



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Project title:	Promoting sustainable plastic value chains through circular economy practices
Project number:	210184
Area/Location/Countries	Nigeria
RBM code:	IC3 Safeguarding the Environment
Thematic area code	IC31 RECP & LowCarbonPrd
Starting date:	April 2022 or upon arrival of funds
Duration:	36 Months
Main Counterparts:	Federal Ministry of Environment
Key partners:	<ul style="list-style-type: none">• Federal Ministry of Industry, Trade and Investment (FMITI)• National Environmental Standards, Regulations and Enforcement Agency (NESERA)• Abuja Environmental Protection Board (AEPB)• Lagos State Waste Management Authority (LAWMA)• Lagos State Environmental Protection Agency (LASEPA) <i>In cooperation with:</i> <ul style="list-style-type: none">• Manufacturers Association of Nigeria (MAN)• Food and Beverage Recycling Alliance• Waste Management Association of Nigeria (WAMASON)
Executing agency:	UNIDO
Budget:	JPY 319,000,000 approximately USD 2,901,527 ¹ (incl. 13 % programme support costs and 1% coordination levy)

Brief description:

The project aims to contribute to Nigeria's inclusive and sustainable industrial development and reduce leakage of plastics to the environment through promotion of circular economy principles and practices to be integrated into effective implementation of plastic waste management and strengthening plastic value chains. It is expected to demonstrate the benefit of adopting circular economy practices and resource efficient production for plastic value chains in Nigeria.

The project has three lines of activities, which interact with each other: 1) Support development of implementation guidelines of the national policy on plastic waste management; 2) Support to strengthening recycling capacity at target municipalities through reinforcing the value chain system, including provision of necessary equipment and pilot implementation of the guidelines on plastic waste management; and 3) demonstration of circular economy and resource efficiency practices, including recycling system and innovative technology, at pilot companies or institutions to showcase their benefits.

Signature:

Date:

Name and title:

On behalf of:
The Government of
Nigeria

On behalf of:
UNIDO

¹ Based on August 2021 United Nations accounting rate of exchange.

A. CONTEXT

A1. Background

1) Introduction

Plastic litter is a major global environmental problem with its production drastically increased by more than twenty-folds between 1964 and 2015, with an annual output of 322 million metric tonnes, which is expected to double by 2035 and quadruple by 2050 if no action is taken. The mismanaged plastic waste mostly originating from land, is not only contaminating the land but released to marine environment, polluting it and threatening biodiversity while also negatively impacting the blue economy. Mismanaged plastics and inadequate waste management is also a source of GHG emissions.

The problem of marine plastic litter can be addressed through implementing circular economy practices. Circular economy practices, inter alia, necessitate policy frameworks to create incentives for economic actors, such as industry as well as consumers, to increase the productivity of resources used. This is realized by maintaining the value of the product and its materials at any point of its life cycle and avoiding premature discarding of products and/or their materials, which includes plastics.

Circular economy, in conjunction with optimizing landfill management, will help to substantially reduce the amount of those plastics that are most likely to end up as marine plastic litter. Together with measures to tighten the management of land-based sources of marine litter, and with clean-up operations where feasible, increased plastic pollution in the environment and oceans may be stemmed and eventually prevented.

Thus, it is crucial to promote circular approaches in production and consumption to prevent and reduce waste, including plastic waste, and to properly manage waste for sustaining human health and the environment.

International community has been committed to limit/halt the plastic pollution through initiatives such as G7's Ocean Plastics Charter in 2018 and Osaka Blue Ocean Vision shared during the Japan's presidency of the G20 in 2019, following the launch of "G20 Action Plan on Marine Litter" at G20 Hamburg summit in July 2017. The Osaka Blue Ocean Vision aims to reduce additional pollution by marine plastic litter to zero by 2050 through a comprehensive life-cycle approach that includes reducing the discharge of mismanaged plastic litter by improved waste management and innovative solutions while recognizing the important role of plastics for society.

To support the G20's Osaka Blue Ocean Vision, Japan launched the "MARINE Initiative" to advance effective actions to combat marine plastic litter at a global scale. As a part of this initiative, with the funding from Japan, UNIDO conducted a plastic value chain study in Nigeria in 2020-2021 to explore the possibility of introducing sustainable technological options such as alternative materials, packaging technology and recycling technology.

2) Plastic waste situation in Nigeria

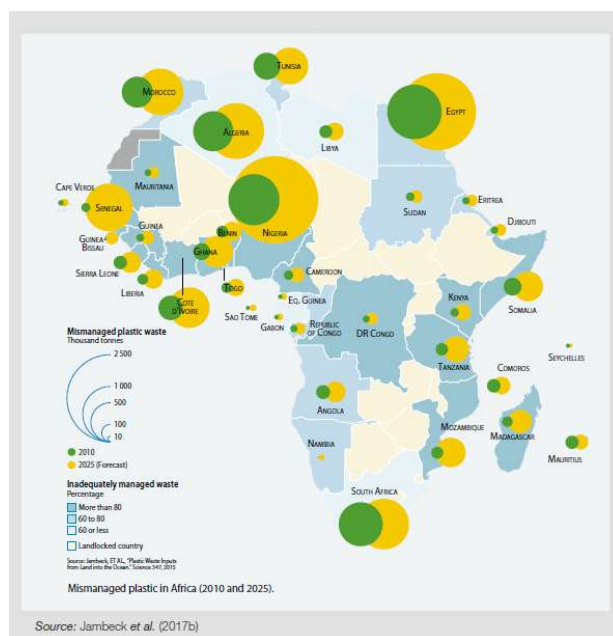
As the most populated nation with the largest GDP in the African continent, Nigeria shares the plastic problem with its increasing consumption from 578,000 tonnes of plastics in 2007 to about 1,250,000 tonnes in 2017² in the country. Per capita plastic consumption has grown by 5% annually from 4.0kg to 6.5kg respectively. It is estimated that each citizen would consume 7.5kg of plastics per year by 2020.

In Nigeria, it is estimated that plastic accounts for 13% of total solid waste. The country is ranked as the 9th top country out of 192 countries having coastlines generating mass of mismanaged plastic waste by the population living within 50km of the coast, accounting to 0.85 million metric tons, or 2.7% of global mismanaged plastic waste (Jambeck et al., 2015). It is forecasted that Nigeria will be the nation producing the largest volume of mismanaged plastic waste in African continent by 2025³.

² <https://www.statista.com/statistics/994632/plastic-consumption-/>

³ UNEP, *Africa Waste Management Outlook*, 2018, p86

Figure: Mismanaged plastic waste, 2010 actual and 2025 forecast⁴



3) UNIDO's Plastic Value Chain Study in 2020-2021, funded by the Government of Japan

With funding from the Government of Japan, UNIDO implemented a project entitled "Study on available sustainable alternative materials to plastics, innovative packaging and recycling technologies that meet market needs in Africa to reduce plastics leakages to the environment (SAP190137)". Under the project, three countries in the African continent were chosen for the study, which includes Nigeria.

