



United Nations Development Programme

Project title: Global Electronics Management (GEM) Program Child Project in Cambodia	
Country(ies): Cambodia	Implementing Partner (GEF Executing Entity): Ministry of Environment of Cambodia
Execution Modality: National Implementation Modality (NIM)	
Contributing Outcome (UNSDCF/CPD, RPD, GPD): UN Sustainable Development Cooperation Framework: Outcome 3: By 2028, people in Cambodia, especially those at risk of left behind benefits from healthier, gender inclusive natural environment. UNDP Country Programme Document: Output 3.2: Circular economy promoted to reduce pollution and improve consumption behaviors and production practices.	
UNDP Social and Environmental Screening Category: Moderate	UNDP Gender Marker: 2
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Expected date of Mid-Term Review (MTR) submission to the GEF: 1 October 2028	Expected date of Terminal evaluation (TE) submission to the GEF: 1 October 2031
Expected Operational Closure Date: 1 January 2032	Expected Financial Closure Date: 1 July 2032
Brief project description: Cambodia is characterized by a high and rapidly growing volume of e-waste with limited existing e-waste management infrastructure and a high reliance on the informal recycling sector. The country's consumption of electronic and electric equipment (EEE) has drastically increased, leading to significant challenges to e-waste management. At present, e-waste is managed mostly by a large and scattered informal sector in an environmentally unsound manner. This has increased emissions of persistent organic pollutants (POPs) including unintentionally produced POPs (UPOPs) and polybrominated diphenyl ethers (PDBEs), as well as mercury and other toxic substances. The project will support Cambodia in its effort to curb the rapid increase in e-waste, and address other ongoing challenges, such as a lack of information and data, limited enforcement of the legal framework for the management of POPs, mercury, and e-waste, and lack of infrastructure capacity	

and private sector investment, amplifying the volumes of toxic emissions and negative impacts on human health and the environment.

This project aims to improve resource circularity and reduce the release of hazardous chemicals and wastes in the electronics value chain by addressing transformation levers (policy, infrastructure, innovation and learning, and multistakeholder dialogues).

The project approach is to support: Enabling policy on circular electronics; Cleaner production and sustainable consumption and use; Resource efficient value chain across the electronics sector; and Knowledge management, communication, and program-level coordination.

Expected outcomes include national-level plans, policies, and incentive mechanisms for the circular electronics value chain; innovative and resource efficient products; markets to support innovation and behavior changes towards increased longevity; mechanisms to maximise reuse, repair, and material recycling; removal of hazardous waste streams in the electronics sector; knowledge management platform; and coordination and linkages among the relevant stakeholders.

The project will deliver multiple global environmental benefits (GEBs), including the reduction of greenhouse gas emissions (27,237 tons) and chemicals of global concern and their waste (2.7 tons of POPs and 0.3 kg of mercury removed or disposed, 20,411 tons of POPs/mercury-containing materials and products directly avoided) and POPs to air (1.7 gTEQ reduced). Other expected results include improved public health, a strengthened informal sector, and enhanced livelihoods.

FINANCING PLAN

GEF Trust Fund grant	USD 4,000,000
UNDP TRAC resources	N/A
Confirmed cash co-financing to be administered by UNDP	N/A
(1) Total confirmed co-financing to this project not administered by UNDP	USD 4,000,000
Ministry of Environment	USD 10,000,000
ECOBATT Energy Investment International Co. Ltd	USD 10,000,000
UNDP (in-kind)	USD 6,100,000
(2) Total confirmed co-financing to this project not administered by UNDP	26,100,000
(3) Grand-Total Project Financing (1) + (2)	USD 30,100,000
Agreed by (Signatures):	
UNDP	Implementing Partner
 DocuSigned by: 5341BE539BD1458... Mr. Enrico Gaveglia Resident Representative UNDP Cambodia	 H.E. Dr. Eang Sophalleth Minister Ministry of Environment
Date: 01 April 2026	Date: 03 April 2026

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Acronym	Meaning
BAT	Best Available Techniques
BEP	Best Environmental Practices
BPPS NCE	Bureau for Policy and Programme Support, Nature, Climate and Energy
CO	Country Office (of UNDP)
CoC	Chemicals of Concern
CSOs	Civil Society Organizations
DIM	Direct Implementation Modality
DP	Development Partners
EIA	Environmental Impact Assessment
EEE	Electrical and Electronic Equipment
EPR	Extended Producer Responsibility
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
ESMPs	Environmental and Social Management Plans
FSP	Full Sized Project
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
GHG	Greenhouse Gas
GGGI	Global Green Growth Institute
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GPP	Green Public Procurement
HACT	Harmonized Approach to Cash Transfer (of UNDP)
ICT	Information and Communication Technology
IGO	Intergovernmental Organization
LoA	Letter of Agreement
NIM	National Implementation Modality
MEF	Ministry of Economy and Finance
MISTI	Ministry of Industry, Science, Technology & Innovation
MoC	Ministry of Commerce
MoE	Ministry of Environment
Mol	Ministry of Interior
MoLVT	Ministry of Labour and Vocational Training
MoT	Ministry of Tourism
MoWA	Ministry of Women's Affairs
MPWT	Ministry of Public Works and Transport
NGO	Non-Governmental Organization
PIF	Project Identification Form
PIR	GEF Project Implementation Report

Acronym	Meaning
POPP	Programme and Operations Policies and Procedures
POPs	Persistent Organic Pollutants
PPG	Project Preparation Grant
PPP	Public Private Partnership
RGC	Royal Government of Cambodia
OSH	Occupational Health and Safety
PDBEs	Polybrominated Diphenyl Ethers
PRO	Producer Responsible Organisation
SAICM	Strategic Approach to International Chemicals Management
SCP	Sustainable Consumption and Production
SDG	Sustainable Development Goal
SES	Social Environmental Standards
SME	Small and Medium Enterprise
SOP	Standard Operational Procedures
SPP	Sustainable Public Procurement
STAP	GEF Scientific Technical Advisory Panel
SUP	Single-use plastics
ToR	Terms of Reference
TWGs	Technical Working Groups
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UPOPs	Unintentionally Produced POPs
WB	World Bank

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II. DEVELOPMENT CHALLENGE

Development challenges associated with the EEE sector

Over the last two decades, economic and population growth in Cambodia coupled with the advancements in and affordability of technology has resulted in a surge in the consumption of electronic and electric equipment (EEE), leading to a significant generation of e-waste. From 2011 to 2021, the population grew from 13.8 million in 2008 to almost 17.4 million in 2023.¹ This expanding economy and population have markedly accelerated the demand for EEE across the country, positioning the sector as an increasingly important component of the country's development. By 2024, Cambodians owned an estimated 24 million ICT devices, including 631,600 desktops, 1.57 million laptops, 1.88 million tablets, and 19.90 million cellphones.²

The growing EEE sector also amplifies concerns over the management and environmental impact of the resulting waste streams. In Phnom Penh, for instance, the total volume of municipal waste increased drastically from 343,657 metric tons in 2007 to 1,288,223 metric tons in 2022 (Ministry of Environment, 2023). Along with the rapidly growing consumption of EEE, between 2010 and 2015, the volume of e-waste increased by 70%.³ This placed Cambodia as the country with the third-highest e-waste volume growth in the East and Southeast Asia region during this period. In 2019, Cambodia generated 19,000 MT of e-waste.⁴ Cambodia does not produce Information and Communications Technology (ICT) EEE, but imports both new and second-hand equipment. Most of the second-hand EEE is of low quality, easily broken, or used only for a short period of time, and some of it is illegally imported.

Unsound management of e-waste, including acid-leaching, dumping, and open burning of e-waste, leads to emissions and releases of persistent organic pollutants (POPs), including unintentional persistent organic pollutants (UPOPs) and PBDEs (used as a flame retardant), but also risks of releases of mercury and other hazardous toxic substances, heavy metals, and chemicals of concern such as lead and cadmium, which pose a threat to human health and the environment through air emissions and soil contamination.

These pollutants are highly toxic, even at low concentrations, and are known for their persistence, ability to bioaccumulate, and long-range environmental transport (and women and children exposed to pollutants from unsound management of e-waste experience negative effects on reproductive health, immune systems, cancers, and birth defects⁵). Open burning of e-waste, in particular plastics (which comprises approximately 20% of e-waste), also generates greenhouse gas (GHG) emissions and short-lived climate pollutants such as black carbon. Burning of one MT of plastic generates 2.9 MT of CO₂, and black carbon has global warming potential up to 5,000 times greater than CO₂ and linked to detrimental health impacts. CO₂ emissions are also created during the manufacturing, transportation, and use of EEE and extending the life of the equipment could reduce such emissions by reducing the frequency of replacing equipment.⁶

While the informal sector is instrumental in driving collection efforts, it lacks the capacity and technology for full-cycle recycling. Non-valuable or unusable e-waste residues, such as plastics, circuit board fragments, or burnt casing, are frequently discarded in environmentally harmful ways. Such practices have created a toxic footprint concentrated around major recycling hubs, impacting air, soil, and water quality, while informal workers often remain unaware of the severe health risks involved.

¹ World Bank. 2024. **Population**, total - Cambodia. Retrieved May 16, 2025, from <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=KH>

² World Population Review, 2024. Computers per Capita by Country 2024, from <https://worldpopulationreview.com/country-rankings/computers-per-capita-by-country> and Cell Phones by Country 2024, from <https://worldpopulationreview.com/country-rankings/cell-phones-by-country>

³ Shunichi Honda, Deepali Sinha Khatriwal, and Ruediger Kuehr. (2016). Regional E-waste Monitor: East and Southeast Asia, United Nations University VIE – SCYCLE, Bonn, Germany

⁴ UNU/UNITAR, ITU, ISWA. 2020. The Global E-waste Monitor 2020.

⁵ Caterbow, A. and Hausmann, J. (2016). Women and Chemicals: The impact of hazardous chemicals on women. Women in Europe for a Common Future (WECF). https://www.wecf.org/wp-content/uploads/2018/12/WomenAndChemicals_PublicationIWD2016.pdf

⁶ UC Irvine, 2022. "UCI study finds 53 percent jump in e-waste greenhouse gas emissions between 2014, 2020", University of California Irvine News, 26 October 2022, <https://news.uci.edu/2022/10/26/uci-study-finds-53-percent-jump-in-e-waste-greenhouse-gas-emissions-between-2014-2020/>

Neither informal nor semi-formal operators follow environmentally sound recycling protocols, and common practices such as open burning, acid-leaching, and cable stripping result in serious environmental degradation and health risks. A core challenge lies in the economic imbalance between the formal and informal sectors. Waste owners often expect payment for their discarded electronics, and the informal sector can operate at significantly lower costs due to a lack of regulation. They can therefore offer better prices than compliant formal recyclers. Formal actors must follow proper hazardous waste management, legal compliance, and occupational safety procedures, making it difficult to compete economically with informal counterparts.

Despite baseline policy commitments put forward by the Government of Cambodia to unlock circular economy potentials in the country, several barriers need to be addressed to reduce the environmental and human impact of electronics management. The implementation of existing laws faces challenges due to limited capacity, infrastructure (formal dismantling, recycling, and disposal facilities), and investments for promoting circular production and sound e-waste management. The policy and regulatory environment that does not sufficiently promote, incentivize, or ensure environmentally sound management of e-waste, resulting in POPs and mercury releases to the environment, health impacts to women and children, and limited implementation and enforcement capacity for the e-waste management legal framework.

Additional challenges include limited capacity of officers; predominance of e-waste management by a large and scattered informal sector; and limited data on the amounts of e-waste generated, collected, dismantled, burned, landfilled, and exported, as most of these activities are handled by the informal sector. These issues pose a challenge in understanding the actual status quo and developing appropriate policy responses. Limited information and data on the volumes and practices regarding the e-waste value chain, including the differentiated roles and challenges of women and men along the value chain, because e-waste data is not regularly collected, monitored, or managed.

The lack of effective monitoring systems to prevent the import of e-waste and associated banned chemicals, which is due to incomplete or false labeling, limited awareness of officials, and inadequate facilities to monitor or verify imported consignments by the General Department of Customs and Excise/Ministry of Economy and Finance (MEF). The country also lacks platforms for cooperation and sharing of business models and best available technologies and best environmental practices (BAT/BEP) capacities to track, collect, separate, recover, and recycle valuable electronic components in a formal, safe, and environmentally sound manner.

Barriers to advance circular economy and resource-efficient electronics value-chain

While Cambodia has piloted several activities in the waste management area, the majority of these efforts concentrate on downstream interventions to tackle plastic waste. Currently, there are no formal interventions or initiatives specifically addressing e-waste, leading to substantial gaps in the necessary investments to establish circularity in the EEE value chain. Furthermore, there is limited private sector investment for sound e-waste management. A few private sector companies are emerging but are still in the early stages of supporting e-waste management.⁷

There is limited investment opportunities to launch private sector-led circular initiatives in e-waste recovery, reuse, recycling, or disposal/treatment as the regulatory framework is not enforced and an EPR framework and PPPs that could provide the necessary and sustainable financing for the treatment of e-waste is not in place. This also results in an active and competitive informal sector that has lower operating costs due to environmentally unsound practices such as dumping the unwanted residues and is barrier to address the limited infrastructure for the sound management of e-waste due to a lack of private sector confidence in return on investment, hindering the safe collection, repair, dismantling, recycling, and disposal of e-waste.

Aggressive marketing campaigns and current consumer culture that patronize newly released models of ICT devices such as mobile phones, rendering mostly perfectly functional units unwanted and discarded allied to the presence

⁷ The private sector-led interventions currently focus on used lead acid batteries (ULAB) regeneration and recycling, piloting battery and e-waste collection, and co-processing of plastics at a cement kiln.

of hazardous chemicals including POPs, toxic metals, and others that hinder the recycling of materials derived from e-waste, and unavailability of final disposal capacity of the separated hazardous waste.

Lack of awareness of the negative environmental and health impacts of e-waste, particularly the health impacts on women and children and the prevalence of gender stereotypes and biases perpetuating unequal opportunities and representation across various roles and levels within the industry hindering sex parity across the value chain.

Policy Alignment

The EEE value chain in Cambodia spans multiple stages from production and sales to consumption, e-waste generation, reuse, treatment, and recycling, ultimately resulting in either secondary raw materials or final disposal. This value chain involves a wide range of stakeholders across formal, semi-formal, and informal sectors. The Cambodian government has shown a clear interest in advancing the electrical and electronic equipment (EEE) sector as part of its broader industrial development agenda. The Industrial Development Policy (IDP) 2015–2025⁸ identifies EEE assembly as a priority sector, with a focus on enhancing technical skills and expanding vocational education to support growth.

Additionally, the Automotive and Electronics Sectors Development Roadmap⁹ outlines targets to create 16,000 new jobs in electronics, with a commitment to ensure that female workers account for 50-60% of created jobs in sectors, and increase sector exports by \$1.6 billion by 2027. Initial strategies emphasize scaling up production of components and sub-assemblies, with a long-term vision of developing a fully integrated electronics manufacturing base.

Cambodia has a strong political commitment to tackling pollution. This includes participating as a Party to the Stockholm, Minamata, and Basel Conventions, and contributor to the Global Framework on Chemicals, and by strengthening its associated legal framework to address the environmentally unsound management of e-waste. The 2016 Sub-decree on EEE Waste Management; a revised (2020) law on prohibited and restricted goods which includes second-hand electronics; an Environmental Code which introduces Extended Producer Responsibility (EPR) as a key policy measure for effective waste management; and a sub-decree on hazardous waste management currently under development, along with draft sub-decree on hazardous substance management. Gender considerations are largely missing from the current electronics and e-waste policy frameworks in Cambodia.

Table 1: Regulations and policies relevant for CE and 4R actions

Title	Year	Relevant points for CE
REGULATIONS		
Environment and Natural Resources Management Code	2023	Among others, stipulates EPR as an instrument to ensure effective waste management.
Law on Environmental Protection and Natural Resources Management	1996	Provides an overarching framework and measures for environmental protection and Natural Resources Management including environmental impact assessment (EIA), monitoring, and inspection.
Investment Law	2021	Includes activities related to the circular economy.
Sub-decree 36 on Solid Waste Management	1999	Aims to regulate solid waste management in a proper technical manner and safe way.
Sub-decree 113 on Municipal Solid Waste Management	2015	Covers separating, storing, cleaning, collecting, transporting and recycling municipal solid waste and management of landfills.
Sub-decree on Hazardous Waste Management	Draft	Aims to determine the procedure for the management and control of hazardous waste from generation to final disposal. This sub-decree covers hazardous waste generating, separating, storing, collecting, transporting, exporting, importing, transiting, recycling, resources recovery, treatment and final disposal.

⁸ Council for the Development of Cambodia. 2022. *Cambodia's Industrial Development Policy (IDP)*. <https://cdc.gov.kh/wp-content/uploads/2022/04/IDP-English.pdf>

⁹ Council for the Development of Cambodia. 2023. *Automotive and electronics roadmap*. https://cdc.gov.kh/wp-content/uploads/2023/04/ENG_Auto_Electronics_Roadmap.pdf

Title	Year	Relevant points for CE
Prakas on the Use of 4 Standards for the Electrical and Electronic Equipment	2025	Adopts the four standards of the International Electrotechnical Commission to use in Cambodia.
Prakas on Responsibility of the Producer, Importer and Exclusive Supplier of the Electrical and Electronic Equipment after it becomes Waste	2025	Determines the responsibility of persons or legal entities as producers, importers, or exclusive suppliers of EEE that, after use or no longer in use and becomes waste, with the aim of strengthening the management of EEE waste in an environmentally safe manner.
Sub-decree on Eco-labelling	Draft	Provides criteria and standards to be used for eco-labelling for products inclusive of air conditioning and plastic packaging.
POLICIES		
Pentagon Strategy Phase I	2023	To build the foundation towards realizing the Cambodia Vision 2050, the Pentagonal Strategy – phase I focuses on (i) growth, (ii) employment, (iii) equity, (iv) efficiency, and (v) sustainability.
Circular Strategy of Environment (2023-2028)	2023	In alignment with the RGC Pentagon Strategy, this strategy outlays the MoE's key priorities for the next five years which builds on three strategies: clean, green, and sustainable. Waste management is a priority area.
National Circular Economy (CE) Strategy and Action Plan (2021-2035)	2021	To create a circular economy, it promotes key actions for Sustainable Consumption and Production (SCP) and zero waste societies as a key priority for proposed interventions. Identified inclusive and effective participation as a guiding principle and outlines key gender mainstreaming actions and strategies for gender and inclusivity in the circular economy.
Cambodia's Roadmap for Sustainable Consumption and Production (2022-2035)	2021	This roadmap includes key measures to realize SCP. Relevant measures include: (i) sustainable distribution through the promotion of environmental labelling and product certification and sustainable packaging and (ii) sustainable consumption through waste prevention, minimization, and management.
Policy on Municipal Solid Waste Management (2020-2030)	2021	It proposes key measures to enhance the capacity to properly manage municipal wastes.
Policy matrix on the reduction of plastic product consumption and strengthening of plastic waste management in short term	2022	This matrix includes short-term measures to be implemented by the government for the reduction of plastic product consumption and strengthening of plastic waste management.
National action plan for tackling marine litter in Cambodia	Draft	It includes a key objective to foster SCP to prevent and reduce leakage at source. Proposed measures include: (i) drafting and enacting EPR regulations and (ii) reduction of SUPs through economic measures (taxes), green procurement, reuse, and refill.
Roadmap for Sustainable Public Procurement (SPP)	Draft	It proposes priority steps towards operationalizing SPP in support for green, circular, and sustainable products and services. Key steps include the development of enabling regulations, criteria, and standards to be used for SPP, and building capacity and raising awareness among relevant stakeholders.
Resource Efficiency and Cleaner Production Strategy (RECP) and Action Plan for Industry and SME Sector 2021-2030	2021	Aims to depict the strategic direction and set the roadmap of actions for implementing RECP in industrial sector of Cambodia.

Regarding Extended Producer's Responsibility (EPR), Article 254 of the Code of Environment and Natural Resources introduces an EPR for EEE, mandating that producers and importers retrieve their EEE once it becomes waste. However, the code does not specify any penalties for failing to fulfill this obligation. To complement the code, the Ministry of Environment (MoE) has issued a Prakas (in 2025) that lists the types of EEE subject to take-back requirements and offers producers and importers the flexibility to design their own take-back systems. In addition, the MoE is also in the process of designing a voluntary EPR system for single-use plastic with technical support from UNDP, UNEP, and GIZ to mobilize engagement and financing from the private sector. The MoE, with UNDP, has developed a draft EPR roadmap that starts with a voluntary EPR scheme and subsequently moves towards a mandatory one.

Cambodia's existing systems for e-waste collection, transportation, and disposal remain inadequate in both capacity and environmental sound management. Ongoing efforts to address this include the development of a national strategy for e-waste management, stronger monitoring of imported EEE, improvements in manual dismantling practices, establishment of structured collection and transportation systems, and initiatives to safeguard worker health and safety. Additionally, new regulations have been introduced to assign responsibilities to manufacturers, importers, and suppliers for e-waste management. However, enforcement and implementation capacity remain significant barriers to progress, and a number of small-scale pilot projects were implemented from 2009-2024 to improve e-waste management and promote circularity in selected cities in Cambodia, though with limited impact so far.

Regarding green financing, several development partners such as Global Green Growth Institute (GGGI), UNDP, and United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), have supported the RGC with the development of readiness studies as well as capacity building on green bonds (both sovereign and corporate green bonds). Initial proposals are under development for blended financing and credit guarantee schemes to support energy-efficiency businesses. The Ministry of Economy and Finance (MEF) is also in the process of designing a green public procurement (GPP) under its Public Financial Management scheme with EU support. The RGC is also developing a related roadmap for Sustainable Public Procurement (SPP) as well as a sub-decree on eco-labelling to set appropriate standards and criteria for certifications of products

STRATEGY

The project has the objective to remove the existing barriers present in the status quo and achieve the objective to improve resource circularity and reduce the release of hazardous chemicals and wastes in the small/portable electronics value chain by addressing transformation levers (policy, infrastructure, innovation and learning, and multistakeholder dialogues). GEF support will be critical to allow the country to achieve its circular economy and resource recovery objectives in the electronics supply chain. GEF support will reduce or eliminate the adverse impacts of POPs, UPOPs, and heavy metals (such as mercury) on human health and environment by making strategic interventions across supply chain of recycling EEE and strengthening Cambodia's capacity for environmentally sound management of e-waste through four integrated components, aligning and interacting with the global GEM program:

- Component 1: Enabling policies on circular electronics
- Component 2: Cleaner production and sustainable consumption and use
- Component 3: Resource efficient value chain across the electronics sector
- Component 4: Knowledge management, communication, and program-level coordination

Based on the Circular Electronics System (Figure 1), the components and outcomes of this project aim to contribute to various stages or levels of the electronics value chain. In these terms, a product is considered circular only if the following three attributes apply (CEP, 2022): (i) The product is made from verified circular resources; (ii) The product is designed for use-phase optimization and material recovery; and (iii) The product's use phase is optimized, and materials are recovered at end of life.

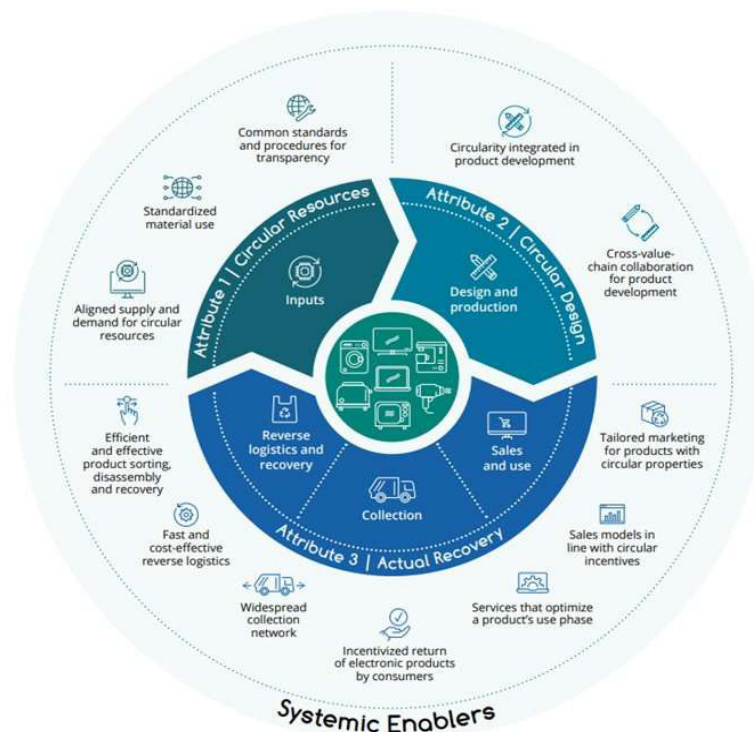


Figure 1: Circular electronics system (CEP, 2022)

Theory of Change

This Child Project aims to make strategic interventions across the life cycle of small/portable EEE and strengthen Cambodia's capacity for the environmentally sound management of e-waste through integrated approaches by targeting the reduction or elimination of POPs, UPOPs, and heavy metals in the value chain.

The project targets four thematic areas:

- i. Enable policy on CE for small/portable electronics.
- ii. Deliver technical assistance for their cleaner production and sustainable consumption and use;
- iii. Assist private sector and other stakeholders to direct investments/finance towards resource efficient value chain across the electronics sector; and
- iv. Ensure knowledge management, communication, and program-level coordination.

Cambodia's electronics sector is growing, yet current EEE production and consumption patterns are not sustainable and may result in environmental and health risks. The project responds to the following baseline conditions and barriers:

- Lack of institutional capacity, incentives, and monitoring mechanisms hinders effective CE implementation and mainstreaming of gender and sustainability considerations.
- Insufficient formal recycling infrastructure, weak enforcement of environmental and labor protections, and limited awareness of health risks perpetuate hazardous practices.
- Absence of policy incentives, standards, or market demand for eco-design, modularity, and reparability prevents broader adoption of circular product design in the electronics sector.
- The lack of investment in formal e-waste management systems, coupled with limited private sector engagement and consumer participation in circular economy schemes, undermines efforts to manage the rising e-waste volumes.

As a result of a CE approach and the application of BAT and BEP, the Child Project will implement a concrete Theory of Change (ToC) that is expected to support the Government of Cambodia to reach the ultimate goal of improving human health and the environment and to:

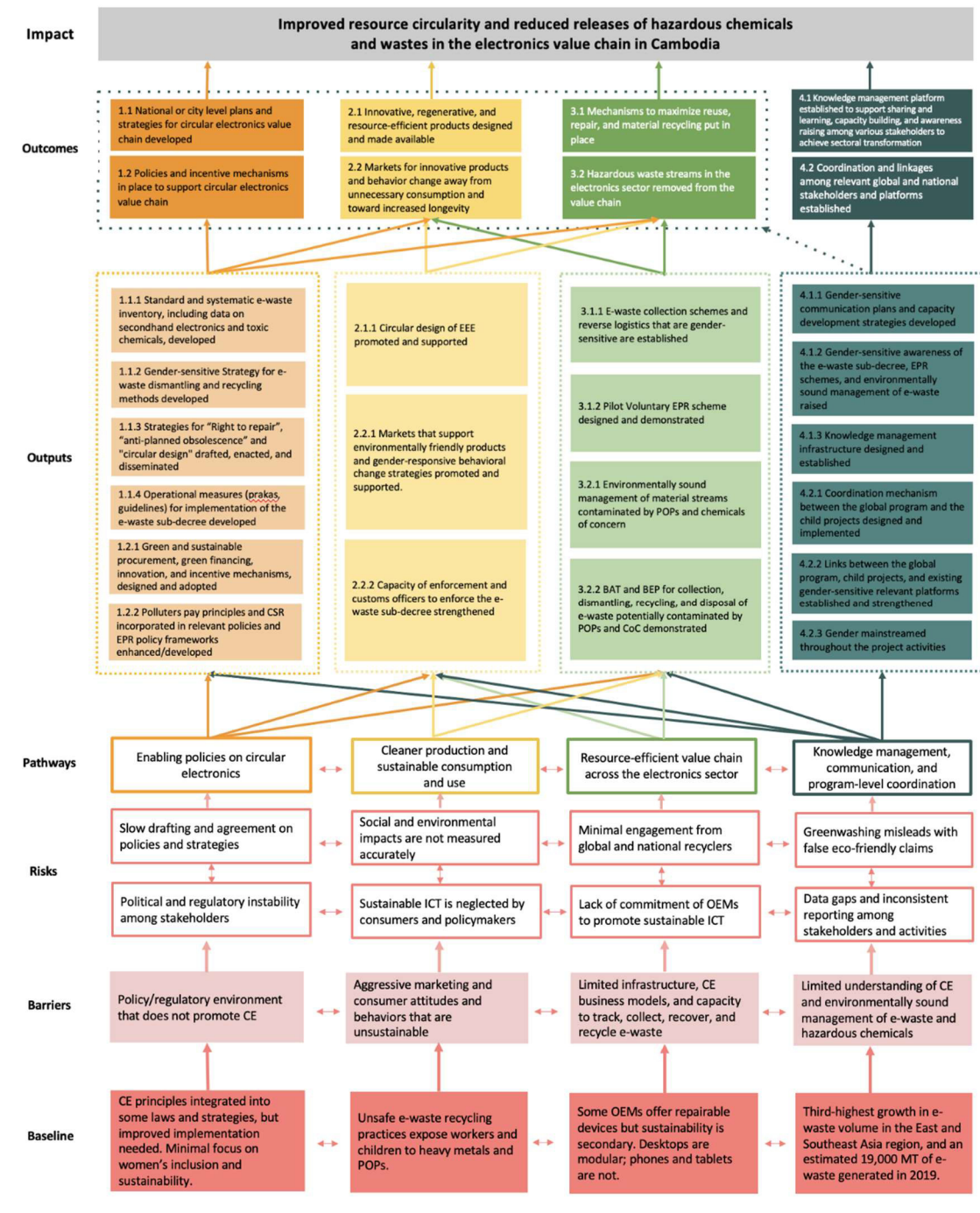
- a. Contribute to the Climate Change Mitigation efforts given GHG emissions are expected to be reduced with the avoidance of open-burning of small/portable e-waste, but also with improved life-cycle approaches that prioritizes recycling and recirculation of materials, reducing the need for primary mining and subsequently the associated emissions of GHG in these activities;
- b. Establish a proper management of hazardous chemicals such as POPs, UPOPs, and heavy metals (mercury) which should improve health and reduce environmental impacts; and
- c. Generate profitable green investment opportunities for the private sector that contribute economically to targeted stakeholders.

The ToC of the Child Project is intended to be transformative in nature as it will integrate CE principles in the EEE (manufacturing) sector by implementing measures throughout the entire value chain of products till their end-of-life (including recycling and disposal) through the proposed interventions:

1. Strengthen the institutional mechanisms and develop knowledge-based interventions including design of innovative economic models for small/portable electronics incipient industry.
2. Improve practices, systems, and technologies for small/portable EEE Manufacturing and its Supply Chain through prevention methods and socio-technical ESM models/pilots aimed for future replication;

3. Improve the small/portable e-waste management ecosystem by deploying investments, prevention measures, and infrastructures and technologies for POPs, UPOPs, and heavy metals emissions/releases reduction in e-waste processing; and
4. Make information and knowledge accessible, raise awareness, and build networks and partnerships to facilitate knowledge sharing among the EEE sector stakeholders and national and subnational Governments, and link national action to international/global programmes on small/portable e-waste.

Figure 1: Theory of Change



RESULTS AND PARTNERSHIPS

This child project aims to improve resource circularity and reduce the release of hazardous chemicals and wastes in the electronics value chain by addressing transformation levers (policy, infrastructure, innovation and learning, and multistakeholder dialogues). To this end, the project will implement the following four interlinked components.

COMPONENT 1 *ENABLING POLICY ON CIRCULAR ECONOMY FOR ELECTRONICS*

Outcome 1.1 *National or city level plans and strategies for circular electronics value chain developed*

Output 1.1.1 *Standard and systematic e-waste inventory, including data on secondhand electronics and toxic chemicals, developed*

Activity 1.1.1.1 Develop standard and systematic e-waste inventory

The project will develop an integrated data management system that will provide information on, and facilitate connections across, the e-waste value chain. The first activity will be to develop an e-waste inventory and database in partnership with the relevant private sector and enforcement agencies. The project will map and analyze stakeholders along the e-waste value chain, and review national and international e-waste inventory practices. It will include data on mobile phones, tablets, laptops, desktop computers, and TV monitors, lamps, ACs, refrigerators, other domestic appliances, second-hand products, solar energy and electric vehicle batteries, Hg-containing batteries, and POPs, mercury, and other toxic chemicals found in e-waste, building on international guidelines such as UNU's "E-waste Statistics: Guidelines on Classifications, Reporting and Indicators" and provide evidence-based information to guide subsequent interventions and the monitoring and evaluation.

Activity 1.1.1.2 Map material flows with GIS and flow modelling tools and identify leakage points and future intervention areas

This activity will provide spatial and quantitative insights into the movement of electronic products and related waste streams. Using Geographic Information Systems (GIS) and flow modeling tools, the project will track electronics—from import and distribution to use, reuse, and disposal—highlighting hotspots of informal handling, environmental leakage, and inefficient resource recovery. The findings will inform national or city-level circular economy strategies by pinpointing areas for policy, infrastructure, and capacity-building interventions that can enhance resource efficiency, reduce toxic exposure, and support environmentally friendly e-waste management.

Output 1.1.2 *Gender-responsive strategy for e-waste dismantling and recycling methods developed*

Activity 1.1.2.1 Undertake an assessment of e-waste dismantling and recycling methods in Cambodia

The project will complement the inventory with an assessment of e-waste dismantling and recycling methods including existing capacities, technologies, POPs, mercury, and other toxics management, and associated health and environmental risks. The assessment will identify required improvements and opportunities, such as appropriate BAT and BEP, options for a formalisation process, and provide guidance and training.

Activity 1.1.2.2 Develop a strategy for establishing national e-waste collection schemes and reverse logistics

This activity focuses on developing a comprehensive strategy for establishing national e-waste collection schemes and reverse logistics systems, with the integration of the informal sector as a key component. The strategy will address strengthening technical infrastructure, including hazardous waste storage capacity, and promoting repair and reuse by securing agreements with ICT manufacturers, distributors, and authorized service providers. It will

include training for after-sale service centers and repair shops on safe dismantling and functionality testing of used components in line with manufacturers' quality standards. The project will support the formalisation of informal repair shops through partnerships and training, and facilitate the development of ICT component databases to verify compatibility and enhance their placement in second-use markets. Additionally, the strategy will guide the collection of end-of-life ICT equipment and components for reuse, local recovery, or shipment to environmentally sound recovery facilities abroad. The project will assess environmental, social, and economic risks through a strategic review during development of the strategy.

Output 1.1.3 *Strategy for "right to repair", "anti-planned obsolescence" and "circular design" drafted, enacted, and disseminated*

Activity 1.1.3.1 Develop a strategy for "right to repair", "anti-planned obsolescence" and "circular design"

The project will conduct a situation and gap analysis on right-to-repair, anti-planned obsolescence, and circular design in EEE in Cambodia, supported by a review of international best practices. It includes stakeholder consultations, particularly with businesses likely to be affected, to inform strategy development and ensure practical compliance. The final phase focuses on creating a targeted strategy, including expert reviews, to promote ICT repair services, encourage the purchase of repairable or upgradable devices, and assess environmental, social, and economic impacts through a strategic review during development of the strategy.

Following the development of the strategy, this activity will identify target stakeholders and priority training needs. A training workshop on right-to-repair, anti-planned obsolescence, and circular design in EEE in Cambodia will support the implementation of the strategy.

