

GIGAWATT GLOBAL

The Abundance Initiative: Empowering Rural Uganda Through Renewable Energy & Agriculture.

**Presented at East Africa FEW Conference
On 14th – 16th July 2025 By
Murungi Patrick, National Coordinator
Abundance Initiative Uganda**



Vision & Mission

Gigawatt Global is a multinational **renewable energy platform** developing **cash-producing assets** in **emerging** markets, bringing new sources of power to

Vision

*We envision a world where **all people** have access to **clean energy**.*



Mission

- Develop clean, bankable **renewable energy** projects in emerging markets
- Generate risk-adjusted commercial **returns**.
- Empower developing country populations with **sustainable power**

Goals

- ~ **900 MW** of solar, wind & hydro under development in '23
- **\$100m+** in deployed capital by **2025**
- **2000+ MW** under development by **2030**
- Energy for **20 million** people by **2030**

Who We Are

The Quadruple Bottom Line



Financial – Risk-adjusted returns for investors in the parent company and at the project level, with upside from potential exits.



Development – Promoting local economic & social development and national economic stability in under-developed countries.



Environmental – Targeting countries where we can greatly reduce the use of fossil fuels for generating electricity.



Humanitarian – *Corporate Social Responsibility* (CSR) programs provide health care to orphans, power for schools, clean water and other similar benefits.

Our Impact

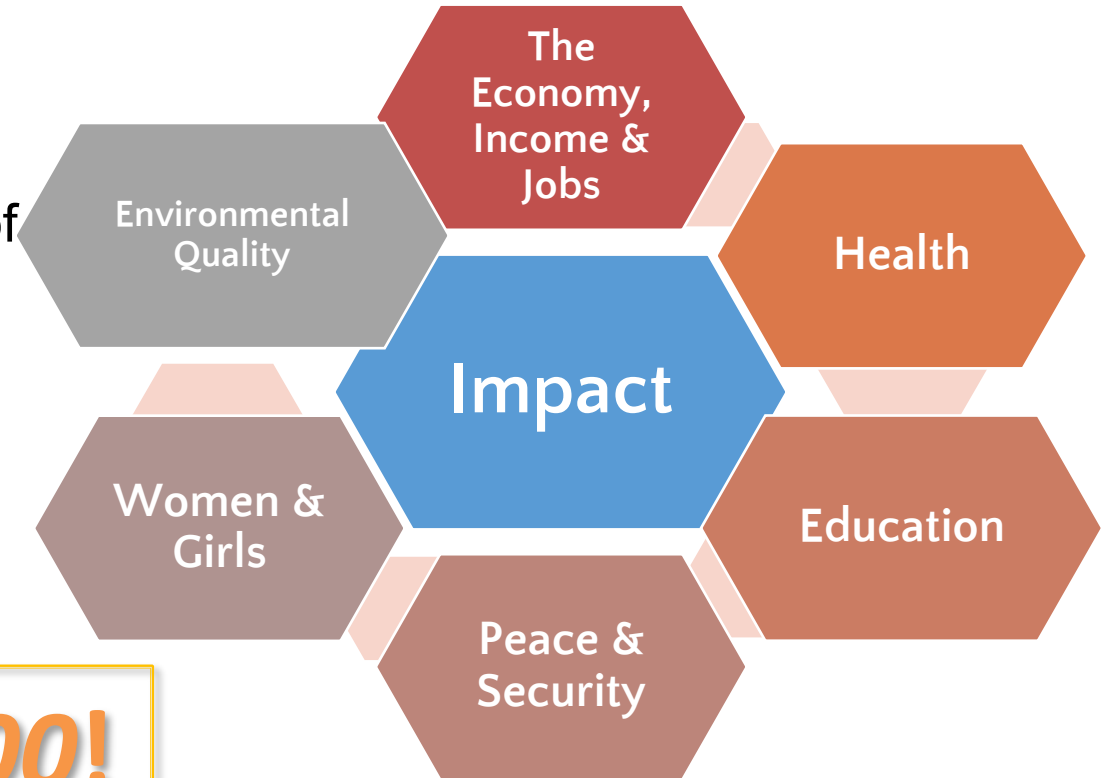
Breadth and Depth

Our Africa-focused business model and pipeline of projects will improve the lives of **millions** of Africans across the continent directly & indirectly addressing 13 of the UN's 17 Sustainable Development Goals.

Our key impact pillars include:

- **Economy**
- **Environment**
- **Women & Girls**
- **Income & Jobs**
- **Health**
- **Education**
- **Peace & Security**

1:25 or 1:100!



