

4th Assembly of African Clean Cities Platform (ACCP) ***Wednesday 20th August 2025***

Roadmap for transformative action on open burning of waste in Africa

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1. Background and Methodology

Background

<i>May 2022</i>	United Nations High Level Champions on Climate change (UNHLC) and Engineering X produced the report on ‘Open waste burning in Africa: Challenges and Opportunities’.
<i>September 2022</i>	The 18th Session of the African Ministerial Conference on Environment (AMCEN) in September 2022, African Ministers passed a resolution to take actions to eliminate open waste burning from Africa.
<i>November 2022</i>	The Multistakeholder Partnership for eliminating open waste burning from Africa co-chaired by the Secretariats of AMCEN and the Urban Cities and Local Governments Africa (UCLG-Africa) was launched at COP-27.
<i>February 2024</i>	Engineering X in collaboration with other partner organizations and Climate and Clean Air Coalition (CCAC) started implementing the project on ‘Transformative action on Waste’.



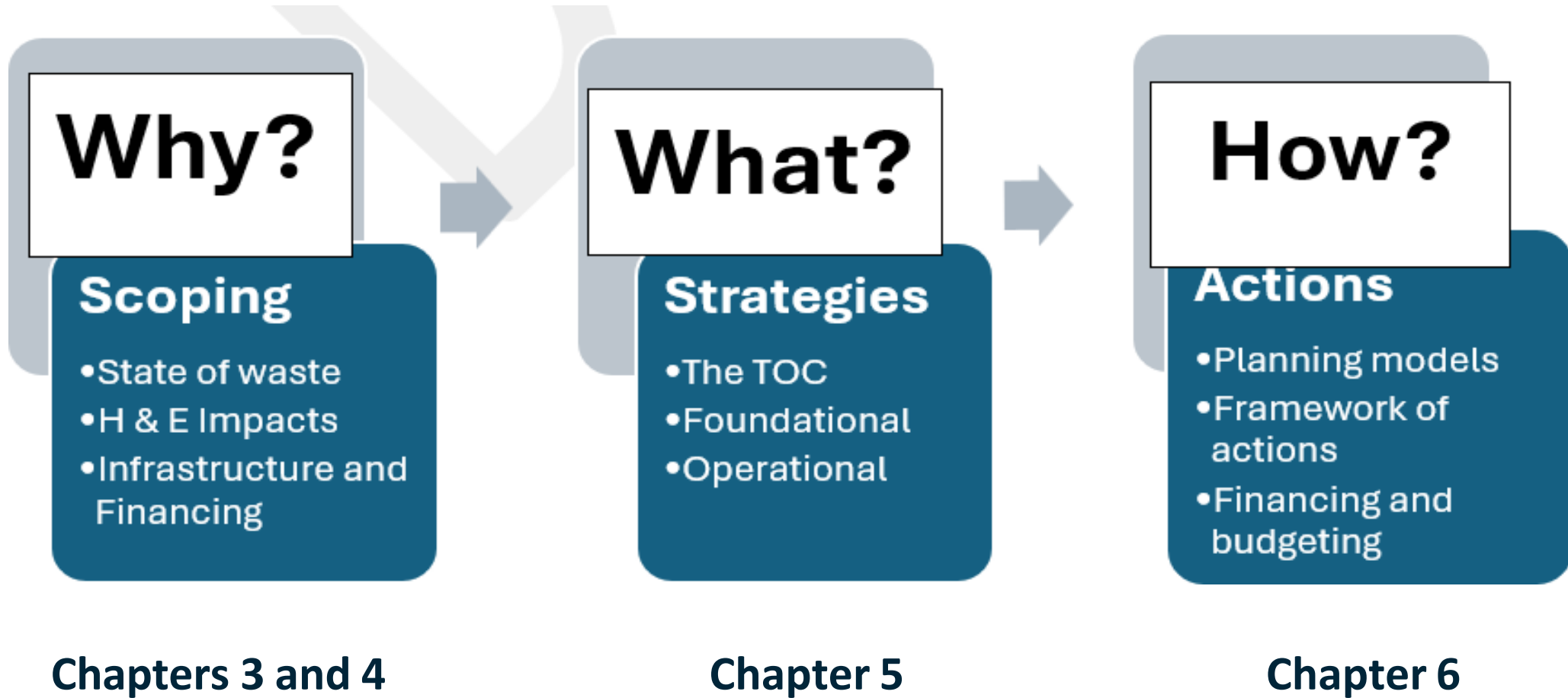
Development of the Regional Roadmap

Approach and methodology

- A *desk-review* of existing reports and documentation on waste management;
- *Regional survey* with a focus on identifying the major challenges and gaps;
- A *webinar organized* to present and discuss the preliminary findings presented to stakeholders' webinar
- *Detailed interview* of representatives of key actors from government, cities, private sector and CBOs
- Targeted *stakeholder consultations* at relevant forums including AMCEN Special Session (2024), ISWA 2024 Congress and CEO Forum of African Development Financing Institutions.



