of policy, legislation, research capacity, technical capability, and knowledge/awareness are often insufficient to safely and completely manage these pollutants.

The primary target chemicals of the BRS-M conventions are due to their potential to bio-accumulate. This characteristic places BRS-M and similar chemicals, both naturally occurring and synthesized, as a significant contributor to the triple planetary crisis of climate change, pollution, and loss of nature and biodiversity. This proposed GEF project will contribute directly in addressing the above-mentioned barriers and to supporting the missions of the BRS-M Conventions to avoid or take lifecycle approaches to hazardous chemicals in new products, manage legacy chemical pollution, and facilitate the safe collection, concentration, and disposal of these chemicals.

From the perspective of ADB and UNIDO, the chemicals and waste approach will, where possible, use proven, transferable approaches to support replicability across chemicals groups, industry sectors, and geographic regions. Where differentiated solutions are needed to address specific challenges, these will be drawn on best practice from partner agencies.

The primary areas for policy innovation will be:

- Policy and legislation related to extended producer responsibility and transboundary shipment of hazardous waste
- Market based instruments to mobilize funding for pollution management and remediation
- Life-cycle management approaches for chemicals such as those used in photovoltaic and electric vehicle manufacturing

The new Global Framework on Chemicals (GFC) has added some fresh perspectives on the chemicals and wastes sector, and takes a life-cycle approach to products and wastes. The GFC advocates a 'whole of society' framework – multi-stakeholder, multi-sectoral and multi-level (global, regional, national) -towards the sound management of chemicals and waste. This GEF project will be aligned with the GFC, and among other things, address key financial priorities which include "adequate, predictable and sustainable financing, technical assistance and capacity-building and technology transfer. Up to now, international financial institutions (IFIs) have had limited involvement in this sector, however, within their operations, there is considerable scope to promote sustainable production, consumption and product innovation, sustainable materials management and circular business models at scale. The GFC states: *"International, regional and national financial institutions and their governing bodies, as well as private sector, are strongly encouraged to expressly integrate sound management of chemicals and wastes activities in the scope of activities that they fund."* (https://www.chemicalsframework.org/page/financial-considerations).

The newly proposed Chemicals and Wastes Financing Partnership Facility (CWFPF) squarely responds to this recommendation. In the absence of such a finance facility, the business as usual will continue to generate pollution, degrade natural systems and biodiversity, and perpetuate climate change. The CWFPF has potential to be transformational in that it will apply a "chemicals and wastes lens" ("CWP") on key elements of the operational portfolio of a regional MDB backed by subject matter expertise and knowledge support of a UN technical agency. The project will be catalytic through support for a policy hub, marketplace, demonstration /

pilot subprojects, strategic alliances with other GEF programs / projects, a dedicated trust fund associated with a number of 'partner managed funds' which will support investment readiness and preparation to design, prepare and package investment projects which generate global environmental benefits. A key component of the work will be reach out, sharing and coordination with other MDBs, DBs and national development financing institutions.

There are a number of challenges to successful management of chemicals and wastes which will be addressed in this project. Principal among these are:

1. Inconsistencies, uneven application and conflicts across policies and regulations which govern management of chemicals and wastes. Included here is relatively low capacity for law enforcement which limits market confidence for investors which follow environment, social and governance (ESG) standards and practices.

2. Inaccurate or incomplete national and sub-national inventories of chemicals and wastes, compounded by lack of credible and systematic monitoring data to support programs and policies.

3. Population pressures, which spur continuous efforts for economic development across various sectors, which places low value on environment and social concerns, with emphasis on financial rates of return.

4. Low awareness of the manifold impacts of societal exposure to chemicals and wastes, combined with limited capacity of government and non-government stakeholders to consider implementation of sustainable and durable solutions for complex problems.

5. Lack of access to finance with which to integrate chemicals and wastes solutions into development programs and projects. This is coupled by some reluctance of international and national financing institutions to venture into these areas due to incomplete understanding and perceived risk, and

6. Absence of incentives for private sector to invest in technological solutions which will reduce, eliminate or replace chemicals of concern in order to achieve net zero, nature positive business models.

Project Justification

Throughout recent history the chemicals industry, in lock step with manufacturing, technology development and consumer demand has been accelerating its development and synthesis of new and innovative products and compounds to address immediate and developing demands from industrial, domestic, and institutional consumers.

Whilst testing and quality assurance have developed the rate of change combined with economic and situational imperatives have often seen chemicals and compounds released into the environment without a thorough understanding of their potential impacts and longevity in the natural environment.

Heavy metal pollution can be traced back to pre-history with metal smelting sites often being identified by their chemical signature. As industrialization gained pace mines and metallurgy sites developed, were exploited, and fell into disuse with institutional and local knowledge losing track of exact locations, conditions, and activities. Recent incidences of mine workings collapsing and releasing millions of gallons of heavily contaminated water into streams and rivers is an obvious example. But less obvious are the persistence of heavy metals and chemicals in production sites, or brownfield locations. The insidious nature of these elements entering the food chain or directly through soil contact can be linked directly to public health issues, biodiversity loss, and even childhood cognitive development.

Persistent organic pollutants which bioaccumulate have been linked to the loss of apex predator species and impacts through the natural systems where they have been used. Often mobilized at short notice to address a “greater” threat such as mosquito born malaria or aggressive crop diseases these chemicals persist both in nature and in their original compound stockpiles.

Pollution both historic and recent represents a systems failure and whilst throwing the majority of consumer and industrial goods “away” poses a significant but short-lived threat to the environment these ore persistent compounds and materials, even plastics, represent a cumulative and hazardous risk for future development and sustainability.

Addressing legacy pollution has, traditionally, been avoided by governments and multilateral institutions as the inevitable conversations around previous decisions, compensation, cost of remediation, and responsibility have been unpalatable. Driven by a growing awareness of the impacts of these chemicals and wastes combined with an increased openness by institutions to address past failures the situation is now conducive to the development of facilities, such as the Chemicals and Waste Financing Partnership Fund, to begin addressing these challenges.

The approach is, by necessity, divided into the preventing the new development, use and release of hazardous materials and strategies to address existing or legacy pollution. Innovative solutions including extended producer responsibility, product as a service, and life cycle investment approaches can effectively manage and fund the use and disposal of new chemical compounds however existing pollution is more challenging.

Examining the cause of the pollution can, in isolated cases of point source pollution or negligence, identify a responsible party and catalyze a legal process to recover costs and drive decontamination and remediation. The majority of situations experiencing non-point source pollution or where the original responsibility is lost to time or avoided by institutional structuring the cost, liability, and future responsibility needs to be carefully understood and managed. The CWFPF funding will be catalytic in identifying the nature and source of pollution, quantifying the scale of the issue, and identifying established or innovative solutions to the remediation of the pollution.

By establishing these simple facts, the outputs from the CWFPF can instruct dispassionate discussions and negotiations around the management of responsibility, liability, appropriate clean up technology, global environmental benefits of remediation, budget development, and financing modalities.

The CWFPF will be critical in leveraging the full benefits of the pollution management intervention. Whilst traditional measures of direct economic cost and value have often seen pollution management ignored due to lack of economic return the use of systems dynamics and mapping, supported by digital solutions, data management, and AI pattern identification will introduce new social, environmental, and economic metrics to the overall benefit discussions.

Long term public health costs, reduction in national cognitive ability with resulting productivity losses, natural capital value increase of the remediated systems, real estate value increase, bio-diversity regeneration and its contribution to overall natural system health, public utility cost reduction, resource availability, climate change adaption and mitigation, climate change resilience, and economic development driven by innovative technology mobilization.

Whilst there will, inevitably, be situations which are beyond the scope of this initial fund it remains a critical first step in genuinely addressing the degeneration of global natural systems and the impact on human health resulting from historic decision making.

Legacy pollution, whilst typically not presenting a dynamic risk, remains a consistent and persistent negative impact on the ecosystems and population which co-exist knowingly or unknowingly with it. It is this cumulative impact on bio-diversity loss, human health, development, or resource isolation, often measurable over

centuries which support the justification of a one-time remediation cost. However, without the resources mobilized by the CWFPF this level of understanding measurement, and articulation is not available.

By adding this extended impact of pollution to the project calculations it is possible to increase the resilience of the proposed solutions over time. As urban conurbations continue to expand and habitable land areas are reduced through climate change, desertification, and sea level rises populations are increasingly going to be pushed into closer contact with previous contaminated sites. This is a lesson learned from experience of other funds, that site selection and future impact analysis is essential.

Similar lessons from other funds, suggest that by leveraging data abundance and recent developments in machine learning and Artificial Intelligence to identify patterns and trends it is increasingly possible to identify clusters of public health issues, productivity reduction, and animal health issues to identify pollution events, legacy pollution sites, and dispersion of pollution from historic point sources. This supports not only the efficiency of locating and addressing pollution but also in effectively capturing the true cost impact of these events across the national purse, not simply local compensation claims or individual responses to the symptoms of pollution.

Chemicals and Wastes Financing Partnership Facility (CWFPF)

What is a Financing Partnership Facility (FPF)?

Financing Partnership Facilities (FPF) are defined as operational 'platforms' for strategic, long-term and multi-partner cooperation that link various forms of assistance in a coordinated manner for well-defined purposes. A typical FPF will aim to pool financial resources, share the risks involved, and combine knowledge and technical expertise in planning and channeling resources for defined development programs or projects.

FPF's can provide value addition to a particular sector or thematic area. They can: i) contribute to preparation of larger investment programs and projects, ii) enable projects to expand or add a new activity/ component, iii) enable the implementation of projects that do not have approved funding from regular funding channels; v) provide non-financial services such as technical advice, information materials, and other knowledge resources, vi) improve the quality of the designs and the monitoring and evaluation of the programs, vii) if there is a 'direct charge' modality, this can enhance responsiveness to country project design needs, or address project 'bottlenecks' and similar implementation constraints, and viii) leverage additional financial resources with a clear focus[1][1].

The table below provides information on a number of different sector-based FPFs at ADB, each with its own priorities, structure, governance and institutional arrangements and funding sources and procedures.

Table 1. Example of ADB's Financing Partnership Facilities

Title (reference)	Summary
Urban Financing Partnership Facility (UFPF) https://www.adb.org/what-we-do/funds/urban-financing-partnership-facility	UFPF focuses on urban environmental infrastructure projects and offers technical assistance, early-stage investment, and guarantees to foster bankable urban projects that can attract long-term investment.

Energy Financing Partnership Facility (EFPF) https://www.adb.org/what-we-do/funds/clean-energy-financing-partnership-facility	Facilitates increased public and private financing in renewable energy and energy efficiency sectors
Ocean Resilience and Coastal Adaptation FPF https://www.adb.org/what-we-do/funds/orcatf	Focuses on enhancing the resilience of coastal and marine ecosystems
Water Financing Partnership Facility (WFPF) https://www.adb.org/what-we-do/funds/water-financing-partnership-facility	Enhances water security for ADB's developing member countries through investments in water infrastructure and services
Community Resilience (CRFPF) **https://www.adb.org/what-we-**do/funds/community-resilience-financing-partnership-facility/overview	Supports community-level resilience initiatives, focusing on vulnerable populations and integrating climate change adaptation
Regional Cooperation and Integration FPF https://www.adb.org/what-we-do/funds/regional-cooperation-integration-fpf	Promotes economic cooperation and integration among member countries, supporting projects that foster regional connectivity
Health FPF https://www.adb.org/what-we-do/funds/hfpf	Supports health sector improvements through investments in public health infrastructure, services, and capacity building

A number of lessons from the operational experience of these, and other financing facilities have been and will continue to be incorporated into the design of the CWFPF. Some perspectives are included in the project approach section under Outcome 3

Scope of the project

The project will focus on chemicals and waste interventions linked to the Stockholm Convention on Persistent Organic Pollutants (POPs), Minamata Convention on Mercury (Hg), and the Global Framework on Chemicals through combining the financial capabilities of ADB and the technical expertise of UNIDO and its partners, including UNEP.

National/sub-national policy decision-making frameworks for CWP investments will be strengthened through the identification of policy inconsistencies on C&W management related to investments, and development of a strategy to overcome policy barriers next to capacity-building on policy formulation leading to the development/update of urban/peri-urban level sustainability strategies, and ultimately, to the preparation of a preliminary framework for C&W pollution reduction/elimination investments.

As fundamental basis of future C&W bankable investments, the CWFPF and associated Trust Fund will be established/initiated by ADB through the development of governance, institutional arrangements, strategy, structure, and operational modalities as well as partnership development in collaboration with UNIDO, and others. In parallel to the set-up of the Trust Fund, a pipeline of 'bankable' projects in selected C&W areas will be defined through: i) government and private sector interaction and investment framework under Outcome 1; ii) a functioning 'policy hub and marketplace' which will include an online marketplace/knowledge management platform, iii) pilot demonstrations in the potential sectors of electronics, buildings, textiles, novel entities, environmental persistent pharmaceuticals, and new POPs chemical additives in products, iv) review of ADB's Country Partnership Strategies and associated pipelines, and vi) potential pipelines of Partner-Managed Funds (see schema of operating model).

Eligible investments with the target to provide 'CWP lens' overlay on at least $ 1 billion in potential sovereign loan projects will be provided to at least 6 investment projects, to at least 2 investment projects preparation support to facilitate access to capital by CSOs, women and youth-led business into urban CWP prevention, abatement and elimination projects, as well as to investment projects to attract private capital in urban CWP prevention, abatement and elimination projects. This project will be supported through a knowledge management learning and communications component throughout the project duration.

The project will address the upstream interventions in terms of supporting enabling policy and strategy formulations addressing financing and investments aspects within national/sub-national C&W frameworks and thus will introduce green elements into planning and implementation for selected sectors. Capacity-building and investment criteria will examine the types of investment that can lead to bankable projects leading to Global Environmental Benefits, which could be invested into through the newly established CWFPF. In the mid-stream and down-stream level the project will implement demonstration/pilot interventions in the potential sectors listed below and will then have investment readiness support for chemicals and wastes pollution reduction / elimination projects, based on governance arrangements and selection criteria to be established and verified.

Global Environmental Benefits (GEBs) in line with the GEF-8 Chemical and Waste Focal Area will be achieved through upstream policy support to identify policy gaps and provide strategies to address its barriers related to potential chemicals and waste financing investments, including risks analysis and strategy. Direct GEBs will be anticipated through the demonstration/pilot projects at the midstream and downstream level through the following potential interventions:

Included will be support pilot / demonstration sub-projects in the following sectors (to be confirmed):

Electronics: The electronics sector, a key driver of technological innovation and societal progress, is also a major contributor to global environmental concerns. From raw material extraction to electronic waste disposal, the industry impacts the environment significantly. Key issues include resource depletion, hazardous chemical releases, and unprecedented rates of electronic waste generation. These challenges worsen global environmental degradation and contribute to social and economic inequities, especially in developing countries such as in the Asia and Pacific region where much electronic waste is disposed. Encouraging the reuse of functional components in similar or different equipment categories can be supported by policy interventions and SMART planning, focusing on circular and modular design. This involves standard methodologies for testing reused components and pilot projects for safe dismantling, testing, and marketing used ICT components. Additionally, promoting the replacement or avoidance of hazardous chemicals in manufacturing ICT components aims to reduce harmful substances, such as MCCP in cables and mercury in backlights for computer monitors.

Buildings: The building sector is responsible for a significant portion of energy consumption, greenhouse gas emissions, use and release of POPs and Hg, and resource use. Pilot/demonstrations in the building sector could aim to promote energy efficiency, reduce carbon footprints, and encourage the adoption of sustainable construction practices, including developing green building standards, and incorporating environmentally friendly materials and technologies to enhance resource efficiency.

Textiles: The textile industry holds significance in many regions, providing substantial employment, foreign exchange earnings, and essential products crucial for human well-being. In Asia and the -Pacific for example, the textile sector is rapidly expanding, marked by increased availability of raw materials, manufacturing capabilities, and consumer retail consumption. Many multinational companies involved in global supply chains have operations in the region, spanning textile manufacturing, garment production, and retail sectors. Globally, the clothing industry, valued at USD 1.3 trillion, employs over 300 million people across its value chain, with cotton production alone contributing significantly to employment in low-income countries. The sector encompasses all stages from fibre production—whether from cotton growth or crude oil extraction for synthetic fibres—to fabric manufacturing, dyeing, garment assembly, retail sales, and product end-of-life. It is projected that the industry's market value chain will reach USD 1,412.5 billion by 2028, growing annually at a rate of 4.4%. However, there are environmental and human health challenges associated with unsound use of POPs during production processes and released at the end of life through improper disposal. The approach to achieving GEBs include the reduction, elimination, and avoidance of harmful chemicals such as PFOS, PFOA, PFAS, and PFHxS through green chemistry chemicals and/or sustainable materials, preventing the environmentally sound disposal of textile waste with POPs and reduction of u-POP emissions through resource recovery and recycling of non-POPs-containing articles.

Environmentally persistent pharmaceuticals (EPP):

Pharmaceuticals are biologically active substances designed to regulate biological functions in organisms, but when they enter the environment, they can adversely affect non-target wildlife and ecosystems. Environmental exposure to pharmaceuticals, or environmentally persistent pharmaceutical pollutants (EPPPs), can lead to resistance in bacteria, genotoxicity, ecotoxicity, and endocrine disruption. Because many pharmaceuticals are designed to resist degradation, they persist in the environment, contaminating water sources and soils. This contamination can occur through wastewater, animal husbandry, and the use of manure as fertilizer, resulting in widespread environmental exposure and biomagnification in food crops[2][2].

