

ANNEX L: Environmental and Social Impact Assessment (ESIA):

Assessment of environmental and social impacts during the PPG have resulted that the project is a **Category A** project. **Category A** projects are likely to induce significant and/or irreversible adverse environmental and/or social impacts that are sensitive, diverse, or unprecedented, or that affect an area broader than the sites or facilities subject to physical works.

As the output of this preliminary ESIA, an Environmental and Social Management Plan (ESMP) is developed in order to integrate the environmental and social sustainability elements into project design. Hence, in this document, preliminary recommendations for appropriate management and mitigation measures are provided and suggestions made to incorporate internationally recognized design criteria and standards.

The purpose of this preliminary ESIA is to ensure that social and environmental impacts, risks and liabilities identified are effectively managed during the phase of procurement of selected waste-to-energy pilot projects and during the implementation of the technical assistance components of the proposed project. The ESIA specifies the mitigation, adaptation, prevention and management measures and shows how the project will mobilize organizational capacity and resources to account for the factors evaluated in order to implement the compiled measures. The ESIA also shows how mitigation and management measures will be scheduled.

This environmental and social impact assessment is a preliminary assessment only. It has been developed based on the concept of three pilot cases (see also Annex K – proposed waste-to-energy business cases). A full ESIA will be required at the stage of project implementation, and once the final site selection for the demonstration projects has been made and in order to understand all implications.

The ESIA also includes the gender analysis for the proposed project and an ESMP – an Environmental and Social Management Plan.

1. Project Description

The proposed project is developed under the GEF-6 Climate Change Mitigation Focal Area Strategy Program 1 ('promote timely development, demonstration and financing of low-carbon technologies and mitigation options') with the objective to "promote innovation, technology transfer and supportive policies and strategies. GEF resources therefore play a key role in piloting emerging innovative solutions, including technologies, management practices, supportive policies and strategies, and financial incentive mechanism in combination with improved Municipal Solid Waste (MSW) management and waste-to-energy solutions.

By means of this Project, global environment management indicators will be developed as a part of the national energy and environment management systems in DRC and practices under the international conventions to which the Democratic Republic of Congo is a party and thus will be improved.

The Project will look into solutions contributing towards integrated urban management and infrastructure investments that include municipal waste management and clean energy solutions, and structural resilience against projected climate change effects such as fluctuations in energy sources and demands and extreme environmental and socio-economic impacts. Through the GEF intervention, the regulatory and policy environment for the waste management sector will be strengthened. The Project will contribute to the twin goals of establishing an effective MSW management for Kinshasa city and promoting WTE projects in DRC. This intervention will also help offsetting the GHG emissions from the currently inappropriate waste management system. More employment opportunities will be generated through these project activities helping to alleviate the existing poverty level in the country.

Based on the successful demonstration of this proposed project, it is envisaged that similar waste-to-energy generation projects will be replicated and scaled up in the future. This will be achieved through mitigation of risks and barriers, engagement of public-private partnership/investment and creation of conducive policies/support mechanisms.

A summary of project components, outcomes, outputs and activities is provided in the CEO Endorsement Request Document (Part II – Project Justification).

Social and environmental context

The increasing presence of uncollected municipal solid waste in recent years is particularly intense in the main urban areas in the DR of Congo.

The large amount of waste neither collected, nor landfilled, suggest that there are a number of other activities carried out beside these public and private actors' practices. If waste is collected by the municipal operator and private waste collectors, but not landfilled, it is currently reported to be dumped to various dumping sites. Wastes not collected are reported to be recycled or reused; disposed of in rivers; backfilling of eroded sites; dumped at backyards or any space available; or solely burned.

In front of these basic organizational barriers and lack of capacity with MSW management in Kinshasa and other cities, the Provincial Government of Kinshasa and other municipalities are not able to meet the pressing needs of growing demand for waste collection and disposal services. The inabilities of municipalities to either analyze or improve their waste management performance, poor financing of MSW management by government and unclear service pricing principles have led to weak control of service quality. Furthermore, research findings suggest that increased collaboration among the government, private companies, NGOs, and CBOs in solid waste management would facilitate the development of more effective and efficient integrated systems and approaches in solid waste management. This development could result in the adoption of technologies and innovative ways of managing solid waste and would promote social and environmental justice in Kinshasa.