The project conducted two study streams that were linked to each other to identify gaps and challenges for managing plastic litter and indicate possible technological options that might be applied to deal with the issues at country levels. The studies collected information of 1) sustainable alternative materials to plastics, and innovative packaging and recycling technologies that are available globally with particular attention to technologies from Japan; and 2) plastics value chains in the target countries and their regulatory frameworks and stakeholders in the sector. For Nigeria, a survey study was also conducted throughout the value chain, covering compounders, packaging producers, distributors, retailers, waste collectors and recyclers to understand the current status and how industry recognizes and responds to Government's initiatives on plastic waste.

a. Actions and initiatives to reduce plastic litter in Nigeria

Amid growing concern on plastic pollution, various efforts are being made in Nigeria at different levels. At Federal Government level, some relevant policies were adopted recently; National Policy on Solid Waste Management was adopted in 2020 and treats solid waste as a resource to promote economic growth and managed to improve the quality of human and environmental health. The policy follows 13 principles, amongst others: Proximity principle and self-sufficiency; Polluter pays principle; Extended producer responsibility; the precautionary principle; Separation at source; Life cycle. In its Annex 3, plastic recycling, especially PET bottles, is promoted.

National Policy on Plastic Waste Management was also adopted in 2020. The overall goal of the policy is to promote sustainable use of plastic as a resource throughout its life cycle. The policy introduces new measures such as the following:

⁴ UNEP, *Africa Waste Management Outlook*, 2018, p86

- Bans single use plastic bags and styrofoam (Micron > 30 μ) and applies a levy on thicker plastic bags and promote the use of alternatives to plastics (e.g., jute bags, leaves, paper, etc.).
- Aims to ensure that all plastic packaging in the market is recyclable or biodegradable or compostable and reusable by 2025.
- Sets national and state-wide targets for 65% recycling rate for municipal waste, 75% recycling of packaging waste, reduction of landfilling to maximum 10% of municipal waste, 50% recycling of all plastic waste, and use of plastic bags per person to be reduced by 50% by 2030.
- Requires mandatory EPR schemes most notably on all packaging items and introduces by law a nationwide bottle deposit requirement, a 5% deposit refund scheme for beverage containers, 5% charge on all single use grocery bags by 2021.

Alternatives are exempted from fines, there is no mention of bio-based plastics, but biodegradables are exempted from fines.

UNIDO has been actively collaborating with the Federal Ministry of Environment in developing the National Policy on Plastic Waste Management and the National Policy on Solid Waste Management, both approved by Nigeria's Federal Executive Council in 2020.

As described above, in recent years Nigeria is becoming better equipped to deal with plastic litter with respect to its policy environment. However, effective implementation of the policies is the hardest challenge due to lack of awareness and capacity in the country as well as limited information and available technologies at national, state and local levels. Based on the strong collaboration with UNIDO in drafting the policies, the Federal Ministry of Environment, in 2020, officially requested UNIDO to continue its support for effective implementation of policies.

At local government level, some initiatives are under implementation. The noteworthy initiatives are Lagos Blue Box Program and Lagos Recycle Initiative.

The Lagos Recycle Initiative (LRI) driven by the Lagos State Waste Management Authority (LAWMA) is developed to encourage waste sorting/segregation and recycling in Lagos State. The major focus of the initiative is to reduce the quantity of recyclables, mainly plastic, that goes to the dumpsite (currently 15% of waste going to dumpsites is plastic), eliminate indiscriminate dumping, promote recycling and create job opportunities as a result. To achieve these, there is a need for at least two (2) recycling centres within every Local Government/Local Council Development Area within Lagos State to serve as a drop off point for recyclables and as a Material Recovery Facility.

The LRI was officially launched on the 16th of December 2020 though it has been active since June 2020. LRI subsumed the Blue Box Initiative which was launched in September 2019. By the end of 2020, over 600 metric tons of plastic waste is expected to have been diverted from dumpsites through the initiative. There are currently 27 actively participating recyclers and the response from residents across the State continues to improve especially with the introduction of the Pakam recycling management digital application.

The Pakam recycling management application works like the Uber application which enables waste generators to locate registered recyclers within their environment in order to exchange recyclables for cash or other incentives.

The designation of recycling centres will address the issue of black spots as many pickers tend to collect, sort and store plastic waste indiscriminately. In addition, the centres which may double as Material Recovery Facilities will:

- Potentially provide upwards of 4,000 jobs across the State
- Encourage the mindset that waste is a resource due to the value created through recycling
- Increase diversion of recyclable materials from the dumpsites reducing pressure on them

At industry level, numerous initiatives are under implementation by associations, NGOs and individual firms (e.g., BASF Waste-2-Chemicals, the Coca-Cola Foundation's Cash 4 Trash). The National

Environmental Standards, Regulations and Enforcement Agency (NESREA) developed the Extended Producers Responsibility (EPR) programme for the Food and Beverage sector, which has created the Food and Beverage Recycling Alliance (FBRA), consisting of various large beverage and dairy products manufacturing companies.

b. Key findings from the Japan funded study in Nigeria

The study report is the first one to compile all the information available as much as possible along with the value chains. It is also valuable in terms of conveying messages from stakeholders based on the survey results. Some of the findings from the UNIDO-Japan plastic value chain study are:

- Composition of waste is estimated as follows: food waste (43.4%), plastic (15.3%), paper (7.8%), textile (1.4%), wood (3.4%), rubber and leather (0.1%), metals (2.0%), glass (2.4%), others (24.2%)
- 80% of plastic waste goes to dumpsites and only 10% is recycled.
- Estimated waste collection rate (in Abuja) is about 45.1%.
- 84% of value-chain players, especially in collection, sorting and recycling are youths between the ages of 20's and 40's
- In Lagos and Abuja, self-disposal is practiced and may take the form of open burning, selling recyclable materials to recyclers and the illegal dumping of waste on undeveloped lands.
- There is no separation at source and sorting is often manually conducted.
- The number of actual recyclers is low (in Lagos).
- Types of plastic products recycled are beverage (PET) bottles, caps and lids, light-weight plastic carrier bags, sachet beverage packaging and lightweight plastic food wrappers.
- Mechanical recycling is the major method, while some recyclers use chemical recycling. Products from feedstock recycling is used at power generation or waste incineration plants.
- Inappropriate sorting and contamination of the plastics are posing challenges.
- Incineration facilities for energy recovery are missing.
- Raw material production technologies are missing.
- While basic compounding and packaging technologies exist, environmentally friendly technologies (including alternative materials) are missing.
- Recycled materials are both imported and locally produced.
- Some retailers use recycled plastic products consisting of both imported and locally produced materials. However, concerns regarding the quality and costs are raised.
- Alternative materials to plastics are yet to be introduced in the market and recognition of bioplastics is low.
- Government is beginning to place emphasis on circular economy and a more coordinated way to manage plastics.
- If support is given to value-chain players, many of them are willing to change to more environmentally friendly and economically viable technologies.

A2. Problems to be addressed

In view of the recently adopted National Policy on Solid Waste Management and the Policy on Plastic Waste Management that aim to deal with plastic waste problems in Nigeria by setting directions and targets as discussed above,⁵ there are significant implementation capacity development needs particularly at State and local levels.

⁵ UNIDO, *Plastic Value Chain Study*, 2021

<https://open.unido.org/api/documents/22180016/download/Country%20report-%20Plastic%20value%20chain%20in%20.pdf>

As identified during the Japan funded study, these targets that are set are ambitious, and it would require significant efforts of the Government to realize them. Building on the support and work that UNIDO have contributed with the funding of Japan, the Federal Ministry of Environment requested to UNIDO and Japan to support the development process of an implementation guideline of the plastic waste management in order to further promote actions at State and local levels.

