



# Case Study

Delivering a netZERO solution for a leading supplier of explosive and blasting services.

## OVERVIEW

Dyno Nobel, a leader in the commercial explosive industry, approached Fuelfix & Tanks2Go to conduct the 10 Year Inspections and upgrade of the Transtank T68 self-bunded tank used at their Moranbah QLD site. During site assessment and development of the scope, it was identified that an exchange tank was required to keep the site operational during the inspection process.

## CHALLENGE

Ensuring a smooth continuity of the operations during the inspection and upgrade of Dyno Nobel’s existing fuel tank was crucial so that their customers would continue to receive the highest level of service. The key to the success of this project was the ability to provide a stand-alone, energy-efficient and greener fuel storage solution that could operate completely off-grid, provide optimal performance and require zero maintenance.

To avoid the added cost, noise and maintenance and refuelling requirements that a diesel-powered generator would have introduced, Fuelfix & Tanks2Go determined the best solution would be the installation of a solar powered fuel storage and refuelling solution.

Due to being a busy 24hr a day / 7 day a week operation, minimising downtime was also critical during the changeover process and zero impact on fuel supply was identified as paramount.

LOCATION	Moranbah, QLD
YEAR	2023
INDUSTRY	Explosive & blasting services
FOCUS	Smooth continuity of the operations during the inspection of the existing tank
SOLUTION	Solar Powered 70 FF Self-Bunded Tank with HV/LV dispensing



## INITIAL BRIEF

In short, the initial request for FuelFix & Tanks2Go was to provide the following:

- A replacement self-bunded tank of similar capacity to their Transtank T68 with Heavy Vehicle and Light Vehicle refuelling that could operate without mains or generator supply.
- An emphasis on reducing downtime and costs associated to maintenance whilst ensuring safety first.
- Adaptability to the scope clarifications and changes and clear communication between all project stakeholders.

## SOLUTION

After a thorough assessment of the site requirements and refuelling 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 our customer's requirements.

Drawing from our extensive range of Go-Greener solutions, FuelFix & Tanks2Go supplied an off-grid solution, scaled to suit the Dyno Nobel's needs which comprised of a MAC5 remote battery storage unit and Solar Skid, paired to a 70FF (65,930L self-bunded tank) with Heavy Vehicle and Light Vehicle refuelling for complete off-the-grid and zero maintenance operation.



The MAC5 unit integrates with solar energy to provide robust and reliable power and is ideal for remote mining, construction or industrial sites that are seeking greener alternatives to fossil fuel generators for safer and more efficient site operations.

We were able to quickly deliver the project within the expected timeline, the system was operational within hours of being delivered to site and connected by our skilled and industry-qualified team.

## VERDICT

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

As a result, Dyno Nobel were able to continue operations on-site with minimal downtime and without the additional risk or costs associated with the installation and maintenance of a diesel-driven generator unit.

Acting as a standalone replacement for diesel generators, the MAC5 is an efficient and zero emission energy storage system and a valued inclusion in our Fuelfix netZERO range. Coupled with our rapid deployment solar skid, it was the ideal solution to power the temporary fuel tank on site with minimal carbon footprint, zero exhaust fumes, low noise pollution and better overall operational costs.

The solution implemented resulted in the significant reduction of costs related to fuel usage, equipment maintenance and servicing as well as carbon emissions.



On an annualised basis, our Go-Greener solution enabled Dyno Nobel to save:



**10,000L of diesel**



**\$30,600 of fuel costs**

Based on fuel costs at AUD1.5/L and other costs related to the use of a diesel generator



**25 tonnes CO2 emissions reduction**

**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 implementing this solution, Dyno Nobel's team were able to access the fuel needed for operations in a safe and succinct manner, which reduces environmental, personal and operating risks relating to refuelling.

When asked for feedback on the solutions provided, Dyno Nobel praised our team expertise and their commitment to ensure that the system perfectly matches their site requirements.

*'Dyno Nobel quote'*