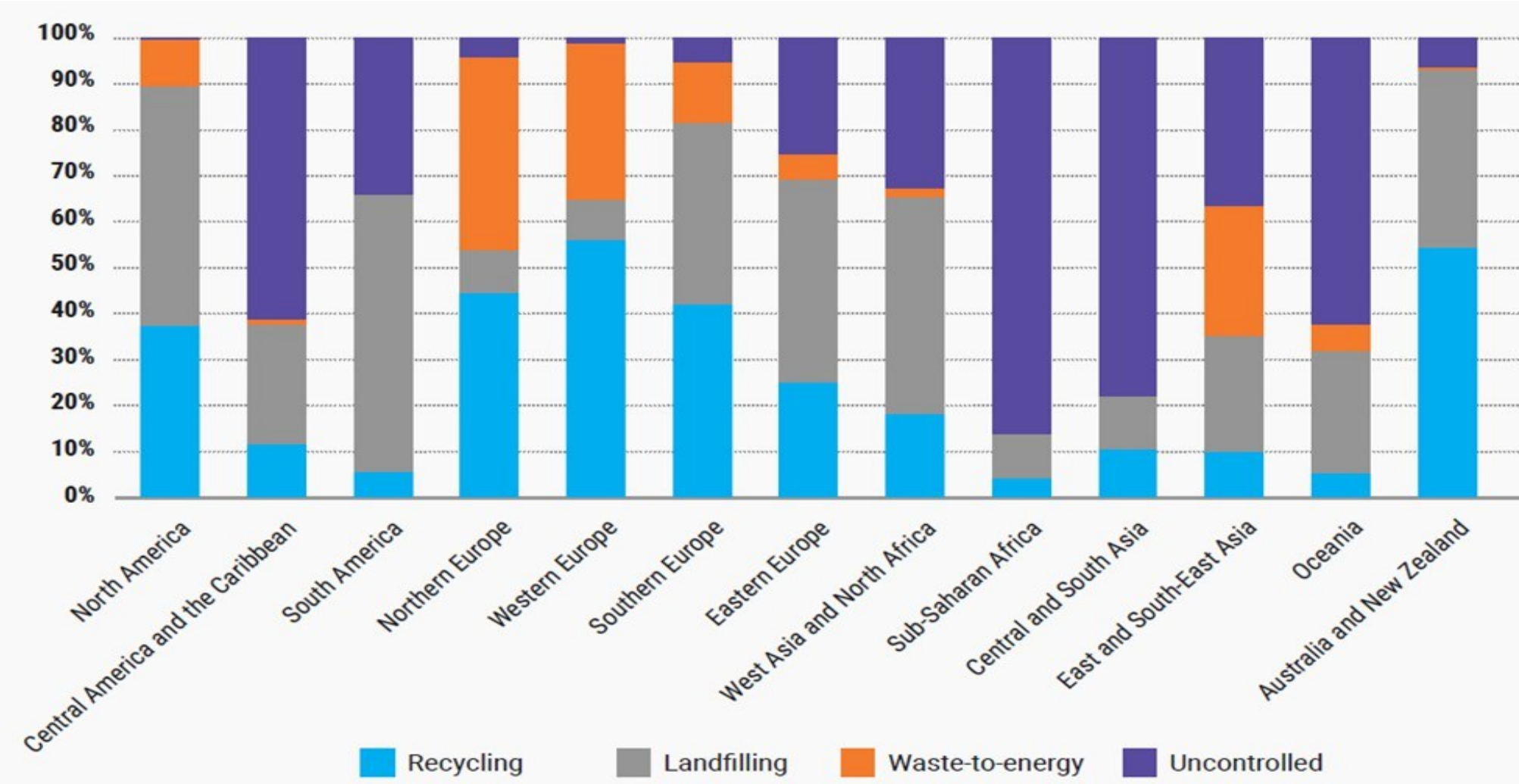
The logical structure of the Roadmap





2. State of waste and its impact

State of Waste



Source: UNEP 2024

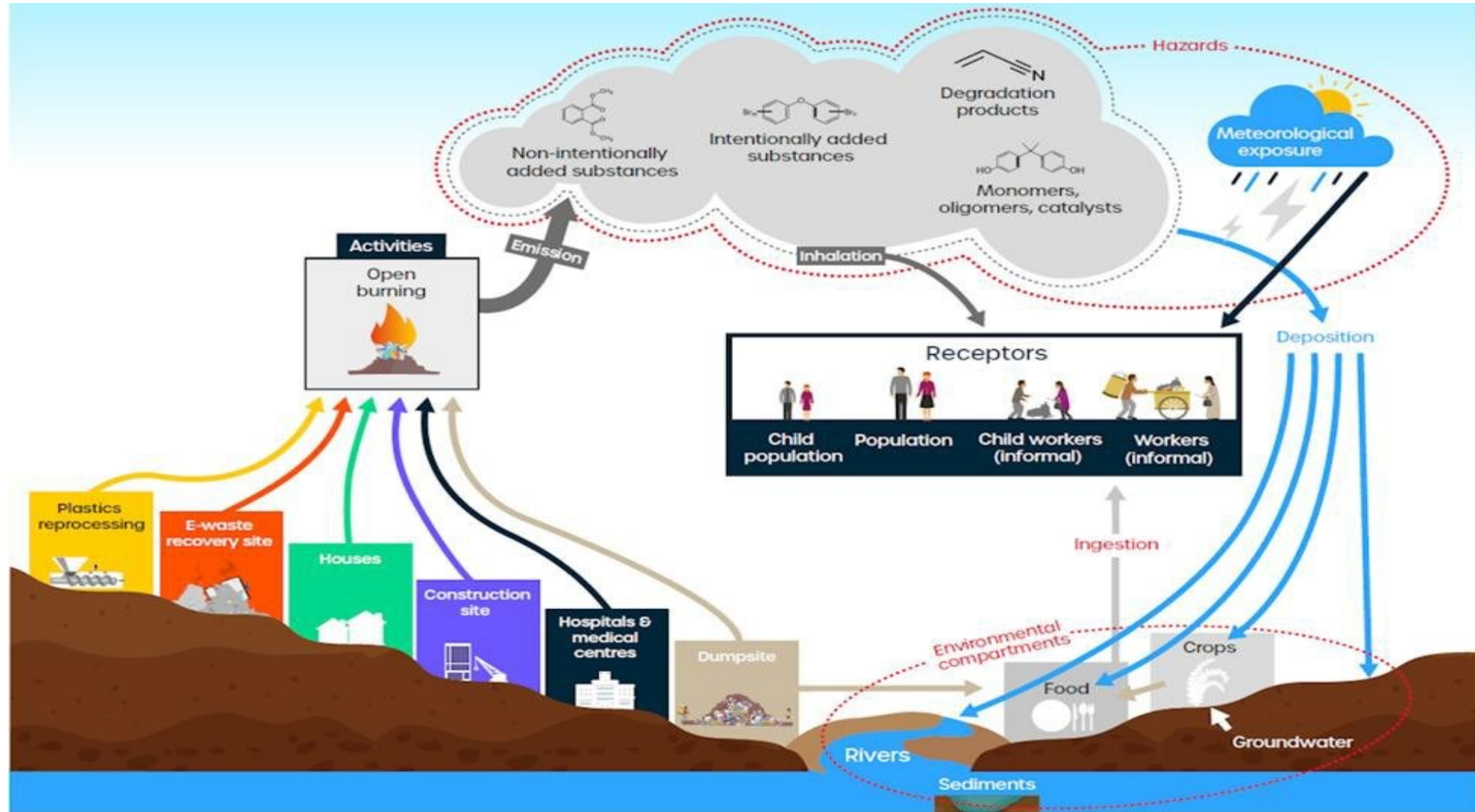
Waste generation and open waste burning

	Total MSW generated (Kg/Year)	MSW burned in the residential/ roadside kg/day	MSW openly burned at landfill/dump sites kg/day	Total amount of waste burned (kg/year)
Reference Year	2020	2020	2020	2020
Africa	10,497,474,548	8,934,019	2,000,212	3,990,994,316
Central Africa	10,364,217,196	10,072,788	2,456,738	4,573,276,871
Eastern Africa	7,813,430,930	8,138,108	1,109,592	3,375,410,392
Northern Africa	15,941,320,192	11,838,847	4,146,056	5,834,489,472
Southern Africa	18,263,457,514	8,145,342	899	2,973,377,970
Western Africa	4,080,817,940	3,629,206	1,099,705	1,726,052,206



Estimate by UN Habitat, 2024 (unpublished)

Environment, and health chain




Health impact

- **Cardiovascular and cardiopulmonary diseases, lung cancer and respiratory diseases**, which are linked to air pollution, are on the rise across Africa.
- In Africa there are **nearly 1.2 million premature deaths per year** from exposure to polluted air to which waste contributes significantly.
- From 2000 to 2019, health burden from household air pollution decreased by 22% while the health **burden from ambient air pollution increased by 79%**.
- **In 2015, air pollution accounted** for 26% of coronary heart disease deaths and for 23% of stroke deaths, reflecting 21% of cardiovascular deaths overall.