Environmental impact. The country has the third largest urban population in sub-Saharan Africa (estimated at 43% in 2016) after South Africa and Nigeria. It is projected that DRC's urban population will increase from 35 million in 2018 to over 71 million in 2040. The growth is expected at a rate of 4.1% per year, which corresponds to an additional 1 million residents moving to cities every year. If this trend continues, the urban population could double in just 15 years. Thus, with a population of 12 million and a growth rate of 5.1% per year, Kinshasa is poised to become the most populous city in Africa by 2030. Such strong urban growth comes with two main challenges – the need to make cities livable and inclusive by meeting the high demand for social services, infrastructure, education, health, and other basic services; and the need to make cities more productive by addressing the lack of concentrated economic activity. Fast urban growth has been substantially accelerated by conflict-induced population displacement and rural migration accentuated by economic collapse of the countryside. Due to the weakness of urban governance and practical absence of land use planning beyond the limits of historic city centres, urbanization is accompanied by minimal (if any) expansion of infrastructure installations and basic services.

Due to chaotic and uncontrolled urban growth, vast informal settlements often develop into degradation hotspots, characterized by severe gullies, poor sanitation and substantial peri-urban deforestation and are highly vulnerable to disasters such as landslides. Providing basic services, including energy and water supply, and addressing environmental problems in urban centres, including in financially strapped secondary cities is one of the key challenges facing the DRC.

In the long-term, the improved waste handling, collection, transportation for re-use , recycling (for recyclable materials) and recovery of waste residues for energy production will help mitigating the severe negative environmental impacts on human health and environment that currently prevail – (i) Uncollected wastes placed on the ground result in unsanitary conditions, (ii) polluted water flowing from waste dumps and disposal sites can cause serious pollution for the surface water and the surrounding environment, (iii) flies and mosquitoes breed in some constituents of solid wastes, flies and rats are very effective vectors that spread diseases, (iv) dangerous items such as broken glass, razor blades, needles and other healthcare wastes pose risks of injury or poisoning, particularly to children and people who are engaged in waste sorting and handling, and finally (v) burning waste on the streets can cause major air pollution, affect the climate change by increasing GHG emissions, beside the effect on human health by causing illness (respiratory diseases) and the risk of fire can spread to the adjacent properties, and make unsecured disposal sites dangerous.

a) Project intervention area

Demonstration activities of the project will take place in the Province of Kinshasa. Kinshasa is the capital and the largest city of DRC, and with a population of approx. 12 million among the three largest cities in Africa.

Since MSWM is of overall importance for a country that is facing a dynamic development of urban population growth and public services have not received the attention required over many years, the Project will contribute towards the transformation of the municipal solid waste management to a more sustainable, service-oriented basic infrastructure by addressing the following market-based mechanisms:

- i. Efficient waste collection and sorting system ensuring properly collected and environmentally safe treatment of waste residues, including their transportation to processing facilities;
- ii. Generation of revenues from waste collection, waste processing and waste-to-energy plants that are invested and operated under public and private sector cooperation;
- iii. Technology transfer to be achieved and local skills developed to manage waste processing and WTE plants, capacities built among governmental decision-makers, operators and final beneficiaries of wastes being treated as resources (including for energy production).

b) Project component risks

Pilot projects to be implemented will relieve the environmental situation in the municipalities, mainly in Kinshasa, by removing mostly illegally disposed of municipal solid wastes from the urban space to be utilized as energy fuel in partly industrial facilities. Since these industries are already in place, e.g. food industry (for the biogas installation) or cement industries (for the utilization of RDF), the additional environmental and social impacts that may arise from these demonstration projects are most likely to occur during the construction phase. However, no changes in industrial processes or facilities that will have adverse effects will be supported by the project. Construction of waste processing facilities and waste-to-energy plants will take place with project support, considering buildings and waste sorting technology, as well as associated groundworks for foundations and provision of controlled waste storage and processing areas (waste transfer stations). Potential impacts encompass air pollution and noise caused by the transportation, construction equipment and machinery during construction and operation. During construction larger volume of water will be required (e.g. for concrete production). It is expected that these potential impacts will be of a short-lasting nature i.e. only entail short-term effects.

The environmental risks that may occur during the operational phase are summarized below:

Waste management

Waste will be generated on site mostly occurred by the incoming supply, and the disposal of the material which fulfilled their lifespan. The project will handle all incoming or on-site generated waste materials. The project team

will be responsible for the appropriate handling, disposal and potential recycling of such materials. During the project cycle no hazardous waste material will be generated. The packaging, non-recyclable content and orders of components will be optimized and kept to a minimum.

