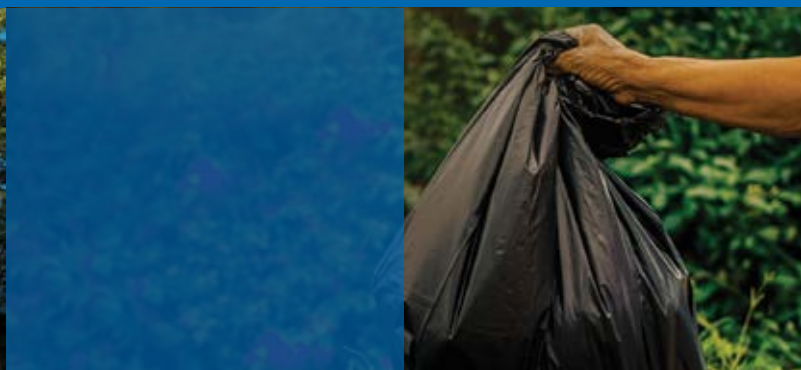




Policy & Programme Recommendations

Ghana Integrated Waste Management Fair and Follow Up Technical Meeting



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October 2021

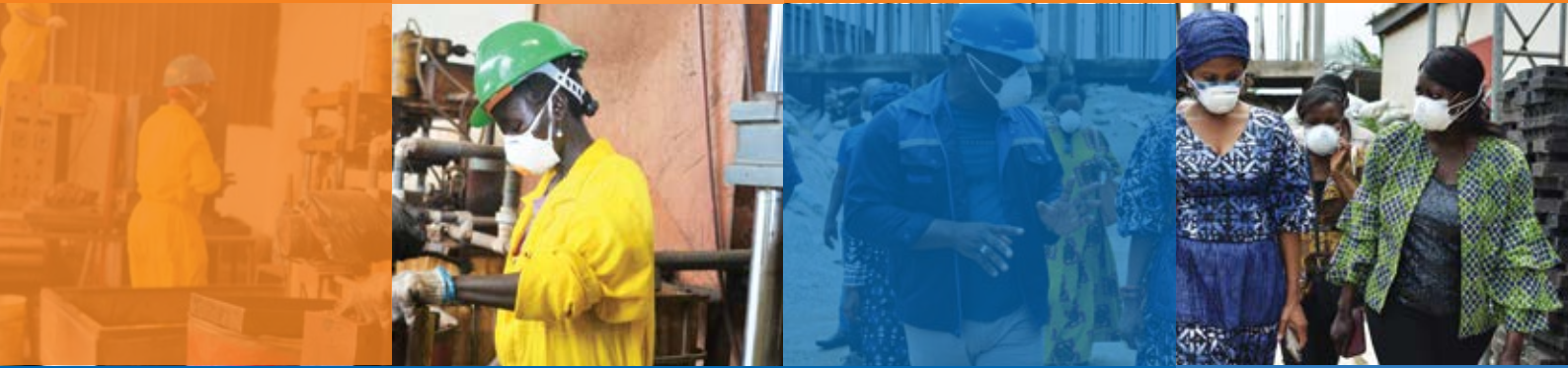




Ghana

Contents

Executive Summary	7
Acronyms	9
1. Introduction	11
1.1 Rationale	11
1.2 Overall Report Structure	11
1.3 Objectives	12
2. Policy Recommendations	12
2.1 Green Financing Policy Recommendations	12
Specific Policy Actions on Green Financing Mechanisms	13
2.2 Data and Use for Waste Management Solutions Policy Recommendations	15
Specific Policy Actions on Data and Use for Waste Management Solutions	15
2.3 Scaling Up Solutions for Waste Management to Achieve Impact of Scale Policy Recommendations	16
Specific Policy Actions on Scaling Up Solutions for Waste Management to Achieve Impact of Scale	17
2.4 Development Partners and Donor Support for Interventions in the Waste Management Value Chain Recommendations	19
3. Programme Recommendations	20
3.1 Project Transition Broad Recommendations	20
3.2 Green Financing Recommendations	21
Proposed Actions on Green Financing Mechanism	22
3.3 Data and Use for Waste Management Solutions Recommendations	22
Proposed Actions on Data Use for Waste Management Solutions	23
3.4 Scaling Up Solutions for Waste Management to Achieve Impact of Scale Recommendations	24
Proposed Actions on Scaling Up Solutions for Waste Management to Achieve Impact of Scale Programme Recommendations	24
Conclusion	25



Ghana

Executive Summary

This report covers the discussions and recommendations shared by stakeholders and actors within the waste management space in Ghana during the Ghana Integrated Waste Management Fair 2021, or “Ghana Waste Fair 2021”. The fair brought together over 50 exhibitors and 150 participants to showcase and explore innovative solutions with different materials in transition along the waste management value chain.

The outcomes of these discussions formed the basis for a two-day technical working group meeting with the objective of ground-truthing the decisions to arrive at clear, actionable policy recommendations. These recommendations would then be shared with identified policy makers for action. Key identified stakeholders also made programmatic proposals to support the next phase of the project. These are grouped under policy recommendations and proposed programme actions.