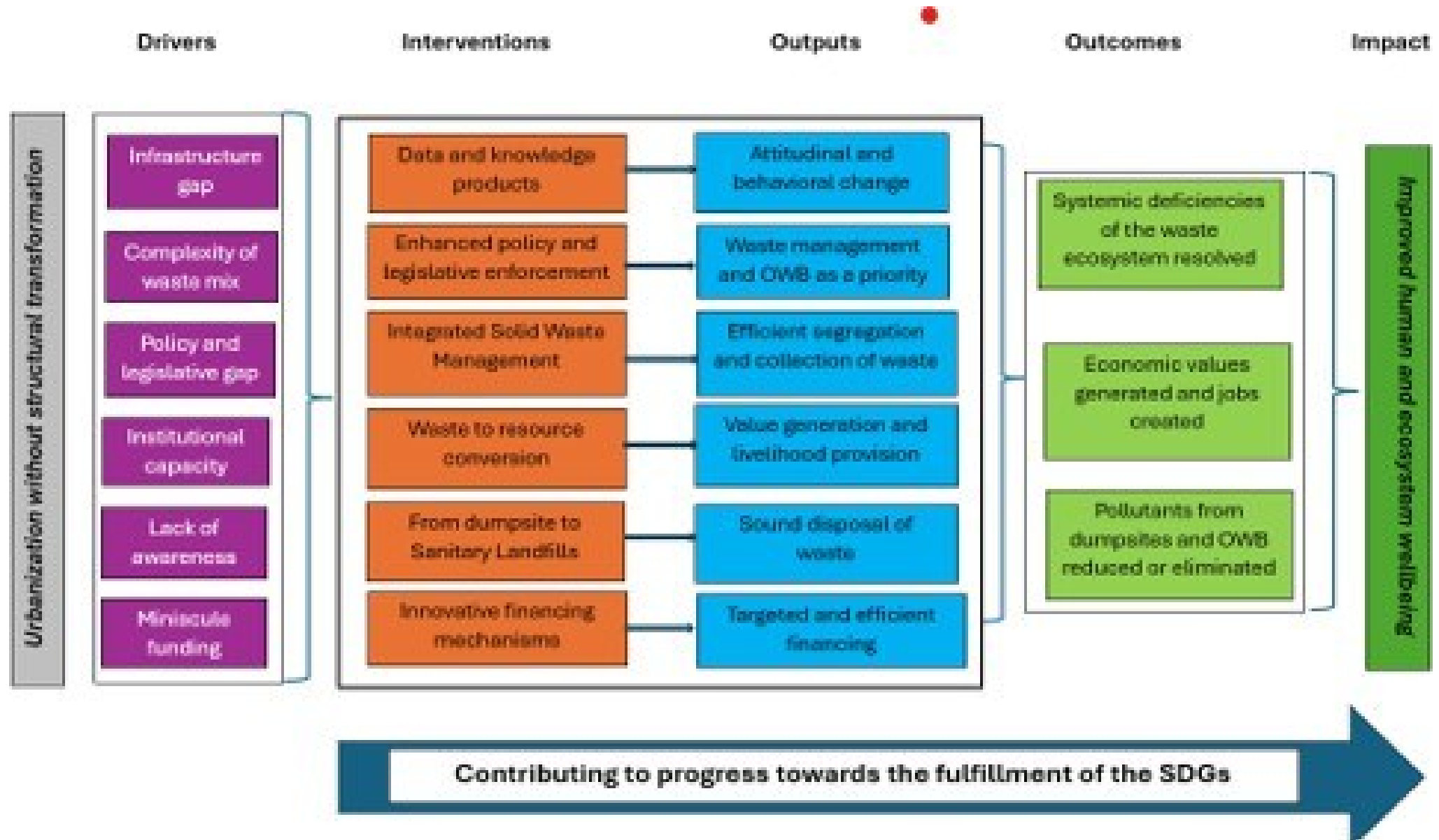
Amegah AK, Agyei-Mensah S. Urban air pollution in Sub-Saharan Africa: Time for action. Environmental Pollution, 2017 Jan 1;220:738-43.