Expansion of land utilization

Non-arable land will be preferred for the placement of the project sites. The expansion of land utilization for the construction of the waste sorting facility and waste-to-energy plants may lead to encroachments of virgin land, resulting in associated impacts. The amount of earth works will be kept to a minimum, including the necessary road works. There will be no involuntary land taking or private land acquisition during the project cycle, which would lead to any losses of the neighboring communities or livelihood.

Use of heavy machinery

Heavy and noisy machines might be used during the construction phase; therefore, they may cause some noise in the affected area. Hence these heavy machines will only be used during daytime and will be used at low speed to reduce any negative impact and ensure safety on site.

Transportation

During the planning and transportation of the various project components to the site the increased emissions of nitrogen and particulate matter from the combustion of transport fuels may reduce local air quality. Site preparation activities may include excavations, grading, levelling, and land clearing activities as well. Appropriate planning to reduce the transportation of components and waste materials will be the responsibility of the project team and beneficiaries.

Emissions

In case of inadequate storage of materials, minimal emissions to soil and groundwater might occur, this may contaminate the biologically active portion of the soil or could reach groundwater or surface water directly. Therefore, the project will ensure the appropriate storage of such materials.

Social impact. The Project addresses the lack of technical and managerial capacity in the public waste management sector and will enhance initiatives established with the involvement of the private sector. Business start-ups, but also non-government organizations (NGOs) and community-based organizations (CBOs) are usually the main subjects involved in waste management, since they represent informal actors in the urban waste management system, however, they contribute effectively to the public waste collection services.

Specific technical training and general capacity building measures are included in the project components 2 and 4 to improve the capacity on public and private levels. The trainings will include target-specific sessions ensuring that staff from various stakeholders will be in a position to mainstream improved waste collection and waste-to-energy solutions in their institutions and be in a position to provide similar trainings to representatives in other regions of the country. The project will also provide training to government agencies for creating conducive policies with incentive mechanisms to make the investment feasible to the end-user.

In addition, employment opportunities will be increased for both women and men in the waste management business and thus local and national economy will be reinforced. Also, social sustainability will be strengthened due to the systematic gender mainstreaming of the project during the whole project cycle.

2. Environmental Policy, Legal and Administrative Framework

Since the democratic elections of 2006, there has been a significant drive to develop and update environmental legislation and institutional arrangements in DRC. This is a major task that is currently ongoing. Nonetheless, environmental degradation continues unabated due to a poorly-enforced, piecemeal environmental legal framework. The lack of an overarching environmental policy has hampered the development of a comprehensive set of regulatory tools and environmental norms. Consequently, laws and regulations have arisen in an *ad hoc* and fragmented manner in response to emerging environmental concerns. Institutional reform is greatly needed and is currently proceeding under the umbrella of the government-led national development plan for forestry and conservation (*Programme National Forêt et Conservation de la Nature* (PNFCN) which is supported by a consortium of international partners.

Institutional weakness has also hampered progress. Key constraints include: (i) a severe funding shortage, with only a small proportion of the Ministry of Environment and Sustainable Development (MEDD) budget being disbursed to cover staff salaries, and a total lack of operational expenditure; (ii) inadequate human and technical capacity, with poor salaries and working conditions (particularly in remote areas) leading to disillusioned personnel and dissuading competent staff from remaining in the Ministry's employment and (iii) poor infrastructure (from offices to electricity supply) and deficient equipment (from vehicles to computers), particularly at the provincial level. Under these circumstances, the government's ability to address the country's wide range of environmental challenges, as well as comply with its commitments under multilateral and regional environmental agreements, is significantly limited. The DRC's move towards decentralisation is in itself creating a major challenge for environmental governance, particularly when it comes to coordination, enforcement and funding of the new entities that will be created. Overlapping mandates between MEDD and other institutional actors such as, the Ministries of Mines as well as the Ministry of Energy and Water Resources add to these difficulties. In addition, strategies and platforms to integrate civil society and increase environmental awareness are wanting although these are now gradually emerging.

The MEDD of the DRC is responsible for the integrated municipal solid waste management (MSWM) in the country. The action plans for MSWM at country level are carried out through various departments under the ministry such as:

- National Sanitation Programme (Programme National d'Assainissement)
- Office of Road and Drainage (Office des Voiries et drainage)
- National Service of Rural Hydraulic (Service national d'Hydraulique Rural)

MSWM activities are decentralized at provincial level and fall under the responsibility of the respective provincial government. A legislative and regulatory regime for the waste management sector in the DRC is non-existent and is not conducive for effective waste management. Almost all the provinces, cities and townships are facing critical problems regarding waste collection and disposal. Rapid urbanization and consumption resulting from economic growth is aggravating the issues.

