

# NIGERIA

CIRCULAR ECONOMY 2-PAGER (Edition December 2020)



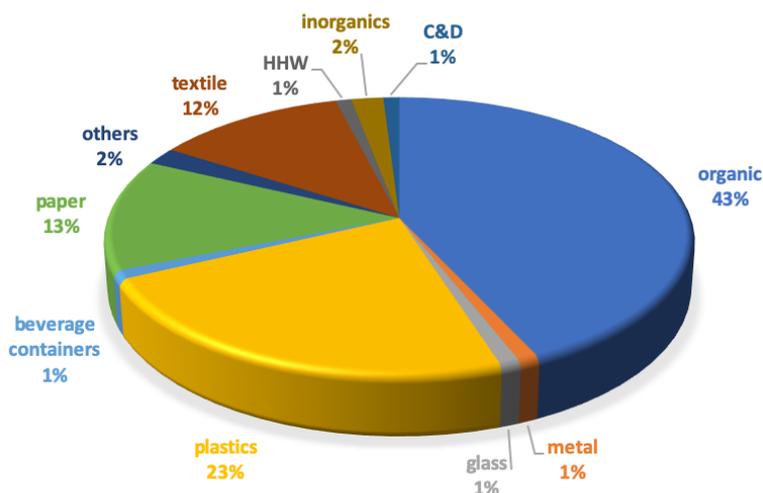
## POLICY LANDSCAPE

Nigeria is part of several international treaties and multilateral environmental agreements, including Basel Convention, Montreal Protocol, and UN Climate Change Convention. The Federal Executive Council of Nigeria has recently approved a new law on plastic waste management. This legislation aims at developing a circular economy around plastic and financial institutions that support recycling initiatives in the country.

## EXTENDED PRODUCER RESPONSIBILITY (EPR)

EPR has been in the regulations since 2011. **NESREA** (on a federal level) and **LASEPA** (on Lagos State level) are responsible for monitoring and implementing EPR systems in Nigeria for different industries, including a \$15 million fund for implementing **circular economy approaches for the electronics sector**. There are also EPR organizations representing industries that aim at implementing a functioning EPR system in Nigeria. For food and beverages this is the Food and Beverages Recycling Alliance (FBRA) and for E-waste this is the Extended Producer Responsibility Organization Nigeria (EPRON).

MUNICIPAL WASTE IN LAGOS STATE, LAWMA 2016



## WASTE MANAGEMENT

Nigeria produces more than 32 million tons of solid waste per year. The Lagos State Waste Management Authority (LAWMA) is responsible for solid waste management in Lagos, the country's main economic powerhouse and home to 22 million inhabitants. The Lagos Recycling Initiative has recently been launched by LAWMA in order to further develop the community based approach that offers

opportunities for the informal solid waste management sector in the city. LAWMA is investing in 20 community recycling centers around the state, as well as composting facilities, and a waste-to-energy facility. For Lagos, decentralizing recycling centers makes a lot of sense, since waste has been historically managed by local communities, and each of these communities is often still big enough to enjoy scale advantages.

## FACTS & FIGURES ECONOMIC INDICATORS

- Population (2019): 202 mln
- Nominal GDP + ranking (2019): \$448 bn, world rank: 26th
- Purchasing power (2019): \$2,222
- Import from NL (2019): €5.2 bln
- Economic growth (2019): 2.27%
- Ease of doing business rank (2019): 131/190 (top 10 most improved)
- Corruption perception index: 146/198
- Unemployment rate: 27%
- Currency: Nigerian Naira
- Time difference NL: 0/-1 hrs

## CE INDICATORS

- Global innovation index: 117/131
- Municipal solid waste produced: 32 million tons/yr
- Potential economic benefit from recycling: 11.71 million USD/yr
- Potential emissions savings from recycling: 307 estimated kt/yr

## MAJOR EVENTS 2021

- [Agrofood Nigeria](#) 30 March - 1 April
- [Mega Clima Nigeria Expo](#) 19-21 May
- [Nigeria Build Expo](#) 19-21 May
- [MEGA HORECA Expo](#) 19-21 May