Landrigan PJ, Fuller R, Fisher S, Suk WA, Sly P, Chiles TC, et al. Pollution and children's health. Sci Total Environ. 2019; 650(Pt 2):2389-94.



3. Framework for Transformational Action

The Theory of Change



Transformational action framework

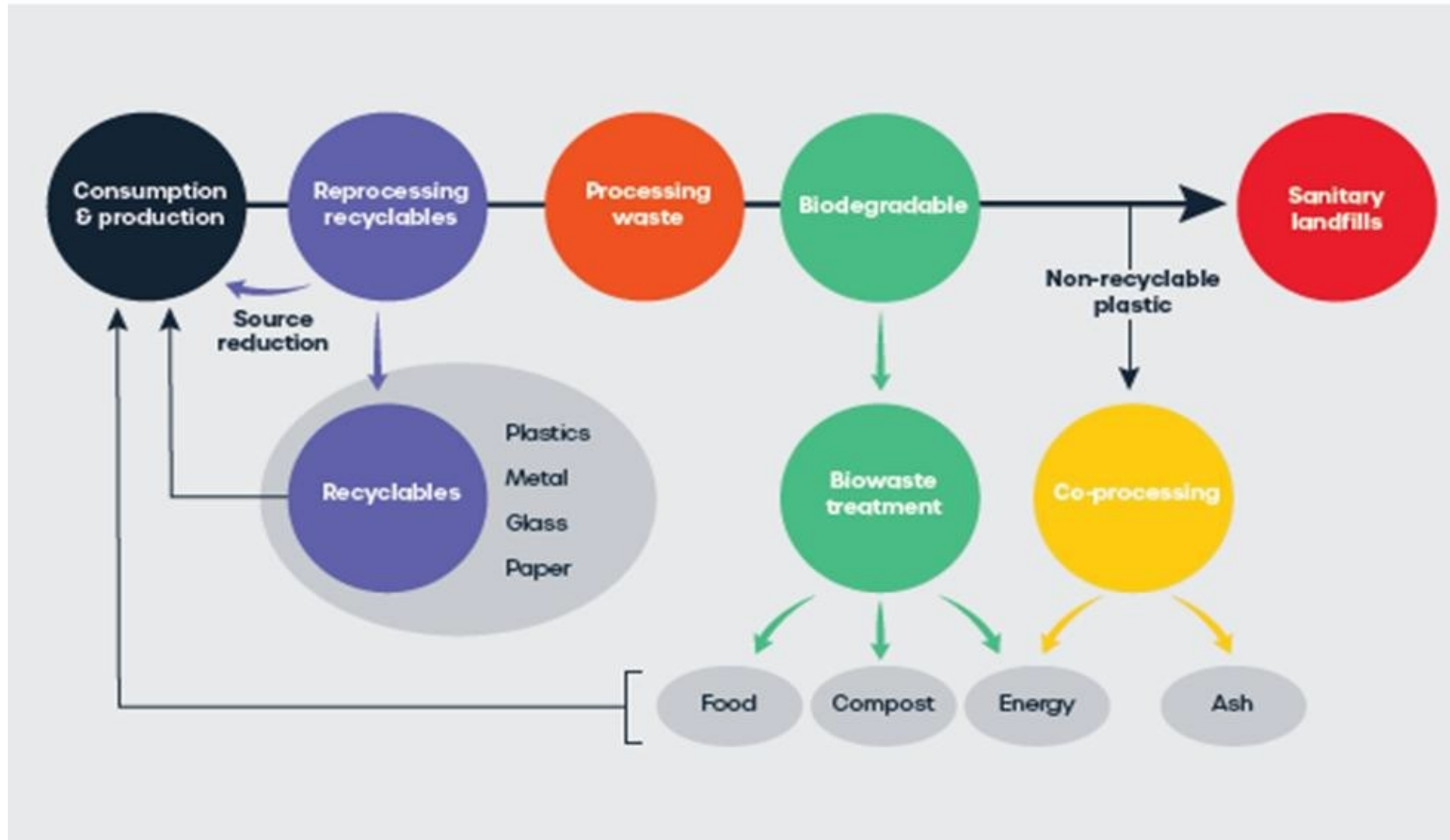
Operational



Foundational



The Transition framework (*from linear to Circular*)



Unlocking multiple opportunities

- A conservative estimate of the value of MSW generated in African urban areas is *US\$8.0 billion per annum*, of which 96 per cent is currently lost through disposal (UNEP 2016)
- Local beneficiation of these secondary resources will ensure that *more jobs and livelihoods* are created for local community groups
- *Significant reduction in health hazards* could be achieved particularly benefiting women and children which are the most vulnerable groups.
- Realizing the enormous opportunities in Africa from waste-to-resource conversion would make major contribution to the *implementation of the African Union Circular Economy Action Plan (AU-CEAP)*.