According to the legal framework for MSWM as part of the legislation of the protection of the environment¹, municipalities (counties) are obliged to manage waste (collection, transport, disposal, treatment). In addition there is the 003/2013 Edict from 9th of September 2013 regarding the sanitation and protection of the environment as well as the Ordinance Law no. 13/001 of 23 February 2013, fixing the provincial taxes, charges, levies, and fees and decentralized territorial entities as well as their terms and conditions for distribution, instituting a tax for sanitation, waste removal and household waste. 2013, a national sanitation policy was formulated. For the implementation of the policy, the national sanitation strategy was drafted in 2017, but it has not been enforced².

¹ Law No. 11/009 of 09 July 2011 on basic principles relating to the protection of the environment and Decree N ° 14/019 of 02 August 2014 laying down rules on procedural mechanisms for the protection of the environment

² African Clean Cities Platform, 2018

Other specific legal references exist:

- Law No. 11/009 of 09 July 2011 on basic principles relating to the protection of the environment
- Decree N° 14/019 of 02 August 2014 laying down rules on procedural mechanisms for the protection of the environment
- Law N° 15/026 of 31 December 2015 related to use of water and water discharge, including water quality
- Order N°. SC / 0178 / BGV / MINPR / COJU / PLS / 008 of August 7, 2008 establishing the Régie d'Assainissement et Travaux Publics of Kinshasa (RATPK). RATPK has been renamed in 2018 into RASKIN - La Régie d'Assainissement de Kinshasa.

In 2014, a new electricity law was adopted in the DRC, enabling the energy sector to be opened to more independent producers of traditional and renewable energy. The liberalization of the electric power sector in the DRC and the opening of the electricity market to any operator wishing to start power production and operation are important measures of the New Electricity Law, set in motion by the Government of the DRC to attract investors to the energy sector, to promote a national energy emergence and make the DRC an energetic power.

The energy sector in the DRC is regulated by Law No. 14/011 of 17 June 2014 which aims in particular at:

- Effective liberalization of the sector;
- The promotion and harmonious development of supply in urban, pre-urban and rural areas;
- Qualitative electricity supply to all kind of needs;
- The guarantee of fair competition between operators and users' rights.

This law applies to activities of production, transmission, distribution, import, export and marketing of electricity implemented by any operator.

Although an Electricity Law is in place since 2014, the institutional and regulatory framework is still lacking an operational National Regulatory Authority for the Electricity Sector (Autorité Nationale de Régulation du secteur de l'Electricité/ANRE). ANRE has been formally established to control the market operations and issuing market-based rules for licensing new operators, granting access to the transmission and distribution grid, as well as approving electricity tariffs. However, the Authority is not yet operational and thus impedes the implementation of the provisions of the New Electricity Act applicable to the legal operating regimes and public electricity service in the DRC. Private-based operators and power producers are therefore not so much interested to engage in new energy production opportunities.

3. Environmental and Social Risks and Mitigation Measures

In this section, information about the relevant environmental and social risks that were identified during the project preparation period is provided. An ESMP has been drafted herewith that should serve as an active tool throughout the project implementation, with additional risks to be included during the project implementation as they are identified.

For each possible risk, a mitigation measure is briefly described including the conditions under which the measure is required. The mitigation measures are accompanied by, or referenced to, project design and operating procedures which elaborate on the technical aspects of implementing the various measures. Additional information, such as technical details of the mitigation technology, location of the potential E&S impact, timelines, responsibility measures are also included.

In general, the mitigation actions are listed in descending order of preference:

- **Avoid**, prevent or eliminate environmental and social risks and adverse impacts, wherever technically and financially feasible; for proposed projects involving existing facilities, remediation may need to be undertaken instead of, or in addition to, mitigation;
- Where it is not technically or financially feasible to avoid, **prevent** or eliminate risks and impacts, identify measures and actions to mitigate, minimize or reduce impacts so that the project operates in compliance with applicable international, national and local environmental and social laws and regulations or achieves acceptable levels of impacts otherwise defined and agreed;
- Where it is not technically or financially feasible to **mitigate**, minimize or reduce risks and impacts, identify measures to offset them by enhancing the proposed project's positive environmental and social impacts;
- Where avoidance, mitigation and offset measures are not technically or financially feasible, identify compensatory measures to **balance** the residual adverse impacts.

