Land Use and Waste Sector: Waste Reduction

Waste in Nigeria comprises of solid and liquid wastes. These wastes can be further divided into domestic and industrial wastes as listed below:

Solid waste: Municipal solid waste and industrial solid waste

Wastewater: Domestic wastewater and industrial wastewater.

Municipal Waste

It is estimated that approximately Nigeria generates 74,428.85 tons of municipal waste daily (or approximately 27,166,530.25 ton annually) which has a potential biogas generation of 2.04 million m3 every day (Giwa et al., 2017). However, most of these wastes are currently disposed in landfills, burned indiscriminately or discharged into sea.

Emission Intensity

GHG emissions from the Waste sector result largely from disposal of solid wastes through landfilling, dumping, incineration, open burning and treatment of domestic and industrial liquid wastes. Key factors that affect emissions generation are population growth, rural-urban drift and improper management of waste both at its source of generation and its final fate.

Key Interactions

The waste generation rates ranged from 0.44 to 0.66 kg/cap/day. The waste generation rate is typical of low-income towns. The rate of waste generation is highly influenced by the population and income.

Level 1

There is no change in the amount of waste generated except a better waste management system with incentives to discourage indiscriminate dumping of waste in urban and rural areas.

Level 2

Ambition is 1/3rd of level 4

Level 3

Ambition is 2/3rd of Level 4.

Level 4

Proper waste management system with policy enforcement, waste segregation, more number of waste generated with 50% percent converted to energy and 40% recycled, more sophisticated technology deployed in recycling and conversion of waste to energy. There is policy to encourage the public to recycle waste. Drastic waste reduction strategies such as phasing out of polyethene bags and plastic packaging, to useage of re-useable packaging materials

Sub Lever	Units	2015	Level 1	Level 2	Level 3	Level 4
Waste Production						
Dry Waste	Index	1	2	1.67	1.33	1
Water Waste	Index	1	1.9	1.6	1.3	1
Recycled						
Dry Waste	Share	5%	5%	13.33%	26.60%	40%
Water Waste	Share	6%	6%	30%	60%	90%
Energy Conversion						
Dry Waste	Share	7%	7%	16.60%	33.33%	50%
Landfill Fugitive						
Emisission	Share	93%	93%	70%	40%	10%