

- Case Study - Lagos Waste Management Authority (LAWMA)



**Sustainable
development
goals (SDGs)**

Goal 3: Good health and well-being

Goal 13: Climate action

Goal 15: Life on land



**Relevant concept/
issues**

Waste management



Relevant sector

Waste management

Lagos state generates an estimated 13,000 tons of solid waste every day. Most of that waste is not sorted and finds its way into landfill. This has caused serious waste management problems, which result in environmental degradation.

The activities associated with managing waste include: reduction, reuse, recycling, handling, recovery and treatment, safe treatment practices, harmless manufacturing processes, and methods for converting solid waste into valuable resources through recycling and reuse.

Sustainable innovation can help achieve engineered landfills, which consist of a leachate collection and treatment system; groundwater monitoring; and gas extraction used for energy production.

An engineered landfill site means the final disposal of solid waste is performed in a secure manner by minimizing impacts on the environment. Engineered landfills are lined with different layers, including geosynthetic clay liner, HDPE membranes and protective geo-textiles that prevent the leachate from infiltrating into the ground. In this way, they protect the soil and groundwater from pollution that originates in landfill (e.g. <https://sswm.info/water-nutrient-cycle/wastewater-treatment/hardwares/solid-waste/landfills>).

LAWMA (<https://lawma.gov.ng/>) is a Lagos state government parastatal that is “committed to achieving an efficient waste management system by employing adaptable solutions and best practices, as well as encouraging regional integration and customer-focused service delivery methods”. LAWMA currently utilizes various modern technologies to tackle the ever-increasing waste generated in Lagos on a daily basis. These include:



Fig. 1. Waste collection vehicles
Source: The Authors.

1. Distribution of bins for sorting waste into dry and wet waste
2. The PAKAM application for sorting waste collection
3. Configured trucks with leachate tanks
4. A pilot project on the conversion of waste food into bio-gas

Regulations guiding waste management in Nigeria

The Nigerian government, and several states, have various regulations and established authorities and agencies that seek to ensure efficient and effective waste management.

- **The National Environmental Standards and Regulations Enforcement Agency Act 2007 (NESREA Act)**

The NESREA Act, 2007, was set up to guide environmental matters in Nigeria. It makes provision for solid waste management and its administration and sanctions against offences or acts that run contrary to proper and adequate waste disposal procedures and practices.

- **Environmental Impact Assessment Act 1992**

The purpose of the EIA Act, among other things, is to establish whether intended activities will affect the environment before a decision is made. Decision makers include: any person, authority, corporate body or unincorporated body, Federation, State or Local Governments and the activities include the disposal of solid waste in the environment.

- **National Environmental (Sanitation And Wastes Control) Regulations, 2009**

This regulation from 2009 makes provisions for waste control and environmental sanitation, among other things, and includes punishments in cases of wrongdoing.

- **The Management Of Solid And Hazardous Waste Regulations**

These regulations control the collection, treatment and disposal of solid and hazardous waste.

- **National Policy On Environment**

Launched by the government on 27 November 1989, this policy provides guidelines and strategies for achieving the policy goal of sustainable development.

Other regulations at state level:

- Lagos State Environmental Protection Agency (LASEPA) Law
- Lagos State Waste Management Authority (LAWMA) Law

Agencies:

- National Environmental Standards and Regulations Enforcement Agency
- Federal Ministry of Environment (FMOE)
- State Ministries of Environment
- Lagos State Waste Disposal Board (LSWDB)
- Lagos State Environmental Protection Agency (LASEPA)
- Lagos State Waste Management Authority (LAWMA)
- Lagos State Waste management Agency operatives (PSP)
- Environmental Law Research Institute (ELRI)