4. From Roadmap to Transformational action

CITY ACTION PLAN

Pilot city: Kisumu

<https://practicalaction.org>

**Practical
ACTION**

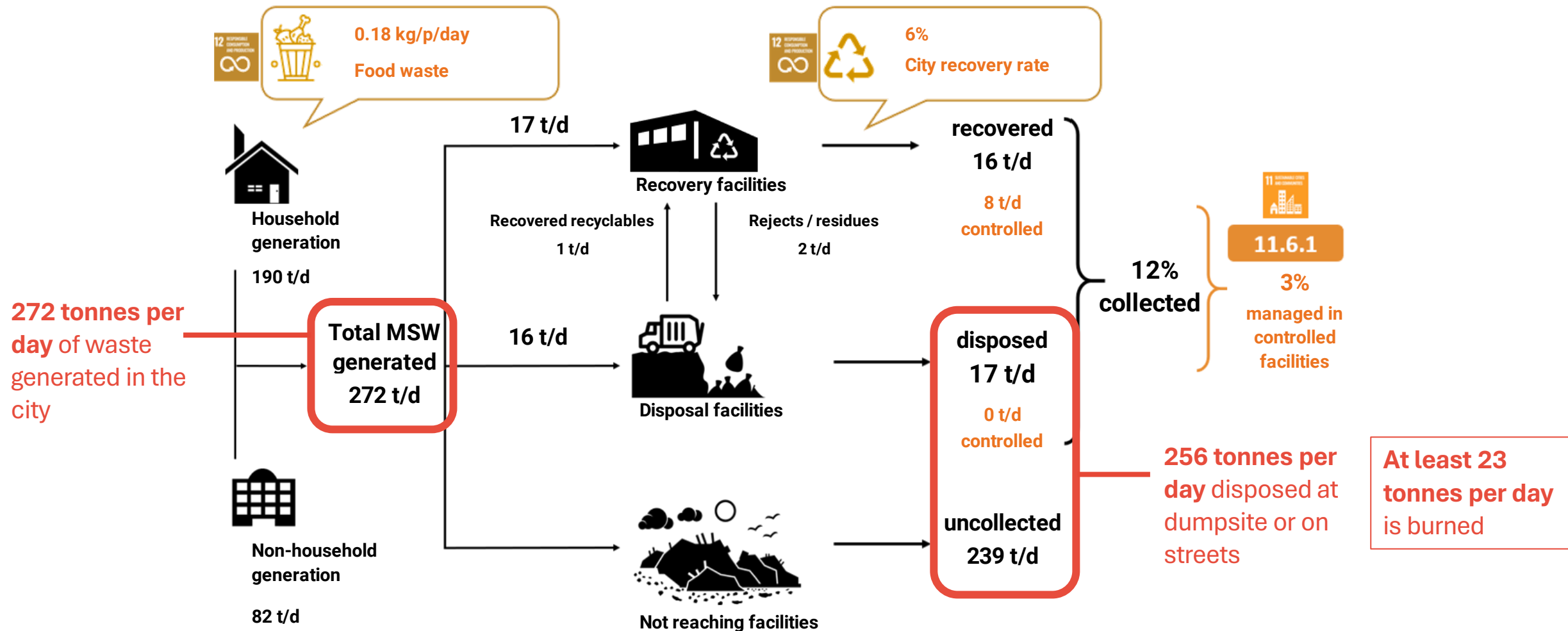


Outline of an action plan

- ***Assessment of waste management system:*** with a focus on policy and strategy, waste quantification and characterization, waste management operations, and public awareness and participation.
- ***Goals and objectives:*** setting goals and objectives with a focus on addressing the systemic deficiencies within the waste management system and promoting circularity through waste to resource conversion.
- ***Actions and targets:*** set specific time bounded targets of no-cost, low-cost, and investment actions that need to be achieved and related indicators for monitoring and evaluation.
- ***Financing and budgeting:*** provide an indicative budget for the implementation of the identified intervention and the mechanism of financing with the possible sources of funding from public, private, DFIs and local communities.