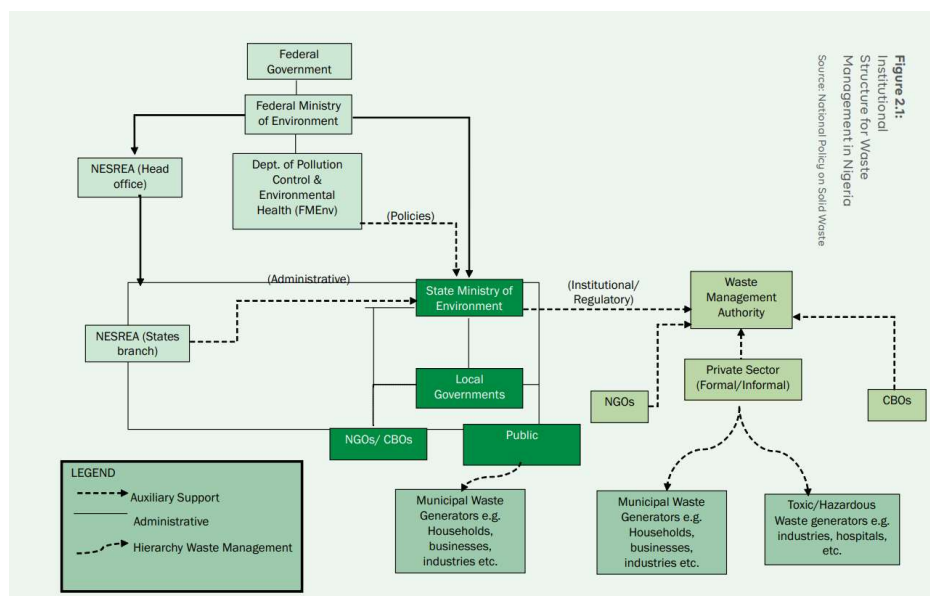
Since the State and local governments are responsible for waste management, it is important for them to know how to implement the mandate. Implementation capacity of local governments is not sufficient and there is a need to translate policy directions and targets and the mandate delegated to local governments into actions on the ground and to inform industries of emerging business opportunities.

The proposed project would structure its interventions into three main components as shown below, and facilitate a platform to encourage close communication and collaboration between Federal government, State, local governments and industry, which will aim to contribute to capacity development in policy implementation and adoption of circular economy practices along value chains:

1. Support the Federal Ministry of Environment to draft guidelines to implement the national policy on plastic waste management. These guidelines will be demonstrated with pilot cases at the local level in targeted municipalities.
2. Support the State and local governments to develop action plans to implement the Federal government guidelines to demonstrate plastic value chain development in targeted municipalities and to improve their collection and separation activities at source, by conducting capacity development activities.
3. Support industry to demonstrate benefits of adopting circular economy practices with innovative technologies including recycling technologies or alternative material production. This can be supported by the experience and technologies of Japan as a part of responses to TICAD7 Action Plan.

In order to achieve the recycling targets set in the Plastic Waste Management Policy, it is crucial to strengthen the capacities at local level throughout a plastic value chain from production to recycling. As the first step, significant awareness-raising activities will be conducted for State and local government officials and private sector in the value chains since they are the key players of promoting sustainable life cycle management of plastics as well as circular economy practices.

<Waste management structure in Nigeria>⁶



⁶UNIDO, *Plastic Value Chain Study*, 2021

A3. Main Target Groups

The project structures its interventions into three main components as described above and will be working with the Federal government, State, local governments and industry, to ensure raising overall capacity of policy implementation and adoption of circular economy practices along value chains, hence the main target groups are:

- Governmental and municipal officials responsible for implementing policies and actions on waste management/plastic lifecycle management
- Companies in plastic value chains in Abuja and Lagos
- Informal plastic waste pickers and recycling workers
- Non-governmental organizations in plastic value chains
- Residents in target municipalities in Abuja and Lagos

A4. Stakeholders

The project will work with government, industry associations, NGOs, academia, and companies in the plastic value chain including businesses that produce and consume plastic products, and that recycle plastics, as well as the associated informal sector actors.

Thus, the main counterparts and stakeholders of the projects are:

- Federal Ministry of Environment
- Federal Ministry of Industry, Trade and Investment
- National Environmental Standards, Regulations and Enforcement Agency
- Abuja Environmental Protection Board (AEPB)
- Lagos State Waste Management Authority (LAWMA)
- Lagos State Environmental Protection Agency (LASEPA)

Other stakeholders could be, but not limited to:

- Manufacturers Association of Nigeria (MAN)
- Food and Beverage Recycling Alliance
- Waste Management Association of Nigeria (WAMASON)
- Recyclers Association of Nigeria (RAN)
- Lagos Recyclers Association
- WeCyclers
- The Association of Waste Recyclers and Collectors of Nigeria (AWARECON)
- Recycling Scheme for Women and Youth Empowerment (RESWAYE).

Local NGOs, informal sectors and residents that are active in the target state and local municipalities are also stakeholders.

A5. Synergy and contribution

The project will contribute to major development initiatives and seek synergies with locally, nationally and internationally supported initiatives as much as possible, including the Osaka Blue Ocean Vision G20 Implementation Framework for Actions on Marine Litter, the Global Alliance on Circular Economy and Resource Efficiency (GACERE), in which Nigeria is a member, African Circular Economy Alliance, and the Tokyo International Conference on African Development (TICAD).

a) TICAD 7 action plans

The project would contribute to strengthening the bilateral relation between Japan and Nigeria by sharing Japanese 3R implementation experience as well as promoting business relations between Japan and Nigeria, thereby contributing to Pillar I and II of TICAD7 Yokohama Declaration. Japan has been promoting 3Rs (reuse, reduce, recycle) since 1990s, and has high plastic recycling rates. Citizens are familiar with the rules and exercise the separation at source of plastic waste. Reflecting the diffusion of 3R practices in the country, there is a wide range of advanced 3R-related technologies available in Japan. The study conducted by UNIDO with funding by the Government of Japan, compiled information on alternative materials, innovating packaging and recycling technologies, mainly from Japan that might match with Nigeria's contexts identified in the plastic value chain study in Nigeria. The study identified and presented appropriate Japanese technological solutions that could be adopted and adapted for Africa for addressing plastic litter issues.

Based on the study results, this project will introduce and possibly utilize identified Japanese technologies in Nigeria. Output 3 of the project, in particular, concerns demonstration of technologies or systems to showcase the benefits of adopting circular economy practices. The project would proactively involve Japanese technologies, and encourage generating investment opportunities, thereby would contribute to the business partnership between Japan and Nigeria, as part of TICAD7 activities. It would also contribute to G20's Osaka Blue Ocean Vision, as a part of Japan's "MARINE Initiative" implementation to advance effective actions to combat marine plastic litter at a global scale.