Output 1.1.4 *Operational measures (prakas, guidelines) for implementation of the e-waste sub-decree developed*

Activity 1.1.4.1 Develop operational measures (prakas, guidelines) for implementation of the e-waste sub-decree

This activity involves conducting a technical review of the implementation of the e-waste sub-decree to identify necessary operational measures. It includes consultations with key stakeholders, especially affected businesses, to ensure their input and support for future compliance. The process will lead to the development of operational tools, such as prakas and guidelines, informed by expert reviews and a strategic review to address environmental, social, and economic impacts.

The project will identify target stakeholders and priority training needs, and conduct a training workshop to support the implementation of the operational measures.

Outcome 1.2 *Policies and incentive mechanisms in place to support circular electronics value chain*

Output 1.2.1 *Green and sustainable procurement, green financing, innovation and incentive mechanisms designed and adopted*

Activity 1.2.1.1 Provide technical assistance and develop guidance for the relevant public institutions, industry, and business to implement policies

To support the implementation of circular economy policies and related incentive mechanisms, the project will identify the needs of target public institutions, industries, and businesses. Following that, it will develop and disseminate two tailored guidelines for those target audiences and implement relevant technical assistance.

Activity 1.2.1.2 Hold a training workshop on implementation of the policies

This activity involves identifying key stakeholders and their priority needs to design and conduct a targeted training workshop. The workshop aims to strengthen inter-ministerial coordination, integrate informal sector considerations into policy and explore the potential for importing EEE for refurbishment and e-waste for recycling. It is expected to build the capacity of at least 50 individuals and 30 businesses to effectively implement CE policies. The project will strive to include women and men equally in the capacity building workshop, including by coordinating with the national gender machinery, gender groups, and women-owned businesses.

Output 1.2.2: ***Polluters pay principles and CSR incorporated in relevant Policies and EPR policy frameworks enhanced/developed***

Activity 1.2.2.1 Design green and sustainable procurement, green financing, innovation policies, polluters pay, incentive mechanism, and CSR and EPR policies

This activity will begin with a technical review of existing policies and Cambodia's national needs related to green and sustainable procurement, green financing, innovation, polluter pays principles, corporate social responsibility (CSR), and EPR for EEE and related incentive mechanisms. It will also include a literature review of international guidance and best practices. Consultations with key stakeholder groups will be conducted to support the updating and design of policies, including defining EEE products that contribute to a circular economy, such as those designed for durability, reparability, reuse of functional components, and exclusion of hazardous substances like POPs and mercury. Finally, the activity will result in the development or revision of relevant policies and hazardous waste rules, informed by expert review meetings and guided by an assessment of their environmental, social, and economic impacts.

COMPONENT 2 CLEANER PRODUCTION AND SUSTAINABLE CONSUMPTION AND USE

Outcome 2.1 ***Innovative, regenerative, and resource efficient products designed and made available***

Output 2.1.1 ***Circular design of EEE promoted and supported***

Activity 2.1.1.1 Identify opportunities to promote and support circular design of EEE (aimed at increasing standardization and compatibility; ease of maintenance and repair, including disassembly and reassembly; avoidance of hazardous material)

This work will support circular design, with a focus on increasing standardization and compatibility, facilitating ease of maintenance and repair, including disassembly and reassembly, and avoiding hazardous materials. It involves engaging major manufacturers, exporters, and importers to identify practical circular design interventions, followed by a feasibility study to evaluate their potential impact. The activity will establish partnerships with at least two educational institutions to integrate sustainability and product longevity into relevant curricula. One pilot initiatives will be launched to test circular design approaches, each accompanied by an Occupational Health and Safety (OHS) and pollution risk assessment and implementation of an Environmental and Social Management Plan (ESMP). Progress will be monitored, impacts measured, and lessons learned compiled to inform future efforts.

Outcome 2.2 ***Markets for innovative products and behavior change away from unnecessary consumption and toward increased longevity***

Output 2.2.1 ***Markets that support environmentally friendly products and gender-responsive behavioral change strategies promoted and supported***

Activity 2.2.1.1 Pilot initiatives to promote and support the sale of more environmentally friendly (e.g. innovative, longevity-focused) ICT products

This activity involves designing two pilot programs to encourage the sale of electrical and electronic equipment (EEE) with lower environmental impacts, in coordination with Outputs 1.2.1, 1.2.2, and 2.1.1. These pilots may include incentive schemes for at least 10 companies that produce or import environmentally friendly ICT products, such as tax breaks or subsidies, as well as programs offering tax incentives or discounts to consumers who purchase such products. Consumer research will involve women and men in communities and households to determine differentiated purchasing priorities and design incentives targeted to women's and men's needs. Once designed, the pilot initiatives will be implemented and closely monitored to assess their progress and impact. Lessons learned and best practices will be compiled to guide future initiatives.

Output 2.2.2 Capacity of enforcement and customs officers to enforce the e-waste sub-decree strengthened

Activity 2.2.2.1 Organize training workshops to strengthen Customs capacity to enforce the e-waste sub-decree

At least three training workshops will be conducted for key stakeholder groups, focusing on the enforcement of the e-waste sub-decree, including how to identify EEE eligible for green labelling, apply product codes, recognize and classify e-waste and secondhand EEE at points of entry, detect red flags, and limit or control the import of hazardous substances in e-waste, as well as understand the gender health risks from hazardous materials. The training workshops will strengthen the capacity of at least 75 customs and enforcement officers in implementing the e-waste sub-decree and aim for gender parity in participation. The first task is identifying the current capacities, needs, and priorities of customs and enforcement personnel through stakeholder consultations. Based on this, a targeted customs capacity strengthening strategy will be developed and training workshops conducted. Provincial and municipal officers will also be included to enhance local enforcement capacity. Progress will be monitored, impacts measured, and lessons learned and best practices documented.

Activity 2.2.2.2 Strengthen laboratory capacity to identify and analyze e-waste contaminants

This activity aims to strengthen laboratory capacity in Cambodia to identify and analyze e-waste contaminants. It will begin with a comprehensive assessment of existing laboratory capabilities in this area. Based on identified gaps and priorities, targeted training will be provided to laboratory personnel to enhance their technical skills in detecting and analyzing e-waste contaminants. The project will aim for gender parity in participation in the training, including by consulting with women and men personnel to identify any barriers to attending training. Essential equipment will be procured for one central laboratory to improve its testing capabilities. SOPs will be developed for analyzing key e-waste components such as screens and printed circuit boards. Additionally, support will be provided for laboratory accreditation processes and inter-laboratory verification exercises to ensure quality and consistency in testing practices. Awareness raising on gendered health impacts of e-waste contaminants will be included in training.

COMPONENT 3 RESOURCE EFFICIENT VALUE CHAIN ACROSS THE ELECTRONICS SECTOR

Outcome 3.1 Mechanisms to maximize reuse, repair and material recycling put in place

Output 3.1.1 E-waste collection schemes and reverse logistics that are gender-responsive are established

Activity 3.1.1.1 Set up a registration system for e-waste management companies with MoE

A registration system for e-waste management companies under the Ministry of Environment (MoE) will be established in accordance with existing legislation and procedures for obtaining permits for industrial operations. The first task includes reviewing regional and international models to inform the design, assessing technical requirements and MoE's capacity, and developing the system accordingly. Key features of the registration system may include company profiling, submission of required licenses and permits, verification of technical capacity and

compliance with environmental standards, reporting obligations for waste volumes and treatment methods, and renewal and audit mechanisms. The system will enable tracking of registered entities and their activities, ensuring transparency and regulatory compliance. Training will be provided to support its implementation and maintenance, followed by monitoring progress, evaluating impacts, and documenting lessons learned and best practices. Training will aim for gender parity in participation to help identify any gender-specific gaps in the registration system.

Activity 3.1.1.2 Develop technical guidelines on e-waste collection schemes and reverse logistics

This activity focuses on developing technical guidelines for e-waste collection schemes and reverse logistics, tailored to the needs of specific target audiences. It begins with identifying the users of the guidelines, such as waste collectors, recyclers, repair shops, and exporters, and understanding their operational and regulatory needs. The guidance will cover key topics including safe collection and transport of e-waste, repair and reuse protocols, standards for dismantling and recycling, criteria for exporting e-waste, and environmental and safety considerations. Developed in coordination with Outputs 1.1.2 and 2.1.2, the guidelines will be published and widely disseminated to support effective and compliant e-waste management practices.

Activity 3.1.1.3 Develop standard operating procedures to be adopted in e-waste collection schemes and reverse logistics

Standard operating procedures (SOPs), including those related to occupational health and safety (OHS), for e-waste collection schemes and reverse logistics, will be developed in coordination with Output 2.1.2. The SOPs will address key issues such as safe handling and storage of e-waste, segregation by waste type (e.g., batteries, screens, circuit boards), labeling and documentation requirements, procedures for transporting hazardous components, worker safety protocols (PPE, training, incident response), and environmental safeguards to prevent pollution. Once developed, the SOPs will be promoted to ensure their adoption and effective implementation across relevant stakeholders.

Activity 3.1.1.4 Pilot digital tracking of high-risk EEE imports

One pilot digital tracking system for high-risk EEE imports will be designed and implemented. The project will review international digital tracking systems to identify best practices. Based on this review, the most suitable approach for Cambodia will be determined, including potential features such as real-time tracking, product coding, automated reporting, and integration with customs and environmental regulatory databases. It will also support the identification of hazardous materials, compliance monitoring, and ensure transparency in the supply chain. The pilot will be closely monitored, with progress measured and lessons learned documented to refine and improve future tracking efforts.

Activity 3.1.1.5 Pilot e-waste collection points

Pilot e-waste collection points will be established across various locations in Phnom Penh, including at least five retailers, five community-based centers, and ten schools. The pilot design will include logistics planning, safe storage protocols, public awareness campaigns, consumer incentives, and coordination with private sector partners, recyclers, and potential public-private partnerships. Each pilot site will undergo a targeted assessment of occupational health and safety and pollution risks, resulting in the implementation of an Environmental and Social Management Plan. The pilots will then be rolled out, monitored for progress and impact, and evaluated to gather lessons learned and best practices for future replication.

Activity 3.1.1.6 Pilot repair and reuse aspects

A pilot to promote repair and reuse will be implemented, with the aim to support at least three SMEs focused on extending product lifespans. This includes establishing small grants for refurbishment businesses, offering local business development services, and providing technical training on repair and quality control. These efforts will be coordinated with private sector investment and public-private partnerships where applicable. Each pilot will undergo

a targeted assessment of occupational health, safety, and pollution risks, and development of an ESMP. Progress will be monitored, impacts measured, and lessons learned and best practices compiled.

Activity 3.1.1.7 Pilot safe e-waste dismantling capacity building program for informal sector

The pilot program to build safe e-waste dismantling capacity in the informal sector includes developing technical guidelines and training materials to support the formation of collectives, promote the use of personal protective equipment (PPE) (such as safety jackets, masks and gloves), and encourage improved practices and equipment use. These guidelines will be disseminated through training sessions for informal dismantlers, who will also receive PPE and tools to enhance safety. The program will foster partnerships between informal dismantlers and formal recyclers for responsible e-waste processing. Additionally, it will implement campaigns to raise the awareness of at least 500 informal sector workers about the health and environmental risks of current practices and promote the adoption of best available techniques and environmental practices (BAT-BEP). Finally, monitoring efforts will assess awareness levels and behavior changes resulting from the pilot.

Output 3.1.2 Pilot Voluntary EPR scheme designed and demonstrated

Activity 3.1.2.1 Establish a voluntary EPR scheme for EEE and sustainable financial mechanisms for private sector

The project will develop and pilot an EPR scheme for e-waste including defining target products, target producers/importers, physical and financial obligations for producers/importers, and fund management mechanism. The EPR fund will ultimately provide a sustainable financial mechanism that will ensure sufficient, reliable, and long-term financial support for all stakeholders involved in the EPR management process, covering collection, dismantling, recycling, and disposal of e-waste. It includes organizing a stakeholder workshop involving the private sector, government entities, municipalities, the informal sector, and civil society. A working group with key government ministries and agencies and private sector enterprises will also be established in coordination with the development of an e-waste inventory in Component 1. An assessment of EPR schemes implemented in other countries and UNDP projects will be reviewed, and various EPR approaches will be considered, including take-back requirements, advance disposal fees, deposit/refund schemes, and taxes.

One municipality and three private companies will be selected to pilot the EPR scheme, integrating into the informal sector. A study tour to a country with an operational EPR system will be conducted to gather insights and best practices. Guidelines will be developed to help stakeholders participate effectively, and a Producer Responsibility Organization (PRO) or relevant service providers will be supported to manage the pilot. The scheme will be implemented and monitored, with results and lessons documented.

Outcome 3.2 Hazardous waste streams in the electronics sector removed from the value chain

Output 3.2.1 Environmentally sound management of material streams contaminated by POPs and chemicals of concern

Activity 3.2.1.1 Develop technical standards for targeted POPs, mercury, and other toxic substances related to e-waste streams

Technical standards for targeted POPs, mercury, and other toxic substances related to e-waste streams will be developed. A comprehensive review and analysis of existing international and national technical standards will identify best practices and gaps. Based on these findings, new and context-specific standards will be formulated and refined through extensive stakeholder consultations, addressing key issues such as thresholds for hazardous substances in e-waste, safe dismantling and storage practices, contamination control measures, guidelines for monitoring and reporting, and protocols for final disposal or recycling. These standards will support safer handling

of POPs, mercury, and other toxic substances, helping to reduce environmental and health risks associated with hazardous substances.

Activity 3.2.1.2 Develop guidance for the relevant public institutions, industry, and business to implement the technical standards

To support the effective implementation of the developed technical standards for targeted POPs, mercury, and other toxic substances in e-waste streams, a guidance document will be developed for relevant public institutions, industry, and businesses. This guidance will provide practical instructions, compliance tools, and best practices tailored to the Cambodian context. It will assist target audiences such as government ministries, the customs department, and local authorities, as well as e-waste recyclers, repair shops, importers, and electronic retailers. The guidance will aim to enhance institutional capacity, clarify roles and responsibilities, and promote uniform application of the standards across the country, ensuring environmentally sound management of hazardous materials within e-waste streams.

Output 3.2.2 ***BAT and BEP for collection, dismantling, recycling, and disposal of e-waste potentially contaminated by POPs and CoC demonstrated***

Activity 3.2.2.1 Implement pilots for BAT and BEP for collection, dismantling, and disposal of e-waste potentially contaminated by POPs and CoC

To demonstrate and promote the environmentally sound management of e-waste potentially contaminated by POPs and chemicals of concern (CoC), a pilot will be developed in alignment with technical standards for targeted hazardous substances and will include estimates of emission reductions achieved through the application of BAT and BEP, supported by sampling and analysis. The pilot will undergo assessments focusing on occupational health and safety (OHS), pollution risks, and potential impacts on informal waste pickers, with Environmental and Social Targeted Risk Management Plan(s) established accordingly.

Two formal recycling companies in Phnom Penh will participate in the pilot to improve the collection, dismantling, and disposal of hazardous e-waste components. The initiative will strengthen national infrastructure for e-waste management by identifying gaps and opportunities in existing dismantling and recycling practices. At least one facility for dismantling and recycling, and one for residual waste disposal, such as co-processing POPs-contaminated plastics in cement kilns, will be established or upgraded. Due to challenges in separating POPs-containing plastics, a specific strategy will be developed for managing cross-contaminated materials. This will be supported by the development of a guideline on the export of e-waste that cannot be processed locally, in accordance with the Basel Convention.

A Measurement, Reporting, and Verification (MRV) system will be set up to monitor the effectiveness of BAT and BEP implementation. Public-private partnerships and private sector investment will be encouraged, while best practices and lessons learned from the pilots will be documented and shared to support replication and scaling-up, including through collaboration with international e-waste management facilities.

COMPONENT 4 *KNOWLEDGE MANAGEMENT, COMMUNICATION, AND PROGRAM-LEVEL COORDINATION*

Outcome 4.1 ***Knowledge management platform established to support sharing and learning, capacity building, awareness raising amongst various stakeholders to achieve sectoral transformation***

Output 4.1.1 ***Gender-sensitive communication plans and capacity development strategies developed***

Activity 4.1.1.1 Design and implement communication plan and capacity development strategy

A communication plan and capacity development strategy will be designed and implemented to support effective circular economy in the electronics sector in Cambodia. The communication plan will target key stakeholders, including government agencies, the private sector, informal workers, gender groups, and the general public, through tailored messaging, public campaigns, and educational materials to promote the GEM project objectives. Communication materials will be developed in line with UNDP's Principles for Gender Sensitive Communications. The capacity development strategy will focus on training programs, technical workshops, and institutional support to strengthen the knowledge and capabilities of national and local authorities, recyclers, and other relevant actors, including through gender-responsive and inclusive approaches. Together, these efforts will foster greater knowledge and capacity for sustainable e-waste management in Cambodia.

Output 4.1.2 *Gender-sensitive awareness of the e-waste sub-decree, EPR schemes, and environmentally sound management of e-waste raised***Activity 4.1.2.1 Raise awareness among government, private sector, and citizens on the e-waste sub-decree, EPR schemes, and reduction and environmentally sound management of e-waste**

Raising awareness among Cambodia's government, private sector, and citizens is essential for the successful implementation of the e-waste sub-decree, EPR schemes, and other circular economy initiatives to support the environmentally sound management of e-waste. Targeted outreach efforts will be undertaken to inform stakeholders about the legal obligations and opportunities under the sub-decree, including the roles of producers, importers, retailers, and consumers in managing electronic waste responsibly. The project will identify and involve NGOs, CSOs, women's groups, and training institutes that can facilitate carrying out awareness raising activities on e-waste management and environmental and health-related issues. Public education campaigns, stakeholder dialogues, and capacity-building workshops will be organized to promote understanding of EPR mechanisms and encourage participation in take-back programs and recycling initiatives.

Output 4.1.3 *Knowledge management infrastructure designed and established***Activity 4.1.3.1 Develop and implement a gender-sensitive knowledge management mechanism**

A gender-responsive knowledge management mechanism will be developed and implemented to support the transition to a circular economy and improve e-waste. Raising awareness among Cambodia's government, private sector, and citizens is essential for the successful implementation of the e-waste sub-decree, EPR schemes, and other circular economy initiatives to support the environmentally sound management of e-waste. Targeted outreach efforts will be undertaken to inform stakeholders about the legal obligations and opportunities under the sub-decree, including the roles of producers, importers, retailers, and consumers in managing electronic waste responsibly. The project will identify and involve NGOs, CSOs, women's groups, and training institutes that can facilitate carrying out awareness raising activities on e-waste management and environmental and health-related issues. Public education campaigns, stakeholder dialogues, and capacity-building workshops will be organized to promote understanding of EPR mechanisms and encourage participation in take-back programs and recycling initiatives.

management along Cambodia's electronics value chain. This mechanism will facilitate the collection, sharing, and application of data, best practices, and lessons learned, while ensuring that gender perspectives are integrated into policy and practice. Key features will include an accessible digital platform, gender-disaggregated data collection, targeted training materials, and participatory knowledge-sharing events. It will engage a wide range of stakeholders, including the government, private sector, informal workers (particularly women involved in repair or recycling), NGOs, and academic institutions. The mechanism will help build inclusive, informed decision-making and capacity for improved e-waste and resource management.

Outcome 4.2 ***Coordination and linkages amongst the relevant global and national stakeholders and platforms established.***

Output 4.2.1 ***Coordination mechanism between the global program and the child projects designed and implemented***

Activity 4.2.1.1 Develop and implement a national-level project coordination mechanism

A national-level project coordination mechanism will be established to ensure effective coordination, communication, and knowledge sharing and reporting between the Cambodia GEM project and the GEM Global program, and at the same time ensure exchange of lessons learned and best practices on thematic topics of concern, to facilitate its replication and the adoption of its solutions by other private and public stakeholders.

Output 4.2.2 ***Links between the global program, child projects, and existing gender-responsive relevant platforms established and strengthened***

Activity 4.2.2.1 Contribute experiences, lessons learned, and other knowledge to the global program's knowledge management platform

The project will contribute localized insights, challenges, and progress updates in support of the facilitation of guidance, risk assessment and support functions. The child project will provide locally tailored communication materials and ensure visibility through media engagements in support of a unified global GEM framework for messaging and branding. The project will facilitate working groups, expert guidance, and webinars based on the contribution of expertise, case studies, and policy insights on technical areas of interest. Part of the knowledge management and reporting contributions, the child project will collect data, conduct evaluations, and contribute localized knowledge products within the monitoring and reporting framework established by the project.

A minimum of activities is summarized below:

I. Child Project coordination with Global GEM Program

Annual participation in:

- GEM Program Coordination Group Meetings
- GEM Global Steering Committee Meeting

II. Communications

- Alignment with GEM Global Communications Objectives
- Participation in Global Communications Coordination Group
- Support for GEM Coordination Platform Communication Campaigns
- Ensure visibility of GEM Cambodia Project

III. Thematic and technical coordination

Participation in Coordination Meetings:

- Technical Advisory Committee
- Online thematic focus groups/webinars
- Coordination with technical experts on implementation

IV. Knowledge management and reporting

- Reporting requirements – allocation of time and content for Quarterly and Annual reporting needs to Global Program
- Monitoring and reporting of Global Environmental benefits (GEBs), programmatic indicators, including Mid-term and Terminal Evaluations
- Content contribution to GEM Coordination Platform Knowledge Repository

- Needs assessment and trainings based on knowledge products from stakeholders/global industry players, social and environmental safeguards and frameworks

Output 4.2.3 Gender mainstreamed throughout the project activities

Activity 4.2.3.1 Implement the Gender Action Plan to mainstream gender throughout project activities

The Gender Action Plan will be implemented to ensure the systematic integration of gender considerations across all project activities aimed at promoting a circular economy and improving e-waste management in Cambodia's electronics sector. This will involve identifying and addressing gender-specific barriers and opportunities, promoting equal participation of women and men in decision-making, and ensuring that women, particularly those in informal repair and recycling activities, have access to capacity-building, financial opportunities, and safer working conditions. Gender-responsive indicators will be included in monitoring and evaluation processes, and gender-sensitive training and awareness programs will be delivered to project stakeholders. Through these actions, the project will contribute to more inclusive and equitable outcomes, while empowering women as key agents in the transition to a circular economy.

Agreement on intellectual property rights and use of the logo on the project's deliverables and disclosure of information: To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed per relevant policies, notably the UNDP Disclosure Policy¹⁰ and the GEF policy on public involvement.¹¹

Resources required to achieve the expected result

The project is supported with a GEF grant in the amount of USD 4,000,000 to be administered by UNDP. An additional support of USD 26,100,000 in-kind co-financing will be from contributors as listed in the table below. GEF grant will be efficiently and effectively utilized to support the project activities as described in the four (4) Project Components, as well as resources (Project Management Costs) required to support effective and orderly implementation of the project interventions. Project budget allocation GEF grant of USD 313,810 is allocated to support project interventions under the four Project Components:

- **USD 356,274** is allocated to Project Component 1 to support the development of national level plans, strategies and policies for circular electronics value chain, as well as developing an e-waste inventory.
- For Component 2, GEF grant in the amount of **USD 1,002,700** will be allocated to support and promote circular design of EEE. Markets that support environmentally friendly products and gender-responsive behavioral change strategies will also be promoted and supported. This component will also strengthen capacity of enforcement and customs officers to enforce the e-waste sub-decree.
- GEF grant of **USD 1,984,000** is allocated for the project to establish e-waste collection schemes and reverse logistics, pilot voluntary EPR scheme, manage material streams contaminated by POPs and chemicals of concern in an environmentally sound manner, and demonstrate BAT and BEP for collection, dismantling, recycling, and disposal of e-waste potentially contaminated by POPs and CoC demonstrated.
- GEF grant in the amount of **USD 268,550** has been allocated to cover budgetary requirement to facilitate knowledge sharing, awareness and training, and gender mainstreaming activities.

¹⁰ See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

- GEF grant in the amount of **USD 198,000** has been allocated to support monitoring and evaluation activities.
- Finally, an amount of **USD 190,476** has been budgeted to support a Project Management Unit (PMU) with engagement of a Project coordinator and a Project Finance & Admin Assistant to undertake the day-to-day overall project implementation, with necessary related technical and management support and facilities for efficient and effective functioning.

The co-financing of **USD 26,100,000** has been committed by the contributors. Details on co-financing are provided in Section X: Financial Planning and Management.

Partnerships

The project will work with a multitude of partners and initiatives to achieve the outcomes such as:

- National government, including Ministry of Environment (MoE) and other line ministries including Ministry of Economy and Finance/General Department of Customs and Excise of Cambodia (MoEF); Ministry of Industry, Science, Technology & Innovation (MISTI); Ministry of Health (MoH); Ministry of Labour and Vocational Training (MoLVT); Ministry of Public Works and Transport (MPWT); and Ministry of Women’s Affairs (MoWA).
- Sub-national government, including Provincial and Municipal Departments of Environment including Solid Waste Management; Phnom Penh Capital Hall.
- Private sector, including EEE producers and importers; formal business involved in collection, dismantling, disposal, and export; and informal sector including collectors, waste pickers, aggregators and traders, dismantlers, junk shops, refurbishers, and exporters; and financial institutions.
- Civil society and others, including communities, academia, schools, women’s organisations, and NGOs.
- International partners: IGOs, IOs, and other development partners (DP), such as GGGI and GIZ.

The project will build on past and current investments to avoid duplication and take advantage of opportunities for synergies. Table 2 outlines some of the key interventions in Cambodia relevant to EEE management, with which the project will coordinate.

Table 1: Key interventions in Cambodia relevant to EEE management

Agency	Title	Objectives/Key activities/Linkages with the GEF project
ADB	Greater Mekong Subregion Climate Change and Environmental Sustainability Program (53068-001)(2023-2026)	One of the operational priorities is on tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability. This includes a sub-output on enhancing environmental quality through pollution control and waste management and will (i) build capacities for strategic environmental planning, environmental quality data management and guidelines on air, water, and soil pollution control and remediation; (ii) provide policy support for implementation of circular economy and waste management; and (iii) conduct feasibility studies and prepare concept papers for investments to address air and water pollution, including plastics.
Finland	Hazardous waste management (2025-)	A Cambodia-Finland partnership was announced in March 2025 with a focus on hazardous waste management, particularly recycling lead-acid batteries. This collaboration emphasizes

Agency	Title	Objectives/Key activities/Linkages with the GEF project
		knowledge transfer, capacity building, and exploring innovative technologies for sustainable waste management.
GGGI	Framework 2021-2025	GGGI is working on identifying waste-to-resource approaches and focussing on the development and implementation of viable business models to attract private sector investment, reducing reliance on donors.
GIZ	Green Growth Initiative for Circular Economy (GGI4CE) for Cambodia for Sustainable Solid Waste Management (2024-2027)	Aims to promote waste segregation, recycling and sustainable solid waste management, with a focus on reducing landfill waste, raising public awareness and fostering economic opportunities through a circular economy approach.
Ministry of Environment	Plastic Mekong River Joint Statement (2025)	Focuses on understanding the effects of plastic pollution and reaffirm the Greater Mekong's Subregion's commitment to leading efforts on environmental protection, natural resources management, sustainable development and ensuring a healthy future for citizens.
MoE & Chip Mong Ecocycle	MoU between MoE and Chip Mong on Environmental Protection Cooperation (2021-)	Covers the treatment of hazardous waste including non-recyclable plastic and e-waste using co-processing. This can include collection, transportation, storage, and destruction, as well as providing technical advice and supporting awareness raising.
General Department of Customs and Excise of Cambodia & Chip Mong Ecocycle	MoU between General Department of Customs and Excise of Cambodia and Ecobatt Energy on National-level Waste Management (2025-)	Focuses on treating confiscated industrial waste, hazardous materials, and defective consumer goods using co-processing.
MoE & Ecobatt Energy	MoU between MoE and Ecobatt Energy on E-waste Management Cooperation (2022-)	Covers e-waste and battery waste management. Battery waste bins have been installed at gas stations, supermarkets, schools, and residential areas (147 bins in Phnom Penh and 40 in the provinces). Ecobatt dismantles and refurbishes some EEE and batteries and some are exported for recycling. To date, over 30 MT of e-waste and batteries have been collected. Ecobatt also collect e-waste directly from the owners once there are 10 or more units.
World Bank	Cambodia: Solid Waste and Plastic Management Improvement Project (P170976)(2021-)	The GEF project will coordinate regarding the following World Bank project activities: waste classification; national landfill guidelines; awareness raising; waste collection, material recovery and recycling, treatment, and disposal; applying EPR; infrastructure development: and cost recovery plans.

Risks and Assumptions

Risk Categories	Ratings	Assessment and Mitigation Measures
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CONTEXT		
Climate	Moderate	In accordance with the Social and Environmental Standards (SES), a pre-Social and Environmental Screening Procedure (pre-SESP) was carried out which rated the climate risk as MODERATE. Increased weather events due to climate change may pose a risk on facilities where stockpiles of e-waste are stored prior to disposal. Various measures will address this including: technical standards; Spill Prevention and Management Plan; and ESIA on the pilot/demonstration facilities.
Environment and Social	Low	The Social and Environmental Screening has identified 9 risks related to this project, all categorized as MODERATE. Most of the risks pre-identified are largely of impacts of medium magnitude, limited in scale (site-specific) and duration (temporary), can be avoided, managed and/or mitigated with relatively uncomplicated measures. Nonetheless, the risks inherent in the handling, transport and processing of e-waste, to both human health (workers and communities) and environment, require management. During PPG, it was not possible to specify some exact project activities and locations, and this will be done at the project's outset. Each location, and each activity with a physical footprint, will undergo on-site screening, tailored to the site and the proposed activity, and the current categorization of MODERATE may be revised up or down. The project has developed guidance on the development of Environmental and Social Management Plans, detailed in Annex 4, to ensure that the risks identified in this screening are adequately managed. Additional screening and Impact Assessment and specific stand-alone plans, such as Spill Prevention, Pollution Prevention, and Occupational Health and Safety, where required, will strengthen the risk mitigation or avoidance framework in a comprehensive and integrated manner. The detailed risk profiling can be seen in Annex 5: UNDP Social and Environmental Screening Procedure (SESP).
Political and Governance	Low	While Cambodia has experienced political and governance challenges in the past, the country has made significant strides in recent years towards strengthening its institutions and improving its governance framework. The government has been working to establish laws and regulations to improve environmental protections, including regulations related to e-waste management. Additionally, Cambodia has been actively promoting foreign investment and has implemented policies to attract investors in the technology sector. These factors suggest that the political and governance risks are relatively low.
INNOVATION		
Institutional and Policy	Low	The project is fully aligned with national policies, international commitments, and priorities (see Section C: Alignment with GEF-8 Programming strategies and country/regional priorities). Regular policy scans and stakeholder consultations will be conducted to ensure alignment with evolving national and sectoral priorities.

Technological	Low	The technical design of the project is based on a rapid assessment of the status quo and present challenges associated with e-waste management. The analysis with recommended sets of interventions was further verified through consultations with relevant stakeholders, including the government, private sector, CSOs, and informal sectors. Thorough assessments of the feasibility of intended technical pilots will be established, and due diligence will be conducted before implementation to avoid unintended risks.
Financial and Business Model	Low	Thorough budgeting was done in the PPG phase where co-financing sources were well-mapped to ensure the availability of adequate financing for all project activities. Financial reporting and monitoring systems will be in place to ensure timely utilization and tracking of funds.
EXECUTION		
Capacity for Implementation	Low	Initially the government agencies may have limited knowledge and capacity for sound e-waste management. The project will build the capacity, knowledge, and skills required for policy making, implementation, awareness raising, and stakeholder engagement. This will include: applying systematic capacity development measures for government partners at the national and subnational levels to control the import of the secondhand electronics and e-waste and ensure enforcement of the e-waste sub-decree; supporting the government in facilitating inter-ministerial mechanisms for information sharing and decision-making on e-waste and chemicals and waste management; and contributing to the long-term capacity for information and data management systems that will support monitoring and reporting of chemicals and waste management.
Fiduciary	Low	To ensure the effective financial and procurement management, the project will apply the UNDP country office support to the national implementation modality (NIM).
Stakeholder	Low	Stakeholder-related risks for the project are considered low overall, given the strong institutional foundation and inclusive engagement mechanisms already in place. Potential risks include coordination challenges among ministries, varying private sector commitment, limited participation of informal recyclers, and uneven inclusion of women and vulnerable groups. To mitigate these risks, a Stakeholder Engagement Plan (SEP) is developed to ensure effective engagement between various stakeholders throughout the lifecycle of the project. It will build on any other relevant project activities with regard to planning and impact assessment processes. Project implementation will ensure regular dialogue with the relevant government ministries and subnational bodies, private sector entities, local community groups, NGOs, public stakeholders, and international partners.
Other	Not rated	

Overall Risk Rating	Moderate	Preliminary analysis and screening conducted during the project development phase via UNDP’s Social and Environment Screening Procedure (SESP) identified nine potential social and environmental risks associated with project activities. The screening procedure established that the project is rated as being of MODERATE risk and that the identified potential social and environmental impacts are manageable through mitigation measures detailed in the Screening Template (Annex 3 to the project document).
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Stakeholder engagement

The key stakeholders for the Cambodia GEM Project are diverse and span across government, private sector, civil society, and international organizations. The targeted groups that are the intended beneficiaries of the project include:

- Government ministries and departments – The national government plays major and multifaceted roles in supporting, guiding and overseeing the project design and implementation to ensure its compliant and aligned with the national policy and regulations concerning hazardous waste management, including e-waste.
- Private sector – The relevant private sectors are divided into two groups: one encompasses companies involved in the import, distribution, and wholesaling of ICT equipment and infrastructure; they demonstrated the environmental responsibility as well as EPR implementation, which employ take-back system mechanism to allow consumer to repair and return their used or end-of-life electronic equipment at drop-off point or collection container at the repair service centres as a part of global sustainability initiatives. Another is the formal stakeholders in downstream e-waste handling, including e-waste management services and reverse logistics.
- Informal sector – Informal e-waste pickers and small-scale dismantlers, often located in marginalized communities, face significant exposure to hazardous chemicals due to the absence of proper safety measures, leading to adverse health effects.
- Academia including schools and universities – Educational institutions provide valuable findings and insights to support the development the effective e-waste policy and regulation and to offer training programs on BAT or BEP for e-waste management. They also play a vital role in enhancing awareness for behavioral changes and advocating for sustainable practices.
- IGOs, development partners, and NGOs – Major stakeholders in this category include KOICA, JICA, ADB, GIZ, World Bank, UNIDO, UNICEP, and the Global E-waste Statistic Partnership. They play a crucial role in providing valuable expertise, funding, and support for sustainable development and environmental initiatives.
- Citizens and local communities – This includes women and men in affected communities (households, school, hospitals, etc.) residing close to sites where e-waste is being stored by e-waste management enterprises or treated by e-waste management enterprises; households purchasing and discarding EEE products that contain hazardous components; and civil society organizations
- Media – Radio, TV, newspapers, press releases, and social media play a role in reaching broader stakeholder groups, mobilizing support, and raising awareness on e-waste management programs and relevant environmental topics.

The Cambodia GEM project will employ a multi-faceted strategy to identify and engage these targeted groups, starting with mapping and analyzing stakeholders along the e-waste value chain to thoroughly understand their roles, responsibilities, needs, strengths, and potential contributions. This will be complemented by consultation meetings, workshops, and bilateral discussions aimed at gathering insights and feedback; notably, an inception

workshop and a validation workshop were already conducted during the PPG phase to introduce the project and receive inputs from a broad range of stakeholders. To effectively connect with beneficiaries, the project will utilize liaisons, such as representatives of local or municipal governments and community leaders. Direct interaction will also be prioritized through conducting field visits to project target sites to gain firsthand understanding of beneficiaries' perspectives.

Furthermore, the project will focus on developing and disseminating information materials in Khmer to enhance awareness. To facilitate communication and outreach, particularly to communities and the informal sector, the project will engage NGOs and CSOs operating at various levels. Direct involvement and benefits for targeted groups will be achieved through implementing pilot activities, such as safe e-waste dismantling capacity building programs for the informal sector and pilot e-waste collection points. The project is committed to promoting the inclusion of informal waste pickers in safe reuse, repair, and recycling opportunities.

