

# Company Profile

ENERGY ACCESS PROSPECTUS





### Who we are:

Clean Technology Hub is a pioneering hybrid hub for the research, development, demonstration of clean energy ideas, technologies, resources for Clean Energy Organizations and Environment and Climate Friendly Initiatives across Africa. At the hub, we also work towards supporting these companies for validation for commercial stage and/or sustainability stage development. The hub was founded in 2016 and is located in Abuja, with virtual hubs spread across the country.

The hub is an early start-up incubator for inventions and innovations in clean energy, a consultancy for sustainability and energy efficiency, and climate friendly solutions for organizations and businesses, a hybrid research and data driven firm, and a driver of clean energy investments into Africa. Clean Technology Hub is focused on increasing clean sustainable technologies across Africa and using it to empower citizens and communities towards building a sustainable well-being economy.



The hub was founded in 2016 and is located in Abuja, with Virtual hubs spread across the country.



### What we do:

Our work at Clean Technology Hub rests on two pillars – Advancing both Clean Energy Access and Climate Action through policy and strategy advisory, and through design thinking and analytics, as well as through training and advocacy. We also invest in very early stage ideation projects that address the two core issues above.

As a hybrid research hub, we believe that data is key to increasing energy access across the board and therefore through support and tracking of laws, policies and regulations around clean energy; increased community engagement to identify and evaluate barriers to access, that we can better support the design and deployment of clean energy projects.

Clean Technology Hub is focused on addressing Africa's energy poverty and advancing climate action by providing up-to-date market information across the African renewable energy markets; and engaging in comparative analysis that impacts industry issues like economic development, policies, resource potential and technology developments.



### **Experience**

Clean Technology Hub has extensive experience and knowledge in the African clean technology sector primarily on clean energy, environment and climate change. We have supported several organizations, including government agencies in implementing clean technology, start-up support, and climate smart programmes in Nigeria. These include the Heinrich Boell Foundation, Reiner Lemoine Institute, Practical Action, Coffey International, the Renewable Energy Association of Nigeria (REAN), the Open Society Initiative for Africa (OSIWA), All On, Power for All, Global Greengrants Fund (GGF), Nigeria Climate Innovation Center (NCIC), Rocky Mountain Institute, Health of Mother Earth Foundation (HOMEF) Caritas Nigeria, Strategy and Innovation for Development Initiative (SI4DEV), Global Off Grid Lightning Association (GOGLA) and several country embassies.



In implementing programmes and projects in Nigeria especially market development, business support, and data collection, we have developed a strong relationship with government agencies in the power sector such as the Nigerian Electricity Regulatory Commission (NERC), the Federal Ministry of Power, Rural Electrification Agency (REA), Energy Commission of Nigeria (ECN), National Power Training Institute (NAPTIN), Electricity Distribution Companies (DISCOs), and Electricity Generation Companies (GENCOs). We have also developed a robust database of over 300 civil society organizations, market associations, community groups, skill centers, faith-based institutions, academia and external experts across the country.

We have a young, passionate and skilled team with experience and knowledge in Environment and Climate Action, sustainability, technology, policy development, business development, government relations, advocacy, and market development; with over 20 years of combined experience in the power and clean technology sector within and outside Nigeria. Most of our team members are also international and national consultants for several global developmental organizations that focus on the advancement of universal Environment and Climate advocacy, clean technologies, sustainability, gender, and entrepreneurship.

### Our key strengths includes



**MARKET DEVELOPMENT** 

**RESEARCH AND DATA ANALYTICS** 





**ADVOCACY** 

START-UP IDEATION AND INCUBATION





**BUSINESS SUPPORT** 

**ENVIRONMENT AND CLIMATE AWARENESS** 





**GENDER EMPOWERMENT** 

SUSTAINABLE DEVELOPMENT AND INTEGRATED RESOURCE PLANNING





**CAPACITY BUILDING** 

POLICY DEVELOPMENT AND REVIEW





**ENERGY GOVERNANCE ANALYSIS** 

POWER SECTOR AND ADVISORY SUPPORT





STRONG RELATIONSHIP WITH GOVERNMENT AGENCIES

## **Related Project Portfolio**

Some of our key related projects and activities that have been implemented include:



## **Developing New Standards for Solar Components in Nigeria - GIZ NESP (Ongoing)**

The GIZ sponsored Development of Standards for Solar PV Modules, Batteries and Charge Controllers in Nigeria project aims to develop standards for solar photovoltaic (PV) modules, lead acid or lithium ion batteries, energy meters and charge controllers to help create a more regulated and standardized market to encourage investments into the renewable energy and energy efficiency sector in Nigeria. This project is being implemented by INENSUS GmbH, Micro Energy International GmbH, and CTH.

