



OFF-GRID ENERGY SOLUTIONS FOR A REMOTE CHICKEN PROCESSING FACILITY

BUSINESS OBJECTIVES

In a pioneering move for the poultry industry, a chicken processing facility has adopted an off-grid, three-phase solar energy system to operate independently of the traditional power grid. This initiative uses Sol-Ark's advanced technology to provide a reliable and cost-effective power solution. Located in a remote area where grid connection is prohibitively expensive, the facility needed an efficient and robust power solution.

SOLUTIONS

The decision to install twelve Sol-Ark 15K inverters, paired with a 148-kW solar array and a 240-kWh lithium battery storage system, ensures continuous, reliable power. The inclusion of a diesel generator as a backup safeguard against any potential disruptions, providing additional resilience.

Project Overview:

- Location: Remote Area, Belize
- System Components: 12 Sol-Ark 15K Inverters, 148 kW PVdc Solar Panels, 240 kWh Lithium Battery Storage, Diesel Generator Backup
- System Capacity: 180kWac output with 240 kWh Lithium
- Solar Array: 50 kW Pvac
- Backup Generator: Yes
- Application: Complete off-grid operation for chicken processing

This solar power setup not only cuts operational costs significantly by avoiding high grid connection fees but also reduces the environmental impact associated with traditional energy sources. The Sol-Ark system is a testament to the feasibility of renewable energy solutions in powering large-scale commercial operations sustainably.

OUTCOME

The project highlights Sol-Ark's capability to deliver high-efficiency, reliable off-grid solar solutions for commercial businesses, promoting energy independence and sustainability. It serves as an inspiring example for industries looking to transition away from conventional energy sources and embrace cleaner, more sustainable operations. Demonstrating the potential of solar technology in reducing energy costs and supporting environmental conservation in the commercial sector.