In response to these concerns, EPPPs were recognized as an emerging policy issue at the 2015 International Conference on Chemicals Management (ICCM 4), leading to cooperative action to raise awareness and fill knowledge gaps. A 2016 global review identified 631 pharmaceutical compounds in the environment of 71 countries, with some, like ciprofloxacin, on the World Health Organization’s list of 'Critically Important Antimicrobials.'[3][3] Cases like the near-extinction of vultures in India due to diclofenac contamination[4][4], and the feminization of fish from estrogen pollution[5][5], highlight the harmful effects of these pollutants.

The development of antimicrobial resistance (AMR) is one of the most significant impacts of pharmaceutical residues in the environment. Pharmaceuticals can promote the selection of resistant microbes, exacerbating the global AMR crisis. Many EPPPs also function as endocrine-disrupting chemicals (EDCs), leading to health disorders in both humans and animals, such as infertility, cancer, and growth abnormalities. Economic analyses estimate that EDC-related health impacts cost the European Union over €150 billion annually, underscoring the urgent need for effective management of pharmaceutical pollutants.[6][6]

New POPs/Hg chemicals additives in products: The Stockholm and Minamata Convention lists chemicals, which are used in certain products for example in consumer, industrial products, and have a wide-spread

application range including paper, PVC, plastic products, thermometers, switches, relays, and usually have environmental and health risk when used improperly and disposed of in an environmentally unsound manner.

As mentioned above, gender dimensions in selected sectors are very widespread, however, also shows discrepancies in terms of policies, educational and professional opportunities as well as strengthen occupational health and safety measures. The project will address gender dimension through gender mainstreaming activities throughout the project, including the following considerations:

- Gap-analysis of the existing C&W policies to ensure gender-inclusive policies and best practices will be in place for women representation,
- Capacity-building, and training targeted to gender dimensions in selected sectors to address identified gaps in policy formulation and strategy development,
- Targeted occupational health and safety measured during any pilot/demonstration interventions to ensure protection against harmful chemicals.

Further direct GEBs will be based on assumptions and estimates for a number of high probability loans that are in ADB's pipeline. These are elaborated under Outcome 4 narrative.

ADB Baseline Investment

"Khyber Pakhtunkhwa Cities Improvement Project" (Pakistan) https://www.adb.org/projects/documents/pak-51036-002-rrp

This project will help provincial and city governments of Khyber Pakhtunkhwa Province (KPK) to improve the livability of five cities (Abbottabad, Kohat, Mardan, Mingora, and Peshawar) by (i) expanding physical investments in urban water, sewerage, solid waste disposal, and green infrastructure; (ii) providing institutional support to improve service delivery and the performance of municipal companies, and (iii) promoting gender-friendly municipal services through empowerment and capacity development. The project will benefit up to 3.5 million people in the five target cities of KPK. The project supports the government's development priorities, established in (i) the KPK Water Act (2020), (ii) the amended Local Government Act (2019), (iii) the Integrated Water Resource Management Strategy for KPK, and (iv) Pakistan's Nationally Determined Contributions (NDCs).

The project has total funding of USD 650 million, of which ADB is providing $ 385 million, Asian Infrastructure Investment Bank (AIIB) $ 200 million and the Government of Pakistan $ 65 million. Apart from the proposed pipeline projects in Outcome 3, this project is considered an ideal reference project for a number of reasons: i) it is ongoing, ii) it supports an integrated waste management approach, iii) the scale and geographic reach, iv) the climate relevance (GHG avoidance and adaptation), and v) the effort to promote gender-inclusive urban services which deliver wider environmental, social and economic benefits. It is also ideal, because this is the type of investment for which, if a "CWP lens" is applied, there could be some additional design measures introduced which would have greater circularity, more upstream intervention, and targeted identification of Core Indicators related to Chemicals and Wastes focal area built in. The GEF additionality, would be the sharpened focus on chemicals and wastes combined with qualitative and quantitative analysis which would enable tracking, monitoring, reporting and replication/ scaling.

[1] https://www.adb.org/documents/financing-partnership-facilities.

[2] Tim aus der Beek, Frank-Andreas Weber, Axel Bergmann, Gregor Grüttner, Alexander Carius Umwelt (2016) Pharmaceuticals in the environment: Global occurrence and potential cooperative action under SAICM, https://www.umweltbundesamt.de/en/publikationen/pharmaceuticals-in-the-environment-global Accessed December 4, 2017

[3] WHO list of Critically Important Antimicrobials for Human Medicine (WHO CIA list), http://apps.who.int/iris/bitstream/10665/255027/1/9789241512220-eng.pdf?ua=1

[4] Oaks J.L., Gilbert M., Virani M.Z. Watson R.T., Meteyer C.U., Rideout B.A., Shivaprasad H.L., Ahmed S, Chaudry M.J.I., Ar-shad M., Mahmood S., Ali A., Khan A.A. (2004): Diclofenac residues as the cause of population decline of vultures in Pakistan. Nature 427, 630–633.

[5] Kidd K.A., Mills K.H., Palace V.P., Evans R.E., Lazorchak J.M., Flick R.W. (2007): Collapse of a fish population after exposure to synthetic estrogen. P. Natl. Acad. Sci. USA 104, 8897-8901.

[6] Trasande et al (2015) Estimating Burden and Disease Costs of Exposure to Endocrine-Disrupting Chemicals in the European Union (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4399291/)

B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

Theory of Change

The project Theory of Change (Figure 1) shows the causal, logical and interrelated approach, including outcome, output and stakeholder mapping, towards achieving the project's objective which is to establish a dedicated finance facility supporting investments in chemicals and wastes pollution (CWP) reduction / elimination 'bankable' projects within the wider long-term transformational impact to advance towards zero-waste societies.

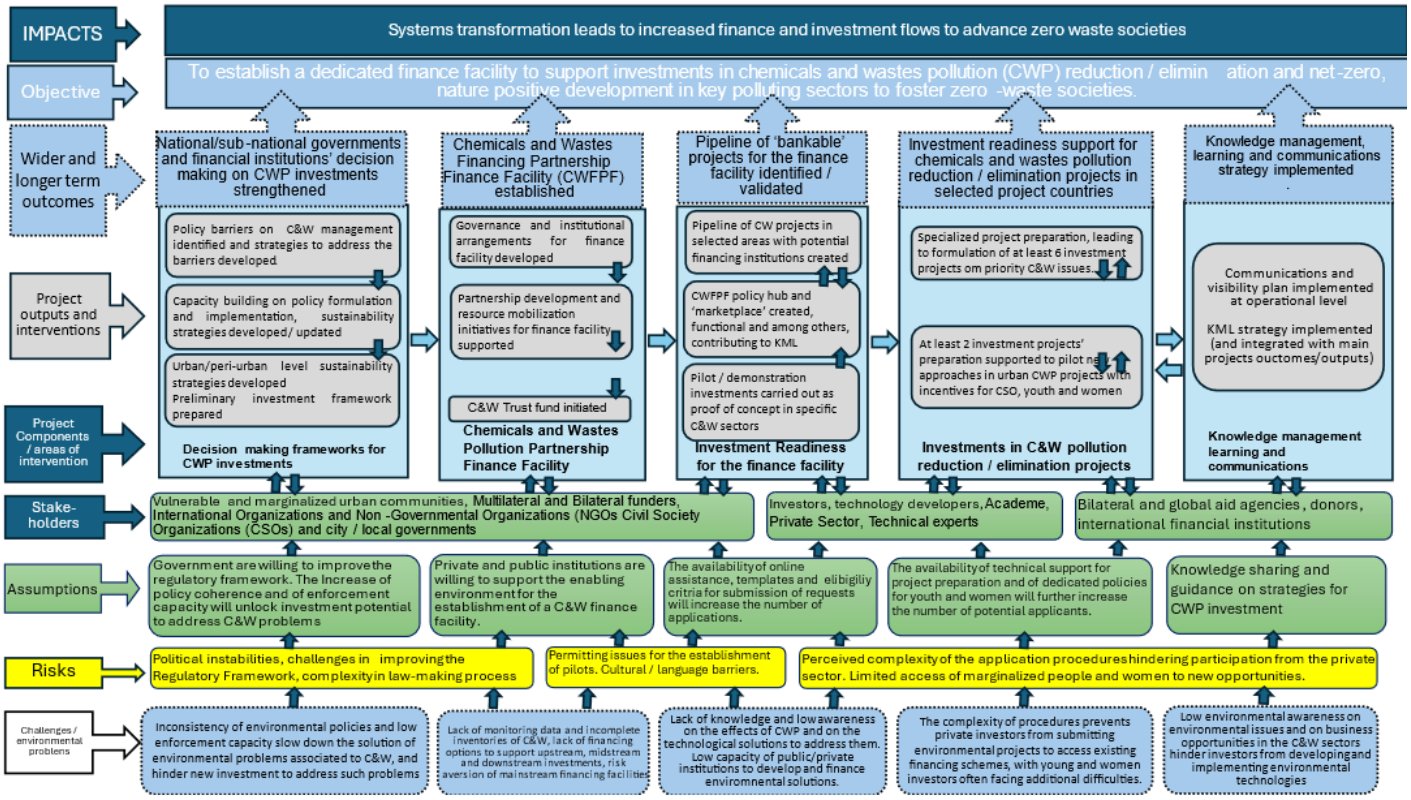

Figure 1: Theory of Change

The Theory of Change is based on the acknowledgement that there is no established Financing Facility dedicated to the GEF's Chemicals & Waste Focal area addressing the International Chemicals and Waste Conventions, namely the Stockholm Convention (SC) on Persistent Organic Pollutants (POPs), Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, and Minamata Convention on Mercury, linking mandates of financing institutions with UN agency comparative advantages. While the ADB has established financing facilities in several areas, interventions in 'bankable' chemicals and waste projects mainly focus on individual country programs and/or projects at the end of the life cycle aiming to achieve circularity, multiply environmental benefits, and high-value investments.

However, recognizing the complexity of persistent organic pollutants (POPs) listed under the SC, and its production/use in processes and products within important global/regional/national supply chains (such as electronics, textiles, plastics), there is a strong need for alliance and partnership between financing institutions and GEF implementation agencies to align technical and financial cooperation initiatives for transformational and focused systematic zero-waste society interventions.

The transformational value-addition collaboration between ADB and UNIDO can be seen through the combination of financing components ('bank's financial incentives') and technical ('technical know-how') leading to greater impacts of bankable investment projects and by advancing the following assumptions:

- Enhanced financial resources through financial instruments and technical expertise in identifying, designing, and implementing chemical and waste technical cooperation projects using best practices, leading to integrated solutions and long-term sustainability.

- Policy support: UNIDO and ADB work closely with governments within the framework of GEF-projects and sovereign and non-sovereign operations and can influence policy and regulatory frameworks. This could be through combined policy and technical capacity work can ensure that local governments are better equipped on CWP investment decision-making. ADB further, can consider specialized products such as sustainability-linked loans or policy-based loans to assist governments.

- Stakeholder engagement: The project can provide a strong inclusive and participatory partnerships between the ADB relationships with Government, civil society and private sector stakeholders and UNIDO relationship with Government, industries, and technical private sector stakeholders. ➢ For the successful execution of the pilot projects in the five proposed sectors, (Output 3.3) stakeholder mapping, engagement, and monitoring will be essential to ensure project ownership, access to technical expertise, and incorporation of industry perspectives. This will enhance the project's relevance, effectiveness, and sustainability. Stakeholder mapping, to be conducted during the Project Preparation Grant (PPG) phase, will categorize stakeholders based on their interests, influence, and potential impact, with special attention to potentially affected communities and vulnerable groups, including women and those living near the pilot areas:

  - In the private sector, potential stakeholders, who will also be the main co-financers of the project, could include manufacturers, suppliers, and recyclers within each relevant industry, depending on the final scope of the pilot.

  - Government involvement will be crucial, particularly from agencies responsible for enforcing chemicals and waste management laws, especially those related to the Stockholm Convention on POPs. These bodies have a vested interest in ensuring compliance with environmental standards, shaping policies, and potentially offering incentives to support the project.

- Non-governmental organizations (NGOs), such as environmental organizations or labor rights groups, will also play a key role. Their primary focus will be on minimizing environmental harm and ensuring fair labor conditions, especially in sectors like textiles. These groups have moderate to high influence as watchdogs, raising public awareness and advocating for stricter regulations. Local communities and vulnerable groups, such as workers in hazardous industries (e-waste recycling or construction), low-income populations, and women or children who may face heightened risks from exposure to harmful chemicals, will also be crucial stakeholders. Although their influence is often limited, advocacy or local representation can help elevate their concerns, particularly around health and safety.

- Academia and research institutions will contribute technical expertise and innovation, advancing knowledge and helping to develop scalable solutions. While their influence is moderate, their role in providing data and analysis is key to informing and refining the pilot projects.

➢ Risk mitigation through partnership on complex chemicals and waste projects, including financial risk management tools combined with technical risk assessment and mitigation strategies.

Project Components

As shown in the Theory of Change (ToC), there will be a number of technical project components: (i) Decision making frameworks for CWP investments; (ii) Chemicals and Wastes Financing Partnership Facility (CWFPF), (iii) Investment Readiness for the finance facility, and (iv) Investments in C&W pollution reduction / elimination projects, v) Knowledge management, learning and communications strategy and vi) a workstream on Performance Monitoring and Evaluation (PM&E) will facilitate efficient implementation and marking of key indicators.

Component 1: Decision making frameworks for CWP investments

Outcome 1: National/sub-national governments and financial institutions' decision making on CWP investments strengthened.

This outcome, led by UNIDO and with inputs from UN Environment UNEP will strengthen the foundational elements of the CWFPF in terms of national and sub-national CWP government and other institutions decision-making on CWP-focused programs and projects through addressing policy barriers, providing capacity-building and, developing urban/peri-urban sustainability strategies, which will led to drafting the preliminary CW investment framework.

The following criteria will be used to identify national, regional, city and municipal government beneficiaries / partners:

1. Demonstrated commitment to environmental sustainability and pollution reduction. This would include policies, legal frameworks, regulations, strategies and action plans

2. CWP has significant and measurable adverse effects on the quality of environmental health (e.g. biodiversity and ecosystems services, air, water, soil etc) in the project area(s)

3. Significant health issues which are traceable to chemicals and wastes root causes in the project area(s)

4. Institutional and technical capacity to evaluate waste management needs, design systems and manage / sustain project interventions and encourage innovation in policy, processes or technology as part of a broader framework of investment priorities

5. Basic systems in place for data collection and curation with respect to CWP, including commitments under Stockholm (and Basel) Conventions, NIPs, etc

6. Potential for transition to nature positive investments to create new business opportunities, 'green growth' etc

7. Opportunities for regional cooperation on transboundary CWP issues

8. Complement CWP interventions with broader risk management, particularly with respect to climate change and disaster preparedness, prevention and response

9. Clear pathways to leverage financing (Capex, Opex, etc) by crowding in investments, creating revenue streams

10. Demonstrable political will, community stakeholder support, and private sector presence.

Output 1.1. **Policy barriers on C&W management, including considerations of policy inconsistencies and coherence at national and sub-national level, identified and strategies to address the barriers developed**.

Under this output, actions will be undertaken to identify and address policy barriers related to the management of Chemicals and Waste (C&W) and its financing investment at national and sub-national level, including the comprehensive review of existing policies to identify inconsistencies, gaps, and overlaps. Following a wide range of stakeholder consultations including with government agencies, and industry representatives about the perceived policy barriers, practical challenges and barriers faced in the implementation of C&W policies, especially related to the financing landscape, identify points in the current policy landscapes to address the barriers will be mapped out followed by a strategy development.

Many countries face policy fragmentation when it comes to C&W management, with various laws and regulations scattered across different ministries or sectors (e.g., environment, industry, public health, and finance). Inconsistent policies or gaps between national and sub-national regulations create confusion and prevent local authorities from fully accessing financial resources or implementing effective waste management programs. For example, national laws might mandate certain chemical waste management standards, but local authorities may lack the legal mandate or resources to implement these measures.

To address this a comprehensive policy review of national and sub-national policies related to C&W management will be conducted to identify inconsistencies, overlaps, or conflicting regulations that inhibit the mobilization of financial resources. This will entail engaging with government agencies, local authorities, and industry players to understand the practical challenges they face in navigating these inconsistent policies. Creating a policy harmonization plan that integrates C&W management frameworks across national and local levels, will support in ensuring coherence and streamlining of legal responsibilities.

Another significant barrier preventing local authorities from addressing C&W issues is the difficulty in accessing dedicated financing mechanisms. Often, policies do not include clear pathways for securing financial

resources, or local governments may not be eligible to apply for national or international funds aimed at environmental management. Furthermore, the absence of policy mechanisms such as market-based incentives or extended producer responsibility schemes limits the availability of funds for waste management infrastructure, remediation projects, or sustainable alternatives to hazardous chemicals.

Identifying the current financial instruments available for C&W management, both domestically and internationally, and assessing the barriers that local authorities face in accessing these resources (e.g., eligibility criteria, complex application processes, lack of technical capacity) will support in finance policy mapping. This mapping will form the baseline for the development of policy recommendations that create explicit financial channels for local authorities, such as allocating a percentage of national environmental funds or international climate finance specifically for local-level C&W projects. Working with local authorities to enhance their ability to navigate complex financing structures and support the development of proposals that meet the criteria for national and international financing is also key.