#### **Approaches/Activities**

- Baseline study of solar photovoltaic modules, lead acid batteries and charge controllers in Nigeria including the identification and documentation of the main actors (private and public).
- Assessment of solar PV module, lead acid battery and charge controller standards, certification and testing facilities in Nigeria.
- Introduction and development of additional standards for solar PV modules, batteries and charge controllers in Nigeria.
- Capacity development and awareness creation for stakeholders on solar PV module, battery and charge controller standards.
- Development of a strategic Action Plan for the environmentally friendly and safe disposal of Used Lead Acid Batteries (ULAB).

#### **Key Outcome**

- Development of guidelines in form of leaflets/brochures on the newly developed Solar PV Component Standards.
- Development and Implementation of an awareness creation program on the newly developed Solar PV Component standards.
- Launch of the new standards for solar PV components.



Localizing Renewable Energy Policies at the State Level in Nigeria - Heinrich Boell Foundation (Ongoing).

The main objective of this project is to engage state actors to adopt renewable energy policies and regulatory guides and/or develop a roadmap for the adoption of a Decentralized Renewable Energy (DRE) policy at the state level in the country.

- Mapping of champion Civil Society Organisations (CSOs) in the chosen states focused on promoting climate friendly practices and clean energy access.
- Baseline study of the selected states on their green potentials and potential ways renewable energy can catalyse their development.
- Engagement with champion CSOs in these states to key into the project as well as to help mobilize other CSOs in the state.
- Organizing workshops/webinars with CSOs in these states focused on empowering them with
  the aid of both the simplified policy guide and baseline study to engage their State Assembly
  and other relevant government stakeholder on the need to develop a roadmap for the
  domestication of these national renewable energy policies/ and or a roadmap for renewable
  energy development in their states.
- Creation of a State Level Task Force made up of influential Civil Society Organizations and other identified stakeholders to engage with the state assembly and other identified key stakeholders.
- Two-day broad stakeholder workshop with the state level taskforce members and key government stakeholders in each state.

#### **Key Outcome**

- Publication of baseline studies for Delta, Ondo and Ebonyi states highlighting their green potentials and potential ways renewable energy can catalyse their development.
- Formation of State Level Task Forces in the selected states.
- Buy-in from relevant government stakeholders in the selected states.



### **USAID Nigerian Power Program (NPSP) - Ongoing.**

PA-NPSP and CTH will work together to accelerate growth of the off-grid energy market, by continuing PA-NPSP's highly successful engagement with REA and businesses, communities, and entrepreneurs to generate market-based research and solutions for accelerated access to off-grid energy. Altogether, NPSP and CTH will design activities to accelerate access to modern, clean, and affordable electricity for the people of Nigeria.

- Develop an updated market intelligence report to provide high-level information on the landscape of Nigeria's off-grid market for local and international off-grid companies interested in entering or expanding in the market.
- Perform a productive load report/ market overview that details the case studies and economic analyses for cold storage and solar irrigation pairing with mini-grids and stand-alone.
- Assess the gaps between the current RESIP and REA's Strategy Document and provide recommendations for a revised RESIP to align with REA's long-term goals.
- Develop a report with an overview and recommendations on how best to support the Role of Women in Rural Electrification Cooperatives.

#### **Key Outcome**

- A Market Intelligence Report.
- Cold Storage and Solar Irrigation Productive Load Use Simulation Report.
- RESIP Gap Analysis & Recommendations Report.
- Women in Rural Community Coordinators" Report.



### **Enterprise Development Programme - All On (Ongoing)**

The project was carried out with the support of the off-grid energy impact investment company, All On. The aims of the project are to build a pipeline of Nigeria off-grid energy businesses by focusing on idea and early stage energy entrepreneurs and supporting them to prove the viability of their business.

#### **Approaches/Activities**

- Call to Application.
- University Boot camp in Abia State Polytechnic and University of Uyo.
- One-day Pitch Event for selected companies in Aba and Uyo.
- Six Months Virtual Incubation for selected off-grid energy start-ups.
- Final Pitch Event for successful off-grid energy start-ups.
- Announcement of final selected off-grid energy start-ups under the first cohort.