What We Have Done

RWANDA



KETURA*



GEORGIA



BURUNDI



Introduction: A Vision of Abundance, Productive Use of Energy (PUE) & Connections



A transformative model to uplift rural communities and women farmers in Uganda —creating scalable, lasting impact across Africa

Introduction: A Vision of Abundance, Productive Use of Energy (PUE) & Connections

The Abundance Initiative by Gigawatt Global is a blended finance model aimed at transforming rural communities in sub-Saharan Africa by expanding access to energy for productive use.

The pilot project in Kyenjojo District, Uganda, integrates a 20MW solar plant, an agro-processing facility, a Center for Agricultural Excellence, and a mini-grid system. These elements work together to support agricultural activities like processing, irrigation, and cold storage, creating jobs, boosting the local economy, and raising household incomes through sustainable rural electrification



This integrated model is expected to quadruple farmer incomes, create hundreds of jobs, empower women-led cooperatives, and deliver thousands of scalable productive-use connections—while directly addressing the region’s energy poverty, agricultural inefficiencies, and economic stagnation to secure a sustainable future.

The flagship pilot lays the foundation for a continent-wide Abundance Scaling Platform which will seek to replicate and adapt this model across at least 10 additional sites in Uganda, and more across sub-Saharan Africa within five years, positioning Abundance as the leading framework for expanding PUE connections at scale.

The Problem: An Urgent Need for Infrastructure & Opportunity



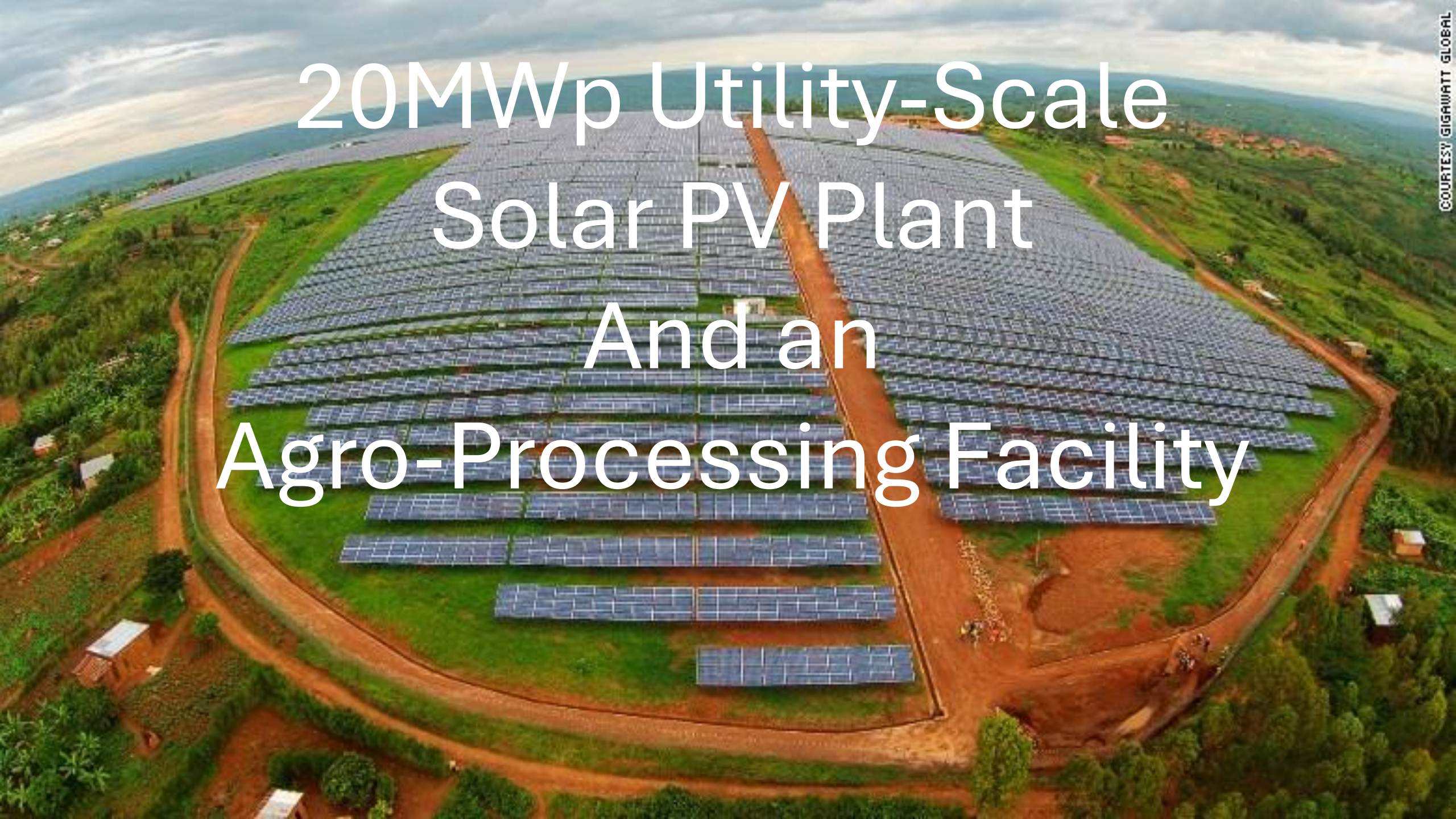
Rural Uganda faces multiple critical, systemic barriers to Agricultural economic prosperity.