The project will promote cross-sector and inter-agency collaboration through the facilitation of the inter-ministerial working group on sustainable consumption and production and the coordination of waste management efforts supported by development agencies to maximize synergy and impacts. As for the institutional framework, the MoE as a focal point will collaborate with line-ministries and subnational governments to ensure multi-sectoral interventions for promoting a circular EEE value chain. For example, Ministry of Economy and Finance (MEF) for economic and fiscal measures; Ministry of Industry, Science, Technology and Innovation (MISTI) for promoting circular business practices; Ministry of Interior (MoI) for supporting subnational governments in e-waste management; and Ministry of Women affairs for promoting gender equality.

Public, private sector, and civil society stakeholders will be engaged to support data collection on recycling potential, the transitioning to green jobs in relation to e-waste management, as well as exploring partnerships with local private sector (including women-led MSMEs) for income generation, mobilization of economic resources and leverage opportunities for e-waste management, as well as updating/developing relevant guidelines and by-laws, facilitating knowledge, which include 3R concepts and building the basis for transition to a circular economy on the long run in the selected sectors.

The engagement strategy ensures that potentially affected groups are informed and able to raise concerns through early and regular consultations, gender-sensitive approaches, and strategic environmental and social assessments. It includes implementing an Environmental and Social Management Plan, establishing a project-level Grievance Redress Mechanism, and promoting transparency, accountability, and the principle of "Do No Harm." Special attention is given to vulnerable groups, including women and informal sector workers, with efforts to raise awareness about health and environmental risks. Progress reports and UNDP's Accountability Mechanisms further support continuous feedback and stakeholder engagement. The project's comprehensive stakeholder engagement strategy (see Annex 8), underpinned by principles of participation, gender equity, respect for cultural diversity, transparency, and partnerships, aims to ensure that all key stakeholders, including target beneficiaries and potentially affected groups, are consulted and have avenues to voice their concerns throughout the project lifecycle.

South-South and Triangular Cooperation (SSC/TrC)

The Cambodia GEM project will provide access to information and opportunities for exchange among parties and other practitioners by informing the other GEM child projects about experiences in leveraging finance, policy coherence, innovation and learning and participatory multi-stakeholder dialogues, including but not limited to access and use of information, technical materials, guidance, and lessons learned. Reporting will be accurately placed on a quarterly and annual basis for national and global dissemination.

Learning opportunities and technology transfer from peer countries will be further explored during project implementation. To present opportunities for replication in other countries, the project will codify good practices and facilitate dissemination through global on-going South-South and global platforms (Outcome 4.2), such as the

UN South-South Galaxy knowledge sharing platform, and PANORAMA.¹² In addition, to bring the voice of Cambodia to global and regional fora, the project will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global development discourse on circular economy in the electronics sector. The project will provide regional cooperation opportunities with countries implementing initiatives on circular economy in the electronics sector in geopolitical, social and environmental contexts relevant to the proposed project in Cambodia.

Gender equality and women's empowerment

Gender is a critical component of the global electronics sector as 60 - 65% of its 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%. The complexity of the gender dimension in the electronics sector mirrors the intricate nature of its value chain. While these figures illustrate progress in some areas, they also underscore persistent challenges in achieving gender parity, particularly in leadership and technical roles.

In Asia including Cambodia, women make up the majority of the informal workforce recovering certain types of waste. Despite this essential role, the contributions of these women are often overlooked. Within the general context of vulnerability, women face more severe obstacles to social and economic opportunities and well-being than men. Gender integration in the hazardous waste management and recycling sector has been minimal in general, and there is limited awareness and education in the country regarding gender mainstreaming in hazardous waste management.

In 2021, approximately 47% of the workers in electrical and electronics manufacturing in Cambodia were women.¹³ They are often relegated to non-specialized, low-paying roles with inadequate safety measures. This is influenced by prevailing social norms and gender stereotypes, including perceptions of women's technical skills. As in other sectors, women face challenges such as low wages, poor working conditions, and gender-based harassment. Despite strides towards gender diversity and inclusion, women continue to face barriers to advancement and representation in the EEE sectors, contributing to a persistent gender gap.

In critical areas such as material sourcing, notably in mining of critical minerals, and e-waste management, women experience a distinct set of challenges. These challenges include wage disparity, heightened exposure to hazardous chemicals, and pervasive discrimination. Women engaged in these segments often endure harsh working conditions and are disproportionately affected by the environmental and health hazards associated with the electronic industry's value chain. Material sourcing and e-waste management are dominated by the informal sector, further exacerbating the vulnerabilities faced by women in these roles.

The project developed a Gender Action Plan (GAP), which outlines gender-sensitive strategies to be integrated into the revised national guidelines and regulatory frameworks. These strategies will also guide the implementation of demonstration and pilot activities, ensuring inclusion and involvement in relevant decision-making processes, and the equitable sharing of economic, environmental, and public health benefits. These strategies and actions include:

- Enabling involved actors to exercise the rights and ability to participate freely in making decisions and in implementing activities that affect them and their environment. Special attention will be paid to the poor and marginalized, including women and girls, who are among the most vulnerable.
- Incorporating gender and vulnerability perspectives in the development of awareness and education materials, and in training and capacity-building activities (by including women and the physically disabled, as well as ethnic minorities and indigenous people).

¹² <https://panorama.solutions/en>

¹³ FABRIC Cambodia and Initiative for Global Solidarity, 2023. Sector Brief: Cambodia: Electrical and Electronic Equipment Industry. Phnom Penh, Cambodia: GIZ

- Ensuring equal participation of both women and men in adopting sustainable e-waste management and circular economy options both in households and workplaces (e.g. repair of EEE, safely storing e-waste, and participating in proper e-waste collection programmes and recycling).
- Developing employment opportunities along with targeted capacity building support that recognize and enhance the capabilities and strengths of women and vulnerable groups as equal to other groups.
- Developing business models and support mechanisms that address the needs and enhance the capability of women and vulnerable groups.

These are the issues that the GEM program and Cambodia child project intends to address: provide fair opportunities for the participation of women in the work force particularly in decision-making, improved working conditions and reduced exposure to hazardous chemicals, and overall advancement in any segment of the electronics value. Additionally, the GAP supports the development of mechanisms to integrate grassroots women's initiatives into wider policy. It emphasizes collaboration with other organizations to enhance the livelihoods of female waste workers, recognizing their vital roles in scaling up a circular economy approach. Besides ensuring an inclusive approach, the project will apply the following principles to avoid and mitigate any adverse impacts from the project implementation:

- **Transparency:** The project will ensure accessible and timely provision of information related to the project activities.
- **Accountability:** The project will promote result-oriented management, which centers on effective monitoring of, and systems for, direct feedback about project implementation. This allows for early identification and correction of problems and strengthens the accountability of all actors.
- **Do No Harm:** All projects will be designed to reflect the cultural, socio-economic and political aspects of the local context, and to anticipate possible unintended and negative consequences deriving from the interaction between the project activities, targeted beneficiaries, and the context. The project will also pre-identify any possible adverse environmental and health impacts of business operations and ensure appropriate measures in place before operationalization.

Knowledge Management

The project will actively involve the government, private sector, informal workers, civil society, and international partners to produce a range of specific knowledge products under the four components. Regarding enabling policies on circular economy for electronics (Component 1), key outputs will include a standard and systematic e-waste inventory and database, assessment reports on e-waste and material flows and on e-waste dismantling and recycling methods, and a strategy for establishing national e-waste collection schemes and reverse logistics. Furthermore, a strategy addressing "right to repair," "anti-planned obsolescence," and "circular design" will be developed, alongside operational measures such as prakas and guidelines for implementing the e-waste sub-decree. The project will also develop technical guidelines focusing on green and sustainable procurement and Extended Producer Responsibility (EPR) policies and incentive mechanisms.

Under the focus on cleaner production and sustainable consumption and use (Component 2), the project will produce a feasibility report identifying circular economy opportunities for Electrical and Electronic Equipment (EEE). Additionally, standard operating procedures (SOPs) for testing key products will be developed. For establishing a resource-efficient value chain across the electronics sector (Component 3), a technical guideline and SOP on e-waste collection and reverse logistics will be developed including occupational health and safety considerations. Other technical guidelines include EPR for key stakeholder groups, targeted toxic substances related to e-waste streams, and a guideline for the export of e-waste that cannot be processed locally.

Component 4 will generate, capture, transfer, and promote the use of knowledge at local, national, regional, and global levels. The knowledge management activities will build capacity and foster collaboration among key stakeholders in Cambodia and scale up project achievements through demonstration and learning. A comprehensive

stakeholder analysis and engagement plan identifies project stakeholders, their roles in project activities, and specific activities to ensure relevant stakeholders are engaged throughout the life of the project.

Component 4 will also foster regional and global connections and deploy awareness raising on key topics, such as the e-waste policy and regulations, EPR schemes, circular EEE design, reduction and environmentally sound management of e-waste, PPPs, and engaging the informal sector. The project will develop and implement a knowledge management plan to disseminate lessons learned, and best practices from all the project interventions through the development of a number of knowledge products to support national, regional, and global replication. Activities will also apply standard UNDP/GEF M&E and adaptive management processes in response to project oversight needs and Mid-Term Evaluation findings, as well as the implementation of a Gender Action Plan to mainstream gender throughout project activities.

Within the framework of the GEM program the child project will partner closely with both the global child project as well as the sister child projects, especially regional projects and child projects with an EEE manufacturing base. As appropriate, this will include participation in global coordination meetings and events, contributions to knowledge products, and bilateral exchanges with sister projects.

The child project will also reach out beyond the GEM program to network, learn, and contribute to relevant circular economy initiatives. Under the GEF umbrella, synergies will be pursued with ongoing and recently completed e-waste, electronics and circular economy projects the region and beyond.

Innovativeness, Sustainability and Potential for Scaling Up

The GEM project in Cambodia incorporates innovation for transformative change in several ways. This includes supporting policy and regulatory measures, fostering private sector innovation for circular economy models, and utilizing innovative approaches to change behaviors and raise awareness. The project will support the design and implementation of enabling operational measures for sound e-waste management and demonstrate an EPR scheme and PPPs for sustained financing by promoting private sector-led innovative and circular solutions and investments. It will also explore additional fiscal measures such as blended financing and green bonds to leverage public and private sector financing for large-scale impact. Furthermore, building an integrated data management system will digitally link institutions and businesses, providing information and facilitating connections across the e-waste value chain for better decision-making and management practices. The project will also support strategic and innovative modes of communication using social media, websites, and creative arts to effectively reach target stakeholders. These innovations can be scaled up to the national level and inform replication in other countries.

To ensure the long-term sustainability and durability of project results, the project will use relevant national systems in Cambodia. It aligns with existing national policies such as the Circular Strategy on Environment (2023-2028) and the Policy on Urban Solid Waste Management (2020-2030). The project will also coordinate with other national initiatives, including those on plastic waste reduction and management, and build the capacity of government agencies to implement and enforce e-waste regulations. The establishment of a registration system for e-waste management companies with MoE will formalize the sector and support ongoing regulatory compliance. The development of operational measures (prakas, guidelines) for the implementation of the e-waste sub-decree will embed project outcomes within the national legal framework.

The development of national-level plans, policies, and incentive mechanisms for the circular electronics value chain provides a foundation for widespread adoption. Piloting initiatives, such as e-waste collection points, and repair and reuse programs, will generate best practices and lessons learned that can be replicated in other regions. By implementing obligations for EEE producers and importers through the EPR scheme, the project aims to create a self-sustaining financial mechanism for e-waste management. The potential for the recovery of valuable resources from e-waste will contribute to the economic viability of the sector. The project will also work to mobilize private sector engagement and finances for circular economy solutions, fostering innovative initiatives and investments.

After the project is completed, the intervention is expected to continue through the established policies, regulations, and the operationalized EPR scheme. The strengthened capacity of government agencies and the private sector will be crucial for ongoing implementation and enforcement. The private sector-led initiatives and investments in e-waste management, driven by the EPR scheme and potential for resource recovery, are expected to continue without direct GEF grant financing. The knowledge and awareness raised and partnerships established among stakeholders will also contribute to sustained behavioral change and ongoing collaboration to support circular economy practices in the electronics sector.

Digital Solutions

The project will utilize several digital technologies and solutions to improve the experiences of target beneficiaries and partners and address the identified development challenges in e-waste management in Cambodia.

- The development of an integrated data management system, including data on secondhand electronics and toxic chemicals, will digitally link institutions and businesses, providing information on and facilitating connections across the e-waste value chain. This will contribute to a better understanding of the scale of the e-waste problem and improved decision-making and management practices.
- Geographic Information Systems (GIS) and flow modeling tools will be employed to map the movement of electronic products and waste streams. This will provide spatial and quantitative insights, highlighting areas of informal handling, environmental leakage, and inefficient resource recovery. By pinpointing these hotspots, the project can better target policy, infrastructure, and capacity-building interventions, addressing the barrier of limited data on e-waste flows.
- To support repair and reuse, the project will facilitate the development of ICT component databases. This will allow for the verification of compatibility of used components, enhancing their placement in second-use markets. This directly addresses the challenges of shorter product lifecycles and limited repair options by making reuse more viable.
- A pilot program will be implemented for the digital tracking of high-risk EEE imports. This system aims to improve the identification of hazardous materials, enhance compliance monitoring, and ensure transparency in the supply chain. This will help tackle the challenge of ineffective monitoring systems that allow the import of e-waste and banned chemicals.
- A central component of the project is the establishment of a knowledge management platform. This platform will support sharing and learning, capacity building, and awareness raising among various stakeholders to achieve sectoral transformation. It will include a gender-sensitive mechanism for collecting, sharing, and applying data, best practices, and lessons learned through an accessible digital platform. This addresses the barrier of a lack of platforms for cooperation and sharing of information and the need for increased awareness.
- The project will strategically use social media and websites as innovative modes of communication to effectively outreach to target stakeholders and support e-waste management. This will aid in raising awareness among the government, private sector, and citizens on the e-waste sub-decree, EPR schemes, and environmentally sound management of e-waste. Addressing the lack of awareness about the negative impacts of e-waste is a key objective.

Through these digital technologies and solutions, the project aims to enhance transparency, improve data collection and analysis, facilitate communication and collaboration, promote circular economy practices, and ultimately lead to a more sustainable and environmentally sound management of e-waste in Cambodia.

PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

The project's approach targets key transformation levers: policy, infrastructure, innovation and learning, and multistakeholder dialogues. This strategic focus allows for interventions at various stages of the electronics value chain, from design to end-of-life management. By addressing systemic barriers such as the lack of clear policies and limited infrastructure, the project aims to create an enabling environment for sustainable e-waste management, rather than solely focusing on downstream activities. This comprehensive approach, guided by the ToC, is expected to yield more impactful and lasting results compared to isolated interventions. For instance, developing a standard e-waste inventory (Output 1.1.1) provides foundational data for informed policy decisions and targeted interventions across the value chain. Similarly, strategies for "right to repair" and "circular design" (Output 1.1.3) aim to reduce e-waste generation at the source.

The project will build on past and current investments to avoid duplication and take advantage of opportunities for synergies (see Table 2 for key interventions in Cambodia relevant to EEE management). Coordination with initiatives, including the World Bank's "Cambodia: Solid Waste and Plastic Management Improvement Project" (which aims to improve solid waste collection systems, enhance information and fee collection mechanisms, and reduce greenhouse gas emissions) and GIZ's "Green Growth Initiative for Circular Economy" may involve sharing data platforms, aligning public awareness campaigns, and developing joint monitoring systems. By working together, these projects can also more cost-effectively address cross-cutting themes such as climate change mitigation, circular economy practices, and informal sector inclusion.

Furthermore, opportunities will be explored for co-location of facilities, such as shared recycling centers, storage spaces, or data collection hubs, which can reduce costs and streamline logistics. The sharing of expertise, technical personnel, and training resources among projects and institutions will strengthen national and local capacity, enabling knowledge exchange and skill transfer. Joint staffing arrangements, such as secondments or inter-project technical working groups, can further foster collaboration and coherence. Through these coordinated efforts, the project will reinforce the broader national agenda for sustainable resource management, support the scaling of circular economy practices, and contribute to the creation of a more integrated and efficient e-waste management system.

The project will also link to national strategies such as the Circular Economy Strategy and Action Plan (2021-2035) and learn from EPR schemes implemented in other countries and UNDP projects globally. Furthermore, the project's alignment with the global GEM program facilitates knowledge sharing and learning from other child projects, especially regional projects and those with an EEE manufacturing base. This portfolio management approach allows the Cambodia GEM Project to leverage existing resources, expertise, and lessons learned, thereby enhancing its cost-effectiveness and maximizing its impact.

An inter-ministerial working group on sustainable consumption and production will support coordinated waste management efforts, which can lead to opportunities for joint monitoring activities, potentially reducing individual project costs and improving the comprehensiveness of data collection. A national-level project coordination mechanism will also ensure effective knowledge sharing with the global GEM program, supporting efficiency in areas such as procurement of expertise or development of knowledge products. The project will also engage the private sector through PPPs within the EPR framework, which could lead to shared responsibilities and resources in areas like collection and recycling infrastructure.

The Cambodia GEM Project's strategy for cost efficiency and effectiveness rests on:

- A comprehensive approach guided by a Theory of Change that addresses systemic issues across the electronics value chain for long-term impact.

- Strategic leveraging of existing initiatives and partnerships with national government bodies, international organizations (like the World Bank and GIZ), and the global GEM program to avoid duplication and maximize synergies.
- A focus on collaboration and coordination among various stakeholders, including the potential for joint operations in monitoring and procurement, as well as PPPs with the private sector.
- The development of a knowledge management platform to facilitate learning and the scaling up of best practices.

This multi-pronged approach addresses development barriers and fosters collaboration, providing an efficient and effective pathway to improve e-waste management in Cambodia within the available resources.

Project Management

The responsibility for the execution of the project is with the Implementing Partner (IP). The Implementing Partner for this project is the Ministry of Environment. UNDP, as the GEF agency for this project, will play an oversight role. A Project Management Unit (PMU) will be established for the overall coordination as well as resource management of this Project. PMU will be financially supported and structured to include the services of the Project Coordinator and the Project Assistant and will be located in Phnom Penh.

The PMU will provide management services and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project consultants, and the sub-contractors. The project manager typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels, and risk registers.

While the PMU will perform the supportive role, the Project Manager is responsible for:

- Managing the overall conduct of the project
- Implementing activities by mobilizing goods and services
- Checking on progress and watch for plan deviations
- Ensuring that changes are controlled, and problems addressed
- Monitoring progress and risks
- Reporting progress including measures to address challenges and opportunities.

The Project Manager should coordinate with the pertinent programme and operational units of the MoE and UNDP Country Office on the follow up of disbursements against obligations and other matters in relation to project implementation and management.

Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information: To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy and the GEF policy on public involvement.

PROJECT RESULTS FRAMEWORK

Contribution to the Sustainable Development Goal (s): SDG 12: Responsible Consumption and Production; SDG 6: Clean Water and Sanitation; SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation, and Infrastructure; SDG 13: Climate Action; SDG 15: Life on Land						
Intended Outcome as stated in the UNSDCF/Country Programme Results and Resource Framework: <u>UN Sustainable Development Cooperation Framework:</u> Outcome 3: By 2028, people in Cambodia, especially those at risk of left behind benefits from healthier, gender inclusive natural environment. <u>UNDP Country Programme Document:</u> Output 3.2: Circular economy promoted to reduce pollution and improve consumption behaviors and production practices.						
Applicable Output(s) from the UNDP Strategic Plan: 1.1, 4.1, 4.2, E1 and E3						
Project title and Quantum Project Number: Global Electronics Management (GEM) Program Child Project in Cambodia						
Objective and Outcome Indicators (no more than a total of 20 indicators)	Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
Project Objective:	To achieve system transformation promoting circularity in electric and electronic equipment (EEE) management in Cambodia in the electronics supply chain by addressing transformation levers (policy, infrastructure, innovation and learning, and multistakeholder dialogues)					
	<u>Mandatory Indicator 1</u> (GEF Core Indicator 11): direct project beneficiaries disaggregated by gender (individual people)	Project activity records (including participants lists from trainings, consultations, and pilot interventions), government and industry data on employment in the EEE manufacturing and e-waste sectors.	0	40,000 women and 40,000 men.	100,000 women and 100,000.	Surveys, desk review of government/industry data record <u>Risks:</u> Limited or inaccurate data on informal workers and small enterprises; record-keeping or reporting by implementing partners may lead to underreporting or duplication of beneficiary numbers. <u>Assumptions:</u> Government agencies and private sector partners provide access to relevant demographic and employment data to support accurate beneficiary tracking.
	<u>Mandatory Indicator 2:</u> GEF CI 6: Greenhouse Gas Emissions Mitigated	National Inventory of GHG emissions	0	0	27,237 tons of CO2 equivalent avoided	Mid-Term and Final Evaluation reports, based on the annual reporting of child project's PIRs. <u>Risk:</u> Low commitment from EEE producers/importers and recycling/waste management facilities to apply BAT/BEP and inadequate implementation of the technological solutions. <u>Assumption:</u> EEE producers/importers and waste management facilities are sufficiently incentivized and supported—through policy alignment, technical assistance, and

							access to finance—to adopt BAT/BEP and implement recommended technological solutions as part of their operations.
	<u>Mandatory Indicator 3:</u> GEF Core Indicator 9: Chemicals of global concern and their waste reduced	No baseline data available. Inventory data on chemicals of global concern in the EEE (ICT) sector will be collected/estimated by the project.	0	0.7 tons of POPs removed, 0.1 kg of mercury reduced, 5,000 tons of POPs and mercury containing materials directly avoided	2.7 tons of POPs removed, 0.3 kg of mercury reduced, 20,411 tons of POPs and mercury containing materials directly avoided.	The PMU will carry out an inventory survey and record the elimination of hazardous chemicals through pilots.	<u>Risk:</u> Limited capacity of government and stakeholders to enable a favorable environment for the innovation of materials and processes with hazardous chemicals (POPs, UPOPs, among others). <u>Assumption:</u> The PMU is committed to promoting coordination between the competent authorities for the creation and implementation of policies that allow the substitution and, when possible, the elimination of hazardous chemicals/products. Implementation of BAT in decreasing hazardous waste generation.
	<u>Mandatory Indicator 4:</u> GEF Core Indicator 10: Persistent organic pollutants to air reduced (g TEQ)	No baseline data available. Data on persistent organic pollutants to air emitted from EEE(ICT) sector will be collected/estimated by the project	0	0	1.7 gTeq POPs to air reduced	The PMU will implement the technological improvement, BAT/BEP and monitor the emissions of open burning.	<u>Risks:</u> Limited capacity of national stakeholders to adopt and implement BAT/BET as well as to encourage technological innovation. <u>Assumptions:</u> Key stakeholders are willing to participate and receive training in use on the implementation of BAT/BEP and technological innovation.
Project component 1	ENABLING POLICY ON CIRCULAR ECONOMY FOR ELECTRONICS						
Project Outcome 1.1: National or city-level strategies and regulations for circular electronics value chain development	Indicator 5: Number of assessment, tools, reports developed on circular electronics recommended to policymakers for adoption	Project activity records	0	2	4	Review the developed tools, reports and assessment.	<u>Risks:</u> Delayed endorsement or limited uptake of developed tools and reports by relevant government agencies or stakeholders due to competing policy priorities or insufficient inter-agency coordination. <u>Assumptions:</u> Relevant authorities and stakeholders are actively engaged throughout the development process and there is political will and institutional interest to integrate project outputs into national and subnational planning and regulatory frameworks.

	Indicator 6: Number of enterprises and organizations engaged in strategy development	Project activity records	0	20 enterprises or organizations engaged in strategy development on "right to repair", "anti-planned obsolescence" and "circular design"	20 enterprises or organizations engaged in strategy development on "right to repair", "anti-planned obsolescence" and "circular design"	Review and collect number of enterprises or organizations engaged	<u>Risk:</u> Limited interest or capacity among enterprises/organizations to adopt CE practices due to perceived high upfront costs, lack of awareness, or absence of regulatory or market incentives. <u>Assumption:</u> Targeted organizations are motivated by business, regulatory, or reputational drivers, and are open to engaging with the project's technical support and incentives to adopt CE-aligned practices.
Outputs to achieve Outcome 1.1	Output 1.1.1: Standard and systematic e-waste inventory, including data on secondhand electronics and toxic chemicals, developed Output 1.1.2: Gender-responsive strategy for e-waste dismantling and recycling methods developed Output 1.1.3: Strategies Strategy for "Right to repair", "anti-planned obsolescence" and "circular design" drafted, enacted, and disseminated Output 1.1.4: Operational measures (prakas, guidelines) for implementation of the e-waste sub-decree developed						
Outcome 1.2: Policies and incentive mechanisms in place to support circular electronics value chain	Indicator 7: Number of standards and guidelines recommended to policymakers for adoption	Project activity record	0	2	2	Review the developed guidelines and strategies.	<u>Risk:</u> Delayed endorsement or limited uptake of developed tools and reports by relevant government agencies or stakeholders due to competing policy priorities or insufficient inter-agency coordination. <u>Assumptions:</u> Relevant authorities and stakeholders are actively engaged throughout the development process and there is political will and institutional interest to integrate project outputs into national and subnational planning and regulatory frameworks.
	Indicator 8: Number of enterprises and organizations with improved capacity to implement green procurement and financing, other CE policies, and/or EPR	Project implementation record	0	30	30	Maintain a database where all participation of the enterprises are logged.	<u>Risk:</u> Limited interest or capacity among manufacturers to adopt CE practices due to perceived high upfront costs, lack of awareness, or absence of regulatory or market incentives. <u>Assumption:</u> Targeted manufacturers in prioritized sub-sectors are motivated by business, regulatory, or reputational drivers, and are open to engaging with the project's technical support and incentives to adopt CE-aligned practices.

Outputs to achieve Outcome 1.2	Output 1.2.1: Green and sustainable procurement, green financing, innovation and incentive mechanisms designed and adopted. Output 1.2.2: Polluters pay principles and CSR incorporated in relevant policies and EPR policy frameworks enhanced/developed.						
Project component 2	CLEANER PRODUCTION AND SUSTAINABLE CONSUMPTION AND USE						
Outcome 2.1: Innovative and resource/energy efficient electronic components (parts) and products designed, manufactured or placed on the market	Indicator 9: Tons of recovered components reused in the manufacture of new electronic parts and products.	Industry reports, repair/service logbooks from repair centers or partners	0	0	0.48	Collect data from project-supported repair shops/operators	<u>Risk:</u> Recovered components do not meet industry quality or safety standards, leading to low uptake by manufacturers and limited integration into new products. <u>Assumption:</u> There is sufficient market demand and industrial capacity to integrate recovered components into new manufacturing processes, supported by enabling policy and quality standards.
	Indicator 10: Tons of new raw materials avoided in the manufacture of new electronic parts	Industry reports, production records	0	1	3	Track material type and weight at the manufacturers	<u>Risk:</u> Recovered materials are not consistently available in sufficient quality or quantity to replace virgin raw materials in manufacturing processes. <u>Assumption:</u> Project-supported manufacturers are technically and economically able to incorporate recovered components into new electronic parts, leading to actual reduction in virgin material demand.
Outputs to achieve Outcome 2.1	Output 2.1.1: Circular design of EEE promoted and supported						
Outcome 2.2: Markets for innovative products and behavior change away from unnecessary consumption and toward increased longevity	Indicator 11: Number of additional months in average lifespan of ICT devices (disaggregated by type of ICT)	Industry reports and market research (average lifespan of mobile phones, tablets, laptops and desktops are set as 36 months)	0	0	Mobile phone:18 Tablets: 18 Laptops: 16 Desktops: 24	Conduct structured surveys with a representative sample of users, track devices repaired and returned to use with estimated added lifespan	<u>Risk:</u> Limited consumer behavior changes or lack of access to affordable, quality repair services may prevent meaningful extension of device lifespan. <u>Assumption:</u> Consumers and producers adopt repair, reuse, or maintenance practices as promoted by the project, leading to a measurable increase in device lifespan.
	Indicator 12: Number of private sector stakeholders	Pilot implementation records, capacity building attendance	0	0	10	Maintain a database where all participation	<u>Risk:</u> Limited market demand for environmentally friendly EEE products (e.g. due to higher prices or low consumer

	promoting and selling EEE that has lower environmental impact	records, interviews and case studies				of the enterprises are logged.	awareness) reduces the incentive for businesses to actively promote or sell these products. <u>Assumption:</u> Through awareness-raising, policy incentives, or improved affordability, consumer demand for environmentally friendlier EEE will increase, encouraging private sector stakeholders to actively promote and sell these products.
Outputs to achieve Outcome 2.2	Output 2.2.1: Markets that support environmentally friendly products and gender-responsive behavioral change strategies promoted and supported. Output 2.2.2: Capacity of enforcement and customs officers to enforce the e-waste sub-decree strengthened.						
Project component 3	RESOURCE EFFICIENT VALUE CHAIN ACROSS THE ELECTRONICS SECTOR						
Outcome 3.1: Mechanisms to maximize reuse, repair and material recycling put in place	Indicator 13: Tons of e-waste avoided (disaggregated by type of ICT)	No baseline data available. Amount of E-waste avoided will be collected or calculated by the project	0	0	- Mobile phones: 12.46 - Tablets: 6.98 - Laptops: 23.24 - Desktop computers: 86.20	Periodic assessment of e-waste generation and diversion rates.	<u>Risk:</u> Limited enforcement of regulations or delayed implementation of pilots may reduce the effectiveness of interventions intended to prevent e-waste generation. <u>Assumption:</u> Pilots are implemented timely, and are supported by the necessary institutional capacity, monitoring mechanisms, and stakeholder cooperation to achieve measurable reductions in e-waste.
	Indicator 14. Number of units of used or end-of-life ICT collected, repaired or refurbished	Collection center intake records and service/repair shops records	0	5,000	17,000	Standardized collection forms and weighing, counting protocols, Repair Tracking Forms	<u>Risk:</u> A lack of economic incentives, parts availability, or technical skills may limit the scale or quality of ICT collection, repair/refurbishment, especially for complex or newer devices. <u>Assumption:</u> There is sufficient demand for repaired ICT products and adequate infrastructure and skills to deliver quality repair/refurbishment services.
Outputs to achieve Outcome 3.1	Output 3.1.1: E-waste collection schemes and reverse logistics that are gender-responsive are established Output 3.1.2: Voluntary EPR scheme designed and demonstrated						
Outcome 3.2: Hazardous waste streams in	Indicator 15: Number of formal recycling companies participating in pilot for improved	Project implementation records	0	0	2	Maintain a database where all participation of the	<u>Risk:</u> Low public participation, weak logistics infrastructure, or informal leakage may lead to under-collection or data gaps, affecting accuracy and performance.

the electronics sector removed from the value chain	collection, management and disposal of hazardous components from e-waste					enterprises are logged.	<u>Assumption:</u> Stakeholders (e.g., households, institutions, businesses) are willing to surrender used ICT devices through formal, accessible collection channels.
Outputs to achieve Outcome 3.2	Output 3.2.1: Environmentally sound management of material streams contaminated by POPs and chemicals of concern Output 3.2.2: BAT and BEP for collection, dismantling, recycling, and disposal of e-waste potentially contaminated by POPs and CoC demonstrated						
Project component 4	KNOWLEDGE MANAGEMENT, COMMUNICATION, AND PROGRAM-LEVEL COORDINATION						
Outcome 4.1: Knowledge management platform established to support sectoral transformation	Indicator 16: Number of knowledge and coordination mechanisms	Project implementation records	0	4	4	Develop and maintain a registry of knowledge and coordination mechanism established	<u>Risk:</u> Mechanisms established remain inactive or fragmented due to unclear mandates, lack of resources, or limited stakeholder ownership. <u>Assumption:</u> Stakeholders are willing and able to collaborate, share knowledge, and institutionalize coordination mechanisms established or supported by the project.
Outputs to achieve Outcome 4.1	Output 4.1.1: Gender-sensitive communication plans and capacity development strategies developed Output 4.1.2: Gender-sensitive awareness of the e-waste sub-decree, EPR schemes, and environmentally sound management of e-waste raised Output 4.1.3: Knowledge management infrastructure designed and established						
Outcome 4.2: Knowledge Management platform established to support sectoral transformation	Indicator 17: Number of individuals (at least 50% women) reached or influenced through gender-responsive coordination, knowledge dissemination, and adaptive learning processes supported by the project	Participation logs, analytics reports, dissemination metrics, and M&E records.	0	4000	10,000	Track downloads, views and distribution lists for shared lessons, publications, review record stakeholder information.	<u>Risk:</u> Disseminated knowledge, coordination processes, or monitoring results do not lead to real influence due to low stakeholder engagement, limited capacity, or institutional resistance to gender-sensitive change. <u>Assumption:</u> Target stakeholders are willing and able to engage meaningfully with coordination platforms, knowledge products, and adaptive learning processes, and apply the information or insights in their institutional or community contexts.
Outputs to achieve Outcome 4.2	Output 4.2.1: Coordination mechanism between the global program and the child projects designed and implemented Output 4.2.2: Links between the global program, child projects, and existing relevant platforms established and strengthened Output 4.2.3: Gender mainstreamed throughout the project activities						

MONITORING AND EVALUATION (M&E) PLAN

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP (including guidance on GEF project revisions) and [UNDP Evaluation Policy](#). **The UNDP Country Office is responsible for ensuring full compliance with all UNDP project M&E requirements including project monitoring, UNDP quality assurance requirements, quarterly risk management, and evaluation requirements.**

Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the [GEF Monitoring Policy](#) and the [GEF Evaluation Policy](#) and other [relevant GEF policies](#)¹⁴. The M&E plan and budget included below will guide the GEF-specific M&E activities to be undertaken by this project.

The Global Electronics Management Program also has programmatic monitoring and evaluation requirements as set out by the GEF Policy on Monitoring (ME/PL/03). The set of GEM Program Indicators will supplement the GEF Core Indicators and the targeted GEBs to provide more granular detail on the progress and learnings of the child project. The child project will contribute existing plans and reports to the joint planning, monitoring and evaluation cycle to minimize additional reporting.

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed – including during the Project Inception Workshop - and will be detailed in the Inception Report.

Minimum project monitoring and reporting requirements as required by the GEF:

Inception Workshop and Report: A project inception workshop will be held within 2 months from the First disbursement date, with the aim to:

- a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
- b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
- c. Review the results framework and monitoring plan.
- d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
- e. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework (where relevant) and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
- f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
- g. Plan and schedule Project Board meetings and finalize the first-year annual work plan. Finalize the TOR of the Project Board.
- h. Formally launch the Project.

GEF Project Implementation Report (PIR):

The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. UNDP will undertake quality assurance of the PIR before submission to the GEF. The PIR submitted to the GEF will be shared with the Project Board. UNDP will conduct a quality review of the PIR, and this quality review and feedback will be used to inform the preparation of the subsequent annual PIR.

¹⁴ See <https://www.thegef.org/projects-operations/policies-guidelines>

GEF Core Indicators:

The GEF Core indicators included as Annex 15 will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the core indicators status. The updated monitoring data must be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent groundtruthing. The methodologies to be used in data collection have been defined by the GEF and are available on the [GEF](#).

Independent Mid-term Review (MTR):

An independent mid-term review (MTR) will be completed by the mid-point of the project. The terms of reference, the MTR process and the final MTR report will follow the standard templates and MTR guidance for UNDP-supported GEF-financed projects available on the [UNDP Evaluation Resource Center](#). The MTR must be submitted to the GEF by the mid-point of the project but no later than 48 months after CEO Endorsement.

Provisions must be taken to complete and submit the MTR within the submission deadline. Therefore, the MTR process must start no later than 8 months before the expected date of submission of the MTR.

The MTR will be 'independent, impartial and rigorous'. The evaluator(s) that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be reviewed. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the MTR process. Additional quality assurance support is available from BPPS/NCE.

The final MTR report will be publicly available in English and will be posted on the UNDP ERC by the MTR submission date included on cover page of this project document. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's submission to the GEF.