#### **Key Outcome**

- Training of over 200 students on career and entrepreneurship opportunities in the off-grid clean energy sector in Abia State Polytechnic and University of Uyo.
- 40 shortlisted start-ups from the preliminary screening process.
- 18 start-ups were selected to participate in the virtual incubation programme.
- 11 start-ups completed the virtual incubation programme and participated in the final event.
- 7 start-ups were selected and given USD 10,000 seed fund.



### Africa Enterprise Challenge Fund (AECF) Project (2021)

Africa Enterprise Challenge Fund (AECF) in a bid to address the issue of energy poverty in Nigeria sought to provide patient capital (no-interest loan and grants) for early and growth-stage businesses. The AECF team employed Clean Technology Hub (CTH) services to provide technical assistance services to the selected businesses and carry out due diligence exercises to verify the business case and viability of the said businesses. The aim was to verify the business operations and ensure the business impacts rural communities across Nigeria.

#### **Approaches/Activities**

- Review of the selected companies' documents such as financial statements, tax compliance certificate, business plan, risk assessment register, among others.
- Onsite due diligence to verify statements made in reviewed documents and clarification of discrepancies
- Development of reports summarizing findings and highlighting recommendations.
- Presentation of an overview of the energy situation in Nigeria
- Provision of feedback and clarification to AECF team

#### **Key Outcome**

Development of an external memo document for the Investment Committee of the AECF to help with a summary overview of each of the companies as well as recommendations.



AMDA is an industry association supporting the scaling-up of decentralized energy utility companies building mini grids for rural energy access across Africa. Clean Technology Hub with the support of AMDA aims to evaluate the specific needs of the sector and also lay out a comprehensive strategy to support minigrid companies in Nigeria to improve access to finance and to scale up their operations.

#### **Approaches/Activities**

- Drive consensus building between Nigeria developers and ensure they support advocacy work within Nigeria.
- Engage with bilateral and multilateral donors to support their work, co-develop new support mechanisms and ensure current programmes can address sector needs.
- Engage with other industry associations to make them aware of AMDA and to get their buy into AMDA's mandate and work.
- Layout a comprehensive strategy to support minigrid companies in Nigeria to improve access to finance and to scale up their operations.

- Development of the Africa Minigrid Developers Association in Nigeria.
- Create a set of advocacy tools for AMDA to help deliver minigrid sector needs in Nigeria, including policy, finance and technical assistance.



Promoting Citizens Access to off the Grid Decentralized Renewable Energy Solutions in Nigeria (Ongoing) - Open Society Initiative West Africa (OSIWA).

Expanding citizen's access to clean energy solutions through inclusive, coherent and sustained stakeholder engagement. The project specifically aims to increase shared understanding of clean energy solutions for Micro, Small and Medium Enterprises (MSMEs); build sustainable models through women-led business networks in communities; build human capacity, skill, sustainability and resilience in universities; and build community awareness on Nigeria's progressive energy policies and programs.

#### **Approaches/Activities**

This project involved the comprehensive desk research on the renewable energy options for Micro, Small and Medium Enterprises (MSMEs); Workshops for Women Leaders in the renewable energy sector, Women-led MSMEs, MSMEs groups, Universities students, and existing as well as potential mini-grid communities in Abuja, Lagos, Kano, Enugu, Bisanti, Sokoto and Port Harcourt.

#### **Key Outcome**

#### The development of:

- Research on Energy Deficit and Sustainable Energy Options for Specific MSMEs Primarily Agriculture and Agro-Allied Industry
- Policy Brief on Strategic Direction for Nigeria's Energy Governance Action .
- Plan for driving women participation across the renewable energy value chain in Nigeria.
- Action Plan for mainstreaming renewable energy into the Nigerian University Curriculum Mini-grid Negotiation Manual for Off-grid communities in Nigeria.
- Training of over 500 students, women, MSMEs owners on the need to transition to cleaner energy sources.



## Sensitization on Energy Efficiency/Energy Efficiency Advocacy Training (2020) - Green Village Electricity

This project involves sensitizing the consumers on how to achieve energy efficiency, which will also reduce their power costs and strengthen their relationship with the GVE Group as the mini-grid operator.

#### **Approaches/Activities**

Customer and stakeholder engagement using practical sessions with the mini grid customers.