- **Lack of Electricity** – Over 80% of the population, especially in rural areas like Kyenjojo (90%), lacks access to the national grid, limiting opportunities for agro-processing, industry, and business.
- **Poor Market Access** – Most smallholder farmers (mainly women) cannot store, process, or sell their produce competitively, trapping them in low-income cycles and dependency on middlemen.
- **Low Agricultural Productivity** – With limited access to modern farming techniques and storage, Uganda loses about 40% of its harvest post-harvest, worsening food insecurity and slowing economic growth.

The Solution Part 1

The Abundance Flagship Pilot in Uganda: A Synergistic Model for Transformation

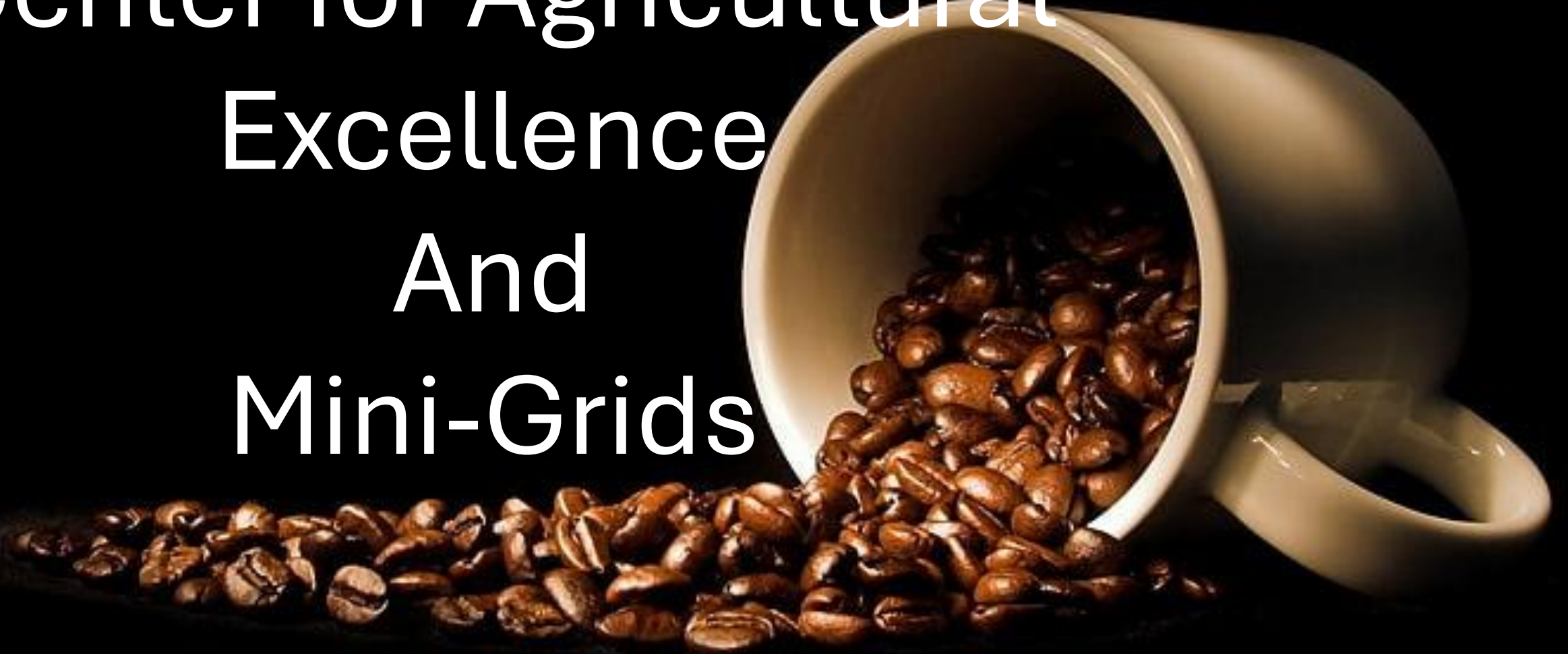
The Abundance Flagship Pilot in Uganda combines four integrated elements designed to radically expand productive-use energy (PUE) connections and catalyze rural economic development—quadrupling farmer incomes.

