Global Gateway

Solid Waste Management Improvement in Kumasi

GHANA

URBAN DEVELOPMENT TECHNICAL FACILITY (UDTF)

#GLOBALGATEWAY

JULY 2026

Project rationale

In 2022, the "EU-Ghana Partnership for Sustainable Cities" initiative was introduced as a multi-phase programme to tackle urban challenges in Ghana, combining efforts to strengthen institutional frameworks at both national and local levels while enhancing the delivery of essential urban services and infrastructure to address the needs of citizens.

The EU Delegation sought support from the Urban Development Technical Facility (UDTF), to assist the Kumasi Metropolitan Assembly (KMA) in conducting a comprehensive assessment of its solid waste management (SWM) system and in identifying pragmatic, short- to medium-term measures that can be implemented within existing institutional mandates and resource constraints to improve the system.

The assignment followed a participatory and pragmatic approach, starting with a detailed diagnostic overview of the solid waste management system, carried out in the field and involving key stakeholders. Based on this diagnosis, improvement measures were proposed and assessed against their technical, institutional, and financial feasibility.

Background

Within its metropolitan boundary, Kumasi generates an estimated 315 tonnes of municipal solid waste per day. Waste collection coverage is relatively high, at an estimated 80–85%, relying on a mix of formal private operators for communal container and household-level collection services, and a large number of informal tricycle ("aboboyaa") collectors.

In terms of infrastructure, the city hosts a landfill that also serves neighbouring municipalities, as well as the Kumasi Compost and Recycling Plant (KCARP), where part of the municipal waste is sorted and processed.

Between 2022 and 2024, Kumasi benefited from the EU-funded HORESD (Holistic Reinforcement for Sustainable Development) project, which, among many activities, introduced source-separation bins, new collection trucks, and multi-stakeholder coordination platforms.

While school-based separation initiatives showed positive results, the roll-out of source separation in the Central Business District (CBD) did not achieve the expected outcomes, largely due to operational constraints, limited awareness creation, weak enforcement and insufficient alignment between costs and revenues. Furthermore, once deployed in the CBD, source-separation bins require consistent servicing and supervision. These bins therefore created additional operational costs, placing increased pressure on KMA's budget and on the Waste Management Department.

Findings and recommendations

The assessment identified a set of interlinked challenges in the following areas:

- **Operations of informal actors**
- **Waste collection tenders and contracts**
- **Use of existing source-separation bins**

THEMATIC AREAS:

- **Solid Waste Management**

FUNDED BY:
European Union

STAKEHOLDERS:
Kumasi Metropolitan Assembly (KMA)

DURATION OF THE UDTF ASSIGNMENT:
February – August 2025

PROJECT REGION:
Kumasi (Ghana)

Above: Map of Ghana

Operation of informal actors

In Kumasi, a significant share of waste collection, recovery, and recycling activities is carried out by informal actors, such as tricycle collectors, aggregators, and small recyclers. While these actors contribute substantially to service coverage and waste diversion, they operate largely outside formal municipal systems, with limited regulation, identification or coordination with official waste management services. This situation results in fragmented service provision, limited supervision, and missed opportunities to strengthen recycling. At the same time, informal actors represent an existing operational capacity that can significantly support improvements in collection efficiency and recycling performance if properly integrated into the system.

Recommendations:

- Introduce or strengthen mandatory Business Operating Permits (BOPs) for tricycle collectors, aggregators, and recyclers.
- Link BOP to basic training, identification systems, and controlled access to disposal facilities.
- Enable the effective participation of BOP-holding waste collectors and recyclers in waste collection tenders, requiring large operators to establish partnerships with them.
- Allow BOP-holding actors to access recyclable materials generated through source-separation initiatives supported by KMA's bins.

Waste collection tenders and contracts

Existing waste collection tenders and contractual arrangements do not fully reflect the operational realities of waste management in Kumasi. Rapid urban expansion, different urban conditions across neighbourhoods, and the presence of different types of service providers-including informal collectors- create a complex landscape that is not adequately addressed in current contracts which are primarily intended for large operators. In addition, contractual frameworks tend to focus primarily on waste collection volumes, with limited integration of recycling objectives.

Recommendations:

- Revise waste collection tenders and contracts to reflect actual urban conditions, including updated zoning and differentiated tariffs.
- Integrate recently formalised BOP holders into the official waste collection system by requiring mandatory partnerships between large waste operators and BOP-holding tricycle collectors
- Introduce recycling-related performance indicators in service contracts and require mandatory partnerships between large waste operators and BOP-holding aggregators and recyclers.
- Strengthen monitoring and accountability mechanisms.

Use of existing source-separation bins

Many of the source-separation bins initially distributed under the HORESD project are currently misused or still stored. Concretely, the unsupervised bins placed in public spaces are not being used for waste separation and have created additional operational burdens for the Kumasi Metropolitan Assembly (KMA). It is therefore proposed to deploy or redeploy under-used HORESD bins to schools, institutions, communal container sites, and other controlled environments for source-separation initiatives. The allocation of bins could be conditional upon the existence of formal agreements with BOP-holding collectors and recyclers, ensuring that collection and off-take responsibilities are clearly assigned. In this way, bins will support structured source-separation initiatives and increase recovery of recyclable materials, without becoming a burden for KMA.

Recommendations

- Redeploy or strategically allocate existing HORESD bins to controlled environments such as schools, institutions, private spaces and communal container sites.
- Make the allocation of bins conditional on the existence of formal agreements with BOP-holding collectors and recyclers, who will be responsible for collection and off-take of recyclables.
- Supported by limited technical assistance, the above recommendations could be implemented within 12–18 months and lead to tangible results.

Lessons learned

The findings from the project show that well-targeted improvements can enhance solid waste management performance in Kumasi. Lessons learned include:

Waste collection contracts are powerful tools to improve system performance

Well-designed tenders and contracts are key tools for metropolitan authorities to integrate all stakeholders in the system, while improving service coverage and recycling outcomes.

Integration of informal actors is both necessary and feasible

Tricycle collectors, recyclers, and landfill waste pickers play an indispensable role in system functioning. Their integration into the formal system is only effective when linked to clear incentives, such as contractual opportunities and guaranteed access to materials.

Targeted and supervised source separation is more effective than large-scale roll-out

Source separation initiatives yield better results when implemented in controlled environments such as schools, institutions, private spaces, and supervised communal sites, rather than through unsupervised deployment of bins in open public areas. Their deployment can be conditional to the existence of off-take agreements for recyclables, although this may only be feasible for recyclables with sufficient market value.