



Case Study

Delivering a low emission and efficient power generation solution for the Boorna Waanginny: The Trees Speak event in Perth.

OVERVIEW

Black & White – Power & Light (B&W) is a leading service and equipment provider in the event management industry, offering reliable temporary power and site/safety lighting solutions. Since 2009, they have been a key player in supplying these solutions for various events in Western Australia.

This year marked their third consecutive contract with the Ever Now Perth Festival, providing their

services for the Boorna Waanginny: The Trees Speak event in October 2023.

Fuelfix was approached by B&W to provide a sustainable and efficient power solution for their temporary office block in Kings Park.

CHALLENGE

B&W required a power solution for a portable office to be used during the organisation of the event. For an event like this, it's important power is provided with minimal noise output as people enjoy the festivities, as well as keeping emissions pollution to a minimum.

The main challenge was to provide sufficient power to the portable office with a focus on fuel efficiency, reduced noise, and low CO2 emissions. B&W had previously relied on traditional diesel-powered generators, which proved to be less cost-effective.

These generators ran continuously, irrespective of the load requirement, leading to higher fuel consumption, unnecessary noise and pollution and higher operational costs.

LOCATION	Kings Park, Perth , WA
YEAR	2023
INDUSTRY	Event - Light & Power services
FOCUS	Low emission, quiet and efficient power solution during a 9-days project
SOLUTION	Hybrid Energy Storage Unit - HESU15



This prompted B&W to explore alternative solutions, leading them to approach Fuelfix to address their power needs for the event.

B&W had no experience using Hybrid Energy Power Units prior to the event and relied on the support and expertise of Fuelfix's trained staff to provide information related to these innovative type of power generators.

SOLUTION

Fuelfix supplied them with our new HESU15 Hybrid Energy Storage Unit, a robust alternative to traditional diesel generators. Capable of producing 9KW of continuous power, this single-phase system delivered sufficient power for the application and presented several advantages over traditional diesel generators. The HESU15 demonstrated a significant reduction of fuel consumption, noise reduction and lower emissions, meeting the specific requirements of the public event. The battery unit requires no maintenance and is also operationally similar to diesel generators, requiring minimal training for B&W staff. Remote monitoring capabilities further eased the operational demands for B&W employees.

VERDICT

The verdict from the client was overwhelmingly positive. The HESU15 not only met but exceeded expectations, delivering substantial benefits to B&W:

Fuel Consumption

The HESU significantly reduced fuel consumption over the conventional generators which in turn reduced the monitoring workload of B&W staff in relation to refuelling and maintenance (90% reduction in fuel consumption compared to traditional generators).

Run Time

During the 9-day trial, the diesel generator ran for only 21 hours out of 216, with the battery providing power for the remaining 195 hours, achieving a 90% reduction in run time.

HESU15 benefits for B&W:



90% reduction in fuel consumption



\$1,091 cost-saving over 9 days
(potential annualised savings of \$44,246)



1.4 tonnes CO2 emissions reduction over 9 days
(potential annualised savings of 40 tonnes)

Greener Outcome

The hybrid system saved 1.4 tonnes of emissions during the 9-day project. Extrapolating this to an annual scale suggests a potential reduction of 40 tonnes, underlining the environmental benefits of the HESU15.

Noise & Emissions Reduction

A significant decrease in both noise and exhaust emissions due to the reduced running time of the generator, enhanced the overall experience for the attendees, contributing to a more socially responsible event and demonstrated a commitment to sustainability and corporate citizenship.

The system delivered significant benefits to the customer, and they were very impressed with the units performance as well as with our customer service.

“The support we received from your team was on a new level! We hire equipment on a weekly basis and never before have we felt so supported in the process. Thank you, Thank you, Thank you Fuelfix, it was so great to work with you all on this project!!”

Desiree Boulton, GM at B&W

Fuelfix's HESU15 stands as a testament to the transformative power of innovation, efficiency, and environmental responsibility. The case of B&W and the Ever Now Perth Festival exemplifies a model for future events seeking to balance operational needs with a commitment to a greener, more sustainable future. Beyond the immediate success of the event, the collaboration between B&W and Fuelfix had broader implications for sustainability.



The decision to employ hybrid lighting towers was a conscious effort to reduce the environmental footprint of the event.

In an industry where operational efficiency, environmental consciousness, and client satisfaction are paramount, the partnership between Black & White – Power & Light and Fuelfix serves as a model for future endeavours.

Fuelfix's Hybrid Energy Storage solution proved to be a game-changer for B&W at the Perth Festival, not only meeting the power requirements but also exceeding expectations in terms of fuel efficiency, reduced noise, and emissions. This successful collaboration highlights the potential for the event management industry to adopt sustainable power solutions, showcasing the positive impact on both operational efficiency and environmental sustainability.

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.