NFE

Nearly Free Energy

Advancing Energy Reliability, Resilience and Abundance,
one community at a time

Market Opportunity

We are building a global product, targeting Uganda first. Here's why:

- ❑ In 2013, there were about 1 billion people without access to electricity and about another 1 billion who are connected to a grid of some kind that's really unreliable grid. In 2023, the number of people without access had decreased to 600 million. However the number of people connected to unreliable grids had increased to about 3.5 billion by some estimates. That's a concerning trend there that points to a bigger problem.
- ❑ Africa's rapidly growing cities are straining national grids, leading to regular outages. The stories of this in South African and Nigeria are littered all over the web. Smaller solutions for individual power backups are expensive to scale for businesses and not affordable for middle income families.
- ❑ Africa's weather (sunshine all year round) is ripe for deploying solar powered DERs.
- ❑ The team grew up in Africa and have served in the energy industry for a combined 20 years. They know the market very well.

Problem · Solution

Today:

- ❑ Urban communities in Uganda receive about 3 to 20 hours of national grid unscheduled power outages, weekly.
- ❑ These power outages disrupt daily life and businesses in these communities leading to loss in quality of life and loss of money spent on expensive power backup solutions.
- ❑ Urban Communities in Nigeria and South Africa are turning to cheap diesel generators.

If community owned microgrids are set up:

- ❑ They can provide reliable and green power to these communities at 90% lower cost to the community than individual power backups and diesel generators
- ❑ More reliable power is = thriving communities

Solution = Reliable Power Microgrids (RPMs)

NFE builds and operate a microgrid in the community, provides a pathway to community ownership.

How RPMs works

RPM Capabilities

Reliable Power, Affordable Green Energy. Community Owned

1. **Reliable Electricity**

   Can reduce power outages to over 90% uptime.

2. **Affordable Green Energy**

   Solar + battery infra on existing community owned roofs can generate power at a lower cost than the national grid.

3. **Grid Stability**

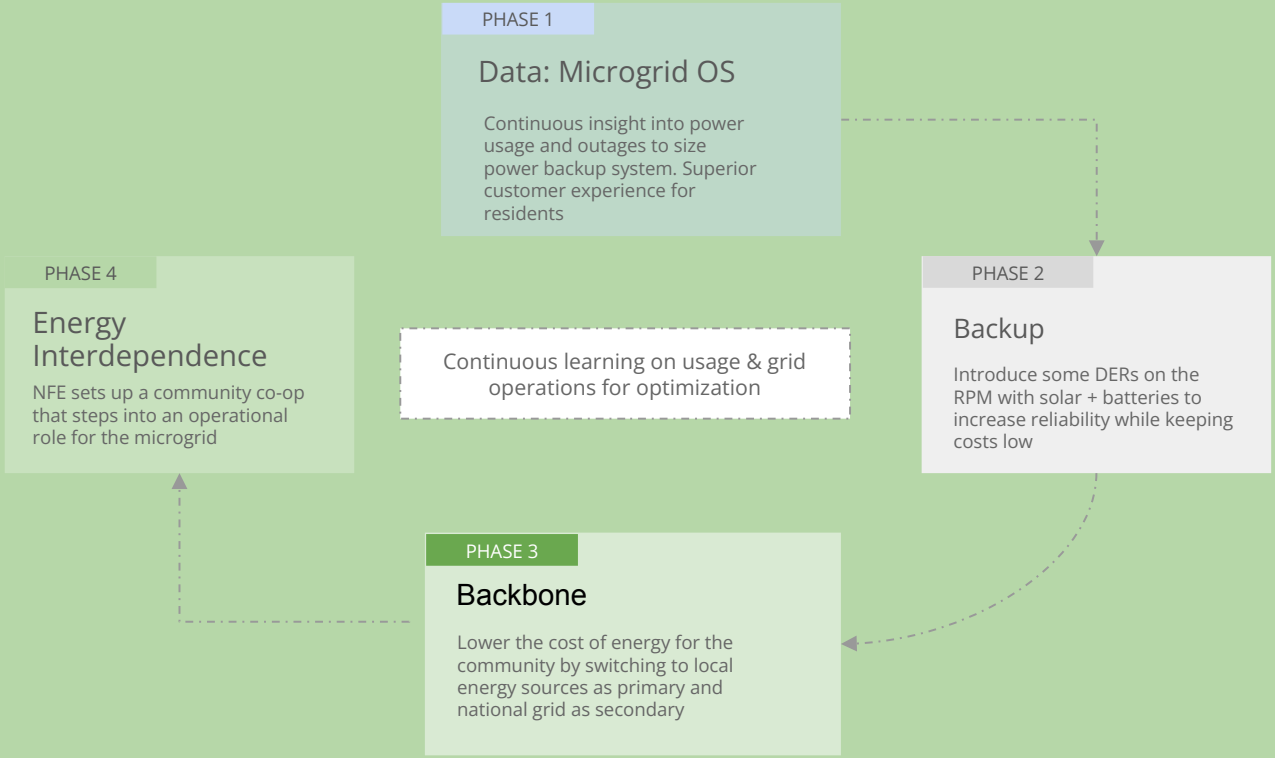
Batteries reduce the load on the national grid during peak times thus providing stability

