Supplementing Productivity and Growth with clean energy
Tanzania

REDAVIA
About REDAVIA

REDAVIA was founded 2010, backed by strong support partners

Provides cost-effective, reliable and clean pay as you go solar power for businesses & communities

Committed to use solar power as a key driver to sustainable development

Market leader of solar plants for on-grid as well as off-grid remote locations on flexible rental terms with a focus on Tanzania, Ghana, and Kenya
What does REDAVIA do?

- Provides solar farms in a **pre-configured containerized set**, including all high-performance solar modules & electrical components

- **Pre-finances solar farms**, so customers only pay monthly lease fees/pay as you use, allowing affordable access to clean electricity

- **Enables significant reduction of cost and carbon emissions**

- **Provides full-service package** including site survey, shipment, set-up, operation, maintenance, 24/7 monitoring & redeployment
REDAVIA'S MODEL

INPUTS
- EEP + other financing
- Solar PV
- Technical staff / project team
- User inputs to design & management

GENERATION/MANUFACTURING
- Installed generation plant
  - DIRECT SUPPLY TO SME

DISTRIBUTION
- Mini-grid distribution network

PRODUCTIVE USE
- Crushing (gold mine)
- Light manufacturing
- Grinding, milling, husking, shelling, threshing

HIGHER INTENSITY
  (over 2.5kW)
- Drying, smoking, preserving
- Refrigeration
- Illumination & services

LOW INTENSITY
  (up to 2.5kW)
Shanta Gold New Luika Mine, Tanzania

Description:

• 8 solar farm containers with a growing capacity of 674 kWp to power their mining operations
• Established fully hybrid solar-diesel system replacing significant amounts of diesel
• Rental business model enables Shanta to pursue flexible investment strategy due to monthly lease payments

Benefits:

• 219k liters diesel saved p.a.
• 660 tonnes of CO₂ reduced p.a.
• 25% cost savings p.a.
Community – mini grids

• 2 mini-grids (89kWp each with a battery and genset back up)

• >500 users (households and businesses)

• Adopted an energy supply model long enough before introducing the business acceleration model (cross-subsidize with commercial user)
  • Observe, learn, accelerate

• Without interference – villagers began their own light manufacturing, agri-processing and service provision activities
LESSONS LEARNED & EXPECTATIONS

• Surprises so far
  • There are local key drivers of productivity and growth that are equally important and successful as external drivers
  • The rise of local monopolies

• Anticipated challenges
  • Identifying the right execution and implementation plan for PUA. (i.e. without disrupting the local market; supporting rise of monopolies; creating e-waste)

• Expected results
  • The gradual process can be painful financially