





### Who we are:

Clean Technology Hub is a pioneering hybrid hub for the research, development, demonstration and incubation of clean and green ideas and technologies in Africa, and their validation for commercial stage development. It is also an early start-up incubator for innovations and inventions in clean energy, a consultancy for sustainability and energy efficiency solutions, and a driver of clean energy and climate smart investments into Africa.

The hub is an early start-up incubator for clean energy innovations and inventions, a consultancy for sustainability, energy efficiency, and climate friendly solutions, a hybrid research and data-driven firm, and a driver of clean energy investments into Africa. Clean Technology Hub focused on increasing clean sustainable technologies across Africa and using it to empower citizens and communities towards building a sustainable 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 Promoting climate action. We achieve this through design thinking and analytics, as well as through policy and strategy advisory, 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 fostering energy access across Nigeria. Therefore, we are certain that by supporting and tracking of laws, policies and regulations around clean energy, as well as increased community engagement to identify and evaluate barriers to energy access, 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 market. CTH engages in comparative analysis that impacts industry issues like economic development, policies, resources potential and technology developments.

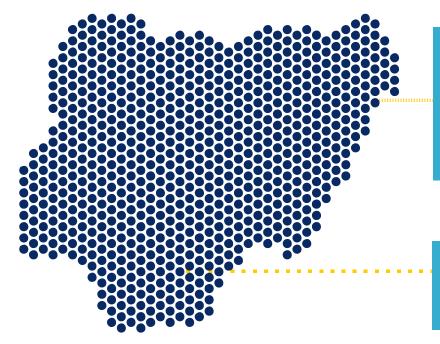
#### WHAT WE OFFER



## Experience

Clean Technology Hub has extensive experience and knowledge in the African clean energy sector primarily on renewable energy, environment and climate change. We have supported several organizations, including government agencies in implementing clean technology, start-up coffey support, and climate smart programmes in Nigeria. These includes the Heinrich Boll Foundation, Reiner Lemoine Institut, Practical Action 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(RMI), Health of Mother Earth Foundation (HOMEF) Caritas Nigeria, Strategy and Innovation for Development Initiative (SI4DEV), Global Off-Grid Lighting Association (GOGLA)

In implementing programmes and projects in Nigeria especially market development, business support, and data collection, we have developed strong relationships with government agencies in the power sector such as the Nigeria Electricity Regulatory Commission (NERC), the Federal Ministry of Power, Rural Electrification Agency (REA), Energy Commission of Nigeria (ECN), National Power Training Institute of Nigeria (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



We have supported several Organisation including government agencies, in implementing Clean technology, start-up support, climate smart programmes in the Country.

Implementing programmes and projects especially market development, business support and data collection.

#### Our key strengths includes



**MARKET DEVELOPMENT** 



**ADVOCACY** 



**BUSINESS SUPPORT** 



**GENDER EMPOWERMENT** 



**CAPACITY BUILDING** 



**ENERGY GOVERNANCE ANALYSIS** 



STRONG RELATIONSHIP WITH GOVERNMENT AGENCIES



RESEARCH AND DATA ANALYTICS AL GRID



START-UPIDEATION AND INCUBATION



**ENVIRONMENT AND CLIMATE AWARENESS** 



SUSTAINABLE DEVELOPMENT AND INTEGRATED RESOURCE PLANNING



**POLICY DEVELOPMENT AND REVIEW** 



POWER SECTOR AND ADVISORY SUPPORT



# The Energy Access Department









#### Publications:

- o Nigeria E-Mobility Market Update Report 2022
- o Nigeria Off-Grid Market Update Report 2022
- o Overcoming the Challenge of Insecurity in Nigeria's Mini-Grid Sector
- 4 CTH Business Case Studies (e-mobility and clean cooking)

#### Research Support:

- Clean Tech Hub supported Power for All in carrying out the Powering Jobs study 2021-2022 in Nigeria
- o CTH supported Africa Minigrid Developers Association (AMDA) in carrying out survey research on the Impact of Insecurity on the Development of the Nigerian Mini Grid Sector
- Developed renewable energy policy documents for Delta and Ondo States (Heinrich Böll Stiftungfunded "Driving Renewable Energy Adoption at State Level" project)
- Secured a grant to carry out research, data collection/dataset building and ecosystem building
- Strengthening partnerships with key government agencies e.g
  - o National Automotive Design and Development Council (NADDC),
  - National Power Training Institute of Nigeria (NAPTIN)
  - o Rural Electrification Agency (REA)
  - o Federal Ministry of Environment etc.
  - o Joined the National Clean Cooking Policy Committee