An aerial photograph of a vast solar photovoltaic (PV) plant. The panels are arranged in neat, parallel rows across a sloping hillside. A dirt road or path runs through the center of the panel array. The surrounding landscape is green with some trees and small buildings visible at the edges. The sky is overcast with grey clouds.

20MWp Utility-Scale Solar PV Plant And an Agro-Processing Facility

- Anticipated annual production of 35-46 GWh of electricity, depending on final configuration (trackers or stationery)Up to 3MW dedicated to powering the on-site agro-processing facility
- The additional power will be injected to the national grid, enhancing Uganda's renewable energy availability
- Located on a 100-acre property near Kisojo village, Kyenjojo District
- Expected to create up to 400 jobs during construction, 10 permanent positions, and an additional 80 seasonal jobs 3-5 times a year.
- State-of-the-art, community co-designed, agro-processing facility providing essential services:
 - Milling, drying, roasting, refrigeration, storage, and processing facilities
 - Value-addition services to transform raw crops into higher-value products such as canning and juicing
 - Quality control, packaging, branding, and market access support
 - Expected to create approximately dozens of permanent jobs, as well as approximately 50-100 additional indirect and seasonal roles, depending on the crop and operations.

Center for Agricultural Excellence And Mini-Grids



- **Extension services and training programs:**
 - Knowledge transfer and skills development to dramatically increase crop yields.
 - Access to improved seeds, nursery of plants, fertilizers, irrigation equipment for use within a cooperative, and sustainable pest control measures and practices
- **Model sustainable demonstration farm showcasing integrated farming practices:**
 - Demonstration farm on 20 acres of land to highlight best agronomic practices and climate-resilient farming techniques to the local farming community
- Expected, together with the agro-processing facility's activities, to quadruple farmer income.
- Expected to create permanent jobs, and train countless farmers, developing their capacity and skills, thus creating hundreds more indirect jobs through economic development (leading to larger harvests and thus additional work) in the long term

**Utility Scale Solar Field -
20 MW**



Abundance Industrial Facility
A Center For Agricultural Excellence

Trainings
in Best
Practices
of
Agronomy



Extension Services



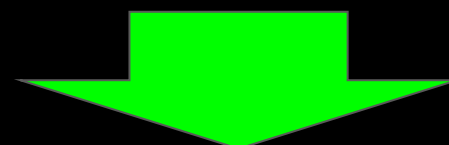
Affordable
Seedlings

Storage

Agro
Processing

Value-
Addition

Packaging
+ Market
Prep



**Direct sale to market, profits go back to farmers and
system**

The Solution Part 2

The Abundance Scaling Platform

The success of the Abundance Flagship Pilot will open doors for national and international replication, and aim to transform rural economies across Africa.

With strong demand from the Ugandan government and ministries, as well as interest from rural communities across sub-Saharan Africa, we anticipate expansion to at least 10 additional sites in Uganda, and more across sub-Saharan Africa within five years, establishing Abundance as a national model for rural development.



To ensure further scaling for even wider impact, the Abundance Initiative will establish a continent-wide Abundance Scaling Platform, comprised of two tracks:

- The Consulting and Facilitation Track will offer technical guidance, toolkits, and back-office support for NGOs, developers, and governments seeking to implement the Abundance model across the continent
- The Fellowship Track will offer a two-year program to train local leaders to establish Abundance Centers in their home communities

Each future Abundance Center will aim to enable ~10,000 electricity connections, tied to productive use and rural income growth.

Financial Model, Blended Finance, & Investment Structure



Unlocking Impact Through Blended Finance

The Abundance Initiative follows a structured blended finance model that leverages multiple funding sources (early philanthropic capital, equity investments, and debt financing) to optimize capital structure, ensuring financial sustainability and maximum long-term impact.

The approach balances commercial and concessional funding to achieve financial sustainability and long-term success.

Financial Model, Blended Finance, & Investment Structure

Key Pilot Program Funding Components:

1. Equity Investment – Initial \$1.5M deployed, additional funding required from grants or project preparation funds.
2. Debt Financing – 70% of total project cost covered by grants or cheap loans, ideally at concessional rates (2-4%).
3. Grant Capital – The project seeks grants or project preparation funds. This is essential to cover the Abundance Center and the Center for Excellence infrastructure, ensuring community revenue retention and project feasibility.
4. Concessional Capital – Lower-cost financing options such as soft loans, impact investment facilities, and development finance institution support to improve project IRR.