- Increasing the awareness of the consumers on how their power consumption is calculated.
- Increasing the awareness of the consumers on energy efficiency and how that can reduce their power costs.



## Development of Solar Alone Solar E-Waste Management Framework for Nigeria - ACE TAF (2020)

This project was done in partnership with ACETAF and was aimed at providing a framework that will provide sector guidance primarily to solar companies on managing and disposing of SAS e-waste in line with existing national environmental framework and best practices. To also inform and guide government agencies of power and environment on SAS e-waste, as well as development partner interventions in the sector.

#### **Approaches/Activities**

- Analysis of the National E-Waste Regulatory Framework including the Environmental (Electrical/Electronic Sector) Regulations of 2011 as applicable to SAS.
- Consultation with relevant stakeholders to get information on e -waste activities, validate desk
  research, identify and fill gaps, and ensure relevant stakeholder contribution to the
  framework.
- Development of a Framework on E-Waste for SAS to serve as a tool for the utilization of the regulatory framework. This project was done in collaboration with Federal Ministry of Environment, NESREA, Renewable Energy Association of Nigeria (REAN), Sofies Group, and CTH.

#### **Key Outcome**

Publication of the Framework on E-Waste Management for Stand Alone Solar in Nigeria.



## Stand Alone Solar Market Update Report - ACE TAF (2020)

This project was funded by ACETAF to develop a market assessment update of the standalone off grid solar market. The aim was to gather information with which to inform the development of TAF implementation plan and to understand and identify country specific and cross cutting off grid solar market barriers that were not addressed. The report was meant to provide country specific public updates to all relevant stakeholders on the off grid solar market including the impact of covid 19 on the off grid solar ecosystem.

- Targeted review of original market assessment and power Africa market assessment.
- Stakeholder engagement and interview.
- Drafting of SAS market update report in Nigeria.

#### **Key Outcome**

Publication of the Stand Alone Solar Market Update Report for Nigeria.



This was done in partnership with the Rocky Mountain Institute (RMI) and the Energy Markets and Rates Consultants (EMRC) and was aimed at identifying a favourable business study for the deployment of under-grid mini-grid in Nigeria.

#### **Approaches/Activities**

This involved extensive engagements with mini-grid companies, donor agencies, and several electricity distribution companies.

#### **Key Outcome**

The development of an Under-grid Mini-grid Business Models Report to help mini-grid developers, electricity distribution companies (DISCOs) and other relevant key stakeholders to decide on the best business model for the development of mini-grids in underserved communities in the country.



This project was commissioned by the Alliance for Rural Electrification (ARE) is collaborating with partners on an initiative to develop consumer protection principles for clean energy mini grids. Communities were engaged using interviews and survey questionnaires to find out about the contracts, price and billing.

#### **Approaches/Activities**

Community engagement through interviews and surveys of customers in 3 minigrid sites in Bisanti, Kigbe and Dakwa.

#### **Key Outcome**

Information from mini grid communities on their needs and expectations that will help improve the service delivery of mini-grid developers in their future project.



## Democratizing Nigeria's Energy Access Laws and Regulations (2019-2020) All On

This project was aimed at unpacking and simplifying relevant policies and regulations governing the renewable energy sector in Nigeria. These documents include the National Renewable Energy and Energy Efficiency Policy (NREEEP), National Renewable Energy A ction Plan (NREAP), National Energy Efficiency Action Plan (NEEAP), NERC Mini-Grid Regulation, Sustainable Energy for All Action Agenda (SE4ALL-AA), Rural Electrification Strategy and Implementation Plan (RESIP), NERC Local Content Regulations, Eligible Customer Regulations, Nigeria's Nationally Determined Contribution and the National Policy on Climate Change.

#### **Approaches/Activities**

This involved a comprehensive desk unpacking of these policies and regulations to identify key provisions, the role of key stakeholders, areas of conflicts; extensive engagements of key government agencies such as the Nigerian Electricity Regulatory Commission (NERC), Rural Electrification Agency (REA), Energy Commission of Nigeria (ECN), the Federal Ministry of Power, the Federal Ministry of Environment amongst others to assess the implementation status of these policies, and a one day validation workshop which brought together relevant stakeholders in the Nigerian energy sector to validate the simplified policy guides developed.

#### **Key Outcome**

- The development of a one-page summary of each policy and regulations.
- The development of simplified policy guides for each policy and regulations.



