

Financing Transformative Action in the Waste Sector

Creating enabling conditions through regional roadmaps and city action plans.

Context

- Open burning is an outcome of a deficient waste management system and has catastrophic effects on human health and the environment.
- It is estimated that **up to 90%** of waste in African countries is dumped or openly burned¹.
- **Up to 80%** of the municipal solid waste generated in African cities is recyclable and could be worth US\$8 billion per year if kept in a circular economy.
- In 2020, the global direct cost of waste management was estimated at \$361 billion, this includes the hidden costs of pollution, poor health and climate change².
 - Without urgent action on waste management, by 2050, this is expected to rise to \$640.3 billion annually².
- Waste is critically underfinanced, **with only 0.4%** of overseas development finance used towards solid waste management projects from 2018-2021³

Key issues for financing the waste sector

National policies and regulations

- Demand at national and municipal levels is crucial for initiating investment in sustainable waste management. However, waste management often competes with other developmental interests for limited public funding. Financing institutions vary their support based on the economic classification, market development, and vulnerability of countries.
- There is a significant public financing gap, exacerbated by a disconnect between local government needs and national government prioritisation.

Financing instruments for city pilots

- City pilot projects often require sub-national financing for project preparation and technical assistance. However, issues related to "bankability" must be addressed for investors to engage.
- Increasingly, large scale financing is being channelled towards inappropriate solutions, such as waste to energy plants, that are then limited in their operational capacity.
- There is limited available finance for small- to medium- sized investments needed to improve infrastructure.

Commercially viable projects

- Municipalities struggle to generate necessary fee collection rates due to poor service, creating a cycle of inadequate supply of commercially viable waste

¹Engineering X is an international collaboration founded by the Royal Academy of Engineering and Lloyd's Registered Foundation.

² United Nations Environment Programme (2024). Global Waste Management Outlook 2024: Beyond an age of waste – Turning rubbish into a resource. Nairobi. <https://wedocs.unep.org/20.500.11822/44939>

³ Ecopsis (2024). Scoping of Funders to Eliminate Open Burning of Solid Waste (unpublished).

management projects. Investing in commercially viable and sustainable businesses is essential.

- Feasibility studies for city pilots must be founded on robust economic analysis to support the business case for investment.

Engaging the private sector

- The private sector's role in climate and developmental objectives has been limited due to perceived risks.
- Developing public-private partnerships and sector-specific bonds can enhance private sector engagement in waste management.

Engaging the informal sector

- Informal waste collectors play a key role in waste management. Improving financial literacy and establishing cooperative funding entities can provide low-interest credit to support informal waste workers.
- Governments can also establish national funds using fees collected through extended producer responsibility (EPR) approaches.

Opportunities for climate finance

- Large disbursements of climate finance are currently directed to other sectors. Given the greenhouse gas (GHG) emissions associated with open burning, the waste sector should be eligible for scaled-up financing.
- Robust data collection and local community education are crucial to increasing demand for solid waste management and accessing climate finance⁴.

Transformative Action in the Waste Sector - Africa roadmap

The AMCEN Resolution

The 18th regular session of the African Ministerial Conference on Environment (AMCEN) that was held in Dakar, Senegal in September 2022, passed a resolution on the elimination of open waste burning by 2040 based on the background work that was done by the United Nations High Level Champions and Engineering X, a growing collaboration founded by the Royal Academy of Engineering and Lloyd's Register Foundation.

The resolution:

- a. urged Member States to take the necessary policy and legislative action for the elimination of open dumping and burning of waste by addressing the systemic deficiencies that exist within waste management systems in Africa.
- b. called on countries to promote the implementation of an integrated solid waste management system with a particular focus on promoting circularity that facilitate the reuse of waste as a secondary resource input.
- c. encouraged Member States, local authorities, civil society actors, community groups, the private sector and development partners to join the Multi Stakeholder Partnership (MSP) in eliminating open burning of waste and the dumping of waste.