The Impact: Measurable, Scalable, Deep, and Lasting



The Impact: Measurable, Scalable, Deep, and Lasting

Delivering Meaningful, Productive-Use Connections

The Abundance Initiative is designed to generate thousands of new, high-quality electricity connections through both utility-scale solar and mini-grid infrastructure—delivering not just access, but productive use of energy (PUE) for agro-processing, irrigation, refrigeration, and small enterprise development. Once the project is scaled, each future site is expected to enable ~10,000 electricity connections.

Driving Energy Demand Through Productive Use

By embedding productive-use infrastructure—such as solar-powered milling, cold storage, drying, and irrigation—the initiative maximizes load factors and strengthens the economics of rural electrification. These PUE anchors stimulate sustained electricity demand, creating a financially viable foundation for mini-grids and grid expansion while generating lasting income streams for communities.

Creating Inclusive, Sustainable Jobs

The pilot site will generate over 400 construction jobs and at least 25 permanent positions in energy and agro-processing operations, with additional seasonal and indirect employment across agricultural and logistics value chains. Special emphasis is placed on training and employing women and youth, ensuring inclusive access to economic opportunity.

The Impact: Measurable, Scalable, Deep, and Lasting

Enabling Scalable, Climate-Aligned Infrastructure

The Abundance Initiative deploys a 20MWp utility-scale solar plant integrated with decentralized mini-grids—scalable infrastructure that directly expands Uganda’s renewable energy capacity while displacing diesel and mitigating emissions. The approach is replicable across similar rural contexts throughout sub-Saharan Africa.

Empowering Women Through Energy Access

Women are 80% of rural farmer in Uganda, and are central to the Abundance model—from cooperative governance to targeted training programs and income-generating opportunities in agro-processing. Access to reliable energy reduces the burden of manual labor, facilitates economic independence, and keeps families together by reducing the need for male migration.

Catalyzing Investment through Blended Finance

Gigawatt Global’s structured financing approach leverages early-stage grant capital to unlock large-scale private and public investment. The Abundance model blends equity, concessional debt, and philanthropic funding to deliver both impact and financial sustainability.

Where Abundance Stands: Pilot Progress and Achievements to Date

- **Land Purchased**

100 acres have been purchased near Kisojo village, Kyenjojo District, Uganda.

- **Extensive Community Engagement**

A comprehensive needs assessment and multiple stakeholder consultations have been conducted, input was gathered from local women farmers, leaders, and agricultural entrepreneurs.

The community signed a letter of support for the project

- **Market Study**

In-depth interviews were conducted with farmers in the region to understand current farming practices, cooperation between farmers, sales methods and issues with pests, rainfall, etc.

A comprehensive analysis of food markets on a local, regional and national scale was conducted to understand where goods originate and what the potential may be for increased amounts, quality, refinement and season extension of currently farmed crops, as well as potential new crops, in the Kisojo region.

Where Abundance Stands: Pilot Progress and Achievements to Date

Investment license from Uganda Investment Authority - obtained

Solar PV pre-feasibility study with EACREEE (East Africa Center for Renewable Energy and Energy Efficiency) - completed

PVsyst - Simulation pre-feasibility report - completed

CultivAid Field Assessment Report and Market Research Report - completed

CultivAid Conceptual Design Report - Completed

Application for feasibility permit with Electricity Regulatory Authority - in progress

Strategic Stakeholders

MOU with the East African Centre of Excellence for Renewable Energy and Efficiency (EACREEE) - signed

Partnership with CultivAid for agricultural expertise and facility design - formalized

Collaboration with local NGOs “Bringing Hope to the Family” and “Noah's Arc” – established

Government Support

The initiative has received additional government support from the Ministries of Energy, Finance, and Trade in Uganda, and is working closely with the Electricity Regulatory Authority (ERA) of Uganda. The most recent development is the policy Directive by the Ministry of Energy to ERA to provide necessary permits for the Project.



Post



Vice President Jessica Alupo 
@jessica_alupo



This morning, I met a team of solar energy investors from USA and Israel, led by CEO of Gigawatt global-Josef Abramowitz. We discussed the possibility of investment in solar plants in Uganda. The team will pilot the first project in Kyenjojo.




3:07 PM · Sep 7, 2022

 33

 23

 135



 Read 33 replies

Let's create a future where abundance of
Connection, energy, food, opportunity, and
hope is accessible to all.

Let's build abundance—together

Thank You for Listening!