Assessing the macroeconomic effect of Import duties and VAT on the af fordability of solar off-grid across ECOWAS (2019-2021)

This policy research is focused on the justification for the removal of import duties and VAT on solar home system components across the ECOWAS region. Due to the charges imposed on solar technologies under the ECOWAS Common External Tariffs (CET), solar t echnologies have become more expensive and thereby unaffordable across the region. This is a deterrent towards achieving SDG 7 of creating access to affordable, reliable, and clean energy for all by the year 2030. This research is prepared by Clean Technology Hub and commissioned by the West African Renewable Energy Association with support from Global Off-Grid Lighting Association, with the aim of exploring the macroeconomic effect of import duties and VAT on the affordability of Solar Home Systems products across ECOWAS.

#### **Approaches/Activities**

- Comprehensive assessment of existing literature on the policies and taxes on off-Grid Solar the ECOWAS region.
- Engagement of relevant stakeholders ranging from renewable energy companies,
   Government agencies, developmental and donor agencies, customs, regional organizations amongst others.

The development of a market assessment report on the importation systems and processes for Off - Grid Solar across the ECOWAS region.



Clean Technology Hub provided consultancy services for the implementation of the project in Nigeria including a comprehensive market assessment of the Nigerian solar industry landscape with key focus on solar home system (SHS) solutions. This assessment analyzed the current enabling environment for SHS, supply and demand side characteristics, regulatory framework, political economy analysis, supporting services, industry challenges and recommendations.

#### **Approaches/Activities**

Comprehensive analysis of the current enabling environment for Solar Home System (SHS) solutions, supply and demand side characteristics, regulatory framework, political economy analysis, supporting services, industry challenges and recommendations as well as extensive engagements with relevant key stakeholders such as the Federal Ministry of Power, Nigerian Electricity Regulatory Commission (NERC), the Rural Electrification Agency (REA), the Nigerian Economic Summit Group (NESG), The African Development Bank (AFDB), the World Bank amongst others.

#### **Key Outcome**

The development of market assessment of the Nigerian solar industry landscape which currently guides the implementation of the African Clean Energy (ACE) Technical Assistance Facility (TAF) Programme in Nigeria, and the development of an importation guide for Solar Home System components in the country.



## The Africa Enterprise Challenge (AECF) REACT HS Program in Nigeria (2019) - DFID

The AECF Program, implemented by Practical Action, aims to drive private sector investment and innovations in solar home systems catalyzed at scale and accessed by the rural poor households. Clean Technology Hub supported the development of the Country Specific Implementation Framework for the REACT Household Solar Program in Nigeria.

This involved the comprehensive market assessment of the Nigerian solar industry landscape especially for solar home system (SHS) solutions — enabling environment, supply and demand side characteristics, regulatory framework, supporting services, industry challenges and recommendations for the AECF Challenge Fund Competition.

#### **Key Outcome**

The development of a comprehensive market assessment report of the Nigerian solar industry landscape and the development of the Country Specific Implementation Framework for the REACT Household Solar Program in Nigeria that currently guides the implementation of the Challenge Fund Competition in Nigeria.



Identifying local challenges faced by communities and small scale enterprises across Nigeria related to sustainable economic development and energy access, and accelerating development paradigms that involve sustainable adoption of clean technology solutions.

#### **Approaches/Activities**

This involved a desk research on the local challenges faced by communities and small scale enterprises in Anambra and Kaduna States, and Local Solutions Lab workshops in these two states to verify our research findings and map out potential solutions to tackling these priority local challenges.

#### **Key Outcome**

The development of an action plan to address the local challenges facing small scale enterprises in these states and the identification of key champions needed to achieve this action plan.



### **Democratizing Energy Access**

Building an alliance to drive, lobby and build a viable, clean energy ecosystem to support rural and deep rural communities across Nigeria - working together with a coalition of civil society organizations, market associations, women groups, community influencers, skill centers and faith-based institutions in Nigeria.

#### **Approaches/Activities**

Engagements with civil society organizations, market associations, women groups, community influencers, skill centers and faith-based institutions across the country.

The creation of a Civil Society Organisations (CSOs) alliance to drive, lobby and build a viable clean energy ecosystem to support rural and last-mile communities across the country.



## Enabling Small Scale Solution Growth (Local Solutions Lab) (2018-2019) - Heinrich Boell Foundation

A women-led women's rights campaign for climate and energy justice that proposes women centred, decentralized, localized, sustainable and collective renewable energy alternatives advanced through women organizations and campaigns. The research involves examining the current landscape in the Nigerian energy access sector by examining how women can play active roles in key energy access policy formulation, capacity building, technology transfer, market intelligence, and building business especially in renewable energy.

