# WILLIAM CREEK
RENEWABLE POWER SYSTEM


## CASE STUDY SUMMARY

**CLIENT:** Anna Creek Station
**LOCATION:** William Creek, South Australia
**INVERTER CHARGERS:** 12 x Victron Quattro 48/15000
**PV INVERTERS:** 7 x Fronius ECO 25 (AC Coupled)
**BATTERIES:** 56 x Redflow ZBM3
**SOLAR MODULES:** 1092 x Canadian Solar 550w Modules

## INTRODUCTION

The William Creek project, undertaken by MyEnergy Engineering, exemplifies a successful off-grid power system installation in remote South Australia. This case study explores the project's objectives, solutions, and outcomes, highlighting MyEnergy's expertise in delivering renewable energy systems in challenging environments.

## PROJECT OVERVIEW

**Client:** Anna Creek Station

**Location:** William Creek, South Australia - a small town with unique geographical and logistical challenges.

**Project Goal:** To implement an off-grid power system capable of handling the town's energy requirements sustainably and efficiently.

## OBJECTIVES

To design and install a hybrid power system (HPS) that provides reliable, efficient, and sustainable energy.

Ensure the system is aesthetically pleasing and integrates seamlessly with the local environment.

Complete the project within the specified timeframe, adhering to the highest safety and quality standards.

## SYSTEM DESIGN AND COMPONENTS

- **Inverters:** Victron Energy at its core, providing a robust and reliable power conversion solution
- **Batteries:** Pylontech batteries for energy storage, ensuring continuous power supply
- **Solar Panels:** 200kW of Trina Solar Modules, capturing solar energy effectively
- **Installation:** The system was installed in May 2022

## THE SOLUTION

- **Capacity:** 135kVa of Victron Energy Quattro Inverters.
- **Solar Modules:** 200kW of Trina Solar Modules
- **Coupling:** DC Coupled using Victron 450/200 Smart Solar chargers and AC Coupled using Fronius International ECO Inverters
- **Monitoring and Control:** Victron Cerbo GX for remote monitoring and control
- **Storage:** 280kWh of storage using Pylon Technologies US5000 Batteries
- **Supporting Infrastructure:** Cabinets from Tro Pacific cooled by Daikin Comfort split systems, and built in a 40' Container

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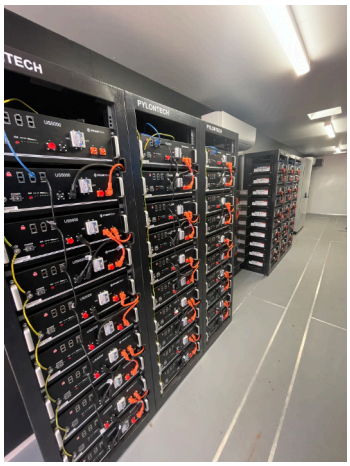
## CHALLENGES AND SOLUTIONS

Remote Location: The small, remote town posed significant logistical challenges for transport and installation.

Environmental Considerations: The system design needed to be environmentally friendly and sustainable, considering the town's unique ecological setting.

Energy Reliability: Ensuring a consistent and reliable power supply in a remote area with fluctuating population.



## PERFORMANCE AND IMPACT

The HPS project has successfully provided William Creek with a reliable and sustainable off-grid power solution.

It significantly reduces reliance on traditional energy sources and minimises environmental impact.

The project stands as a testament to MyEnergy's capability in designing and implementing complex off-grid systems in remote locations.

## CONCLUSION

MyEnergy's William Creek project demonstrates their expertise in delivering tailor-made off-grid power solutions in challenging environments. By leveraging advanced technology and innovative design, MyEnergy has effectively addressed the unique energy needs of William Creek, paving the way for similar projects in remote and environmentally sensitive areas.

**MyEnergy Engineering** is a family-owned company delivering off-grid power solutions since 2010. Our focus is renewable energy systems, which over time, have developed a reputation nationally for our expertise and industry leadership in the design, build and installation of off-grid power systems throughout Australia.

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