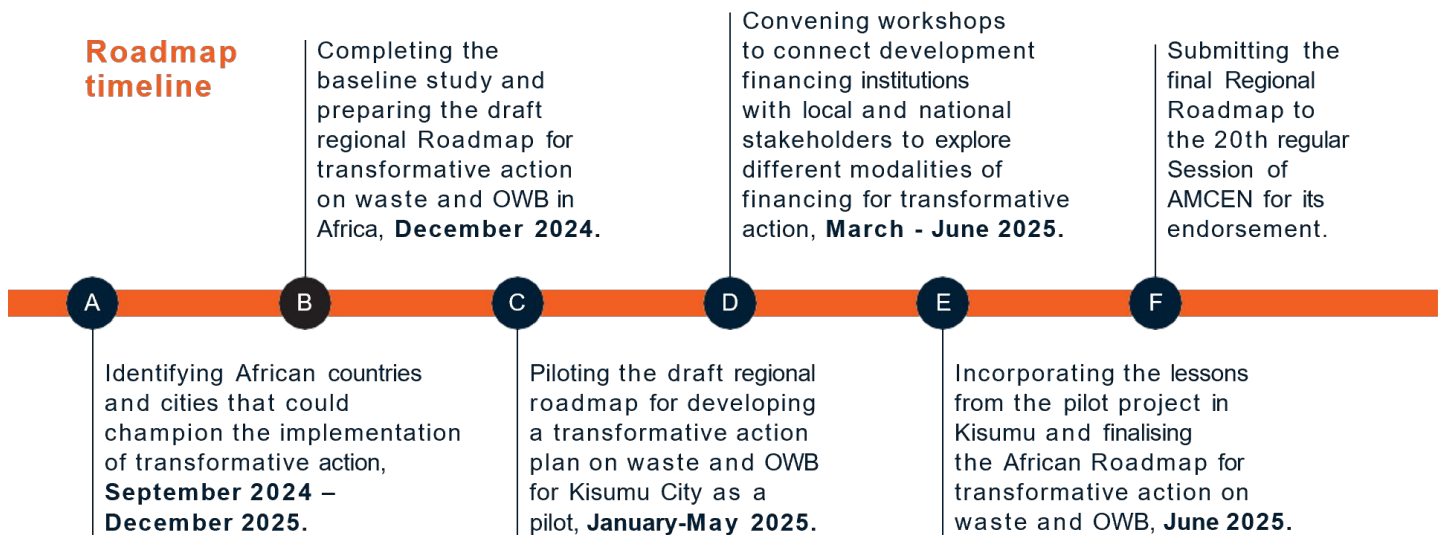
⁴ Ecopsis (2024). Scoping of Funders to Eliminate Open Burning of Solid Waste (unpublished).

- d. requested development partners to support African countries to reduce methane and black carbon emissions associated with waste with a focus on reducing the open burning of waste.

Implementation of the resolution

The following key actions were taken to facilitate the implementation of the AMCEN resolution on open waste burning:

- a. The Multi Stakeholder Partnership for the elimination of open waste burning from Africa established under the co-chairmanship of AMCEN Secretariat and the United Cities and Local Governments (UCLG) Secretariat was launched in October 2022 on the side of COP 27 in Sharma el Sheikh, Egypt by AMCEN President.
- b. Engineering X opened a global funding call for projects tackling open burning of waste is funding six projects on ending open burning in Africa worth £180,000.
- c. Engineering X, in consortium with Practical Action, UN Habitat, ISWA and IGES developed the project on 'Transformative Action in the waste sector' that is supported by the Climate and Clean Air Coalition (CCAC).
- d. A baseline study that includes a regional survey and stakeholder consultations in selected countries has been carried out on the state of waste management and open waste burning in Africa as background for the development of the African Roadmap.
- e. A financial stakeholders mapping has also been completed to identify potential funding sources for supporting transformative action on waste management in Africa at local and national level.



Action needed from financing institutions

- Closing the funding gap for sustainable waste management will require a coordinated approach that involves a range of stakeholders - from both the public and private sectors.
- Utilising the increasing financial resource that is available for climate action and circular economy promotion would require developing innovative financing mechanisms at the national level.
- Development Financing Institutions (DFIs) have a critical role to play in mobilising the required financial resource for addressing the systemic deficiency and promoting waste to resource conversion at local level.
- Mobilising finance to implement the Transformative Action in the Waste Sector Africa roadmap recommendations.

Relevant links

- [Climate and Clean Air Coalition](#)
- [Open Burning in Africa: challenges and opportunities](#)
- [Multi stakeholder partnership](#)

For information on the Africa roadmap contact Professor Desta Mebratu
dmebratu@gmail.com

For coordination questions contact Ms Charlie Fenn, Programme Manager,
Engineering X charlie.fenn@raeng.org.uk

Engineering X

Engineering X is a growing collaboration that promotes the role of engineering in tackling safety and sustainability challenges by building global connections across sectors and disciplines. Founded by the Royal Academy of Engineering and Lloyd's Register Foundation, we champion systems approaches and amplify unheard voices to ensure solutions are sustainable and locally appropriate.