#### **Approaches/Activities**

- Extensive literature review of existing documents on the nexus between energy access and gender issues.
- Engagements with relevant stakeholders ranging from:
  - 1. Government agencies.
  - 2. Donor and developmental agencies.
  - 3. Civil society organisations (CSOs).
  - 4. Women rights groups amongst others.

#### **Key Outcome**

The publication of a report examining the current Nigerian energy access landscape by examining how women can play active roles in policy formulation, capacity building, technology transfer, market intelligence, and building businesses, particularly in the renewable energy sector.



## Market Finance Needs Study for Clean Energy Enterprises (2017) - Sustainable Energy for All (SE4AL), Practical Action

Sustainable Energy for All carried out a Market Finance needs study implemented in Nigeria by Practical Action through Clean Technology Hub. The study, which covered Kenya, Ethiopia, Nigeria, Bangladesh and Myanmar, accessed the past and future needs of renewable energy enterprises to improve understanding among financiers and banks of the energy access sector's financing needs.

This involved engagement with relevant stakeholders in the sector such as:

- Financiers.
- Renewable energy companies.
- Donor agencies.
- Government agencies, amongst others.

#### **Key Outcome**

The publication of the Market Finance Needs Study for Clean Energy Enterprises in Nigeria.



Powering Jobs Campaign 2018-2019 - Schneider Foundation and Rockefeller Foundation

This campaign was implemented by Clean Tech Hub on behalf of Power for All in Nigeria and was focused on rallying stakeholders (policy-makers, government agencies, funders, private and public sector partners, Civil Society Organizations (CSOs), and others) to increase investment in DRE -focused education and training that develops local capacity, create jobs and helps alleviate poverty.

#### **Approaches/Activities**

#### This involved:

- A renewable energy job survey in Nigeria.
- The formation of Steering Committees consisting of relevant stakeholders including a representative from the National Power Training Institute of Nigeria (NAPTIN).
- The launch of the Powering Jobs Census reports in Nigeria.

#### **Key Outcome**

The publication of the Powering Jobs Research Summary and the Census Report for Nigeria.



Market Finance Needs Study for Clean Energy Enterprises (2017) - Sustainable Energy for All (SE4AL), Practical Action

A holistic research that delves into the nexus between energy access and gender issues; access to market and opportunities in the renewable energy space for women; rural women empowerment through productive use of clean energy; and developing gender human capital across the clean energy value chain. The objective of this project is to mainstream gender in Nigeria's emerging clean energy space, and power sector in general.

- Extensive literature review of existing documents on the nexus between energy access and gender issues.
- Engagements with relevant stakeholders ranging from:
  - 1. Government agencies.
  - 2. Donor and developmental agencies.
  - 3. Civil society organisations (CSOs).
  - 4. Women rights groups amongst others.

#### **Key Outcome**

- Increasing the awareness of the consumers on how their power consumption is calculated.
- Increasing the awareness of the consumers on energy efficiency and how that can reduce their power costs.



With the renewable energy market growing rapidly in Nigeria, more women are finding themselves in the utility industry and navigating the leadership nuances that come with women in male-dominated industries and in leadership positions. This project in partnership with Power Africa – Nigerian Power Sector Program (NPSP) – implemented by Deloitte.

#### **Approaches/Activities**

This involved engagements with influential women in the renewable energy sector in partnership with the Power Africa – Nigerian Power Sector Program (NPSP).

#### **Key Outcome**

The creation of a support tool-kit for women in the renewable energy sector towards growing more women into leadership cadre and providing a pipeline of competent qualified women ready to step into leadership positions in the renewable energy industry.



Developing guidelines and regulatory framework for the renewable energy industry in managing its growing ULAB stream, and adoption by key industry stakeholders including the Rural Electrification Agency (REA) and the Federal Ministry of Environment.

This involved leading cross-stakeholder collaboration and engagements with:

- Battery suppliers.
- Renewable energy providers.
- Automotive sector.
- E-waste sector.
- Regulatory agencies.
- Relevant government agencies.
- ULAB collectors.
- Recyclers.

#### **Key Outcome**

The development of a Used Lead Acid Battery (ULAB) Stewardship Programme for the Renewable Energy Sector in Nigeria.