



Case Study 1: YHI Mobile Renewable Power System (MRPS)

The SOBOS Energy YHI-1 MRPS is a remotely monitored, self-contained power system providing 24/7 power through rechargeable lithium-ion battery storage combined with solar generation, and integrated back-up generation. The YHI-1 is currently supplying around the clock off-grid power on a construction site in Queensland. In addition to supplying high reliable power, the YHI was able to solve multiple challenges that are present with conventional diesel generators on construction sites. Here's some key stats from a 195 day period from October 2024 - March 2025.

- ✓ **38% less cost:** Same amount of power, but much lower operating costs than a conventional diesel generator.
- ✓ **98% less generator run hours:** 4582 less, thanks to integrated solar array, charger, battery and inverter systems.
- ✓ **98% less fuel:** Only used during inclement weather, lower generator run time yields lower fuel / refueling costs.
- ✓ **30.2t less CO2 emissions:** A direct benefit of lower engine run times.
- ✓ **Noise abatement:** A reduced noise footprint with only <40dB (quiet office or refrigerator)
- ✓ **100% uptime:** Remotely monitored by SOBOS and with client cloud app login, reliability is achieved.

Reduction in Generator Run Hours



Number of Days:	195
Conventional run-hours:	4680
Actual run-hours:	97
Reduction in run-hours:	4583

Reduction in Diesel Fuel Consumption



Reduction in run hours:	4583
Fuel used /hr. (L):	2.5
Fuel reduction (L):	11,458
CO2 Savings (t):	30.2

Site Load Specifications (24 hrs)

Item	Load	Used kWh
Air Cond. 2x	3.0	15.0
Refrigerator	0.3	3.6
Lights	0.1	1.2
Microwave	2.0	1.0
Kettle	2.0	1.0
Toaster	1.6	0.8
Total /day	9.0	22.6
3x Offices	27	67.8



Unlock reliable, off-grid power with superior efficiency, sustainability and reduced operating costs. The perfect alternative to conventional diesel powered generators is here.

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