4. **Community Owned**

   The community has long term agency in making sure the RPM continues to serve both profit and people.

Our Vision

Advancing local energy resilience for every community



Founder’s Insight

Significant progress has been made to extend energy access to communities without access to electricity however we are seeing an increase in the number of people connected to an unreliable macrogrid. We think this number will continue to increase with increasing demand for electricity. Our model is to introduce microgrids in communities that are connected to an unreliable macrogrid.

Use a microgrid to abstract the main grid and unlock possibilities for the domestic consumer.

Sustainability Model

Energy as a service, Exit to community

Revenue Streams	Unit Cost	Margin
Bulk energy purchase and resale	400 UGX per kWh	10% to 50% depending to tariff available
Sale of energy generated via solar	300 UGX per kWh	30% to 50% depending on scale

DISTRIBUTION CHANNELS

- ❑ High density residentials
- ❑ Commercial (Shopping Malls)

* *2k CAC = 1.2k sales + $800 misc. costs*

Projections

1st Microgrid (Pilot): 10 active households

Revenue per customer	**Cost of Goods**	**Gross/Net Profit (for 10 consumers)**
16.5 USD per month (2.5 kWh per day) @ 0.22 USD per kWh	8.25 USD per month @ 0.11 USD per kWh	8.25 USD * 10 = 82.5 USD per month Less OPEX (Technical support, Taxes, maintenance) ~ 12 USD per month **70.5 USD per month (Net)**

* *2k CAC = 1.2k sales + $800 misc. costs*

Traction

- ❑ Vetting suppliers and partners for open source hardware and Microgrid OS. - Q225
- ❑ Recruiting founding team - Q225
- ❑ Pilot deployed for Q325 (25 kWh microgrid) serving 10 households
- ❑ NFE is an active member of Open Source in Energy Community. Partnership with EnAccess Foundation to scale use of an open source energy CRM MicroPowerManager and build more energy tools others can use - Q425
- ❑ Next 100 households on track for Q126 (over 300 homes on the waitlist)

Competition

- ❑ 2kWh to 10kWh battery + inverter kits for single family homes.
- ❑ Large scale Solar energy installers

Long-term Moats

- Vertical integration: turnkey system
- Zero upfront cost to customers
- Community funding / Ownership Co-op model

Team

- ❑ Led teams at successful startups
- ❑ Deep relationships with energy sector in Uganda/ Africa
- ❑ Experience building power systems for Africa
- ❑ Engineering experience at Fortune 500s
- ❑ Grew up and living in Uganda with experience living in Asia, North America and Europe

Aaron Tushabe
CEO and Product | Co-founder

Hillary Arinda
Technology | Co-founder

Dansturn Kimbowa
Operations | Co-founder

Founder and Advisory support team

These folks have contributed cash,, operational support and a lot of counsel to help us build the MVP.

Kirabo Martha, Michael Goldbash, Elain Baker, Sumaya Mohamed, Alba Topuli, James Wire

Ask: $300k Recoverable Grant

Terms: Recoverable Grant

We will use the money to:

- ❑ Product Development for the MicroGrid OS
- ❑ Advancing the Pilot microgrid to Phase 2
- ❑ Growing from 10 to 100 households across 2 to 3 communities

Want to learn more?

Let’s connect!

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Thank you!