In many countries, the absence of robust extended producer responsibility (EPR) policies prevents effective C&W management. EPR schemes can generate financial resources by making producers responsible for the lifecycle of their products, including waste disposal. Without such policies, local authorities are left to manage chemical and hazardous waste without adequate funding or support from the private sector. In addition, the lack of market-based instruments, such as pollution taxes or incentives for adopting cleaner technologies, further limits financial flows into waste management and pollution control. Reviewing existing EPR schemes and market-based instruments and assess their potential for adoption or expansion at national and sub-national levels is envisaged, as well as reviewing of existent strategies that incentivize industries to invest in cleaner technologies, recycling, and safe waste disposal through policy changes (e.g., tax breaks for sustainable practices, pollution levies on hazardous chemical production). This work will be facilitated by dialogues between the private sector, local governments, and national regulators.

The absence of clear policies that promote circular economy models—such as reusing, recycling, and reducing hazardous chemicals—represents a significant policy gap. While many international frameworks advocate for circular economy practices, these models are often not embedded in national or sub-national regulations, limiting opportunities for financing projects that reduce chemical waste or transition to more sustainable materials. Analysis of existing policies and identification of gaps where circular economy models can be integrated into national and local regulations is envisaged.

Output 1.2. **Capacity building at national and sub-national levels on policy formulation and implementation conducted.**

Even where sound policies exist, weak institutional capacity and lack of enforcement often prevent their effective implementation. Local governments may not have the administrative or technical resources to enforce regulations or engage effectively with national financing mechanisms, resulting in missed opportunities for addressing C&W issues.

To start with, assessment of the capacity of local authorities to implement and enforce C&W policies, particularly regarding technical know-how, administrative capabilities, and financing will be conducted.

This output will focus on enhancing the skills and knowledge of relevant stakeholders at the national and sub-national level involved in policy formulation and implementation related to Chemicals and Waste (C&W) management focusing on financing investments. Tailored capacity-building programs for local authorities to enhance their capacity to implement, enforce, and fund C&W management programs, including how to effectively engage with national financing schemes and international donors will be developed and implemented, including the following:

- Organization of workshops and training seminars at both national and sub-national levels to educate stakeholders on the principles and practices of effective policy formulation and implementation, covering topics such as policy analysis, regulatory frameworks, strategic planning, stakeholder engagement, and monitoring and evaluation.

- Development of training materials and guidelines tailored to the needs of different stakeholders involved in C&W management. This could also be e-learning modules and online courses to provide flexible learning opportunities for participants, as well as exchange of best practices in other countries.

- Stakeholder engagement, including gender dimension, and collaborative training with various interest groups, including government and private sector, to ensure a common beneficial understanding of potential Chemical and Waste financing investments and its road maps for policy formulation and implementation procedures.

Gender indicators: # of men and women participate in training and workshops, training materials internalize gender dimensions,

Output 1.3 **Urban/ peri-urban level sustainability strategies developed/ updated**

Under Output 1.3, the development and updating of urban and peri-urban sustainability strategies will focus on integrating effective Chemicals and Waste (C&W) management practices into broader sustainability strategies. This aims to create a holistic and practical sustainability strategies for urban and peri-urban areas, ensuring that effective C&W management is an important component of broader urban/peri-urban sustainability efforts. Activities under this output can include conducting a comprehensive baseline /assessment of existing urban/peri-urban sustainability strategies, including the identification of key environmental, economic, and social challenges related to C&W management and investments, stakeholder engagement with urban/peri-urban authorities, business, communities, and others to gather inputs and foster collaboration in the development/update of sustainability strategies, including best practices. The preliminary activities will lead to the development/update of sustainability strategies, which will include specific goals, targets, and indicators for effective C&W management, especially related to hazardous waste management, pollution, and International Chemicals Conventions.

Gender indicators: # of men and women participating in strategy development/updating, strategies integrate concerns of women, youth and differently-abled persons, strategies include actions which will increase

participation of women in city-level decision-making and increase women's control over natural resources, as applicable.

Output 1.4 **Preliminary investment framework prepared through technical assistance on defining and originating potential CW pollution reduction / elimination investments (**this may also include coverage of ongoing programs and platforms e.g. GOLD, ISLANDS, FARM, SCIP etc as well as relevant UNEP, UNIDO, UNDP and other Programs**)**

Based on work under Outputs 1.1, 1.2 and 1.3. and in consultation with a number of other key GEF C&W projects and programs, GEF support will address the key barriers to transformation and understanding the drivers of environmental degradation. Technical assistance support will focus on developing a framework and approach for investments in reduction of and alternatives to, chemicals use in a range of sectors – which will inform and guide work undertaken in Outcome 3. The proposed framework will consider three levels of intervention in the chemicals and wastes management cycle, for specific sectors, subsectors, products and/or processes.

Upstream capacity-development TA will reinforce enabling legislative, regulatory and enforcement conditions for participating countries, and strengthening the implementation of respective National Implementation Plans (NIPs). It will also look at scope to introduce 'green' elements into policy formulation and implementation for selected sectors, including, for instance, the reduction of single-use items consumption; and examine the main criteria and types of investments that can be introduced to influence waste generation 'at source.'

Midstream analysis will focus on the collecting and treating different types of waste and waste streams, particularly those that contain chemicals of concern. The aim will be to qualify the types of investments which foster proper segregation at the source and implementing recycling and resource recovery processes, where needed. It will look at measures to rebuild materials supply and waste management chains to incorporate materials recovery, recycling and reuse while managing hazardous chemicals and waste out of the materials stream.

Downstream work will place emphasis on identifying key elements of disposal of the wastes and residual wastes through methods which include scientific landfilling or pyrolysis, where high-value products such as bio-oil, biochar, and gas can be obtained from the waste through a high-temperature process in the absence of oxygen. Effective management across all these stages is crucial to minimize environmental pollution, ensure proper waste handling, and promote sustainable practices in waste management.

Gender indicators: concerns of women, youth and differently-abled persons are considered at all stages in the investment framework continuum

Component 2: Chemicals and Wastes Pollution Partnership Finance Facility

Outcome 2: Chemicals and Wastes Financing Partnership Facility (CWFPF) established

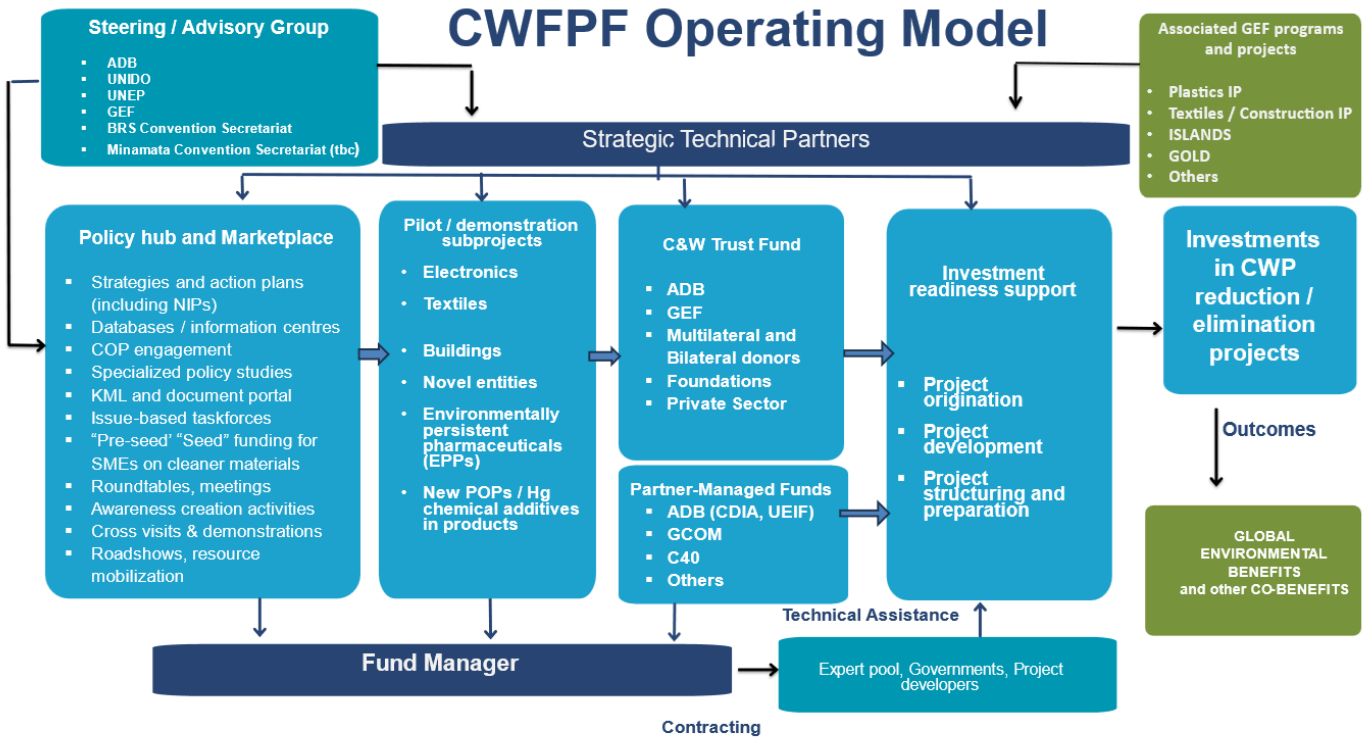

Figure 2: **CWFPF Operating Model: Concept-Level Workflow**
(Institutional arrangements discussed in separate section and fund flow arrangements to be elaborated during PPG phase)

The figure above shows early thinking on the operating model for the CWFPF. More details are provided in the narrative sections below (Outcome 2, 3 and 4).

Output 2.1 **Governance, institutional arrangements, structure / strategy and operational modalities for finance facility developed, including eligibility and selection criteria**

The FPF arrangements will be created through review of prior and ongoing FPFs and consultations across the primary and secondary stakeholders for the project. In principle, the governance will include: i) FPF Steering Committee, ii) FPF thematic working groups, iii) FPF Secretariat / Manager (third party), iv) FPF organizational focal points, v) Partnership group or advisory body, among others.

The Establishment Paper will be prepared by ADB in consultation with specialists, partners and stakeholders. It will: i) outline the background and rationale for the FPF, ii) define the objectives (including the outcomes and outputs identified in the GEF funding), iii) outline the scope (covering technical assistance and investment grants), iv) identify thematic coverage for a proposed Trust Fund(s), eligible countries and eligibility criteria, institutional framework, v) explore linkages with other Trust Funds and financing facilities, vi) describe ways in which co-financing will be encouraged and treated, vii) describe ways in which knowledge sharing will be undertaken, viii) establish process for accepting contributions and transfers from various funding sources, ix) elaborate on administrative arrangements (from Output 2.1), x) define application procedures and fund flow processes, xi) define categories or tiers of partnerships, xii) outline reporting processes, risk assessment and mitigation measures, among others.

Gender indicators: concerns of women, youth and differently-abled persons integrated into structure and strategy of facility, equal representation of men and women in governance arrangements

'Partner-managed funds' (PMFs)

Within ADB a partner-managed fund[3][7] is one for which ADB's roles and responsibilities as a trustee may diverge from those for regular trust funds because the governance arrangements, financing modalities and/or due diligence requirements are tailored to meet the development objectives of the TF concerned and/or requirements of the relevant financing partner. In a PMF, the financing partner may be part of the TF's governance structure (e.g., Board of Directors of the TF).

For purposes of this project, below are some characteristics of PMFs as envisioned under the CWFPF, and as also informed from ADB prior experience with TFs:

a) PMFs are distinct from the proposed CWFPF Trust Fund, in legal and/or financial sense
b) PMFs can be independently governed by another agency / partner, or include ADB in the governance arrangements
c) Objectives of the PMF are aligned with CWFPF
d) PMFs are operationally distinct, and provide grants and/or technical assistance, but may also deploy other types of non-grants instruments, in addition to a number of other value added services
e) CWFPF has agreement with the PMF secretariats and funds managers on sharing of information and building on synergies and comparative advantages, and
f) Association with PMFs within the CWFPF allows for greater synergies, coordination, sharing of knowledge and information and collaborative financing opportunities.

Examples:

#1 Cities Development Initiative for Asia (CDIA) https://cdia.asia/

Multi-donor trust fund administered by ADB, with support from the Governments of Austria, Germany, the Republic of Korea, Spain and Switzerland. The vision of CDIA is “an improved quality of life and sustainability in secondary cities of Asia and the Pacific.” Its mission is to help cities develop bankable infrastructure projects and link them to financing mechanisms, especially public-private partnerships and blended finance modalities. Guiding principles include identifying bankable and investment-ready projects, responding to secondary cities’ needs, aligning with global agendas, and building on CDIA strengths.

The Trust Fund has identified three pathways to accomplish its goals: i) Building capacity to help secondary cities make wise investments in line with the new realities of climate change, ii) Increasing collaborations through networks and partnerships to support longer-term strategic and Paris Agreement-aligned investments; and iii) Assisting cities to combine and structure project financing in such a way as to be attractive for private sector participation and that reflect blended financing modalities that are increasingly becoming the norm.

Opportunity: i) tightly aligned fund management teams, ii) sharing of deal origination and pipeline activities and information, iii) joint financing of single or coordinated project preparation initiatives to inform investment project(s), iv) joint knowledge products, and v) donor coordination where relevant.

#2 City Climate Gap Fund https://www.citygapfund.org/

Implemented by World Bank and European Investment Bank (Bank) in partnership with the Deutsche Gesellshaft fur international Zusammenarbeit (GIZ) and others. The Global Covenant of Mayors for Climate and Energy (GCOM) provides technical assistance and facilitation services for the fund. The Gap Fund supports cities in developing and emerging countries transitioning towards low-carbon and climate-resilient pathways by providing early-stage technical assistance. GCOM and its partners, provide technical assistance to formulate city climate strategies, analyse key actions, promote improved coordination among key stakeholders, and support the preparation of projects from planning and strategy development to project concept and pre-feasibility stage.

Opportunity: Alignment with the GCOM and the City Climate Gap Fund would contribute to the CWFPF in the following ways: i) GCOM and its partners could engage with potential clients (likely to be city / sub-national governments upstream, to prepare potential pipeline, ii) GCOM and partners would pre-qualify potential investment opportunities for CWFPF, which could be discussed in a focussed, joint roundtable meeting, iii) GCOM and partners would ‘open doors’ to continued engagement with key financing institutions which are within their sphere of influence, iv) this could unlock additional financing support for CWFPF, and / or create cross-pollination of potential deals and opportunities for further investments of scale.

#3 Inclusive Climate Action (ICA) Cities Fund https://www.c40.org/what-we-do/raising-climate-ambition/inclusive-thriving-cities/ica-cities-fund/

The C40 ICA Fund is designed to help cities develop and implement climate projects with equity and inclusion principles at their core. There is no climate justice without social justice, and action at the city level is critical to achieving both.

The ICA Fund builds on the successes of phase one of C40’s Global Green New Deal Pilot Initiative. It was launched in response to the unmet needs of cities as they navigate interlinking global crises, aiming to benefit cities by: i) Strengthening existing programmes, policies and projects by making them more equitable and inclusive, ii)

Enabling cities to unlock broader, long-term organisational and financial buy-in for inclusive climate action, iii) Providing a platform to showcase cities leading on inclusive climate action.

Opportunity: Association with the C40 and ICA would be very similar to GCOM and City Gap Fund. Opportunities could include: i) Technical and organizational support working with city governments on policies and sustainability strategies (Outcome 1), ii) Providing venues, such as round tables, match-making events, to originate potential deals, iii) Joint knowledge products and dissemination, iv) access to networks of subnational governments and brokering interaction with private sector.

Contribution of PMFs to GEBs:

The dual purpose of clustering a group of 'like-minded' funds together with the CWFPF is to: i) increase awareness of PMFs on the mechanics of using a "CWP lens" and influence a broader ranges of investment preparation programs to achieving GEBs, and ii) foster synergies, economies of scale and efficiencies in advancing a portfolio of investment programs and projects which have potential to address GEBs at scale.

Output 2.2 **Partnership development and resource mobilization initiatives for finance facility supported**

The GEF funds will contribute to branding and marketing activities to increase awareness and understanding across countries as well as public and private funding institutions and companies. This will include preparation of visibility strategy, marketing collaterals (with reduced reliance on print materials) and support road shows, exhibits and events to target additional financial support / contributions for the FPF. This work will contribute to the proposed "policy hub and marketplace".

There will be a number of actions, including road shows, demonstrations, investor round tables etc (described below in the "marketplace' section) to mobilize additional resources: a) into the Trust Fund, and/ or b) as a 'Partner Managed Fund", or other arrangement. This work will be done in close consultation with the BRS-M Convention Secretariats and be tailored to different types of funding organizations, including:

a. Bilateral donors
b. City-based organizations (GCOM, ICLEI, C40)
c. Private foundations and philanthropies
d. Climate and environment impact funds
e. Industry associations and NGOs (linked to chemicals, such as Croplife, Alliance to End Plastic Waste)
f. Asset managers, and
g. Others

Output 2.4. Establishment paper approved, C&W Trust Fund initiated including Implementation Guidelines

A C&W Trust Fund will be created under ADB's new Trust Fund Guidelines. Among other things, this would include the establishment paper (see above), implementation guidelines and contribution agreements with various financing partners.

Some key lessons from past and ongoing partnership financing facilities include: i) importance of clear institutional arrangements between all parties and actors, ii) strong, relatively independent multistakeholder governance system should be put in place, and complemented by fund manager that has relative independence yet accountable, iii) beneficial to separate the 'facility' from the 'fund'[4], in the sense that the facility itself has a mandate which can support and enhance the fund operations (e.g. scientific studies, partner engagement, knowledge and learning, etc) and also keep open the possibility of additional trust funds depending on requirements of donors / financiers, iv) eligible investments could be open to opportunities

outside ADB (with other financing partners), and v) implementation guidelines should be reviewed periodically and adjustments made from time to time, to adapt to changing institutional or environmental circumstances, or improve efficiency of operations.