Policy Recommendations: These recommendations leverage key lessons and messaging from the recently held Ghana Waste Fair 2021 and actions related to building a vibrant and sustained waste management ecosystem in Ghana. At the end of the process, a total of 17 key recommendations were agreed to be used as the basis for policy level engagement with government and other relevant stakeholders to co-design and / or strengthen institutional structures to support innovative solutions for waste management in Ghana. These are:

Policy recommendations: green financing policy

1. Develop robust data infrastructure for green financing instruments
2. Promulgate deliberate and unambiguous policy interventions
3. Develop an ecosystem to support green business
4. Create awareness and educate industry players on green financing
5. Invest in research and development in green financing

Policy recommendations: data and use for waste management solutions

1. Leverage technology for data collection on waste
2. Enhance the proper collection and analysis of waste data
3. Utilize policy machinery to create demand for specialized products
4. Invest in research and development

Policy recommendations: scaling up solutions for waste management to achieve impact of scale

1. Reduce tax and create tax incentives for waste innovators
2. Strengthen the interactions between policy makers and innovators
3. Enact specific policies that support an enabling ecosystem for waste and recycling innovators to thrive
4. Ensure coordination at the highest levels of policy advocacy in relation to the waste sector
5. Invest in industrial hubs and technical training

Recommendations for development partners and donor support for interventions in the waste management value chain

1. There is a need to ensure that circular economy interventions are inclusive and sustainable
2. Project models should be viable beyond overseas development assistance support. In addition, there is the need to employ transparent communication strategies within a multi stakeholder framework



Proposed programme actions: Based on best practice and stakeholder lessons learned, the report also proposes recommendations for continuing project implementation and project closeout. Most importantly, a total of 25 proposed actions, which may be of interest to project owners and developers. They are:

Proposed actions: green financing

1. Institute annual dialogue series with state and government officials to clarify issues on definitions
2. Advocate for the development of a comprehensive green finance action plan to include national green finance policy with a national advocacy strategy
3. Continue to Create awareness on green finance instruments available through information channels such as newsletters and social media
4. Tailor project concepts to suit various stages of business. This will include criteria for selection of businesses for incubation or support
5. Advocate for regulatory agencies such as the Registrar-general to review compliance measures for start-ups and small, and medium-sized enterprises within the green industry
6. Update the existing Sustainable Development Goals (SDGs) investment maps facilitated by UNDP in collaboration with the Ghana Investment Promotion Centre to include waste management derivatives including carbon financing related projects from the waste management sector. This will feed into the national Carbon Finance Mechanism

Proposed actions: data and use for waste management solutions

1. Support the implementation of the National Plastics Action Roadmap
2. Pilot the roll out of the Ghana Statistical Services-led data quality assurance toolkit through engagement with the waste management sector
3. Carry out a national survey on the general baseline data for an inventory on carbon footprint generation rate/ capacity in CO₂e. (This will complement existing data in the forestry sector under REDD+, agricultural waste emission and landfill waste)
4. Actively engage the use of baseline data to measure addition to carbon footprint annually
5. Expand the pilot project that tested the use of mobile phone applications through the CleanApp in four districts nationwide
6. Link CleanApp data collected to national data sets from the Ghana Statistical Services and link to specific SDG indicators on health and sanitation
7. Finalise the waste app and make it fully accessible and operational

Proposed actions: scaling up solutions for waste management to achieve impact of scale programme recommendations

1. Develop innovative challenge funding opportunities to support innovation with start-ups
2. Create a fund to support research and development of new ideas in academic institutions
3. Make available business advisory services, mentorship programmes and build business capacity of start-ups and innovators
4. Conduct assessment of certification, licensing challenges and bottlenecks faced by innovators
5. Proactively begin the process of creating policy guidance to formulate principles, criteria and standards for waste management
6. Engage regulatory, certification and licensing bodies to review and revise bottlenecks
7. Advocate for tax exceptions, and other tax incentives for green start ups
8. Broker public-private partnerships for the creation of industrial hubs in Accra and Tema to support value addition
9. Advocate for state support, development of physical infrastructure and investment into such waste recycling industrial hubs
10. Develop training curriculum for middle level technical staff to understand the use of machinery in waste management operations
11. Create incentives through the COTVET or technical universities to institute courses in technical machine operations for green industry
12. Strategically support the increase in the number of opportunities for retooling, skills development and upgrade of certificated skills for middle management technical teams and operators

Acronyms

ACEA	Africa Circular Economy Alliance
ACFTA	Africa Continental Free Trade Agreement
EPA	Environmental Protection Agency
ESPA	Environmental Services Providers Association
ESRM	Environmental and Social Risk Management
GSS	Ghana Statistical Service
GEF	Global Environmental Facility
GNPAP	Ghana National Plastic Action Partnership
MESTI	Ministry of Environment, Science, Technology and Innovation
MLGRD	Ministry of Local Government and Rural Development
MOF	Ministry of Finance
MSWR	Ministry of Sanitation and Water Resources
NDC	Nationally Determined Contributions
SDG	Sustainable Development Goals
TCCF	The Coca-Cola Foundation
UNDP	United Nations Development Programme
WRIC	Waste Recovery Innovation Challenge



Ghana

1. Introduction

This report is a culmination of discussions that took place at the Ghana Integrated Waste Management Fair 2021, or “Ghana Waste Fair 2021”, organized by UNDP, within the framework of the Plastic Waste Recovery for a Circular Green Economy project and in partnership with the Ghana National Plastic Action Partnership (GNPAP) and the Ministry of Environment, Science, Technology and Innovation (MESTI). The Ghana Waste Fair brought together over 50 exhibitors and 150 participants to showcase and explore innovative solutions with different materials in transition along the waste management value chain. It also provided space for dialogue on key thematic areas of interest to stakeholders in the waste management arena. These thematic areas are:

1. Green financing mechanisms
2. Data and use for waste management solutions
3. Scaling up of innovative solutions for waste management to achieve impact of scale policy
4. Development Partners and donors support for interventions in the waste management value chain

1.1 Rationale

Since the development of the Sustainable Development Goals (SDGs) framework, Ghana has identified the numerous policy gaps, technical challenges and programmatic issues within the waste management industry that have stunted the growth of viable value chains within the ecosystem. These include both internal and external factors that have mitigated against the expansion of the industry.