#### HBS Driving State Level Adoption At State Level

Objective: To engage state actors to adopting RE policies and laws /or develop a roadmap for renewable energy adoption in Delta and Ondo States



Stakeholder Briefing Workshop (April 2022)



Launch of Roadmap (August 2022)



Launch of Implementation Plan (October 2022)



# "Communities of Practice" Driving bottom-up energy transition

**Objective:** To strengthen and empower local communities to plan and implement renewable energy projects for the socio-economic development of their communities.



Identifying Communities of Practice (CP) across five geopolitical zones (February - August 2022)



Data collection exercise in 4 CPs to asses electricity demand in the community (Nov - Dec 2022)

#### Powering Jobs Nigeria Campaign

Clean Tech Hub supported Power for All in carrying out the Powering Jobs study 2021-2022 in Nigeria. The study quantifies the importance of decentralized renewable energy jobs for local economies by collecting and analysing data that drive employment related decisions for the distributed renewable energy sector. The study covered 5 countries - Kenya, Nigeria, Uganda, Ethiopia and India.

- Quantitative data collection
- Formation and Coordination of Steering Committee
- Focus Group Discussions
- Nigerian Report Launch
- Advocacy/Awareness Creation



#### Drive Electric Campaign Project

**Funder:** Rockefeller Foundation

**Duration: 2022-2023** 

#### **Objective:**

- To ascertain the nature and scale of the impact of R&D on internal and external outcomes in the e-mobility industry in Nigeria.
- To disseminate new insights on the Nigerian e-mobility sector to policymakers and other key stakeholders, and advocate for a national e-mobility policy







#### 2023 Activities

#### Publish:

- o Nigeria E-mobility Market Update Report 2023
- o Africa Green Hydrogen Market Update Report 2023
- o Nigeria Climate Smart Agriculture Report 2023
- o Nigeria Productive Use of Energy Market Update Report 2023
- O Nigeria Mini-Grid Market Update Report 2023
- o Nigeria Clean Cooking Policy Brief
- 6 Business Case Studies (clean cooking, e-mobility, mini-grid/SHS, & productive use)
- o 5 Policy Briefs (e-mobility, CSA, mini-grids & hydrogen)
- o Database on Nigeria's e-mobility industry

#### Projects:

- Expanding of state level policy development workstream in Ondo State and Ebonyi/Bayelsa State
- o Clean cooking training and demonstration projects
- o Organize 3 webinars in each of the 7 energy access portfolios

#### ိူ Network:

- o Joining influential and Strategic Energy Access Coalitions
- Collaborate with Energy Peace Partners, SOAS Anti-Corruption Evidence (ACE) and Effective States in Development (ESID) on Just Energy Transition reports and working papers.

