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Financing solid waste management in Ghana

Priorities, cases and lessons learned



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Agenda

- Why SWM Finance Matters Now
- World Bank Financing
- Case Studies
- Lessons
- Conclusion



Why Solid Waste Finance Matters Now



The Global & Regional Challenge

- **Rapidly growing volumes:** global MSW expected to rise 73% by 2050.
- **Service gaps:** >40% of waste in low-income countries unmanaged; open dumping & burning dominate.
- **Public health risks:** Between 400,000 and 1 million deaths annually linked to poorly managed waste.
- **Climate externalities:** waste sector a top methane emitter (landfills & open burning).
- **Economic cost of inaction:** flooding, lost productivity, degraded ecosystems, missed circular economy jobs.

Ghana's Urgent Lens

- **Urban growth & densification:** rising waste generation, especially in Greater Accra & secondary cities.
- **Flood risk linkages:** clogged drains, unmanaged waste amplify urban flooding. Plastic leakage: major hotspot for mismanaged plastics; coastal & marine ecosystems under threat.
- **Informality:** large share of collection & recycling driven by informal sector; unsafe & underfinanced.
- **Financing gap:**
 - CAPEX: engineered landfills, transfer stations, treatment plants, vehicles.
 - OPEX: collection, transport, sorting, disposal, compliance.
 - Need predictable revenues & performance discipline to ensure sustainability.



Financing



Financing SWM

- **Public finance:** central government and municipal own-source revenue,
- **User charges:** pay-as-you-throw, differentiated tariffs, service-level-based fees
- **Environmental levies & EPR:** producer responsibility fees funding collection & sorting
- **Climate & results-based finance:** outcome bonds, carbon/methane credits, results-based disbursements
- **Private capital:** PPPs, blended finance instruments, viability-gap funding (VGF)

World Bank Financing

Investment Project Financing (IPF):

- Supports long-term investments in infrastructure, human capital, and institutional development.
- Disbursements are tied to actual expenditures and project milestones.
- Examples: sanitary landfills and transfer stations, MRF/compost, fleets

Program-for-Results (PforR):

- Links disbursements directly to results achieved by the borrower.
Disbursements linked to KPIs: collection coverage, diversion, controlled disposal, data reporting
- Examples: Increasing waste collection coverage in urban areas, implementing municipal solid waste management plans, Enhancing citizen engagement in waste reduction and recycling. Improving financial management and transparency in waste services.

World Bank Financing

Development Policy Financing (DPF):

- Supports policy and institutional reforms to promote sustainable growth and poverty reduction.
- Disbursements are linked to agreed reform actions.
- Examples: EPR regulations, tariff frameworks, fiscal incentives

Trust Funds & Advisory Services (ASA):

- Non-lending support to help countries design policies and build capacity - Analytics, pilots, and technical assistance
- De-risk reforms, build local capacity
- Examples: Development of national or city-level solid waste strategies.
- Roadmaps for transitioning to circular economy models. Advice on tariff structures, fee collection, and subsidy design, Support for Extended Producer Responsibility (EPR) frameworks, Legal reviews and institutional mandates for waste governance.



World Bank Financing Case Studies - Ghana



Greater Accra Resilient and Integrated Development (GARID) Project

Investment Project Financing (IPF)

Objective:

To improve flood risk management and solid waste management in the Odaw River Basin of the Greater Accra Region and improve access to basic infrastructure and services in the targeted communities within the Odaw River Basin.

Total Commitment (USD): 350M

Component
Component 1: Climate Resilient Drainage and Flood Mitigation Measures
Component 2: Solid Waste Management Capacity Improvements
Component 3: Participatory Upgrading of Targeted Flood Prone Low-income Communities and Local Government Support
Component 4: Project Management
Component 5: Contingent Emergency Response Component

Greater Accra Resilient and Integrated Development (GARID) Project

Solid waste disposal capacity for Greater Accra:

- Design and construction of Engineered Landfill & Final Disposal at Ayidan, Ga South Municipality
- Development of a Financing Plan for the Operations of a Sanitary Landfill

Capping of Old Dumpsites:

- Abloragyei dumpsite Pollution control through leachate reduction.
- Post-closure management plan + safeguards.

Greater Accra Resilient and Integrated Development (GARID) Project

Waste Transfer & Resource Recovery:

- Transfer stations to reduce haulage distance/time.
- Support for material recovery, reuse, and recycling.

Community-based SWM & Outreach

- Target low-income Odaw basin communities.
- Equipment: skip buckets, waste bins, tricycles, handcarts.
- Cleanup campaigns, awareness, and results-based incentives.
- Litter management strategy + physical barriers along

PROBLUE

Multi-donor Trust fund

PROBLUE is a multi-donor trust fund housed at the World Bank that supports healthy and productive oceans and the implementation of SDG 14.

