“Everything-as-a-Service” Platform for Scaling Access to Renewable Energy

10th ICEF 2023, Concurrent Session 3

“Innovative Use of Renewables”

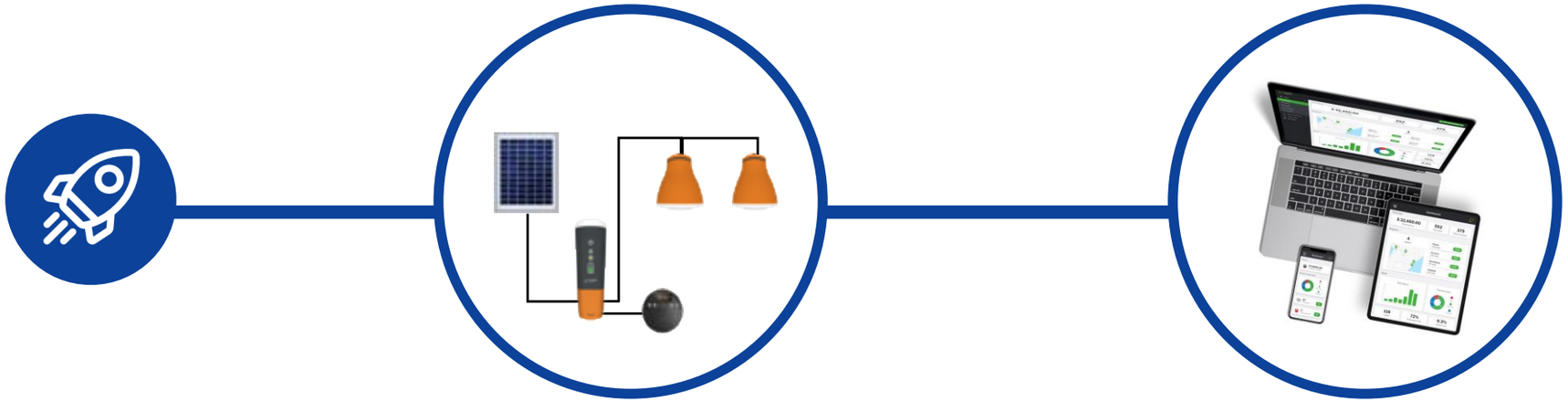
05/10/2023

Rebecca Bregant

Co-founder & CMO PineBerry

INTRODUCTION

PineBerry is a German-Kenyan social business with a mission to **scale access to clean energy with digitalization**.



