



Case Study

Delivering smarter, quieter, greener power solution for urban construction.

OVERVIEW

GVG's Danby Lane Apartments project in Queensland is a forward-thinking residential development that's setting new standards in sustainable construction.

In the early stages of the build—when grid power is unavailable—GVG partnered with Fuelfix to implement a cleaner, quieter, and more efficient energy solution.

CHALLENGE

Like many construction sites, Danby Lane faced a common hurdle: no access to permanent electricity during the initial build phase. Traditionally, this would mean relying on petrol generators to power pumps, lighting, and site amenities. However, this approach comes with significant drawbacks:

- **High fuel consumption and emissions**
- **Excessive noise**, especially disruptive during night operations
- **Manual oversight** required to manage generator operation

GVG needed a solution that aligned with their sustainability goals while maintaining operational efficiency and safety.

SOLUTION

Fuelfix deployed the **ESU15 Battery Energy Storage System**, paired with a solar array, to deliver a **fully integrated, low-emission power solution**.




LOCATION	Brisbane, QLD
YEAR	2025
INDUSTRY	Construction - Development
FOCUS	Align with GVG's sustainability goals while maintaining operational efficiency and on-site safety
SOLUTION	Battery-powered system paired with a solar array

SOLUTION

- **Solar-powered charging:** The solar array generates approximately 20kWh daily.
- **Battery storage:** The ESU15 stores up to 30kWh—enough to power pumps, crib facilities, and lighting overnight or across weekends.
- **Backup generator:** A petrol generator remains on-site but is now rarely used, significantly reducing fuel dependency.



For larger-scale construction or mining applications, Fuelfix also offers higher-capacity battery systems, delivering even greater power and storage for more demanding energy needs.



The system is compact, modular, and easily relocatable—ideal for dynamic construction environments.

VERDICT

The ESU15 system has transformed energy use at Danby Lane:

- **Fuel and emissions reduced dramatically**
- **Noise pollution eliminated during off-hours**
- **24/7 autonomous operation without on-site supervision**
- **A meaningful step toward net zero construction**

By integrating battery and solar technology, GVG is not only cutting operational costs but also setting a new benchmark for sustainable construction practices in Australia's urban development sector.



This initiative is in line with our [Two Pathways, One Goal Strategy](#) and our commitment to enable our customer's transition to a cost-effective, cleaner energy future.

We provide flexible and innovative energy solutions to assist our customers to maximise their fuel efficiency, minimise their operational costs and reduce their Scope 1 and 2 emissions.

1300 734 764 | fuelfix.com.au