It is part of the broader Blue Economy program, which as of 2020 had over \$5.6 billion in active projects globally.

PROBLUE's engagement in Ghana is multifaceted, with a strong emphasis on marine litter reduction, plastic pollution management, and ecosystem restoration, particularly in the Greater Accra Region.



PROBLUE

Solid Waste and Plastics Pollution Management

- Support for regulatory frameworks and innovative pilots for plastic collection, buy-back centers, and recycling.
- Development of RPET standards adopted by the Ghana Standards Authority
- Development of Extended Producer Responsibility (EPR) legislation

Sustainable Ocean Plan (SOP)

- Ghana is developing a national SOP to guide marine spatial planning and sustainable ocean governance.
- The SOP is nearly complete and has received strong government backing, though its formal launch is pending due to recent political transitions

Ghana Secondary Cities Support Program (GSCSP)

Program-for-Results (PforR) financing

The GSCSP is a flagship World Bank initiative launched in 2018 to improve urban management and basic urban services in Ghana's secondary cities.

Objectives

- Strengthen urban governance and municipal management
- Improve basic urban services such as sanitation, waste management, and infrastructure
- Enhance fiscal decentralization and performance-based grants through tools like the District Performance Assessment Tool (DPAT)

Initial IDA Credit: US\$100 million

Additional Financing (AF): US\$150 million approved in 2022 to expand geographic scope and sustain impact

Ghana Secondary Cities Support Program (GSCSP)

Relevance to Solid Waste Management

The GSCSP provides a financing and governance model that can be adapted to solid waste management:

- Municipal Assemblies receive grants based on performance, which can be tied to waste collection and recycling targets
- Capacity building supports better planning and enforcement of waste regulations
- Infrastructure investments under Urban Development Grant (UDG) can include landfills, transfer stations, and recycling centers

Africa Environmental Health and Pollution Management Program (EHPMP) – Ghana

IPF with GEF support.

The project aims to reduce exposure to mercury and upops pollution at pilot sites and strengthen the institutional capacity to manage and regulate mercury use in artisanal small-scale gold mining (ASGM) and e-waste in selected countries in Africa.

Addressing pollution from artisanal and small-scale gold mining (ASGM) and electronic waste (e-waste) management.

Africa Environmental Health and Pollution Management Program (EHPMP) – Ghana

Policy & Regulatory Strengthening

- Support implementation of the Hazardous and Electronic Waste Control and Management Act (2016, Act 917).
- Strengthening enforcement of e-waste regulations, and Minamata Convention commitments on mercury.

Pollution Reduction Investments

- Pilot mercury-free technologies in ASGM communities.
- Upgrade infrastructure for e-waste collection, recycling, and disposal.
- Support formal sector investments in environmentally sound e-waste recycling facilities.



Lessons



Lessons Learned – Financing SWM in Ghana

Credible Service Models Attract Finance

Bankable projects require clear service standards, performance monitoring, and reliable data to give confidence to financiers.

Cost Recovery is the Weak Link

User charges and tariffs are often politically sensitive; without predictable revenue streams, OPEX financing remains constrained.

Municipal Capacity is Critical

Financing instruments work best when cities have technical,

Lessons Learned – Financing SWM in Ghana

Blended Approaches Unlock Scale

Public funds alone are insufficient—combining grants, concessional lending, PPPs, and EPR levies enables sustainable cost coverage.

Infrastructure + Operations Need Balance

Investments in engineered landfills, transfer stations must be coupled with O&M financing and compliance systems, or assets risk underutilization.

Informality Cannot Be Ignored

Informal collectors and recyclers are vital to service coverage; inclusion in financing models (e.g., through cooperatives, EPR schemes) improves

Lessons Learned – Financing SWM in Ghana

Climate Finance is an Untapped Opportunity

Methane abatement from landfills and plastics circularity can mobilize carbon and results-based finance, diversifying revenue.

Political Economy Shapes Outcomes

Reforming tariffs, enforcing EPR, or closing dumpsites requires political will, citizen buy-in, and sequencing of reforms to sustain momentum.

Conclusion

Waste challenge is urgent and growing: urbanization, plastics leakage, flood risk, and health costs demand stronger systems.

Financing gap is real: CAPEX & OPEX needs exceed municipal budgets; predictable revenues and discipline are critical.

Finance follows credible service models: data, performance monitoring, and clear accountability attract funding.

Diverse instruments available: user charges, EPR/levies, climate finance, PPPs, and World Bank toolbox (IPF, PforR, DPF, TF/ASA)

Thank you