2018

Establishment

2018/19

Solar home system (SHS) manufacturing

→ **Field research & pilot projects in rural Kenya**

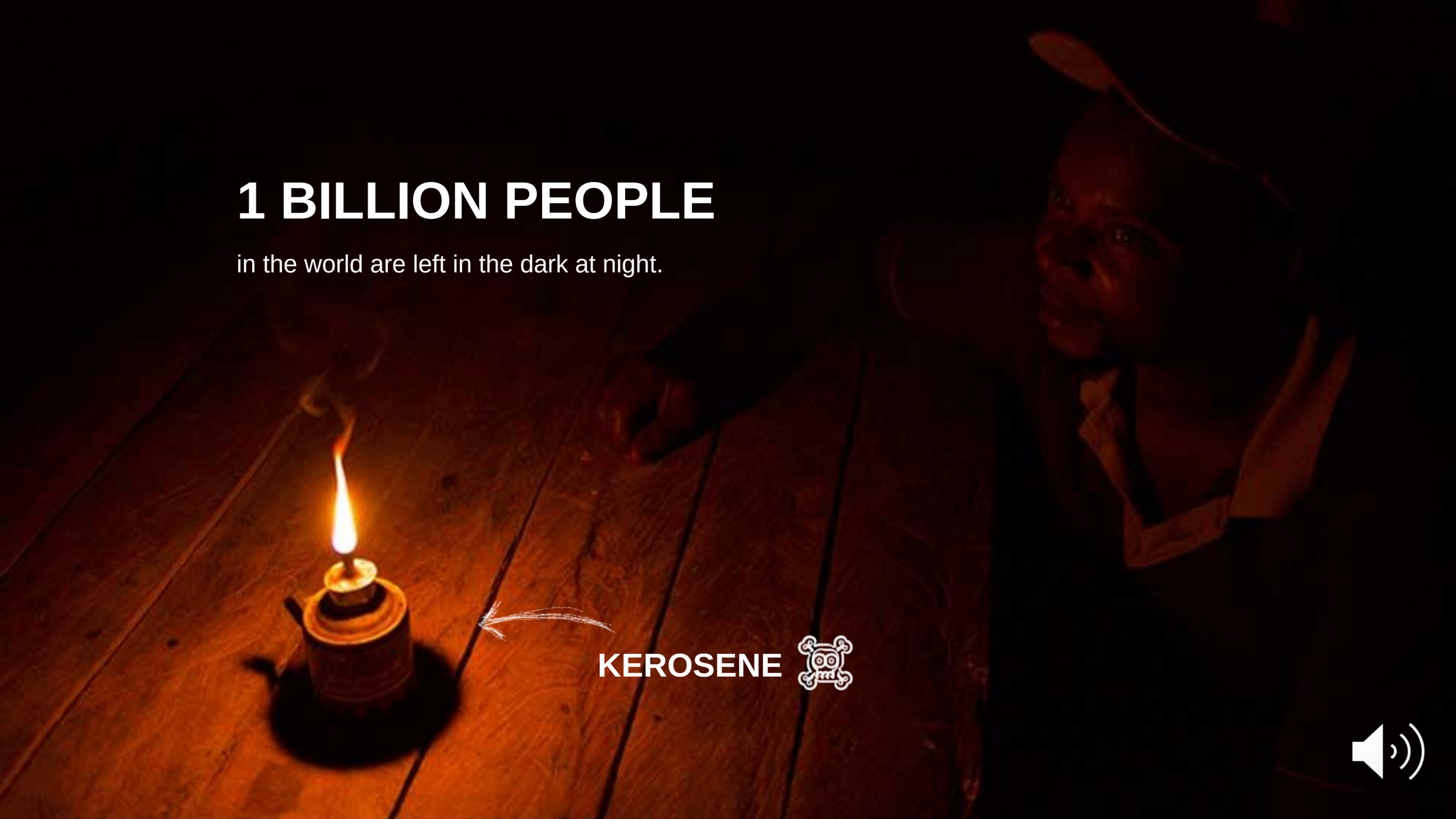
from 2020

Software platform for organizations in the energy access space

→ **Continuous co-creation in Africa, Asia and LatAm**

1 BILLION PEOPLE

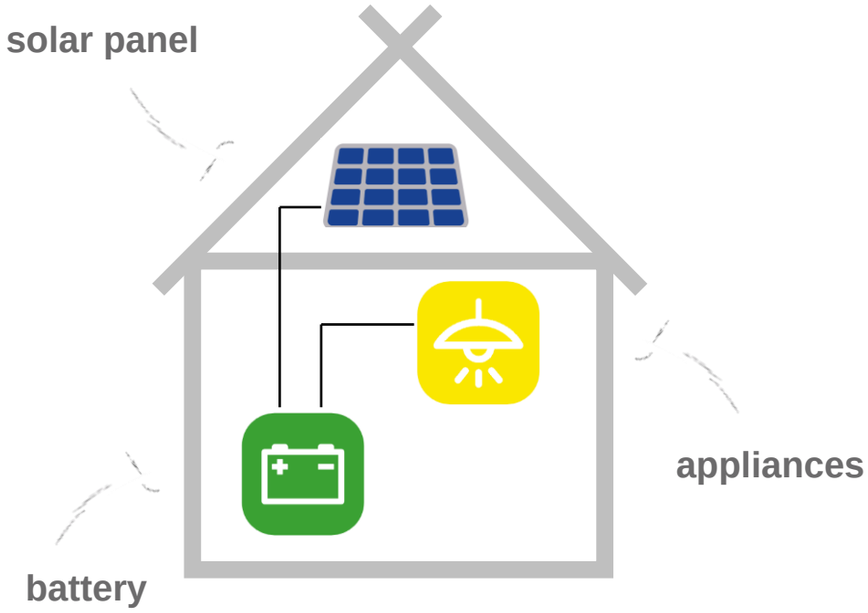
in the world are left in the dark at night.



PROBLEM

A market evolved which serves communities **“off the grid”** with stand-alone, clean energy.

Example: Solar home system



BUT: THE ENERGY ACCESS SECTOR FACES SEVERAL CHALLENGES.