This paper leverages the key lessons and messaging from the Ghana Waste Fair in particular and draws inspiration from ongoing advocacy by the Waste Recovery Platform to propose concrete policy and programmatic recommendations and actions related to building the waste management ecosystem including plastics. This will be the basis for policy level engagement with government and other relevant stakeholders to co-design and/or strengthen institutional structures to support green businesses.

1.2 Overall Report Structure

This report is in two parts.

The first part of this two-part report provides policy recommendations under the four thematic areas noted previously. These policy recommendations are for the immediate attention of the Government of Ghana and the various identified ministries and agencies responsible for supporting policy implementation in the waste management sector.

They are in direct response to a call by the Minister for Environment, Science, Technology and Innovation to UNDP, as organizers of the Ghana Waste Fair, to take the opportunity to meet with the MESTI to present and discuss the recommendations and proposals from the fair for uptake by the ministry. These policy recommendations will also be shared with other relevant ministries, departments and agencies including the Ministry of Water and Sanitation; the Ministry of Local Government, Decentralization and Rural Development; the Accra Metropolitan Assembly, and others.

This is the value proposition to policy makers to make the switch and introduce financial and other market-based incentives to enhance the ecosystem for sustainable businesses in the plastic waste management sector.



The second part of this report provides programmatic recommendations, also organized under the four thematic areas, that suggest possible and plausible areas of focus for the next phase of UNDP-led support for the Waste Recovery Platform initiative. These are for the immediate attention of ecosystem builders who may be interested in innovations or continuing with existing projects within the waste management space. These are also for the special attention of UNDP in developing comprehensive programmes for the continuation of the support for the Waste Recovery Platform initiative and may inform other complementary programme design and development.

1.3 Objectives

1. Present a key set of policy recommendations with clear timelines to identified policy makers to support the creation of an enabling ecosystem for the development of the waste management sub sector
2. Present identified programmatic actions for implementation, with clear timelines, responsibility, and estimated costs for implementation, drawing on areas of collaboration and leveraging of resources and technical expertise for implementation.

This report was developed by a technical working group comprised of all resource persons and moderators that attended the Ghana Waste Fair 2021, in addition to key innovators from the innovation challenge and project coordinators from UNDP.

2. Policy Recommendations

This section provides the broad policy recommendations for the uptake of policy makers interested in the waste management and waste recovery space. The policy recommendations are structured under the four thematic areas of (i) green financing mechanisms, (ii) data and use for waste management solutions and (iii) scaling up of innovative solutions for waste management to achieve impact of scale policy, and (iv) development partners and donor support for interventions in the waste management value chain.

Policy recommendations under each thematic area are structured by first providing the broad policy recommendation and then further detailing this in an action plan template where recommendations are captured under action points and corresponding timelines for action and responsible institutions. Recommendations under the fourth thematic area include a list of suggestions for the attention of donors to improve future interventions and support within the local space.

2.1 Green Financing Policy Recommendations

The Platform acknowledges the role of the MESTI in policymaking on building a sustainable ecosystem for waste management as a bankable resource and recognizing the peculiar challenges confronting actors in the waste management value chain, calls on the Government of Ghana through the MESTI to actively develop a supportive ecosystem that takes into consideration all parts of the value chain- upstream, midstream and downstream. Specifically,

- We congratulate the Government of Ghana for the launch of a country financing road map for the achievement of the SDGs, which includes increasing the stock of green financing in the economy.
- We congratulate the Ministry of Finance for the upcoming US\$2 billion green bond that will address the challenge of lack of financing for green projects in the near future in Ghana.

2.1.1. Specific Policy Actions on Green Financing Mechanisms

NO.	GREEN FINANCING POLICY RECOMMENDATIONS	BY WHOM	WHEN
1.	Robust data infrastructure on green financing instruments Recognizing that there exists an annual financing gap of about US\$5.2 trillion in the small- and medium-sized enterprises (SME) sector and the need to intensify the application of the sustainable banking principles in the financial sector to drive the demand for green financing.		
1.1	It is recommended that a clear definition of green financing be approved within the Ghanaian context, which includes policies and funding to facilitate business activities that focus on sustainable environment. Such a clear definition will support the eligibility of green businesses in accessing appropriate financing instruments	MESTI (lead) MLGRD, MSWR, MOF, EPA, GSS, DPs-UNDP	36 months
1.2	It is recommended that a data value chain on green financing instruments be developed in an accessible and understandable manner. The data infrastructure should share information on where to access green finance instruments in Ghana and the criteria for accessing such instruments, among others. This information should be available for all parts of the waste management value chain (small-, medium- and large-scale operators).	Academia Ashesi Innovation Hub	36 months
1.3	It is proposed that stronger partnerships be created between the various ministries working in the area of waste management and academia in the development of such a robust data base. There exists a pilot automation project funded by The Coca-Cola Foundation and hosted by UNDP, and it is recommended that data on green financing mechanisms be included.	MESTI (lead) MLGRD, MSWR, MOF, EPA, GSS, DPs-UNDP	12 months
2.	Promulgate deliberate and unambiguous policy interventions		
2.1	It is recommended that a wide-ranging green finance action plan be developed to include national green finance policy, and a national advocacy strategy.	MOF	36 months
2.2	It is proposed that US\$2 billion green bond be used to implement the already agreed list of green projects on the Nationally Determined Contributions (NDCs) list as this will improve Ghana's opportunity to gain carbon credits.	MOF, Private Sector: financial institutions Fidelity Bank, SGBank, ECOBANK	6 months
2.3	It is recommended that a National Carbon Finance Mechanism be developed to include waste management.	MESTI	36 Months
2.4	It is further recommended that the Environmental Fiscal Policy document be finalised and approved as this document provides the basis for the establishment of a green fund to compliment locally generated funds with FDI for green interventions.	MOF, MESTI	6 months
2.5	It is also recommended that the upcoming Development Bank of Ghana be used as a vehicle for this fund and that a special unit be created within the Development Bank of Ghana with special emphasis to support SMEs dedicated to working in the waste value chain.	MOF, BOG, MESTI	12 months