The mid-term and terminal evaluation exercise will be harmonized across the GEM Program using a common Terms of Reference, as to ensure comparable evaluation results across the Child Projects.

The child project will conduct the midterm review (MTR), the results of which will be shared by the UNDP to the GEM Program Lead Agency UNIDO, for compilation of lessons learnt and implementation progress, potential issues and challenges, and likelihood of the child project reaching its objectives within the expected timeframe and resources.

Terminal Evaluation (TE):

An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and TE guidance for UNDP-supported GEF-financed projects available on the [UNDP Evaluation Resource Center](#). TE must be submitted to the GEF no later than 6 months after the Completion Date. This is a hard deadline that, if not met, can only be extended through a formal extension request.

Provisions must be taken to complete and submit the TE within the submission deadline. Therefore, TE must start no later than 8 months before the expected date of submission of the TE (or 11 months prior to the estimated operational closure date).

The evaluation will be 'independent, impartial and rigorous'. The evaluator(s) that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from BPPS NCE.

The final TE report will be publicly available in English and posted on the UNDPHY ERC by the TE submission date included on cover page of this project document. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report submission to the GEF.

Per the GEF Terminal Evaluation requirements, for cancelled full-sized projects, Terminal Evaluations are required if the GEF grant expenditure exceeds more than US\$ 2 million.

The independent Terminal Evaluation (TE) of this child project will focus on project performance (relevance, effectiveness, and efficiency) and determine the likelihood of impact and sustainability. The Lead Agency (UNIDO) will also conduct a Programmatic Terminal evaluation in accordance with GEF evaluation guidelines after all child projects have been completed.

Final Report:

The project's final GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans.

Monitoring Plan: The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored by the Project Management Unit annually, and will be reported in the GEF PIR every year, and will be evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. Project risks, as outlined in the risk register, will be monitored quarterly.

Monitoring Activity							
	Results Monitoring	Indicators	Targets	Description of indicators and targets	Frequency	Responsible for data collection	Means of verification
Track results progress	Project objective: To achieve system transformation promoting circularity in electric and electronic equipment (EEE) management in Cambodia in the electronics supply chain by addressing transformation levers (policy, infrastructure, innovation and learning, and multistakeholder dialogues)	Indicator 1 direct project beneficiaries disaggregated by gender (individual people)	Midterm: 40,000 women and 40,000 men End: 100,000 women and 100,000 men	Tracks individuals directly benefiting from project activities (e.g., training, pilots etc). Target based on estimated reach of circular pilots, knowledge sharing, and formal job creation. At least 6,000 are women	Annually, midterm, closure	Project team, consultant,	Participant lists disaggregated by gender; training/event reports
		Indicator 2 Greenhouse Gas Emissions Mitigated	Midterm: 0 End: 27,237 tons	GHG emissions avoided through circular practices and technology upgrades. Derived from PIRs and partner data.	Closure	Project consultant	PIRs, site-level emission reports
		Indicator 3 Chemicals of global concern	Midterm: 0.7 tons of POPs removed, 0.1 kg of mercury	Reduction of hazardous chemicals via circular practices and improved EEE	Midterm, Closure	Project consultant	Inventory data; elimination records.

Monitoring Activity							
	Results Monitoring	Indicators	Targets	Description of indicators and targets	Frequency	Responsible for data collection	Means of verification
		and their waste reduced	reduced, 5,000 tons of POPs and mercury containing materials directly avoided End: 2.7 tons of POPs removed, 0.3 kg of mercury reduced, 20,411 tons of POPs and mercury containing materials directly avoided.	waste management and substitution.			
		Indicator 4 Persistent organic pollutants to air reduced (g TEQ)	Midterm: 0 End: 1.7gTeq POPs to air reduced	Emissions avoided by reducing open burning and improving waste treatment	Closure	Project consultant	Emission monitoring reports; BAT/BEP documentation
	Project Outcome 1.1: National or city-level strategies and	Indicator 5 Number of assessments, tools, reports	Midterm:2 End:4	Includes assessment, technical guidelines, or reports.	Midterm, closure	Knowledge management officer	Document review and quality check of developed outputs

Monitoring Activity							
	Results Monitoring	Indicators	Targets	Description of indicators and targets	Frequency	Responsible for data collection	Means of verification
	regulations for circular electronics value chain development	developed on circular electronics recommended to policymakers for adoption					
		Indicator 6 Number of enterprises and organizations engaged in strategy development	Midterm:20 End:20	Measures breadth of enterprise engagement in strategy development	Midterm, closure	Sector engagement consultant	Records of participation in assessment and data collection
	Project Outcome 1.2: Policies and incentive mechanisms in place to support circular electronics value chain	Indicator 7 Number of standards and guidelines recommended to policymakers for adoption	Midterm: 2 End:2	Includes policy recommendations, incentives, and strategies developed	Midterm, closure	PMU	Document reviews, meeting minutes, etc.
		Indicator 8 Number of enterprises and organizations with improved	Midterm:30 End:30	Tracks the number of enterprises with improved capacities	Midterm, closure	PMU	Project registry

Monitoring Activity							
	Results Monitoring	Indicators	Targets	Description of indicators and targets	Frequency	Responsible for data collection	Means of verification
		capacity to implement green procurement and financing, other CE policies, and/or EPR					
	Project Outcome 2.1: Innovative and resource/energy efficient electronic components (parts) and products designed, manufactured or placed on the market	Indicator 9: Tons of recovered components reused in the manufacture of new electronic parts and products.	Midterm: 0 End: 0.48	Tracks flow of recovered parts used in new electronics.	Closure	Project Consultant	Logs from refurbishes; documentation from
		Indicator 10: Tons of new raw materials avoided in the manufacture of new electronic parts	Midterm: 1 End: 3	Reflects virgin material substitution by recovered components in manufacturing.	Midterm, Closure	Project consultant	Industry reports; production input records

Monitoring Activity							
	Results Monitoring	Indicators	Targets	Description of indicators and targets	Frequency	Responsible for data collection	Means of verification
	Project Outcome 2.2: Markets for innovative products and behavior change away from unnecessary consumption and toward increased longevity	Indicator 11: Number of additional months in average lifespan of ICT devices (disaggregated by type of ICT)	Midterm: 0 End: Mobile phone:18 Tablets: 18 Laptops: 16 Desktops: 24	Measures effectiveness of circular repair/refurbishment activities.	Closure	Project consultant	Surveys; repair records; user tracking logs
		Indicator 12: Number of private sector stakeholders promoting and selling EEE that has lower environmental impact	Midterm: 0 End: 10	Businesses that promote the selling of environmentally friendly EEE.	Closure	Project consultant	Industry reports; sales record
	Project Outcome 3.1: Mechanisms to maximize reuse, repair and material recycling put in place	Indicator 13: Tons of e-waste avoided (disaggregated by type of ICT)	Midterm:0 End: mobile phone 12.46, tablets 6.98, Laptops: 23.24, Desktop:86.20	E-waste not generated due to circular business models and reuse Includes those involved in circular product pilots,	Annually, midterm, closure	Project consultant	Monitoring reports; periodic assessment surveys

Monitoring Activity							
	Results Monitoring	Indicators	Targets	Description of indicators and targets	Frequency	Responsible for data collection	Means of verification
				capacity-building, and mentorship.			
		Indicator 14: Number of units of used or end-of-life ICT collected, repaired or refurbished	Midterm:5,000 End:17,000	Measures success of repair/refurbishment models piloted under the project.	Semi-annually, midterm, closure	Project consultant	Repair tracking forms; service provider reports
	Project Outcome 3.2: Hazardous waste streams in the electronics sector removed from the value chain	Indicator 15: Number of formal recycling companies participating in pilot for improved collection, management and disposal of hazardous components from e-waste	Midterm:0 End:2	Document the number of recycling companies that improved their e-waste management capacity	Closure	Project consultant	Pilot report
	Project Outcome 4.1: Knowledge management platform established to	Indicator 16: Number of knowledge and coordination mechanisms	Midterm:4 End:4	Document the establishment of knowledge platforms and coordination mechanisms	Midterm, closure	PMU	Project Registry, meeting minutes

Monitoring Activity							
	Results Monitoring	Indicators	Targets	Description of indicators and targets	Frequency	Responsible for data collection	Means of verification
	support sectoral transformation						
	Project Outcome 4.2: Knowledge Management platform established to support sectoral transformation	Indicator 17: Number of individuals (at least 50% women) reached or influenced through gender-responsive coordination, knowledge dissemination, and adaptive learning processes	Midterm: 4,000 End: 10,000	People reached via coordination mechanisms, KM events, knowledge products (at least 50% women).	Semi-annually, midterm, closure	KM officer, gender officer	Participation logs, analytics reports, dissemination metrics, and M&E records.

Monitoring Activity			
	Frequency/Timeframe	Expected Action	Partners (if joint)
Inception Workshop and Report	Inception Workshop within 2 months of the First Disbursement	As per above description	
Track results progress (see above table for details)	Annually and at mid-point and closure	Slower than expected progress will be addressed by project management.	
Monitor and Manage Risk	Quarterly	Risks are identified by project management, and actions are taken	

Monitoring Activity			
	Frequency/Timeframe	Expected Action	Partners (if joint)
		to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.	
Monitor Gender Action Plan, Stakeholder Engagement Plan, ESMP (Environmental and Social Management Plan), and ESMF (Environmental and Social Management Framework)	Ongoing	Continuous monitoring and adjustment, with particular attention to the implementation of Pilot Projects.	
Supervision Missions	Annually		
Learning and Learning Missions	As needed	Relevant lessons are captured by the project team and used to inform management decisions.	
Annual Project Quality Assurance	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.	
Review and Make Course Corrections	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.	
Annual GEF Project Implementation Report (PIR)	Annually typically between June-September	Mandatory contribution by Project Team, CO and RTA. Strengths and weaknesses will be reviewed by project management and used to inform decisions to improve project performance	
Project Review (Project Board)	At least annually	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.	

Evaluation Plan

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNSDCF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders
Independent Mid-Term Review (MTR)	N/A.	Output 1.1: The 2030 Agenda, Paris Agreement and other intergovernmental agreed frameworks integrated in national and local development plans, measures to accelerate progress put in place, and budgets and progress Output 4.1: Natural resources protected and managed to enhance sustainable productivity and livelihoods. Output 4.2 Public and private investment mechanisms mobilized for biodiversity, water, oceans, and climate solution.	UNSDCF: Outcome 3 By 2028, people in Cambodia, especially those at risk of left behind benefits from healthier, gender inclusive natural environment. CPD: Output 3.2: Circular economy promoted to reduce pollution and improve consumption behaviours and production practices.	By the MTR submission date included on cover page of Project Document	UNDP, MoE, members of the Project Board, beneficiaries and donors
Independent Terminal Evaluation (TE)	N/A	Same as above	Same as above	By the TE submission date included on cover page of Project Document	Same as above

Monitoring and Evaluation Budget for project execution:	
GEF M&E requirements to be undertaken by Project Management Unit (PMU)	Indicative costs (US\$)
Inception Workshop and Report	10,000
M&E required to report on progress made in reaching GEF core indicators and project results included in the project results framework	7,500
Preparation of the annual GEF Project Implementation Report (PIR)	N/A
Monitoring of Gender Action Plan, Stakeholder Engagement Plan, ESMP (Environmental and Social Management Plan), and ESMF (Environmental and Social Management Framework)	50,500
Supervision missions	15,000
Learning missions	10,000
Independent Mid-term Review (MTR):	50,000
Independent Terminal Evaluation (TE):	55,000
TOTAL indicative COST	198,000

GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Section 1: General roles and responsibilities in the projects' governance mechanism

Implementing Partner: The Implementing Partner for this project is the Ministry of Environment.

The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
- Procurement of goods and services, including human resources.
- Financial management, including overseeing financial expenditures against project budgets.
- Approving and signing the multi-year workplan.
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

Responsible Parties:

Two categories of Responsible Parties will be engaged in the implementation of this project:

Responsible Party A: Responsible Party A are industry associations, research institutions, NGOs and academia with concerns regarding environmental protection and public health. They are responsible for providing technical guidance, support and consultations to facilitate project implementation and decision making of governance and management.

Responsible Party B: The Responsible Party B are sub-national governments. Guided by the Implementing Partner, they are responsible for facilitating project and pilot activities to promote and facilitate pollution prevention and control, emission reduction, monitoring, supervision and enforcement actions. They will be instrumental in assisting in the promotion and awareness raising activities to achieve emission reduction and sound e-waste management.

Project stakeholders and target groups:

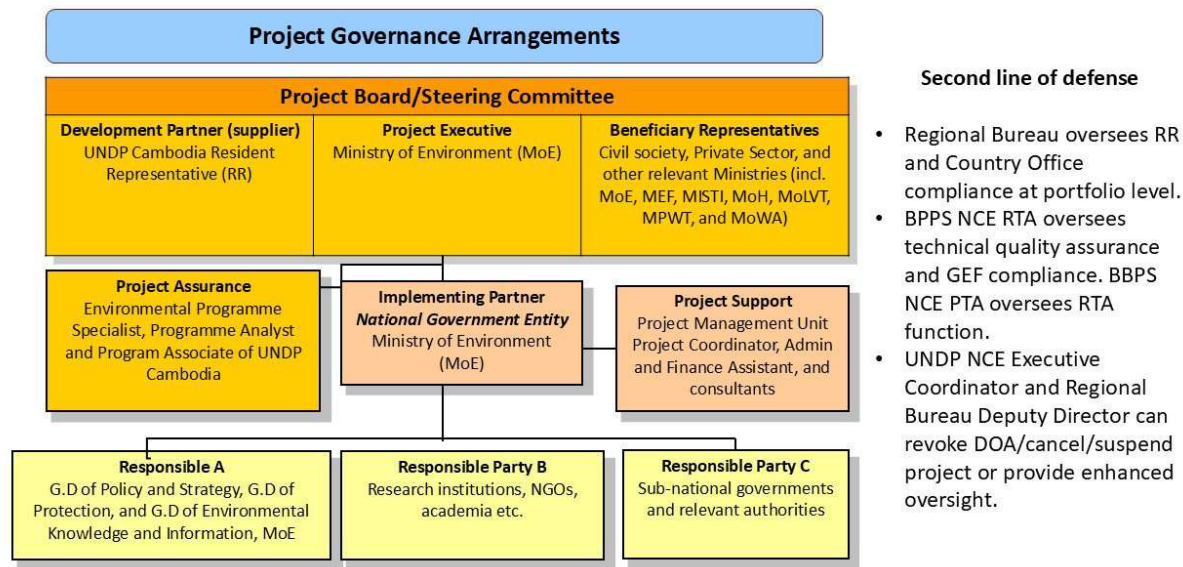
The project will work with a multitude of partners and initiatives to achieve the outcomes such as:

- National government, including Ministry of Environment (MoE) and other line ministries including Ministry of Economy and Finance/General Department of Customs and Excise of Cambodia (MoEF); Ministry of Industry, Science, Technology & Innovation (MISTI); Ministry of Health (MoH); Ministry of Labour and Vocational Training (MoLVT); Ministry of Public Works and Transport (MPWT); and Ministry of Women's Affairs (MoWA).
- Sub-national government, including Provincial and Municipal Departments of Environment including Solid Waste Management; Phnom Penh Capital Hall.
- Private sector, including EEE producers and importers; formal business involved in collection, dismantling, disposal, and export; and informal sector including collectors, waste pickers, aggregators and traders, dismantlers, junk shops, refurbishes, and exporters; and financial institutions.

- Civil society and others, including communities, academia, schools, women’s organizations, and NGOs.
- International partners: IGOs, IOs, and other development partners (DP), such as GGGI and GIZ.

UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

Section 2: Project governance structure



The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP’s Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.

Section 3: Segregation of duties and firewalls vis-à-vis UNDP representation on the project board:

As noted in the [Minimum Fiduciary Standards for GEF Partner Agencies](#), in cases where a GEF Partner Agency (i.e. UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and execution functions.

In this case, UNDP is only performing an implementation oversight role in the project vis-à-vis our role in the project board and in the project assurance function and therefore a full separation of project implementation oversight and execution duties has been assured.

Section 4: Roles and Responsibilities of the Project Organization Structure:

- a) **Project Board:** All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.

The two main (mandatory) roles of the project board are as follows:

- 1) **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the [“Provide Oversight”](#) section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.
- 2) **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the [“Manage Change”](#) section of the POPP).

Requirements to serve on the Project Board:

- ✓ Agree to the Terms of Reference of the Board and the rules on protocols, quorum and minuting.
- ✓ Meet annually; at least once.
- ✓ Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
- ✓ Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
- ✓ Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

Responsibilities of the Project Board:

- ✓ Consensus decision making:
 - The project board provides overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
 - Review project performance based on monitoring, evaluation and reporting, including progress reports, risk logs and the combined delivery report;
 - The project board is responsible for making management decisions by consensus.
 - In order to ensure UNDP’s ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.
 - In case consensus cannot be reached within the Board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.
- ✓ Oversee project execution:
 - Agree on project manager’s tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager’s tolerances are exceeded.

- Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
 - Address any high-level project issues as raised by the project manager and project assurance;
 - Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies);
 - Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
 - Track and monitor co-financed activities and realisation of co-financing amounts of this project.
 - Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.
 - Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.
- ✓ Risk Management:
- Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.
 - Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.
 - Address project-level grievances.
- ✓ Coordination:
- Ensure coordination between various donor and government-funded projects and programmes.
 - Ensure coordination with various government agencies and their participation in project activities.

Composition of the Project Board: The composition of the Project Board must include individuals assigned to the following three roles:

1. **Project Executive:** This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Board. The Executive usually is the senior national counterpart for nationally implemented projects (typically from the same entity as the Implementing Partner), and it must be UNDP for projects that are direct implementation (DIM). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Board. If the project executive co-chairs the project board with representatives of another category, it typically does so with a development partner representative. The Project Executive will be co-chaired by a representative of the Ministry of Environment (MoE) and by UNDP Resident Representative or his/her designate. Other PEB members under the project include a representative from the relevant General Directors under the Ministry of Environment.
 2. **Beneficiary Representative(s):** Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Board. The Beneficiary representative (s) is/are: the Ministry of Environment and other relevant ministries, civil society organizations such as but not limited to River Ocean Cleanup, Composted Organization, Private Sector such as but not limited to TONTOTON, GOMI RYCLE, ECOBAT, and sub-national/local authorities in target areas.
 3. **Development Partner(s):** Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partner(s) is a UNDP Resident Representative or Deputy Resident Representative who will ensure the policies of UNDP and the GEF are complied with.
- b) **Project Assurance:** Project assurance is the responsibility of each project board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and

monitoring functions. UNDP performs quality assurance and supports the Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. Project assurance is totally independent of project execution.

A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function is/are: Environmental Programme Specialist, Programme Analyst and Program Associate of UNDP Cambodia.

- c) **Project Management – Execution of the Project:** The Project Manager (PM) (also called project coordinator) is the senior most representative of the Project Management Unit (PMU) and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The project manager typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers.

A designated representative of the PMU is expected to attend all board meetings and support board processes as a non-voting representative.

The primary PMU representative attending board meetings is the Director of the Department of Science and Technology, Ministry of Environment.

FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is USD 30,100,000. This is financed through a GEF grant of USD 4,000,000 administered by UNDP and additional support of USD 26,100,000. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.

Co-financing: The actual realization of project co-financing amounts will be monitored by the UNDP Country Office and the PMU on an annual basis in the GEF PIF and will be reported to the GEF during the mid-term review and terminal evaluation process as follows:

Co-financing source	Co-financing type	Name of Co-financier	Investment Mobilized	Co-financing amount
Government	In-kind	Ministry of Environment	<i>Recurrent expenditures</i>	10,000,000
Private Sector	In-kind	ECOBATT Energy Investment Interational Co. Ltd.	Recurrent expenditures	10,000,000
GEF Agency	In-kind	UNDP	Recurrent expenditures	6,100,000
Total				26,100,000

Budget Revision and Tolerance: As per UNDP POPP, the project board may agree with the project manager on a tolerance level for each detailed plan under the overall multi-year workplan. The agreed tolerance should be written in the project document or approved project board meeting minutes. It should normally not exceed 10 percent of the agreed annual budget at the activity level, but within the overall approved multi-year workplan at the activity level. Within the agreed tolerances, the project manager can operate without intervention from the project board. Restrictions apply as follows:

Should the following deviations occur, the Project Manager/IP through UNDP Country Office will seek the approval of the BPPS/NCE-VF team to ensure accurate reporting to the GEF. It is **strongly encouraged** to maintain the expenditures within the approved budget at the budgetary account and at the component level:

- a) Budget reallocations must prove that the suggested changes in the budget will not lead to material changes in the results to be achieved by the project. A strong justification is required and will be approved on an exceptional basis. Budget re-allocations among the components (including PMC) of the approved Total Budget and Work Plans (TBWP) that represent a value greater than 10% of the total GEF grant.
- b) Introduction of new outputs/activities (i.e. budget items) that were not part of the agreed project document and TBWP that represent a value greater than 5% of the total GEF grant. The new budget items must be eligible as per the [GEF and UNDP policies](#).
- c) Project management cost (PMC): budget under PMC component is capped and cannot be increased.

UNDP is not in a position to increase the total budget above the amount approved by the donor, therefore any over-expenditure would have to be absorbed from non-GEF resources by the Implementing Partner (GEF Executing Entity)

Project extensions: The UNDP-BPPS-NCE team Executive Coordinator must approve all requests for extension of the Project Completion Date and for other milestone extensions with hard deadlines. All extensions impose additional time and cost burdens at all levels and the GEF project budget cannot be increased beyond its originally approved amount. A single extension may be granted on an exceptional basis and subject to the conditions and maximum durations set out in the UNDP POPP. The project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs shall be covered by non-GEF resources; the additional UNDP oversight costs during the extension period must be covered by non-GEF resources, in accordance with UNDP's policy as set out in UNDP POPP.

For any extension request, UNDP CO and IP will consult and jointly present a clear plan indicating how and from which specific sources the additional oversight costs that will be incurred by UNDP will be covered during the extended period. The BPPS-NCE Executive Coordinator will consult the Regional Bureaux (RBX) and may reject the extension request if no (external co-financing by the IP or internal UNDP CO resources) can be identified.

All extension requests, along with all supporting documentation, shall be submitted by the IP to the UNDP CO in line with the requirements and within the deadlines set out in the UNDP SOPs and policies in UNDP POPP.

Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

Transfer or disposal of assets: In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project, however **must be done before the operational closure date**. In all cases of transfer, a transfer document must be

prepared and kept on file¹⁵. The transfer should be done before Project Management Unit complete their assignments.

Completion Date: The project completion date is the date of Project Document Signature plus project duration. This date can only be extended through a formal extension request. Prior to completion date, all UNDP-financed inputs must be provided and related activities for the Project completed. No activities, except for the final clearance of the Terminal Evaluation Report and the corresponding management response and the end-of-project review Project Board Meeting should take place after the Completion Date.

Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

- **Operational Closure:** Operational closure must happen within 9 months from project completion date. Prior to operational closure, the Terminal Evaluation must have been submitted and the corresponding TE management response and the end-of-project review Project Board meeting must have been completed. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. Before Operational Closure, the project must have completed the transfer or disposal of any equipment that is still the property of UNDP.
- **Financial Closure:** Financial closure must happen within 6 months of operational closure or after the date of cancellation. The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to BPPS/NCE for confirmation before the project will be financially closed in Quantum by the UNDP Country Office.

Cancellation and Suspension: All projects considering going through cancellation or suspension must follow UNDP and GEF requirements. Guidance can be found in the UNDP POPP ([SOPs for management actions of Vertical Fund projects escalated to the Executive Coordinator](#) and [Guidance for GEF project revisions](#)).

Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/NCE team Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF. Unspent project balance is not permitted to be transferred to any other projects.

¹⁵ See <https://popp.undp.org/> <https://popp-prod.acquia.undp.org/policy-page/close-and-transition>.

TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Quantum Business Unit	UNDP-KHM10		
Quantum Project ID:	01005493	Quantum Project Title:	Global Electronics Management (GEM) Program Child Project in Cambodia
Quantum Award ID:	1544510	Quantum Award Title:	<i>As in Quantum</i>
UNDP-GEF PIMS No.	9833		
Implementing Partner	Ministry of Environment		

Quantum Outcome (GEF Component)	Quantum Output and Activity (GEF Outcome)	Quantum Responsible Party (UNDP, IP, or Responsible Party)	Quantum Fund ID	Quantum Donor ID	Quantum Budgetary Account Code	Quantum Budget Account Description	Amount 2026 (USD)	Amount 2027 (USD)	Amount 2028 (USD)	Amount 2029 (USD)	Amount 2030 (USD)	Total (USD)	See Budget Note
Component 1: Enabling policy on circular economy for electronics	Outcome 1.1: National or city level plans and strategies for circular electronics value chain developed	MoE	62000	010003	71600	Travel	1,550	550	-	-	-	2,100	1
			62000		72100	Contractual Services - Companies	90,000	80,000	-	-	-	170,000	2
			62000		71300	Local Consultants	52,500	24,500	-	-	-	77,000	3
			62000		75700	Training, Workshops and Conferences	4,500	8,500	-	-	-	13,000	4
			62000		71200	International Consultants	37,500	-	-	-	-	37,500	5
		Total MoE						186,050	113,550	-	-	-	299,600
	Total Outcome 1.1						186,050	113,550	-	-	-	299,600	
	Outcome 1.2: Policies and incentive mechanisms in place to support circular electronics value chain	MOE	62000	010003	71600	Travel	-	674	-	-	-	674	6
			62000		71300	Local Consultants	-	21,000	-	-	-	21,000	7
			62000		75700	Training, Workshops and Conferences	-	5,000	-	-	-	5,000	8
			62000		71200	International Consultants	-	30,000	-	-	-	30,000	9
		Total MoE						-	56,674	-	-	-	56,674
	Total Outcome 1.2						-	56,674	-	-	-	56,674	
Total Component 1							186,050	170,224	-	-	-	356,274	
Component 2: Cleaner production and sustainable	Outcome 2.1 Innovative and resource/energy efficient	MoE	62000	010003	71600	Travel	4,800	4,800	4,800	4,800	4,800	24,000	10
			62000		72100	Contractual Services - Companies	115,000	30,000	180,000	-	-	325,000	11

consumption and use	electronic components (parts) and products designed, manufactured or placed on the market		62000		75700	Training, Workshops and Conferences	4,000	4,000	4,000	4,000	4,000	20,000	12	
		Total MoE						123,800	38,800	188,800	8,800	8,800	369,000	
	Total Outcome 2.1						123,800	38,800	188,800	8,800	8,800	369,000		
	Outcome 2.2 Markets for innovative products and behavior change away from unnecessary consumption and toward increased longevity	MoE	62000	010003	72100	Contractual Services - Companies	10,000	540,000	50,000	5,000		605,000	13	
			62000		71600	Travel	-	2,800	1,400	-	-	4,200	14	
			62000		75700	Training, Workshops and Conferences	1,000	1,000	4,000	8,000	-	14,000	15	
			62000		71300	Local Consultants	10,500	-	-	-	-	10,500	16	
Total MoE						21,500	543,800	55,400	13,000	-	633,700			
Total Outcome 2.2						21,500	543,800	55,400	13,000	-	633,700			
Total Component 2							145,300	582,600	244,200	21,800	8,800	1,002,700		
Component 3: Resource efficient value chain across the electronics sector	Outcome 3.1 Mechanisms to maximize reuse, repair and material recycling put in place	MoE	62000	010003	71600	Travel	4,200	4,200	4,200	4,200	4,200	21,000	17	
			62000		72100	Contractual Services - Companies	170,000	380,000	200,000	150,000	-	900,000	18	
			62000		71300	Local Consultants	-	-	21,000	-	-	21,000	19	
			62000		75700	Training, Workshops and Conferences	1,000	2,000	2,000	2,000	1,000	8,000	20	
			62000		71200	International Consultants	40,000	10,000	55,000	10,000	10,000	125,000	21	
		Total MoE						215,200	396,200	282,200	166,200	15,200	1,075,000	
	Total Outcome 3.1						215,200	396,200	282,200	166,200	15,200	1,075,000		
	Outcome 3.2 Hazardous waste streams in the electronics sector removed from the value chain	MOE	62000	010003	71600	Travel	4,200	4,200	4,200	4,200	4,200	21,000	22	
			62000		71300	Local Consultants	49,000	49,000	49,000	49,000	49,000	245,000	23	
			62000		75700	Training, Workshops and Conferences	1,000	2,000	2,000	2,000	1,000	8,000	24	
62000			72100		Contractual Services - Companies	-	150,000	150,000	200,000	-	500,000	25		
62000			010003	71200	International Consultants	-	25,000	25,000	25,000	-	75,000	26		

			62000		71800	Contractual Services- Implementing Partner	12,000	12,000	12,000	12,000	12,000	60,000	27
		Total MoE					66,200	242,200	242,200	292,200	66,200	909,000	
	Total Outcome 3.2						66,200	242,200	242,200	292,200	66,200	909,000	
Total Component 3							281,400	638,400	524,400	458,400	81,400	1,984,000	
Component 4: Knowledge management, communication , and program-level coordination	Outcome 4.1 Knowledge Management platform established to support sharing and learning, capacity building, awareness raising amongst various stakeholder to achieve sectoral transformation	MoE	62000	010003	71600	Travel	1,400	1,400	2,800	1,400	2,800	9,800	28
			62000		72100	Contractual Services - Companies	5,000	30,000	40,000	-	-	75,000	29
			62000		75700	Training, Workshops and Conferences	-	6,000	6,000	4,000	4,000	20,000	30
		Total MoE					6,400	37,400	48,800	5,400	6,800	104,800	
	Total Outcome 4.1						6,400	37,400	48,800	5,400	6,800	104,800	
	Outcome 4.2 Coordination and linkages amongst the relevant global and national stakeholders and platforms established	MoE	62000	010003	71600	Travel	15,950	15,950	15,950	15,950	15,950	79,750	31
			62000		71200	International Consultants	4,800	4,800	4,800	4,800	4,800	24,000	32
			62000		71800	Contractual Services - Implementing Partner	12,000	12,000	12,000	12,000	12,000	60,000	33
		Total MoE					32,750	32,750	32,750	32,750	32,750	163,750	
	Total Outcome 4.2						32,750	32,750	32,750	32,750	32,750	163,750	
Total Component 4							39,150	70,150	81,550	38,150	39,550	268,550	
Monitoring and Evaluation (M&E)	Monitoring and Evaluation (M&E)	MOE	62000	010003	75700	Training, Workshops and Conferences	10,000	2,000	2,000	2,000	4,000	20,000	34
			62000		71200	International Consultants	17,500	-	-	-	-	17,500	35
			62000		71300	Local Consultants	8,250	8,250	8,250	8,250	-	33,000	36
			62000		71600	Travel	4,500	4,500	4,500	4,500	4,500	22,500	37
		Total MoE					40,250	14,750	14,750	14,750	8,500	93,000	
		UNDP	62000	010003	71200	International Consultants	-	-	30,000	-	30,000	60,000	38

			62000		71300	Local Consultants	-	-	20,000	-	25,000	45,000	39
Total UNDP							-	-	50,000	-	55,000	105,000	
Total M&E							40,250	14,750	64,750	14,750	63,500	198,000	
Project Management Component	PMC	MoE	62000	010003	71800	Contractual Service Cost - Implementing Partners duals	22,400	38,400	38,400	38,400	38,400	176,000	40
			62000		72500	Supplies	100	100	100	100	100	500	41
			62000		72800	Information Technology Equipment	1,000	244	244	244	244	1,976	42
		Total MoE					23,500	38,744	38,744	38,744	38,744	178,476	
		UNDP	62000	010003	74100	Professional Services	-	3,000	3,000	3,000	3,000	12,000	43
		Total UNDP					-	3,000	3,000	3,000	3,000	12,000	
Total Project Management Cost							23,500	41,744	41,744	41,744	41,744	190,476	
Total Project Grant							715,650	1,517,868	956,644	574,844	234,994	4,000,000	

Budget Notes

Budget Note No.	Budget Note (Description)
COMPONENT 1: Enabling policy on circular economy for electronics	
1	Travel costs of officials, experts, consultants, and key stakeholders for developing e-waste inventory and strategies for circular electronics value chain a) 1 person X \$250x 2 trips=\$500, Output 1.1.1 (year 1) b) 1 person X \$250x 2 trips=\$500, Output 1.1.2, \$500 (year 1); c) 1 person X \$275x 2 times (Y1 =\$275 and Y2: \$275), Output 1.1.3, \$550 (years 1 and 2); d) 1 person X \$275x 2 times (Y1 =\$275 and Y2: \$275), Output 1.1.4, \$550 (years 1 and 2); Total:\$2,100
2	Subcontracts with entity or institute: a) to develop standard and systematic e-waste inventory (Activity 1.1.1.1), \$90,000; b) to map material flows with GIS and flow modelling tools and identify leakage (Activity 1.1.1.2), \$80,000; Total: \$170,000

3	a) Local expert on e-waste management to assess e-waste dismantling and recycling methods and existing capacities and technologies in Cambodia; and develop strategy for establishing national e-waste collection schemes and reverse logistics systems; and review the implementation of the e-waste sub-decree to identify and develop necessary operational measures. (180 days X \$350 = \$63,000) b) Local consultant on circular design to conduct a situation and gap analysis on right-to-repair, anti-planned obsolescence, and circular design in EEE in Cambodia (40 days X \$350=\$14,000) Total: \$77,000
4	a) One consultation meeting and one validation meeting on e-waste inventory, each meeting with 30 participants, \$1,500/meeting, total \$3,000 (Output 1.1.1) b) One validation workshop on e-waste dismantling and recycling methods assessment, 30 participants, \$1,500 (Output 1.1.2) c) One training workshop on safe dismantling and functionality testing of used components for after-sale service centers and repair shops, 50 participants, \$ 3,000 (Output 1.1.2) d) One training workshop on right-to-repair, anti-planned obsolescence and circular design, 50 participants, \$3,000 (Output 1.1.3) e) One training workshop on applying the operational measures for implementation of the e-waste sub-decree, 50 participants, \$2,500 (Output 1.1.4) Total:\$13,000
5	a) International technical advisor on e-waste management to identify required improvements and opportunities for e-waste dismantling and recycling methods based appropriate BAT and BEP, and provide guidance and training. (30 days X \$750=\$22,500) b) International expert on circular design to advise on international best practices for right-to-repair, anti-planned obsolescence, and circular design in EEE. (30 days X \$500=\$15,000) Total:\$37,500
6	Travel costs of officials, experts, consultants, and key stakeholders for designing green and sustainable procurement and other Circular Economy policies (Output 1.2.1), \$674 (years 2);
7	Local expert on green financing to review exiting policies and national needs related to green and sustainable procurement, green financing, innovation, polluter pays principles, CSR, EPR etc. (60 days X \$350 = \$21,000)
8	One training workshop on implementation of circular economy policies, 80 participants, \$5,000 (Output 1.2.1)
9	International Expert on Green Financing to conduct literature review of international guidance and best practices on green and sustainable procurement, green financing, innovation policies, polluters pay, incentive mechanism, and CSR and EPR policies, and develop tailored guidelines for implementation of circular economy policies. (40 days X \$750= \$30,000)
COMPONENT 2: EEE Manufacturing, Supply Chain and End of Life (EOL) Ecosystem improvement through prevention measures and socio-technical ESM models/pilots for replication.	
10	Travel costs of officials, experts, consultants and other key stakeholders over 5 years to promote and support circular design of EEE (Output 2.1.1), \$1600/trip X3 trips/yearX5 years = \$24,000
11	Subcontract(s) with entities or institutes: a) identify practical circular design interventions and carry out feasibility study to evaluate their potential impact; \$50,000 b) engage at least two education institutions to integrate sustainability and product longevity into relevant curricula; \$30,000 each, sub-total \$60,000 c) engage two OEMs/manufactures to test circular design approaches; \$75,000 each, sub-total \$150,000 d) develop reports/knowledges products on lessons learned; \$65,000 Total \$ 325,000
12	Two consultation, review or technical workshops on circular design conducted each year over 5 years at \$2,000 per workshop, \$20,000 ;

13	Subcontract or agreement with entities or institutes: a) design and carry out two pilot programs to test incentive schemes that will encourage the sale of EEE with lower environmental impacts (Output 2.2.1); \$150,000 each, sub-total \$300,000 b) conduct comprehensive assessment of existing laboratory capabilities on analyzing e-waste contaminants (Activity 2.2.2.2), \$10,000 c) procure equipment for identified laboratory to improve its testing capabilities on e-waste contaminants (Activity 2.2.2.2), \$240,000 d) provide training to laboratory personnel to enhance their technical skills in detecting and analyzing e-waste contaminants (Activity 2.2.2.2), \$5,000 e) carry out laboratory accreditation and inter-laboratory verification exercises (Activity 2.2.2.2) \$50,000 Total \$605,000
14	Travel costs of officials, experts, consultants and other key stakeholders to support capacity building of enforcement and customs officers (Output 2.2.2), \$700/trip/person x 2person X3 trips = \$4,200
15	Two consultation meeting with customs/enforcement personnel and other stakeholders, \$1,000 per meeting, total \$2,000; Three training workshops on enforcement of the e-waste sub-decree, 50 participants each, \$4000/workshop, total \$12,000 Total: \$14,000
16	Local consultant on customs capacity building to identify the capacities, needs and priorities of customs and enforcement personnel and develop a targeted customs capacity strengthening strategy. 30 days X \$350=\$10,500
COMPONENT 3: Improvement of baseline systems and infrastructures for POPs and UOPs reduction in e-waste processing	
17	Travel costs of officials, experts, consultants, and other key stakeholders to support in activities pertaining to Outputs 3.1.1 and 3.1.2. \$700/person/trips X 6person trip/year X 5 years=\$21,000
18	Subcontract of an entity or institute: a) to review regional and international models to inform the design, assess technical requirements and MoE's capacity, and set up a registration system for e-waste management companies (Activity 3.1.1.1); \$100,000 b) to develop and pilot one digital tracking system for high-risk EEE imports (Activity 3.1.1.4); \$70,000 c) to pilot e-waste collection points in Phnom Penh (Activity 3.1.1.5), \$200,000 d) carry out one pilot to support three SMEs (refurbishment businesses, repair shops etc.) through establishing and providing small grants, offering business development services, providing technical training etc. (Activity 3.1.1.6), \$180,000 e) to carry out one pilot program to build safe e-waste dismantling capacity in the informal sector, \$150,000; f) to develop and pilot an EPR scheme for e-waste, including defining target products, target producers/importers, physical and financial obligations for producers/importers, and fund management mechanisms (Activity 3.1.2.1), \$200,000 Total \$900,000
19	Local expert on e-waste management to develop standard operation procedures (SOPs) for e-waste collection schemes and reverse logistics. 60days X \$350/day = \$21,000
20	Eight coordination meetings with project experts and key stakeholders, \$1,000/meeting, \$8,000
21	International technical advisor on e-waste management to develop technical guidelines for e-waste collection schemes and reverse logistics. 40 days X \$750/day = \$30,000 International technical advisor on EPR to support the development of EPR scheme; provide advisory services and assess EPR schemes in other countries; and coordinate activities under Output 3.1.1 and 3.1.2. \$95,000 (127 days, \$750/day).

