

**AJC** EasyCabin

Push sustainable power beyond the *MAX*, all the way to *ZERO*.



Your journey towards ZERO emissions starts here:

**Ecosmart**<sup>®</sup>

3 years of development has led to the ultimate EasyCabin range. Designed for the highest possible power saving & harvesting performance, even in the unpredictable UK weather.

**SOLAR MAX** **ZERO**<sup>CO<sub>2</sub></sup>

Backup HVO  
Stage 5 Generator

Backup  
Hydrogen Fuel Cell



Maximum Solar. Lithium Battery Bank.  
Intelligent, automatic systems. Efficient appliances.  
Same great Ecosmart comfort and usability.  
100% of the power can be met from solar only.\*

**AJC** EasyCabin

**SITE WELFARE**

Your journey towards  
**ZERO** emissions  
starts here.



**EcoSmart**® **SOLAR MAX**

Maximum Solar + Lithium Battery Bank + Backup HVO Stage 5 Generator + No Fossil Fuels  
Intelligent systems + Efficient Appliances + Fully Automatic + Self Charging  
= ZERO fuel potential, 100% of power needs can be met by solar alone.\*

**AJC** EasyCabin

**No emissions  
No compromise**

**The future of site  
welfare is here.**



**EcoSmart<sup>®</sup> ZERO<sup>CO2</sup>**

Maximum Solar + Lithium Battery Bank + Backup Hydrogen Fuel Cell + No CO<sub>2</sub> Emissions  
Intelligent systems + Efficient Appliances + Fully Automatic + Self Charging  
= ZERO fuel potential, 100% of power needs can be met by solar alone.\*

# Ecosmart®



**No compromise, sustainable, automatic power systems. The ultimate EasyCabin.**

**Extra large, high quality solar panels and lithium battery bank for maximum power harvesting and storage.**

3 years of development has led to the ultimate EasyCabin range. Designed for the highest possible power saving & harvesting performance, even in the unpredictable UK weather.

Ecosmart Solar MAX & ZERO offer a welfare solution for companies that are working to meet the demands of future CO<sup>2</sup> reduction and clean air targets.

With increased focus on the reduction of carbon footprint and the prioritisation of corporate social responsibility issues, there is a real demand for industries to adopt alternative power whilst maintaining reliability and cost effectiveness.

The Ecosmart Solar MAX & ZERO hybrid systems provide an opportunity to both reduce operating costs and increase environmental performance. The systems are silent most of the time and only engage the backup generator or fuel cell when absolutely necessary.

Ecosmart Solar MAX & ZERO have been designed to have the same user friendly operation as standard Ecosmart welfare unit. Power to run the heating, sockets, kettle and microwave comes instantly from the large battery bank. The batteries are constantly fed by the large, powerful solar panels.

**Start your journey towards ZERO Emissions.**



**Full roof of super efficient solar panels**



**LOW CO<sup>2</sup>**

## No fossil fuels

With HVO fuel or hydrogen fuel cell, used as a back up only.



## Zero fuel with solar panels

On summer days up to 100% of the power demands can be met from the solar panels.\*



## More peace and quiet

Less generator time. Less noise and vibration.



## On-demand power & heat

On any appliance in the cabin.



## Efficient power management

The Ecosmart system controls power demands to make sure the generator is only used when absolutely necessary.



## Remote telemetry

View data readouts on your device or laptop from any where in the world.



Kettle & Microwave



Lighting



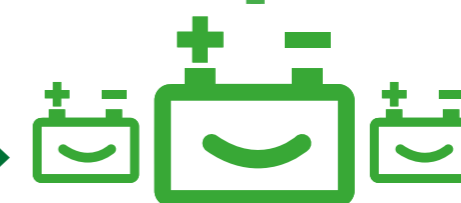
Hot water



Heating & Air-con



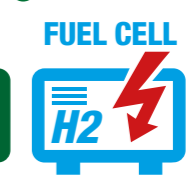
Sockets



Powerful lithium battery bank

**Ecosmart**

**Power management system keeps generator use to a minimum**



**Backup power on stand by just in case!**



**Solar + Lithium Battery Bank  
+ Stage 5 HVO Generator  
= No fossil fuels (or low emission diesel)**



**Ready for the transition  
away from fossil fuels.**

**We have been working hard behind the scenes to develop new ways to save harmful emissions and get ready for the future.**

We need to provide piece-of-mind to our customers who are moving towards new alternative fuels. Our Biosmart products are designed to run both HVO and regular diesel whilst maintaining a manufacturers warranty. The perfect solution whilst in the transition away from fossil fuels.

