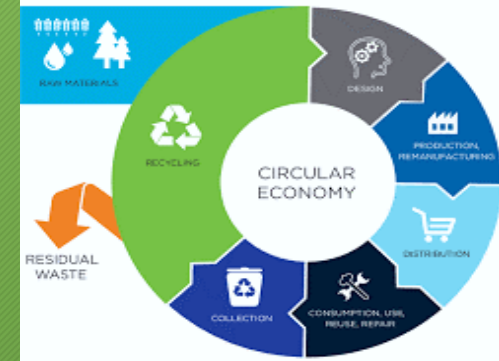


Circular Economy: A Pathway to Sustainable Development

Exploring the Potential of Circular Economy



September, 2024

Introduction to Circular Economy



Circular Economy is an economic model aimed at eliminating waste and the continual use of resources.

Key Concepts:

- Designing out waste and pollution
- Keeping products and materials in use
- Regenerating natural systems

Contrast with Linear Economy: Take, make, dispose model.

Circular Economy in Action: Global Examples

Netherlands: (A *Circular Economy Pioneer*)



The Netherlands is a leader in recycling and resource recovery.

- **Ambitious goal:** Fully circular economy by 2050.
- Recycling rate of 97% for construction waste.
- **Focus sectors:** construction, food systems, and renewable energy.

Reference: European Commission, 2020

Circular Economy in Action: Global Examples Japan

(Circular Economy and the 3Rs)



Japan focuses on the 3Rs: Reduce, Reuse, Recycle.

- Home Appliance Recycling Law promotes recycling of large appliances.
- "Urban mining" initiatives recover valuable metals from e-waste.

Reference: Ministry of the Environment, Japan, 2020

Circular Economy in Action: Global Examples

Germany

(The Green Dot System)



Germany leads in waste management and recycling.

- Circular Economy Act promotes resource productivity and waste reduction.
- The "Green Dot System" requires manufacturers to manage the full lifecycle of their products.

Reference: Federal Ministry for the Environment, Germany, 2021

Circular Economy in Action: Global Examples

Sweden

(Waste-to-Energy Pioneer)



Sweden has one of the highest recycling rates globally.

- Strong focus on waste-to-energy programs.
- Waste reduction through deposit-refund systems for bottles and cans.
- The world's first shopping mall for recycled and upcycled goods, ReTuna.

Reference: Swedish Environmental Protection Agency, 2020

Circular Economy in Action: Global Examples Rwanda



Rwanda is a leader in Africa's circular economy transition.

- Banned single-use plastics in 2008 and has focused on e-waste recycling.
- Rwanda Green Fund (FONERWA) finances circular economy projects such as waste-to-energy initiatives and sustainable agriculture.

Reference: Rwanda Environment Management Authority, 2020

Why is Circular Economy Important for Nigeria?



Environmental Challenges:

- Pollution in major cities (Lagos, Port Harcourt)
- Waste management crisis
- Oil spills and environmental degradation

Economic Potential: Creating jobs, innovation in manufacturing, and resource efficiency.

Key Principles of Circular Economy



1. Design for Longevity: Products made to last longer.
2. Waste as a Resource: Recycling, composting, and reusing waste.
3. Renewable Energy Usage: Encouraging green energy solutions.
4. Collaborative Consumption: Shared services and products (e.g., ride-sharing, leasing).

Nigeria's Current Waste and Resource Challenges



- **Waste Accumulation:** Over 32 million tonnes of waste produced annually.
- **Plastic Pollution:** Lagos alone generates 13,000 tonnes of waste daily.
- **Limited Recycling Infrastructure:** Minimal investment in waste recycling facilities.

References:

Nigerian Federal Ministry of Environment. (2020). Waste Management Challenges in Nigeria.

Lagos State Waste Management Authority (LAWMA). (2021). Lagos Waste Management and Recycling Report.

Potential Sectors for Circular Economy in Nigeria



- Agriculture: Using organic waste as compost or biogas.
- Manufacturing: Extending product life cycles through repair and recycling.
- Construction: Utilizing eco-friendly materials and green building designs.
- E-Waste: Developing a robust e-waste recycling ecosystem.

References:

Nigerian Economic Summit Group (NESG). (2021).
Circular Economy Opportunities in Key Sectors.

Government and Policy Role in Nigeria



- Supportive Policies Needed:
- National recycling framework.
- Incentives for companies adopting circular business models.
- Investment in renewable energy.
- Existing Initiatives: Lagos State Waste Management Authority (LAWMA) promoting recycling, startups focusing on plastic recycling and biogas production.

References:

- Nigerian Federal Ministry of Environment. (2020). National Environmental Policy: Promoting Circular Economy.
- Lagos State Waste Management Authority (LAWMA). (2021). Promoting Recycling Initiatives in Lagos State.

Conclusion and Call to Action



Summary: Circular economy presents a sustainable path to tackle waste, boost its economy, and protect the environment.

Call to Action: Collaborative efforts from government, private sector, and citizens to embrace the circular economy.

“Waste is only waste if we waste it.” - Ellen MacArthur

THANK YOU FOR YOUR TIME



ACEP