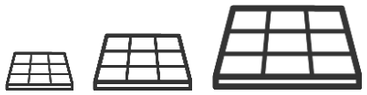
CHALLENGES IN THE ENERGY ACCESS SPACE

According to co-creation studies with 50+ participants, energy access providers need…

- to ensure energy is **affordable** for consumers
- to manage all **products** and **payments** in the field
- to reach **economic viability** in challenging settings

The energy access market is **heterogeneous:**

System size



Portfolio

Payments

Sales

. . .

SOLUTIONS WITH DIGITALIZATION

These pressing challenges can be solved with digital solutions for energy access providers that…

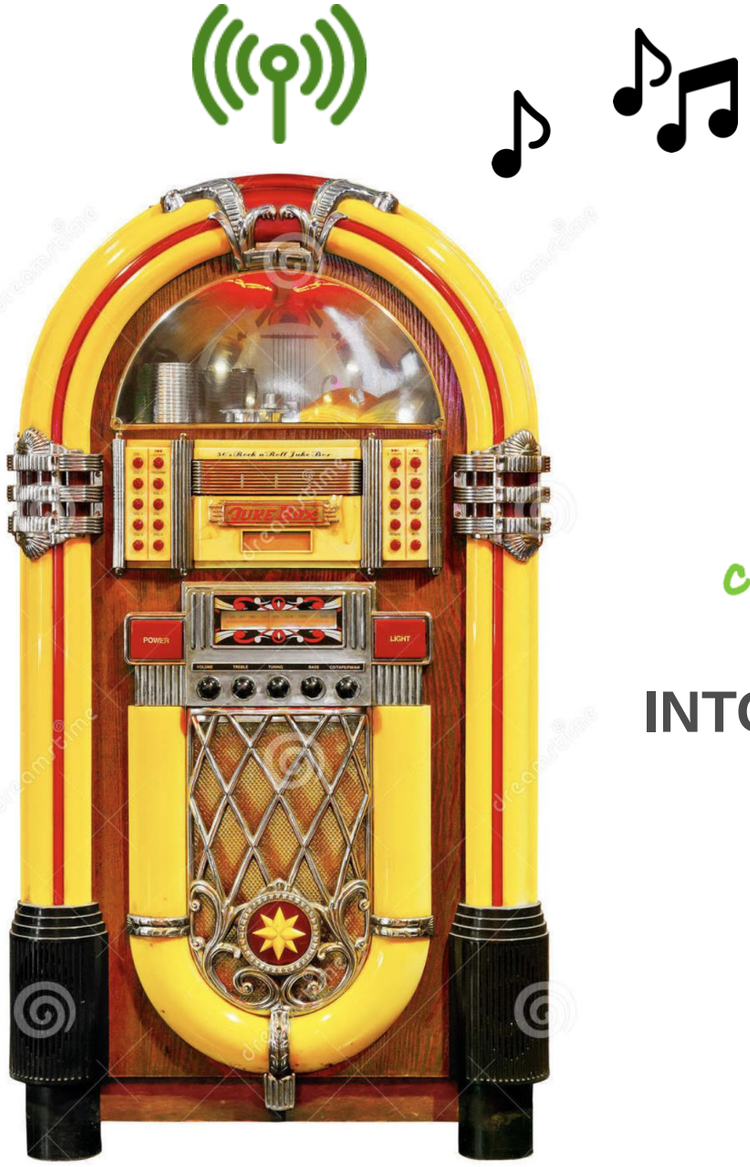
- are **customizable**: Features, roles, logo, colors
- offer inclusive **“Pay-As-You-Go” financing** options for consumers and different **payment types**: Mobile money vs. cash, rent-to-own vs. leasing
- can be **integrated** with existing ecosystems and the (IT) landscape of clean energy providers

→ **Every operating model is special** and has special needs to operate most cost-efficiently.

PineBerry

PINEBERRY TURNS

SOLAR SYSTEMS



connected

INTO JUKEBOXES.

