

We provide affordable clean water and renewable energy in remote areas

# Off grid energy as a catalyst for change

Worldwide, there are...

# 1.2 Billion people

without access to basic electricity

# 800 Million people

without access to <u>safe drinking water</u>



In Sub-Sahara Africa, there is a...

# \$734 Million market

for <u>solar powered</u> irrigation, cooling and refrigeration, using energy and water

# Improved lives, improved incomes







- Affordable purified water in the community;
- Reduction in water-borne diseases;
- No more fuel needed to boil water;
- Desalination for coastal and island communities.

- Safe, affordable and pollution free lights in homes;
- Children can study at night;
- Home based business activities can be carried out;
- Customers can charge their phone and listen to the radio.

- Well-paid jobs and training for 2 women from the community;
- Energy for productive uses like welding, milling, irrigation;
- Insitutional buildings (clinics, schools) can be electrified;
- WiFi provided through a hotspot.

## **Unit Economics**



Initial Cost (approx):

\$25K

Deployed and operational

Pricing:

\$0.18

Fee for re-charging + clean water+ WiFi

\$0.50

Price per kWh for small businesses

Serve:

2,000

people 2-4

Shops

\$10K/yı

Recurring gross revenue, including sale of water

# Family kit for Pay As You Go

### Each family purchases a \$15 kit that includes:

- One Lithium 40Wh battery pack
- Three 2-watt LED bulbs
- Phone adapter
- A clean and branded 5L jerry can



## Uses for the OffGridBox

## **Applications**

- Village kiosk for power & water for households
- **Energy for institutional** building like clinics and schools
- **Energy for productive** (agricultural) uses
- **Humanitarian: energy** &water for disaster relief and refugees

### **Customers & Partners**









































# Tanzania UNDP Project 2019

## **Aspects**

- 3 Districts around Lake Victoria
- 12 Boxes in rural communities
- 3kWp up to 6kWp
- 400 HH per Box
- Clean water and power through battery packs
- Solar powered water pumping from 120m deep
- Potential for productive use applications
- SPV to be set up, involving Districts, UNDP and implementing partner











## Impact metrics

#### **Employment**

Each box will provide skilled, respected, and above-average paid jobs to 2-4 Women, plus spin-off employment.



Clean water leads to 50-100% reduction in contraction of waterborne diseases.

















#### Safety

Solar powered-lights will greatly reduce fire incidents and burn injuries caused by kerosine lights.

#### **Environment**

1 OffGridBox equals 15 tons of CO2 emissions avoided by divesting from fossil fuels and batteries.

#### Education

Electricity at home leads to higher literacy rates and more school completion through longer night-time study hours.

### Connectivity

Providing connectivity means rural communities gain access to global communication, leading to less isolation, and more efficient & better-informed societies.

#### Social & Women Empowerment

Each box will save 7.5 days of walking time per year collecting water, which is often carried out by women and children.



Emiliano Cecchini, PhD CEO & CTO

Set up 6 companies; 20 years experience building sustainable utility solutions for impoverished regions



**Davide Bonsignore**Global Director & CFO

12 years experience designing, and deploying renewable energy technologies



Jodie Wu COO

10 years of experience in last mile distribution in East Africa, including energy



Bas Berends
Chief Partnership Officer

20 years of experience in diplomacy and sustainable development



Nicola Stenico
Technical Director
10 years experience working
for RE companies in East

Africa





Paul Kagame
Head of
Administration
7 years of experience in the
sales and marketing

industry



Christian Yesashimwe Project Manager

3 years of experience in managing construction projects. Extensive research in the Rwandan water and renewable

energy sector



**Troy Billett**US Director

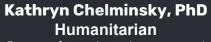
10 years experience helping start-ups grow and scale. Consultant at Techstars 2017

# **Jean Marie Niyonschima**Commercial Manager

6 years experience in rural and urban business, 2 years experience in renewable energy and purified packaged water



4 years managing solar retail sales and last-mile distribution of solar products. Passionate about community empowerment, especially women



5 years of experience in energy and international relations

## Press











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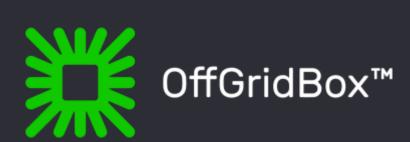












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