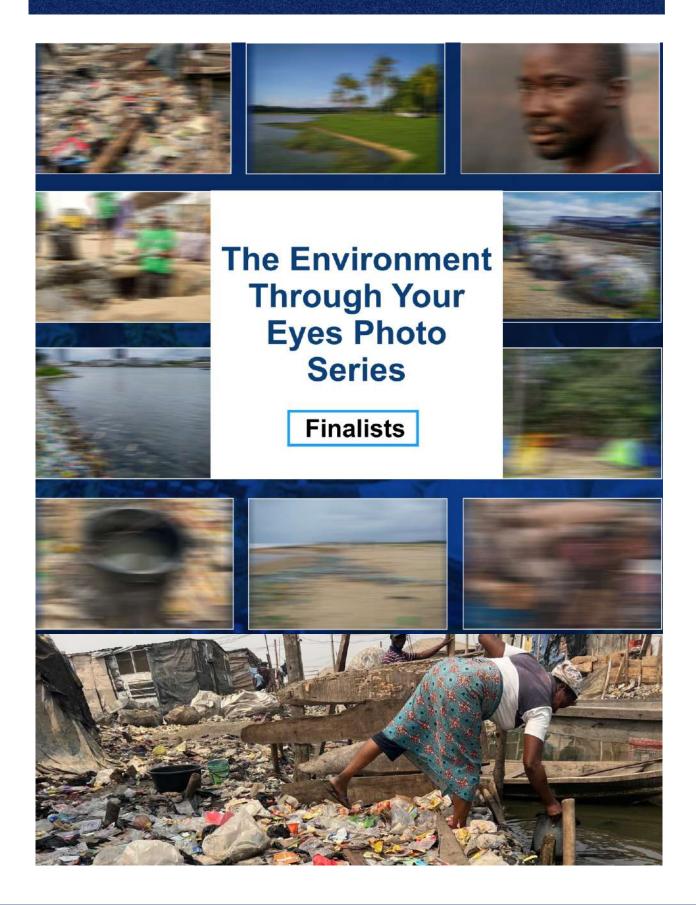


# Environment Climate Action Department



#### The Environment Through Your Eyes

The Environment Through Your Eyes is a project launched by CTH to highlight the visual effects of climate change and environmental pollution in Nigeria through images posted on social media platforms.





#### Adopt a School

The Adopt-a-School
Programme is an
initiative of CTH that
seeks to introduce
climate education to
both public and private
schools in Nigeria
through conducting
sensitization programs
and the establishment of
green clubs.





#### Circular Economy Webinar

This webinar was held to introduce the concept of the Circular Economy to the general public. It also served to explain to them the business and monetary opportunities that are available to them through the application of circular economy principles. Attending the webinar were guest speakers who are active players in the circular economy space in Nigeria

#### **Green Economy Tracker Launch**

The Green Economy Coalition (GEC) designed green engagement tool, known as the Economy Tracker Tracker), to assess how nations are transitioning to green and fair economies. This tool tracks 21 policies under six (6) themes; Nature, Governance, People, Finance, Sectors and Green Covid-19 recovery. It was designed to help civil society track green economy policies that are being adopted by nations around the world. The tool also helps decisionmakers on the pathway to green



economy recovery and ensures increased ambition on sustainable economic models.



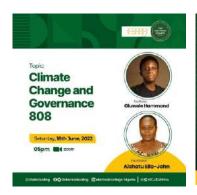
#### Social Solutions Lab (Physical event)

Clean Technology Hub organized a solutions lab event in commemoration of World Environment Day, 2022. The event brought together young people in the environmental space who were all passionate about advocating for a better earth. The one day event sought to promote innovation among youths and produce bankable environmental ideas.



#### **Electoral College**

In May 2022, Clean Technology Hub signed an MoU with the Electoral College where CTH would occupy a faculty seat on the Electoral College, teaching potential electoral office holders on Climate Change and Governance





#### Climate Change and the Vulnerable Population

A webinar on the topic of vulnerable populations and the effect of climate change on women, people with disabilities, and the elderly was highlighted.

This webinar birthed a platform for project collaboration.





#### Plastic Action Campaign

The aim of the campaign was to investigate the knowledge, attitudes, and practices of Nigerians towards plastic products and waste in order to identify the best measures to curb overconsumption, improper disposal, and the resulting plastic pollution.

We accelerated the development, implementation, and enforcement of policies to effect change by combining physical and digital advocacy and awareness programs aimed at altering the general public's perceptions and behaviours toward plastic with engagement sessions with pertinent governmental entities and civil society organizations



#### **E-Learning Summer School**

The Pilot edition of the CTH E Learning campaign kicked off with the Summer School for Teens. The aim was to test run our curriculums and also educate teens on various topics on a sustainable future

#### **ECA Policy Brief**

CTH developed summaries of various environmental and climate protection policies created by the Nigerian government. The aim of this policy brief was to improve the awareness amongst Nigerians of the existing policies designed to improve environmental conservation and mitigate climate change.





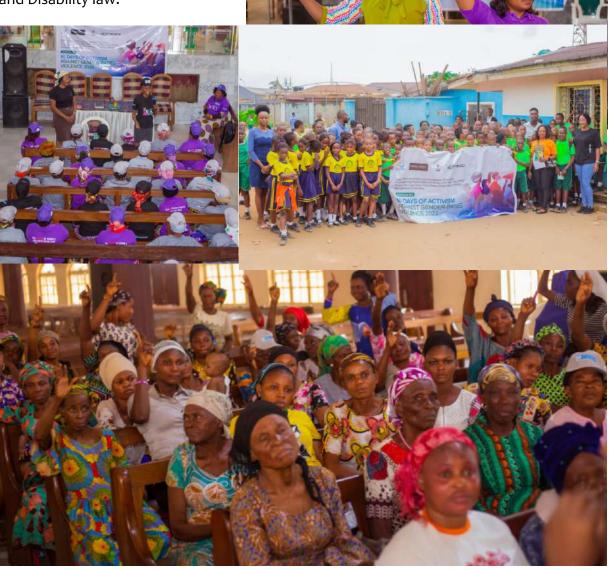
#### 16 days of Activism Gender Based Violence