3.	Develop an ecosystem to support green business		
3.1	It is requested that the MESTI work actively to finalize processes towards the US\$7 million Global Environmental Facility (GEF) Grant that will develop the infrastructure for a viable circular economy in Ghana.	MESTI	6 months
3.2	It is recommended that a continental approach be taken to ensure the integration of green businesses within the Africa Continental Free Trade Agreement (ACFTA) and the Africa Circular Economy Alliance (ACEA).	MESTI, MOFARI	12 months
3.3	It is requested that deliberate government policies (at the national and local level) be used to motivate the private sector to invest in innovative waste management initiatives. This will include, but not be limited to, a nationwide commitment to green procurement.	MESTI, MOF (green procurement) MLGRD	12 months
3.4	It is further requested that the MESTI engage with statutory regulatory and legal bodies, such as the Registrar-General and the Ghana Revenue Authority to review compliance measures for start-ups and SMEs working in the circular economy.	A-GD, MESTI, MOF, GRA	12 months
3.5	It is strongly recommended that application of the sustainable banking principles which provides the seven guiding principles be enforced to underpin effective Environmental and Social Risk Management (ESRM) Policy framework.	BOG, MOF	6 months
4.	Awareness and education on green financing		
	Recognizing the important role of information sharing and awareness of existing green finance instruments in the waste management space.		
4.1	It is recommended that awareness is created, and community educated on waste management funds are made available, through targeted communication channels.	MESTI, NPAP, Academia	6 Months
4.2	It is specifically further recommended that awareness creation campaigns through the National Plastics Action Plan (NPAP) be implemented at both consumer and producer levels.	MESTI, NPAP	6 months
5.	Research and development in Green Financing		
	Recognizing that the mandate of the MESTI is premised on science, technology and innovation; and acknowledging the role of deepening research and development of the circular economy through ring-fencing of funds to finance green.		
5.1	It is recommended that the planning committee for the Ghana Technology Innovation Week be celebrated annually in November and include members of the ESPA. It is further recommended that green financing be made an integral theme of the week-long celebration.	DPs- Germany and Israel, Korea	Nov 2021

2.2 Data and Use for Waste Management Solutions Policy Recommendations

The Platform acknowledges the role of the Government of Ghana in instituting key data policies. Key among these is the National Plastic Action Roadmap.

- We congratulate the Government of Ghana for the implementation of a pilot project on mobile phone waste reporting in three Districts through the CleanAPP Ghana which showed the power of the Citizen monitors.
- We congratulate the MESTI for development of the National Plastic Action Roadmap and request for inclusion of the Platform and its members in the setting up of the taskforce groups.
- We congratulate the Ghana Statistical Services for the setting up of a data quality framework and request its commitment to support the strategic roll out of the data quality assurance toolkit through engagement with the waste sector.

2.2.1. Specific Policy Actions on Data and Use for Waste Management Solutions

NO.	ACTION	BY WHOM	WHEN
1.	Leverage on technology for data collection on waste		
	Recognizing that in reporting on plastic and solid waste management in Ghana, there are often inconsistent and incomplete data sets on solid waste at subnational levels.		
1.1	It is recommended that the learnings from the pilot mobile phone waste reporting project implemented in Techiman, Ho and Ga East districts be appropriately documented and replicated in other locations.	GSS/ MLGRD	Ongoing
1.2	It is requested that the National Plastic Action Roadmap be rolled out in a systematic and inclusive manner	MESTI	From Dec 2021
2.	Proper collection and analysis of waste data		
	Acknowledging the importance of data collection of waste to inform policy planning, marketing and innovation.		
2.1	It is requested that the state support the proper collection of data to address the challenges of SDG 11.	MSWR, MESTI, GSS	Ongoing
2.2	It is recommended that state actors, especially the Ghana Statistical Service invest adequately in data collection on waste resources through the setting up of structures from local level to national level for data collection, analysis and transmission to support policy planning.	MLGRD, GSS, MESTI, MSWR	ASAP
2.3	It is proposed that a data repository/bank be set up to house all project, policy and relevant data on waste management.	GSS, MOF	ASAP
2.4	It is recommended that the state provide incentives to operators and households to collect and share data. This may include innovations such as linking waste collection to revenue creation or the use of plastic bottles to pay for transport fares.	MSWR, MLGRD	ASAP