	Total \$125,000
22	Travel costs of officials, experts, consultants, and other key stakeholders to support in activities pertaining to Outputs 3.2.1 and 3.2.2. \$700/person/trips X 6person trip/year X 5 years=\$21,000
23	Local consultants including a technical expert on national standards and an EEE industrial expert at \$350/day to provide technical support and overall coordination of Output 3.2.1 and Output 3.2.2 a) Technical expert on national standards to focus on national technical standards, stakeholder consultation etc. 70 working days per year, total 350 working days, \$122,500; b) EEE industrial expert to support developing practical instructions and compliance tools for applying standards, engaging industries and businesses , 70 working days per year, total 350 working days, \$122,500; Total \$245,000
24	Eight coordination meetings with project experts and key stakeholders, \$1,000/meeting, \$8,000
25	Subcontract of a) two recycling facilities/companies to demonstrate and promote environmentally sound management of e-waste. \$150,000 each, total\$300,000. b) identification and contracting licensed treatment and recovery facilities abroad to process e-waste fractions (e.g., printed circuit boards, mercury-containing waste) that cannot be treated domestically, Total \$200,000 Total \$500,000
26	International expert to review and analyze international and national technical standards for targeted toxic substances related to e-waste streams, advise on standards formulation, and the development and application of relevant guidance that will provide practical instructions, compliance tools, and best practices. 100days X \$750/day = \$75,000
27	One stakeholder engagement expert to support Output 3.1 and Output 3.2, with responsibilities including engaging with stakeholders, managing agreements and reporting requirements, coordinating and organizing stakeholder meetings, and supporting the implementation of resource-efficient value chains across the electronics sectors. etc. \$12,000/year X 5 years = \$60,000
COMPONENT 4: Knowledge management, Global coordination & cooperation, and monitoring & evaluation (M&E)	
28	Travel costs of officials, experts, consultants, and other key stakeholders to support in project activities under Output 4.1.1&4.1.2, \$700/trip 14= \$9,800 ;
29	Subcontract or agreement with entities or institutes (total \$75,000): a) to develop and implement communication plan and capacity development strategy to support effective circular economy in the electronics sector in Cambodia.(Activity 4.1.1.1), \$5,000 b) to undertake outreach efforts and awareness raising activities on e-waste sub-decree, EPR schemes, and reduction and environmentally sound management of e-waste. (Activity 4.1.2.1), \$30,000 c) to develop a gender-sensitive knowledge management mechanism, which will include an accessible digital platform, gender-disaggregated data collection, targeted training materials, and participatory knowledge-sharing events. (Activity 4.1.3.1) \$40,000
30	a) Annual review workshops conducted for the overall coordination of stakeholders and progress stock taking (Output 4.1.1) at \$2,000 per workshop for years 2, 3, 4 and 5. Total \$8,000; b) Annual review workshops conducted for the overall coordination of stakeholders and progress stock taking (Output 4.1.2) at \$2,000 per workshop for years 2, 3, 4 and 5. Total \$8,000; c) Two technical workshops conducted per second and third year for the coordination of stakeholders and capacity building for achieving Output 4.1.3, \$2,000/workshop, Total \$4,000: Grand Total \$20,000
31	Travel costs for officials, experts and other key stakeholders to participate in knowledge sharing activities, GEM Program Coordination Group Meeting (annual) and GEM Global Steering Committee Meeting (annual). \$15,950/year X 5 years = \$79,750

32	One professional writer to produce GEM human interest stories, create content for events, promote project stories, and support for overall coordination and management of outcomes, 12 work days per year for 5 years at \$400/day, total 60days, \$24,000 ;
33	One communication and Knowledge Management Officer to support Output 4.2.1 and Output 4.2.2, including developing and implementing a national-level project coordination mechanism, meeting Global Program knowledge management and reporting requirements, coordinating with stakeholders and organize meetings etc. \$12,000/year X 5 years = \$60,000
Project Monitoring and Evaluation (M&E)	
34	a) Organize Inception Workshop \$10,000 b) Project Board Meetings at \$2,000/year for 5 years = \$10,000 Total \$20,000
35	One International Consultant for Development of ESIA(s), ESMP(s) as applicable, for a period of 7 weeks over 6 months at \$500/day, \$500 x 5 x 7 = \$17,500 ;
36	One National Safeguards Expert for operationalization of the ESMF and Safeguards Capacity-Building Plan, and monitoring of the Environmental and Social Safeguards, 15 weeks per year for a period of 4 years = \$550/week x 15 x 4 = \$33,000 ;
37	Monitoring visits for tracking project progress, GEF core indicators and Implementation of ESMPs and ESIA's report and protocols at \$4,500/year for 5 years = \$22,500;
38	One International Consultant for Mid-term Review and one for Terminal Evaluation; 30 working days each over a period of 3 months plus lump sum travel costs for MTR = \$30,000, and for TE = \$30,000. Total: \$60,000
39	One National Consultant for conducting Mid-term Review and one for Terminal Evaluation plus lump sum travel costs, 30 working days over a period of 3 months each for MTR and TE, MTR \$20,000; TE \$25,000; Total \$45,000
Project Management Cost	
40	a) Full time (100%) national project coordinator to coordinate the project's on-going, reporting, manage consultants, and follow the workplan. Salary monthly rate = \$2,200 x 55 months = \$121,000 b) National Project Finance & Admin Assistant to support project. Monthly rate = \$1,000 x 55 months = \$55,000 Total: 176,000
41	Office and miscellaneous supplies incl. stationery, printer cartridges, paper, \$100 per year (Y1-Y5) \$500
42	Information Technology Equipment, Laptops, and printer (Y1-Y5), \$1,976
43	UNDP Annual audit costs at \$3,000/year, Total \$12,000 (starting from Y2)

LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Cambodia and UNDP, signed on 19 December 1994. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by the Ministry of Environment (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

RISK MANAGEMENT

1. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
 - a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - b) assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.
2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document.
3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Consolidated Sanctions List can be accessed via <https://www.un.org/securitycouncil/content/un-sc-consolidated-list>.
4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.
 - (a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General’s Bulletin ST/SGB/2003/13 of 9 October 2003, concerning “Special measures for protection from sexual exploitation and sexual abuse” (“SEA”).
 - (b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment (“SH”). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment. SH may occur in the workplace or in connection with work. While typically involving a pattern of conduct, SH may take the form of a single incident. In assessing the reasonableness of expectations or perceptions, the perspective of the person who is the target of the conduct shall be considered.
5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have

minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

- i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
 - ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;
 - iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;
 - iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
 - v. Promptly and confidentially, record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.
- b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.
6. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
 7. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
 8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
 9. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds.
 10. In the implementation of the activities under this Project Document, UNDP places reasonable reliance upon the Implementing Partner for it to apply its laws, regulations and processes, and applicable international laws regarding anti money laundering and countering the financing of terrorism, to ensure consistency with the principles of then in force the UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy.

11. The Implementing Partner will ensure that its financial management, anti-corruption, anti-fraud and anti-money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.
12. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
13. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.
14. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

15. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

16. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.
17. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
18. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, mutatis mutandis, in all sub-contracts or sub-agreements entered into further to this Project Document.

Mandatory Annexes

1. GEF Budget Template (available from BPPS NCE team)
2. Project Map and geospatial coordinates of the project area
3. Multiyear Workplan
4. Social and Environmental Screening Procedure (SESP), or justification of SESP exemption
5. UNDP Risk Register
6. Overview of technical consultancies/project positions
7. Stakeholder Engagement Plan
8. Environmental Social Management Framework (ESMF) or other SES frameworks/plans including the Project's GRM

Annex 1: GEF Budget Template

Expenditure Category	Detailed Description	Component (US\$eq.)				Sub-Total	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total (US\$eq.)	Responsible Entity
		Component 1	Component 2	Component 3	Component 4					(Executing Entity receiving funds from the GEF Agency)
Equipment	Information Technology Equipment, Laptops, and printer (Y1-Y5), \$1,976					-		1,976	1,976	MOE
Contractual services-Individual	One stakeholder engagement expert to support Output 3.1 and Output 3.2, including managing agreements and reporting requirements, coordinating and organizing stakeholder meetings, and supporting the implementation of resource-efficient value chains etc. \$300/day, 200 days			60,000		60,000			60,000	MOE
Contractual services-Individual	One communication and Knowledge Management Officer to support Output 4.2.1 and Output 4.2.2, including developing and implementing a national-level project coordination mechanism, meeting Global Program knowledge management and reporting requirements etc. \$300/day, 200 days				60,000	60,000			60,000	MOE
Contractual services-Individual	A full-time (100%) national project coordinator to coordinate the project's on-going, reporting, manage consultants, and follow the workplan. Salary monthly rate = \$2,200 x 55 months = \$121,000					-		121,000	121,000	MOE
Contractual services-Individual	A project Finance & Admin Assistant to support project. Monthly rate = \$1,000 x 55months = \$55,000							55,000	55,000	MOE
Contractual services-Company	Develop standard and systematic e-waste inventory (Activity 1.1.1.1)	90,000				90,000			90,000	MOE
Contractual services-Company	Map material flows with GIS and flow modelling tools and identify leakage (Activity 1.1.1.2).	80,000				80,000			80,000	MOE
Contractual services-Company	Identify practical circular design interventions and carry out feasibility study to evaluate their potential impact		50,000			50,000			50,000	MOE
Contractual services-Company	Engage at least two education institutions to integrate sustainability and product longevity into relevant curricula; \$30,000 each		60,000			60,000			60,000	MOE
Contractual services-Company	Engage two OEMs/manufactures to test circular design approaches; \$75,000 each		150,000			150,000			150,000	MOE
Contractual services-Company	Develop reports/knowledges products on lessons learned on circular designs		65,000			65,000			65,000	MOE
Contractual services-Company	Design and carry out two pilot programs to test incentive schemes that will encourage the sale of EEE with lower environmental impacts (Output 2.2.1); \$150,000 each		300,000			300,000			300,000	MOE
Contractual services-Company	Conduct assessment of existing laboratory capabilities on analyzing e-waste contaminants and procure equipment for		250,000			250,000			250,000	MOE

Expenditure Category	Detailed Description	Component (USDeq.)				Sub-Total	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total (USDeq.)	Responsible Entity
		Component 1	Component 2	Component 3	Component 4					(Executing Entity receiving funds from the GEF Agency)
	identified laboratory to improve its testing capabilities on e-waste contaminants.									
Contractual services-Company	Provide training to laboratory personnel to enhance their technical skills in detecting and analyzing e-waste contaminants and carry out laboratory accreditation and inter-laboratory verification exercises.		55,000			55,000			55,000	MOE
Contractual services-Company	Review regional and international models to inform the design, assess technical requirements and MoE's capacity, and set up a registration system for e-waste management companies (Activity 3.1.1.1)			100,000		100,000			100,000	MOE
Contractual services-Company	Develop and pilot one digital tracking system for high-risk EEE imports (Activity 3.1.1.4)			70,000		70,000			70,000	MOE
Contractual services-Company	Pilot e-waste collection points in Phnom Penh (Activity 3.1.1.5)			200,000		200,000			200,000	MOE
Contractual services-Company	Carry out one pilot to support three SMEs (refurbishment businesses, repair shops etc.) through establishing and providing small grants, offering business development services, providing technical training etc. (Activity 3.1.1.6)			180,000		180,000			180,000	MOE
Contractual services-Company	Carry out one pilot program to build safe e-waste dismantling capacity in the informal sector			150,000		150,000			150,000	MOE
Contractual services-Company	Develop and pilot an EPR scheme for e-waste, including defining target products, target producers/importers, physical and financial obligations for producers/importers, and fund management mechanisms (Activity 3.1.2.1)			200,000		200,000			200,000	MOE
Contractual services-Company	Subcontract two recycling facilities/companies to demonstrate and promote environmentally sound management of e-waste, \$150,000 each.			300,000		300,000			300,000	MOE
Contractual services-Company	Identify and contract licensed treatment and recovery facilities abroad to process e-waste fractions (e.g., printed circuit boards, mercury-containing waste) that cannot be treated domestically.			200,000		200,000			200,000	MOE
Contractual services-Company	Develop and implement communication plan and capacity development strategy and undertake outreach efforts and awareness raising activities on e-waste sub-decree, EPR schemes, and reduction and environmentally sound management of e-waste.				35,000	35,000			35,000	MOE

Expenditure Category	Detailed Description	Component (USDeq.)				Sub-Total	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total (USDeq.)	Responsible Entity
		Component 1	Component 2	Component 3	Component 4					(Executing Entity receiving funds from the GEF Agency)
Contractual services- Company	Develop a a gender-sensitive knowledge management mechanism, which will include an accessible digital platform, gender-disaggregated data collection, targeted training materials, and participatory knowledge-sharing events. (Activity 4.1.3.1)				40,000	40,000			40,000	MOE
International Consultants	International technical advisor on e-waste management to identify required improvements and opportunities for e-waste dismantling and recycling methods and provide guidance and training, and develop technical guidelines for e-waste collection schemes and reverse logistics (\$750/day, 70days).	22,500		30,000		52,500			52,500	MOE
International Consultants	International expert on circular design of EEE to advise on international best practices for right-to-repair, anti-planned obsolescence and circular design. (20 days X \$750=\$15,000)	15,000				15,000			15,000	MOE
International Consultants	International expert on green financing to conduct literature review of international guidance and best practices on green and sustainable procurement, green financing, innovation policies, polluters pay, incentive mechanism, and CSR and EPR policies, and develop tailored guidelines for implementation of circular economy policies. (40 days X \$750=\$30,000)	30,000				30,000			30,000	MOE
International Consultants	International technical advisor on EPR to support the development of EPR scheme, provide advisory services and assess EPR schemes in other countries; coordinate activities under Output 3.1.1 and 3.1.2. 127 days, \$750/day			95,000		95,000			95,000	MOE
International Consultants	International expert on hazardous waste streams to review and analyze international and national technical standards for targeted toxic substances related to e-waste streams, advise on standards formulation, and the development and application of relevant guidance that will provide practical instructions, compliance tools, and best practices. 100days X \$750/day = \$75,000			75,000		75,000			75,000	MOE
International Consultants	One professional writer to produce GEM human interest stories, create content for events, promote project stories, and support for overall coordination and management of outcomes, 12 work days per year for 5 years at \$400/day,60days				24,000	24,000			24,000	MOE
International Consultants	One International Consultant for Development of ESIA(s), ESMP(s) as applicable, for a period of 7 weeks over 6 months at \$500/day, \$500 x5 x 7 = \$17,500;					-	17,500		17,500	MOE

Expenditure Category	Detailed Description	Component (USDeq.)				Sub-Total	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total (USDeq.)	Responsible Entity
		Component 1	Component 2	Component 3	Component 4					(Executing Entity receiving funds from the GEF Agency)
International Consultants	One International Consultant for Mid-term Review and one for Terminal Evaluation; 30 working days each over a period of 3 months plus lump sum travel costs for MTR =\$30,000, and for TE =\$30,000.					-	60,000		60,000	UNDP
Local Consultants	Local expert on e-waste management to assess e-waste dismantling and recycling methods and existing capacities and technologies in Cambodia; develop strategy for establishing national e-waste collection schemes and reverse logistics systems; review the implementation of the e-waste sub-decree to identify and develop necessary operational measures, and develop standard operation procedures (SOPs) for e-waste collection schemes and reverse logistics. \$350/day, 240days.	63,000		21,000		84,000			84,000	MOE
Local Consultants	Local consultant on circular design to conduct a situation and gap analysis on right-to-repair, anti-planned obsolescence, and circular design in EEE in Cambodia (40 days X \$350=\$14,000)	14,000				14,000			14,000	MOE
Local Consultants	Local expert on green financing to review exiting policies and national needs related to green and sustainable procurement, green financing, innovation, polluter pays principles, CSR, EPR etc. (60 days X \$350 = \$21,000)	21,000				21,000			21,000	MOE
Local Consultants	Local consultant on customs capacity building to identify the capacities, needs and priorities of customs and enforcement personnel and develop a targeted customs capacity strengthening strategy. 30 days X \$350=\$10,500		10,500			10,500			10,500	MOE
Local Consultants	Technical expert on national standards to focus on national technical standards, stakeholder consultation etc. 70 working days per year, total 350 working days			122,500		122,500			122,500	MOE
Local Consultants	EEE industrial expert to support developing practical instructions and compliance tools for applying standards, engaging industries and businesses , 70 working days per year, total 350 working days			122,500		122,500			122,500	MOE
Local Consultants	One National Safeguards Expert for operationalization of the ESMF and Safeguards Capacity-Building Plan, and monitoring of the Environmental and Social Safeguards, 15 weeks per year for a period of 4 years = \$550/week x 15 x 4 =\$33,000;					-	33,000		33,000	MOE

Expenditure Category	Detailed Description	Component (USDeq.)				Sub-Total	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total (USDeq.)	Responsible Entity
		Component 1	Component 2	Component 3	Component 4					(Executing Entity receiving funds from the GEF Agency)
Local Consultants	One National Consultant for conducting Mid-term Review and one for Terminal Evaluation plus lump sum travel costs, 30 working days over a period of 3 months each for MTR and TE, MTR \$20,000; TE \$25,000; Total \$45,000					-	45,000		45,000	UNDP
Training, Workshops, Meetings	Three consultation/validation meeting on e-waste inventory, dismantling and recycling methods assessment, each meeting with 30 participants, \$1,500/meeting	4,500				4,500			4,500	MOE
Training, Workshops, Meetings	Two training workshop on safe dismantling and functionality testing, right-to-repair, anti-planned obsolescence and circular design 50 participants/meeting, \$3000/meeting	6,000				6,000			6,000	MOE
Training, Workshops, Meetings	One training workshop on applying the operational measures for implementation of the e-waste sub-decree, 50 participants (Output 1.1.4)	2,500				2,500			2,500	MOE
Training, Workshops, Meetings	One training workshop on implementation of circular economy policies, 80 participants (Output 1.2.1)	5,000				5,000			5,000	MOE
Training, Workshops, Meetings	Two consultation, review or technical workshops on circular design conducted each year over 5 years at \$2,000 per workshop		20,000			20,000			20,000	MOE
Training, Workshops, Meetings	Two consultation meeting with customs/enforcement personnel and other stakeholders, \$1,000 per meeting		2,000			2,000			2,000	MOE
Training, Workshops, Meetings	Three training workshops on enforcement of the e-waste sub-decree, 50 participants each, \$4000/workshop		12,000			12,000			12,000	MOE
Training, Workshops, Meetings	Sixteen coordination meetings with project experts and key stakeholders, \$1,000/meeting			16,000		16,000			16,000	MOE
Training, Workshops, Meetings	Annual review workshops conducted for the overall coordination of stakeholders and progress stock taking (Output 4.1.1) at \$2,000 per workshop for years 2, 3, 4 and 5.				8,000	8,000			8,000	MOE
Training, Workshops, Meetings	Annual review workshops conducted for the overall coordination of stakeholders and progress stock taking (Output 4.1.2) at \$2,000 per workshop for years 2, 3, 4 and 5.				8,000	8,000			8,000	MOE
Training, Workshops, Meetings	Two technical workshops conducted per second and third year for the coordination of stakeholders and capacity building for achieving Output 4.1.3, \$2,000/workshop				4,000	4,000			4,000	MOE
Training, Workshops, Meetings	One Inception Workshop \$10,000					-	10,000		10,000	MOE
Training, Workshops, Meetings	Project Board Meetings at \$2,000/year for 5 years						10,000		10,000	MOE

Expenditure Category	Detailed Description	Component (USDeq.)				Sub-Total	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total (USDeq.)	Responsible Entity
		Component 1	Component 2	Component 3	Component 4					(Executing Entity receiving funds from the GEF Agency)
Travel	Travel costs of officials, experts, consultants, and key stakeholders for developing e-waste inventory and strategies for circular electronics value chain under Outcome 1.1	2,100				2,100			2,100	MOE
Travel	Travel costs of officials, experts, consultants, and key stakeholders for designing green and sustainable procurement and other Circular Economy policies (Output 1.2.1)	674				674			674	MOE
Travel	Travel costs of officials, experts, consultants and other key stakeholders over 5 years to promote and support circular design of EEE (Output 2.1.1), \$1600/trip X3 trips/yearX5 years = \$24,000		24,000			24,000			24,000	MOE
Travel	Travel costs of officials, experts, consultants and other key stakeholders to support capacity building of enforcement and customs officers (Output 2.2.2), \$700/trip/person x 2person X3 trips = \$4,200		4,200			4,200			4,200	MOE
Travel	Travel costs of officials, experts, consultants, and other key stakeholders to support in activities pertaining to Outputs 3.1.1 and 3.1.2. \$700/person/trips X 6person trip/year X 5 years=\$21,000			21,000		21,000			21,000	MOE
Travel	Travel costs of officials, experts, consultants, and other key stakeholders to support in activities pertaining to Outputs 3.2.1 and 3.2.2. \$700/person/trips X 6person trip/year X 5 years=\$21,000			21,000		21,000			21,000	MOE
Travel	Travel costs of officials, experts, consultants, and other key stakeholders to support in project activities under Output 4.1.1&4.1.2, \$700/trip 14=\$9,800;				9,800	9,800			9,800	MOE
Travel	Travel costs for officials, experts and other key stakeholders to participate in knowledge sharing activities, GEM Program Coordination Group Meeting (annual) and GEM Global Steering Committee Meeting (annual). \$15,950/year X 5 years = \$79,750				79,750	79,750			79,750	MOE
Travel	Monitoring visits for tracking project progress, GEF core indicators and Implementation of ESMPs and ESAs report and protocols at \$4,500/year for 5 years = \$22,500;					-	22,500		22,500	MOE
Office Supplies	Office and miscellaneous supplies incl. stationery, printer cartridges, paper, \$100 per year (Y1-Y5) \$500					-		500	500	MOE
Other Operating Costs	UNDP Annual audit costs					-		12,000	12,000	UNDP
Grand Total		356,274	1,002,700	1,984,000	268,550	3,611,524	198,000	190,476	4,000,000	

Annex 2: Project map and Geospatial Coordinates of project sites

Geo Name ID	Location Name	Latitude	Longitude
1821306	Phnom Penh	11.556374	104.928210
1822214	Siem Reap	13.330266	104.100133
1821307	Battambang	13.095453	103.182907
1831142	Kampong Chham	12.098292	105.313119
1822214	Sihanoukville	10.609320	103.529580
1831117	Banteay Meanchey	13.585000	102.800000



Annex 3: Multi Year Work Plan

Outcomes	Outputs	Activities	Year 1				Year 2				Year 3				Year 4				Year 5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1: Enabling policy on circular economy for electronics																						
1.1: National or city level plans and strategies for circular electronics value chain developed	1.1.1: Standard and systematic e-waste inventory, including data on secondhand electronics and toxic chemicals, developed	1.1.1.1: Develop standard and systematic e-waste inventory																				
		1.1.1.2: Map material flows with GIS and flow modelling tools and identify leakage points and future intervention areas																				
	1.1.2: Gender-responsive strategy for e-waste dismantling and recycling methods developed	1.1.2.1: Undertake an assessment of e-waste dismantling and recycling methods in Cambodia																				
		1.1.2.2: Develop a strategy for establishing national e-waste collection schemes and reverse logistics																				
	1.1.3: Strategies for “Right to repair”, “anti-planned obsolescence” and "circular design" drafted, enacted, and disseminated	1.1.3.1: Develop strategies for “Right to repair”, “anti-planned obsolescence” and "circular design"																				
	1.1.4: Operational measures (prakas, guidelines) for implementation of the e-waste sub-decree developed	1.1.4.1: Develop operational measures (prakas, guidelines) for implementation of the e-waste sub-decree																				
	1.2.1: Green and sustainable procurement, green financing, innovation and incentive mechanisms designed and adopted	1.2.1.1: Provide technical assistance and develop guidance for the relevant public institutions, industry, and business to implement policies																				
		1.2.1.2: Hold a training workshop on implementation of the policies																				
1.2.2: Polluters pay principles and CSR incorporated in relevant Policies and EPR policy frameworks enhanced/developed	1.2.2.1 Design green and sustainable procurement, green financing, innovation polices, polluters pay, incentive mechanism, and CSR and EPR policies																					
Component 2: Cleaner production and sustainable consumption and use																						
2.1: Innovative, regenerative and resource efficient products designed and made available	2.1.1: Circular design of EEE promoted and supported	2.1.1.1: Identify opportunities to promote and support circular design of EEE (aimed at increasing standardization and compatibility; ease of maintenance and repair, including disassembly and reassembly; avoidance of hazardous material)																				
2.2: Markets for innovative products and behavior change away from	2.2.1: Markets that support environmentally friendly products and behaviors promoted and supported	2.2.1.1: Pilot initiatives to promote and support the sale of more environmentally friendly (e.g. innovative, longevity-focused) ICT products																				

stakeholder to achieve sectoral transformation	4.1.3: Knowledge management infrastructure designed and established	4.1.3.1: Develop and implement a gender-sensitive knowledge management mechanism																			
4.2: Coordination and linkages amongst the relevant global and national stakeholders and platforms established	4.2.1: Coordination mechanism between the global program and the child projects designed and implemented	4.2.1.1: 1: Develop and implement a national-level project coordination mechanism																			
	4.2.2: Links between the global program, child projects, and existing gender-responsive relevant platforms established and strengthened	4.2.2.1: Contribute experiences, lessons learned, and other knowledge to the global program's knowledge management platform																			
	4.2.3: Gender mainstreamed throughout the project activities	4.2.3.1: Implement the Gender Action Plan to mainstream gender throughout project activities																			

Annex 4: UNDP Social and Environmental Screening Procedure (SESP)**Project Information**

Project Information	
1. Project Title	Global Electronics Management (GEM) Program Child Project in Cambodia
2. Project Number (PIMS+)	9833
3. Location (Global/Region/Country)	Cambodia
4. Project stage (Design or Implementation)	Design
5. Date	June 2025

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability? <i>Briefly describe in the space below how the project mainstreams the human rights-based approach</i> The project mainstreams a human rights-based approach by embedding the core principles of equality, participation, transparency, accountability, and non-discrimination throughout its design and implementation. A strong emphasis is placed on the inclusive participation of vulnerable groups in decision-making processes, capacity-building activities, and income-generating opportunities related to e-waste management. The project empowers these groups by recognizing their vital roles, particularly in the informal sector, and by promoting equitable access to resources and benefits. Stakeholder engagement is a central element, enabling local communities, civil society, and marginalized populations to participate meaningfully in shaping project outcomes. Transparency and accountability are upheld through mechanisms for information sharing, feedback, and monitoring, while environmental and social safeguards are applied to prevent harm and address potential adverse impacts. Overall, the project integrates human rights principles into all aspects of its operations, fostering a more inclusive, equitable, and sustainable development process. <i>Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment</i> The project is likely to enhance gender equality and women's empowerment by actively promoting the inclusion of women in all stages of project implementation, particularly in decision-making roles and economic opportunities within the electronics value chain. The project ensures that women, especially those in vulnerable and informal sectors, are provided with targeted capacity-building, safer working conditions, and access to green jobs in e-waste management, repair, and recycling. It also supports the development of gender-sensitive policies and business models that recognize and enhance women's capabilities. By addressing systemic barriers such as gender stereotypes and limited access to resources, the project creates an enabling environment for women to participate equally and benefit fully from the transition to a circular economy. The Gender Action Plan (GAP) will be implemented to ensure the systematic integration of gender considerations across all project activities aimed at promoting a circular economy and improving e-waste management in Cambodia's electronics sector. Gender-responsive indicators will be included in monitoring and evaluation processes, and gender-sensitive training and awareness programs will be delivered to project stakeholders. Through these actions, the project will contribute to more inclusive and equitable outcomes, while empowering women as key agents in the transition to a circular economy. <i>Briefly describe in the space below how the project mainstreams sustainability and resilience</i> The project mainstreams sustainability and resilience by promoting a circular economy approach within the electronics sector, focusing on reducing hazardous waste, enhancing resource efficiency, and extending product life cycles. It supports the development and enforcement of sustainable policies, such as Extended Producer
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Responsibility (EPR) and green procurement, while encouraging innovation, cleaner production, and responsible consumption. The project also strengthens institutional and community capacities to manage e-waste safely and adapt to environmental and economic challenges. By integrating climate mitigation, pollution reduction, and inclusive economic opportunities, the project builds long-term resilience for both ecosystems and communities.

Briefly describe in the space below how the project strengthens accountability to stakeholders

The project ensures regular and transparent reporting of progress and outcomes through annual and quarterly reports, public awareness campaigns, and stakeholder meetings to keep all parties informed and engaged. By providing training and technical assistance to stakeholders, the project empowers them to actively participate in and oversee project activities. This includes building the capacity of local authorities, informal sector workers, and community members to manage e-waste effectively. A Stakeholder Engagement Plan (SEP) has been developed to ensure inclusive participation of and disclosure of information to local communities, women, youth, CSOs, and private sector actors. In addition, the project will put in place a Grievance Redress Mechanism (GRM) to provide meaningful means for local communities and affected populations to raise concerns and/or grievances when activities may adversely impact them. This mechanism will ensure that throughout project implementation, stakeholders have access to decision-making linked to the project, whether they are directly or indirectly involved in project implementation. UNDP's Accountability Mechanism, which includes the Social and Environmental Compliance Review (SECU) and Stakeholder Response Mechanism (SRM) provides a further institutional-level communication channel which can be used to engage in a constructive and timely manner to address any concerns and complaints by stakeholders that cannot be addressed through the project-level GRM. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? <i>Note: Complete SESP Attachment 1 before responding to Question 2.</i>	QUESTION 3: What is the level of significance of the potential social and environmental risks? <i>Note: Respond to Questions 4 and 5 below before proceeding to Question 5</i>			QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High
Risk Description <i>(broken down by event, cause, impact)</i>	Impact and Likelihood <i>(1-5)</i>	Significance <i>(Low, Moderate Substantial, High)</i>	Comments (optional)	Description of assessment and management measures for risks rated as Moderate, Substantial or High
Risk 1 Relevant SES Standard/Principle: Accountability (P.13, P.14) Event: Vulnerable/marginalized stakeholder groups excluded or not meaningfully engaged in the planning activities and processes that will be implemented by the project	I=3 L=3	Moderate	Although the project foresees consultative and participatory approaches to its planning activities, it is possible that stakeholders may inadvertently be excluded from participating in development of strategies, standards and regulation amendments related to chemical management and their elimination	Assessment A strategic review of environmental and social aspects (please refer to the Environmental and Social Management Framework for more details on what this strategic review will consider) will be undertaken during development of the strategy for national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1) and operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1) such that the findings will be integrated into these documents.