	E&S risks	Mitigating Measure	Technical details of the mitigation technology, process, equipment, design and operating procedures	Location	Timeline, including frequency, start and end date	Responsibility	Cost of Mitigation (If Substantial; to be covered by the GEF grant or non-UNIDO co-financing)
Risks identified during the PIF preparation and verified during the project preparation (PPG)	Communities: The surrounding communities might be affected by the developed project sites in terms of visibility, noise and air pollution.	The project will ensure through proper planning that the negative impacts will be kept to the acceptable minimum	The project will conduct an assessment of the possible negative impacts for the communities, will involve them during the planning phase and develop a mitigation plan if necessary.	All project locations	Continuously	PMU, Project developers	The mitigation measure will not have a substantial cost and will be covered by the project developers
	Waste management: Incoming waste could impact the surroundings of the project sites negatively.	The project will handle all incoming as well as on-site generated waste appropriate.	The project will conduct an assessment of the waste categories and their potential impact and will develop an appropriate mitigation plan	All project locations	Continuously	PMU, Project developers	The mitigation measure will not have a substantial cost and will be covered by the project developers.
	Expansion of land utilization: The expansion of land utilization (non-arable land preferred) could lead to encroachments of virgin land.	The project will ensure that that earth works, including surrounding infrastructure such as roads, are kept to minimum necessary.	The project will conduct detailed assessment and planning of infrastructure development and ensure that no involuntary land taking will occur.	All project locations	Continuously	PMU, Project developers	The mitigation measure will be beneficiary to the project and will be covered by the project developers.
	Use of heavy machinery: The construction phase will require the use of heavy and noisy machines, causing noise and possibly dust	The project will ensure that the heavy and noisy machinery will only be used during daytime and at minimum speed to reduce the negative impact and ensure safety.	The project will conduct an assessment on the impact concerning noise and dust development and will develop a mitigating plan if necessary.	All project locations	Continuously	PMU, Project developers	The mitigation measure will not have a substantial cost and will be covered by the project developers.

	E&S risks	Mitigating Measure	Technical details of the mitigation technology, process, equipment, design and operating procedures	Location	Timeline, including frequency, start and end date	Responsibility	Cost of Mitigation (If Substantial; to be covered by the GEF grant or non-UNIDO co-financing)
	Transportation: During the planning phase and the transportation of project components increased emissions of nitrogen and the combustion of fuels may reduce air quality	Appropriate planning to reduce transportation of components and waste material to the site will be carried out	The project will prepare a detailed transportation plan.	All project locations	Continuously	PMU, Project developers	The mitigation measure will be beneficiary to the project (since it reduces transportation cycles) and will be covered by the project developers.
	Emissions: In the case of inadequate storage of materials minimal emissions to soil or groundwater could occur, causing contamination.	Appropriate storage facilities for materials will be eradicated.	The project will conduct an assessment of materials and their impact to soil and groundwater and develop a mitigation plan if necessary.	All project locations	Continuously	PMU, Project developers	The mitigation measure will be beneficiary to the project (since it reduces transportation cycles) and will be covered by the project developers.
	Social and gender risk: Risk of resistance against, or lack of interest in, the project activities from stakeholders, especially with regard to the active promotion of gender equality. Low participation rates of suitable female candidates due to lack of interest, inadequate project activity or missing qualified female	This project will ensure stakeholder involvement at all levels, as well as involving CBOs and NGOs. This shall mitigate social risks and create a culture of mutual acceptance by all stakeholders including nearby communities.	Awareness will be created among all stakeholders on the employment generation, business opportunities created, improved health benefits to attract participation. Capacity building activities are foreseen throughout the project	Whole country	Continuously	PMU	The mitigation measure will not have a substantial cost and will be covered by the programme

	E&S risks	Mitigating Measure	Technical details of the mitigation technology, process, equipment, design and operating procedures	Location	Timeline, including frequency, start and end date	Responsibility	Cost of Mitigation (If Substantial; to be covered by the GEF grant or non-UNIDO co-financing)
	population within engineering sector.						
	Climate change risks: The WTE technology or improved waste management techniques are affected by climate change	Due to the changing weather patterns which might lead to flooding of the project sites. Adequate site assessment will be done before construction of site building and offices. All the buildings and structures will be designed and built appropriately to avoid destruction by floods and extreme weather events.	Clear guidelines will be prepared, and staff training will be conducted on management of such emergencies. ESMP will identify during the project implementation and propose mitigation measures for such climate change risks.	Whole country	Continuously	PMU	N/A

4. Environmental and Social Sustainability Monitoring

The final ESMP will detail the environmental and social monitoring and reporting to be conducted during project implementation to:

- Provide information about actual versus predicted environmental and social impacts;
- Measure the effectiveness and evaluate the success of mitigation, remediation and enhancement measures;
- Evaluate compliance with applicable international, national, and local policies laws, regulations, safeguards, performance standards, policies and procedures;
- Allow corrective action to be taken when needed

In addition to recording information, to track performance and establishing relevant operational controls, the monitoring plan will use of dynamic mechanisms, such as inspections and audits, where relevant, to verify compliance and progress toward the desired outcomes. Since this Category A project may have significant impacts that are diverse, irreversible or unprecedented, the project will require the retaining of external experts to verify monitoring information.