<p>2.5 It is further recommended that appropriate incentives be instituted to accelerate data collection on waste. For waste collectors, this will include the monetization of the waste by weighing per kg or tonnage of the plastics recovered and equivalent cash payment made. Others may also benefit through renewals of national health insurance cards. Waste collectors and aggregators should be given the chance to benefit from essential services to encourage them to keep on segregating waste.</p>	<p>MLGRD, all Assemblies</p>	<p>ASAP</p>
<p>3. Use policy machinery to create demand for specialized products</p>		
<p>Recognizing the potential of the market for recycled, upcycled and renewable products and acknowledging that such products have traditionally not been popular within the Ghanaian society.</p>		
<p>3.1 It is proposed that demand is deliberately created for specialised waste, e.g., composting as a key requisite of the Planting for Food and Jobs (PFJ) or the total ban of Styrofoam plates at government functions. We believe this will stimulate the demand for bio friendly products and inspire innovative green products</p>	<p>MLGRD, MESTI, MSWR, MOFA, MOF</p>	<p>ASAP through green procurement</p>
<p>4. Research and Development</p>		
<p>4.1 It is proposed that the MESTI invest strategically into R&D in the use of data for waste management. This will include new tests and analysis of the benefits of implementing new technologies, understanding interconnectedness for new forms of waste management products</p>	<p>MESTI, GSS</p>	<p>24 months</p>

2.3 Scaling Up Solutions for Waste Management to Achieve Impact of Scale Policy Recommendations

Waste innovators note the high import duties on equipment which makes it difficult for start-ups to import to scale and therefore request for the Ministry of Finance and its allied institutions to waive or reduce import duties on waste and sanitation equipment intended for local use. We note that similar tax exemptions exist in other spaces such as waste to energy innovation space and request the lessons learnt from this space be replicated within the waste innovators industry as well.

- We congratulate UNDP and its partners in pushing for innovation through the implementation of two editions of the Waste Recovery Innovation Challenge (WRIC). This has included support to 14 businesses, civil society organizations and research institutions through the disbursement of grants of up to US\$400,000.
- We applaud all start-ups and innovators in the waste management and waste recovery sector for their resilience.
- We congratulate the MESTI for its ongoing partnership with the governments of South Korea, Italy and Israel in the creation and strengthening of an innovation ecosystem through trilateral discussions.

2.3.1. Specific Policy Actions on Scaling Up Solutions for Waste Management to Achieve Impact of Scale

NO.	ACTION	BY WHOM	WHEN
1.	Reduction of tax and creation of tax incentives for waste innovators		
1.1	It is recommended that the Tax Incentive Policy document submitted by ESPA to the Ministry of Finance in 2020 be discussed and approved for implementation within the shortest possible time. The ESPA team is available to meet on said proposal.	MOF, MESTI, NPAP	ASAP
1.2	The Platform and its members are available and willing to support a process of developing an inclusive framework for accessing incentives that includes criteria for eligibility, a monitoring framework and a joint taskforce to ensure compliance with implementation. The Platform is willing to regulate members' access to such incentives in a fair and inclusive manner.	MESTI, MOF, MOTI	ASAP
1.3	It is proposed that specific equipment unique to the waste management space such as garbage trucks be tax free to incentivize and reduce cost.	MOF, MESTI, MLGRD	ASAP
1.4	It is recommended that clear guidelines be shared on which ministry is responsible for tax incentives in the waste management space. The industry currently sits within three ministries, which makes issues of collaboration unclear: MESTI with a mandate for waste, MLGRD with a mandate for solid waste and Ministry of Sanitation with a mandate for plastics.	MESTI, MLGRD, MSWR	ASAP
2.	Strengthen the interactions between policy makers and innovators		
2.1	It is requested that spaces be created for frequent interaction between policy makers and waste innovators. In this regard, we request that the Platform be included in the planning and implementation of the upcoming Ghana Technology Innovation Week Celebrations slated for November 2021.	MESTI, Office of the Vice President	ASAP
2.2	It is recommended that a coordination agency on innovation be created within MESTI, the ministry with the mandate on innovation to ensure alignment with national development goals and the SDGs. We believe such an agency will be key in providing funding for R&D on innovation within the waste management sector.	MESTI	ASAP
2.3	It is recommended that the capacity of mid-level technicians be built to support automation and mechanization in specialized sanitation deliverables through the creation of certificated training programmes at vocational institutions and technical universities.	COTVET/TVET, MOE	ASAP
2.4	It is recommended that appropriate business advisory services and mentorship programmes be developed as part of the Government's Ghana Enterprises Agency agenda to build the business acumen of start-ups.	MOTI, NBSSI	ASAP