Kisumu City waste flow



Open Burning of Waste

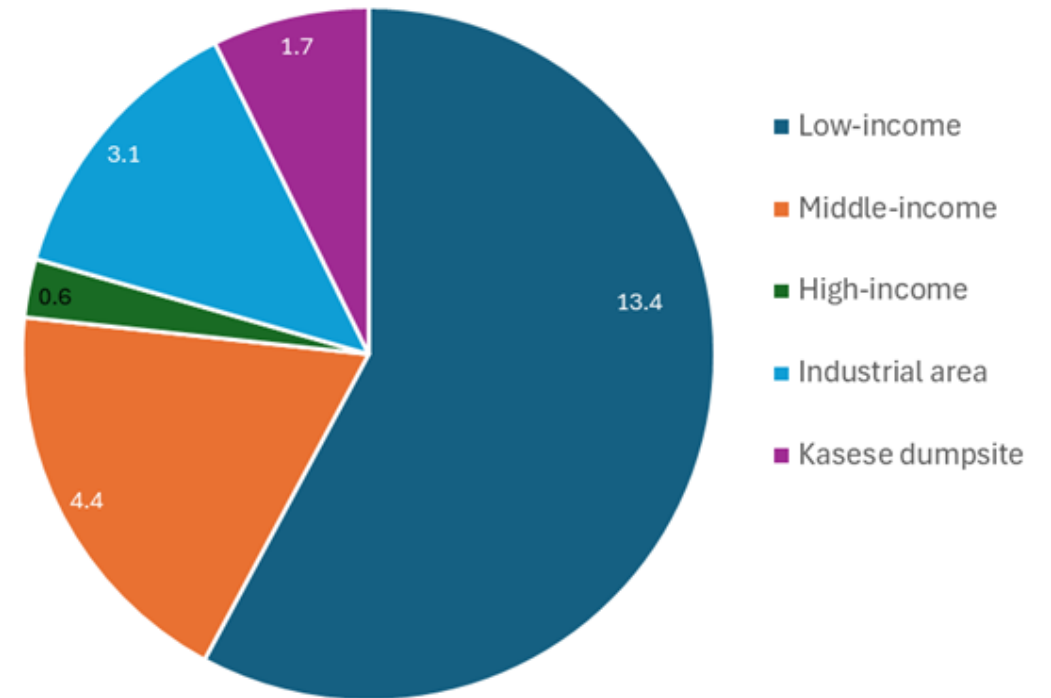


Waste is burned to reduce volumes, smells and pests, and for lack of alternatives.

Most waste is burned in the city, not the dumpsite, especially in low and middle-income areas.

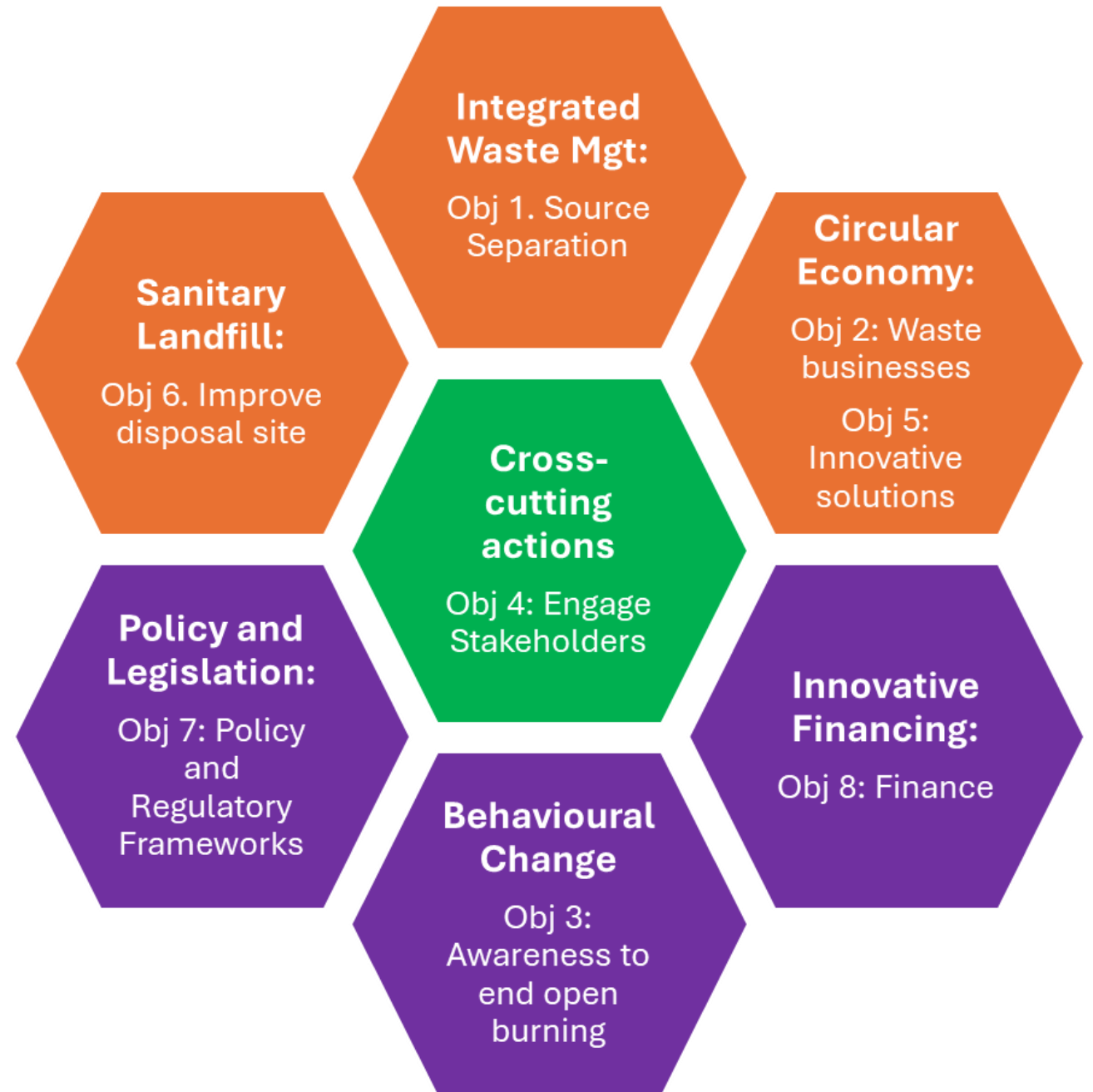
Women are key managers of waste and key drivers of neighbourhood initiatives

