



SOLAR SOLUTIONS



### PROJECT SCOPE:

- 84.03MWh Annual Production
- 96 Panels
- 52.8kW Power
- Commercial Project

# NCT FORESTRY AGRICULTURE



## CASE STUDY:

Ijika Solar Solutions, a leading solar installation company, undertook a significant solar installation project for NCT Forestry Agricultural in Pietermaritzburg, South Africa. The project aimed to provide a reliable backup system for NCT's offices and servers, reduce electricity consumption, and decrease carbon dioxide emissions.

The project faced challenges, including the removal of the existing UPS system, replacing it with a 50-kW hybrid high voltage inverter and lithium-ion battery setup. Ijika Solar Solutions obtained necessary permissions from the PMB local council and ensured compliance with the latest NRS097 standards. The installation process spanned six weeks, during which the team overcame the complexities of working on a steep tile roof using roof hooks and a rail system.

The solar installation delivered significant economic benefits to NCT Forestry Agricultural by reducing electricity costs and providing a backup system with batteries, reducing reliance on diesel generators during grid power failures. Moreover, the project contributed to environmental sustainability by reducing CO2 emissions, aligning with the client's commitment to green energy solutions.





The installed system was monitored using Sunsynk, ensuring optimal performance and efficiency. This monitoring solution allowed Ijika Solar Solutions to track the system's output and promptly address any issues, ensuring continuous functionality and maximum energy production.

#### Key Stakeholders:

- Ijika Solar Solutions: Responsible for design and engineering of the solar installation.
- Sunsynk: Provided high voltage inverters and monitored the performance of the installed system.
- Freedom Won: Contributed the high voltage battery used for the solar system
- NCT Forestry Agricultural: The client seeking a reliable backup solution and a reduction in electricity consumption.

Ijika Solar Solutions gained valuable insights from this project, particularly in handling high voltage batteries and inverters. The team emphasized the importance of adhering to stringent safety precautions when working on steep roofs, ensuring the well-being of their staff while delivering high-quality solar solutions to their clients.