	E&S risks	Parameters to be measured	Monitoring methods and procedures used (e.g. sampling)	Timing/Frequency of measurement	Sampling/monitoring location	Responsibility
Risks identified during the PIF preparation and verified during the project preparation (PPG)	Communities: The surrounding communities might be affected by the developed project sites in terms of visibility, noise and air pollution.	Blockage of natural views from different vantage points around the area. Air quality	Photographic comparison of before and after Air samples taken	2 times. Before and after completion of installation.	All project locations and impacted surrounded area	PMU, Project Contact Person, local authorities and project developers
	Waste management: Incoming waste could impact the surroundings of the project sites negatively.	Waste quality by category	Samples taken and analyzed	Regular	All project locations and impacted surrounded area	PMU, Project Contact Person, local authorities and project developers
	Expansion of land utilization: The expansion of land utilization (non-arable land preferred) could lead to encroachments of virgin land.	Soil analysis	Samples taken and analyzed	Regular	All project locations and impacted surrounded area	PMU, Project Contact Person, local authorities and project developers
	Use of heavy machinery: The construction phase will require the use of heavy and noisy machines, causing noise and possibly dust	Noise level taken	Methods to measure noise (Decibel)	Regular	All project locations and impacted surrounded area	PMU, Project Contact Person, local authorities and project developers
	Transportation: During the planning phase and the transportation of project components increased emissions of nitrogen and the combustion of fuels may reduce air quality	Air quality measured	Air samples taken	Regular	All project locations and impacted surrounded area	PMU, Project Contact Person, local authorities and project developers
	Emissions: In the case of inadequate storage of materials minimal emissions to soil or groundwater could occur, causing contamination.	Soil, groundwater and surface water samples measured	Respective samples taken and analyzed	Regular	All project locations and impacted surrounded area	PMU, Project Contact Person, local authorities and project developers
	Social and gender risk: Risk of resistance against, or lack of interest in, the project activities from stakeholders, especially with regard to the active promotion of gender equality. Low participation rates of suitable female candidates due to lack of	Social and Gender Analysis	A study on social and gender analysis incorporated into project design	Study performed during PPG and will be applied throughout the project.	-	PMU, Project Contact Person, local authorities and project developers

	interest, inadequate project activity or missing qualified female population within engineering sector.					
	Climate change risks: The WTE technology or improved waste management techniques are affected by climate change	Number of wastes collected, sorted, recycled and used for energy production	Regular monitoring and analysis of performance indicators	To be defined in the M&E methodology	To be defined in the M&E methodology	PMU, Project Contact Person, local authorities and project developers

5. Capacity Development

Management arrangements of the project

The institutional arrangement considered at this stage includes the following organs:

- The Project Steering Committee (PSC) as the highest decision-making authority, the preliminary composition of which is as follows:
 - Ministry of Industry (Chair)
 - UNIDO
 - Ministry of Energy and Hydro Resources
 - Ministry of Environment and Sustainable Development
 - Industrial Promotion Fund
 - Provincial Ministry of Planning of Kinshasa
 - Provincial Ministry of Environment of Kinshasa
 - RASKIN, FONAK
 - Private sector representatives
- For daily management and coordination of project activities, a **Project Management Unit (PMU)** will be set up by UNIDO. The PMU will be responsible for the day-to-day management and execution of project activities as in the agreed project work plan. The Project's GEF and co-financing resources foresee the recruitment of a full-time National Project Coordinator (NPC), a part-time project assistance, and part-time national and international specialists, such as a municipal waste expert, a waste-to-energy expert, technical and capacity building experts and monitoring & evaluation and public procurement specialists. All experts will be hired under Individual Service Agreements (ISA) and their recruitment will be done according to the relevant UNIDO's rules and regulations.
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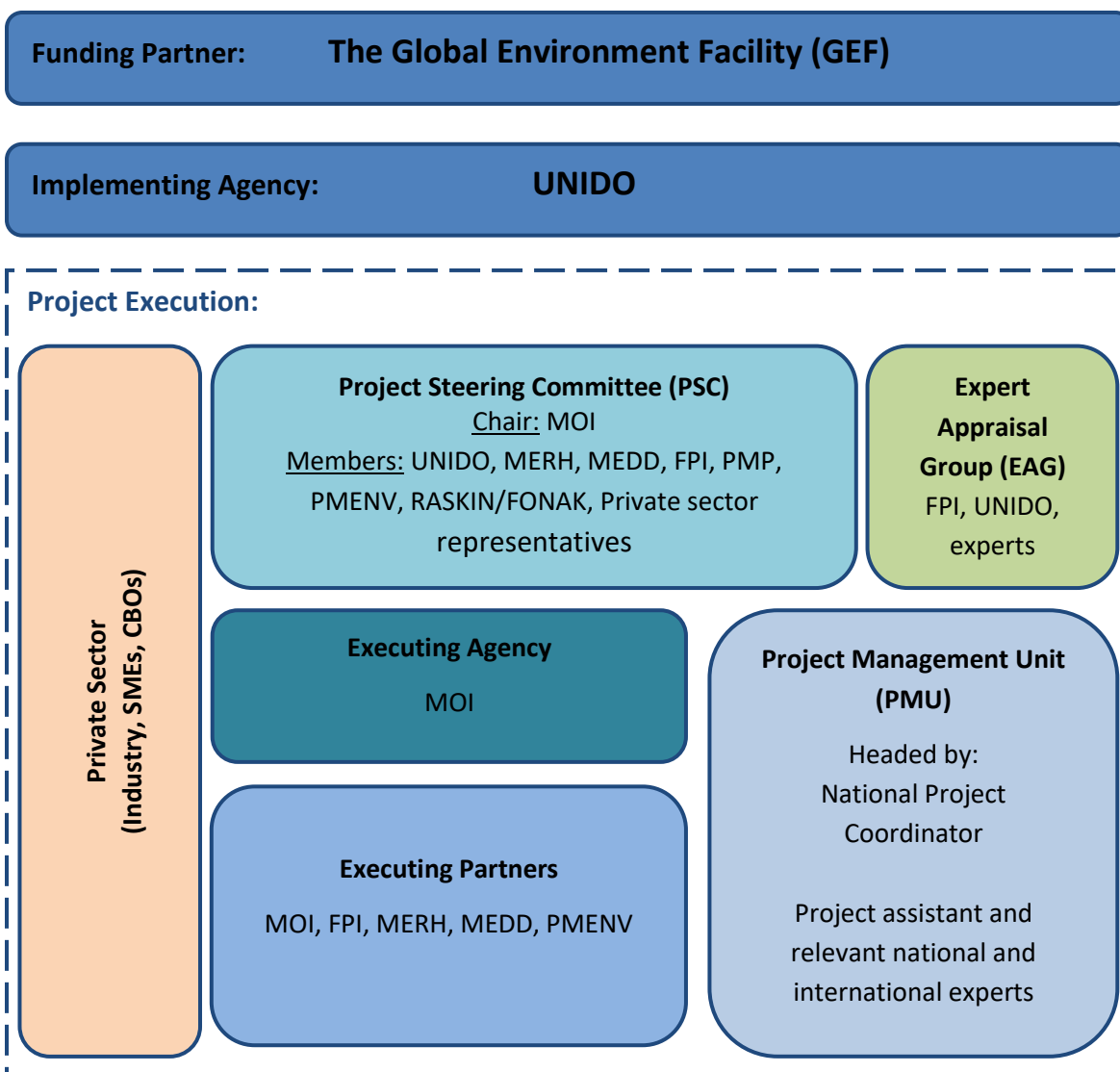


