Greenhill Recycling Value for Waste

NIGERIA





Problem

- 1. No large-scale recyclable collection from source in Nigeria
- 2. Inadequate supply of raw materials to recycling companies = low productivity
- 3. Dumpsites not sustainable; fetal consequences
- 4. Poor waste disposal causing dirty communities
- 5. Dirty communities aiding growth of disease vectors such as mosquitoes
- 6. High poverty rate and population growth hinder waste service fee collection and financing
- 7. Waste management is a low priority sector for the government
- 4000 tons of plastic waste generated daily in lagos; estimated to grow by 9.6% annually to 1.9 million tons by 2025
- 9. The urban poor are the most vulnerable

Solution

Plastic waste as a currency

We tackle poverty, unemployment, and climate change by converting plastic waste into a currency. Using technology, we offer communities the chance to earn from their waste while promoting healthier living. Users earn 'Green Points' for plastic waste deposited, redeemable for cash, health insurance, school fees, utility bills, groceries or micro business funding.





Primary targets

- Indigent individuals, (especially women) in architecturally unplanned communities earning below \$3 daily
- People involved in desperate survival methods such as theft, begging, or prostitution
- We have engaged over 25,000+ of such individuals since inception in 2016 (sensitization campaigns, word of mouth, referrals)
- 60% of those engaged are women



- Eco-conscious, tech-savvy climate literate individuals (middle income earners)
- Looking to earn & save while protecting the environment.
- Don't mind delayed gratification
- Targets include financial institutions, hotels, gated communities and others
- Engaged over 1,000 targets through the mobile app during.

Mission

Provide

Provide sustainable solutions to the waste management crisis in developing countries like Nigeria.



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Elevate

Elevate female waste pickers and rural recyclers in Nigeria out of poverty and financial exclusion.



Paying Customers

Paying CustomersNeeds/motivationsImage: Second sec

We then created models that addressed those needs in order to satisfy our customers, in return building trust and earning a premium.

Refer to link for proof: <u>https://tinyurl.com/yeyvk3rx</u>

Needs/motivations	Solutions
Clean source of raw materials at a cheaper cost, increased efficiency and reduced labour cost	Sorting and baling (pre-processing) reduces labour cost by almost 50% for our customers as clean materials feed directly into their machines.
Environmental sustainability	We help our customers reduce their carbon footprint; providing them with recycled raw materials.
Regulatory compliance	Through our service, our customers can share collection data we provide as proof of compliance
Business Security	Through our process (Recovery) manufacturers (end users) remain in business. Without collection, there would be no recycling.

We sell plastics to 2 major end users ; ALEF Recycling, a producer of food grade pellets and ALKEM, producer of fibre grade pellets

Unique Value Proposition

Value to Target Users (Suppliers of Plastic Waste)

- 1. Healthier and cleaner communities
- 2. Diversified income generation opportunity
- Raising climate conscious adults through our schools recycling project
- 4. Reduced flooding and malaria outbreak in communities
- 5. Health Insurance and schools fees available to women living below \$3 daily

Value to Paying Customers (Off-takers)

- 1. Regular supply of clean feedstock to meet increasing demands for raw material.
- 2. Increased productivity of the recycling process for end user; since feedstock is not sourced from dumpsites; hence not commingled with impurities.
- 3. Saves time, money and reduced labour needs for end users
- 4. Our process (recovery) ensures that end users (manufacturers) remains in business.



User Journey Map

Product(s), Key Benefits and Key Features



Franchise Model

Key Benefits

Diversified income source for women. They all earn above the minimum wage in Nigeria.

Key Features

Women are provided with baling machines to produce bales themselves and sell to Greenhill Recycling.

Waste Pickers Key Benefits

Improved social status and healthcare benefits

Key Features

PPEs, health insurance and trolleys; then absorbed into the formal waste recycling sector.



Subscription Key Benefits

Cash rewards, groceries and other benefits

Key Features

Users earn "Greenpoints" that can be redeemed for cash and other benefits.



Schools Project Key Benefits Plastic waste becomes currency for paid education

Key Features

Students get their fees paid while schools get basic amenities.