Gender indicators: Establishment paper, Trust Fund and implementation guidelines are compliant with GEF and ADB gender equality policies, and include gender indicators.

Component 3: Investment readiness for the finance facility

Outcome 3: Investments in C&W pollution reduction/elimination projects identified / validated

Based on the policy and capacity-building support provided under component 1 and 2, this outcome will support the scientific, technical, environmental, social, economic and financial due diligence required to package investments. To achieve the identification/validation of investments in C&W pollution reduction/elimination projects, outcome 3 will develop a robust pipeline of investible chemicals and waste management projects by identifying high-potential financial and technical projects, conducting feasibility studies/pilots, and engaging stakeholders to secure ownership and engagement. Simultaneously, an online knowledge platform and support request forms will be created to provide potential city or other entity applications with application guidelines, and to request financial and technical support through the facility. Additionally, pilot/demonstration projects in sectors (to be verified) such as electronics, buildings, textiles, novel entities, environmentally persistent pharmaceuticals (EPP), and new POPs-chemical additives in products will be implemented to demonstrate effective C&W management practices, with thorough monitoring and evaluation of Global Environmental Benefits to inform future scalability and replication.

Output 3.1 **Robust pipeline of investible chemicals and waste projects in selected areas with potential financing institutions**

GEF funds will contribute to creating or consolidating a robust pipeline of investible chemicals and wastes projects in selected areas with potential financing institutions, including ADB (linked to Output 1.4). Once a viable investment framework emerges (it could be in phases), this information will be collated by the Fund Manager and discussed with the Advisory/Steering Group. Each potential investment will be graded through a 'traffic light system" – green (potential), yellow (possible with some additional scoping including safeguards, and red (not viable). In order to ensure that investment opportunities consider 'upstream' and 'midstream' interventions in the design, some capacity development and training will be conducted.

Capacity development will focus on training key urban and peri-urban stakeholders on circular economy – how to integrate circularity in to programs, projects and policies. It will build on work supported under Outcomes 1 and 2; as well as the GEF-supported initiative on "Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific" (GEF ID 10628). The training will aim to: i) provide a clear understanding of CE/circularity principles beyond solid waste management (SWM) and recycling, ii) identify ideas for integration of CE into sustainability programs and projects (Outcome 1) using case studies, iii) provide input to national and sub-national Circular Economy Frameworks in selected countries, iv) inform stakeholders concerning the implications of the Global Plastics Treaty (GPT), and v) spur greater interest in prioritizing investments in CE, waste management and plastics in particular.

Gender indicators: capacity development and training targets men and women equally; with materials internalizing concerns of women, youth and differently abled persons (already prepared under GEF 10628)

Output 3.2 **CWFPF policy hub and 'marketplace' created, functional, and among others, contributing to knowledge management and learning (KML)**

The knowledge management and learning approach will be embedded within a 'policy hub' and 'FPF marketplace'.

Possible elements of policy hub (to be reviewed during PPG):

The Policy Hub will serve as a central repository and an active platform for guiding, supporting, and informing policy development, data sharing, and collaborative action. Possible components include:

- Information Management and Data Curation: Centralizing national implementation plans (NIPs), best available techniques (BAT), and best environmental practices (BEP) related to chemical and waste management.
- Scenario Planning: In order to keep up with the complex shifts and new scientific knowledge in the Chemicals sector, there will be need to maintain periodic analysis of the elements of change and how the CWFTF needs to adapt.
- Interdisciplinary Studies: Exploring the linkages between chemicals and waste management, climate change, and biodiversity, ensuring holistic approaches to environmental sustainability. These studies will be made available in the hub as living documents that can be improved with a qualified participation from the relevant stakeholders.
- Informal Sector Engagement: Developing strategies and studies to effectively manage and include the informal sector in waste management initiatives. Give a voice to the informal sector on the policy hub.
- Collaboration with International Conventions: Working with the Secretariats of the Basel, Rotterdam, and Stockholm (BRS) Conventions and the Minamata Convention to develop content and outreach strategies for their Conference of the Parties (COPs).
- Capacity Development: Providing guidance on strengthening scientific and institutional capacities, especially concerning the management of original and newly listed industrial POPs including research, monitoring, and policy formulation.
- Policy and Regulatory Support: Developing policy and regulatory incentives to improve the accuracy and comprehensiveness of C&W inventories, ensuring better monitoring and management.
- Market-Based Instruments (MBIs): Conducting research on how MBIs can be leveraged to mobilize private and public financing for pollution avoidance, management, and remediation projects in the C&W sector.

CWFPF Market Place (to be reviewed during PPG phase**)**

The proposed 'marketplace" would be designed to socialize and create interest around the CWFPF, increase awareness, stimulate action, and generate demand for substantive investments in C&W pollution reduction/elimination and search for alternative approaches. Some elements would include:

- Web-Based Portal: Developing a user-friendly, transactional platform to host resources, connect stakeholders, and track project progress and outcomes. This will be based on a comparative review of other types of platforms, in order to find the best fit for CWFPF
- Support for Task Forces: Facilitating issue-based task forces that address specific policy issues, promote cross-sector dialogue, and advance project outcomes (this is also part of Scenario Planning)

- Seed Financing Programs: Designing competitive programs for providing 'pre-seed' and 'seed' financing to small and medium-sized enterprises (SMEs) focused on cleaner materials and technologies within targeted sectors.

- Cross-Site Learning: Organizing cross-site visits to demonstrate successful projects and foster knowledge exchange, encouraging replication and adaptation of best practices.

- Investor Engagement and Matchmaking: Hosting round-table events and matchmaking services to connect investors with government project promoters, with a focus on specific chemical sub-sectors and asset classes;

- Finance Academies: Establishing City C&W Finance Academies to train municipal officials, project developers, and financiers in developing bankable projects related to chemical and waste management.

- Workshops for Green Finance: Conducting project design and preparation workshops aimed at applying a chemicals and waste perspective to green finance initiatives, targeting multilateral development banks (MDBs), development banks (DBs), and national financial institutions.

This comprehensive output will drive capacity building, foster investment, and promote the scaling up of effective solutions for chemical and waste management.

Gender indicators: # of men and women participating in project activities, policy dialogues and knowledge products give consideration to women, youth and differently-abled persons, events and materials have gender considerations embedded, pre-seed and seed financing targets women-led businesses.

Output 3.3 Pilot / demonstrations carried out as proof of concept in specific C&W sectors a) electronics, b) buildings, c) textiles, d) novel entities, e) environmentally persistent pharmaceuticals (EPP), f) industrial POPs- chemical additives in products (to be confirmed):

In alignment with the GEF Chemicals and Waste Focal Area, and its applicable sectors, Output 3.3 will focus on implementing pilot and demonstration sub-projects as proof of concept in key C&W sectors for scalability and replicable solutions, including the achievement of Global Environmental Benefits (GEBs). This will inform and advise the proposed CW Trust Fund as outlined in the process flow operating model under Figure 2 above, but also have knowledge and feedback loops to other sources of financing. The sectors have been identified through desktop research, information from prior programs and projects under the GEF C&W portfolio, and consultations between BRS Secretariat, GEF Secretariat C&W team, UNIDO, UNEP and ADB. The pilots will introduce technologies, methodologies, or practices to reduce the use and release of POPs and POP-containing hazardous waste across targeted sectors. These pilots will assess technical feasibility, cost-effectiveness, and environmental impact, with private sector partners contributing expertise and scaling potential. The outcomes and lessons learned will inform larger interventions funded by the Chemicals and Waste (C&W) facility, refining approaches, improving regulatory frameworks, and enhancing capacity-building to reduce environmental and health risks from hazardous chemicals and waste. The pilots are expected to deliver measurable Global Environmental Benefits (GEBs) through collaboration with the private sector, ensuring ownership and commitment. Successful pilot activities will demonstrate proof of concept against C&W criteria, making them eligible for scaling and replication. Private sector roles include providing technical expertise, investing in sustainable practices, offering infrastructure, and participating in capacity-building to train workers in best available techniques and environmental practices (BAT/BEP), ensuring market relevance and alignment with industry goals to maximize adoption and impact.

The expected outcomes of the pilots, which includes collaboration, cooperation and support with relevant private sector to ensure ownership and commitment, are measurable achievements of GEBs through potential pilot activities (as outlined in the table below), and its proof of concept against the C&W criteria to be eligible for up-scaling and replication through the C&W facility.

More information on these proposed sub-projects is presented below:

Sector (to be confirmed)	Potential Pilot/demonstration (along with i to xi above)
Preliminary analyses common to all sectors	Feasibility study, financial and economic analyses, market analytics, use of case scenarios and situation analyses, risk assessments , including E&S risks, with E&S studies (ESIA/ESMP) to follow if necessary
Electronics **GEB 9.1** In the electronic sector, chemical replacement may occur through piloting processes or alternative chemicals for the replacement of MCCP in cables or the avoidance of Hg in screen monitors. These changes may also be triggered by update regulation at national our supra-national level. The pilots could aim at an overall avoidance of MCCP through industrial process change in the order of 172 tons over the project duration. **GEB 9.6** Pilot in the electronic sector may also aim at the ESM of POP or lead containing waste (mostly screen monitors and MCCP containing cables, but also other waste contaminated by substances of concern, with an overall amount of 2760 tons of POPs containing waste. **GEB 10.1** A U-POPs avoidance of around 1.4gTeq, due to the adoption of better disposal process, waste avoidance, or investment in APCS may also be expected for this sector.	Supply chain studies and pilots aimed at improving the circularity and resource efficiency of electronics, focusing on reuse of functional components/recovery of valuable materials in electronic equipment's, including testing of safe dismantling, testing of equipment for hazardous chemicals and re-usability of non-hazardous components. promoting the replacement or avoidance of hazardous POPs chemicals and mercury in manufacturing electronic components.
Buildings **GEB 9.1** Short Chain Chlorinated Paraffin (SCCPs)[4]: SCCPs are used as plasticizers in PVC, rubber articles and special paints. The construction industry alone already absorbs 50 to 55% of the use and manufacture of PVC[5][8]. The construction sector also sees a massive use of HBBCD , for which product alternatives, regulatory and technical measures are available. Pilots project may be established for the replacement of such chemicals from building materials, or process replacement in the building industry for a tentative amount of 172 tons. **GEB 9.2 Hg:** The emission factor for mercury emissions in cement production is estimated at 0.1 g Hg/tons of cement. Through implementation of BAT/BEP such as dust shuttling techniques,	Supply chain studies and demonstration of technologies for the alternatives/replacement of POPs flame-retardants (decaBDE and HBCD), plasticizers (SCCPs), corrosion prevention, grease, and water-resistant chemicals (PFOA- and PFOS-related compounds) with safer chemicals, low-carbon and high-calorific materials in the construction industry, and recyclability of non-POPs-containing building material waste. Supply chain studies and pilots of best available techniques/best environmental practices (BAT/BEP) aimed at controlling mercury and unintentionally produced persistent organic pollutants (u-POPs) emissions in cement kilns. This will also include technical support and capacity-

selective non-catalytic reduction (SNCR), selective catalytic reduction (SCR) an overall reduction of about 20% could be expected, while different sorbents use could increase the reduction to approximately 80%. Assuming a reduction of 40% in a pilot an a plant with capacity in the order of one million ton would lead to a Hg reduction of around 40 kg of mercury. **GEB 9.6**.The pilot projects will also aim at demonstrating avoidance or environmental sound disposal of building waste contaminated by POPs in the building sector for an overall amount of 2760 tons. **GEB 6 – Greenhouse gas emission mitigated:** GHG emissions from the construction sector could originate from the direct emissions from construction related activities, the embodied carbon of the imported materials as well as the energy efficiency of the buildings. Through a pilot in greening used materials, including cement, GHG emissions could be achieved considering (based on GEB calculations made under a GEF/UNIDO construction project) that the production of 1 ton of clinker needs between 92 to 111 kWh of energy (3300-4000 MJ) and emits about 800 to 1,000 kg CO2-eq. depending on the fuel type and efficiency of the kiln. The pilot could implement BAT/BEP for the avoidance of GHG in one plant with the capacity of around one million tons of clinker per year with the consequent reduction of 900 thousand tons per year of GHG.	building initiatives to cement industry stakeholders, enabling them to effectively integrate these advanced technologies into their operations. Primary measures could include the use of limit requirements on mercury content in raw materials and fuels, quality assurance system for input materials with low mercury content when possible and avoiding the use of waste with high mercury content.
Textile **GEB 9.1** Pilot project intervention in the sector may lead to a POP avoidance of around 5 tons (by demonstrating process changes in specific factories) plus around 110 tons of POPs avoided through direct substance replacement with minor process change in relevant production plants, triggered also by regulatory measures. Target POPs may be for instance PFAS – wich are a large group of synthetic chemicals widely used in the textile sector; POPs PBDE which are flame retardants specifically used in some specialized textile, and others. **GEB 9.6.** Pilot may be established in the textile sector to prevent or dispose in an environmental sound way residual process waste containing POPs or other substance of concern. This will include improvement of processes to reduce the generation o waste, increased recycling of process stream, or ESM of hazardous / POPs waste up to an overall amount of around 1840 tons.	Technology assessment / pilots plant aimed at reducing POPs in industrial boilers within the textile industry through Resource Efficiency and Cleaner Production (RECP) implementations such as improving combustion efficiency, adopting cleaner technologies, and implementing better management practices. reduce the formation of POPs. Supply chain studies such as RECP assessments, green chemistry and BAT/BEP for textile processing and technology roadmap for replacement of hazardous POPs-chemical use, post-production of textile waste types (e.g., excessive rolls, rejected fabrics, offcuts, rejected products) into high value products

GEB 10.1 A U-POPs avoidance of around 0.9 gTeq, due to the adoption of better disposal process, waste avoidance, or investment in APCS may also be expected for this sector.	through innovative remanufacturing processes.
	Supply chain studies such as RECP assessments and BAT/BEP for the recyclability of non-hazardous textiles to reduce the quantity to be disposed of in environmentally unsound manner.
Environmentally Persistent Pharmaceuticals (EPP) The pilot projects, through safe collection and disposal of unused or expired medications to prevent their release into the environment, identification of chemical or non chemical alternatives to POPs, demonstration of POPs-free industrial processes, waste prevention and ESM of POPs waste aims at achieving around 130 t of POPs or other chemical of concern avoidance in industrial processes, 1840 t of ESM of waste contaminated by POPs or other substances of concern, and a reduction of around 0.9 gTeq of U-POPs.	To establish a pharmaceutical take-back program in collaboration with local pharmacies, healthcare facilities, and environmental agencies. This program would focus on the safe collection and disposal of unused or expired medications to prevent their release into the environment through household waste or wastewater. In parallel, the pilot could include public awareness campaigns on the environmental risks of improper pharmaceutical disposal, and provide training for healthcare providers on prescribing practices that minimize excess medication waste. This initiative would also incorporate monitoring of water sources for pharmaceutical residues to assess the effectiveness of the intervention in reducing EPPP contamination
New POPs-Chemical additives in products focusing on demonstrating innovative approaches to managing and reducing POPs in various consumer and industrial products.	Supply chain studies such as RECP assessments, product quality improvement, green chemistry and BAT/BEP for manufacturing of products for optimizing resource use and minimizing environmental impact throughout the manufacturing process
	Supply chain studies such as RECP assessments, green chemistry and BAT/BEP to improve, resource efficiency, substitute POPs/Hg, minimizing environmental impact, and ensuring compliance with environmental regulations.
	Supply chain studies such as RECP assessments, green chemistry and BAT/BEP to support separation of POPs/Hg-containing materials from mixing with the solid waste stream reducing the quantity of environmentally unsound management of hazardous wastes entering end-of life.

Table 2: Provisional Pilot Demonstration Sub-Projects

Gender indicators: # of men and women participating in project pilots, technical knowledge products give consideration to women, and youth

Component 4: Investments in C&W pollution reduction / elimination projects

Outcome 4: Investments in chemicals and wastes pollution reduction / elimination projects

Outcome 4 will support the implementation of the CWFPF, with a view to formulation of at least 6 investment projects totaling $ 1 billion. This would include at least 2 investment projects which pilot new approaches (to facilitate access to capital by CSOs, women and youth-led businesses into in urban CWP prevention, abatement and elimination projects. In addition, at least one investment project will pilot new approaches to attract private capital in urban CWP prevention, abatement and elimination.

Output 4.1 **Specialized project preparation support provided to eligible institutions, leading to formulation of at least 6 investment projects covering a range of priority products, processes and sectors (of which 2 would facilitate access to capital by CSOs, women and youth-led businesses)**

Types of Project Preparation Actions Supported

The nature of support under the CWFPF Trust Fund would include, but not be limited to:

i) localization of CWP incidence
ii) spot testing, monitoring, abatement / remediation strategies
iii) feasibility study for relevant interventions
iv) natural capital assessments and valuations
v) abatement / remediation cost / GEBs modelling
vi) financial and economic analyses
vii) market analytics
viii) gender assessments
ix) detailed project designs
x) use case scenarios and situation analyses,
xi) risk assessments, including E&S risks
xii) supply chain studies and analysis to promote circularity for proposed investments, and
xiiii) other types of support if eligible under the CWFPF selection criteria.

Modalities of support through the CWFPF and associated Trust Fund

Based on prior TF experience it is envisioned that the CWFPF will administer finance through: i) direct charge (up to a defined ceiling), ii) grants, iii) technical assistance, and/or iv) grant component of a larger investment loan.

