

Background

Die Eike is a commercial fruit farming operation based in the Witzenberg Valley in the Western Cape, well known as the fruit bowl of the country. Die Eike contributes to the many tons of premium produce grown in the area.

This geographic region is extremely fertile, has a lush landscape and sunny climate. However, this area, which falls under the Witzenburg municipality, is also acknowledged to have an overall electricity shortage, making farmers vulnerable to regular disruptions, even more so when there is national load-shedding.

Objective

The team at Die Eike approached New Southern Energy with the intention of exploring solar power as a way to supplement their energy due to the limited energy availability in the region.

This would be their first move to solar energy. The installation became the first phase in a multi-phase project, working towards the objective of establishing the site as a net exporter of electricity.

Solar solution

A grid-tied solar plant was designed and constructed for Die Eike. The solar system generates renewable power by harnessing solar energy from the sun and converting it to usable AC power. Such a system generates power for the property and thereafter, feeds any excess power it generates back into the electrical grid, to which it is connected.



Results

The site was established on 20 November 2019. The first solar power was produced on 6 March 2020. Approximately R 943 000 has been saved since the installation with 720 megawatt hours produced by the system.

It is conservatively estimated that over the next 25 years, the system will save Die Eike approximately R 25 million.

Solar solution

Southern Energy installed a 702kWp Solar PV plant with reticulation and a dedicated transformer. The solar PV system, which consists of 1 904 Canadian Solar 370 Wp panels, is ground mounted, using available space on the property.

The structures were erected at the maximum height in order to provide for grazing and tending below the tables.



Team

Business Development Manager: Mike Pritchard

Project Manager: Andrew Alexander

Construction Manager: Gerhard Louw

Asset Manager: Brian Ssebabi