SOLUTIONS WITH DIGITALIZATION

THE “JUKEBOX PRINCIPLE”

1 Insert coin

2 Music on… for 30 minutes

3 Music off

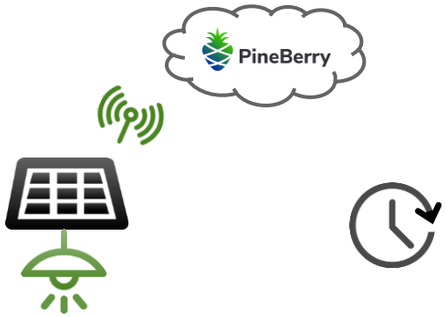
SOLUTIONS WITH DIGITALIZATION

THE “JUKEBOX PRINCIPLE”

1 Insert coin

2 Music on… for 30 minutes

3 Music off



1 Pay instalment

2 Solar system on… for 1 week

3 Solar system off

SOLUTIONS WITH DIGITALIZATION

PineBerry has developed the first **Everything-as-a-Service platform** that enables clean energy providers to **manage their operations** in 1 central platform, **save costs and time** while scaling their **business and impact.**

Energy players can…

… manage all customers & products in **1 central place**

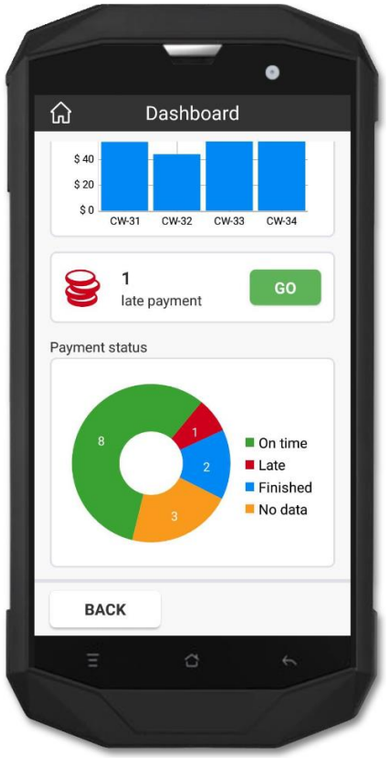
… be sure their **customers are paying** (thanks to the “Jukebox”)

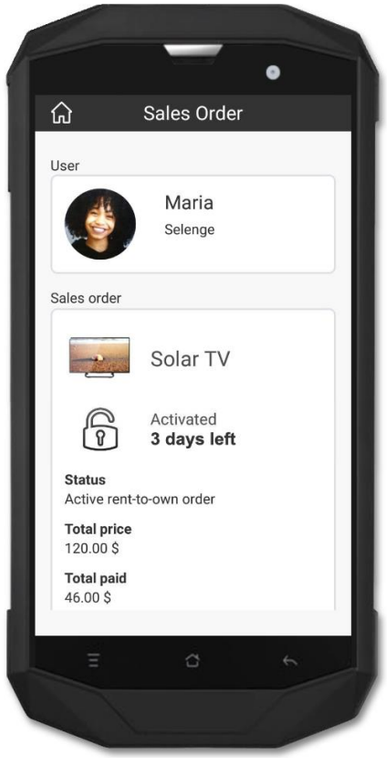
… keep **full control** over all connected products