The details of project contribution to TICAD7 Action Plan are:

Project contribution to TICAD7 Action Plan		
TICAD7 Focus Areas and Actions		Contribution that the project could make
1.3	Unlock the potential of the private sector	
	c) expand industrial human capital resources	The project will expand/upgrade the knowledge and capacity of recycling industry in Nigeria.
	d) Strengthen capacity and productivity of private sector including MSMEs.	The project will train private recycling companies including MSMEs on new technologies and productivity improvements through resource efficiency.
2.3	Enhance resilience against natural disasters exacerbated by climate change and promote sustainable and environmentally friendly urban development	
	a) Implement climate mitigation and adaptation measures to avoid land degradation, desertification and deforestation.	The project contributes to climate mitigation by reducing the use of fossil-based virgin plastic, thereby reducing the CO2 emission. Further, it contributes also to adaptation by upgrading capacity of recycling industry and promoting 3R of plastic products, whereby reducing the risk of land degradation.
	b) Augment disaster risk reduction and management efforts.	The mitigation measures against floods risk are often impeded by the large amount of plastic litter and wastes scattered over riverbanks and clogging up of drainage systems. The project will contribute to disaster risk reduction and reinforce management efforts to tackle increasing incidence of flood in Nigeria, by promoting appropriate plastic waste management and recycling.
	c) Improve waste management systems, including through measures and actions to reduce marine plastic waste.	The project will directly contribute to improve plastic waste management systems to reduce marine plastic waste from land sources in Nigeria.

Further, the project will seek cooperation with the African Clean Cities Platform (ACCP) initiative led by Japan International Cooperation Agency, the Ministry of Environment of Japan and other UN agencies. Part of the plastic waste problem is related to insufficient waste management systems, and the project will support the improvement of these systems by strengthening the recycling capacity within the value chains. It will also complement JICA's past project, *"Integrated Solid Waste Management System in Federal Capital Territory in the Federal Republic of Nigeria"*, since the project covers the same target city and involves Abuja Environmental Protection Board (AEPB) as one of the project counterparts.

b) Other Donors' related activities in Nigeria

The World Bank has been a player in Nigeria at multilateral level and implemented projects in Lagos to promote composting and landfilling of urban solid waste and organic waste as integral part of infrastructural assistance. The World Bank is starting a global programme "Pro Blue Marine Plastic Litter" in 2021, and is aiming to support Nigeria on the policy front.

African Development Bank (AfDB) is supporting the African Circular Economy Alliance (ACEA) established during the 23rd United Nations Conference of Parties (COP23) by the Governments of Nigeria, Rwanda, and South Africa. Its mission is to spur Africa's transition to a Circular Economy at the country, regional and continental levels by operating as a collaborative platform to coordinate and link the various initiatives on the continent. The ACEA's main intervention pillars include policy advisory, leadership & advocacy, as well as projects and business scale-up.

AfDB is supporting the Nigeria Circular Economy Working Group (NCEWG), which serves as a locally driven platform where strategic stakeholder groups voluntarily meet to share ideas, experiences, and coordinate activities to break silos and take advantage of economies of scale to inform Circular Economy policies and develop bankable projects both at the national and sub-national level. UNIDO is invited as a member of the NCEWG.

Another initiative with a multilateral dimension is the Global Plastic Action Plan (GPAP) of the World Economic Forum. Nigeria has joined GPAP in 2021 and a locally-led platform for policy-makers, business leaders and civil society advocates is to be formed and started within the year to develop a national action plan (NAPA) for radically reducing plastic pollution. This project could cooperate with GPAP for synergy creation and coordinate relevant activities to ensure delivery of efficient and effective impact in Nigeria. It will further promote visibilities of Japan's contribution in addressing global challenges of marine plastic litter.

At the bilateral level, Netherland is supporting the NCEWG to conduct a study together with AfDB. UK is assisting Nigeria for urban wastewater, administrative systems and urban infrastructure and implemented a waste treatment project (2009-2016) as part of it. Further, France, Belgium, Norway and Portugal have implemented Clean Development Mechanism (CDM) projects in Lagos to promote composting of organic waste and use of landfill gas. In Abuja, JICA has implemented "The Project for Integrated Solid Waste Management System in Federal Capital Territory" (2015-2018).

Projects focusing on plastic waste has not been implemented by any donor yet so far as of 2021. UNIDO's plastic waste-focused assistance such as the "Development of National Policy on Solid Waste Management, National Policy on Plastic Waste Management and Extended Producer Responsibility Program", funded under the Nigeria-UNIDO Country Programme, and the study conducted on plastic value chain funded by the Government of Japan have been receiving interests from other donors.

c) UNIDO's related projects in Nigeria

UNIDO is currently implementing 14 projects for a total budget of over \$14 million in Nigeria, 70% of which is related to environment and energy areas, including biomass power generation and small hydropower generation; assistance to develop national action plan to implement Minamata Convention and; to gradually reduce hydrofluorocarbon (HFC) to implement the Montreal Protocol on Substances that Deplete the Ozone Layer.

UNIDO is also presently implementing a project “Improving Nigeria's Industrial Energy Performance and Resource Efficient Cleaner Production through Programmatic Approaches and the Promotion of Innovation in Clean Technology Solutions” funded by the Global Environment Facility (GEF) which also promotes the principles of circular economy.

UNIDO’s plastic-related assistance on “Development of National Policy on Solid Waste Management, National Policy on Plastic Waste Management and Extended Producer Responsibility Program” and the Japan funded study on plastic value chain has demonstrated strong technical and management competence to implement projects in cooperation with local governments. This project is the expansion of these UNIDO’s assistance in scope and dimension.

Moreover, the presence of the UNIDO Investment and Technology Promotion Office (ITPO) Nigeria would contribute to the project by mobilizing its extensive private sector network.

B. UNIDO APPROACH

B1. Rationale

UNIDO, as a leading UN agency promoting circular economy, supports member state governments to addresses challenges of marine plastic litter by promoting circular economy practices.⁷

Circular economy practices require policy frameworks to create incentives for economic actors, including industry and consumers, to increase resource efficiency and productivity. Applying circular economy practices would move industries in plastic value chains towards more innovative, resource efficient and sustainable production. Circular business models help industries to design out waste to retain plastics within the economy, preserving the value embodied in plastics that leaked out of the economy as waste.

In the upstream, the value chain interventions start with selection of non-toxic, less carbon intensive and more sustainable input materials, including chemicals and redesigning existing and new products and production processes for circularity. In the downstream, ensuring products are distributed, used and consumed through most low carbon and least polluting means is critical. Further downstream, returning products, parts and materials at post-consumption to the economy through most effective collection, sorting and recycling technologies closes loops. As a transitional measure and last resort, waste to energy actions may also be considered.

Application of circular economy practices often requires collaboration with the waste management industry at the downstream, also includes social considerations such as the integration and improvement of the working conditions of informal waste pickers.

Moving the plastic value chain towards re-designing products, promoting reuse, and improving recycling, while taking into account the whole life cycle of the products with the circular economy practices will lead to increasing circularity of the plastic economy in Nigeria. This requires a value chain approach that looks at both production and recycling sides of plastics. For the plastics sector to grow sustainably, it has to be viewed more through the concept of increasing industry profitability through waste reduction along the value chain, in addition to increasing efficiency of recycling. This will ensure each link in the value chain to be strengthened while increasing the amount of recycled materials and their reuse, instead of continuous application of virgin materials.

The project will demonstrate the benefit of adopting circular economy practices and resource efficient production for plastic value chains so that circular economy principles and practices are integrated into effective implementation of plastic waste management, and plastic value chains are strengthened, especially recycling capacity. This would ultimately contribute to reducing plastic leakages to the environment.