Project Preparation Selection Criteria

The Fund Manager in screening of requests, will encourage the CWFPF to consider the following criteria:

Alignment with key sector and commodity priorities of CWFPF: The CWFPF will prioritize the following sectors, products, processes or waste streams:

i) municipal solid waste (MSW),

ii) hazardous waste, including electronic wastes,
iii) industrial and municipal waste water treatment,
iv) pesticide use in agriculture (including agricultural plastics),
v) landfill management and upgrades.

Corresponding sectors under coverage could include: i) buildings and construction, ii) textiles and garments, iii) tourism, iv) horticulture; v) electric and electronic manufacturing; vi) manufacturing and formulation of chemical additives; vii) plastic industry; viii) pharmaceuticals

Ability to generate significant Global Environmental Benefits (GEBs): and economic viability and sustainability: Projects should show promise to deliver measurable GEBs under the GEF 8 results framework and architecture. However, there should also be defined potential co-benefits which may be attainable during a project life and/or beyond. The finance facility will also need to adhere to the requirements of other donors / investors in the proposed C&W Trust Fund.

Financial and economic viability and sustainability - project demonstrates financial feasibility and the potential for sustainable operation beyond the CWFPF investment period, including cost recovery mechanisms and private sector involvement

Demonstrated interest from financing institution, including ADB for follow on investments. There should be early engagement with potential multilateral, bilateral and other financing institutions.

Innovation and scalability - utilize innovative technologies or approaches for CWP with potential for replication or scaling up in similar contexts across ADB DMCs and UNIDO target countries.

Institutional Capacity and Governance: capability of borrower to manage and implement the project effectively, considering governance, transparency, and accountability.

Community involvement and social acceptance - strong community support, engaged stakeholders in planning and implementation, sensitive to social and cultural contexts.

Risk management - assessment of potential risks, including environmental, social, financial, and operational risks; capacity to manage and mitigate these risks effectively.

Partnership and Leveraging Resources - leveraging resources from development partners, private sector, FIs to enhance the project's impact and sustainability.

Gender equality and social inclusion - projects that consider CWP impacts on social groups, ensure equitable benefits, measures to empower women and marginalized communities

Positive health Impact - projects that promise substantial public health benefits by reducing exposure to hazardous chemicals and improving quality of life for communities affected by pollution.

Contribution to policy and regulatory change - support strengthening policy and regulatory frameworks for CWP, including promotion of policy coherence and replacement of harmful subsidies and incentives with those that promote net zero, nature positive outcomes.

Compliance with Environmental and Social Safeguards - adherence to GEF, ADB, UNIDO safeguard policies and international best practices to ensure that projects do not result in adverse environmental or social impacts, and advance net zero, nature positive impacts. An environmental and social safeguards and compliance

review document is attached, which has been done for the baseline "Khyber Pakhtunkhwa Cities Improvement Project". This template will guide operations of the CWFPF.

Bankability - A project is bankable, whether from public or private sources, when its risk-return profile meets investors' criteria and can secure financing to implement the project. Key criteria for bankability include the probability of meeting the project's financial, environmental, and social goals, sufficient estimated cash flows to cover costs and produce returns that meet investor expectations, and whether the project will be implemented by a creditworthy entity. Though the assessment of whether a project is bankable may differ between specific financiers, they all need confidence that the regulatory, environmental, social, and economic factors are unlikely to prevent the project from being completed (Rana 2017; GPRBA2018).

The Fund Manager will also play a role in screening of incoming requests for support, through its core team, as well as use of specialized sector-based or technical expertise depending on the nature of the request. Screening will be transparent, well documented and follow the criteria described above.

Provisional pipeline of opportunities

Below is a sampling of potential (and real) opportunities currently in the ADB pipeline, which could well benefit from the CWFPF.

1. Landfill Rehabilitation and Remediation: Kazakhstan

ADB has engaged with the Environmental Department of the Kazakhstan government to explore opportunities to reduce greenhouse gas emissions under the Nationally Defined Contribution (NDC) methodology of the Paris Agreement.

ADB is exploring a sectoral loan to support the stabilization, rehabilitation, and management of existing landfill sites and the construction of new sanitary landfill sites. The traditional approach to landfill construction and management has provided basic environmental protection but has not, in most cases, differentiated between industrial and domestic waste sources.

The loan will encompass strategies to avoid low temperature combustion of waste in rural areas, increase collection rates in urban and peri-urban areas, promote source segregation of waste, promote segregation of municipal and industrial wastes, promote the limited reprocessing of waste already in landfills to support repairs and reduce leakage, the improved management of leachate, and enhanced monitoring capacity.

2. Enhancing National Policy and Legislation to Facilitate Compliant Management of BRS-M and Related Chemicals.

ADB is working with the BRS Secretariat and Ministry of Environment Japan to support the development of national policy and legislation to accelerate BRS-M compliance. This policy-based loan opportunity includes the full scope of policy and legislation to effectively manage legacy pollution and adopt life-cycle approaches for new and emergent applications of hazardous chemicals in the renewable energy and electric vehicle sectors.

This initiative, led by ADB's Office of the General Counsel, aims to support developing member counties in the design and implementation of new or modified policies and legislation to enhance alignment with the operational needs of the BRS-M conventions.

Identified barriers to compliance for legacy stockpiles and pollution include the absence of national disposal capacity combined with the inability to ship materials across national boundaries to a disposal location. Legacy

pollution and stockpiles do not benefit from the opportunities of extended producer responsibility or polluter pays principles.

The transition to renewable energy and electric vehicles will see a new range of chemical compounds and uses being imported to countries, especially small island states and countries without established chemical management infrastructure. The PBL approach aims to establish effective extended producer responsibility systems for these products ensuring that their end-of-life management and safe disposal of chemical components is supported by the necessary financial provisions, infrastructure, and operational policies.

3. Global Plastics Treaty: Strategies for National Operationalization and Compliance: Viet Nam

ADB has been delivering its TA 6669: Promoting Action on Plastic Pollution from Source to Sea in Aisa and Pacific since 2020. This regional program provides capacity building and knowledge support to Viet Nam, Philippines, Indonesia, Thailand and Sri Lanka for the management of plastics. Taking a value chain approach using circular economy principles the TA has delivered research and training on plastics substitution, avoidance, waste management, recycling, and monitoring. The TA, in parallel to the progress of the Global Plastics Treaty, has focused on innovative digital solutions to enhance collection, recycling, and monitoring of plastics in the environment.

In response to a request from the Vietnamese government through the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) for support in developing and implementing national compliance strategies for the Global Plastics Treaty ADB, in conjunction with MOEJ, is working to develop a package of policy and technological solutions.

Leveraging on the initial work of the TA around substitution, avoidance, and digital solutions combined with plastics position in the value hierarchy of waste streams a sector type loan, modified to comply with Viet Nam borrowing policies, is proposed.

This loan product will support the government to develop a plastics inventory baseline, a national action plan on plastics, strategies and technologies to reduce plastic usage, promote recovery of plastics from then environment, and monitoring strategies and technology to demonstrate compliance.

A key aspect of the overall approach is to address open burning of wastes, informal or illegal dumping of waste, informal recycling of wastes, and remediation of legacy pollution from recycling, processing, and disposal of plastics and waste. This will reduce the emissions of unintended persistent organic pollutants (uPOPs) from open burning and also begin to address heavy metal and chemical pollution resulting from non-sanitary landfills.

4. Addressing Heavy Metal Pollution from Artisanal, Informal, and Small-Scale Metal Extraction, Refining, and Recycling: Multiple Locations

Artisanal and small-scale gold mining (ASGM) is a significant industry in the Southern Philippines with a focus in the Agusan River basin of Northeastern Mindanao. The un-restricted use of mercury to amalgamate gold stems from Roman times. However, as the industry has grown the levels of mercury contamination in the environment have exceeded toxic levels in drinking water and fish stocks adjacent to river estuaries. ADB is building on previous research to develop solutions and approaches to address pollution and optimize future activities to avoid the use of mercury in ASGM.

ADB supports the Working Group on Understanding and Mitigating the Global Burden of Lead Poisoning organized by the Centre for Global Development and is collaborating with Pure Earth to examine the impact of lead poisoning on childhood development. Through its Economic Research and Development Impact

Department (ERDI) ADB has supported initial studies on informal and small-scale lead recycling from lead acid batteries presented as a policy brief “How to Stop Automotive Battery Recycling from Poisoning Our Children”

In support of these ongoing initiatives and wider interest in the opportunities to remediate and decontaminate post-industrial, legacy disposal, and informal processing sites ADB is developing a range of technical assistance, grant, and loan opportunities to support cities, regions, and national initiatives to address chemical, heavy metal, and waste management pollution.

5. Hazardous chemical substitution, wastewater treatment, and legacy pollution remediation related to the leather tanning industry in Bangladesh

In 2003 the Bangladesh government commence development of the 200-acre Savar Industrial estate to centralize 154 small, medium, and cottage scale leather tanning businesses. 21 years later the common effluent treatment plant (CEPT) has yet to be completed and is partially processing less than half the daily effluent produced by the estate.

The resulting pollution is discharged into the Dhaleshwari and Birganga rivers damaging the ecosystem, reducing fish stocks, and contaminating drinking water. As a result, tanneries based at the industrial park are unable to secure international certification for their goods, limiting export opportunities and prices. The knock-on effect has restricted the development of the national industry leading to increased leather imports and a loss of global market share.

Following recent changes in national government the opportunity exists to undertake further investment in the tanning industry, reducing pollution, increasing biodiversity, and directly improving the national balance of trade. ADB will explore the design and development of an integrated project to address chemical use in the industry, promote increased efficiency, construct a larger wastewater management facility, and pollution remediation.

6. Climate-Smart Horticulture Value Chain Infrastructure Project (Viet Nam)

In line with national directions for compliance with the Montreal convention on ozone depleting gases, decreasing regional food supply security, and sectoral initiatives to accelerate adoption of sustainable production methods ADB is developing a range of projects to further food supply security and climate smart production practices in the horticultural and agricultural sectors. The Climate Smart Horticulture Value Chain Infrastructure project in Viet Nam, considers the development of high efficiency integrated cold chain systems to reduce crop spoilage between

field and plate. This intervention across 6 provinces gives ample opportunity for ADB’s sustainable procurement policies to instruct the selection of bioplastic substitutes which will, in turn reduce the need for expanded polystyrene (EPS) and polyurethane (PU) insulations requiring hexabromocyclodecane (HBCDD) flame retardants. The project is estimated to address @5000 tonnes of EPS and PU insulation over the project and extended impact periods. This inclusion and estimation is based on recent market assessments[1]. It should be noted that this proposed project has been associated with ADB’s national project under the FARM program (GEF ID 10915), however, the HBCDD has not been factored into any of the GEB estimated under that ongoing project (i.e. no ‘double counting’).

[1] https://www.alliedmarketresearch.com/expanded-polystyrene-insulated-panels-market-A15762

Grant amounts available per project investment

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Ticket sizes for project preparation support would range between $ 250,000 and $ 2.0 million depending on the nature of the request. Efforts will be made to balance project preparation across upstream, midstream and downstream interventions.

Gender indicators: # men and women participating in project activities, CWFPF supports gender assessments for investment project preparation, gender equality indicators considered in screening of request for support under the facility (including consideration for increased role of women in decision-making and control over natural resources), and proposed investment projects include gender and social inclusion plans and targets.

Output 4.2 At least one investment project supported as pilot new approaches to attract private capital into in urban CWP abatement and elimination projects

Private sector financing for CWP abatement and remediation, in some cases, may offer some advantages over sovereign loans, such as speed (months rather than years to arrange financing and implement solutions), flexibility in decision-making, ability to deal directly with subnational governments (rather than national governments) and contract directly with businesses, replicability, scalability, ability to continuously upgrade technologies through “as a service” contracts, and other advantages. Although its primary focus will be to add incremental CWP abatement and remediation components to larger sectoral sovereign loan projects, CWFPF will also seek to develop, pilot, “incubate” and “accelerate” new financing approaches to attract private capital into smaller experimental CWP abatement projects, for example through equipment leasing or similar arrangements.

If successful, CWFPF can scale up this approach by encouraging other DFIs to try similar structures, and also through replication of successful strategies and approaches through publications, seminars, workshops on case studies and other forms of project results dissemination.

Component 5: Knowledge management, learning and communications

Outcome 5: Knowledge management, learning and communications strategy implemented

Output 5.1 Communications and visibility plan implemented at operational level.

A communications and visibility plan will be drafted for the implementation phase. It will include the following elements:

- Alignment with branding and visibility policies of ADB, GEF and UNIDO
- Protocols for flow of information and communications between core members of the Project Steering Committee (PSC)
- Protocols and guidance for communications between GEF Agencies, the UNIDO PIU, the proposed CWFPF Fund Manager and potential clients and partners
- Protocols and guidance for design and conduct of project-related events

Output 5.2 KML strategy integrated with main project outcomes/ outputs

A budgeted KML strategy will be finalized during the PPG phase. It will consider, among others, the approach described below in the knowledge section. It will be important that the strategy itself is integrated across as many of the outcomes and outputs. More details on proposed KML actions and products is presented below:

Gender indicators: Content for knowledge event and products include gender sensitive elements, women, youth and differently-abled persons targeted in communications and knowledge products.

Under Outcome 1: National/sub-national governments and financial institutions' decision making on CWP investments strengthened

Knowledge management and learning (KML): will be embedded through this Outcome (linked to the "policy hub and marketplace", and consist of:

- articles/blog releases, policy briefs (digital publishing)
- media releases, explainers and situationers (digital publishing)
- learning modules to be integrated with work in other outcomes
- policy and technical content for marketplace website
- city C&W academies (workshops etc)
- social media (through dedicated and secure accounts)

Under Outcome 3: Pipeline of 'bankable' projects for the finance facility identified / validated

Knowledge management and learning: will be embedded through this Outcome (and linked to the 'policy hub and marketplace), and consist of:

- articles/blog releases through digital publishing

- explainers and situationers (similar to https://development.asia/explainer/learning-adbs-financial-management-requirements-efficiently-through-online-course)

- video shorts/highlights (1-2mins) on a featured topic

- learning modules (animation preferred to popularize the technical content)

- city C&W finance academies (facilitated workshops)

- marketplace for partners, etc (like https://hub4r.adb.org/e-marketplace | https://adb.eventsair.com/adb-e-marketplace-for-water-secure-and-resilient-asia-and-the-pacific/virtual-exhibitors)

- social media (using credible and secure accounts)

Under Outcome 4: Investment readiness support for chemicals and wastes pollution reduction / elimination projects in selected project countries

Knowledge management and learning: will be embedded through this Outcome (and linked to the 'policy hub and marketplace), and consist of:

- project administration and management (PAM) policy advice for ADB operations staff

- staff instructions for ADB operations staff

- articles/blog releases through digital publishing

- explainers and situationers (similar to https://development.asia/explainer/learning-adbs-financial-management-requirements-efficiently-through-online-course)

- video shorts/highlights (1-2mins) on a featured topic

- learning modules (animation preferred to popularize the technical content)

- marketplace for partners, etc (like https://hub4r.adb.org/e-marketplace | https://adb.eventsair.com/adb-e-marketplace-for-water-secure-and-resilient-asia-and-the-pacific/virtual-exhibitors)

- client-focussed C&W finance academies (facilitated workshops)

- social media (using credible and secure accounts)

Outcome 6: Performance monitoring and evaluation system implemented

The project will include a performance tracking and reporting system which will support monitoring efforts for the facility.

Output 6.1 Project performance monitoring system in place

Project performance elements will be included in the budgeted M&E Plan at PPG phase. All projects supported under the CWFPF TF will be required to include plans for monitoring and evaluation, which will be validated by the Fund Manager. Guidelines for this will be provided based on templates used for other TFs. In addition, the operations of the TF itself will be monitored and evaluated periodically through the following: i) semi-annual technical and financial reports, ii) quarterly meetings of the CWFPF Executive Committee, iii) Annual meeting of the CWFPF Steering / Advisory Committee and other measures.

It is likely that the website / portal referenced in the policy hub and marketplace, will also have a 'public-facing dashboard' presentation of basic facts and progress towards goals.

Output 6.2 Mid-Term Review and Terminal Evaluation conducted

A budgetted M&E Plan will be included in the CEO Endorsement Request, as per GEF policy.

Incremental Cost Reasoning

The table below provides a summary of the incremental reasoning underpinning the project development and implementation.