Cause: Development of strategy for national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for “right-to-repair”, “anti-planned obsolescence”, and “circular design” in Electrical and Electronic Equipment (EEE) (Activity 1.1.3.1), e-waste operational measures (Activity 1.1.4.1) and policies on green and sustainable procurement, green financing, innovation policies, polluter pays principle, incentive mechanisms, corporate social responsibility (CSR), extended producer responsibility (EPR), and hazardous waste rules (Activity 1.2.1.1) Impact: Views and concerns of marginalized and vulnerable communities are not fully incorporated into the project and equitable opportunities for local community involvement in the project not attained. Risk Owner: UNDP			and the reduction of POPs emissions.	Management The project will undertake consultations with key stakeholders to contribute to the update/design of policies including the definitions of EEE products that support the circular economy (Activity 1.2.1.1) taking into consideration their environmental, social and economic impacts. The project will ensure equitable distribution of compensation in the developed mechanism to avoid elite capture through adequate stakeholder engagement in line with the project Stakeholder Engagement Plan (SEP). It will also put in place a Grievance Redress Mechanism (GRM) to provide meaningful means for local communities and affected populations to raise concerns and/or grievances when activities may adversely impact them.
Risk 2 Relevant SES Standard/Principle: Human Right (P.2, P.4, P.5) Event: Government officials may not have the capacity to properly enforce legislation related to e-waste Cause: Implementation of Operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1) Impact: Unauthorized importation and circulation of electronics and e-waste Risk Owner: UNDP	I = 2 L = 3	Moderate	While the project aims to improve the capacity of government officials to properly enforce legislation, insufficient training of government agencies on the implementation of the e-waste sub-decree may result in their inability to recognize and classify e-waste and secondhand EEE at points of entry and to limit or control the import of hazardous substances in e-waste.	Assessment A strategic review of environmental and social aspects will be undertaken during development of the operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1) addressing this risk such that the findings will be integrated into these documents. Management The project will organize training workshops to strengthen Customs capacity to enforce the e-waste sub-decree including how to identify EEE eligible for green labelling, apply product codes, recognize and classify e-waste and secondhand EEE at points of entry, detect red flags, and limit or control the import of hazardous substances in e-waste (Activity 2.2.2.1).
Risk 3	I = 3 L = 3	Moderate	A significant proportion of Cambodian women are engaged in the informal waste sector. In the informal sector, which includes	The entire programme will be informed by gender analysis to ensure that women are active participants and benefit directly and indirectly throughout interventions across its three components. These gender-responsive activities aim to:

Relevant SES Standard/Principle: Gender Equality and Women Empowerment (P.9, P.10) Event: Existing gender discrimination reproduced within the community Cause: Overall project implementation without mainstreaming gender aspects to ensure women participation Impact: Limiting women's ability to contribute to decision-making and to benefit from the project Risk Owner: UNDP			waste collection and recycling activities, women account 60% to 70% of the total workforce. Despite their substantial involvement at the grassroots level, women are underrepresented in decision-making roles related to waste management¹⁶.	- Identify and address gender-specific barriers and opportunities within project activities. - Promote equal participation of women and men in decision-making processes. - Ensure that women, especially those in informal repair and recycling sectors, have access to capacity-building opportunities, financial resources and safer working conditions through purpose built and targeted trainings - Integrate gender-responsive indicators into the project's monitoring and evaluation framework. - Deliver gender-sensitive training and awareness programs to all project stakeholders. - Contribute to inclusive and equitable outcomes, empowering women as key actors in the transition to a circular economy. The Gender Action Plan (GAP) will be implemented to ensure the systematic integration of gender considerations across all project activities aimed at promoting a circular economy and improving e-waste management in Cambodia's electronics sector (included as Annex 10).
Risk 4 Relevant SES Standard/Principle: Standard 2: Climate Change and Disaster Risks (Questions 2.1, 2.2) Event: Disruption or damage to e-waste transport routes and facilities due to natural disasters Cause: Implementation of pilots for promoting and supporting circular design of EEE (Activity 2.1.1.1), e-waste collection points (Activity 3.1.1.5), repair and reuse aspects (Activity 3.1.1.6), voluntary EPR scheme for EEE (Activity 3.1.2.1) and BAT and BEP for collection, dismantling, and disposal	I = 3 L = 2	Moderate	Cambodia faces high disaster risk levels, ranked 58 out of 191 countries by the 2024 Inform Risk Index driven particularly by its exposure to flood hazard. In fact, Cambodia has extremely high exposure to flooding, including, riverine and flash flooding. The country also has limited exposure to tropical cyclones and their associated hazards¹⁷.	Assessment Targeted assessments will be conducted for the pilots (Activities 2.1.1.1, 3.1.1.5, 3.1.1.6, 3.1.2.1 and 3.2.2.1) to assess the vulnerability of the routes and facilities used to natural disasters. Management Based on the findings of the targeted assessment, the pilots will adopt adaptive measures in their design and the resulting Environmental and Social Management Plans (ESMPs) for the pilots will include mitigation measures that address the identified climate and disaster risks.

¹⁶ Kaiser, M. (2025). Gendered landscape of waste management in Cambodia. Heinrich Böll Stiftung. Retrieved from <https://kh.boell.org/en/2025/01/09/gendered-landscape-waste-management-cambodia>

¹⁷ World Bank Group & Asian Development Bank. (2021). Climate risk country profile: Cambodia. Retrieved from https://climateknowledgeportal.worldbank.org/sites/default/files/2021-08/15849-WB_Cambodia%20Country%20Profile-WEB.pdf

of e-waste (Activity 3.2.2.1) without considering risk of natural disasters Impact: Release of hazardous material into the environment during the transfer or disposal of e-waste Risk Owner: UNDP				
Risk 5 Relevant SES Standard/Principle: Standard 3: Community Health, Safety and Working Conditions (3.2, 3.5, 3.6) Event: Community exposure to hazardous material due to improper handling, transport or disposal of E-waste Cause: Implementation of pilots for promoting and supporting circular design of EEE (Activity 2.1.1.1), e-waste collection points (Activity 3.1.1.5), repair and reuse aspects (Activity 3.1.1.6), voluntary EPR scheme for EEE (Activity 3.1.2.1) and BAT and BEP for collection, dismantling, and disposal of e-waste (Activity 3.2.2.1) Impact: Potential health and safety risks to the local community Risk Owner: UNDP	I=3 L=3	Moderate	Many of the toxic materials found in e-waste are known or suspected to cause harm to human health, and several are included in the 10 chemicals of public health concern, including dioxins, lead and mercury. Children and pregnant women are especially vulnerable to the effects of hazardous pollutants from informal e-waste recycling activities¹⁸.	Assessment Targeted assessments will be conducted for the pilots (Activities 2.1.1.1, 3.1.1.5, 3.1.1.6, 3.1.2.1 and 3.2.2.1) to assess the potential exposure of nearby communities to health and safety risks during their implementation. Management Based on the findings of the targeted assessment, the pilots will adopt preventative measures in their design and the resulting ESMPs for the pilots will include mitigation measures that address the residual risks on community health and safety.
Risk 6 Relevant SES Standard/Principle: Human Rights (P.5) Event: Potential loss of income for businesses Cause: Implementation of strategy for establishing national e-waste collection	I = 3 L = 3	Moderate	While the project adopts a participatory approach, strategies and policies developed by the project that will be adopted and implemented in the country may disadvantage certain small and medium sized businesses that are unable to benefit from the project and meet the required standards may lose income as a result,	Assessment A strategic review of environmental and social aspects will be undertaken during development of the strategy for national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1) and operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1) such that stakeholder concerns and findings will be integrated into these documents. Management

¹⁸ World Health Organization. (2024). Electronic waste (e-waste). Retrieved from [https://www.who.int/news-room/fact-sheets/detail/electronic-waste-\(e-waste\)](https://www.who.int/news-room/fact-sheets/detail/electronic-waste-(e-waste))

schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1), operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1), and policies for green and sustainable procurement, green financing, innovation policies, polluter pays principle, incentive mechanisms, corporate social responsibility (CSR), extended producer responsibility (EPR), and hazardous waste management (1.2.1.1) Impact: Risk of financial strain on businesses and negative socio-economic effects on communities reliant on these businesses Risk Owner: UNDP			leading to loss of jobs within the community.	The project will undertake consultations with key stakeholders to contribute to the update/design of policies including the definitions of EEE products that support the circular economy (Activity 1.2.1.1) taking into consideration their environmental, social and economic impacts. A SEP has been developed to identify vulnerable/marginalized stakeholder groups. The SEP includes specific engagement strategies for each of the identified vulnerable/marginalized groupings, and other categories of stakeholders and methods for engaging them throughout project implementation. During implementation, the project will develop and implement a project-level GRM accessible to all community members.
Risk 7 Relevant SES Standard/Principle: Standard 6: Indigenous Peoples (6.1, 6.3) Event: Marginalization of indigenous people from formalization of e-waste recycling and reuse Cause: Implementation of strategy for establishing national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1), operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1) and policies for green and sustainable procurement, green financing, innovation policies, polluter pays principle, incentive mechanisms, corporate social responsibility (CSR), extended producer	I = 3 L = 3	Moderate	Cambodia is home to 24 different indigenous peoples, who speak mostly Mon-Khmer or Austronesian languages, and constitute 3% of the national population. Indigenous Peoples continue to face discrimination and coerced displacement from their lands that are extinguishing them as distinct groups¹⁹. Some of these groups are involved in the informal e-waste recycling sector and may be negatively affected by its formalization, leading to loss of income.	Assessment A strategic review of environmental and social aspects will be prepared for Strategy for establishing national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1), operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1) to assess this risk such that the findings will be integrated into these documents. Potential impact on indigenous peoples will also be assessed. Management The project will undertake consultations with key stakeholders to contribute to the update/design of policies including the definitions of EEE products that support the circular economy (Activity 1.2.1.1) taking into consideration their environmental, social and economic impacts. A SEP has been developed to identify vulnerable / marginalized stakeholder groups including indigenous peoples. The SEP includes specific engagement strategies for each of the identified groups and methods for engaging them throughout project implementation.

¹⁹ International Work Group for Indigenous Affairs. (n.d.). Cambodia. IWGIA. Retrieved from <https://iwgia.org/en/cambodia.html>

responsibility (EPR), and hazardous waste management (1.2.1.1)				During implementation, the project will develop and implement a project-level GRM accessible to all community members.
Impact: Loss of income from changes in the e-waste sector Risk Owner: UNDP				
Risk 8 Relevant SES Standard/Principle: Standard 7: Labour and Working Conditions (7.1, 7.2, 7.3, 7.4, 7.5, 7.6) Event: Exposure of workers to hazardous conditions Cause: Implementation of strategy for establishing national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1), operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1), and pilots for promoting and supporting circular design of EEE (Activity 2.1.1.1), e-waste collection points (Activity 3.1.1.5), repair and reuse aspects (Activity 3.1.1.6), voluntary EPR scheme for EEE (Activity 3.1.2.1) and BAT and BEP for collection, dismantling, and disposal of e-waste (Activity 3.2.2.1) Impact: Health hazards, injuries and improper treatment of workers Risk Owner: UNDP	I=3 L=3	Moderate	Workers may encounter hazards in e-waste recycling, including the risk of injury, hearing loss, and exposure to toxic dust and other chemicals. These hazards can cause permanent and serious health problems that could begin ²⁰ . During pilot activities, workers may be employed under conditions in contravention to principles and standards of ILO fundamental conventions. <u>This includes the potential involvement of child labour and forced labour.</u>	Assessment The strategic review of environmental and social aspects that will be conducted during development of the strategy for establishing national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1) and operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1) will assess this risk in the various subsectors and integrate recommendations that safeguard worker health and safety into these documents. Targeted assessments will be conducted for the pilots (Activities 2.1.1.1, 3.1.1.5, 3.1.1.6, 3.1.2.1 and 3.2.2.1) to assess the OHS risks that workers will be exposed to during implementation. Management Based on the findings of the targeted assessment, the pilots will adopt preventative measures in their design and the resulting ESMPs for the pilots will include mitigation measures that address the OHS risks, including an Occupational Health and Safety Plan that requires workers to work to wear personal protective equipment (PPEs) and take precautionary measures in line with the type of work they are engaged in.
Risk 9	I=3 L=3	Moderate	E-waste is a complex mixture of valuable materials and hazardous substances. When discarded	Assessment The strategic review of environmental and social aspects that will be conducted during development of the strategy for establishing

²⁰ California Department of Public Health. (2012). Electronic waste recycling: Working safely. Retrieved from <https://www.cdph.ca.gov/Programs/CCDC/DEOD/OHB/HESIS/CDPH%20Document%20Library/eWaste.p>

	QUESTION 4: What is the overall project risk categorization?	
	Low Risk	☐
	Moderate Risk	☒
	Substantial Risk	☐
	High Risk	☐

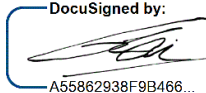
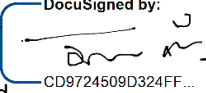
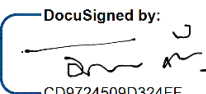
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QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)			
Question only required for Moderate, Substantial and High Risk projects			
Is assessment required? (check if "yes")	X		Status? (completed, planned)
<i>if yes, indicate overall type and status</i>		Targeted assessment(s)	Planned for: Activity 2.1.1.1 Activity 3.1.1.5 Activity 3.1.1.6 Activity 3.1.2.1 Activity 3.2.2.1
		ESIA (Environmental and Social Impact Assessment)	
		SESA (Strategic Environmental and Social Assessment)	
Are management plans required? (check if "yes")	X		
<i>if yes, indicate overall type</i>		X Targeted management plans (e.g. Gender Action Plan, Stakeholder Engagement Plan)	GAP and SEP and (completed)
		X ESMP (Environmental and Social Management Plan which may include range of targeted plans)	Planned for: Activity 2.1.1.1 Activity 3.1.1.5 Activity 3.1.1.6 Activity 3.1.2.1 Activity 3.2.2.1 (To include OHS Plan and Pollution Prevention and Management Plan)
		X ESMF (Environmental and Social Management Framework)	Completed
Based on identified risks, which Principles/Project-level Standards triggered?		Comments (not required)	
Overarching Principle: Leave No One Behind			
Human Rights	X		
Gender Equality and Women's Empowerment	X		
Accountability	X		

	1. Biodiversity Conservation and Sustainable Natural Resource Management		
	2. Climate Change and Disaster Risks	X	
	3. Community Health, Safety and Security	X	
	4. Cultural Heritage		
	5. Displacement and Resettlement		
	6. Indigenous Peoples	X	
	7. Labour and Working Conditions	X	
	8. Pollution Prevention and Resource Efficiency	X	

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	Date	Description
QA Assessor  Sovanny Chhum, Programme Analyst	01 April 2026	UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have “checked” to ensure that the SESP is adequately conducted.
QA Approver  Shakeel Ahmad, Deputy Resident Representative	01 April 2026	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have “cleared” the SESP prior to submittal to the PAC.
PAC Chair  Shakeel Ahmad, Deputy Resident Representative	01 April 2026	UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
INSTRUCTIONS: The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the SES toolkit for further guidance on addressing screening questions.		
Overarching Principle: Leave No One Behind Human Rights		Answer (Yes/No)
P.1	Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
P.2	Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	Yes
P.3	Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?	No
<i>Would the project potentially involve or lead to:</i>		
P.4	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	Yes
P.5	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? ²²	Yes
P.6	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	No
P.7	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Gender Equality and Women's Empowerment		
P.8	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
<i>Would the project potentially involve or lead to:</i>		
P.9	adverse impacts on gender equality and/or the situation of women and girls?	Yes
P.10	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Yes
P.11	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	No

²² Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

<i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	
P.12 exacerbation of risks of gender-based violence? <i>For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.</i>	No
Sustainability and Resilience: Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below	
Accountability	
<i>Would the project potentially involve or lead to:</i>	
P.13 exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	Yes
P.14 grievances or objections from potentially affected stakeholders?	Yes
P.15 risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?	No
Project-Level Standards	
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management	
<i>Would the project potentially involve or lead to:</i>	
1.1 adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? <i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>	No
1.2 activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3 changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4 risks to endangered species (e.g. reduction, encroachment on habitat)?	No
1.5 exacerbation of illegal wildlife trade?	No
1.6 introduction of invasive alien species?	No
1.7 adverse impacts on soils?	No
1.8 harvesting of natural forests, plantation development, or reforestation?	No
1.9 significant agricultural production?	No
1.10 animal husbandry or harvesting of fish populations or other aquatic species?	No
1.11 significant extraction, diversion or containment of surface or ground water? <i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	No

1.12	handling or utilization of genetically modified organisms/living modified organisms? ²³	No
1.13	utilization of genetic resources? (e.g. collection and/or harvesting, commercial development) ²⁴	No
1.14	adverse transboundary or global environmental concerns?	No
Standard 2: Climate Change and Disaster Risks		
<i>Would the project potentially involve or lead to:</i>		
2.1	areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?	Yes
2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters? <i>For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes</i>	Yes
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	No
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	No
Standard 3: Community Health, Safety and Security		
<i>Would the project potentially involve or lead to:</i>		
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)	No
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	Yes
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	No
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	No
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	Yes
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	Yes
3.7	influx of project workers to project areas?	No
3.8	engagement of security personnel to protect facilities and property or to support project activities?	No
Standard 4: Cultural Heritage		
<i>Would the project potentially involve or lead to:</i>		
4.1	activities adjacent to or within a Cultural Heritage site?	No
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	No

²³ See the [Convention on Biological Diversity](#) and its [Cartagena Protocol on Biosafety](#).

²⁴ See the [Convention on Biological Diversity](#) and its [Nagoya Protocol](#) on access and benefit sharing from use of genetic resources.

4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.4	alterations to landscapes and natural features with cultural significance?	No
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
<i>Would the project potentially involve or lead to:</i>		
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No
5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	risk of forced evictions? ²⁵	No
5.4	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
<i>Would the project potentially involve or lead to:</i>		
6.1	areas where indigenous peoples are present (including project area of influence)?	Yes
6.2	activities located on lands and territories claimed by indigenous peoples?	No
6.3	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? <i>If the answer to screening question 6.3 is “yes”, then Standard 6 requirements apply, and the potential significance of risks related to impacts on indigenous peoples must be Moderate or above. *</i>	Yes
6.4	the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? <i>Consider, and where appropriate ensure, consistency with the answers under Standard 5 above</i>	No
6.7	adverse impacts on the development priorities of indigenous peoples as defined by them?	No

²⁵ Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

* Note: revised July 2022 modifying presumption of risk significance from Substantial or higher to Moderate or higher.

6.8	risks to the physical and cultural survival of indigenous peoples?	No
6.9	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? <i>Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.</i>	No
Standard 7: Labour and Working Conditions		
<i>Would the project potentially involve or lead to: (note: applies to project and contractor workers)</i>		
7.1	working conditions that do not meet national labour laws and international commitments?	Yes
7.2	working conditions that may deny freedom of association and collective bargaining?	Yes
7.3	use of child labour?	Yes
7.4	use of forced labour?	Yes
7.5	discriminatory working conditions and/or lack of equal opportunity?	Yes
7.6	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	Yes
Standard 8: Pollution Prevention and Resource Efficiency		
<i>Would the project potentially involve or lead to:</i>		
8.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Yes
8.2	the generation of waste (both hazardous and non-hazardous)?	Yes
8.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	Yes
8.4	the use of chemicals or materials subject to international bans or phase-outs? <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention</i>	Yes
8.5	the application of pesticides that may have a negative effect on the environment or human health?	No
8.6	significant consumption of raw materials, energy, and/or water?	No

Annex 5: UNDP Risk Register

PORTFOLIO/PROJECT RISK REGISTER

Portfolio/Project Title: Global Electronics Management (GEM) Program Child Project in Cambodia	Portfolio/Project Number: 9833	Date: 1 June 2025
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#	Event	Cause	Impact(s)	Risk Category and Sub-category (including Risk Appetite)	Impact, Likelihood & Risk Level (see Annex 3 Risk Matrix)	Risk Valid From/To	Risk Owner (team accountable for managing the risk)	Risk Treatment and Treatment Owner
1	Vulnerable/marginalized stakeholder groups excluded or not meaningfully engaged in the planning activities and processes that will be implemented by the project	Development of strategy for national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for “right-to-repair”, “anti-planned obsolescence”, and “circular design” in Electrical and Electronic Equipment (EEE) (Activity 1.1.3.1), e-waste operational measures (Activity 1.1.4.1) and policies on green and sustainable procurement, green financing, innovation policies, polluter pays principle, incentive mechanisms, corporate social responsibility (CSR), extended producer responsibility (EPR), and hazardous waste rules (Activity 1.2.1.1)	Views and concerns of marginalized and vulnerable communities are not fully incorporated into the project and equitable opportunities for local community involvement in the project not attained.	1. SOCIAL AND ENVIRONMENTAL (1.1. Human rights) - UNDP Risk Appetite: CAUTIOUS 1. SOCIAL AND ENVIRONMENTAL (1.3. Grievances (Accountability to stakeholders)) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01-Jun-25 To: 31-Dec-25	Ministry of Environment (MOE) (Project Director)	Risk Treatment: The project will undertake consultations with key stakeholders to contribute to the update/design of policies including the definitions of EEE products that support the circular economy (Activity 1.2.1.1) taking into consideration their environmental, social and economic impacts. The project will ensure equitable distribution of compensation in the developed mechanism to avoid elite capture through adequate stakeholder engagement in line with the project Stakeholder Engagement Plan (SEP). It will also put in place a Grievance Redress Mechanism (GRM) to provide meaningful means for local communities and affected populations to raise concerns and/or grievances when activities may adversely impact them. Treatment Owner: Project Management Unit (PMU)
2	Government officials may not have the capacity to	Implementation of Operational measures	Unauthorized importation and	1. SOCIAL AND ENVIRONMENTAL	Likelihood:	From: 01-Jun-25	MOE (Project Director)	Risk Treatment:

	properly enforce legislation related to e-waste	for implementation of the e-waste sub-decree (Activity 1.1.4.1)	circulation of electronics and e-waste	(1.1. Human rights) - UNDP Risk Appetite: CAUTIOUS	3 – Moderately likely Impact: 2 – Minor Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	To: 31-Dec-25		The project will organize training workshops to strengthen Customs capacity to enforce the e-waste sub-decree including how to identify EEE eligible for green labelling, apply product codes, recognize and classify e-waste and secondhand EEE at points of entry, detect red flags, and limit or control the import of hazardous substances in e-waste (Activity 2.2.2.1). Treatment Owner: Project Management Unit (PMU)
3	Existing gender discrimination reproduced within the community	Overall project implementation without mainstreaming gender aspects to ensure women participation	Limiting women's ability to contribute to decision-making and to benefit from the project	1. SOCIAL AND ENVIRONMENTAL (1.2. Gender equality and women's empowerment) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Risk Treatment: The entire programme will be informed by gender analysis to ensure that women are active participants and benefit directly and indirectly throughout interventions across its three components. These gender-responsive activities aim to: - Identify and address gender-specific barriers and opportunities within project activities. - Promote equal participation of women and men in decision-making processes. - Ensure that women, especially those in informal repair and recycling sectors, have access to capacity-building opportunities, financial resources and

								safer working conditions • Integrate gender-responsive indicators into the project's monitoring and evaluation framework. • Deliver gender-sensitive training and awareness programs to all project stakeholders. • Contribute to inclusive and equitable outcomes, empowering women as key actors in the transition to a circular economy. The Gender Action Plan (GAP) will be implemented to ensure the systematic integration of gender considerations across all project activities aimed at promoting a circular economy and improving e-waste management in Cambodia's electronics sector (included as Annex 10). Treatment Owner: Project Management Unit (PMU)
4	Vulnerability of e-waste transport routes and facilities to natural disasters	Implementation of pilots for promoting and supporting circular design of EEE (Activity 2.1.1.1), e-waste collection points (Activity 3.1.1.5), repair and reuse aspects (Activity 3.1.1.6), voluntary EPR scheme for EEE (Activity 3.1.2.1)	Disruption to the transfer or disposal of e-waste	1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 2 - Low likelihood Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Risk Treatment: Based on the findings of the targeted assessment, the pilots will adopt adaptive measures in their design and the resulting Environmental and Social Management Plans (ESMPs) for the pilots will include mitigation measures that address the

		and BAT and BEP for collection, dismantling, and disposal of e-waste (Activity 3.2.2.1)			appetite of EXPLORATORY)			identified climate and disaster risks. Treatment Owner: Project Management Unit (PMU)
5	Community exposure to hazardous material due to improper handling, transport or disposal of E-waste	Implementation of pilots for promoting and supporting circular design of EEE (Activity 2.1.1.1), e-waste collection points (Activity 3.1.1.5), repair and reuse aspects (Activity 3.1.1.6), voluntary EPR scheme for EEE (Activity 3.1.2.1) and BAT and BEP for collection, dismantling, and disposal of e-waste (Activity 3.2.2.1)	Potential health and safety risks to the local community	1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 – Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Risk Treatment: Based on the findings of the targeted assessment, the pilots will adopt preventative measures in their design and the resulting ESMPs for the pilots will include mitigation measures that address the residual risks on community health and safety. Treatment Owner: Project Management Unit (PMU)
6	Potential loss of income for businesses	Implementation of strategy for establishing national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1), operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1), and policies for green and sustainable procurement, green financing, innovation policies, polluter pays principle, incentive mechanisms, corporate social responsibility (CSR), extended producer responsibility	Risk of financial strain on businesses and negative socio-economic effects on communities reliant on these businesses	1. SOCIAL AND ENVIRONMENTAL (1.1. Human rights) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Risk Treatment: The project will undertake consultations with key stakeholders to contribute to the update/design of policies including the definitions of EEE products that support the circular economy (Activity 1.2.1.1) taking into consideration their environmental, social and economic impacts. A SEP has been developed to identify vulnerable/marginalized stakeholder groups. The SEP includes specific engagement strategies for each of the identified vulnerable/marginalized groupings, and other categories of stakeholders and methods for engaging them throughout project implementation. During implementation, the project will

		(EPR), and hazardous waste management (1.2.1.1)						develop and implement a project-level GRM accessible to all community members. Treatment Owner: Project Management Unit (PMU)
7	Marginalization of indigenous people from formalization of e-waste recycling and reuse	Implementation of strategy for establishing national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1), operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1) and policies for green and sustainable procurement, green financing, innovation policies, polluter pays principle, incentive mechanisms, corporate social responsibility (CSR), extended producer responsibility (EPR), and hazardous waste management (1.2.1.1)	Loss of income from changes in the e-waste sector	1. SOCIAL AND ENVIRONMENTAL (1.9. Indigenous peoples) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Risk Treatment: The project will undertake consultations with key stakeholders to contribute to the update/design of policies including the definitions of EEE products that support the circular economy (Activity 1.2.1.1) taking into consideration their environmental, social and economic impacts. A SEP has been developed to identify vulnerable / marginalized stakeholder groups including indigenous peoples. The SEP includes specific engagement strategies for each of the identified groups and methods for engaging them throughout project implementation. During implementation, the project will develop and implement a project-level GRM accessible to all community members. Treatment Owner: Project Management Unit (PMU)
8	Exposure of workers to hazardous conditions	Implementation of strategy for establishing national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in	Health hazards, injuries and improper treatment of workers	1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Risk Treatment: Based on the findings of the targeted assessment, the pilots will adopt preventative measures in their design and the resulting ESMPs for the pilots will include mitigation measures that address the OHS risks, including an Occupational Health and Safety

		EEE (Activity 1.1.3.1), operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1), and pilots for promoting and supporting circular design of EEE (Activity 2.1.1.1), e-waste collection points (Activity 3.1.1.5), repair and reuse aspects (Activity 3.1.1.6), voluntary EPR scheme for EEE (Activity 3.1.2.1) and BAT and BEP for collection, dismantling, and disposal of e-waste (Activity 3.2.2.1)			appetite of EXPLORATORY			Plan that requires workers to work to wear personal protective equipment (PPEs) and take precautionary measures in line with the type of work they are engaged in. Treatment Owner: Project Management Unit (PMU)
9	Accidental leakages or spills due to the improper handling, transport or disposal of POPs and toxic chemicals	Implementation of strategy for establishing national e-waste collection schemes and reverse logistics (Activity 1.1.2.2), strategies for right-to-repair, anti-planned obsolescence, and circular design in EEE (Activity 1.1.3.1), operational measures for implementation of the e-waste sub-decree (Activity 1.1.4.1), and pilots for promoting and supporting circular design of EEE (Activity 2.1.1.1), e-waste collection points (Activity 3.1.1.5), repair and reuse aspects (Activity 3.1.1.6), voluntary EPR scheme for EEE (Activity 3.1.2.1) and BAT and BEP for collection, dismantling,	Pollution of air, soil or water	1. SOCIAL AND ENVIRONMENTAL (1.11. Pollution prevention and resource efficiency) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Risk Treatment: Based on the findings of the targeted assessment, the pilots will adopt preventative measures in their design and the resulting ESMPs for the pilots will include mitigation measures that address this risk, including a Pollution Prevention and Management Plan. Treatment Owner: Project Management Unit (PMU)

		and disposal of e-waste (Activity 3.2.2.1)						
Increased weather events due to climate change may pose a risk on facilities where stockpiles of e-waste are stored prior to disposal.			Moderate	1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Various measures will address this including: technical standards; Spill Prevention and Management Plan; and ESIA on the pilot/demonstration facilities.
Delayed implementation of project activities and national measures related to circular economy and e-waste management.	Limited institutional capacity, overlapping mandates, and weak coordination among key government agencies at national and sub-national levels.	Reduced effectiveness of policy and regulatory interventions, limited private sector compliance, and failure to achieve project outcomes related to improved circularity and sound management of e-waste.		4. ORGANIZATIONAL (4.1. Governance) - UNDP Risk Appetite: EXPLORATORY TO OPEN	Likelihood: 2 - Low likelihood Impact: 3 - Intermediate Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	While Cambodia has experienced political and governance challenges in the past, the country has made significant strides in recent years towards strengthening its institutions and improving its governance framework. The government has been working to establish laws and regulations to improve environmental protections, including regulations related to e-waste management. Additionally, Cambodia has been actively promoting foreign investment and has implemented policies to attract investors in the technology sector. These factors suggest that the political and governance risks are relatively low.
Project activities may not fully align with or adapt to changes in Cambodia's national strategies, sectoral development plans, or emerging policy priorities.	Evolving national agendas, fragmented policy landscape, and limited consultation or coordination with relevant line ministries during implementation.	Reduced national ownership, limited policy uptake of project results, and potential duplication or irrelevance of certain interventions, undermining project sustainability and impact.		7. STRATEGIC (7.7. Alignment with national priorities) - UNDP Risk Appetite: OPEN TO SEEKING	Likelihood: 2 - Low likelihood Impact: 3 - Intermediate Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	The project is fully aligned with national policies, international commitments, and priorities (see Section C: Alignment with GEF-8 Programming strategies and country/regional priorities). Regular policy scans and stakeholder consultations will be conducted to ensure alignment

								with evolving national and sectoral priorities.
	Intended technical interventions or pilots may face unforeseen implementation challenges or underperform in the local context.	The technical design may not fully capture local operational constraints, infrastructure readiness, or informal sector dynamics. Additionally, technological unfamiliarity among local actors could lead to difficulties in adoption or scaling.	Delays in implementing pilots could undermine project credibility, result in inefficient use of resources, and limit the demonstration of value and replicability of proposed circular models and technologies.	7. STRATEGIC (7.8. Innovating, piloting, experimenting) - UNDP Risk Appetite: OPEN TO SEEKING	Likelihood: 2 - Low likelihood Impact: 3 - Intermediate Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	The technical design of the project is based on a rapid assessment of the status quo and present challenges associated with e-waste management. The analysis with recommended sets of interventions was further verified through consultations with relevant stakeholders, including the government, private sector, CSOs, and informal sectors. Thorough assessments of the feasibility of intended technical pilots will be established and due diligence will be conducted before implementation to avoid unintended risks.
	Project activities may be delayed or disrupted due to gaps in the availability of funds or misalignment in the timing of cash disbursements.	Administrative bottlenecks in fund transfers, or slower-than-expected mobilization of committed resources.	Interruptions to project implementation, reduced efficiency in delivering outputs, and potential reputational risk with stakeholders due to unfulfilled commitments or postponed activities.	2. FINANCIAL (2.6. Budget availability and cash flow) - UNDP Risk Appetite: MINIMAL TO CAUTIOUS	Likelihood: 2 - Low likelihood Impact: 3 - Intermediate Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Thorough budgeting was done in PPG phase where co-financing sources were well-mapped to ensure the availability of adequate financing for all project activities. Financial reporting and monitoring systems will be in place to ensure timely utilization and tracking of funds.
	Key project stakeholders may lack the technical expertise, coordination mechanisms, or institutional capacity required to implement, enforce, and sustain project interventions.	Limited prior experience with circular economy approaches in the electronics sector, weak enforcement capacity for EPR and chemicals/waste regulations, and gaps in coordination across ministries and between national and subnational levels.	Delayed or ineffective implementation of policy and regulatory reforms, low compliance by manufacturers and importers, and limited sustainability of project outcomes post-implementation.	4. ORGANIZATIONAL (4.7. Human Resources) - UNDP Risk Appetite: EXPLORATORY TO OPEN	Likelihood: 2 - Low likelihood Impact: 3 - Intermediate Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	Initially the government agencies may have the limited knowledge and capacity for sound e-waste management. The project will build the capacity, knowledge, and skills required for policy making, implementation, awareness raising, and stakeholder engagement. This will include: applying systematic capacity development measures for government partners at the national and subnational levels to control the import of the

								secondhand electronics and e-waste and ensure enforcement of the e-waste sub-decree; supporting the government in facilitating inter-ministerial mechanisms for information sharing and decision-making on e-waste and chemicals and waste management; and contributing to the long-term capacity for information and data management systems that will support monitoring and reporting of chemicals and waste management.
	Project implementation may experience delays or inefficiencies due to weak financial management, slow procurement processes, or bottlenecks in fund disbursement.	Complex administrative procedures, limited capacity of the implementing/executing entities to manage	Slower delivery of project outputs, delayed procurement of key goods and services, and increased risk of audit issues or non-compliance with fiduciary standards.	2. FINANCIAL (2.5. Delivery) - UNDP Risk Appetite: MINIMAL TO CAUTIOUS	Likelihood: 2 - Low likelihood Impact: 3 - Intermediate Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	To ensure the effective financial and procurement management, the project will apply the UNDP country office support to the national implementation modality (NIM).
	Key stakeholders may not be effectively engaged during project implementation, leading to reduced collaboration, lack of alignment, or resistance to project activities.	Inadequate stakeholder mapping, unclear communication strategies, or limited capacity to maintain inclusive and continuous dialogue with diverse actors, including government, private sector, local communities, and NGOs.	Diminished stakeholder ownership, weakened coordination, and limited update of project outputs—potentially jeopardizing the achievement and sustainability of project outcomes.	1. SOCIAL AND ENVIRONMENTAL (1.12. Stakeholder engagement) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 2 - Low likelihood Impact: 3 - Intermediate Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-Jun-25 To: 31-Dec-25	MOE (Project Director)	A Stakeholder Engagement Plan (SEP) will be designed to ensure effective engagement between various stakeholders throughout the lifecycle of the project. It will build on any other relevant project activities with regard to planning and impact assessment processes. Project implementation will ensure regular dialogue with the relevant government ministries and subnational bodies, private sector entities, local community groups, NGOs, public stakeholders, and international partners.

