

# INNOVATIVE WASTE MANAGEMENT FOR AFRICA



This presentation highlights:

- The GIVO model
- SDGs & Impact
- GIVO Technology Applications in Waste Management
- JICA Project - Objectives, Activities and Outcomes
- GIVO Traction to Date

## The GIVO Center



The GIVO center operates as a local hub operated by youth and women, that collects plastics from households and the environment and processes these materials into industrial products.

### Key Features:

- Customized 40ft Container
- 5KVA solar inverter system
- Integrated with GIVO software solution (web platform, mobile app, Internet of Things)

Capacity: 250-300 kg of plastic recyclables collected and processed daily

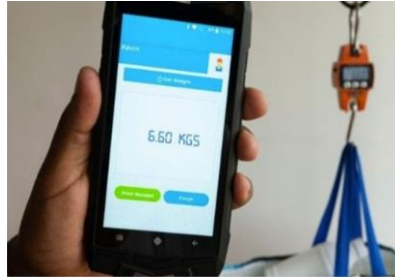
Staff: 10-15 full-time jobs created.

Output: Shredded plastic granules

### Benefits:

- Provision of a convenient and efficient recycling waste management solution for 10,000 community residents per center.
- Diverting waste materials from landfills, by collecting 90 metric tons annually, leading to a cleaner environment.
- Emissions capture of up to 540 tonnes of CO<sub>2</sub> per annum.
- Creation of up to 15 full-time jobs per center
- Promote circularity by manufacturing industrial products from recyclables.
- Increase in income for depositors by paying incentives per kg of recyclables they deposit (up to \$9,000 per year).

# How is GIVO Innovating?



## Youth & women led franchisee model

Modular collecting and processing via GIVO Center.  
Community based advocacy.

## Hardware + Software Solution

Automating and digitizing the collection of recyclables.

