

Creighton Valley dairy farms embrace solar power for sustainable production

In the picturesque Creighton Valley of Kwa-Zulu Natal, a significant shift towards renewable energy is taking place. Traditional pillars of the local economy, such as dairy farms and cheese producers, are embracing solar power through SolarSaver, a company providing solar photovoltaic installations. This move aims to cut electricity expenses and establish a reliable power source, marking a transformative journey in the region's sustainable energy landscape.



Source: Supplied

Dairy farming is an energy-intensive operation. From powering milking machines to maintaining refrigeration units, a consistent supply of electricity is crucial for the seamless running of the farms. The Creighton Valley Cheese Company processes approximately 70,000 litres of locally sourced milk daily, transforming it into 6 tonnes of cheese. This process-intensive business also relies on a considerable amount of power.

Three years ago, SolarSaver completed a grid-tied solar installation at the Creighton Valley Cheese Company. The impact was immediate and significant, prompting owner Hayden Stokes to refer SolarSaver to other farmers in the valley and ultimately install a hybrid system (solar + battery backup) at Burnview Dairy.

"SolarSaver's installations have already made a huge difference to the farms in terms of electricity costs, having reliable, stable power, and reducing the impact on the environment," says Stokes. "We needed to reduce our dependency on Eskom, and SolarSaver provides a scalable solution."

The need for consistent power supply

With the Creighton Valley region powered by Eskom, unstable power, voltage fluctuations and load-shedding have created ongoing challenges that result in significant financial losses and threaten the viability of these businesses. While grid-tied solar systems provide power during daylight hours, Stokes needed to find a way to keep his businesses operational and productive 24/7.

The company recently added batteries to the existing grid-tied installation at Burnview Dairy to create a hybrid system, which is working well. Stokes plans to add batteries to the Creighton Valley Cheese Company installation and increase it by 50kWp.

"As milk is perishable, we risk losing thousands of litres of milk when outages occur," says Stokes. "Load-shedding disrupts the daily routines of dairy farming. Dairy cows must be milked at regular intervals, and power outages can interrupt this process, leading to decreased milk production and potential health issues for the cows."

Grid-tied solutions are offered through the company's unique rent-to-own model, which enables solar photovoltaic systems to be installed at no capital cost while clients pay only for the green power produced at lower rates than Eskom. The company further provides solar battery hybrid solutions for a set monthly fee or as a direct sale.

"While the rent-to-own grid-tied systems provide a powerful solution to save costs and provide greener power with no capital investment, we've found that due to the extent of loadshedding and the cost of generators, battery hybrid solutions can also make financial sense," says Lance Green of SolarSaver.

By ensuring a consistent, stable power supply whilst reducing dependency on generators, solar installations are enabling farms to save costs and maintain production. "Burnview Dairy and the Creighton Valley Cheese Company are great examples of how renewable energy can help farmers remain competitive as we work together to deal with power challenges and create a more sustainable future for South Africa," says Green.

Pleased with the installations, Stokes referred SolarSaver to other dairy farmers in the Creighton Valley. As a result, SolarSaver has installed grid-tied and hybrid systems at Sunnyside Dairy, Vlei Villa, Twin Dams, Valhalla Dairy, and Helston Farm – totalling just under 700 kWp.

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