

SHANTA GOLD

An innovative mining company ready to make a bigger impact



Saves approx
219,000 liters of
fuel per year

Total capacity of
674 kWp

660 tonnes
of CO₂ less
per year

Located in Tanzania, Shanta Gold is focused on the mining, development and exploration of gold in East Africa. The company is currently building a portfolio of high quality gold assets in the region through innovative and intelligent operations centered around its New Luika Gold Mine in south-western Tanzania. Shanta is developing a modern approach to delivering operational efficiencies and sustainable operations.

Tanzania is one of Africa's leading gold-producing countries and its economic impact is poised to increase in the near future. With deep knowledge of the region, Shanta has its sights on taking advantage of the country's gold opportunities and gold mining tradition. The company is firmly positioned to become a key player in Tanzania, helping to maximize the country's under-explored and under-developed gold resources.

CHALLENGE

Going underground with more energy from high above.

REDAVIA has helped Shanta Gold overcome two challenges in the company's journey to improved energy: When Shanta Gold opened its New Luika Gold Mine in Tanzania's Chunya region in 2012, the mine relied exclusively on diesel and heavy fuel oil (HFO) in its first few years of operation. But the high and fluctuating price of diesel and the fuel's impact on the

environment impelled Shanta to install a REDAVIA solar farm in 2014 for a glimpse of its many possibilities. Then the next challenge appeared: Shanta began executing its underground mining expansion plan, which required significant additional amounts of energy to power continuous operation.

Financed by:



SHANTA GOLD

A young, innovative mining company ready to make a bigger impact

SOLUTION

Seizing a golden opportunity.

For a young, cutting-edge company like Shanta Gold, REDAVIA's rental business model is uniquely appealing. In 2014, REDAVIA deployed a 63 kWp initial rental solar power plant directly at the mine and combined it with its diesel generator setup. The new hybrid system now uses less diesel fuel and is supplemented by clean power from the sun.

After the success of the first solar farm, Shanta partnered with REDAVIA to install seven additional solar farm containers. In mid-2017, REDAVIA completed the installation and now, with eight solar farm containers completely operational, Shanta has a solar capacity of 674 kWp, feeding power into their growing mining operations. The economic and efficient energy keeps the business going. The financial impact is supplemented by the eco-friendly aspect – two key areas that many sub-Saharan companies are trying to achieve.



No upfront investment



More than
1 million kWh
per year



BENEFIT

Generating power and results.

Shanta's initial solar plant generated around 100,000 kWh in the first year with an estimated fuel saving of 28,000 liters and a CO₂ reduction of 67 tonnes. Looking ahead, the fully-operational eight solar container farm is set to generate more than 1 million kWh per year, while saving approximately 219,000 liters of fuel and reducing CO₂ emissions by an estimated 660 tonnes per year.

The financial benefits for Shanta are compelling – immediate cash savings through a significantly reduced demand for fuel and no up-front investment. In addition, the fixed-price solar farm rental contract reduced the volatility of power costs over the 5-year term, thereby stabilizing Shanta's cost base.

In addition to these financial benefits, the solar farm results in several additional benefits, which ultimately add to shareholder value. Firstly, as a measure to reduce environmental footprint (CO₂ and fuel transport reduction, less local pollution and infrastructure damage), the solar farm improved Shanta's relationship with the local authorities, especially the environmental management authority. Secondly, as a highly visible, on-site embodiment of Shanta's commitment to responsible mining and operational efficiency, the solar farm raises the awareness of its workers to act responsibly and efficiently throughout their workday. Finally, towards investors, REDAVIA's solar farm highlights Shanta's ability to identify and successfully execute innovative, yet tried-and-tested new technologies that create sustainable shareholder value.

This eco-conscious and cost-effective approach makes Shanta Gold a true role model in its industry.