Baseline: Environmental Regulation and Enforcement in Participating Countries	**Alternative scenario: Component 1: Decision making frameworks for CWP investments**
There is a lack of regulatory enforcement and governance in many countries, particularly in developing regions, where weak regulatory frameworks or limited enforcement capabilities hinder effective chemical and hazardous waste management. Even when legislation exists, the capacity to enforce laws and monitor compliance is often insufficient, leading to persistent chemical pollution. The lack of transparency and accountability mechanisms further worsens the situation, allowing harmful practices to go unchecked. Strengthening governance structures and enforcement mechanisms will be crucial to overcoming these challenges. Insufficient technical capacity and knowledge gaps are also significant barriers to managing hazardous chemicals and waste. In many regions, local stakeholders—including industry players, regulatory agencies, and civil society—often lack the technical expertise necessary to properly handle hazardous substances or implement life-cycle management approaches. This challenge is	To address the regulatory gaps identified, a comprehensive policy review of national and sub-national policies related to chemicals and waste (C&W) management will be conducted to pinpoint inconsistencies, overlaps, or conflicting regulations that hinder the mobilization of financial resources. This process will involve engaging with government agencies, local authorities, and industry players to understand the practical challenges they face in navigating these inconsistent policies. Outcome 1.1, led by UNIDO with inputs from UN Environment (UNEP), aims to strengthen the foundational elements of the Chemicals and Waste Financial Partnership Framework (CWFPF) by addressing policy barriers, providing capacity-building, and developing urban and peri-urban sustainability strategies. These efforts will contribute to drafting the preliminary C&W investment framework. Additionally, the project will focus on enhancing the skills and knowledge of relevant stakeholders at the national and

further compounded by the rapid pace of innovation in the chemicals industry, which can outstrip the ability of regulatory frameworks to keep pace with new developments. Comprehensive capacity-building efforts will be essential to bridging this gap. In terms of co-financing, participating countries will contribute to the budget associated with drafting, approving, and enforcing regulations related to chemicals and waste management.	sub-national levels who are involved in policy formulation and implementation related to C&W management, particularly in financing investments. Tailored capacity-building programs for local authorities will be developed and implemented to improve their ability to implement, enforce, and fund C&W management programs. These programs will also focus on how to effectively engage with national financing schemes and international donors- GEF Grant requested: 1,750,000
Baseline: presence of financing tools related to management of C&W	Alternative scenario: **Component 2: Chemicals and Wastes Pollution Partnership Finance Facility**
Despite the availability of several financing tools for environmentally related investments, adequate and sustainable financing remains a critical challenge in managing chemicals and hazardous waste in many developing countries. Access to these existing financing tools is often complex and not easily available to potentially interested enterprises. Many governments and private sector entities face budgetary constraints that may delay or limit their ability to invest in safer, more sustainable alternatives. The transition to circular business models or the implementation of extended producer responsibility systems requires upfront capital investment, which may not be readily accessible in all regions or industries. Current efforts undertaken by the Asian Development Bank (ADB) and other partners to design innovative financing tools in participating countries can be considered as baseline co-financing.	To complement existing financing tools, a Chemical and Waste Financing Partnership Facility (CWFPF) will be established. The arrangements for the CWFPF will be developed through a review of prior and ongoing financing partnership facilities (FPFs) and consultations with both primary and secondary stakeholders involved in the project. An Establishment Paper will be prepared by the Asian Development Bank (ADB) in collaboration with specialists, partners, and stakeholders. As outlined in the “Project Description” section, the Establishment Paper will address key elements such as defining the objectives, scope, and thematic coverage of the facility, identifying eligibility criteria and eligible countries, clarifying and promoting the co-financing framework, ensuring knowledge sharing, and establishing procedures for accepting contributions and transfers from various funding sources. Additionally, it will outline reporting processes, conduct risk assessments, and propose mitigation measures, along with all other necessary aspects to ensure the smooth implementation of the CWFPF. GEF grant requested: USD 198,500

Baseline: implementation of MEAs agreements in the participating countries and associated demonstration of environmentally sound technologies	Component 3: Investment readiness for the finance facility
Multilateral Environmental Agreements (MEAs), such as the Basel, Rotterdam, and Stockholm Conventions, the Minamata Convention (BRS-M), and other voluntary instruments, have helped reduce some of the risks associated with improper management of chemicals and waste. However, progress has been uneven, with significant gaps in implementation and a lack of practical experience in adopting alternative processes and using non-hazardous chemicals. This has made the chemicals industry resistant to change, especially when it comes to adopting more sustainable practices that could disrupt existing profit models. Critical sectors where more environmentally sound practices need to be demonstrated include: Electronics Buildings Textiles Environmentally persistent pharmaceuticals New POPs and mercury-containing chemicals in products Without the project, knowledge about the bankability of interventions in these critical sectors will remain uncertain. The investments mobilized at the country level to identify and test environmental solutions in these relevant sectors will be considered as contributions to the project's co-financing budget. Co-financing will also be sought from the private sector for proposed pilot or demonstration sub-projects.	Here's the revised version of your text for improved grammar and fluency: GEF funds will help create or consolidate a robust pipeline of investable chemicals and waste projects in selected areas, involving potential financing institutions, including the Asian Development Bank (ADB). To this end, the project will also run pilots in relevant sectors, not only for environmental purposes but also to identify and validate a pipeline of bankable projects for the Chemical and Waste Financing Partnership Facility (CWFPF). A CWFPF policy hub and 'marketplace' will be established to contribute to knowledge management and learning (KML). As detailed in the project description, pilot demonstrations will serve as proof of concept in specific chemicals and waste sectors, including: • Electronics • Buildings • Textiles • Environmentally persistent pharmaceuticals (EPP) • New POPs and mercury-containing chemicals in products The preliminary analysis common to all sectors will include feasibility studies, financial and economic analyses, market analytics, use-case scenarios, and situation analyses. Risk assessments, including environmental and social (E&S) risks, will

	also be conducted, with further environmental and social impact assessments (ESIA) and environmental and social management plans (ESMP) to follow, if necessary. GEF grant requested: 8,406,500 USD
Baseline related to investments in the C&W management sector.	**Alternative Scenario: Component 4: Investments in C&W pollution reduction / elimination projects**
The formulation and submission of investment projects related to the environmentally sound management of chemicals and waste remain uncertain and highly challenging. This is due to the complexity of the regulatory and technical frameworks, the need to achieve consensus among all stakeholders, the large scale of the investments required, and the resistance to change within the manufacturing and chemical industries in the absence of a clear regulatory and financing environment. In this context, the Global Framework on Chemicals (GFC) advocates for a 'whole of society' approach—multi-stakeholder, multi-sectoral, and multi-level (global, regional, and national)—towards the sound management of chemicals and waste. This complexity is further exacerbated by a lack of adequate, predictable, and sustainable financing, as well as the need for technical assistance, capacity-building, and technology transfer. To date, international financial institutions (IFIs) have had limited involvement in this sector. However, there is considerable potential within their operations to promote sustainable production, consumption, product innovation, sustainable materials management, and circular business models at scale.	Outcome 4 will support the implementation of the CWFPF, with a view to formulation of at least 6 investment projects totaling $ 1 billion. This would include at least 2 investment projects which pilot new approaches (to facilitate access to capital by CSOs, women and youth-led businesses into in urban CWP prevention, abatement and elimination projects. In addition, at least one investment project will pilot new approaches to attract private capital in urban CWP prevention, abatement and elimination. Sectors under coverage could include: i) buildings and construction, ii) textiles and garments, iii) tourism, iv) horticulture; v) electric and electronic manufacturing; vi) manufacturing and formulation of chemical additives; vii) plastic industry; viii) pharmaceuticals As detailed in the project description, selection criteria will include • Alignment with key sector and commodity priorities of CWFPF: • Ability to generate significant Global Environmental Benefits (GEBs): and economic viability and sustainability: Financial and economic viability and sustainability • Demonstrated interest from financing institution, including ADB for follow on investments. • Innovation and scalability • Institutional Capacity and Governance: • Community involvement and social acceptance • Risk management • Partnership and Leveraging Resources - • Gender equality and social inclusion - • Positive health Impact

The GFC emphasizes: 'International, regional, and national financial institutions and their governing bodies, as well as the private sector, are strongly encouraged to explicitly integrate sound management of chemicals and wastes into the scope of activities they fund.'

It worth noting that there are already a number of opportunities currently in the ADB pipeline, which could well benefit from the project, which are:

- Landfill Rehabilitation and Remediation: Kazakhstan
- Enhancing National Policy and Legislation to Facilitate Compliant Management of BRS-M and Related Chemicals
- Global Plastics Treaty: Strategies for National Operationalization and Compliance: Viet Nam
- Addressing Heavy Metal Pollution from Artisanal, Informal, and Small-Scale Metal Extraction, Refining, and Recycling: Multiple Locations
- Hazardous chemical substitution, wastewater treatment, and legacy pollution remediation related to the leather tanning industry in Bangladesh

Without the project, it is likely that financial and technical challenges associated with investments in environmentally sound chemicals and waste management will largely persist.

Co-financing: Roughly $ 300 million will be drawn from one or two loans in the ADB portfolio that have potential to originate projects for the proposed CWFPF. These could be in agriculture, urban or water sector. Further, an additional $ 20 -25 million will be added as finance for the actual Trust

- Contribution to policy and regulatory change
- Compliance with Environmental and Social Safeguards
- Bankability.

GEF Grant requested:16,243,500

Fund. In this way the combination of GEF catalytic funding and ADB match funding, should give confidence to additional investors into the Trust Fund, or for investors to align their funds with the facility in a parallel manner.	
Baseline related to awareness in the risks associated to hazardous chemicals and waste	**Alternative scenario : Component 5: Knowledge management, learning and communications**
Public awareness of the risks posed by hazardous chemicals is generally low, particularly in regions where these substances have already caused long-term environmental damage. Engaging the broader public and key stakeholders, including industry players and local communities, is essential for building a shared understanding of the risks and fostering a collective commitment to addressing chemical pollution. However, achieving meaningful engagement across diverse sectors and geographies is often difficult due to competing priorities and limited access to information. Co-financing contributions, initially estimated as 700,000 USD, will be calculated at PPG based on the synergies with ongoing efforts related to the development of Knowledge Management tool at global and country level.	A comprehensive communications and visibility plan will be developed. It will ensure alignment with the branding and visibility guidelines of ADB, GEF, and UNIDO. Clear protocols will be established for efficient information exchange within the Project Steering Committee (PSC), as well as between key stakeholders like GEF Agencies, the UNIDO PIU, the CWFPF Fund Manager, and potential clients. Additionally, the plan will provide guidance for organizing and conducting project-related events. A budgeted KML strategy will be finalized during the PPG phase. It will consider, among others, the approach described below in the knowledge section. It will be important that the strategy itself is integrated across as many of the outcomes and outputs. GEF Grant requested: 700,000 USD

Gender equality and women's empowerment

A gender perspective is critical for understanding the chemicals and waste pollution challenges, and for designing effective, prevention, abatement and remediation solutions. Women already play a significant role in some national waste management efforts in many developing countries, with their central role in designing and implementing solutions increasingly recognized.

For example, in the areas of e-wastes, in India, women play a key role in waste collection and processing of electronic wastes, but this role can be expanded as women fill more senior positions in e-waste processing companies. Women manage household waste and adhere more frequently to proper disposal behavior (segregation before collection, preparation before pickup). There are still issues that need to be addressed: (i) jobs in government-run waste management are predominantly held by men, though waste sorting is often done 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.

The gender dimensions which have been identified in respect of CWFPF include the following:

a. Health impacts. Women and children are bearing the brunt of POPs, mercury and lead pollution because those chemicals tend to enter mother's milk and thus be transmitted to infants, upon whom they have a very deleterious effect in terms of mental development, educational attainment, etc. Any efforts at addressing CWP should have a potentially strong positive impact on women and children's health.

b. Household consumption. 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. Airborne POPs can be reduced by education regarding the hazards of household waste-burning.

c. Solid waste management. 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. Technical assistance to train women for more senior waste management positions and supporting their promotion to management roles should create more equality of opportunity and enable a more productive circular plastics economy, as well as empowering women as decision makers.

d. Women as agents of change. Behavior change communications linked to CWP abatement & remediation 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 CWP 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.

e. Supporting female entrepreneurs: 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 Project Preparation, a gender specialist will be engaged to support project design to ensure it will actively support the GEF Gender Equality Strategy, the UNIDO Gender Equality Strategy and 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.[2] A Gender and Social Inclusion 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 and Social Inclusion Plan will include the following:

a. Equal engagement of male and female participants in all project activities

b. Reach out to financing and venture organizations that are dedicated to women-led projects and enterprises

c. Every financing initiative under the Trust Fund will require screening according to GESI criteria

d. Gender and youth will be mandatory among the selection criteria for project preparation activities

e. Project activities should be targeted to include benefits to women and youth, where possible (with indicators)

f. Engagement of gender specialist to advise the fund management team

g. Capacity development and 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

h. Collating sex-disaggregated data.

Taken together, these measures are expected to ensure that CWFPF achieves its strategic gender priorities of increasing women's economic empowerment, enhancing gender equality in decision making and leadership; and reducing women's time poverty and drudgery.

Targets and gender-disaggregated indicators will be allocated to each activity to ensure effective monitoring and evaluation. Below is additional information on the proposed UNIDO demonstration sub-projects.

Electronics	Gender is a critical component of the global electronics sector as 60 - 65% of its workforce are women. In Vietnam, 80% of workers in the electronics industry are women who are working in the assembly lines (IPEN, 2024). In India, 70% of the 1.2M workforce are women. Based on the data gathered from electronics manufacturers (INTEL, 2023), women in leadership position comprise 18-30% of the total workforce while for non-technical position it is 55 to 58%.
Buildings	Gender dimensions in the Asian building markets highlight the disparities and opportunities for women within the industry, impacting their roles, access to resources, and economic participation. Women are often underrepresented in the construction workforce, typically occupying lower-paying, less skilled positions and facing significant wage gaps compared to men. They also encounter unique health and safety risks, limited access to vocational training, and underrepresentation in leadership roles. Structural and cultural barriers hinder women's career progression, but increasing their participation can yield economic benefits and promote gender equality. Implementing gender-inclusive policies, advocating for equal opportunities, and involving women in design and planning can lead to more inclusive and user-friendly built environments, ultimately contributing to broader societal shifts towards gender equity and women's empowerment.
Textile	The garment sector is a key entry point for women entering the formal economy, bringing with it unprecedented opportunities for advancing women's economic empowerment. Women in Asian-Pacific countries represent one of the largest pools of untapped talent for manufacturers, and closing the gender gap in manufacturing is the key to businesses' ability to evolve and expand. Yet, many opportunities are not yet realized. Women are underrepresented in leadership positions and their voice is largely absent from relevant decision-making and social dialogue processes.

	Historically, textile manufacturing has been a male-dominated industry, and gender stereotypes and biases have contributed to the limited representation of women in the sector. Women often face barriers to entry, including limited access to education and training, as well as cultural and societal pressures that steer them away from such traditionally male-dominated fields. Commonly, identified were (i) systemic inequalities, (ii) no practice of collecting sex disaggregated indicators, (iii) pay equity gap in lower categories of employment, (iv) inadequate skills to move up to higher job categories and (v) no exposure to technological innovations in production.

Private Sector Engagement

CWFPF will have a continuous outreach to POPs-generating parts of the private sector chemicals industry, both to individual companies and to industry associations to identify potential opportunities to introduce BATs and BEPs, and to look at behaviour change at source, or pilot abatement and remediation investment opportunities and financing approaches.

Additionally, a foundation of CWFPF investment project preparation, including and discussions of optimal financing in urban and peri-urban areas will include active consultation with businesses involved in different aspects of CWP management, abatement and remediation. These are expected to include manufacturers of abatement cleantech, alternative "green chemistry" companies, firms involved with municipal solid waste processing, wastewater treatment plant and sanitary landfill design & construction, specialty waste and circular economy facilities (e.g., for sorting, segregation, disassembly etc. of Weee streams), manufacturers and suppliers of air and water quality sensors, IoT sensor monitoring & reporting networks and software, and many other industries and subindustries.

CWFPF will also regularly engage with local and international private sector investors and possible abatement and remediation equipment and project financiers as active participants in design and implementation of pilot projects. As part of its outreach during project preparation, consultations will be undertaken with industry and business associations, chambers of commerce, city-based organizations and other private sector fora in an effort to ensure that engagement mechanisms are sufficiently well designed.

Furthermore, the project will also seek active engagement to involve private sector entities as:

a. **Recipients of new knowledge and applications of BAT / BEP;**

b. **Participants in and beneficiaries of technology and innovation promotion activities;**

c. **Providers of professional services and goods for project implementation; and**

d. **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 (for example, through the ADB Private Sector Operations Department).**

CWFFP will also aim towards transformational change by harnessing the private sector as an "agent of scaling", able to take projects and financing approaches piloted under the project and bring them to national or international scale. There are two specific actions embedded in the PIF. First one output (4.2) which commits to "piloting new approaches to attract private capital in

urban CWP prevention, abatement and elimination", and second, a proposed 'pre-seed' and 'seed' financing option under the CWFPF "marketplace' for small and medium enterprises which will encourage innovative commercialization / application of 'cleaner materials' in identified supply chains.

<u>Knowledge management and learning</u>

Knowledge management and learning will be integrated throughout various elements of the project, and will be aligned with the GEF approach and policy in this regard, as well as the new policy on communications, visibility and branding. The KML work will also be aligned with the policy and practice of ADB and UNIDO as GEF Agencies.

The more detailed, budgeted knowledge management plan will be included at the CEO Endorsement Request (CER stage). Below are some principles that will be considered in this regard:

There is no "one size fits all" approach to knowledge management and learning (KML), or singular toolbox of techniques. A knowledge management and learning framework is bespoke, tailored to the circumstance, context and time.

1. **KML is aligned with the key elements of the project.**

2. **The KML activities should ensure implementers of this project improve their performance and learn from project implementation. The knowledge is to help all stakeholders make better decisions, feel more engaged, connected, supported and contributing to the primary goals and objectives of a project. KM provides linkages between creation, curation and flows to various end users.**

3. **KML should involve content and connectivity with the project being the knowledge generator and user. This approach requires: i) timely generation of knowledge, ii) ways to validate accuracy of knowledge provided, iii) methods to organize or curate knowledge, and iv) multimedia methods to transfer knowledge to appropriate users.**

4. **KML should be targeted to specific end users through communication and ensures visibility at the appropriate time it is needed. The KM needs to fit the objectives of the project and ensures it reaches the key audiences in the appropriate form which is usable or actionable. It also needs to reach the targets through a variety of means, such as i) multimedia (print, broadcast, web, traditional story-telling), ii) experiential learning by doing, iii) demonstrations and pilots, iv) policies, incentives and removal of barriers that encourage their adoption.**

5. **KML should function as a collection of materials and work with a "community of practice" including government and non-government thought leaders, influencers, community stakeholders, including women and youth.**

6. **KML must be embedded throughout the project, rather than as a stand-alone effort and promote participation, inclusion and learning across all stakeholders, vertically and horizontally. Lessons learned, best practices, and guidance notes for scaling up should be collated and disseminated according to a communication strategy developed during project development.**

7. **The project would benefit from participation in conferences, regional meetings, including COPs – which are associated with the BRS-M Conventions.**

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[1] This could be in the form of 'reimbursable grants.'

