

Sales Office

Case Study

Delivering a a low emissions temporary power solution for the Eglinton Village estate development.

OVERVIEW

In a first for Western Australia, Cedar Woods launched WA's first-ever residential community energy sharing network as part of Eglinton Village estate development.

Fuelfix was commissioned to provide a low emissions temporary power solution for the project to reduce fuel reliance and resultant emissions.

CHALLENGE

The key to the success of this project was the ability to provide reliable and continual power to the portable sales office without the drawbacks of a traditional diesel generator.

Cedar Woods was looking for a stand-alone, energy-efficient and greener power solution that could operate completely off-grid, deliver operational efficiencies and reduce emissions.

To avoid the costs, noise, maintenance and refuelling requirements that a diesel-powered generator would have introduced, Fuelfix recommended an alternative and greener option to power their sales operations.



LOCATION	Eglinton, WA
YEAR	2024
INDUSTRY	Property Development Company
FOCUS	Reliable and low emissions temporary power solution
SOLUTION	Hybrid Power Solution



FUELFIX APPROACH

Through extensive analysis of fuel consumption and energy requirement data of power systems in remote Mining, Construction and Civils sites, Fuelfix has designed microgrid solutions that aim to significantly reduce fuel consumption and CO₂ emissions, and lower associated costs based on 4 principles:

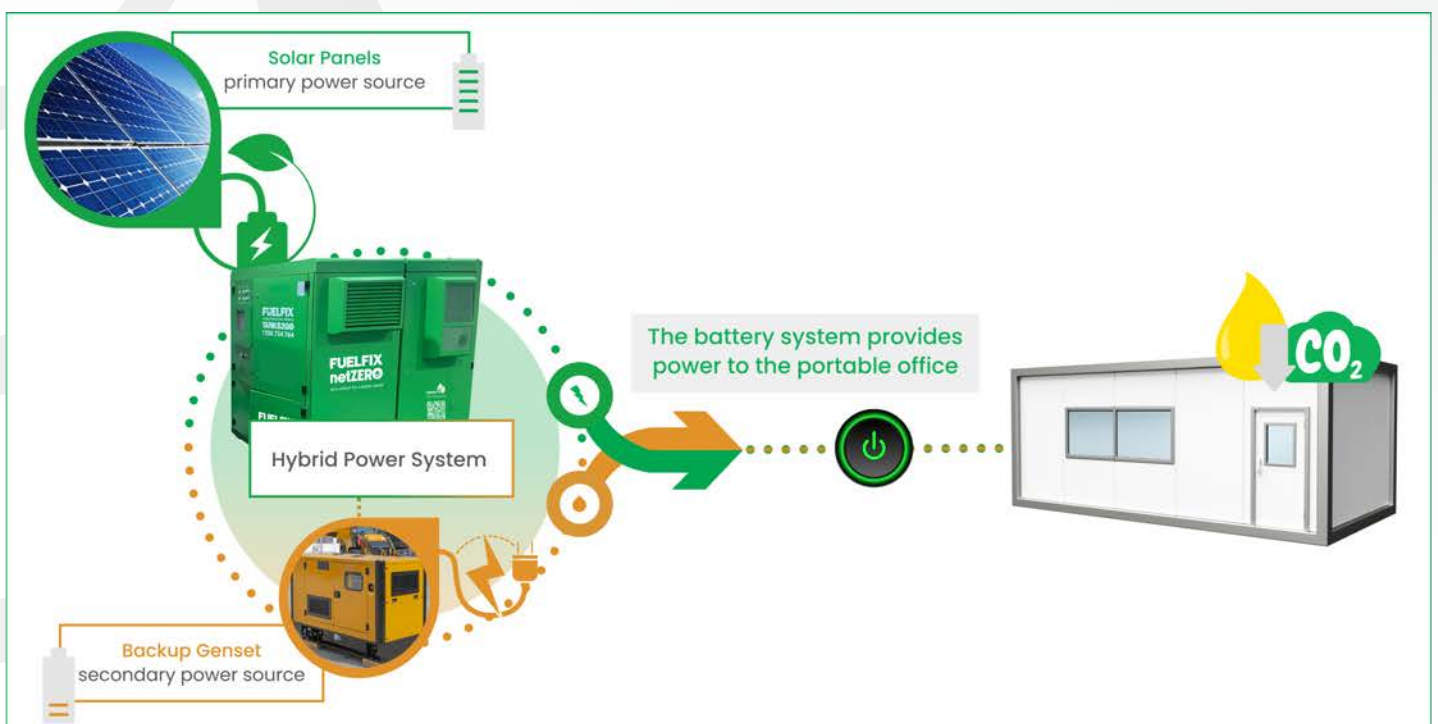
- Where feasible, utilise renewable energy by using power conversion systems along with battery storage.
- Eliminate energy waste (fuel waste), by using batteries to store excess energy.
- Ensure that the traditional hydrocarbon-based power generation systems are used at their most efficient.
- Deliver solutions that offer lower cost of ownership as compared to traditional power solutions.

SOLUTION

After an assessment of the site requirements and power needs, our team adapted the scope of the project to replace the diesel generator, traditionally used for this type of application, with our Fuelfix Go-Greener solutions that perfectly matched the project's requirements.

Fuelfix supplied an off-grid hybrid solution, scaled to suit the client's needs which comprised of a HESU15 Hybrid Power System (battery storage unit and back-up generator) and Solar Skid.

The battery storage was used as a reservoir to store solar energy and energy from the backup generator. The battery system then supplied this stored energy efficiently to the load (in this case the portable sales office).



VERDICT

We provided a reliable, easy to use and 100% off-grid solution that performed as per Cedar Wood's requirements and expectations, with all the benefits of a green powered solution.

Following a thorough examination of the data captured by the Fuelfix supplied hybrid power system over a 30-days period (720 hours of operational time), we have already seen great savings in fuel and CO2 emissions along with reduced noise pollution and movement on site.



Over 30 days (720 hours of operational time), our Go-Greener solution enabled Cedar Woods to save:



2,150L of diesel



\$4,300 of fuel costs

Based on fuel costs at AUD2/L and other costs related to the use of a diesel generator



5.8 tonnes CO2 emissions reduction

According to Tree For Life (TFL Carbon), it requires about 29 trees to offset this amount of CO2 emissions over 30 years.

Two Pathways,
One Goal



This project is in line with our Two Pathways, One Goal Strategy which includes designing and delivering solutions that provide opportunities to reduce carbon emissions and maintain efficient operations with better environmental outcomes.

By optimising the use of solar, battery and backup generation, Fuelfix hybrid power systems deliver operational efficiencies with a significant reduction in CO2 emissions and fuel costs.

Discover how we can help you lower your emissions whilst reducing operational costs with our Go-Greener range