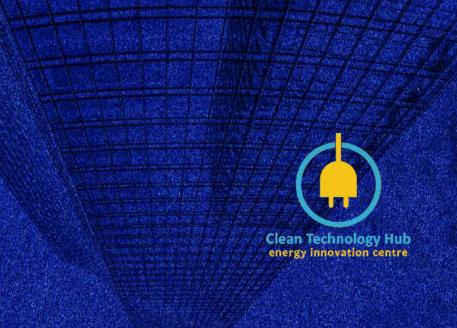
A Series of Activities to mark the 16 days of gender based violence. The activities aims to bring to the fore the effects of climate change on violence to women and girls



Capacity Building for Women Groups in Akwa Ibom State

A training on entrepreneurship and the contents of the Violence Against Persons Prohibition Law and Disability law.





# Enterprise Development & Knowledge Management Department



#### We support Startups Across the following Thematic Area

Climate Change



Clean Energy



Agriculture



Energy Efficiency



Circular Economy



E-Mobility





Our Enterprise Development Program (both incubation and accelerator) offers enterprise support and development to climate-related and clean energy companies. Our incubation program has incubated forty (40) renewable energy startups providing clean energy solutions. Our acceleration program involves providing technical support, investment development, access to networks, and mentorship to enable them scale. We also work with partners to drive clean energy access, especially to women, in grassroot communities, reaching over 1,500 people across 14 states in the federation. We are committed to advancing the development of climate-focused solutions technologies in Africa by supporting innovations in clean energy, sustainability and climate-smart investments into the continent.

**Incubation Program:** training program for clean energy startups. These startups receive tailored support, mentorship and access to funding opportunities.

**Investment** - **matching**: CTH will provide high-touch, operationally-focused support to help entrepreneurs plan clear growth strategies, build strong operational systems and processes, and determine realistic capital needs.

#### The key objectives of these projects are:



To identify clean energy entrepreneurs and support them towards becoming scalable and investable businesses.



To create a pipeline of investment ready clean energy businesses.



To drive private capital investments into scalable and investment ready solutions.



To strengthen and make for a more diverse the global clean tech ecosystem

#### **Approach**

1 Identifying Innovation

2 Building Capacity

3 Access to network

4 Funding and access to funding opportunities

5 Ecosystem development

Mentorship programs

#### **Solutions**

#### **Bootcamps**

Energy Access Bootcamps for students.

#### **Hackathons**

Technology meets renewable energy hackathon.

#### Enterprise Development Programs

Acceleration programs that help businesses become investment ready.

#### **Impact**

Post program, our startups have gone on to raise funding, grow staff strength and scale the use of their product.

\$2 Million mixed funding raised

**40+** supported startups

50% women-led/managed bussinesses



The CTH e-Learning platform is a Virtual Learning Environment created to offer students and other educators information, resources, and tools to assist and improve the delivery of education.

The CTH e-Learning curriculum was carefully chosen to convey the story of the environment and climate change, as well as how it has an impact on man and his actions both directly and indirectly.

The curriculum is created for three main groups of people. The first group of learners are those categorized as "Basic" and aged 6-12. The second is labelled "Intermediate" and is intended for teenagers between the ages of 13-19, while the third is labelled "Advanced" and is intended for young adults who are open to switching to a different career path.

# Knowledge Management and Communication Portfolio







#### Social Media

CTH has combined an online reach of 10,504 followers across all platforms. Up 18.5% Jan 2022

#### **Email Marketing**

With 1300+ subscribers, our CTH Newsletter is a critical tool of engagement with stakeholders, partners and enthusiasts.

#### **Audio/Visual Media**

Our podcasts are utilised to amplify conversations. Reach in 4 countries and counting.



A fully immersive digital publication born out of a need for quality thought leadership as well as a pioneering platform for an accurate representation of clean energy innovations and climate action developments across the country and continent at large.

#### New Partnerships