Annex 6: Overview of Technical Consultancies/Project Positions

Core Project Team Members

Staff	Time Input	Tasks, Inputs and Outputs
For Project Management		
National Project Director (Government financed position)	60 months over 5 years	The Project Director will be responsible for ensuring (1) the implementation of the Project is fully aligned with the policies of the Royal Government of Cambodia (RGC); (2) smooth implementation of the Project including by facilitating coordination between the responsible parties; (3) to ensure the proper use of project resources in line with the agreement between UNDP and RGC; and (4) to approve the Annual Work Plan and Budget and Annual Report of the Project after endorsement by the Steering Committee. Duties and Responsibilities • Be responsible to RGC and the Project Board for the smooth implementation of the project in line with RGC policies and the NIM Agreement between UNDP and RGC; • Approve the Annual Work Plan and Budget of the Project; • Approve the assignment of Government staff appointed to project management roles; • Approve the appointment of advisers; • Approve the Project Annual Report; • Attend meetings of the Project Board; • Ensure coordination between MoE, NCSD, NCDD-S, MME and other responsible parties; • Maintain good communication with UNDP and other Development Partners on behalf of RGC; • Represent the Project in public forums; • Oversee the day-to-day work of the Project Management team in MoE-CCD. Qualifications The Project Director is a senior official of the MoE at Director General level or higher. The Project Director will have: • A post-graduate degree in a relevant discipline; • Good command of spoken and written English and Khmer; • Demonstrated capacity for management of complex projects.
National Project Manager (Government financed position)	60 months over 5 years	The Project Manager will be responsible for ensuring the efficient and effective functioning of the Project Management Team (PMT). The Project Manager reports to the Project Director. The roles of the PMT include (1) consolidation of the Annual Work Plan and Budget and submission to the Project Director; (2) consolidation of the Annual Report and submission to the Project Director; (3) consolidation of project financial reporting; (4) coordination of the work of the Responsible Parties; (5) project monitoring, evaluation and knowledge management; and (5) organization of project events such as workshops and seminars. Duties and Responsibilities • Oversee and ensure the efficient and effective implementation of all the tasks of the PMT; • Make recommendations on appointments of staff and advisers to the Project Director; • Be responsible for all use of project funds by the PMT, including prior approval of all payments above an agreed threshold; • Be a co-signatory to the Project bank account in PMT; • Review and endorse the consolidated Annual Work Plan and Budget and submit it to the Project Director; • Review and endorse the consolidated Project Annual Report and submit it to the Project Director;

		- Review and endorse consolidated project financial reports; - Monitor implementation of work plan activities of the PMT; - Manage the budget of the PMT; - Maintain good coordination with the Project Coordinator – MoE, NCSD, NCDD-S, MME, MEF. Qualifications The Project Manager is a senior official of the MoE at Deputy Department Director or Department Director level. The Project Manager-PMT will have: - A graduate degree in a relevant discipline; - Good command of spoken and written English and Khmer; - Previous experience in project management.
National Project Coordinator	US\$ 121,000 US\$ 26,400/yr for 4.yrs, 7 mths Salary distribution: 100% charged to PMC	The National Project Coordinator will be responsible for the overall management of the project, including development of annual and quarterly workplans, preparing quarterly narrative and financial reports, the mobilization of all project inputs, supervision over project staff, consultants, and sub-contractors and execution and monitoring of project activities. Duties and Responsibilities - Manage the overall conduct of the project; - Plan the activities of the project and monitor progress against the approved workplan; - Execute activities by managing personnel, goods and services, training and low-value grants, including drafting terms of reference and work specifications, and overseeing all contractors' work; - Monitor events as determined in the project monitoring plan, and update the plan as required; - Provide support for completion of assessments required by UNDP/UNEP, spot checks and audits; - Manage requests for the provision of UNDP financial resources through funding advances, direct payments or reimbursement using the FACE form; - Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports; - Monitor progress, watch for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results; - Ensure that changes are controlled and problems addressed; - Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities; - Prepare and submit financial reports to UNEP on a quarterly basis; - Manage and monitor the project risks – including social and environmental risks - initially identified; assess new risks and its response measures; and submit new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log; - Capture lessons learned during project implementation; - Prepare revisions to the multi-year workplan, as needed, as well as annual and quarterly plans if required; - Prepare the inception report no later than one month after the inception workshop; - Ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR; - Prepare the GEF PIR; - Assess major and minor amendments to the project within the parameters set by UNDP-GEF; - Monitor implementation plans including the gender action plan, stakeholder engagement plan, and any environmental and social management plans; - Monitor and track progress against the GEF Core indicators; - Support the Mid-term review and Terminal Evaluation process. Qualifications - A University Degree, in Environment, Social Science, Business Administration or a related field

		- At least 3 years (for master's degree) or 5 years (for bachelor's degree) of professional experience in providing technical advice, strategic coordination, and communication with government, development partners, and CSOs to address relevant issues and to ensure the greater impact of a development project; - Solid experiences in project management (design, implementation, coordination, monitoring and evaluation of development projects) and in establishing inter-relationships among international organizations and national governments; - Knowledge of environmental and waste management related issues, and awareness and familiarity of key actors and stakeholders across the political, economic, and development spheres, alongside knowledge of government, civil society, and other non-state actors; - Familiarity with procedure of UN and various donor agencies would be an asset.
National Project Administrator/Finance Assistant	US\$ 55,000 US\$ 12,000/yr for 4 yrs, 7 mths Salary distribution: 100% charged to PMC	Under the guidance and supervision of the National Project Manager, the National Project Administrator/Finance Assistant will be responsible for effective management of financial and administrative aspects of programme assets and financial resources; and providing support in preparing quarterly and annual financial reports. Duties and Responsibilities <u>Ensure effective and high-quality support on programme administrative and financial management</u> - Contribute to day-to-day support for the programme implementation and ensure conformity to expected results, outputs, objectives, and work-plans; - Ensure effective local purchases in line with UNDP and Government procurement procedures; - Maintain programme accounts; - Provide necessary financial information as and when required for project management decisions; - Review annual budgets and project expenditure reports, and notify the Project Manager if there are any discrepancies or issues; - Keep records of project funds and expenditures, and ensure all project-related financial documentation are well maintained and readily available when required by the Project Manager; - Review project expenditures and ensure that project funds are used in compliance with the Project Document and Government financial rules and procedures; - Validate and certify FACE forms before submission to UNDP; - Establish and maintain the electronic and physical filing system for programme documentation and communication; - Consolidate financial progress reports submitted by the responsible parties for implementation of project activities; - Prepare and update proper programme documentation/records and ensure that the documents are prepared and ready for audit; - Ensure effective management of financial and administrative aspects of programme assets and financial resources to meet satisfactory outcomes of the annual audit of the project; and - Liaise and follow up with the responsible parties for implementation of project activities in matters related to project funds and financial progress reports. - Provide support in preparing quarterly and annual financial reports. <u>Effective support to programme implementation</u> - Prepare budget for workshops and meetings; - Arrange for travel for programme staff and meeting participants; - Facilitate the organization of workshops and training programmes; - Make arrangements and prepare the necessary documentation for all payments for activities under the programme; - Prepare the requisite accountabilities for the programme funds (prepare cash advance statements and quarterly expenditure accounts); - Prepare work plans and budgets for all programme activities; - Compile the financial documentation to be submitted regularly; - Ensure proper records and filing of the programme; - Liaise very closely with the UNDP programme assistants/associates to ensure the effectiveness of administrative and financial management in accordance with UNDP rules and regulations; and - Maintain the registers for inventory of non-expendable equipment and ensure that the equipment is safe and in proper working conditions.

		Qualifications • A University Degree with specialised certification in accounting or business administration; • At least 5 years of relevant experience in office administrative and financial management; • Proven organisational, financial, inventory, and budgetary skills; • Experience in the operational aspects of UN-funded projects/programmes or with projects of other donors is an advantage.
Communication and Knowledge Management Officer	US\$ 60,000 Salary distribution: 100% charged to Component 4	The Communication and Knowledge Management Officer will be responsible for the effective and timely implementation of the communications strategy, and strategic communication to ensure digital visibility, delivery of quality outputs, and achieve outcomes with maximum impact to project beneficiaries. Duties and Responsibilities <u>Strategizing on Communications</u> • Design, implement and monitor a communications strategy in consultation with the Project Manager and relevant project staff; • Maintain and manage social media pages and website with timely updates and fresh, relevant content, ensuring digital visibility; • Bringing in innovative best practices for the effective dissemination of information for awareness and visibility purposes; • Generating accurate, detailed reports covering analytics and narrative explanations of social media campaigns. • Support Output 4.2.1 and Output 4.2.2, including developing and implementing a national-level project coordination mechanism, Global Program Knowledge Management and reporting, stakeholder coordination, and organizing meetings <u>Managing communications of projects</u> • Develop communication materials and campaigns based on project needs; • Develop content for media releases, newsletters and other communication materials related to project implementation; • Support with Monitoring and Evaluation measures on communications related deliverables; • Graphic designing and editing of visual materials for platforms where necessary; • Communicating with photographers and videographers of the projects to ensure that there are constant updates from all programs that can be used for social media; • Stepping in to review content, proofread and fact check when necessary. <u>Managing communications of stakeholders</u> • Ensuring that the project team has a well-maintained and continually developed contact list of journalists and media outlets covering all media – print, TV, radio, web, etc.; • Generating and compiling content such as Annual reports, Newsletters, Photo galleries and other material for a variety of audiences; Qualifications • A University Degree, in Communications, Journalism or any other related field; • Minimum of 5 years of demonstrated experience in the field of communication or journalism with special attention to social media campaign design and implementation; • Demonstrated expertise in developing and implementing innovative and creative communication strategies at the institutional/national level; • Existing relationship with media industry; • Desktop publication, including internet platforms (update website); • A high level of oral and written communication skills in English and Khmer.
Stakeholder Engagement Officer	US\$ 60,000 Salary distribution: 100% charged to Component 3	Under the guidance and supervision of the National Project Manager, the Stakeholder Engagement Officer will be responsible for liaising with stakeholders and providing support in preparing project events, particularly related to Outcome 3. Duties and Responsibilities

		Support Output 3.1 and Output 3.2 on engaging stakeholders, managing agreements and reporting requirements, organizing stakeholder meetings, and supporting the resource-efficient value chains across the electronics sectors
For Technical Support to Project Management Unit		
International Contracting		
2 International Technical Advisor, E-waste and Recycling	US\$ 22,500 Salary distribution: 100% charged to Component 1	Duties and Responsibilities - Identify required improvements and opportunities for e-waste dismantling and recycling methods based appropriate BAT and BEP - Provide guidance and training - Provide technical expertise and strategic guidance on e-waste dismantling and recycling methods
International Expert, Circular Design	US\$ 15,000 Salary distribution: 100% charged to Component 1	Duties and Responsibilities Advise on international best practices for right-to-repair, anti-planned obsolescence, and circular design in EEE
International Expert, Green Financing	US\$ 30,000 Salary distribution: 100% charged to Component 1	Duties and Responsibilities - Conduct literature review on green and sustainable procurement, green financing, innovation policies, polluters pay, incentive mechanism, and CSR and EPR policies - Develop tailored guidelines on CE policies
International Technical Advisor, Circular Design of EEE	US\$ 65,000 Salary distribution: 100% charged to Component 2	Duties and Responsibilities - Provide guidance and technical advisory services on circular interventions - Coordinate activities under Output 2.1.1 Circular design of EEE promoted and supported - Monitor progress and impacts of the pilot projects and document lessons learned
International Technical Advisor, Environmentally Friendly Markets	US\$ 60,000 Salary distribution: 100% charged to Component 2	Duties and Responsibilities - Provide guidance and technical advisory services on circular interventions - Coordinate activities under Output 2.2.1 Markets that support environmentally friendly products and behaviors promoted and supported - Monitor pilots and document lessons learned
International Expert, E-waste Collection and Reverse Logistics	US\$ 30,000 Salary distribution: 100% charged to Component 3	Duties and Responsibilities Develop technical guidelines for e-waste collection schemes and reverse logistics
International Technical Advisor, E-waste Collection, Reverse Logistics, and EPR	US\$ 50,000 Salary distribution: 100% charged to Component 3	Duties and Responsibilities - Provide technical advisory services and coordinate activities under Output 3.1.1 E-waste collection schemes and reverse logistics that are gender-responsive established - Provide technical advisory services and coordinate activities under Output 3.1.2 Voluntary EPR scheme designed and demonstrated

International Expert, Hazardous Waste Streams	US\$ 75,000 Salary distribution: 100% charged to Component 3	Duties and Responsibilities - Analyze international and national technical standards for targeted toxic substances related to e-waste streams - Advise on standards - Develop and guide application of relevant guidance and best practices
Professional Writer	US\$ 24,000 Salary distribution: 100% charged to Component 4	Duties and Responsibilities Produce GEM human interest stories Create content for events Promote project stories

Key Consultants

Consultant	Time Input	Tasks, Inputs and Outputs
For Technical Assistance		
International Contracting		
International Expert, EPR	US\$ 45,000 Salary distribution: 100% charged to Component 3	Under the guidance and supervision of the National Project Manager the International Expert, EPR, will provide technical expertise to support the implementation of EPR-related activities and tasks related to <i>Output 1.2.1: Green and sustainable procurement, green financing, innovation, and incentive mechanisms, designed and adopted</i> regarding EPR schemes and <i>Output 3.1.2: Voluntary EPR scheme designed and demonstrated</i>. Duties and Responsibilities - Support the development of EPR scheme, provide advisory services, and assess EPR schemes in other countries - Undertake a technical review of existing policies and Cambodia's national needs related to PR for EEE - Develop technical guidelines on EPR policy - Support capacity building to implement the EPR - Support the establishment of a voluntary EPR scheme for EEE and sustainable financial mechanisms for private sector engagement - Support the organization of a study tour to another country in the region that has an operational EPR scheme to share experiences, lessons learned, and best practices; - Support monitoring progress, measuring impacts, and compiling lessons learned and best practices.
International Consultant, ESIA and ESMP	US\$ 17,500 Salary distribution: 100% charged to Project M&E	Duties and Responsibilities Develop ESIA(s) and ESMP(s) as applicable

International Consultant, Mid-term Review	US\$ 30,000 Salary distribution: 100% charged to Project M&E	Duties and Responsibilities - Conduct the project Mid-Term Evaluation in line with UNIDO/UNDP-GEF requirements - Assess the project's progress toward achieving its objectives and outcomes, including reviewing the relevance, effectiveness, and efficiency of the implementation strategy and identifying factors contributing to or hindering progress - Conduct stakeholder consultations, review project documentation, and evaluate effectiveness of M&E systems - Prepare report with actionable recommendations to improve project performance and sustainability
International Consultant, Terminal Evaluation	US\$ 30,000 Salary distribution: 100% charged to Project M&E	Duties and Responsibilities - Conduct the project Terminal Evaluation in line with UNIDO/UNDP-GEF requirements - Collect and analyze data through desk reviews, stakeholder interviews, and site visits to identify lessons learned, best practices, and gaps in project design and/or implementation - Assess the achievement of project objectives and results, including relevance, effectiveness, efficiency, sustainability, and impact, using evidence-based and participatory methods - Prepare a comprehensive evaluation report with findings and actionable recommendations to improve future programming and ensure the sustainability of project benefits
Local/National contracting		
Local Expert, E-waste and Recycling	US\$ 21,000 Salary distribution: 100% charged to Component 1	Duties and Responsibilities Assess e-waste dismantling and recycling methods and existing capacities and technologies
Local Expert, E-waste Collection and Reverse Logistics	US\$ 21,000 Salary distribution: 100% charged to Component 1	Duties and Responsibilities Develop strategy for establishing national e-waste collection schemes and reverse logistics systems
Local Consultant, Circular Design	US\$ 14,000 Salary distribution: 100% charged to Component 1	Duties and Responsibilities Conduct a situation and gap analysis on right-to-repair, anti-planned obsolescence, and circular design in EEE
Local Expert, E-waste Sub-decree	US\$ 21,000 Salary distribution: 100% charged to Component 1	Duties and Responsibilities - Review the implementation of the e-waste sub-decree - Identify and develop necessary operational measures to support implementation of the e-waste sub-decree
Local Expert, Green Financing	US\$ 21,000 Salary distribution: 100% charged to Component 1	Duties and Responsibilities Review existing policies and national needs related to green and sustainable procurement, green financing, innovation, polluter pays principles, CSR, and EPR
Local Consultant, Capacity Building	US\$ 10,500 Salary distribution: 100% charged to Component 2	Duties and Responsibilities - Identify the capacities, needs and priorities of customs and enforcement personnel - Develop a targeted customs capacity strengthening strategy

Local Expert, E-waste Collection and Reverse Logistics	US\$ 21,000 Salary distribution: 100% charged to Component 3	Duties and Responsibilities Develop standard operation procedures (SOPs) for e-waste collection schemes and reverse logistics
Technical Expert, National Standards	US\$ 122,500 Salary distribution: 100% charged to Component 3	Duties and Responsibilities - Support the development of national technical standards - Support stakeholder consultations on the development of national technical standards
Expert, EEE Industries	US\$ 122,500 Salary distribution: 100% charged to Component 3	Duties and Responsibilities - Support the development of practical instructions and compliance tools for applying standards - Engage EEE industries and businesses
National Expert, Safeguards	US\$ 33,000 Salary distribution: 100% charged to Project M&E	Duties and Responsibilities - Operationalize the Safeguards Capacity-Building Plan, and monitor Environmental and Social Safeguards progress in development/implementation of the project, ensuring that UNDPs SES policy is fully met and the reporting requirements are fulfilled - Oversee/develop/coordinate implementation of all safeguards-related plans - Ensure social and environmental grievances are managed effectively and transparently - Review the SESP annually, and update and revise corresponding risk log; mitigation/management plans as necessary - Ensure full disclosure with concerned stakeholders - Ensure environmental and social risks are identified, avoided, mitigated and managed throughout project implementation - Monitor progress in implementation of the project Gender Action Plan ensuring that targets are fully met, and the reporting requirements are fulfilled - Oversee/develop/coordinate implementation of all gender-related work - Review the Gender Action Plan annually, and update and revise corresponding management plans as necessary
National Consultant, Mid-term Review	US\$ 20,000 Salary distribution: 100% charged to Project M&E	Duties and Responsibilities - Work in collaboration with the International Consultant, Mid-Term Review, to conduct desk reviews of project documents, collecting and analyzing national-level data, and preparing necessary inputs for evaluation reports - Lead or facilitate stakeholder interviews and field visits within the country, ensuring local context, perspectives, and logistical arrangements are effectively integrated into the review process - Collaborate in drafting and reviewing key evaluation deliverables and ensure that national priorities and relevant local issues are reflected in the Mid-Term Review
National Consultant, Terminal Evaluation	US\$ 25,000 Salary distribution: 100% charged to Project M&E	Duties and Responsibilities - Conduct comprehensive desk reviews and gather project data, supporting the development of the evaluation plan and methodology in coordination with the International Consultant - Lead or facilitate national-level stakeholder interviews, field visits, and data collection activities to ensure local context and perspectives are fully integrated into the Terminal Evaluation - Contribute to drafting and reviewing key evaluation deliverables, providing analysis on project relevance, effectiveness, efficiency, and sustainability, and ensuring findings reflect national priorities and lessons learned

Annex 7: Stakeholder Engagement Plan

1. INTRODUCTION

This Stakeholder Engagement Plan (SEP) is designed to ensure effective engagement between various stakeholders throughout the lifecycle of the GEF-8 project “Global Electronics Management (GEM) Program Child Project in Cambodia”. It will build on other relevant project activities with regard to planning and impact assessment processes. Project implementation will ensure regular dialogue with the relevant government ministries and parastatals, private sector entities, local community groups, NGOs, public stakeholders, and international partners.

The electronics sector has driven unprecedented technological innovation and societal progress, and is also at the forefront of pressing global environmental concerns. From the extraction of raw materials to the disposal of electronic waste, the industry's operations have far-reaching environmental implications. Key issues include the depletion of finite resources, the release of hazardous chemicals into the environment, and the generation of electronic waste at unprecedented rates. Cambodia is also impacted by these issues.

This project aims to improve resource circularity and reduce the release of hazardous chemicals and wastes in the electronics value chain by addressing transformation levers (policy, infrastructure, innovation and learning, and multistakeholder dialogues). The project centers on implementing four key components: Component 1 focuses on establishing and strengthening enabling policies on circular electronic practices. Component 2 addresses enhancing cleaner production and sustainable consumption and use. Component 3 targets resource-efficient value chain across the electronics sector. Lastly, Component 4 emphasizes knowledge management, communication, and program-level coordination to ensure effective implementation and coordination of efforts.

Throughout the project, effective and inclusive engagement of relevant stakeholders is paramount for ensuring its success and long-lasting impact. For example, involving national and subnational governments across sectoral areas (such as environment, industry, labour, finance, science, health, and gender) is imperative for creating and implementing an enabling regulatory and policy environment (Project Component 1). Collaborating with government bodies, the project aims to incentivize inclusive circular solutions that empower women and men. The commitment and active involvement of regulators are indispensable for the successful adoption and enforcement of these policies.

Likewise, supporting cleaner production and sustainable consumption and use (Project Component 2) necessitates the active participation of the electronics sector as well as the financial sector. These stakeholders play a pivotal role in driving innovation and financing circular measures. The project aims to empower businesses in these sectors with the knowledge and capacity to adopt inclusive circular measures, fostering commitment and transparent reporting. This engagement is crucial for the success of circular business models and the mobilization of private-sector investments.

Strengthening a resource efficient value chain across the electronics sector (Project Component 3) is a critical factor in achieving a circular economy. Shifting practices towards a CE requires maximising reuse, repair, and material recycling, including pilots on gender-responsive economically sustainable models on EEE reparability options, provincial plans for collection and environmentally sound management of e-waste, training, and removing hazardous waste streams in the electronics sector value chain.

The project seeks to enhance knowledge and capacity of women and men to support sectoral transformation. Collaboration with national and subnational governments, academics, and consumers is instrumental in achieving environmentally sound and circular management of e-waste. Furthermore, effective knowledge management, communication, and program-level coordination (Project Component 4) rely on the active involvement of various stakeholders for sharing knowledge, developing learning activities, and ensuring effective communication for awareness-raising and the replication of good practices. In line with gender equality and social inclusion commitments of UNDP and GEF, stakeholder engagement will be gender-responsive, which will help ensure that gender differentiated knowledge, interests, priorities, and opportunities are reflected across project components and outcomes.

2. SEP OBJECTIVES

The objective of this SEP is to ensure that the interests and priorities of the different stakeholder groups and sectors are taken into account during relevant phases of project development and implementation. The engagement of stakeholders in this project is guided by the below set of comprehensive objectives:

Communicating with stakeholders to foster a shared understanding of project goals and strategies.

Cultivating project support and commitment from specific partners and beneficiaries.

- Participation: Facilitating stakeholder involvement at all levels, from government entities to local community members.
- Gender equity: Designing and implementing the project with responsiveness to gender-sensitive considerations, addressing the specific capacities and needs of women, youth, and marginalized/vulnerable groups.
- Respect for cultural diversity: Ensuring project design and implementation respect existing customs, traditions, and forms of organization and decision-making.
- Communication and transparency: Designing and implementing a communication strategy to deliver coherent messages to specific stakeholder groups and to provide information transparently.
- Partnerships and synergies: Continuously mapping other interventions with similar objectives and exploring opportunities to establish synergies that enhance project impact and prevent duplication of efforts.

The stakeholder analysis provides a structured framework for assessing and enhancing engagement efforts. This process seeks to improve effectiveness by offering a comprehensive understanding and identification of key project stakeholders. This will serve as a dynamic document intended for ongoing analysis.

This stakeholder identification provides a comprehensive overview of each stakeholder group with distinct roles, interests, and influence across the electronic and electrical equipment (EEE) value chain. A summary of the key stakeholders in the EEE value chain is provided in Figure 1 below.

Value Chain of Electronics

The Value Chain of Electronics is divided into three main stages:

- Upstream:** Design, Assembly, Test, Components, Logistics, Suppliers and Service Providers (Outsourced Fabricators, Original Equipment Manufacturers (OEM)), and Manufacturers.
- Mid-stream:** Importers, Distributors, Marketing and Sales, and After Sales Service.
- Downstream:** E-waste (Residual) Disposal, E-waste Treatment, E-waste Transport, E-waste Collectors, E-waste generators, E-waste Exporters, E-waste Importers, Repair, Refurbish, and Secondhand Market.

Arrows indicate the flow of materials, information, and products between these stages.

Notes:

- After Sales Service may include repairs for under warranty units by authorized centers
- E-waste generators covers formal and informal sectors.

Stakeholders in Cambodia

Key stakeholder groups that will be informed about and engaged in the project are as follows:

National Government: The national government plays major and multifaceted roles in supporting, guiding and overseeing the project design and implementation to ensure its compliant and aligned with the national policy and regulations concerning hazardous waste management, including e-waste. The Ministry of Environment (MoE) is responsible for devising and enforcing environmental policies and regulations to control and prevent the release of hazardous pollutants. The Ministry of Economy and Finance devises and operationalizes economic, financial, and procurement measures to support CE solutions. The General Department of Customs and Excise of Cambodia is responsible for supervising the inspection, monitoring, and management of all import and export goods. The Ministry of Industry, Science, Technology, and Innovation contributes expertise in fostering innovative technologies, while also promoting sustainable industrial practice and encouraging circular economy model related business. The Ministry of Labour and Vocational Training promotes harmonious working conditions by strengthening occupational safety and health measures and providing specialized training. The Council for the Development of Cambodia influences investment policies and green industrial development.

Provincial/Municipal Governments: Phnom Penh City Hall partners with waste collection service companies to ensure the proper handling of all types of waste, including e-waste. This collaboration facilitates efficient collection, segregation, and disposal processes, ensuring that e-waste is managed responsibly and directed to authorized recycling or treatment facilities. The Municipal Department of Environment, in collaboration with other provincial departments and national-level administration is in charge of monitoring and inspecting on illegal waste or hazardous substances discharged or released from the industrial sector. Other provincial and municipal government entities and organizations include the Department of Solid Waste Management and the Enterprise for Managing Municipal Solid Waste in Phnom Penh

Private sector: Key private sector stakeholders encompass businesses operating within the electronics sector, as well as those offering alternatives and circular solutions. Major EEE players include EEE producers, importers, distributors, and after-sales service providers, e-waste collection, transport, treatment, and disposal enterprises, and EEE repair and refurbish enterprises. Providers of CE solutions, specializing in reuse, repair, and recycling, also play a vital role in the upstream measures of the project. National and private banks are additional stakeholders, potentially offering green financing. For example, the National Bank of Cambodia (NBC) and financial institutions like ARDB Bank and ACLEDA Bank are key stakeholders. The private sector is divided into two main groups:

- a. The first group includes companies involved in importing, distributing, and wholesaling ICT equipment and infrastructure, such as Samsung, Huawei, and LG. These companies have demonstrated environmental responsibility through the implementation of Extended Producer Responsibility (EPR) programs. These include take-back systems that allow consumers to return or repair used or end-of-life electronics at designated drop-off points or collection containers, in line with global sustainability efforts.
- b. The second group includes formal stakeholders engaged in downstream e-waste management, including services such as collection, dismantling, repair, refurbishment, and export for recycling. Notable players include Ecobatt Energy Cambodia, Asia Data Destruction, and Tes-Amm Cambodia. Their work supports sustainable consumption and a resource-efficient value chain by promoting recovery and reuse. Functional devices and components are collected, repaired, and resold, helping to reduce improper disposal in landfills or public spaces and limiting the release of hazardous substances such as POPs, mercury, and other harmful chemicals.

Informal sector: Informal e-waste pickers and small-scale dismantlers, often located in marginalized communities, face significant exposure to hazardous chemicals due to the absence of proper safety measures, leading to adverse health effects. These workers manually break down electronic waste to extract valuable components and materials, such as metals, printed circuit boards, and plastics, using basic and unsafe methods like burning and acid baths. Women face significant challenges on account of social norms and a lack of economic opportunities. Women can be exploited through various factors such as unequal payment, excessive overtime, and limited access to training opportunities.

Academia including schools and universities: The contribution of educational institutions is to provide valuable findings and insights to support the development of effective e-waste policies and regulations, and to offer training programs on BAT or BEP for e-waste management, particularly on repair and recycling practicalities. Furthermore, they play a vital role in enhancing awareness for behavioural changes and advocating for sustainable practices. This group includes the Royal University of Phnom Penh and the National Technical Training Institute.

Intergovernmental organisations (IGOs), development partners, and non-governmental organisations (NGOs): Major stakeholders in this category include KOICA, JICA, ADB, GIZ, World Bank, UNIDO, UNICEP, and the Global E-waste Statistics

Partnership. They play a crucial role in providing valuable expertise, funding, and support for sustainable development and environmental initiatives.

Media. Radio, TV, newspapers, press releases, and social media play a role in reaching broader stakeholder groups, mobilizing support, and raising awareness on e-waste management programs and relevant environmental topics.

Regional and global networks

Regional and global networks play a crucial role in the Cambodia GEM project by facilitating knowledge sharing, learning, and the exchange of experiences and best practices with the global GEM program and other projects. This involves actively participating in coordination meetings and contributing localized insights and lessons learned to the global program's knowledge management platform. These connections help align policies, leverage global expertise, and support the potential for replicating successful circular economy approaches across different contexts. Below are key networks and initiatives:

The Global E-waste Monitor is a comprehensive report published by the Global E-Waste Statistics Partnership (GESP), a collaborative effort involving the International Telecommunication Union (ITU), the United Nations University (UNU), and the International Solid Waste Association (ISWA). This report provides critical data and insights on the generation, collection, recycling, and disposal of e-waste worldwide. It serves as a key resource for policymakers, researchers, and stakeholders working to track the global-waste generation, advocate for sustainable e-waste management practice, and raising awareness about impact of e-waste mismanagement.

The UN E-Waste Coalition is a collaborative initiative led by multiple United Nations (UN) agencies including International trade centre, UNEP, UNU, ILO, UNIDO, WHO, BRS secretariat, UN-habitat and UNITAR working with member state countries to address e-waste, with the main three core activities: (1) advocacy via supporting various awareness raising initiative targeted at policy-makers, decision-makers and consumers; (2) knowledge transfer by collaborating with the Global E-waste Statistics Partnership to share the best practice and lesson learned and providing a one-stop shop for the online compilation and dissemination of information through the globalewaste.org; (3) Joint implementation mechanism via Engaging through the implementation of joint projects, mainly focusing on policy and legislation, standardization, research, and capacity building.

International E-waste Management Network established in 2011 by the US environmental Protection Agency and the Environmental Protection Administration Taiwan, is a global voluntary and non-binding community of environmental regulator, providing the participating countries opportunities to collaborate in order to share the best practices and experiences to reduce the negative impacts of electronic waste on public health and the environment.

3.2 Stakeholder engagement and roles

3.2.1 Government

Ministry of Environment (high interest and influence in the project): With technical assistance from UNDP and UNEP, the Ministry will serve as the overall project lead in managing the project and overseeing all the components and outputs under this project and managing GEF resources. Acting as a focal point, they collaborate with ministries and partners, leading the development and implementation of regulations, policies, and standards related to CE solutions. Their role includes driving private sector engagement. The Ministry is instrumental in achieving outputs such as agreed regulatory frameworks, policies, and guidelines for reducing e-waste, strengthening systems for circularity, promoting behaviour and social change, and improving knowledge.

Ministry of Economy and Finance (MEF) (high interest and influence): The project will work with MEF for Component 1 and outputs related to the development and implementation of legislation, regulations and guidelines related to economic and financial measures, including green public procurement. It will also work with MEF on Component 2 and outputs related to designing and piloting green financing initiatives, such as green bonds, credit guarantee schemes, and blended financing and the design and implementation of an EPR scheme, with a particular focus on creating an EPR Fund. Moreover, under Component 1, the project will specifically target the General Department of Customs and Excise of Cambodia to build the knowledge and capacity for preventing the import and use of banned or to-be-banned products and waste. The general strategy for involving the Ministry includes directly engaging them in expert discussions for joint development of proposed measures, correspondence through official letters, Telegram, telephone, and formal and informal meetings including regular inter-ministerial working group meetings on Sustainable Consumption and Production (SCP), workshops, and progress reports.

Ministry of Industry, Science, Technology and Innovation (MISTI) (high interest and influence): The project will work with MISTI for Component 1 and outputs related to the development and implementation of legislation, regulations and guidelines pertinent to alternatives and CE business development, and Component 2 and outputs related to designing and testing CE business models for upscaling. The strategy for involving the Ministry includes directly engaging them in expert discussions for joint development of proposed measures and supporting businesses, correspondence through official letters, Telegram, telephone, and formal and informal meetings including regular inter-ministerial working group meetings on SCP, workshops, and progress reports.

Ministry of Interior (high interest and influence): Their primary responsibility lies in the effective engagement of subnational governments as liaisons to provide circular solutions to combat e-waste. The project will work with the Ministry of Interior for Components 1, 2, and 3 and outputs related to the sub-national level enforcement of legislation, regulations, and guidelines related to e-waste and CE solutions and raising awareness and advising on EPR. The key components of their involvement include policy enforcement and awareness-raising. The strategy for involving the ministry includes correspondence through official letters, Telegram, telephone, and formal and informal meetings including regular inter-ministerial working group meetings on SCP, workshops, progress reports, and policy briefs.

Subnational governments Phnom Penh, Siem Reap, Sihanoukville (high interest and influence): The project will work with subnational governments for Component 2 and outputs related to providing circular solutions including EPR and Component 3 and outputs related to pilots and raising awareness among government entities, private sectors, citizens, and local communities. The strategy for involving subnational governments includes joint field missions, correspondence through official letters, Telegram, telephone, formal and informal meetings, workshops, and progress reports.

Ministry of Education (high interest and influence): The project will work with the Ministry for Component 3 and outputs related to education and awareness campaigns, student engagement programs, and facilitating the implementation of CE models. The expected outcomes are agreed regulatory frameworks, policies, and guidelines that support circular solutions, strengthened capacity and institutional frameworks, and knowledge sharing to replicate and upscale good practices. The strategy for involving the Ministry includes correspondence through official letters, Telegram, telephone, and formal and informal meetings including regular inter-ministerial working group meetings on Sustainable Consumption and Production (SCP), workshops, progress reports, and policy briefs.

Ministry of Women Affairs (MoWA) (high interest and influence): The Ministry plays a significant role in promoting gender equality and ensuring gender-sensitive measures. The project will work with the MoWA for Component 1 and outputs related to ensuring gender equality in regulations and guidelines related to CE solutions and public-private-partnerships (PPPs) and EPR and for Component 2 and outputs related to the provision of advice on business models that promote gender equality and empower women-led enterprises and private sector investments with a focus on gender equality. The strategy for involving the MoWA includes direct interactions through inter-ministerial working group meetings on SCP, correspondence through email and phone, formal and public meetings, roundtable discussions, and progress reports. MoWA also works with the Cambodian National Council for Women (CNCW) to coordinate within the government to empower women and to eliminate all forms of discrimination and violence against women.

3.2.2 Private sector

Companies related to EEE in Siem Reap, Phnom Penh and Preah Sihanouk (medium interest level and high influence): The project will work with them for Component 1 and outputs related to drawing on industry expertise for the development of regulations and guidelines and Component 2 and outputs related to working with the electronics sector in implementing measures and promote CE solutions. And Component 3 and outputs related to raising awareness about sustainable consumption and production. The engagement strategy entails, among others: (i) the dissemination of guidelines and easily implementable actions to support CE solutions; (ii) strategic outreach through RGC as liaison to enrol them for the adoption of the recommended measures; (iii) provision of technical assistance and required knowledge for them to adopt CE measures; (iv) strategic campaigns through social media and videos to feature and disseminate best practices among the sectors; (v) in-person or virtual meetings and formal and roundtable meetings; and (vi) recognition of good practices through awards and social media.

Electronics companies (high interest and influence): Electronics companies, alongside importers, distributors, retailers, repair/recycling companies, and others, hold a pivotal role in adopting CE measures, and for some actively engaging in EPR. The project will work with them for Component 1 and outputs to seek their crucial insights for the development and review of legislation, regulations, and guidelines related to CE solutions, including an EPR pilot and Component 2 and outputs related to demonstration pilots for CE business models and strategies through improved repair, reuse, and recycling, as well as for financial support through investments in technologies and infrastructure. The engagement strategy involves, among others: (i) developing easy-to-implement

measures to promote CE; (ii) expert consultations on and public hearing about the voluntary EPR scheme and other CE measures; (iii) forming a network or coalition of businesses under the EPR scheme to demonstrate best CE practices; (iv) strategic campaigns through social media and videos to feature and disseminate best practices among the sectors; (v) in-person or virtual meetings, participation in formal and roundtable meetings; and (vi) recognition of good practices through awards and social media.

Businesses that provide alternatives and CE solutions (high interest and low influence): Their role in scaling up CE solutions is a key success factor. The project will work with them for Component 1 and outputs related to the provision of inputs into new legislation, regulations, and guidelines about the relevant fields of operation as well as the design of, and relevant data for inclusion in, production and consumption of alternatives and CE solutions and Component 2 and outputs related to promotion and upscaling of alternatives and CE solutions. The engagement strategy involves: (i) the identification of existing and emerging related businesses; (ii) the provision of guidelines for these businesses to access required sets of technical assistance and incentives; (iii) creating a forum for relevant business actors to be connected with government and potential investors; and (iv) in-person or virtual meetings, participation in formal and roundtable meetings, and progress reports.

National banks and other private banks (medium interest but high influence): The project will work with them for Component 1 and outputs related to designing and operationalizing green financing such as green bonds, credit guarantee schemes, and blended financing to support circular solutions and Component 2 and outputs related to the piloting of a green financing scheme, further contributing to strengthening systems for circularity through innovative business models and financing, bonds, pilot EPR schemes, and PPPs in the target provinces. The engagement strategy involves joint technical discussions and work related to green bonds and financing, and regular correspondence through email and phone, in-person or virtual meetings, participation in formal and roundtable meetings, and progress reports.

3.2.3 Academia and Research

Elementary and secondary schools (low interest but medium influence): As levels of awareness about plastic pollution and needed solutions remain low, integrating these issues into existing educational programs and improving the knowledge is necessary to trigger the change in behaviours starting with young generations such as elementary and secondary students. The engagement strategy entails: (i) strengthening environmental education related to plastic pollution; (ii) outreach activities and field visits; and (iii) dissemination of posters and information briefs about plastic pollution and needed interventions.