B2. Sustainability Strategy

In order to ensure sustainability as well as self-evolving and continuous activities beyond the project duration, the project will incorporate the following measures:

- The project will involve a wide range of stakeholders from government institutions, industry associations, NGOs, etc. through consultations, surveys, interviews and hearings, and stakeholders' meetings.
- Awareness development activities will involve not only producers but also user side of value chains including food and beverage industry, brand owners, retailers, and consumers to ensure both side of value chain understand economic, social, and environmental benefits of adopting circular economy practices.
- Outcome of demonstration activities will be widely promoted to show-case the benefits of adopting circular economy practices.

⁷ For UNIDO's approach towards the issue, refer to "UNIDO Working paper for G20, *Addressing the challenge of Marine Plastic Litter Using Circular Economy Methods*", published in 2019.

- In order to encourage sustainable use of equipment and technologies provided during the project and beyond the project duration, the project will establish a framework with the Nigerian government to ensure operation and maintenance of the technology and equipment. Particularly, it will be agreed in written form that the Nigerian counterparts are responsible for sustainable use and maintenance of the equipment, especially on taking measures to prevent loss, theft, or personal use of provided equipment under Output 2.
- Further, co-finance or contributions from demonstrating companies will be encouraged for the purchase of technologies under Output 3. An MOU with the Nigerian government and selected beneficiary entities for the sustainable use and maintenance of the equipment, especially on taking measures to prevent loss, theft or personal use of procured equipment as well as guaranteeing the ownership of the technology in case the company goes into bankruptcy.
- National and States guidelines, action plan and other documents will be encouraged to be adopted and become operational documents for stakeholders use.

B3. Gender Mainstreaming

UNIDO recognizes that gender equality and the empowerment of women have significant positive impacts on sustained economic growth and sustainable industrial development, which are drivers of poverty reduction and social integration. The achievement of gender equality and the empowerment of women is at the core of UNIDO's goal of realizing inclusive and sustainable industrial development (ISID). The project will integrate gender equality aspects throughout its activities, as engaging women is important to develop effective circular systems and value chains for sustainability.

According to the World Economic Forum's Global Gender Gap Index 2020⁸, Nigeria ranked 128th and in Sub index Economic Participation and Opportunity, 38th. Women and men are offered with comparable economic opportunities; however, estimated average annual income for women is about 30% lower than men. While women represent 64.6% of skilled professionals, women have a significantly lower share of senior position. This implies improvements in gender gaps, especially in wages and higher positions will have a significant impact on the country's economic and social progress.

The project is planning to integrate the following strategies, while further analysis will be conducted at the inception phase by incorporating the gender aspect into the initial assessments of activities 1.1 and 2.2, and target indicators will be updated as necessary.

- All decision-making processes will consider gender dimensions. The project shall promote gender equality and advocate women's empowerment.
- At the level of project activity implementation, efforts will be made to consult with stakeholders focusing on gender equality and women's empowerment issues. This is especially relevant in drafting guidelines/strategies.
- Female candidates will be encouraged for receiving trainers' training.
- Female participants will be encouraged for meetings, workshops, and trainings, and gender disaggregated numbers of participants will be collected.
- Women-owned companies in the plastic value chain that are willing to demonstrate benefits of circular economy practices could be prioritized in the selection process.
- Efforts will be made for the project team to be gender balanced.
- Gender disaggregated data will be monitored to ensure that gender mainstreaming and inclusive development is considered in the project.

⁸ World Economic Forum, Global Gender Gap Report 2020

B4. Environmental and Social Assessment

The objective of this project is to contribute to Nigeria's inclusive and sustainable industrial development through promotion of circular economy principles and practices to be integrated into effective implementation of plastic waste management, and strengthening of plastic value chains.

Main activities are awareness development, stakeholder meetings, workshops, trainings, and technical assistance and technology demonstrations for selected pilot companies and institutions as well as in the target municipalities.

It is expected that there will be technology transfer activities that involve installation of equipment at the target municipalities to support recycling facilities, and at selected companies to demonstrate benefit of technologies for promoting circular economy practices.

As per UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), the Environmental and Social screening template has been completed, and this project has been categorized as "Category B".

Category B projects are likely to have less adverse impacts on human populations or environmentally important areas than those of Category A projects. Likely impacts will be few in number, site-specific, and few if any will be irreversible. An Environment and Social Management Plan (ESMP) will be developed at the beginning of the implementation phase based on the capacity needs assessment results and updated as the project progresses.

C. THE PROJECT

C1. Objective of the project

The overall objective of the project is to contribute to inclusive and sustainable industrial development of Nigeria by ensuring sustainable plastic management through circular economy practices and resource efficiency.

C2. Expected Outcome

Circular economy principles and practices are integrated into effective implementation of plastic waste management, and plastic value chains are strengthened, especially recycling capacity, so that the amount of plastics leaking to the environment will be reduced.

C3. Outputs and Activities

There are three main outputs, which would lead to expected outcome.

1. Implementation guidelines of the national policy on plastic waste management are drafted with circular economy and resource efficiency aspects.
2. Strengthening recycling capacity is supported at target municipalities through reinforcing the value chain system, provision of necessary equipment and pilot implementation of the guidelines on plastic waste management.
3. Demonstration of circular economy and resource efficiency practices including recycling system and innovative technology at pilot companies or institutions in/around the target municipalities is implemented to showcase the benefits.

There are three sets of activities to produce three outputs, and one for project management and monitoring. These activities will interact with each other to maximize impact of the project and to lay the foundation to reach the expected outcome. Furthermore, awareness development, outreach and visibility promotion activities will be organized throughout the project.

Activities:

Output 1: Implementation guidelines of the national policy on plastic waste management are drafted with circular economy and resource efficiency aspects.

Activities	
1.1	Assess current status, needs, risk and future planning on plastic waste management, including gender equality status.
1.2	Organize seminars, multi-stakeholder consultation workshops, awareness development and outreach activities, and trainings, especially introducing circular economy and resource efficiency aspects. Gender aspect is incorporated as one of topics to be covered, especially in seminars and awareness development activities.
1.3	Support drafting of guidelines/strategies for effective implementation of the national policy on plastic waste management. Ensure gender aspect is included in the guidelines.
1.4	Support adjustment of the guidelines, based on the result from pilot implementation at target municipalities (from Activities 2.6. and 2.7).

Output 2: Strengthening recycling capacity is supported at target municipalities through reinforcing the value chain system, provision of necessary equipment and pilot implementation of the guidelines on plastic waste management.

Activities	
2.1	Conduct awareness raising seminars and activities on circular economy/resource efficiency/3R/ separation at source concepts for waste management institutions and plastic recycling companies and NGOs as well as residents in the target municipalities. Gender aspect is incorporated as one of topics to be covered, especially in seminars and awareness raising activities.
2.2	Assess plastic recycling value chain and current waste management status as well as gender status such as roles and data in the value chain at target municipality level, in particular on plastic waste, and develop municipality action plans for plastic waste management, aligning with the guidelines to be drafted in Activity 1.3. Ensure Action plans would incorporate the gender aspect.
2.3	Conduct training of waste management officials/ institutions/ companies/ informal plastic waste pickers and recyclers on plastic wastes collection and handling (including training of trainers, training of workers/personnel involved in waste management). Target more than half of trainees to be women.
2.4	Conduct needs assessments for equipment and procurement (e.g. scale, bailer machine, push bikes, personal protective equipment (PPE), segregating garbage boxes, digital technology, etc.) for collection centers/ materials recovery facilities (MRF) in target municipalities.
2.5	Assist implementation of plastic waste collection system with periodical monitoring with data collection, and continuous corrective adjustment.
2.6	Assist adjustment of action plan for plastic waste management at municipal level and finalize it (based on Activity 2.5.).
2.7	Prepare a case study report and publish case study leaflets on pilot municipal plastic waste management.
2.8	Develop and distribute outreach material for promoting 3R and “separation at source”.
Candidate municipalities: One in Abuja, and Yaba or/and Ajeromi Local Council Development Areas (LCDA) in Lagos	

Output 3: Demonstration of circular economy and resource efficiency practices including recycling system and innovative technology at pilot companies or institutions in/around the target municipalities is implemented to showcase the benefits.