Market Segmentation

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Key Target: Lagos State



Our pilot market is Lagos State, located in the Southwestern geopolitical zone of Nigeria. With over 22 million people, it is the most populated of all 36 states in Nigeria.

Competition

Wecyclers, Chanji Datti, Horlag Recycling and Keltani Recycling.

Total Market Size

In Nigeria 2.5 million tonnes of plastic waste is generated annually (This Day, 2021).

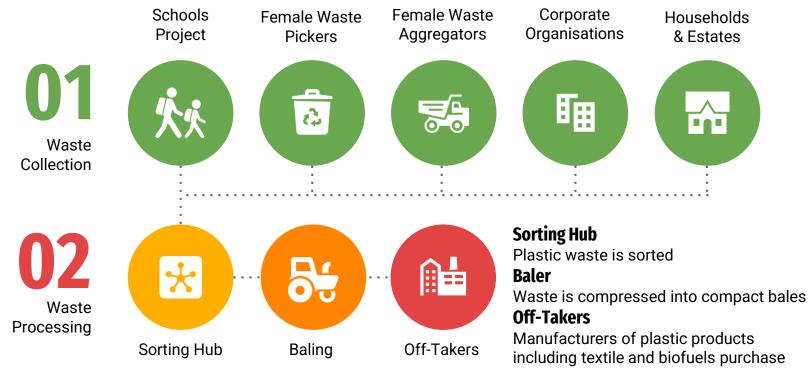
Serviceable Available Market

In Lagos, 9,000 tonnes of waste are generated daily with about 86 percent of it plastic, consisting bottles and bags (This Day, 2021).

Market Share

Greenhill Recycling at scale looks to gain a market share of **25%**.

System Map



bales

Scale Plan



Finance

Projected annual revenue by Dec, 2025 is **£1,000,000** with a profit of **£807,000**.

Impact

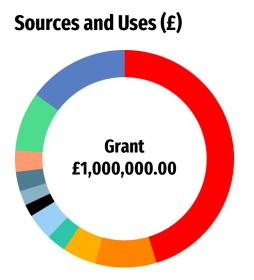
105,000+ households will be impacted through aggressive awareness and sensitisation campaigns and we will divert 1,700 tons of CO2 from the atmosphere and 15M+ plastics from polluting marine habitats.

Team

Job opportunities will be created for **1,000 women** through our franchise model & waste pickers initiative. Our staff strength will increase to 300+ with 80% women by Dec, 2025

Operational Optimizations

Leveraging technology to collect **300+** tons of plastic waste monthly, positions us for export opportunities. We will introduce another end product (plastic flakes) and expand collection to **Edo and Ogun states in Nigeria**, in addition to Lagos State.



Profit and Loss Projections (₦)

Budget

45.3%	Factory	452,648.45
9.1%	Hot wash and crushing complete line	90,529.69
5%	Compactor trucks	49,791.33
2.9 %	Fork lifts	28,969.50
4%	Weighing Bridge	39,833.06
1.8%	Label remover	18,105.94
2.2%	Transformer	21,727.13
2.9 %	110 KVA generator set	28,969.50
3.2%	Drop off centres	31,866.45
8.8%	Baling machines	87,943.13
14.9%	Working capital	149,341.40
0.0%	Unutilised funds	274.43

	Year 1 (000')	Year 2 (000')	Year 3 (000')	Year 4 (000')	Year 5 (000')	Total (000')
Revenue	197,368	425,429	995,086	1,556,908	1,683,335	4,858,126
Cost of sales	(237,500)	(398,273)	(795,416)	(1,124,197)	(1,183,980)	(3,739,365)
Total operating expenses	(44,066)	(61,077)	(74,630)	(86,980)	(88,838)	(355,591)
EBITDA	(84,197)	(33,921)	125,040	345,731	410,517	763,170
PAT	(121,333)	(71,056)	61,533	216,017	261,367	346,527

Social Impact and Gender Impact





Women Empowerment

Women make up 80% of our workforce, with most of them working as sorters, collectors, bin hosts and Franchisees. These women support their families with their earnings, in some cases, they are the breadwinners in their families.