LAST-MILE-AS-A-SERVICE

SELLING SOLAR PRODUCTS

Last-Mile-as-a-Service





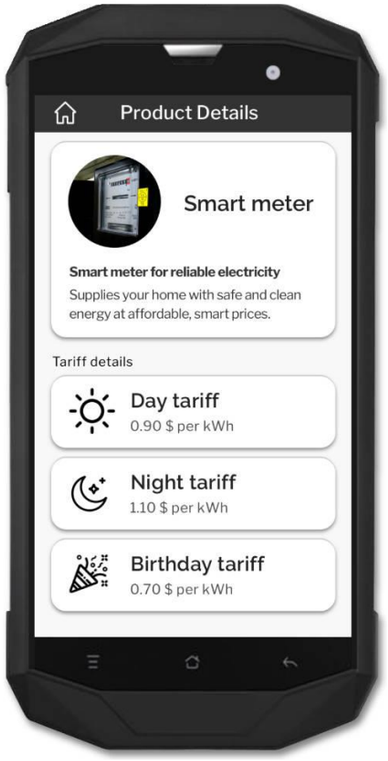
Dashboards:
All key insights in 1 place

Remote
product control

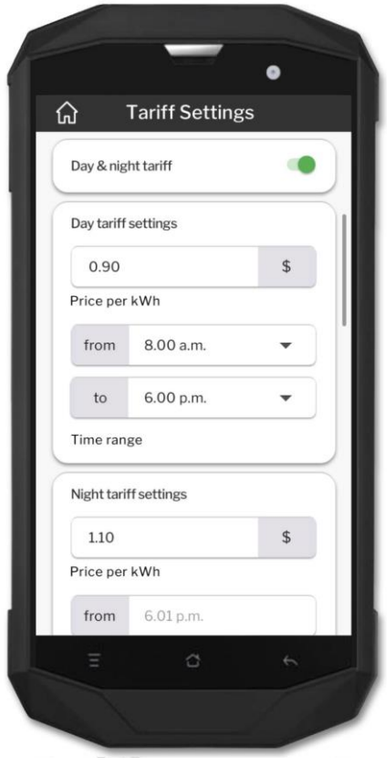
MINI-GRID-AS-A-SERVICE

SELLING SOLAR ELECTRICITY

Mini-Grid-as-a-Service



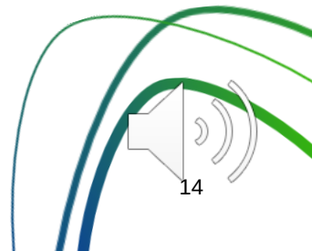
Smart meter connections



Flexible **tariff** management

any product

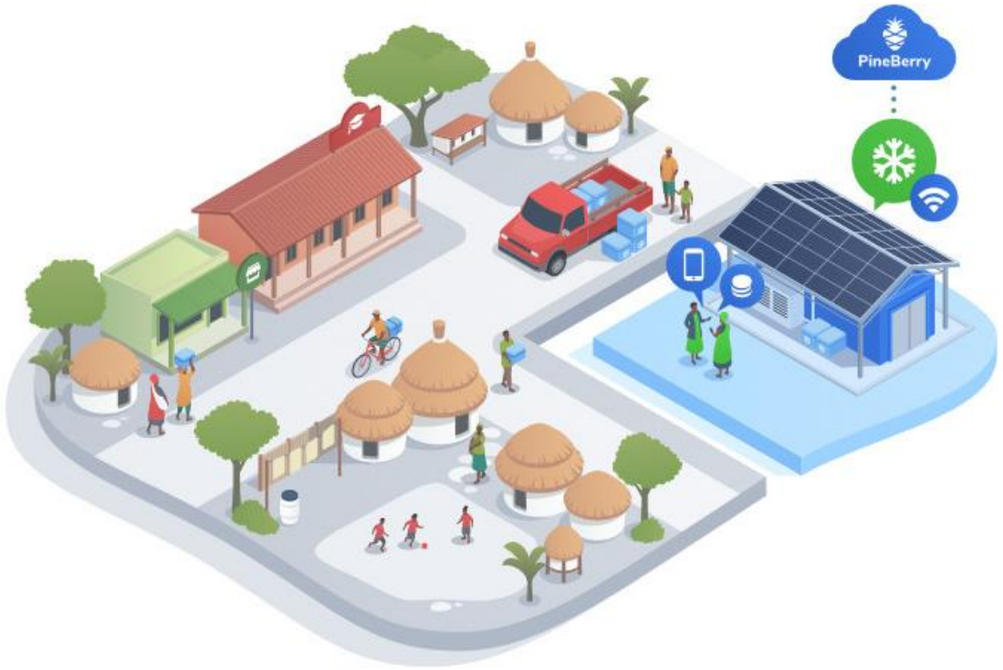
PINEBERRY TURNS SOLAR SYSTEMS INTO JUKEBOXES.



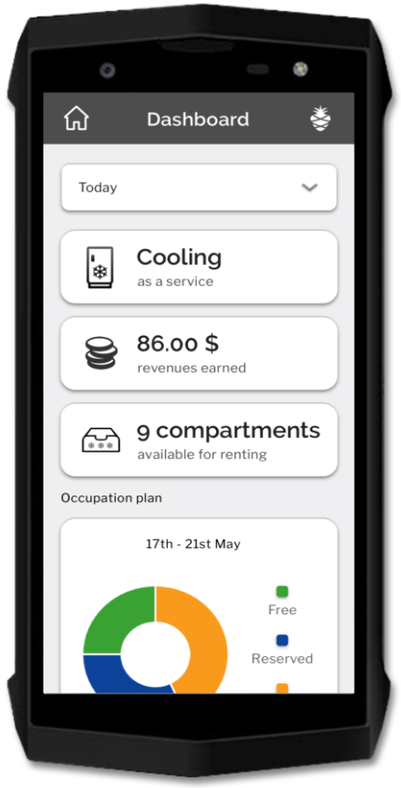
ENERGY PLAYERS CAN
EXPAND THEIR BUSINESS MODELS.