Activities	
3.1	Conduct awareness raising seminar and activities for private sectors on plastic value chains on circular economy, resource efficiency and 3Rs, and collect proposals from interested companies and select pilot companies for demonstration. Women owned companies would be prioritized.
3.2	Assess the capacity and collect baseline data of selected companies.
3.3	Assist pilot companies to improve resource efficiency and select technologies to be demonstrated.
3.4	Procure and install technologies for piloting companies.
3.5	Periodically monitor the improvement in capacity and environmental impact with data collection and provide technical advice.
3.6	Develop and distribute outreach material for promoting the outcome/ benefit.

Project management and monitoring

Activities

Day to day operation of the project and monitoring including preparation of project progress reports including gender progress and conducting an evaluation at the end of the project.

Organize Project Steering Committee (PSC) and stakeholders' consultation meetings.

Ensure gender specific awareness activities are included in the awareness raising seminars and activities in Output 2 &3.

Outreach/ visibility promotion locally and globally.

C4. Institutional Arrangements and Coordination Mechanism

In order to ensure aligning the project activities to the government's agenda, UNIDO and the Federal Ministry of Environment, as the main counterpart of the project, in coordination with the stakeholders, will work closely during the project implementation.

The main counterpart, the Federal Ministry of Environment (FMEnv), will assign a Senior Focal Point to coordinate and work closely with the UNIDO Project Management Unit (PMU).

PMU will consist of the UNIDO project manager, a project assistant at the Headquarters in Vienna, and a National Project Coordinator (NPC) at UNIDO Nigeria office. Project management and coordination structure is described in the Annex 1.

Project Steering Committee (PSC) co-led by the UNIDO and the Federal Ministry of Environment will be established and will include all relevant national counterparts and the donor as a monitoring and consultation body.

• Project Steering Committee (PSC)

The main role of the PSC is to monitor the project progress, validate its overall direction and the project workplan, and assist in mobilizing resources required for project implementation, where necessary. The PSC shall meet twice a year (online or in-person) from the official start date of the project onward. If any action or consultation is required for the implementation, the PSC members will be requested to respond to it online.

The PSC will be co-chaired by the FMEnv and UNIDO. The National Project Coordinator of UNIDO will act as the Secretariat of the PSC. All member organizations of the PSC will assign a Senior Officer, without any costs to UNIDO, to be the focal point for the project steering committee.

PSC members would consist of representatives from:

- The Embassy of Japan in Nigeria
- Federal Ministry of Environment
- Federal Ministry of Industry, Trade and Investment
- National Environmental Standards, Regulations and Enforcement Agency
- Abuja Environmental Protection Board (AEPB)
- Lagos State Waste Management Authority (LAWMA)
- Lagos State Environmental Protection Agency (LASEPA)
- Manufacturers Association of Nigeria (MAN)
- Food and Beverage Recycling Alliance
- Waste Management Association of Nigeria (WAMASON)
- UNIDO Representative in Nigeria
- UNIDO Project management team members (Nigeria and HQ)

Other entities would be invited as observers whenever necessary for consultations. The PSC may invite additional members to attend its meetings as needed.

D. PROJECT INPUTS

D1. Counterpart inputs

All counterpart and cooperating organizations will assign a Senior Officer, without any costs to UNIDO, to be the focal point within the organization to work with the UNIDO team in the overall coordination of the project as a member of the PSC.

The counterparts will create enabling conditions for efficient project implementation, such as: nominating staff and officials who will work closely with the project team; providing necessary documentation, data, statistics and information; coordinating with all the relevant project stakeholders; facilitating the project implementation (e.g. identification of target beneficiaries, mobilization of necessary number of trainees in coordination with the local authorities, custom clearances of imported tools and equipment, and government approval of any kind, etc.), as well as ensuring operation and maintenance of the technology and equipment provided by the project.

In order to encourage sustainable use of equipment and technologies provided during the project and beyond the project duration, the main counterpart (FMEnv) will provide necessary support to ensure sustainable operation and maintenance of the technology and equipment. Particularly, for Output 2 and 3, an agreement in written form will be concluded among Nigeria Government, UNIDO and municipalities and/ or private sectors on sustainable use and maintenance of the equipment, especially on taking measures to prevent loss or theft or personal use of provided equipment as well as guaranteeing the ownership of the technology in case the beneficiary private company goes into bankruptcy.

D2. UNIDO Inputs

UNIDO's responsibility as an implementing and executing agency is to provide technical and administrative assistance for successful implementation of the project through the project management unit consisting of:

- A UNIDO HQ-based Project Manager/Industrial Development Expert
- UNIDO administrative and technical support services at HQ
- A National Project Coordinator at UNIDO Nigeria office

UNIDO project team will arrange necessary international and national technical and technological expertise.

The necessary technology for demonstration of circular economy practices under Output 3 will be purchased through UNIDO procurement services applying geographically limited competition to Japanese companies if the technology is available in Japan. Should the procurement not be successful (i.e. no Japanese bidders submitted their proposals or technology is not available in Japan), the re-bidding process shall be undertaken using open international competition. Prior to this, a Japanese technology advisor or a company that has expertise will be engaged to provide overall technological consultation services, including needs assessment, and development of technical specifications for procurement.

Other general equipment and services, including international and local technical experts, will be sourced in line with UNIDO procurement rules and regulations.

E. INDICATIVE BUDGET

The project follows the results-based management budget structure. In order to be able to respond to changing conditions and to ensure swift implementation, UNIDO may make budgetary adjustments, not foreseen in the project document, according to its rules and regulations: UNIDO will inform the donor about changes between budget components. In the case that shifts between outputs greater than 15 per cent become necessary, UNIDO will submit a revised budget for approval by the donor, with explanation of the required changes. Changes between budgetary components are not to affect the total budget made available for the project.

F. MONITORING, REPORTING AND EVALUATION

The project will be subject to the standard UNIDO monitoring, reporting and evaluation procedures.

The PSC will be established and monitor the project progress at bi-annual meetings (in person or on-line) as described in C4. The details of monitoring and evaluation (M&E) framework will be determined during the inception phase of the project, when some of the indicators and targets in the logical framework may be revised. It will include data collection and analysis, gathering of baseline information, and the preparation of M&E work-plan. Data will always be disaggregated by sex and age. It is a key management tool to ensure the effectiveness and efficiency of project implementation and measures the progress towards the achievement of project outcomes, outputs and objectives, as well as any problem areas that need to be addressed.

The PMU will prepare regular progress reports on project activities detailing progress achieved in terms of the scheduled work, the problems and constraints emerging over the period, gender-based statistics, and next steps including addressing challenges and constraints. In addition, work plan will be updated while identifying activities to be implemented for the following six-month period. Each report will be shared with the PSC for their information, review, and recommendations for any appropriate action that needs to be taken.