Universities (high interest but medium influence): The project will engage universities for Component 2 and outputs related to promoting cleaner production, SCP innovations, and new technologies aimed at reducing e-waste and fostering research and development initiatives to explore sustainable alternatives, and for Component 3 and outputs related to piloting resource efficient measures through the electronics value chain. The engagement strategy involves joint technical discussions identifying innovation and new technologies, and pilot activities to support resource efficient measures through the value chain.

3.2.4 IGOs, development partners, and NGOs

IGOs, development partners, and NGOs (high interest and medium influence): This includes the EU, GGGI, GIZ, IGES, UNDP, UNEP, UNESCAP, UN-Habitat, UNIDO, UN Women, World Economic Forum, and World Bank. The project will work with them for Components 1, 2, 3, and 4 and outputs related to technical assistance for the review of new legislation, regulations, and guidelines and provision of technical support in their respective fields of operation.

For instance, the project will work with the: (i) EU to advance the work related to green procurement; (ii) GGGI and UNESCAP for the work related to green financing; (iii) GIZ for EPR, green public procurement, eco-labelling, and certification; (iv) World Bank for the implementation of new measures on CE solutions; and (v) World Economic Forum to facilitate the national level policy forum and dialogue (hosted by UNDP). To maximize synergy and impacts, co-financing arrangements will be made with relevant institutions. Furthermore, UNDP will play a key role in providing essential technical assistance, project execution and administrative support, and quality assurance support to the MoE for all planned activities. UNEP as an Implementing Agency will oversee the overall implementation of the project, primarily accountable to the GEF secretariat in reporting progress and results from the project. The project will also organize regular meetings with them, including national forums, to share progress on respective work to ensure effective communication and collaboration throughout the project.

3.2.5 Citizens and communities

Consumers (low to medium interest but high influence in terms of EEE consumption): The success of the project depends upon their active engagement in taking actions towards avoiding/reducing the consumption of EEE, adopting CE measures including reuse and

repair alternatives, and serving as an active agent to demand businesses to provide more environmentally friendly and circular products and practices. This will include differences and considerations for women and men in their priorities, roles, and issues related to consumption. The project will aim to engage consumers for behaviour changes through Component 3 and outputs through: (i) provision of information materials (videos, posters, banners and bulletin boards) to promote the avoidance/minimisation of EEE consumption and promote CE measures; (ii) dissemination of messages through social media, radio, and newspapers, working with influencers and celebrities including Buddhist monks; and (iii) public events and campaigns.

Women and men in communities located in poor urban and rural areas living in proximity to contaminated sites, industries, or waste dumps (high interest but relatively low influence): The project will work with them for Component 2 and outputs related to EPR pilots and Component 3 and outputs aiming for behaviour changes for the reduction of e-waste as part of reuse and repair schemes. Community members actively participate in green jobs created with the support of the project, contributing to the overall success of circular solutions. The key components of their involvement include monitoring, awareness-raising, input provision, and participation in green jobs. The strategy for involving these communities through field visits, direct engagement through EPR and green job creation, community-level meetings, posters and information briefs, and bulletin boards about e-waste and needed interventions, and campaigns.

4. ENGAGEMENT STRATEGIES

This project will ensure that the views and concerns of the different stakeholders directly or indirectly involved or affected by the project are taken into due consideration. Thus far, several consultation meetings, and other approaches have been used to engage stakeholders to ensure that they were informed of the project's objectives, intended activities, and outputs at a very early stage of the project's development in order to generate their buy-in throughout the different stages. These communication practices will continue during project implementation to ensure the participation of all relevant stakeholders, taking gender equity into account, respecting cultural diversity, and allowing for required communication and transparency as well as partnerships and synergies.

Techniques to target and engage stakeholders and beneficiaries will depend on the actor(s) and the stage of project implementation. In summary, engagement of stakeholders and beneficiaries will be achieved through one or more of the following approaches:

- **Project Steering Committee (PSC):** PSC meetings will be organized on a regular basis to ensure relevant partners remain actively engaged in monitoring the project's progress and steering the implementation of project activities towards the intended outcomes. The PSC will strive for gender balance in its membership and include representation from at least one gender-focused stakeholder group.
- **Correspondence (phone, email):** This method will be used to: (i) distribute project updates and key announcements through regular emails to ensure stakeholders stay informed about the latest developments, milestones, and upcoming events; (ii) invite stakeholders to meetings and discussions via personalized emails including comprehensive agendas and objectives; and (iii) provide clear information on support for activities and initiatives through detailed emails, ensuring transparency and mutual understanding.
- **Workshops:** Workshops will be used to inform and actively engage larger groups of stakeholders in consultation processes, generating buy-in, and sharing knowledge.
- **Meetings:** Meetings will be held bilaterally or with groups with the purpose to inform stakeholders and/or obtain agreement on issues of importance for successful project implementation:
 - One-on-one meeting to seek views and opinions providing space for understanding and sharing of perspectives and priorities.
 - Virtual meetings: Record meetings to capture insights, decisions, and feedback for future planning, analysis, and documentation of stakeholder interactions.
 - Group meetings (sometimes through the engagement of CSOs/NGOs/community organizations) will also form an important means of communication at the community level.
 - Formal meetings to: (i) present the project information to a group of stakeholders in a formal meeting; (ii) disseminate technical information in a structured and accessible manner; and (iii) establish information and feedback mechanisms providing a formal avenue for feedback.
 - Public meetings to present project information to a large group of stakeholders in public meetings facilitating dissemination of key project updates.
 - Roundtable meetings to present project information to a group of stakeholders to allow for in-depth exploration of specific topics and bring together stakeholders from diverse backgrounds.

- **Liaisons:** Representatives of local or municipal governments and district councils, community leaders, etc. may act as liaisons, e.g., between beneficiaries and other project partners.
- **Expert consultations:** Recognized experts in thematic areas will consult and inform stakeholders on strategic aspects of the project, including a gender expert to inform gender-responsive approaches and strategies for engaging women and men in communities.
- **Field visits:** Regular visits of project staff and other stakeholders (e.g., government and other partners; UNDP staff, midterm/final review consultants) to project target sites will be fundamental for engaging with beneficiaries, ensuring continued buy-in and commitment as well as to review progress implementation, and flag and address risks.
- **Exchange visits:** Project partners and beneficiaries may be selected to participate in visits to other sites/countries in order to exchange knowledge and learn from good practices and successful approaches implemented elsewhere that could be replicated in the project sites given.

In addition to the above-mentioned engagement tools, the project will develop a communication plan that will take into consideration the stakeholder engagement plan and can be adapted depending on the stage of the project and in response to feedback from stakeholders as well as the grievance mechanism.

Contents and format of information dissemination will be specifically adapted to targeted audiences, their educational background, cultural contexts, preferences for accessing information for women and men, and languages in order to obtain the highest possible levels of understanding, buy-in, and continued support including through the following mechanisms:

- **Community skits and bulletin boards:** Skits spoken in Khmer and notifications/posters on bulletin boards/offices will help raise awareness of beneficiaries on relevant project subjects.
- **Brochures/flyers/newsletters:** Printed materials will be used for sharing project summaries and key outputs with national stakeholders (Government staff, private sector entities, entities involved in the project's implementation, communities around targeted sites, etc.).
- **Radio, TV, newspapers, press releases, social media:** The media will be used to reach broader stakeholder groups in the country, mobilize support, and raise awareness on project activities and relevant environmental topics.
- **Exhibitions:** Posters, photos, banners, and/or short (2 min) videos will be produced for display in national and international fora and fairs, and for dissemination using social media apps and regular media channels.
- **Policy briefs:** To inform decision-makers on recommendations, lessons learned, and good practices resulting from project implementation and enable replication/upscaling, policy briefs will be developed for sharing with Government stakeholders.
- **Progress reports:** Reports produced as part of M&E processes (e.g., UNDP GEF PIR) will be shared with the Steering Committee, UNDP, donor(s), as well as other relevant stakeholders (as appropriate).
- **Online media:** The project will share progress updates and good practices to the general public through online media, including the website of partner ministries. Posts may include case studies, photographs, photoblogs, short videos, etc. To reach national and global audiences, the project will also establish accounts on social media including Facebook, Telegram, TikTok, X, Instagram, and YouTube.

During all stakeholder engagement, participation of women will be ensured. Women's organizations will be consulted with to provide advice on how to improve the project's concept and implementation strategy from a gender equality perspective and inform strategies to ensure inclusive stakeholder and gender-responsive engagement. Awareness raising campaigns will include all those who are affected directly and indirectly by the project activities and will take into consideration the fact that women and men are impacted differently through different routes.

Table 1 below outlines the type of information that will be communicated to stakeholders and associated methods. This strategy has been formulated to engage diverse stakeholders effectively in the project. Tailored approaches, presented above, have been carefully selected to align with the specific needs of each stakeholder group. These go beyond information dissemination, serving as strategic instruments to foster collaboration, encourage active stakeholder participation, and ensure inclusivity in decision-making. For example, national and subnational governments will be engaged through workshops, policy briefs, and formal meetings. Private sector actors will be mobilized via roundtable meetings, pilot EPR scheme, and personalized discussions. Citizens and local communities will be involved through public meetings, project brochure distribution, and grassroots initiatives. These strategic linkages will ensure targeted and effective approaches to stakeholder participation.

Table 1: Type of information that will be communicated to stakeholders and associated methods

Stakeholders group	Information, formats, and languages	Communication methods	Rules for communication
Stakeholders to be affected directly or indirectly by the outcomes of the project	The project activities, how these will be implemented, the foreseen social and environmental issues as well as the mitigation actions that will be undertaken and project status updates. Depending on the stakeholders, the formats and languages will vary. The formats will be either in formal documentation layout or lay-person perspective brochures and pamphlets while the language used will be in English and/or Khmer as appropriate.	• Meetings • Brochures and pamphlets • E-mail • Field visits • Formal/informal letters • Ministry website • Workshops • Newspapers, radio, and television	• Communication will be undertaken by Government project partners, UNDP, the project team, UNDP Regional Hub in Bangkok, UNDP HQ, among others. • Public communication will be through national reporting lines as well as UNDP reporting procedures. • An integrated approach will be adopted for information dissemination and awareness raising for all project stakeholders. • Data and information exchange will be strengthened between stakeholders through existing inter-ministerial dialogue roundtables/committees, ensuring every participant can contribute and will be heard. • On a regular basis, all stakeholders will be informed on project progress. • Awareness raising on gender perspectives will be held and how to incorporate gender mainstreaming in all project activities, whenever possible.
Internal stakeholders who are involved in project implementation	The project document, bottlenecks in the implementation phase, different scenarios to achieve the required outputs, any changes brought about in the project, and project status updates. The formats of disclosing information will be in formal documentation layout and the language used will be English and/or Khmer.	• E-mail/telegram • Meetings including PSC meetings • Formal letters • Workshops • Ministry website • UNDP website	• In accordance with the rules for internal communication, meetings and the grievance mechanism for workers (employees and contract labour supplies). • The needs and requirements of all internal stakeholders involved in the project will be considered to ensure their cooperation and buy-in and project assistance will be provided to increase stakeholder capacity. • Awareness raising campaigns and training on the sound management of chemicals will be carried out, in order to enhance the process cooperation among all concerned stakeholders/ministries. • Awareness raising activities organized on gender perspectives and how to mainstream gender into project activities whenever possible.
External stakeholders who participate in the project implementation	Relevant project activities with which they are concerned, any issues arising during implementation, means to address these issues, and project status updates.	• E-mail/telegram • Meetings • Formal letters • Workshops	• In accordance with laid down government procedures for information exchange. • The needs and requirements of all external stakeholders involved in the project will be considered to ensure their

Stakeholders group	Information, formats, and languages	Communication methods	Rules for communication
	The formats of disclosing information will be in formal documentation layout and the language used will be English.		cooperation and buy-in and project assistance will be provided to increase stakeholder capacity. • Awareness raising campaigns and training will be carried out, in order to enhance the process of cooperation/collaboration among all concerned stakeholders/ministries. • Awareness raising activities organized on gender perspectives and how to mainstream gender into project activities whenever possible.
National government	High-level meetings/workshops, any policy decisions that are important to implement some activities, and project status updates and bottlenecks that require the interventions of senior government officials. The formats of disclosing information will be in formal documentation layout and the language used will be English and/or Khmer.	• E-mail/telegram • Formal letters • High-level meetings • Expert consultations • Workshops/roundtable discussions	• In accordance with administrative procedure requirements. • The needs of the national government and its capacity to contribute to the project will be considered. These surveys, carried out periodically, can inform the design of a support network that allows local government to meet its obligations. • Awareness raising campaigns and training to enhance the process of cooperation among all concerned stakeholders/ministries. • Awareness raising activities organized on gender perspectives and how to mainstream gender into project activities whenever possible.
Subnational government	High-level meetings/workshops, any policy decisions that are important to implement some activities, and project status updates and bottlenecks that require the interventions of senior government officials. The formats of disclosing information will be in formal documentation layout and the language used will be in Khmer.	• Meetings • Brochures and pamphlets • E-mail/telegram • Field visits • Ministry website • Workshops • Newspapers, radio and television • Social media	• In accordance with laid down government procedures for information exchange. • The needs and requirements of all external stakeholders involved in the project will be considered to ensure their cooperation and buy-in and project assistance will be provided to increase stakeholder capacity. • Awareness raising campaigns and training will enhance the process of cooperation/collaboration among all concerned stakeholders/ministries. • Awareness raising activities organized on gender perspectives and how to mainstream gender into project activities whenever possible.
Private sector Academia and Research CSOs and NGOs Development partners and IGOs	The project activities, how they will be implemented, the foreseen social and environmental issues, as well as the mitigation actions that will be undertaken and project status updates.	• Meetings • Brochures and pamphlets • E-mail/telegram • Expert consultations	• In accordance with required procedures. • Organizations playing a role in specific assessments or data collection that could contribute to the project will be encouraged to do so.

Stakeholders group	Information, formats, and languages	Communication methods	Rules for communication
	The format of disclosing information will be either in formal documentation layout or lay-person perspective brochures and pamphlets while the language used will be in English and/or Khmer.	• Field visits • Formal/informal letters • Ministry website • Workshops • Newspapers, radio and television	• Women's organizations of interest to the project in order to enrich the project's dialogue roundtables will be taken into consideration. • Civil society and women organizations providing advice on how to improve the project's approach and implementation strategy from a gender equality perspective will be encouraged. • Designing campaigns for internal use within private sector entities to educate and raise awareness, focusing on the specificities of the industries and products concerned. A gender perspective module would be included in this campaign. • Enabling mechanisms within the various industries concerned to support the creation of women groups will be established.

5. STAKEHOLDER ENGAGEMENT ACTIVITIES DURING THE PPH PHASE

A gender-responsive, culturally sensitive, non-discriminatory and inclusive stakeholder consultation process underpinned the project's formulation. During the PPG phase, a number of stakeholder engagement activities were undertaken to discuss and agree on the project's activities, resulting in the Project Document and annexes. This includes: an inception workshop, numerous stakeholder consultation meetings, and a validation workshop.

These consultations held to explore the scope of the problems; deepen the understanding of the various stakeholder groups and their knowledge; and identify solutions with government ministries, private sector participants, and international organizations, among others. The consultations serve to inform and optimize ongoing and future stakeholder engagement strategies, ensuring alignment with stakeholder interests and fostering a collective approach toward achieving the project's goal and objectives.

5.1 Project inception workshop during PPG phase

MoE and UNDP jointly organized a multistakeholder inception workshop on 12 February 2025. The workshop aimed to: introduce the proposed project to the stakeholders; receive inputs and feedback from stakeholders; and gather information to support project development including identifying existing and future initiatives that the project could build on or complement. The inception workshop involved 43 participants (9 female and 34 male).

List of participants in the Inception Workshop (12 February 2025)

Government

Name	Position	Organization
H.E Mr. Sum Thy	Director General	Ministry of Environment
Mr. Ou Chanthearith	Director of Department	Ministry of Environment
Mr. Sophal Laska	Director of Department	Ministry of Environment
Mr. Rim Chanthya	Vice Chief Officer	Ministry of Women Affair
Mr. Bo Han	Vice Chief Officer	Ministry of Industry, Science, Technology & Innovation
Mr. Nhouth Manith	Officer	Ministry of Environment
Mr. Kong Narith	Officer	Ministry of Interior
Mr. Un Hemalin	Vice Chief Officer	General Department of Customs and Excise of Cambodia
Mr. Oen Pheara	Officer	Ministry of Public Work and Transport
Mr. Prak Chandarith	Bureau Chief	Ministry of Labour and Vocational Training
Mr. Khem Reaksa	Bureau Chief	Department of Environment Phnom Penh
Mr. Ean Soky	Bureau Chief	Ministry of Health
Mr. Tan Khunratana	Deputy Director	Ministry of Environment
Mr. Ngoun Sipheng	Director	Enterprise for managing Municipal solid waste in Phnom Penh
Mr. Chan Vichet	Deputy General Director	Ministry of Labour and Vocational Training
Mr. Som Sophon	Officer	The Council Development of Cambodia
Mr. Chea Moninoran	Representative	Ministry of Public work and transport
Mr. Ly Chanthon	Deputy Director	Ministry of Industry, Science, Technology & Innovation
Mr. Sophal Dykanal	Bureau Chief	Ministry of Environment/Department of Hazardous substance Management
Mr. Turvy Narith	Bureau Chief	Ministry of Environment/Department of Science and Technology

Name	Position	Organization
Ms. Phann Daneth	Vice Chief Officer	Ministry of Environment/Department of Hazardous substance Management
Mr. Nob Sokhai	Deputy Director	Ministry of Environment
Ms. Cheng Tharika	National Consultant	MoE/UNDP
Ms. Siv Kimly	Volunteer	MoE
Mr. Deth Sokmab	Volunteer	MoE
Mr. Ro Channarith	National Consultant	MoE/UNDP
Ms. Kim On Korn	National Consultant	MoE/UNDP
Mrs. Kimsan Linna	Volunteer	MoE
Mrs. Nang Phasya	Officer	MoE
Mrs. Yong Sokha	Bureau Chief	Ministry of Environment/Department of Science and Technology
Mr. Sok Chanvirak	Vice Chief officer	Ministry of Environment/Department of Science and Technology

Private sector

Name	Position	Organization
Mr. Sam Techkong	General Manager	Panasonic
Mr. Sokchea Kim	Service Manager	LG Electronics Cambodia
Mrs. Zhong Jinan	CCO	Huawei
Mr. Chery Bona	General Manager	Ecobatt Energy
Mr. Arvmngam	Manager	Tes-Amm
Mrs. Ser Siya	HR director	Gear Group

Academia and Research

Name	Position	Organization
Mr. Yan Rem	Teacher	Royal University of Phnom Penh
Mr. Sen Samnang	Teacher	The National Technical Training Institute

IGOs, development partners, and NGOs

Name	Position	Organization
Mr. Flonan Schmidt	Advisor	GIZ
Mr. Amit Tshast	Project Lead	GGGI
Mr. Shakeel Ahmad	Deputy Resident Representative	UNDP
Mr. Nac MI	Project Manager	UNDP
Mrs. Noun Silyvann	Communication Assistant	UNDP
Mrs. Kim Sreykhuoch	Project Assistant	UNDP
Mr. Brandon Turner	GEF PPG Team Leader	UNDP

5.2 Bilateral stakeholder consultations during PPG phase

Date	Meeting objective	Organization/Participants	Contact	Main outcomes and agreements
24 Feb 2025 9:00-11:00 AM	To collect essential data for the preparation of UNDP/GEF Project Documents (ProDocs), GEF CEO endorsement documents, and additional supporting materials. This involves conducting stakeholder consultations and site visits to gather insights on stakeholder roles, responsibilities, needs, strengths, as well as their potential contributions and involvement in the project.	Asia Data Destruction Mr. Sebastien Ung	(+855) 12 418 015	- Expressed interest in the collection phase and acknowledged of government-mandated collection mechanisms. - Potential area for collaboration or partake in project were (1) waste collection schemes and reverse logistics and (2) Increased uptake of recycled materials along the value chain
		Thai Samsung Electronics - Mr. Chet Setha - Ms. Leang Mora - Mr. Prum Thaileang	(+855) 77 797 666	- There is an existing initiative for a take-back program, but struggling due to low participation and high operational costs. If the program demonstrates potential for operational improvements, there is greater willingness to participate in the project. - Potential area for collaboration or partake in project was trade of electronic equipment with low-impact at use stage
25 Feb 2025 9:00-11:00 AM	To collect essential data for the preparation of UNDP/GEF Project Documents (ProDocs), GEF CEO endorsement documents, and additional supporting materials. This involves conducting stakeholder	Huawei - Ms. Zhang Nancy - Ms. Lim Hour - Mr. Khim Sopheak	(+855) 10 286 176	- Likewise, has an initiative for a take-back program; however, it does not align with the scope of the project. Additionally, the influence of regulatory policies has been acknowledged - Potential area for collaboration or partake in project was identified as following (1) waste collection schemes and reverse logistics and (2) Increased uptake of recycled materials along the value chain
25 Feb 2025 2:00 -4:00 PM	consultations and site visits to gather insights on stakeholder roles, responsibilities, needs, strengths, as well as their potential contributions and involvement in the project.	Ministry of Environment - Mr. Sophal Dyakanal - Mr. Nob Sokhai	(+855) 11 999 910 (+855) 78 838 985	- Demonstrated significant interest in advancing policies for waste management and circular economy initiatives, emphasizing their dual role in supporting policy creation and carrying out baseline studies on hazardous waste, including electronic waste. - Potential area for collaboration or partake in project was all of component 1
26 Feb 2025 2:00 -4:00 PM	to collect essential data for the preparation of UNDP/GEF Project Documents (ProDocs), GEF CEO endorsement documents, and additional supporting materials. This	Ecobatt Energy Investment International - Mr. Lean Sochea - Mr. Pao Socheat	(+855) 11 399 122 (+855) 86 598 307 (+855) 10 323 962	- Show considerable interest in the collection and dismantling pilot project, and the likelihood of collaboration on the project is very high. - Potential area for collaboration or partake in project include: - E-waste collection schemes and reverse logistics - Infrastructures and inclusive business models

Date	Meeting objective	Organization/Participants	Contact	Main outcomes and agreements
	involves conducting stakeholder consultations and site visits to gather insights on stakeholder roles, responsibilities, needs, strengths, as well as their potential contributions and involvement in the project.	Mr. Cheuy Bona		- Material streams contaminated by POPs and chemicals of concern - BAT and BEP for collection, repair, dismantling, recycling, and disposal including export
27 Feb 2025	to collect essential data for the preparation of UNDP/GEF Project Documents (ProDocs), GEF CEO endorsement documents, and additional supporting materials. This involves conducting stakeholder consultations and site visits to gather insights on stakeholder roles, responsibilities, needs, strengths, as well as their potential contributions and involvement in the project.	Informal processors - Mr. Sok Heng - Mr. Sok Thy		- The possible opportunity is collection pilot but they have shown low interest. - Potential area for collaboration or partake in project include: - E-waste collection schemes and reverse logistics - Infrastructures and inclusive business models - Increased uptake of recycled materials along the value chain
28 Feb 2025 10:00-11:00 AM	Summary the mission's outcome and information necessary regarding the bilateral meeting	Ministry of Environment - Mr. Sophal Laska - Mr. Ou Chantharith - Ms. Siv Kimly	(+855) 12 900 470	- strong interest in policymaking and the enforcement of regulations, particularly the Extended Producer Responsibility (EPR) regulation and the hazardous waste regulation, both scheduled for issuance this year. They are also keen on inventory development, formulating a national waste management plan, and updating guidelines related to EPR. - The potential area for collaboration or participation in the project encompassed all aspects of Component 1. However, it was also recommended to review the feasible activities and consider revising certain outcomes and outputs for further refinement
28 Feb 2025 3:00-4:00 PM	Debrief the mission's outcome and information necessary regarding the bilateral meeting	UNDP - Mr. Mi Nac - Mr. Ahmed Shifaz		They expressed their agreement to support the development of the project.

5.3 Project validation workshop during PPG

MoE and UNDP jointly organized a multistakeholder workshop on 11 April 2025. The workshop aimed to present the draft proposed project and obtain inputs, feedback, and validation from the stakeholders. The validation workshop involved 86 participants (21 female and 65 male).

At the start of project implementation, a project inception workshop will be held to assist project partners to further understand the project design, their roles and responsibilities in the project's implementation, including stakeholder engagement and monitoring, as well as communications, reporting, and conflict resolution and grievance redress.

List of participants in the Multistakeholder Validation Workshop (11 April 2025)

Government

Name	Position	Organization
H.E Chuop Paris	Secretary of State	Ministry of Environment
H.E Sum Thy	Director General	General Directorate of Policy and Strategy, MoE
Mr. Ou Chanthearith	Director	Department of Science and Technology, MoE
Mr. Sophal Laska	Director	Department of Hazardous Substances Management, MoE
Mr. Theing Ban	Deputy Director	Ministry of Commerce
Mr. Than Socheat	Deputy Director	MoE
Mr.Yong Sokchea	Chief officer	MoE
Mr Chreum Chhenghong	Vice Chief Officer	MoE
Mr.Nhang Manith	Officer	MoE
Mr. Im Piseth	Officer	Ministry of Health
Mr. Hem Sokhim	Officer	Council Development of Cambodia
Soun Vinarin	Chief officer	MoE
Deth Summab	Officer	MoE
Seab Sihakvann	Vice Chief Officer	MoE
Nam Ratanak	Officer	CDC
Khem Nora	Officer	Phnom Penh Department of Environment
Sok Seila	N/A	MoE
Mr. Srem Monyneth	N/A	Ministry of Economic and Finance
Mr. Ut Ratha	N/A	Ministry of Interior
Mr. Tang Ponlue	Vice Chief Officer	MoE
Mr. Lek Eanamara	Director	Ministry of Mine and Energy
Neak Non	Deputy Director	Ministry of Planning
Mrs. Neng Cheeseila	Officer	MoE
Mrs. Phon Somnea	Vice Chief Officer	Department of land management, Urban Planning, and Construction
Mr. Pich Sdohim	Chief Officer	MoE
Mr. Vo Vutha	Officer	MoE
Souy Leakena	Chief Officer	MoE

Name	Position	Organization
Lim Sothearith	Deputy Director	Ministry of Education, Youth and Sport
Mr. Phum Meanpitou	Chief Officer	MISTI
Mr. Keo Seda	Officer	MoE
Khvat Bunrath	Vice Chief officer	Ministry of Labor and Vocational Training
Mrs. Kimsan Linna	Voluntary Officer	MoE
Mrs. Ky Channimol	Chief Officer	MoE
Mrs. Um Sreynoy	Officer	MoE
Mr. Tron Rathana	Chief Officer	Phnom Penh Capital Administration/Hall
Siv Kimly	Volunteer	MoE
Mr. Prom Kampol	Chief Officer	Ministry of Transport and Public Works
Mr. Thong Sophlla	Vice Chief Officer	MoE
Mr. Chea Chanthou	Advisor	MoE

Private sector

Name	Position	Organization
Mr Khoun Sinath	N/A	Sarom Trading
Ms. Sak Sophorn	Director	Comma Partnership
N/A	Accountant	Tes-Amm Cambodia Co.LTD
Mrs. Chem Thika	Junior Consultant	Sevea
Mr. Rous Sopheak	AW	800 Super- GAEA
Mr. Sam Phalla	Director	COMPOSTED
Mr. Luy Krin	Senior Specialist	ACLEDA Bank
Mr. Bun Saovannak	Inspection Manager	CANADIA Bank
Mr. Chery Bona	WEE manager	Ecobatt
Dam Chea		Por Sengdara
Oum Sreynak	AW Program	800 Super-GAEA
Mr. UCH Rithy	Deputy Director	COMPOSTED
Mr. Chea Moulennaou	Chief Officer	Kfour
Mr. Tep Piseth	Senior Officer	ARDB Bank
Mr. Keo Veasna	Manager	Cooperation Committee for Cambodia
Mr. Chet Setha	Manager	Samsung
Mr. Lor Chorn	CEO	Be Safe Electric
Mr. Sam Techkong	GM	Panasonic
Mr. Sebastien Ung	Director	ADD
Mrs. Va Chinda	Assistant CEO	Mizuda
Mr. Som David	Advisor	GIZ
Mr. Najha Royah	CM	ChipMong

Name	Position	Organization
Mr. Mam Syana	IT	CANADIA Bank
Mr. Neau Oudom	Deputy Manager	Cintri
Mrs. Seng Somk	GM	Mi ne va
Mrs. Chan Sohatheany	Business Manager	Huawei
Mrs. Sep Sophos	Risk Manager	SME
Phen Bora	HR supervisor	WCFO
Mr. Jun Hyun Wuok	N/A	Verywords
Mrs. Tao Socheata	N/A	Smart
Mrs. Chem Sreysern	N/A	Smart

Academia and Research

Name	Position	Organization
Mr. Vong Thearak	Teacher	Royal University of Phnom Penh
Dr. Sou Veasna	Researcher	RUPP
Mr. Sous Socheat	Teacher	NTTI

IGOs, development partners, and NGOs

Name	Position	Organization
Mr. Shakeel Ahmad	Deputy Resident Representative	UNDP
Mr. Yin Somean	SWM Engineer	World Bank
Mr. Nou Savan	ED	RoC
Mr. Hong kibun	OM	RoC
Mr. Chom Sovanny	Officer	UNDP
Mr. Tuy Vichet	TS	People in Need
Mrs. Kim Sreykhuoch	Project Assistant	UNDP
Mr. Nac Mi	Specialist	UNDP
Mr. Keo Bunly	Specialist	UNCDF

Others

Name	Position	Organization
Mr. Brandon Turner	International Consultant	UNDP
Ms. Kon Kim On	National Consultant	MoE-UNDP
Mr. Ro Channarith	National Consultant	MoE-UNDP
Ms. Cheng Tharika	National Consultant	MoE-UNDP

6. RESOURCES AND RESPONSIBILITIES

The Project Manager will be responsible for implementing the stakeholder engagement plan and achieving its objectives. He/she will mobilise the project team and project partners to conduct specified stakeholder engagement activities and manage the grievance mechanism, according to the objectives and principles of the SEP.

Table 3: Estimated budget for activities specifically targeted at stakeholder engagement

Item	Estimated costs USD
Inception workshop	2,000
Stakeholder consultation meetings	10,000
Field visits by project staff and local project partners	2,000
Field visits and participation in meetings by stakeholders from outside the project sites	2,000
Communication strategy development & implementation	10,000
Total	26,000

Additional details on the budget allocations set aside for stakeholder engagement can be found in the UNDP Project Document Section IX: Total Budget & Work Plan as well as in the budget notes.

7. ACCOUNTABILITY AND GRIEVANCE REDRESS MECHANISM

Kindly refer to Annex 8: Environmental and Social Management Framework (ESMF) of the UNDP Project Document, which explains in detail UNDP's Accountability & Grievance Redress Mechanism. An excerpt of the ESMF on this subject has been incorporated below.

7.1 UNDP's Accountability Mechanisms

UNDP's Social and Environmental Standards (SES) recognize that even with strong planning and stakeholder engagement, unanticipated issues can still arise. Therefore, the SES are underpinned by an Accountability Mechanism with two key components, which is available to all of UNDP's project stakeholders:

1. A Social and Environmental Compliance Review Unit (SECU) to respond to claims that UNDP is not in compliance with applicable environmental and social policies; and
2. A Stakeholder Response Mechanism (SRM) that ensures that individuals, peoples, and communities affected by projects have access to appropriate grievance resolution procedures for hearing and addressing project-related complaints and disputes.

The Social and Environmental Compliance Unit (SECU) investigates concerns about non-compliance with UNDP's Social and Environmental Standards and Screening Procedure raised by project-affected stakeholders and recommends measures to address findings of non-compliance.

The Stakeholder Response Mechanism helps project-affected stakeholders, UNDP partners (governments, NGOs, businesses) and others to jointly address grievances or disputes related to the social and/or environmental impacts of UNDP-supported projects.

Further information, including how to submit a request to SECU or SRM, is found on the UNDP website at:

<http://www.undp.org/content/undp/en/home/operations/accountability/secu-srm/>.

7.2 Project-level Grievance Redress Mechanisms

As mentioned in the Project Document, the project will establish a Grievance Redress Mechanism (GRM) at the start of implementation. The full details of the GRM will be agreed upon during the ESIA preparation stage.

Interested stakeholders may raise a grievance at any time to the Project Board, Project Management Unit, the Ministry of Environment, UNDP, or the GEF.

8. MONITORING STAKEHOLDER ENGAGEMENT AND REPORTING

Participatory project Monitoring & Evaluation is a key part of the results-based management (RBM) approach applied by UNDP and GEF for all projects. Similarly, stakeholder engagement activities will be integrated in the M&E processes for this project to provide sufficient information for adaptive management decision-making.

Project beneficiaries and partners have been encouraged to participate in different steps of the process, including the design and verification of the logical framework and its indicators, tracking tools, reviews, field visits for monitoring progress, etc. The project will also ensure to regularly disseminate progress reports to relevant stakeholders for inputs, reviews, feedback and information sharing purposes.

Stakeholder engagement will be monitored as part of the M&E activities of the project. Table 4 below provides an overview of the parameters for monitoring stakeholder engagement as proposed by the project.

Table 4: Monitoring stakeholder engagement

Proposed parameter	Reporting responsibility
Number of government agencies, civil society organizations, private sector entities, communities, associations, and other stakeholder groups that have been involved in the project implementation phase as beneficiary or project/implementing partner	Project Management Unit
Number of persons (sex-disaggregated) that have been involved in the project implementation phase as beneficiary or project/implementing partner	Project Management Unit
Number of engagements (e.g., meetings, workshops, consultations) with stakeholders during the project implementation phase	Project Management Unit
Grievances handling mechanism: How many grievances have been received and how have results communicated to all stakeholders	Project Management Unit

Details on the budget allocations set aside for the monitoring of stakeholder engagement can be found in the UNDP Project Document Section IX: Total Budget & Work Plan, budget notes, and Monitoring and Evaluation Plan and Budget, which can be found in the UNDP Project Document Section VI: Monitoring & Evaluation (M&E) Plan.

As mentioned above, reports produced as part of M&E processes (e.g., UNDP GEF PIR, yearly progress report, MTR and TE) will be shared with the Steering Committee, UNDP, donor(s), as well as other relevant stakeholders (as appropriate). In this way, the project will ensure to regularly disseminate progress reports to relevant stakeholders for inputs, reviews, feedback, and information sharing purposes.

At each project board meeting, meeting notes of the previous project board will be discussed and approved. Therefore, the status of activities/progress and mitigation measures proposed during the previous project board meeting will be assessed and reported to ensure constant monitoring of project implementation.

Relevant stakeholders will be required to provide feedback on actions taken and bottlenecks if any. The board members will agree on future actions needed. The timing to disseminate information to project-affected and broader stakeholder groups will lie on the project board members. Depending on the implementation phase and ongoing initiatives related to the project in the country, information will be shared to relevant stakeholders for inputs, review and feedback.

Annex 8. Environmental Social Management Framework (ESMF)

Attached as separate Document

Annex 9. Gender Analysis and Gender Action Plan

Attached as separate Document

Annex 10. Procurement Plan

Attached as separate Document

Annex 11. GEF CEO Endorsement/Approval

To be attached

Annex 12. Terms of Reference for Project Board and Project Team

Attached as separate Document

Annex 13. GEF Core indicators

Attached as separate Document

Annex 14. GEF Taxonomy

Attached as separate Document

Annex 15. Results of the Partners Capacity Assessment Tool (PCAT) and HACT Micro Assessment

Attached as separate Document

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Programme Analyst

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Signature Adoption: Pre-selected Style

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Signature Adoption: Drawn on Device

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Certified Delivered	Security Checked	April 1, 2026 16:51
Signing Complete	Security Checked	April 1, 2026 16:51
Completed	Security Checked	April 1, 2026 16:51

Payment Events	Status	Timestamps
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Electronic Record and Signature Disclosure
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