Figure 1: Project steering and execution structure

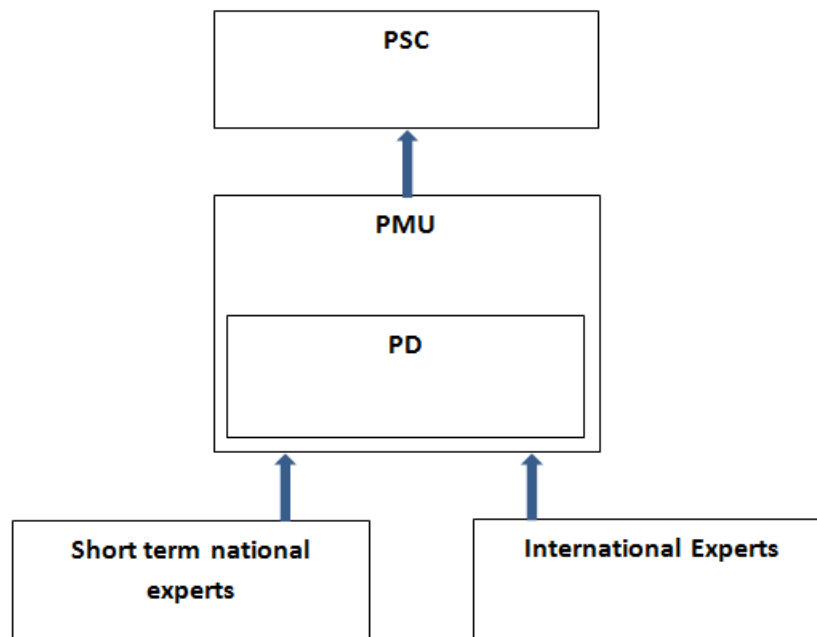
If needed, the capacity development section of the ESMP will outline a plan for strengthening capacities of UNIDO staff, Project Executing Organization staff, and contractors with direct responsibility for activities relevant to the environmental and social sustainability of the proposed project so that they have the knowledge and skills necessary to perform their work, including current knowledge of the host country's regulatory requirements and the applicable requirements of UNIDO environmental and social policies and procedures. Capacity development will also address the methods required to perform the specific actions and measures of the ESMP in a competent and efficient manner.

During PPG three main targets have been identified where capacity development support will be provided.

1. Capacity building mechanism for improved waste management considering legal and policy requirements, technical and operational issues including O&M for technicians, managers at private enterprises, SMU, entrepreneurs, as well as government representatives, and waste management operators at public level

2. Capacity and knowledge of decision makers in government and private sector through tailored workshops
3. Awareness in relevant sectors about improved MSWM and WTE technologies increased through the development of tailored knowledge products.

- The ESMP will be managed within the framework of the overall project, which follows the below structure:



- Other stakeholders, who will intervene in other aspects (apart from management) of the project, will be identified during project implementation. Capacity building – especially with respect to the demonstration pilot projects – is foreseen as part of the project activities.

6. Communication

As part of the GEF Annual Monitoring Report (AMR), UNIDO will annually communicate implementation progress on issues that involve ongoing risk to or impacts on the project stakeholders, and on issues that the consultation process or grievance mechanism has identified as of concern to those stakeholders. The ESMP and the relevant progress reports (PIRs) will be disclosed on the UNIDO public website: www.open.unido.org

The environmental and social risks, proposed mitigation actions and monitoring arrangements will be included the annual reporting of UNIDO to GEF as part the project AMR. Furthermore, reporting on the compliance with the ESMP will be made during the project steering committee meetings.

Consultation	Purpose	Participants	Lead/Chair	Reporting	Schedule
Initial	Project Start up: ➤ Project Overview	All the members of the project steering	UNIDO/Ministry of Industry	Minutes of the PSC	1 month after the project has been

	<ul style="list-style-type: none"> ➤ Project Organization ➤ Project Schedule ➤ Social and Env Impacts ➤ ESMP ➤ Development of a detailed/full ESIA 	committee, namely MOI, MEDD, MEHR, UNIDO, FPI, PMP, PMENV, private sector representatives			officially launched.
Public consultation & site visit	<ul style="list-style-type: none"> ➤ Adjusting of mitigation measures, if necessary; ➤ Impact of replacing and updating activities; ➤ Comments and suggestions 	Involved ministries and provincial government administration, project beneficiaries	PMU, PSC	Progress reports	6 months before construction
Public consultation & site visit	<ul style="list-style-type: none"> ➤ Effectiveness of mitigation measures; ➤ Impacts of project implementation; ➤ Comments and suggestions. 	Involved ministries and provincial government administration, project beneficiaries	PMU, PSC	Progress reports	3 months before construction
Expert workshop or press conference	<ul style="list-style-type: none"> ➤ Comments and suggestions on impacts; ➤ public opinions 	Interested members of the PSC and Project Beneficiaries	PMU	Press release and progress reports.	2 months before construction
Addressing Community Concerns	Consultation on Grievance Procedure	All the members of the project steering committee, namely MOI, MEDD, MEHR, UNIDO, FPI, PMP, PMENV, private sector representatives	PMU, PSC	N/A	2 months before construction