The UNIDO project manager is responsible to monitor and report the project activities on a continuous basis to the donor in order to ensure that activities are carried out according to the plan and remedial steps are taken as necessary.

The project will be subject to an independent evaluation at the end of the project, as per the UNIDO evaluation policy. The project evaluation will be based on assessments of project results and impacts in accordance with the logical framework.

G. VISIBILITY PROMOTION

UNIDO will ensure appropriate visibility of the Donor to stakeholders throughout implementation of the project and, in particular:

- Public activities and events;
- Knowledge tools, such as training material, handouts, presentations, etc. and any other studies and reports produced during the project;
- Local and international media outreach, such as interviews, articles, etc.;
- Appropriate application of logos on technology granted; and
- Appropriate application of logos and mention of Donor and institutional counterparts will be arranged for all suitable opportunities, in line with respective visibility guidelines.

H. PRIOR OBLIGATIONS AND PREREQUISITES

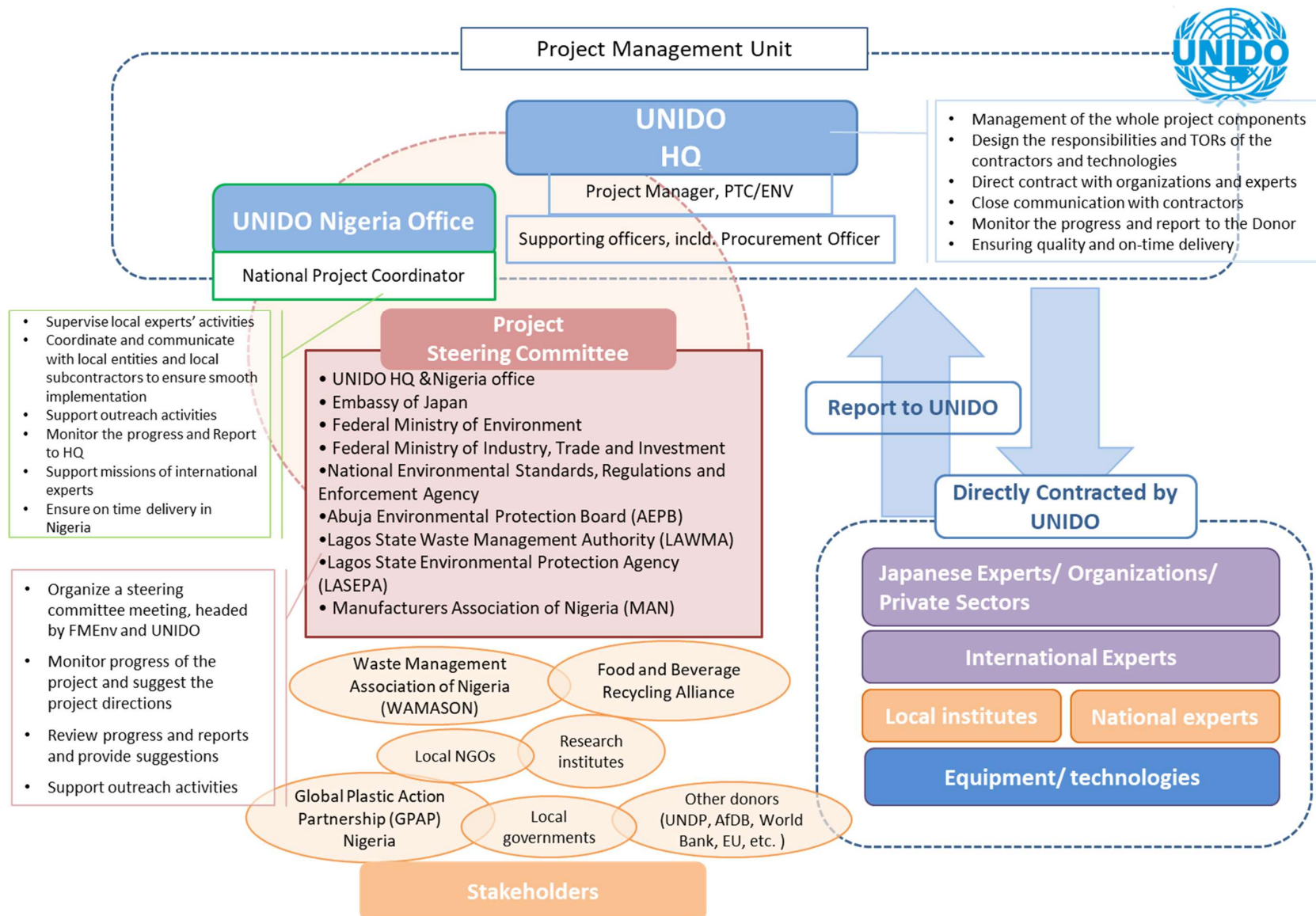
The project will start as soon as the donor transfers the agreed funds to UNIDO account specified by the responsible department.

The intervention of UNIDO is subject to the continuing commitment and engagement of the host country and other partners towards the vision and goals of the project, especially defined tasks and inputs in the section C and D.

I. LEGAL CONTEXT

The present project is governed by the provisions of the Standard Basic Cooperation Agreement between the Federal Republic of Nigeria and UNIDO, signed and entered into force on 5 November 1992.

Annex 1. Project management structure



Annex 2. Indicative Timeline of Activities

Activities	Year 1				Year 2				Year 3			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
For Output 1: Draft an implementation guidelines of the national policy on plastic waste management												
1-1) Assessment												
1-2) Organize seminars, multi-stakeholder consultation workshops and trainings		Seminar&Con sultation workshop		Training		Seminar		Training		Consultation workshop		Seminar
1-3) Support for drafting of guidelines/strategies												
1-4) Support adjustment of the guidelines												
For Output 2: Strengthening recycling capacity at target municipalities												
2-1) Conduct awareness raising seminars on circular economy/resource efficiency/3R/ separation at source concepts												
2-2) Assess plastic recycling value chain and current waste management status at target municipality and develop actiona plans												
2-3) Conduct training on waste management officials/ institutions/ companies/ informal plastic waste pickers and recyclers on plastic wastes collection and handling												
2-4) Conduct needs assessments for equipment and procurement at target municipalities												
2-5) Assist implementation of plastic waste collection system and data collection												
2-6) Assist adjustment of action plan for plastic waste management at municipal level and finalize it												
2-7) Prepare a case study report and publish case study leaflet on pilot municipal plastic waste management.												
2-8) Develop and distribute outreach material for promoting 3R and "separation at source"												
For Output 3: Demonstration of circular economy and resource efficiency practices including recycling system and technology at pilot companies or institutions												
3-1) Conduct awareness seminar for private sectors on plastic value chains on circular economy, resource efficiency and 3Rs, and collect proposals from interested companies for selection		Seminar								Seminar		
3-2) Assess the capacity and collect baseline data of selected companies.												
3-3) Assist pilot companies to improve resource efficiency and select technologies to be demonstrated												
3-4) Procure and install technologies for piloting companies												
3-5) Monitor the improvement in capacity and environmental impact with data collection and provide technical advices.												
3-6) Develop and distribute outreach material for promoting the outcome/ benefit												