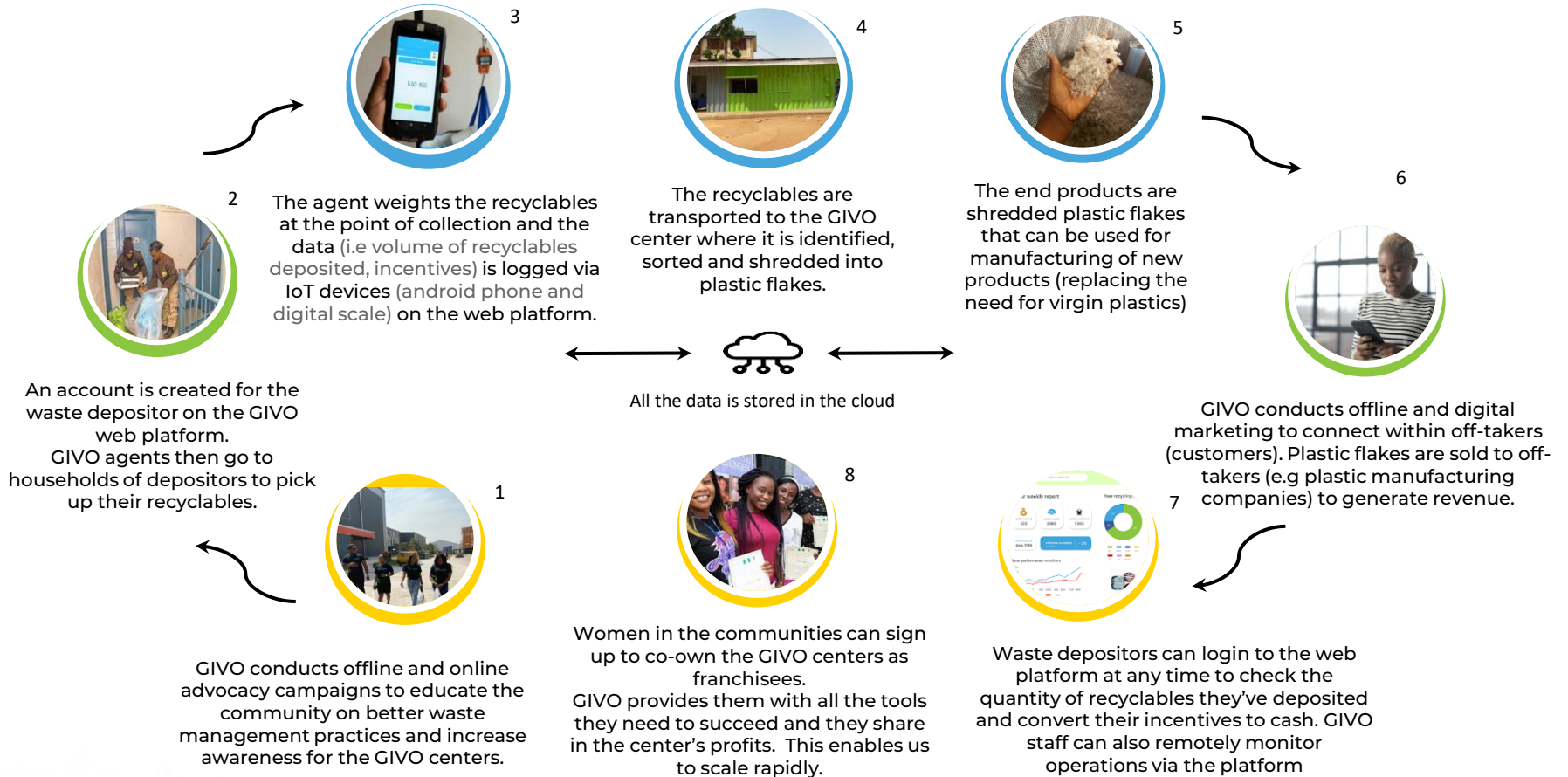
## Mobile payments

Provide incentives and cashless payments for waste depositors.

## Vertically Integrated Value-chain

Value addition by producing plastic flakes from recyclables collected.

# GIVO's System Map



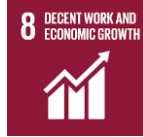
# SDG's & impact



What do we target?



5.5. Ensure women's effective participation and equal opportunities for leadership at all levels



8.2. Higher level of productivity by focusing on labor-intensive sectors.  
8.5. Achieving full and productive employment for all staff.



11.6. Reduce the adverse per capita environmental impact of cities



12.5. Reduce waste generation through prevention, reduction, recycling and reuse



14.1. Prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

How do we measure it?

Over 60% of GIVO workforce are women

40,000 units of consumer and industrial products manufactured.

Competitive wages and conducive work conditions for GIVO staff.

Over 1800 metric tons of carbon emissions saved.

120 metric tons of recyclables collected and processed to date

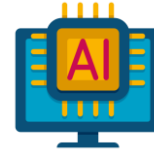
5000 people educated on recycling

90 metric tons of recyclables diverted from landfills and water bodies per GIVO center annually.

# Application of Technology in Waste Management



Internet of Things (IoT)



Computer Vision (AI)



Advanced Hardware



Digital Money



### Objectives:

- Improve the rate of recycling in Abuja by promoting a new “Trash to Cash” mindset - through implementation of a digital recycling platform.
- Provide an opportunity for recyclers to scale the recycling business in Nigeria by utilizing digital solutions.



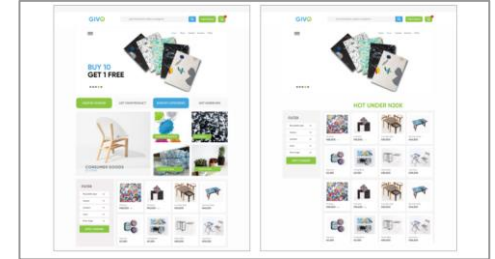
## JICA project - Activities



Problem solution fit to understand unique challenges affecting recycling in Abuja and recommendations to solve them.



Establishment of a GIVO center to aggregate and process recyclables within the state.



Development of a recycling marketplace to cater to all stakeholders across the value chain (depositors, customers, recyclers)

## JICA project - Outcomes



### Level of Interest

90% of stakeholders (households, government, recyclers) expressed need for incentives, awareness and a marketplace to encourage recycling.



### Advocacy

Community outreach to over 5,000 people increasing awareness about recycling in the state.



### Depositors

200 new depositors on the GIVO platform, thus promoting the “trash to cash” mindset.



### Collection Volume

Over 120 kg of recyclables collected and processed from households and businesses in Abuja.

# Traction

May  
2019

Participated and won EPIC Plastic Innovation Challenge organized by Coca Cola.

**EPIC**

February  
2020

Collection Pilot, with the Lagos State Waste Management Authority to digitize waste collections in Lagos State



May  
2020

Processing Pilot to produce face shields and masks in response of COVID-19.



December  
2020

Made 15,000th unit of PPE. Diversified production to include flower pots and abacus.



July  
2021

Installation of the plastic sheet production line - First of its kind in Africa.



December  
2021

Secured partnerships with FCDO, University of Warwick UK, AEPB, JICA.



July  
2022

2 GIVO centers operational in Lagos and Abuja, with 3 more opening in Q3.



Our awards:

**EPIC**



**ORANGE CORNERS**

L'innovation pour les femmes en Afrique  
AFD Digital Challenge



**OCEANHUB AFRICA**

## Our Partners



Thank  
you