Education and Wellbeing

The social objective of this company is to address gaps in education of children and the welfare of residents within impoverished communities by exchanging plastic waste for cash to pay school fees, utility bills and/or basic food for these residents.



Potential Risks for Women

With the proposed scaling of our operations, more women within our target market area will have an opportunity to earn, however this would mean that they have less family time.

To mitigate this risk, we will insist on strict working hours for our women; organise capacity building sessions on work- life balance and provide paid maternity leave for women of child-bearing age.

Environmental Impact



Plastic Recovery

By 2025, we will recover an average of 500 tons of plastic waste monthly, diverting 2,900kg of CO2 from the environment and contributing largely to climate change mitigation.



Carbon Emissions

We also recognise the impact of using diesel powered generating sets and fuel powered tricycles for processing and collection purposes respectively, to this end we intend to ensure our offices are solar powered as well as our collection tricycles by the year 2025.

The introduction of solar powered aggregation centers and solar powered tricycles for doorstep plastic collection reduces the introduction of toxic gases into the atmosphere.



Marine Life

Diverting plastics from getting into the oceans and dump sites mitigates the effect of climate change.

Team

Management team



Mariam Lawani (CEO/Founder) MBA, (ALUSB) Circular Economy & Social sector certified



Edmond Idokoko (Strategy & Marketing) 20+ yrs experience, MBA, (University of South Wales)

Non-management team



Chidi Afulezi (Innovation) NYU's School of Business, Access to African \$ Int'l markets



Ambibola Osuchukwu (Accounting) China Europe International Business School,



Adegboyega Adebajo (Strategy) 25+ yrs experience, access to Northern markets



Rosebell Abwonji (M&E/ Projects) ALUSB, Conservation & Environment, Project Management

Favour Gbemudu — Community Engagement Officer (Strategic addition to address the Hausa language barrier, 5+ years in the recycling sector) Edna Arinzechukwu — Business Development and Data Manager (Speaks Igbo fluently) Nwankwo Sonia — Accounts Nkemjika Jeovin — Business Development (Speaks Yoruba fluently) Ugodinobi Lordson — Franchise Officer (Strong negotiation skills) Okpagba Chioma — Hubs Manager Tari Okereke — Design (Extremely proficient in design and social media management)

Partnerships

Partner	What they do	Partnership stage	Partnership value	Partnership strategy
GBF	Largest beverage producer in the world	Current and Future	Partnership confers validation on our brand, provides credibility and support of our model / our waste pickers	Help partner achieve a world without waste mandate, partner invests in our model to promote community recycling from source
THE FOOD A REALING CONTINUES	Consortium of 29 packaging COYs, the PRO set up to fulfil EPR in the sector	Current and Future	Incentivize our collection/ Support our sorters and seek opportunities for strategic supports in future	As the only PRO organisation in Nigeria for this sector, partnership ensures we benefit from the EPR model with individual Beverage companies
RECYCLERS RECYCLERS	Recycling associations across Nigeria and Lagos	Current and Future	Makes it easier to identify active recyclers to collaborate with, ecosystem already existing. Franchisees identified from existing ecosystem	Direct access to a pool of waste pickers and aggregators to work with/ Emulate and improve on existing working models within the ecosystem
	Responsible for policies and regulation of the Recycling sector in Lagos state	Current and future	Invited as a contributor/ panelists to the plastic policy doc in Lagos. Influence decisions around plastic sector in Lagos	Policy formation/ influence, Regulation and rebates on Recycling certification,
	Cement factory	Future	Off take our labels, shred and mix with other materials fed into cement kiln as fuel	Partnership ensures little or no negative environmental impact of our process
HYGEIA	Health Insurance	Current and future	Partnership provides access to affordable health for all our staff, provides screening for our women and health education	Make use of affordable insurance plans to continue to provide coverage for our staff
empower.eco	Blockchain alternative for the recycling system	Future	Use Blockchain technology to provide recycling companies with carbon credit	Our company earns FX for our plastics on the carbon credit market as the date for collection is traceable and accurate

Greenhill Recycling THANK YOU

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