Annex 3. Project Logical Framework

Project Summary	Indicators (target)	Sources of Verification	Assumptions
Objective			
To contribute to inclusive and sustainable industrial development of Nigeria by ensuring sustainable plastic management through circular economy practices and resource efficiency.	<ul style="list-style-type: none"> • ENV.1: Cumulative reduction of CO2 emissions through plastic circular economy practices (to be calculated through recycled plastics) • ENV.4: Cumulative improved plastic material efficiency • ENV.5 Number of new or improved recycled (green) products made available or used 	<ul style="list-style-type: none"> • The Government Data on the amount of plastic collected and recycled. • Survey to beneficiary companies • Survey to industry associations, particularly PROs 	
Outcomes			
Circular economy principles and practices are integrated into effective implementation of plastic waste management, and plastic value chains are strengthened, especially recycling capacity, so that the amount of plastics leaking to the environment will be reduced.	<ul style="list-style-type: none"> • POL.1: Number of revised policies adopted by policymakers • POL.3: Number of guidelines adopted by relevant actors • GOV.1: Number of institutions strengthened for implementing plastic waste management • BUS.1: Number of firms adopting circular economy practices • TEC.3: Number of new technologies adopted 	<ul style="list-style-type: none"> • Policy documents • Website of relevant actors • Annual report of relevant institutions • Survey to industry associations and companies participated in awareness seminars/RECP assessments 	<ul style="list-style-type: none"> • Political stability • The national and local governments are committed implementing the policy • Financial stability at country, regional and global level
Outputs			
Output 1: Implementation guidelines of the national policy on plastic waste management are drafted with circular economy and resource efficiency aspects.	<ul style="list-style-type: none"> • TCO.3: Number of guideline drafted/prepared for effective implementation of the national policy on plastic waste management • GOV.2: Number of actors participating in enhanced collaboration settings through multi-stakeholder consultation workshops • TCO.1: Number of seminars, workshops and trainings on circular economy and resource efficiency organized for policy makers and relevant ministries (At least 7 times) • REA.1: Number of actors reached (Participants at seminars (at least 300, of which 120 female) • REA.2 Number of actors engaged (participants at consultation workshops (at least 100, of which 40 female); participants at trainings (at least 50, of which 25 female) 	<ul style="list-style-type: none"> • Published Guidelines • Reports of multi-stakeholder consultation workshop containing list of participants with sex-disaggregated data. • Relevant reports (i.e. on seminars, workshops and training) containing list of participants with sex-disaggregated data. 	<ul style="list-style-type: none"> • Political stability • No natural disaster • No lockdown, no travel restriction • Stable covid situation • In case of covid restriction, participants have access to on-line facility
Output 2: Strengthening recycling capacity is supported at target municipalities through reinforcing the value chain system, provision of necessary equipment and pilot implementation of the guidelines on plastic waste management.	<ul style="list-style-type: none"> • TCO.3: Number of municipal level Action Plan on plastic waste management produced • GOV.2: Number of institutions participating in enhanced collaborative plastic value chains in target municipalities • TCO.1: Number of seminars, workshops and trainings on circular economy and plastic value chains organized (At least 2 times) 	<ul style="list-style-type: none"> • Developed Action Plan • List of members engaged in plastic value chains, defined in the action plan developed for target municipalities 	<ul style="list-style-type: none"> • Political stability • No natural disaster • No lockdown, no travel restriction • Stable covid situation • In case of covid moving restriction imposed, companies and trainers

	<ul style="list-style-type: none"> • REA.1: Number of actors reached (Target: at least 200 participants for seminars, of which 80 female, at least 300 workers/personnel trained by trainers, of which 200 female) • TCO.1: Number of training of trainers and training of workers/personnel activities provided • REA2. Number of actors engaged through training of trainers (Target: at least 20 trainers, of which 12 female) • TCO.2: Value of assets provided to target municipalities. 	<ul style="list-style-type: none"> • Seminar reports containing participant list with sex-aggregated data • Technical Expert/hands-on training reports • Training reports containing participant list with sex-aggregated data • Procurement document/ ToT 	have access to on-line facility
Output 3: Demonstration of circular economy and resource efficiency practices including recycling system and technology at pilot companies or institutions in/around the target municipalities is implemented to showcase the benefits.	<ul style="list-style-type: none"> • TCO.1: Number of awareness seminars and RECP assessment provided for private sectors on plastic value chains on circular economy, RECP and 3R (At least 2 times) • REA.1: Number of actors reached (At least 50 companies participated for seminars, of which 15 are female-owned) • TCO.4: Number of RECP/business plans developed to promote RECP practices (A least 10 plans for RECP developed, of which 2-3 plans for companies to be upgraded) • REA2. Number of actors engaged (A least 10 companies assessed for RECP, of which 3 will be female-owned. 2-3 companies to be upgraded) • TEC.3: Number of new technologies supported to adopt for promoting circular economy practices • TCO.2: Value of assets provided to demonstrating companies 	<ul style="list-style-type: none"> • Seminar reports and technical reports containing list of participating companies with sex-aggregated data • Procurement document/ ToT • RECP technical reports 	<ul style="list-style-type: none"> • Political stability. • No natural disaster. • No lockdown, no travel restriction. • Stable covid situation. • In case of covid restriction, companies and trainers have access to on-line facility. • Companies are committed to adopt RECP practices and new technologies.

Annex 4. Risks and Mitigation Measures

Result	Assumptions & Risks				
Project element	Risk Description	Risk Type	Risk Level	Assumptions	Mitigation measures
Meetings, workshops, seminars, trainings.	<p>Trainers/experts are infected with virus and possibly disturb the training plan.</p> <p>Some participants are covid-infected.</p> <p>Travel restrictions to and in Nigeria is in place due to Covid19 pandemic. (in particular the first year of project implementation)</p>	Project trainers /experts, National/local government, stakeholders, companies.	Medium	<p>The Covid19 situation will be under control in the late 2022 and by 2023.</p> <p>Organization of on-line meeting/seminars/conference is widely accepted in wide range of people in Nigeria.</p>	<p>Instead of asking an individual expert, contract with expert institutions as far as possible so that alternate trainer/expert can be provided.</p> <p>Distances are to be maintained and masks will be made obligatory inside the event site. Provide masks and sanitizer at the entrance.</p> <p>In case of travel restrictions continue to be in place, in-person events will be replaced by on-line events. UNIDO is fully compliant with UNDSS instructions, rules and regulations and follows all required security procedures to ensure the safety of project personnel.</p>
Adoption of Guideline	Stakeholders, including national/local governments and municipalities, would not incorporate the actions described in Guideline into their actions.	Beneficiaries/ counterparts	Low	Stakeholders, including national/local governments and municipalities, would make use of the actions described in Guideline.	<p>Continuous consultations with stakeholders to promote understandings.</p> <p>Adoption of inclusive approach to cultivate strong ownership of Guideline.</p>
Trained trainers	Trained trainers will leave the institutions/consultation industry.	Beneficiaries/ counterparts	Low	Trained trainers will continue to stay in the institutions/to provide company consultation service.	Selection of the right, committed personnel/experts and right institutions.
Trained workers/ companies	Trained workers /companies would not apply their trained skills into practices.	Beneficiaries	Low	Trained workers will apply their trained skills into practices.	Continuous consultations with stakeholders for follow-up checks and maintaining the involvement in plastic actions.