COOLING-AS-A-SERVICE

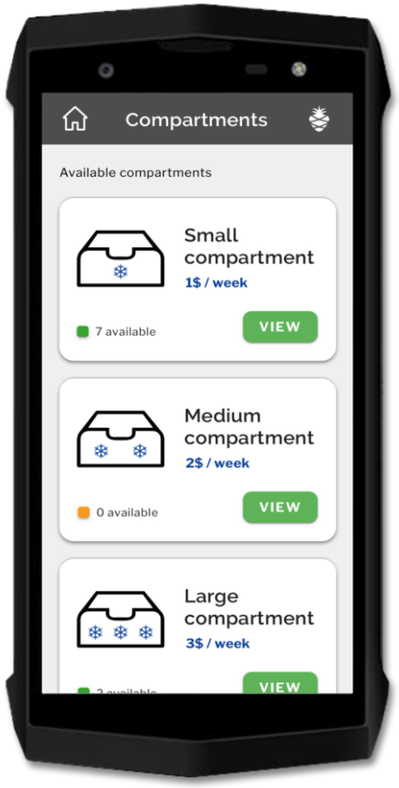
RENTING COOLING COMPARTMENTS



Cooling-as-a-Service



Dashboards:
All key insights in 1 places

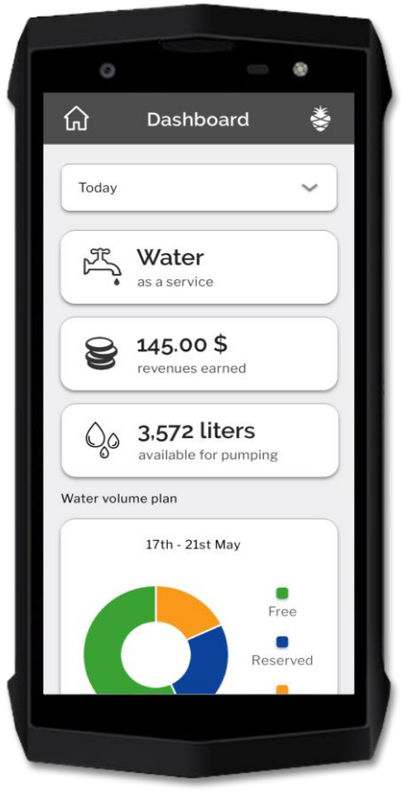


Flexible **cooling** renting

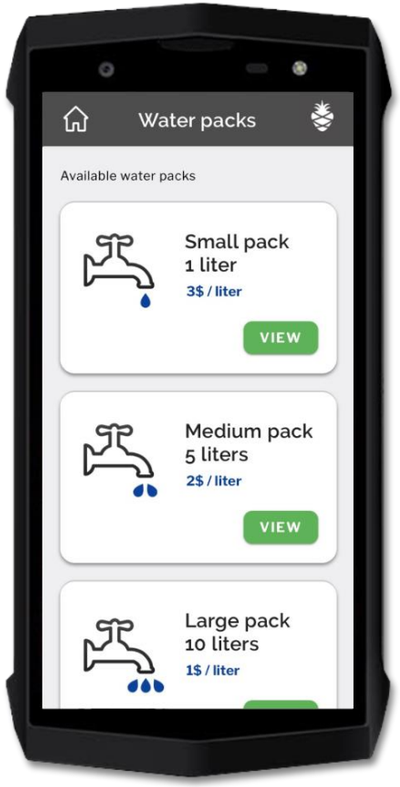
WATER-AS-A-SERVICE

SELLING WATER FOR DRINKING & IRRIGATION

Water-as-a-Service



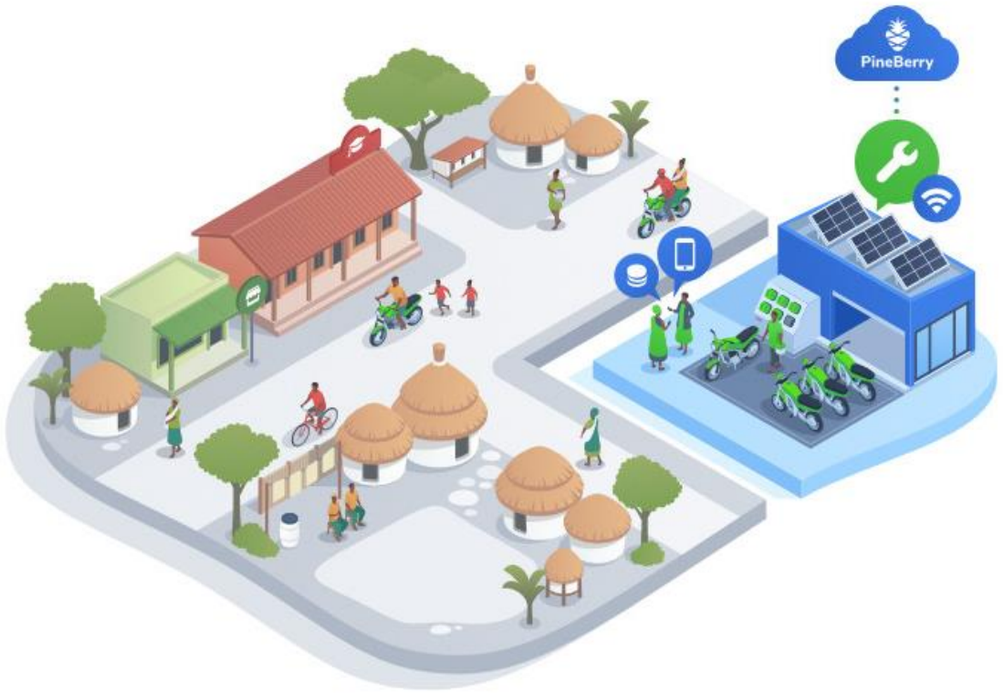
Dashboards:
All key insights in 1 places



