



RENT THE SOLAR FARM, OWN THE FUTURE

**THE INNOVATIVE
BUSINESS MODEL**

REDAVIA

**PRE-CONFIGURED,
CONTAINERIZED SOLAR
MINI-GRIDS FOR RENT**

TAN8037



EEP

ENERGY AND ENVIRONMENT
PARTNERSHIP / SOUTHERN AND EAST AFRICA





REDAVIA is on a mission to help small villages and communities in Africa expedite their social and economic development.

To achieve this, the company has developed a simple yet innovative business model: provide pre-configured, containerized solar mini-grids for rent – without upfront, unaffordable investment.

"Each solar farm is pre-assembled using high-performance solar modules and then shipped to the community in a large container."

"REDAVIA delivers a 360° service for every solar farm including engineering, manufacturing, assembling, testing, deployment, maintenance and redeployment."

Since 2010, REDAVIA has been developing their innovative solar power system based on a pre-configured container model.

It's as simple as it sounds. Each solar farm is pre-assembled using high-performance solar modules and then shipped to the community in a large container. The solar farm is set up on average in four days, immediately providing much-needed electricity to people in Sub-Saharan Africa.

While REDAVIA works directly with communities, it serves a range of customers that positively affect residents. These include agriculture, manufacturing, and mining companies that provide community employment and often housing, as well as public institutions such as universities and hospitals that lead social development. For all its customers, REDAVIA delivers a 360° service for every solar farm including engineering, manufacturing, assembling, testing, deployment, maintenance and redeployment.



Control panel of the mini-grid.

Every morning, the sun rises. So, too, should opportunities for the people living in Tanzania's Mbozi District.

"Access to efficient and economic energy is critical."

The villages of Shitunguru and Isenzanya, in Mbozi District, are seeking to advance their respective social, economic and public development. One key enabler for turning potential into reality is access to energy. Yet, these communities are off-grid, creating challenges in health, education, food security and entrepreneurship. Access to efficient and economic energy is critical.





Through the power of solar energy, REDAVIA is striving to transform how these communities live, work and play.

In the Mbozi District, electricity powers schools, hospitals and government buildings. It lets local farmers work more efficiently. It turns on common household appliances. Unlike other energy options, REDAVIA's business model provides a true competitive edge for communities and other customers because the solar farms are pre-financed and require no upfront investment. Access to energy is not only achievable, but maintainable and affordable in the long-term.

While electricity is in reach, the road to attain it is paved with many obstacles.

Having been in East Africa for over five years now, REDAVIA has seen these challenges first-hand. Shitunguru and

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Isenzanya, for example, are in remote areas far from urban centers and power grids. For roughly half a million people in Mbozi, electricity is either unreliable or unavailable.

Even when villages have some form of electricity, its unpredictability often causes regular outages that disrupt basic living and working.

Children often go without continuous light to complete homework, while farmers are unable to process their crops in time. To be sure, the effects are always aggravating – yet sometimes catastrophic.

The Shitunguru and Isenzanya villages also face many financial challenges. While the cost of accessing the grid is rising, the purchasing power of residents is not. Urban Tanzanian cities may be experiencing rapid growth, but smaller villages are still searching for ways to take the next step forward.





Creation of a power infrastructure: Building a mini-grid, then harnessing the sun.

As REDAVIA surveyed the villages and their challenges, two things became clear. First, each village required its own mini-grid system to form the basis of a reliable power infrastructure. Second, the company's pre-configured, rental solar farms would make the energy more available but also efficient and economic.

Showcasing its energy expertise and its commitment to helping these communities thrive, REDAVIA built the mini-grid systems from the ground up. The REDAVIA team currently maintains full operation of each mini-grid, yet will most likely hand off control to local personnel in the near future. Not only has REDAVIA built an infrastructure, they've also created job opportunities.

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Planting rental solar farms is not only an efficient source of energy, it's a pragmatic economic solution.

With a working mini-grid established, REDAVIA assembled and transported its rental solar farms to the villages. Both villages received their containerized solar farms, with each containing 336 solar modules, plus all the necessary solar support frames, inverters and cables. In Shitunguru and Isenzanya you will see rows of solar panels hard at work. What's more, the solar farms seamlessly integrated into the mini-grid infrastructure, quickly creating a hybrid system capable of supplying continuous power.

The benefits of REDAVIA's innovative system are extensive, but also very tangible for the communities and individuals, respectively. From a financial perspective, the rental model gives the villages tremendous flexibility in scaling its solar capabilities as needed. Adding solar farms to meet increasing demand is simple.

Moreover, the villages do not need to make an upfront investment, saving costs that can be used for other growth initiatives. The rental model allows the villages and communities to grow on their own terms.

The rental terms and costs are key factors driving the implementation of REDAVIA's solar farms. But, more importantly, affordability equals access. Simply having energy access opens the door to countless opportunities and creates meaningful impact in the lives of residents. Children have access to well-lit homes and classrooms, as well as computer-learning programs and the Internet. Rural consumers can charge cellular phones and listen to radios. Hospitals have the necessary energy to provide routine care and emergency services. As Shitunguru and Isenzanya depend largely on agriculture for employment and economic growth, REDAVIA helps power milling, machinery and tools.

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Local workers cleaning solar panels.



As REDAVIA implemented its solar farms, it wondered how the people of the Mbozi District could truly take advantage of electricity's possibilities.

When a village gets electricity, residents naturally want to use it. That means they need appliances and devices.

This simple insight led REDAVIA to seek partnerships with the aim to offer village residents the chance to rent everyday appliances such as refrigerators, TVs and other electrical appliances, as well as electrical starter kits.

It's all about working hand-in-hand to provide the villages with the amazing benefits of electricity. For example, residents of the Mbozi District can now easily obtain refrigerators for their homes, allowing them to store food for several days. Without refrigeration, residents would have to go to the market more often to purchase fresh groceries. If they didn't consume many items that same day, the food would quickly spoil. With continuous electricity and the necessary appliances, residents can reduce the amount of wasted food and money.

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**In Tanzania alone,
there are approximately
40 million residents
living away from the
power grid.**

REDAVIA is expanding its footprint in Tanzania, but also throughout Sub-Saharan Africa. Its rental solar farms are poised to create major impact in the lives of thousands of communities. The company will soon roll out enhanced solar technology with more intuitive features, and begin scaling its mini-grid operation. Alongside close collaboration with each village, REDAVIA is committed to using solar energy as a key driver to sustainable social and economic impact.





REDAVIA offers rental solar power for businesses and communities – with a regional focus on East and West Africa.

The REDAVIA system is based on a pre-configured container model, including high-performance solar modules and high-quality electrical components.

It is easy to ship, set up, scale and redeploy. Businesses and communities benefit from a cost-effective, reliable and clean energy solution without the need for upfront investment or technical skills, supporting the reduction of carbon emissions and increasing the impact on a sustainable society.

Find out more on www.redviasolar.com

"Supporting the reduction of carbon emissions and increasing the impact on a sustainable society."

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