2.5	It is recommended that a system of mapping out innovators and innovations and showcasing innovations through government channels, fairs, etc be supported.	MESTI	36 months
3.	Enact specific policies that support an enabling ecosystem for waste and recycling innovators to thrive.		
	Recognizing the need for an enabling ecosystem that includes the development of a comprehensive waste processing policy document.		
3.1	It is recommended that a national policy on source segregation be developed that inculcates the habit of waste segregation in citizens and supports the value chain processes needed to utilise segregated waste.	MESTI, MSWR, MLGRD	12 months
3.2	It is further recommended that green procurement principles be mainstreamed into existing national procurement instruments and therefore request for the development of a Green Procurement mainstreaming Policy, which includes tax incentives for compliance and to builds innovation within the space.	MOF, MLGRD,	ASAP
3.3	It is strongly recommended that a dialogue on tax incentives in the waste sector be convened based on the ESPA Tax incentives policy paper shared with the Ministry of Finance.	MOF, MESTI	6 months
3.4	It is proposed that a dialogue be held with state agencies such as the Registrar General’s Department and the Ghana Standards Authority to revise licensing and certification processes for companies and practitioners in the waste management value chain, facilitated by MESTI. This will reduce the high cost of experimentation, prototyping and testing of products for innovators.	A-G, GSA, FDB	6 months
4.	Ensure coordination at the highest levels of policy advocacy in relation to the waste sector.		
	We note that the current structure of government and governance puts waste management issues under three very distinct ministries: MESTI with a mandate for waste, MLGRD with a mandate for solid waste and the Ministry of Sanitation and Water with a mandate for plastics. This creates challenges of coordination, collaboration and institutional linkages.		
4.1	It is recommended that a structured coordination system between the stated agencies that streamlines polices and implementation of issues within the wider waste management sector be created.	MESTI, MLGRD, MSWR	ASAP
5.	Investment in industrial hubs and technical training		
	Recognizing the need for the creation of waste recycling industrial hubs that bring together players in the value chain, which will reduce cost of business operations and lower the cost of inputs especially water and electricity; and recognizing that such an industrial hub will incorporate resource efficiency principle and standards in the operation.		

<p>5.1 It is recommended that the Government delineate strategic locations as industrial hubs for waste recovery and recycling innovators. Such hubs could be through a public-private partnership or purely government led. The Social Security and National Insurance Trust could be support for such an endeavour.</p>	MESTI	36 months
<p>5.2 It is recommended that the Government support and leverage strategic partnerships with patient capital to support such industrial hubs.</p>	MESTI	36 months

2.4 Development Partners and Donor Support for Interventions in the Waste Management Value Chain Recommendations

Development partners and donors continue to play an important part in the development of the ecosystem and in the creation of institutional structures that support innovation across the value chain.

Collaboration with partners is crucial because it helps to combine resources, avoid double financing and conflicts of different activities in the same region. Also, sharing information and knowledge prevents the duplication of work and research.

The following are recommendations, from the point of view of industry players who interact on a daily basis with donors and who are the beneficiaries of donor-level pro-recycling policies. These recommendations are given in good faith, recognizing the immense role that both traditional and non-traditional donors have leveraged their resources to catalyse the sectors growth.

Recommendation 1: There is need to ensure that interventions on circular economy are inclusive and sustainable.

1. Improve coordination and linkages among development partners and donors; create a hub or database of all development partners and donors providing green financing or business advise support.
2. Develop a curriculum to guide development partner support to SMEs to mitigate duplication of support/financing in the ecosystem.
3. Intensify stakeholder engagement right from inception to the end of the project timeline.
4. Develop a set of risk factors and associated mitigation efforts.
5. Viability and sustainability of business models should be made a requirement at the inception phase of projects.
6. Improve coordination and linkages among development partners and donors; create a hub or database of all development partners and donors providing green financing or business development advise support.
7. Develop a curriculum to guide for development partner support to SMEs to mitigate duplication of support and financing in the ecosystem.
8. Develop a rigorous plan and M&E schedule to assess the project during and after the grant phase.

Recommendation 2: Project models should be viable beyond ODAs. In addition, there is the need to employ transparent communication strategies within a multi stakeholder framework.

1. Identify existing linkages.
2. Include adequate local content.
3. Identify other local resources that can continue with the project beyond their implementation stage.
4. Identify local actors who can continue projects.
5. Include lifeline support to ensure requisite ministries or local entities can continue executing project.
6. Develop a succession plan as a mandatory aspect of project implementation.



3. Programme Recommendations

The first part of this two-part section provides the broad recommendation for project implementation. This focuses on project management and project closeout processes. The second part focuses on direct recommendations on thematic areas that may be of interest to project owners and developers.

3.1 Project Transition Broad Recommendations

In 2018, UNDP, under the Plastic Waste Recovery for a Circular Green Economy in Ghana Project, facilitated the establishment of the Waste Recovery Platform which brought interventions in the waste management value chain in contact with the state and private sector. Since then, the project has realized several achievements. Prominent among them are:

- Organized two editions of the Waste Recycling Innovative Challenge
- Provided US\$400K in grants to innovators
- Organized the first-ever Ghana Waste Fair
- Engaged with government officials, policy makers and academia on resolving the challenges of waste in Ghana

As the first phase of the project closes, it is recommended that project implementers take note of the following in the design of the new phase.

1. Manage project transition

It is important that the transition period between phase 1 and phase 2 be managed well to ensure the gains of the first phase are not lost during this period. Project transition management includes ensuring the interest of stakeholders are kept through regular information sharing sessions and other low-cost activities.

2. End of phase evaluation

It is recommended that implementing bodies, led by UNDP, commission an evaluation of the project using the outcome harvesting methodology. Outcome harvesting assesses the outcomes that the project contributed to and generates potential outcomes that will be used to get an overall view of what happened during project implementation. This is suitable for this project as the project was designed as an adaptable process of behavioural change.

It is proposed that the end of phase evaluation focus on the extent to which the project's activities and advocacy has resulted in a positive change to promote a circular economy in Ghana – and to the extent that this has resulted in new innovations and the creation of the ecosystem. A two-year period may not be enough time to ascertain a sizeable creation of jobs or economic growth. It is believed that the project may require further implementation to achieve its overall desired objectives.

