



# **Fuel Efficiency Comparison**

### **Non Hybrid Welfare cabin:**

Running 6kVA generator with diesel, no battery power.

## All systems powered directly from the generator:

- Kettle
- Lights
- Microwave
- Water
- Heating
- Sockets

Solar / Battery: X NONE

## **MPG Hire Ecosmart Solar Hybrid cabin:**

Running 3.5kVA generator combined with solar power and battery.

#### **Solar / Battery:**

### Lights

- Low voltage sockets
- WaterPumps
- Battery charging

#### **Generator:**

- Kettle
- Microwave
- Heating
- Battery charging

NON HYBRID 6 kVA welfare unit

6 Person

12 Person

# Open plan mobile unit

No Office

<b>L</b> (a)	Litres of fuel used	2,600 L
N	Cost of fuel used <sup>(b)</sup>	£ 4,420 Diesel
AN	CO <sup>2</sup> produced <sup>(kg)</sup>	7,083 kg

	1
277 L	
£ 525 HVO	VS Non Hybrid 6 kVA
<b>75 kg</b> HV0	89.3% Betterment

439 L	
£ 835 HV0	VS NON HYBRID 6 kVA
120 kg HV0	83.1% Betterment

NON HYBRID 6 kVA welfare unit

10Person
WELFARE UNIT
WITH OFFICE

1	6	Person
		WELFARE UNIT WITH OFFICE

# Mobile unit with office

With Office

(a)	Litres of fuel used	2,600 L
N	Cost of fuel used <sup>(b)</sup>	£ 4,420 Diesel
AN	CO <sup>2</sup> produced <sup>(kg)</sup>	7,083 kg

538 L	
£ 1,022 HVO	VS NON HYBRID 6 KVA
147 kg HVO	79.3% Betterment

1,363 L	
£ 2,590 HVO	VS NON HYBRID 6 kVA
371 kg HVO	47.5% Betterment

- Based on 10 hours per day, 260 working days per year, 80 days in winter mode and 180 days in summer mode. Location Luton UK.
   Each day is a typical usage day.
- (b) £1.70p per litre of HVO or Diesel fuel
- (c) Solar panels achieve maximum output in direct sunlight, but they work in normal daylight and cloudy weather too. The amount of power a solar panel or charging kit generates in cloudy weather will be lower compared to direct sunlight. Also the positioning of the cabin will affect the solar charging of the batteries i.e. under trees, etc.
- (d) This assessment doesn't take in consideration the usage of the hydraulics
- (e) This assessment is guidance only