[2] 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.

[3] Referred to in past ADB Trust Fund guidelines as "partner-governed funds".

[4] Although fund flow can be exclusively through the trust fund.

[5] Source: OEC-2022 https://oec.world/en/profile/country/cri?latestTrendsFlowSelectorNonSubnat=flow1&yearlyTradeFlowSelector=flow1&depthSelector1=HS6Depthhttps://oec.world/en/profile/country/cri?latestTrendsFlowSelectorNonSubnat=flow1&yearlyTradeFlowSelector=flow1&depthSelector1=HS6Depth

[6] Even some plasticizers based on CPs, as MCCPs may contain SCCPs.

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

Yes

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

Institutional arrangements

As this is a global project the GEF Agencies will play an executing role. ADB and UNIDO will jointly provide technical and financial oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and requirement, including those related to project cycle management and corporate activities, project implementation progress, project-level reporting, mid-term review, terminal evaluation and the achievement of the project's impacts on the global environment.

Refer to the figure on project institutional schema below. A Project Steering Committee (PSC) will be formed at the project start to ensure project oversight, coherence, and institutional ownership, as well as to provide advisory inputs in key topics to be delivered by the project. The PSC will be chaired by the ADB and will additionally include UNIDO, GEF Secretariat, UNEP, the BRS Convention Secretariat, and Minamata Convention Secretariat (to be confirmed). Representatives from governments, financial institutions, private sector corporations, civil society and NGOs will be invited to participate with observer status from time to

time. While the PSC would meet annually, there will be an Executive Committee (EC) which includes ADB, UNEP and UNIDO which will be more operational and meet quarterly or as needed. The TORs for the PSC and EC will be detailed during project preparation. The institutional arrangements will also include a suite of different types of partners as illustrated below. More information on the roles ad contributions of these partnerships will be provided during project preparation.

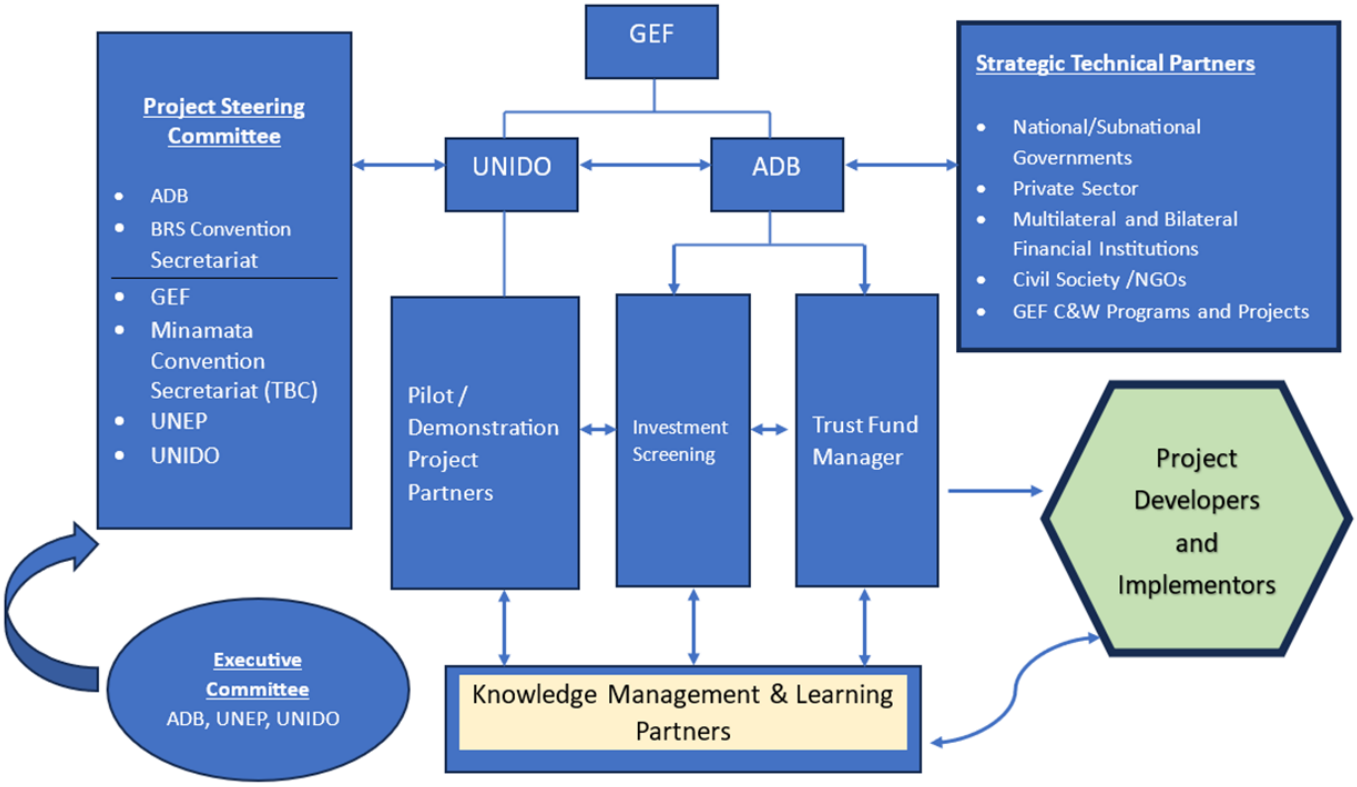

Figure 3: Institutional arrangements (provisional)

ADB Independent Fund Manager

An independent fund manager, with dedicated terms of reference consisting of several individuals with specialized skill, will be engaged to be the main point of contact for interactions with project partners and stakeholders, and process incoming requests for support. The locus of the fund management group can be varied and subject to discussion during PPG. Options include: i) internal to ADB and/or UNIDO; ii) completely external to ADB and UNIDO, or iii) hybrid, decentralized model.

The fund manager will: i) participate in relevant activities which create demand for or originate project preparation support, ii) provide technical and financial advice to project creators and developers, iii) recommend the nature of support most likely to generate interest from downstream investors, including ADB, iv) screen incoming requests for support from the CWFPF, using the "CWP lens", to ensure that criteria (see below) are sufficiently addressed, through transparent consultative process with sector or subject matter experts, v) engage prospective operational and investment entities early in the process to ensure that project preparation is aligned with potential investment fund availability, vi) process funding for project preparation activities, vii) monitor progress, viii) provide regular reports and act as Secretariat to the CWFPF Project Steering Committee, and viii) play a lead in knowledge management and learning.

UNIDO Project Management

UNIDO will execute the project in close coordination with the ADB. As GEF Executing Entity (EE), UNIDO will be responsible for the management and disbursement of the funds as well as for contracting other Project Executing Partners (PEPs) and/or sub-contractors to support the execution of project activities where necessary. Any required services will be procured during implementation following an open and competitive process to select the most appropriate service providers, following any applicable legislation and rules, including GEF and UNIDO ones.

The institutional set up in line with GEF Minimum Fiduciary Standards will be defined during PPG concerning both implementation and execution functions on relevant components for the UNIDO.

A Project Management Unit (PMU) will be hosted by UNIDO, whose composition will be decided upon during the PPG phase. In close collaboration with ADB-engaged Fund Manager, the PMU will be responsible for the day-to-day management of the project activities under Components 1, 3, Knowledge management and Monitoring and Evaluation. Additional tasks of the PMU include the development of annual workplans, support the development of the Project Implementation Reports (PIRs) that the UNIDO PM needs to submit to GEF; ensure coordination and collaboration with other projects, report project progress and liaise with the PSC, implement M&E activities. These functions as well as others, will be specified in the inception phase report and workplan. The PMU will be the main point of contact with UNIDO PM and will take care of reporting to UNIDO headquarters.

Coordination with Ongoing Initiatives and Projects

In addition to other partners to be identified, the project will include the following organizations in the consultative and partnership development process:

Basel, Rotterdam and Stockholm Convention Secretariat:

The project will foster a working relationship with the BRS Convention Secretariat. It will support the Secretariat's efforts towards implementation of multi-faceted solutions to phase out and disposal of POPs, disposal of PCBs through energy grid modernization, integrate with the SC financial mechanism, (e.g upscaling links to climate change and biodiversity), strengthening of national reporting, private sector engagement, focus on upstream and prevention of chemicals pollution, and reinforce partnerships.

Yale University Centre for Green Chemistry and Green Engineering

Based on GEF ID 10353 (UNIDO) this GEF project will work with the Yale University to draw on its green engineering network for example: i) American Chemicals Society and Green Chemistry Institute, ii) UN Green Chemistry and Commerce Cycle, iii) Japan Green and Sustainable Chemicals Network, iv) Chinese Academy of Sciences, (among others. It will also draw on the UNIDO-Yale project work on green chemistry opportunities for investment, which could include: i) manufacturing, ii) textiles, iii) food and pharmaceuticals, iv) energy, etc; and the Green Chemistry Accelerator Programme.

Global Opportunities for Long-term Development (GOLD) (GEF ID 10569)

GOLD is an initiative aimed at reducing the use of mercury in artisanal and small-scale gold mining (ASGM) with a model for sustainable artisanal gold mining that can be replicated in different countries. GOLD's specific objectives include (i) reduce mercury use; (ii) improve mining practices; enhance legal and regulatory frameworks; and (iii) increase market access to gold from certified mercury-free mining techniques. These objectives are met through GOLD supplying (i) technical assistance on technologies that reduce or eliminate the need for mercury in gold processing; (ii) capacity building to promote best practices in mining operations; (iii) awareness and education about the health and environmental risks associated with mercury use in mining; (iv) health and safety improvements, reducing the exposure of miners and local communities to hazardous substances; (v) environmental monitoring to monitor and mitigate the environmental impacts of mining activities.

Implementing Sustainable Low and Non-Chemical Development in Small Island Developing States (ISLANDS) (GEF ID 10185)

ISLANDs' key goal is to reduce chemicals and waste impacts on the environment and public health in small island developing states (SIDS), who face unique challenges and limited capacity to deal with the adverse effects of pollution. ISLANDS objectives are to (i) reduce the release of chemicals and waste, specific persistent organic pollutants (POPs), mercury, and other hazardous chemicals; (ii) strengthen policy and regulatory frameworks that enhance national and regional policies, laws, and regulations for better management of chemicals and waste; (iii) promote sustainable practices that encourage the adoption of environmentally sound management practices and technologies that prevent pollution and reduce waste; and (iv) raise awareness and build capacity among stakeholders, including government, private sector, and communities, about the risks associated with hazardous chemicals and waste. To accomplish these objectives, ISLAND finances (i) an integrated approach to chemical and waste management with broader environmental and sustainable development goals; (ii) regional collaboration among SIDS to share best practices, successful technologies, and effective policies; (iii) public-private partnerships for the planning and execution of projects to leverage resources and expertise; (iv) community involvement in the decision-making process, ensuring that interventions are tailored to local needs and conditions; and (v) monitoring and evaluation mechanisms to assess the effectiveness of the interventions and adjust strategies as necessary.

Financing Agricultural Resilience and Mitigation (FARM) (GEF ID 10872)

FARM finances projects and programs that enhance sustainable agricultural practices to combat climate change, promote biodiversity, and support sustainable development by ensuring that agricultural productivity and livelihoods are improved. The primary objectives of the project financing are (i) to encourage the adoption of agricultural practices that reduce emissions and increase resilience to climate change impacts; (ii) protect and enhance biodiversity within agricultural landscapes, promoting practices that help conserve wildlife habitats and plant varieties; (iii) implement soil and water conservation techniques to improve land productivity and reduce degradation and erosion; (iv) enhance the capacity and income of smallholder farmers through access to sustainable technologies and practices; and (v) align agricultural development with environmental conservation to ensure long-term sustainability of resources. FARM pursues these objectives by financing (i) cutting edge technologies and practices, such as precision agriculture, that can increase efficiency and reduce environmental impact; (ii) capacity building support for farmers and agricultural workers to adopt sustainable practices and technologies; (iii) policy and institutional support to governments and organizations that increase sustainable agricultural practices and create favorable market conditions for sustainably produced goods; (iv) research and development in new solutions to agricultural challenges that are environmentally sound; and (v) community engagement in the planning and implementation of projects to ensure that the solutions are accepted and culturally appropriate.

Global Covenant of Mayors (GCOM)

GCoM has a range of initiatives and collaborative efforts to mobilize resources for sustainable urban development and climate action across cities globally. GCoM's financing program is a multifaceted approach that leverages international partnerships, innovative finance models, and capacity building to support cities around the world in achieving their climate goals and enhancing urban sustainability. GCoM, using its vast network and including ASEAN Mayors, supports cities through (i) innovative financing models that include working relationship with multilateral, bilateral and commercial banks**;** (ii) funding opportunities through partnerships, like the City Climate Finance Gap Fund and the FMDV Global Fund for Cities Development, bridging the gap in early project development phases; and (iii) focus on energy and climate resilience, improving urban energy access and enhancing climate resilience.

C40 Cities Climate Leadership Group

C40, a network of the world's megacities committed to addressing climate change, provides direct financial support and technical support to develop and finance sustainable urban climate change solutions. C40's support includes (i) direct funding from philanthropic organizations, national governments, and international institutions to reduce greenhouse gas emissions; (ii) capacity building and technical assistance to help cities

develop projects that are bankable and sustainable; (iii) facilitating access to finance as an intermediary between cities and potential funders, including international financial institutions, private investors, and government funding programs; (iv) innovative financing models designed to attract private investment into public sector initiatives like green bonds, public-private partnerships, and climate funds; and (v) networks and partnerships, leveraging its extensive network of global cities, financial institutions, and other stakeholders.

Local Governments for Sustainability (ICLEI)

ICLEI supports local and regional governments in their efforts to address climate action, energy efficiency, resilient cities' planning, sustainable urban mobility, biodiversity and circular economy strategies. ICLEI's Transformative Actions Program (TAP) aims to transform initial infrastructure project concepts with low-emission and climate-resilient development into mature, robust, and bankable projects ready for financing and implementation. Projects that demonstrate high transformative potential are given increased visibility to potential investors and connected to project preparation facilities and financial partners. For a project to be eligible for TAP, it must be submitted by a local or subnational government (or a partner with the government as a key stakeholder), have been approved by a decision-making body like a municipal council, and must seek funds specifically for infrastructure investments aimed at accelerating net-zero and climate-resilient development. Projects are scored based on their potential for transformative impact, including their ability to mitigate greenhouse gas emissions, adapt to climate change, and support local and national sustainability priorities.

Global Electronics Management (GEM) Program (GEF ID 11553)

The Global Electronics Management (GEM) Program aims to significantly reduce the generation of electronic wastes (e-wastes) and increase circularity and resource recovery in the electronics sector of developing countries, through the creation of an enabling environment, including access to finance, technology and policy and legislative change that fosters responsible electronics management.

GEM is envisaged to catalyze the transition from environmentally unsound practices within the electronics value chain towards a cleaner, more sustainable and resource-efficient supply chain and lifecycle. With the global electronics market increasingly reliant on digitalization and modern conveniences, the program systematically addresses the substantial environmental impacts associated with this sector, including resource depletion, chemical pollution, and greenhouse gas (GHG) emissions. Embracing an inclusive value-chain approach, GEM seeks to foster cleaner production methods and promote sustainable consumption patterns along the entire lifecycle of products, from design to re-use. This encompasses reducing hazardous chemicals in production processes, innovating designs for resource and energy-efficient electronic components and products, and establishing markets for durable and repairable goods. Furthermore, GEM aims to cultivate a resource efficient value chain by facilitating the reuse, repair, and material recycling of valuable electronic components, while mitigating hazardous waste streams through environmentally sound resource recovery initiatives. Achieving transformational change in the electronics industry will be incentivized through policies and fostering multi-stakeholder cooperation, demonstrating customized strategies to replace resource-intensive processes and materials with more sustainable alternatives and creating a more circular and transparent value chain. Under this CWFPF project, the electronics sector will also be included as pilot project, and thus synergies, and coordination from the GEM project will be sought to ensure efficient knowledge exchange and sharing of lessons learned.

Eliminating hazardous chemicals from supply chains (GEF ID 11169)

The program aims to transition fashion and construction supply chains toward green by design and strengthen the enabling environment necessary to support this transformation. Fashion and construction are among the top three economic sectors that contribute significantly through their supply chains to pollution, greenhouse gas (GHG) emissions, land degradation, water pollution, and threats to biodiversity. Fashion, for example, contributes more GHG emissions than all global transport, including air travel. For its part, construction contributes 39% of global GHG emissions, and contributes significantly to water pollution, land degradation, biodiversity loss, and chemicals pollution. The Supply Chain Integrated Program seeks to address environmental degradation from globally significant supply chains through the lens of chemicals. Ideally, it will

be the catalyst for integrating actions across several environmental dimensions. The program aims to create clean, circular (as far as possible), regenerative, and transparent supply chains that drive innovations in new materials, methods, and policy. Under this CWFPF project, the sectors of building and textile will also be targeted, and thus synergies, coordination, lessons learned with the 'Eliminating hazardous chemicals from supply chains' program will be sought.