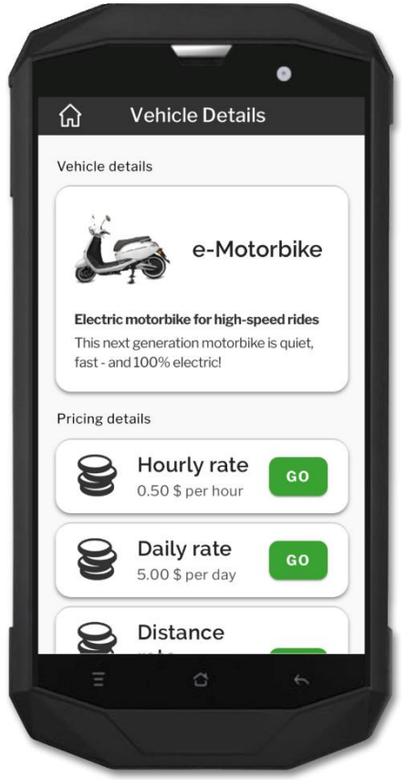
Flexible **water** selling

E-MOBILITY-AS-A-SERVICE

SELLING & RENTING E-VEHICLES, SWAPPING BATTERIES



E-Mobility-as-a-Service

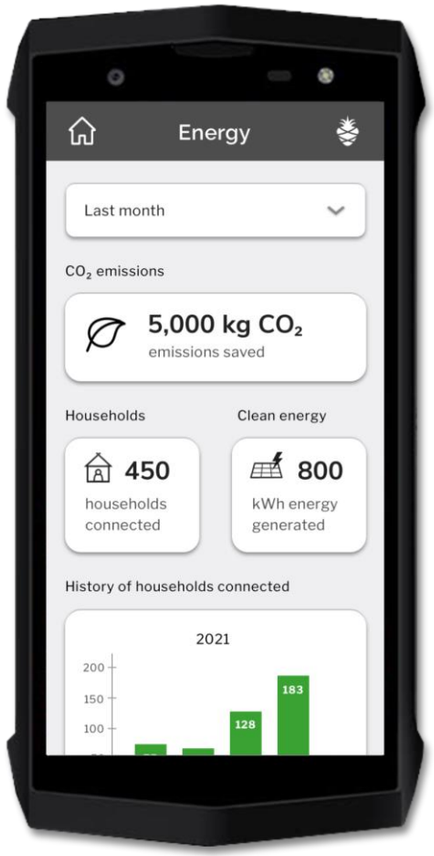


Dashboards:
All key insights in 1 places

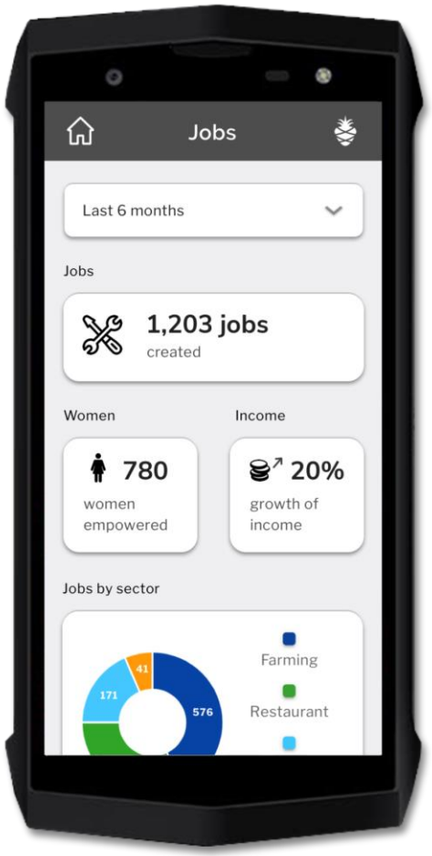
Flexible **vehicle**
selling & renting

IMPACT-AS-A-SERVICE

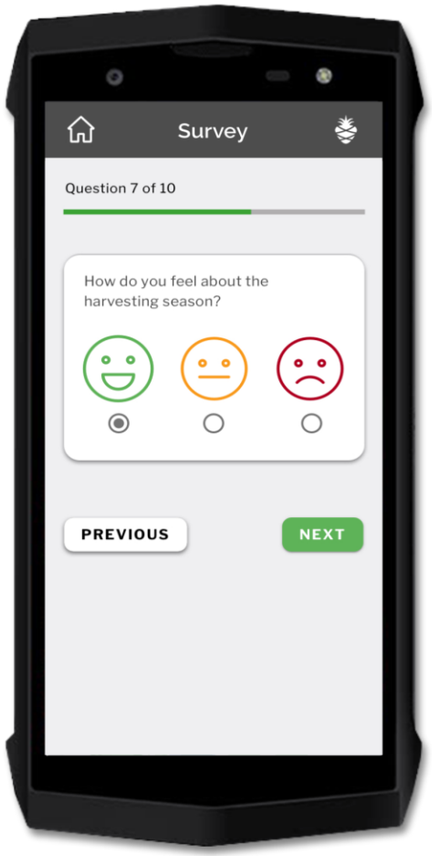
MEASURING THE IMPACT CREATED



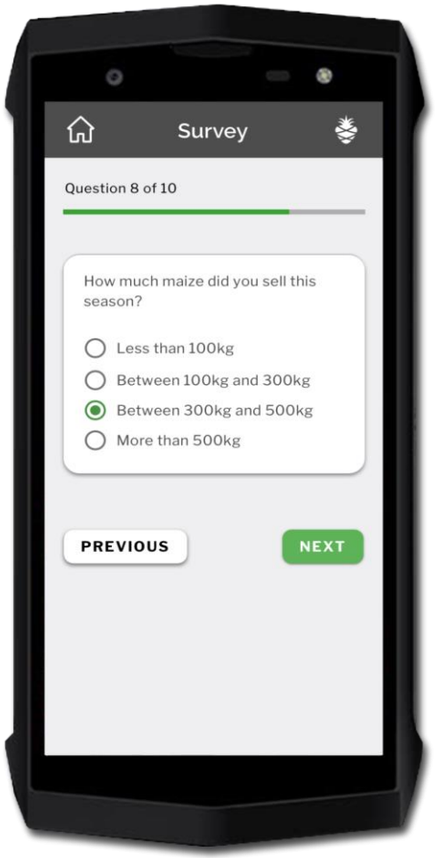
Impact metrics on
clean energy and **climate**



Impact metrics on
jobs creation and **gender**



Surveys for **qualitative**
impact **metrics**



Surveys for **quantitative**
impact **metrics**

OFF-GRID VILLAGES ARE TRANSFORMED
INTO FULLY CONNECTED VILLAGES …

API &
3rd PARTIES
PineBerry
ENERGY AS A SERVICE
DISTRIBUTION AS A SERVICE
WATER AS A SERVICE
COOLING AS A SERVICE
E-MOBILITY AS A SERVICE
MILLING AS A SERVICE

TEAM & VISION

PineBerry

Co-founders

REBECCA

MANUEL

DANNY

Team members

OLAF

ANNE

WARINGA

JOHN

GREGORY

JULIA

200 M. people until 2030

SUSTAINABLE business models

PineBerry

Rebecca.Bregant@pineberry.services

www.pineberry.services