It will also be important to evaluate the project against indicators of relevance, coherence, effectiveness, efficiency, inclusion, value for money, impact and sustainability.

3. Lessons learning

Lessons learning is an important part of all project closeout processes. It is recommended that UNDP and partners hold a lessons learning event with implementers and other relevant stakeholders in the waste management sector to harvest the key strategies that resulted in success and identified challenges that the project faced. These lessons will then form the basis for refining strategies, processes and activities within the next phase.

4. Project development

The next phase of project development will be based on the recommendations from the processes listed previously. The following principles should inform project design, implementation strategy and expected outcomes

- **Leverages piloting projects implemented.** Based on pilots implemented under this phase, UNDP has learned, on a smaller scale, the right ways to implement projects. These include the Waste Recycling Innovation Challenge, the Ghana Waste Fair and the Data Use projects tested under the initiative. These pilots provide an impetus to replicate success across other relevant communities.
- **Strengthens the Waste Recovery Platform and build this into a social movement for change in Ghana.** The Waste Recovery Platform has built a strong foundation among stakeholders in the waste management value chain. A dynamic social movement on waste recovery in Ghana will ensure the achievement of widescale behavioural change in Ghana.
- **Links to national programmes for sustainability.** The next phase of the project must be designed within the context of national sustainable development priorities, including achieving the objectives of the Government's Coordinated Programme of Economic and Social Development Policies (2017-2024): *National Medium-Term Development Framework: Agenda for Jobs: Creating equal opportunities for all (2018–2021)*, *AU Agenda 2063 and the Sustainable Development Goals*.

3.2 Green Financing Recommendations

Objective (iv) of the TCCF Grant primarily targets creating and strengthening an institutional framework to support the establishment of a vibrant business ecosystem for the waste management sector to thrive. The focus is on the fiscal and regulatory frameworks that incentivize the growth of the ecosystem – such as action by relevant and key government MDAs to pass the plastic waste policy and provide other financial and economic incentives for businesses in the plastic waste recovery value chain to thrive. The Plastic Waste Policy document has been passed during the project implementation period. Pillar 4 responds to objective (iv) of the current project.

This includes support and advocacy on green financing mechanisms. There exist several financial instruments locally to support innovators in the green space. Some of these include the Ghana Climate Venture Facility, the Ghana Social Bond, the Green Climate Fund and the Global Environmental Facility. It is also valuable to note that several local banks also have funds that support green businesses such as Calbank with their NDR Fund.

At the programme level, it is recommended that information on availability, accessibility and eligibility for green financing be made easily available.



3.2.1. Proposed Actions on Green Financing Mechanism

NO.	CHALLENGE	PROPOSED ACTION	BY WHOM	TIMELINE	BUDGET
1.	Lack of clarity on what green financing on waste management is at the policy level.	1.1 Institute an ongoing annual dialogue series with state and government officials to clarify definitional issues.	DPs, led by UNDP	6-12 months	Dialogue meetings and follow ups (US\$5K)
		1.2 Institute an ongoing annual dialogue series with state and government officials to clarify definitional issues.	NDP through ESPA and WRP	6-12 months	Consultancy engagement (US\$250K)
2.	Lack of understanding on what green financing entails for formal institutions and what support systems need to be put in place for Ghana to be green finance ready	2.1 Continue to Create awareness on green finance instruments available through information channels such as newsletters and social media.	Waste Recovery Platform (WRP)	0-36 months	Nationwide Sensitization and marketing campaign (US\$ 500K)
		2.2 Tailor project concepts to suit various stages of business. This will include criteria for selection of businesses for incubation or support.	Project Initiators, donors interested in the WR, SNV, etc.	36 months	Specific expertise at DP level
		2.3 Advocate for regulatory agencies such as the Registrar-General to review compliance measures for start-ups and SMEs within the green industry.	UNDP through ESPA and WRP	36 months	US\$500K
		2.4 Update the existing SDGs investment platform to include waste management derivatives including carbon financing related projects from the waste management sector. This will feed into the national Carbon Finance Mechanism.	UNDP	36 months	US\$50K

3.3 Data and Use for Waste Management Solutions Recommendations

The availability of and access to and proper utilization of data within the waste management industry is a mainstream issue that is relevant to the overall success of the project. The TCCF Project has put down key foundational steps that showcase the possibility of data in achieving the overall objective of the project.

Within the project implementation period, two innovative data projects have been implemented with a high level of success.

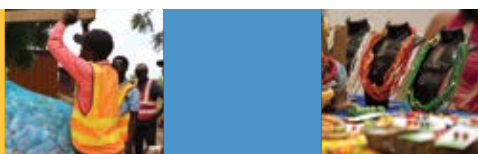
- The use in four districts of a mobile app for waste reporting
- The development of a website for showcasing all waste sites
- The NPAP roadmap

It is recommended that the next phase of the project focuses on producing data in support of the achievement of the SDGs in the areas of:

- Filling critical data gaps
- Strengthening the use of data
- Strengthening the data ecosystem