Core Indicators

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	8500000	0	0	0
Expected metric tons of CO_2e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	8,500,000			
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting	2027			
Duration of accounting	10			

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
626.00	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 at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
	584.00			

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
42.00			

Indicator 9.3 Hydrochloroflurocarbons (HCFC) Reduced/Phased out (metric tons)

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

Indicator 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-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)
3			

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)
1			

Indicator 9.6 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)
14,240.00			

Indicator 9.7 Highly Hazardous Pesticides eliminated

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

Indicator 9.8 Avoided residual plastic waste

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
100,000.00			

Indicator 10 Persistent organic pollutants to air reduced

Grams of toxic equivalent gTEQ (Expected at PIF)	Grams of toxic equivalent gTEQ (Expected at CEO Endorsement)	Grams of toxic equivalent gTEQ (Achieved at MTR)	Grams of toxic equivalent gTEQ (Achieved at TE)
6.60			

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)

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

Core Indicator and sub-indicator information input into Portal.

An updated methodology, approach and underlying logic of GEB calculation can be found in “24-10-22 Revised Annex: GEB assumptions and methods” – which covers the proposed demonstration sub-projects and a subset of ADB provisional pipeline.

Please refer to the ANNEX: Notes on GEB methods and calculations. (Roadmap)

Total beneficiaries not possible at this early stage, however estimates may be possible during PPG and project inception.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		

Climate	Low	UNIDO Pilot projects will lead to GHG avoidance or reduction through project activities outlined under output 3,3, For the ADB CWFPF TF: Climate risk assessments will need to be included in the Trust Fund screening criteria and also feed into any proposed investment project. The project preparation activity or investment project will need to outline specific risk mitigation measures
Environmental and Social	Moderate	UNIDO plot projects are designed to yield substantial global environmental benefits (in the areas of chemicals and waste, indirectly to climate change) as well as positive socio-economic impacts related to gender, the private sector, and the youth. For the ADB CWFPF TF: Environment and social safeguard assessments will need to be included in the Trust Fund screening criteria and also feed into any proposed investment project. The project preparation activity or investment project will need to outline specific risk mitigation measures. Also additional measures may be required, including ethnical and minorities or indigenous peoples management concerns. GEF funds will not be associated with any involuntary resettlement.
Political and Governance	Low	For ADB relationships with Government are defined by Country Partnership Strategies and other country-specific protocols. In some cases, for example fragile and conflict affected States, ADB will have specific guidance in place. In other cases where there is political upheaval, for example Myanmar and Bangladesh, the project will be guided by ADB policy with respect to operations in the country.
INNOVATION		
Institutional and Policy	Low	ADB and UNIDO will ensure that in-country protocols of both organizations are followed. The project will prepare a communications plan which will guide such interaction. At the Trust Fund level, similar measures will be taken to adhere to the policy, practice and reporting requirements of all investors or stakeholders in the Fund. There may be implementation risks which the project will face which will involve careful relationship management at national, subnational levels. Further at the policy level, the project communications and KML strategy will focus on encouraging transformational change, incrementally. The C&W academies and other KML actions will help address implementation gaps.
Technological	Moderate	UNIDO sub-projects will endeavor to connect with manufacturers, copyrights and non-disclosure policies may serve as barrier in technology sharing. ADB CWFPF TF: investments will be subject to due diligence with respect to technologies developed or deployed
Financial and Business Model	Moderate	ADB CWFPF: There may be risk in that the investment readiness does not give rise to viable investments. This is not uncommon for these types of funds based on prior experience. The finance facility will put in place: a) solid governance arrangements, b) strong fund management and sector / product

		domain expertise, c) appropriate due diligence measures, and d) rigorous screening and financial oversight. The strategy will be to cast a wide net, but be selective about potential "winners".
EXECUTION		
Capacity	Moderate	UNIDO will be the co-implementing agency focusing on the pilot projects. UNIDO has proven track records working on the proposed interventions, especially with BAT/BEP. ADB CWFPF: will provide appropriate capacity gap assessment and training as needed.
Fiduciary	Low	Similar to financial and business model risks, there will be regular reporting and oversight. If there are gaps, low levels of disbursement, or if there is mission drift - under the governance structure, remedial action will be considered.
Stakeholder	Low	The project cannot be all things to all people. Therefore, expectations will need to be well managed across all stakeholders through transparency and disclosure. For investors and donors the 'marketplace' will have a special function which will provide a dashboard, combined with reporting requirements to specification
Other	Moderate	CWFPF Fund Parameters too narrow. Currently under the GEF C&W focal area programming directions, the priority focus is on Convention-listed chemicals. This might be considered 'narrow' by other donors as well as project developers and owners. The Facility will need to be sufficiently flexible to accommodate participation from parties that are interested in other 'chemicals of concern'. This would include lead (Pb), for example, implying coverage of heavy metals, or methane (CH4), which would extend the applicability of the Fund to such initiatives as landfill remediation, livestock management, natural gas processing or wetland / marshland conservation. This opens up the opportunity for the Facility to host a number of other Trust Funds.
Overall Risk Rating	Moderate	Medium

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

The project is consistent with all three objectives of the GEF 8 Chemicals and Wastes Focal Area. It will contribute to creation and strengthening of the enabling environment and policy coherence to transform

manufacture, use and sound management of chemicals and to eliminate waste and chemical pollution. It will contribute to eventual build-up of hazardous chemicals in the environment. Finally it will directly address elimination of hazardous chemicals and wastes. The project is also aligned with the missions and mandates of the BRS-M Conventions, and addresses priorities outlined in the new Global Framework for Chemicals (GFC).

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities:

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

ADB Stakeholder Consultation Matrix

Stakeholder (s)	Approximate date(s)	Nature of discussion / collaboration on potential role
Eiko Ishikawa, Shibata Sensei UNU-IAS, Tokyo (re POPs monitoring study	5 May 2023	Potential resource on POPs monitoring.
Russel Hirst, Managing Director Wiser Environment, Viet Nam / UK	5 June 2023	Technical resource on lead and other heavy metals treatment
Andrea Villaroman, Department Head, Climate Change and Environmental Sustainability Department, Quezon City, Philippines	27 June 2023	Potential client for CWFPF

Richard Santuile, OIC, Department of Sanitation & Clean up Works, Quezon City	29 June 2023	Potential client for CWFPF
Nuray Atimov, Director CAREC Regional Environmental Center, Astana, Kazakhstan	02 July 2023	Technical inputs and potential strategic partner
Charles Melhuish, Advisor Clean Air Asia, Metro Manila, Philippines	01 June 2023	Technical inputs and potential strategic partner
Ebenise Bester, Lead Investment Officer, FinDev Canada, Montréal, Canada	07 June 2023	Potential bilateral investor
Ivan Fuentetaja, Cities Development Initiative for Asia (CDIA), Mandaluyong, Philippines	Multiple in-person consultations between June and August 2023	Potential 'partner managed fund' and strategic technical partner
Daniel Robinson, Project Lead, ICLEI South Asia, Chennai, India	07 July 2023	Potential 'partner managed fund" and strategic technical partner
David Torres, Managing Director, Wellness TechGroup S.A., Seville, Spain (re tech aspects of pollution monitoring IOT sensor networks, use in cities in OECD countries)	28 June 2023	Private sector partner
Eszter Mogyorosy, Head, Innovative Finance, ICLEI	25 Sept 2023	Potential 'partner-managed fund" through TAP
Ashish Kulkarni, Partner and Associate Director, Center for Sustainable Earth	25 September 2023	Technical resource / knowledge partner
Anita George, Edina Capital	26 September 2023	Potential funder, knowledge partner
Harrey Hadi, Head, Local Development Planning Agency, Palembang, Indonesia	26 September 2023	Potential client city (hazardous waste management)
Nisha Priya, Sustainable Cities Specialist, Greater Chennai Corporation	26 September 2023	Potential client access
Riza Hamsah, Coordinator, Foreign Funding Planning, BAPPENAS, Indonesia	26 Sept	Indonesia Government partner
Mark Watts, Executive Director, C40 Cities Climate Leadership Group, London, UK and Milag San-Jose Ballesteros, Regional Director, Asia, Singapore	13 November 2023	Potential 'partner managed fund' and strategic technical partner

Christel Bourbon Seclet, Director, C40 City Finance Program, Paris, France Andreas Fernandes, Managing Director, Climate Knowledge and Partnerships C40, London, UK Zachary Tofias, Director, Food and Waste, C40, Boston, MA, USA Jessy Aparvoo, Head, Cities Finance Facility, C40, Edinburgh, Scotland	Multiple between mid-October 2023 and mid-July 2024	Potential 'partner managed fund' and strategic technical partner
Andy Deacon, Co-Managing Director, Global Covenant of Mayors (GCOM)	05 May 2024	Potential 'partner managed fund' and strategic technical partner
Asma Jhina, City Resilience and Climate Finance Advisor, GCOM, London, UK	Multiple between 20 September 2023 and 11 July 2024	Potential 'partner managed fund' and strategic technical partner
Margot de Groot van Embden, Policy Advisor Local Development Finance, French Ministry for Europe and Foreign affairs (formerly with FMDV Global Fund for Cities), Paris, France	Multiple between 20 September 2023 and 30 June 2024	Potential 'partner managed fund' and strategic technical partner
Paul Bulson, Senior Blended Finance Specialist, DALCO Point, Seattle, WA, USA	Multiple between mid-July 2023 and 30 June 2024	Technical advisor
Yumi Chung, Team Lead, Policy Advisor, International Environment Cooperation Centre, Korea Environmental Industry and Technology Institute (KEITI), Incheon, Republic of Korea	16 June 2024	Potential investor, strategic technical partner
Rolf Payet, Executive Secretary, Secretariat of the BRS Conventions, Geneva, Switzerland	18 June 2024	Project steering / advisory committee, strategic technical partner
Frank Moser, Head of Unit, Programme Resources and Oversight, Secretariat of the	Multiple, with in-person from 09-11 July 2024	Project steering / advisory committee, strategic technical partner

BRS Conventions, Geneva, Switzerland		
ADB Natural Capital financing team, ADB Green Finance Hub team, ADB Water and Urban funds teams	Regular consultations	Contribute to design and implementation of CWFPF

Stakeholder engagement

The poor and marginalized are disproportionately impacted by both the cause of the problem (unsustainably managed agriculture, industry and waste) of CWP and its impacts (disease, poisoning, environmental degradation, water and food security issues, etc.). Large quantities of POP-based pesticides are being applied to peri-urban agricultural areas, chemical-laden industrial wastes are being dumped into rivers and municipal wastewater treatment facilities (which cannot treat them), plastics are being burnt by factories and households illegally releasing carcinogenic fumes into the atmosphere. Waste (especially single-use plastic) clogs waterways and sewers, exacerbating flooding and creating breeding grounds for disease vectors.

The poorest and most vulnerable coastal communities that are most reliant on coastal and marine resources for food and livelihoods, as well as poor and marginalized urban communities living close to industrial areas in cities and polluted waterways are the most affected by environmental degradation. CWFPF aims to reduce these impacts, creating healthier, more livable environments for poor communities and improving opportunities for coastal and marine livelihoods, e.g., fisheries and tourism, while creating new business and job opportunities.

Academe, Private Sector, Technical experts, Multilateral and Bilateral funders, International Organizations and Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs) and city / local governments have been consulted during the preparation of this PIF.

Joint work programs on POPs and Mercury abatement will be agreed 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 and its financing requirements for collection, sorting, recycling and other circular economy facilities related to waste management. Participating country and local governments will play key roles in project preparation and implementation. The private sector will be engaged, as described herein.

The project is being designed to be participatory, inclusive and to have gender equality and poverty reduction / alleviation elements. Regional and local NGOs/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 project activities is critical to successful outcomes and the sustainability of interventions.

A more detailed stakeholder analysis, to be undertaken during Project Preparation, will lead to development of a comprehensive Stakeholder Engagement Plan. The plan will adhere to the core principles of the new GEF Policy on Stakeholder Engagement (2018) and will be supplemented by ADB principles for stakeholder engagement.

In summary, stakeholder engagement will seek to:

a. Be constructive, responsive, accountable and transparent,

b. Encourage fair, balanced and inclusive participation of stakeholders (including women and youth),

c. Apply across all GEF-financed activities,

d. Be 'meaningful" in the sense that it will promote sustained commitment and action (including allocation of resources) through the project cycle, and

e. Be supported by publicly available and accessible documentation.

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)

ADB	GET	Global	Chemicals and Waste	POPs	Grant	20,046,000.00	1,804,000.00	21,850,000.00
UNIDO	GET	Global	Chemicals and Waste	POPs	Grant	9,037,000.00	813,000.00	9,850,000.00
Total GEF Resources ($)						**29,083,000.00**	**2,617,000.00**	**31,700,000.00**

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

275300

PPG Agency Fee ($)

24700

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG($)	Agency Fee($)	Total PPG Funding($)
ADB	GET	Global	Chemicals and Waste	POPs	Grant	137,650.00	12,350.00	150,000.00
UNIDO	GET	Global	Chemicals and Waste	POPs	Grant	137,650.00	12,350.00	150,000.00
Total PPG Amount ($)						**275,300.00**	**24,700.00**	**300,000.00**

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
Total GEF Resources					**0.00**

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
CW-1	GET	2,908,300.00	39296000

CW-2	GET	15,995,650.00	156882000
CW-3	GET	10,179,050.00	104622000
Total Project Cost		**29,083,000.00**	**300,800,000.00**

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
GEF Agency	Asian Development Bank	Loans	Investment mobilized	264500000
GEF Agency	Asian Development Bank	Grant	Investment mobilized	25000000
Private Sector	Manufacturers, suppliers, and/or recyclers related to the pilot demonstrations	In-kind	Recurrent expenditures	2000000
Private Sector	Manufacturers, suppliers, and/or recyclers related to the pilot demonstrations	Grant	Investment mobilized	8000000
GEF Agency	UNIDO	Grant	Investment mobilized	50000
GEF Agency	UNIDO	In-kind	Recurrent expenditures	250000
Recipient Country Government	National governments of the countries identified for the pilots under Output 3.3 and Output 4.1	In-kind	Recurrent expenditures	1000000
Total Co-financing				**300,800,000.00**

Describe how any "Investment Mobilized" was identified

Note on co-financing:

Roughly $ 300 million will be drawn from one or two loans in the ADB portfolio that have potential to originate projects for the proposed CWFPF. These could be in agriculture, urban or water sector. A sample loan in Pakistan is cited below which serves as a reference baseline. Further, an additional $ 20 -25 million will be added as finance for the actual Trust Fund. In this way the combination of GEF catalytic funding and ADB match funding, should give confidence to additional investors into the Trust Fund, or for investors to align their funds with the facility in a parallel manner. The project will actively undertake resource mobilization from sovereign and non-sovereign sources.

For UNIDO, co-financing will be sought from the private sector for proposed pilot / demonstration sub-projects under Output 3.3. Further co-financing will be provided through grants and in-kind sources.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Yoko Watanabe	9/17/2024	James Baker	+63286324444	aabraham.consultant@adb.org
GEF Agency Coordinator	Ganna Onysko	9/17/2024	Maren Mellondorf	+431260263647	m.mellendorf@unido.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)

ANNEX C: PROJECT LOCATION

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

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title
PAK Khyber Pakhtunkhwa Cities Improvement Project 51036-002 Initial ESS Compliance Review
24-09-17 ADB REA Checklist for All CWFPF Financing
24-09-12 UNIDO ES_Screening_C&W Financing Partnership Facility

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Principal Objective 2	No Contribution 0	Significant Objective 1	No Contribution 0

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
Influencing models			
	Transform policy and regulatory environments		

Level 1	Level 2	Level 3	Level 4
	Strengthen institutional capacity and decision-making		
	Convene multi-stakeholder alliances		
	Demonstrate innovative approaches		
	Deploy innovative financial instruments		
Stakeholders			
	Private Sector		
		Capital providers	
		Financial intermediaries and market facilitators	
		Large corporations	
		SMEs	
	Beneficiaries		
	Civil Society		
		Non-Governmental Organization	
		Academia	
	Type of Engagement		
		Information Dissemination	
		Partnership	
	Communications		
		Awareness Raising	
		Behavior Change	
Capacity, Knowledge and Research			
	Capacity Development		
	Knowledge Generation and Exchange		
		Theory of Change	
	Innovation		
	Knowledge and Learning		
		Knowledge Management	
		Innovation	
		Capacity Development	
		Learning	
	Stakeholder Engagement Plan		
Gender Equality			
	Gender Mainstreaming		
		Beneficiaries	
		Women groups	
		Sex-disaggregated indicators	
		Gender-sensitive indicators	
	Gender results areas		
		Access and control over natural resources	
		Participation and leadership	
		Access to benefits and services	

Level 1	Level 2	Level 3	Level 4
		Capacity development	
		Awareness raising	
		Knowledge generation	
Focal Areas/Theme			
	Chemicals and Waste		
		Mercury	
		Artisanal and Scale Gold Mining	
		Persistent Organic Pollutants	
		Unintentional Persistent Organic Pollutants	
		Sound Management of chemicals and Waste	
		Waste Management	
			Hazardous Waste Management
			Industrial Waste
			e-Waste
		Emissions	
		Disposal	
		New Persistent Organic Pollutants	
		Polychlorinated Biphenyls	
		Plastics	
		Eco-Efficiency	
		Pesticides	
		Industrial Emissions	
		Open Burning	
		Best Available Technology / Best Environmental Practices	
		Green Chemistry	