## SELECTED PRIORITY AREAS

### PLASTICS

1.3 million tons of plastic waste is generated in Lagos alone every year. Currently only 10% is recycled. It is estimated that the increase of plastic recycling to 50%, can yield a \$250 million return for the industry. Although both recycling companies and informal workers are collecting plastic waste, a huge amount still ends up in the ocean due to lack of collection. LAWMA's Blue Box initiative as well as private initiatives such as Wecyclers and RecyclePoints are set out to enhance supply from households. Opportunities in this area include buying recycled plastics, application of Ocean Cleanup Interceptors, incineration of non-recyclables for industrial energy production, investments in PET recycling facilities and much more, knowing that the demand for recycled raw materials in Nigeria is higher than the current supply. A valuable partner for companies looking to make use of plastic waste in Nigeria, especially F&B packaging, is the Food & Beverage Recycling Alliance.

### ORGANIC WASTE

Lagos on its own produces an estimate of 7,000 tons of organic waste daily (>40% of the city's total waste). Organic waste supply is currently regularly provided by markets and food producers, and hopefully soon this will also be available from households via the Green Box initiative that is yet to be implemented. Opportunities vary, including separation of organic waste into a dry fraction (that can be incinerated for energy purposes) and a wet fraction (with high concentration of organics which is perfect for anaerobic digestion) using a Dutch pressure separation technique. Another application under investigation by Dutch 'New Generation

Nutrition (NGN) is producing high protein animal feed from insects using organic waste as the main input. Organic waste generated upstream and early in the agricultural value chain, which is the country's largest economic sector, can help prevent food waste and generate new and sustainable value streams using CE concepts. Partners in this area include Earthcare limited for composting and Nigerian Breweries (Heineken) for yeast drying.

### ELECTRONICS & EEEW

Nigeria deals with over 1.1 million tons of e-waste annually, most of which is handled unprofessionally in a place called "New Garage" in the Ojota district in Lagos. A national program funded by the Global Environment Facility (GEF) has recently launched to implement a functioning EPR system for EEEW, which has triggered an increase of e-waste treatment and storage infrastructure. Business opportunities include collecting and recycling deep cycle batteries and setting up proper WEEE recycling lines for different products. Recently, the Dutch social enterprise **Closing the Loop** was able to successfully conclude a pilot project concerning retrieving cobalt from lithium-ion mobile phone batteries sourced from Nigeria. They were able to source a total of 5,000 kg of batteries and sending them back to the Netherlands to be safely recycled, extracting an estimated 1,250 kg of cobalt that will be sold back to the market and used for new batteries, all accomplished in an economically viable manner and by providing work opportunities for the Nigerian collectors. Investments in this area are expected to increase as a result of the GEF program for supporting the EPR system. Notable partners for EEEW projects are **E-Terra** and **Hinckley Group**.

## REPORTS & LINKS

### Reports

- [Doing Business in Nigeria](#)
- [Nigeria Scoping Mission, Waste and Circular Economy](#)
- [Renewable Energy Potential](#)
- [FAO in Nigeria](#)
- [Transforming Nigeria's Agricultural Value Chain](#)
- [The Global E-waste Monitor 2020](#)

## RELEVANT NETWORKS

- [Lagos State Waste Management Authority](#)
- [National Environmental Standards and Regulations Enforcement Agency](#)
- [Food and Beverage Recycling Alliance of Nigeria](#)
- [Waste Management Society of Nigeria](#)
- [Nigeria Climate Innovation Center](#)
- [African Circular Economy Network](#)
- [E-waste Producer Responsibility Organisation Nigeria](#)

- [Alliance for Responsible Battery Recycling](#)
- [FATE Foundation](#)
- [Lagos Business School Sustainability Center](#)
- [Lagos Chamber of Commerce and Industry](#)
- [Circular Economy Innovation Partnership](#)

## EMBASSIES & RELATED ORGANIZATIONS

- [Embassy of Nigeria in the Netherlands](#)
- [Embassy of the Netherlands in Abuja](#)
- [Netherlands Consulate-General in Lagos](#)