3.3.1. Proposed Actions on Data Use for Waste Management Solutions

NO.	CHALLENGE	PROPOSED ACTION	BY WHOM	TIMELINE	BUDGET
1.	In reporting on waste management in Ghana, there are often inconsistent and incomplete data sets on waste at subnational levels.	1.1 Support the implementation of the National Plastics Action Roadmap.	UNDP, Implementing partners	36 months	US\$ 250K
		1.2 Pilot the roll out of the GSS-led data quality assurance toolkit through engagement with the waste management sector.	WRC to identify potential pilot partners	Dec 2021	US\$1M for 4 pilots of US\$250K each for 12 months
		1.3 Carry out a national survey on the general baseline data for an inventory on carbon footprint generation rate/capacity in CO ₂ e. (this will complement existing data in the forestry sector under REDD+, agricultural waste emission and landfill waste).	UNDP in consultation with MESTI	12 months	
		1.4 Actively engage in the use of baseline data to measure addition to carbon footprint annually.	UNDP in consultation with MESTI/ EPA	36 months	
2.	Some administrative data exist on estimated quantity of waste collected but not on quantity of waste generated especially at municipal, metropolitan and district levels.	2.1 Expand the pilot project that tested the use of mobile phone applications through the CleanApp in four districts nationwide.	UNDP/ GSS	36 months	
		2.2 Link CleanAPP data collected to national data sets in the Ghana Statistical Services and link to specific SDG indicators on health and sanitation.	UNDP through GSS	12 months	
		2.3 Finalize the waste app and make it fully accessible and operational.	UNDP/ WRP/ ESPA	6 months	



3.4 Scaling Up Solutions for Waste Management to Achieve Impact of Scale Recommendations

The promotion of the circular economy in the waste management sector is incomplete without targeted, specific focus and support to budding industry players. The TCCF Project focused substantially and significantly in this area through strategies that sought to unearth innovative solutions through the waste recovery innovation challenge, amplify the voice of practitioners on support requirements to build the ecosystem and create linkages, networks and interactions between practitioners and within ecosystem enablers such as financial institutions.

In the next phase of the project, it is highly recommended that this very important objective of unearthing and scaling up sustainable innovations be continued. It is recommended that the highly successful innovation challenge be continued. For UNDP and other donors, the key challenge of duplication within the industry support space must be effectively tackled. Recommendations include the creation of a basket fund, hosted by UNDP to support ecosystem users. Alternatively, the creation of a platform among donors interested in investing in the waste recovery space as an information sharing and lessons learning hub can be considered. UNDP continues to be in pole position to coordinate this platform and link results into the broader SDG 11 outcomes.

3.4.1. Proposed Actions on Scaling Up Solutions for Waste Management to Achieve Impact of Scale Programme Recommendations

NO.	CHALLENGE	PROPOSED ACTION	BY WHOM	TIMELINE	BUDGET
1.	Research and development in waste materials recovery and recycling should be promoted.	1.1 Develop innovative challenge funding pots to support innovation with start-ups.	UNDP, DPs		
		1.2 Create a fund to support research and development of new ideas in academic institutions	MESTI, donors		
		1.3 Make available business advisory services, mentorship programmes and build business capacity of start-ups and innovators.	UNDP, donors		
2.	Need to lessen the cumbersome process of obtaining licenses and certification for companies and practitioners in the waste management value chain	2.1 Conduct assessment of certification, licensing challenges and bottlenecks faced by innovators.	UNDP		
		2.2 Proactively begin the process of creating policy Guidance to formulate principles, criteria and standards for waste management.	UNDP		
		2.3 Engage regulatory, certification and licensing bodies to review and revise bottlenecks.	UNDP		
		2.4 Advocate for tax exceptions, tax holidays for green start-ups.	ESPA/WRP		

3.	There is need for the creation of waste recycling industrial hubs, while incorporating resource efficiency principles and standards in the operation of such hubs	3.1 Broker public-private partnerships for the creation of industrial hubs in Accra and Tema to support value addition.	UNDP	
		3.2 Advocate for state support, development of physical infrastructure and investment into such waste recycling industrial hubs	UNDP	1 hub per MMDCEs Metro: 3 million Municipal- 2 million (hosts)
4.	Lack of training for technicians and operators	4.1 Develop training curriculum for middle level technical staff to understand the use of machinery.	COTVET	
		4.2 Create incentives through the COTVET or technical Universities to institute courses in technical machine operations for green industry.	COTVET/ academic institutes	
		4.3 Strategically support an increase in the number of opportunities for retooling, skills development and upgrade of certificated skills for middle management technical teams and operators.	COTVET/ academic institutes	

Conclusion

The Ghana Waste Fair 2021 follow-up technical meeting was organized with panellist and moderators of the different sessions of the fair as experts to further digest, discuss and draw up concrete policy recommendations from the proposals made at the fair, and proffer concrete follow up actions.

The workshop brought together experts in the field of waste management recovery to build a collective understanding of actionable follow-up actions. Throughout the workshop, participants discussed the recommendations and proposals from the waste fair and prioritized the recommendations that were practical and actionable. Participants shared insights on policy actions for government engagement and programme interventions. Finally, they shared their expectations and recommendations for the next waste fair.

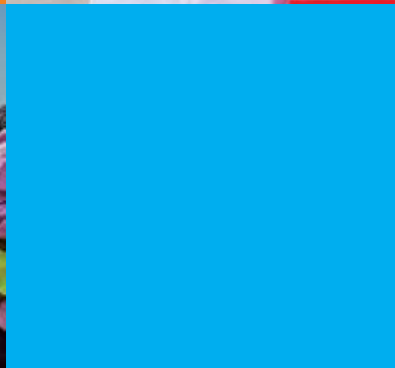
The activities were executed successfully. The participants were very passionate and motivated about the subject. Participants willingly shared their lessons and experiences during the workshop. It is hoped the engagement will still be sustained in the discussions that take the policy recommendations forward.

Credits

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