Waste burned per day: 23 tonnes/day



City Action Plan Objectives

- Eight objectives aligning with the Regional Roadmap
- Cross-cutting action emphasising multi-stakeholder actions
- Specific actions can be:
 - **No cost**
 - **Low cost**
 - **Investments**



Types of Action: working definitions

- **No-cost Actions**

Actions which can be paid for by using existing County budgets or through spending by other stakeholders from their existing budgets

- **Low-cost Actions**

Actions which require new and additional budgets, but below the levels that could be funded through major investment bids

- **Investment Actions**

Actions which will require significant investments through a combination of public funds, grants, low-interest loans and other financial instruments

No-cost actions: examples

Cross-cutting: Engage and Empower Stakeholders

- Partner with schools, churches, community organisations
- Encourage businesses to reduce, recycle and adopt circular economy principles



Behaviour change: Raise awareness to end open burning of waste

- Organise community-clean-ups to build ownership and participation
- Awareness raising about the effects of open waste burning and available alternatives



Integrated waste management: Promote uptake of collection services

- Run promotion campaigns for uptake of waste collection services, and promoting source segregation of waste

Low-cost actions: examples

Policy and Legislation: Enhance policy and regulatory frameworks

- Include OWB in County waste management legislation
- Train enforcement officers and community leaders on waste management laws

Financing: Secure sources of innovative and sustainable finances

- Advocate for increased allocation from County Budgets
- Identify potential funding sources, create partnerships, and secure project preparation support

Circular economy: Improve working conditions and capacity of formal and informal waste businesses

- Review and adopt a digital app and encourage consistent use by all waste collectors



Investment actions: examples

Integrated waste management: Promote uptake of collection services and segregation at source

- Construction and equipping of community recycling centres / mini-MRFs
- Provide or subsidise simple bins for household waste separation

Circular economy: Innovative solutions

- Establish waste-to-biogas and composting projects

Controlled landfill: Improve management of disposal site

- Procure and install fencing for the disposal site
- Better spreading and covering of waste, ensuring weigh bridge accessible
- Provide access to water and sanitation for all users on site



Key lessons

- Adopt a multi-stakeholder approach to developing the plan
- Ensure this is city-led and aligns and adds value to existing City strategies
- Support actions by multiple stakeholders for quick wins
- Keep it positive: alternatives and benefits first, then enforcement
- Keep it people-centred: ensure people get the services they need, and integrate the informal sector
- Seek support for developing financing plans for larger investments



Outcome from the 20th Ordinary session of AMCEN

- The Roadmap was submitted to the 20th ordinary session of AMCEN held in Nairobi from 14-18 July 2025
- In its decision 20.3, the 20th session of AMCEN:
 - endorsed the regional roadmap for transformative action of waste in Africa;
 - encouraged member States, to promote private sector investment and circular economy models and innovative financing mechanisms that support integrated chemicals and wastes management systems;
 - Called on all national and local authorities in Africa to prioritize and implement actions on open dumping and open burning of waste as outlined in the Regional Roadmap for Transformative Action.



Thank you very much

For further information, please contact

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