HVO (Hydrogenated Vegetable Oil) is becoming more popular and accessible to off-road machinery users. It offers an easy way to cut emissions and fossil fuel use, whilst running traditional generators.

Biosmart HVO fits neatly into our product line offering real flexibility with fuel availability. Biosmart working in combination with our solar powered systems, will lower emissions even further!

**HVO. Every drop powers lower harmful emissions**

Due to changes in tax relief on red diesel coming into force in 2022, the drive towards green fuel alternatives is getting stronger. There are many established UK wide suppliers and prices are falling.

HVO is virtually the same as mineral diesel, but with added green benefits.

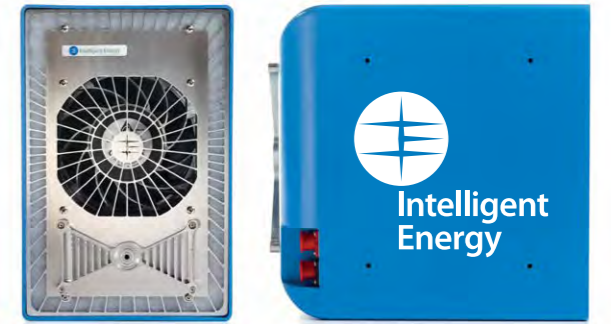
**Fuel Benefits**

(\*varies depending on fuel brand/supplier)

- Up to 30% lower NOx\*
- Up to 85% less particulates\*
- Up to 90% less CO2\*
- Meets EN 15940:2016
- Enhanced cold weather storage & performance, compared to mineral diesel
- Non toxic biodegradable
- Low sulphur, FAME and fossil content\*



**Solar + Lithium Battery Bank  
+ Hydrogen Fuel Cell  
= No Local Emissions**



**NEW 2022 MODEL**

**True ZERO local emissions,  
the future of site welfare.**

**The UK hydrogen economy is growing. Get ahead of the curve with your welfare fleet.**

The Ecosmart ZERO, the world's first Hydrogen powered welfare unit. Launched in Feb 2019, the zero has 2 years' service in the UK, undergoing extensive trials, improvements and upgrades. The Ecosmart ZERO has the same welfare facilities as any Ecosmart unit, with ZERO local emissions.

Zero fuel potential with solar panels. On summer days up to 100% of the power demands can be met from the solar panels.

The Ecosmart ZERO is now used by hire fleet operators and their customers, all year round in UK weather. We have collected 2 years of power consumption data to show systems working in all kinds of site scenarios.

**MAJOR 2022 UPGRADE: The Ecosmart ZERO**

Now with a redesigned Hydrogen Fuel Cell Module to improve performance, power and operation. Intelligent Energy engaged AJC on what improvements they would like to see from their fuel cells that would bring additional benefits to the Ecosmart ZERO range. Ecosmart ZERO 2022, is the next generation model.

**Trialled, Tested, Proven. Hydrogen + Solar Welfare.**

Extensively tested and proven to work effectively in all seasons. Used by hire fleet operators and their customers, UK wide. Next generation fuel cell & updated systems. More power, quicker startups, more features, more efficiency. Add the Wind turbine upgrade for reduced charge times.







# Choose Systems

## Scale up your eco-potential to ZERO emissions. Solar + alternative power sources.

We have a large collection of power consumption case studies and data.  
Available on request.

### Hybrid power saving potential



EcoSmart	EcoSmart 'Air'	AutoSmart	EcoSmart Solar UPGRADE	EcoSmart MAX	EcoSmart ZERO
<p><b>Hybrid Power</b> Generator / Battery</p> 	<p><b>Hybrid Power</b> Generator / Battery</p> 	<p><b>Automatic Self charging hybrid</b> Generator / Battery</p> 	<p><b>Solar Panels</b> Generator / Battery / Solar</p> 	<p><b>Automatic Self charging hybrid</b> Battery Bank / XL Solar / HVO Generator Backup</p> 	<p><b>Automatic Self charging hybrid</b> Battery Bank / XL Solar / Hydrogen Fuel Cell Backup</p> 
<p><b>Heating</b> Fan heater</p> <p><b>Water Pump</b></p> <p><b>Kettle Microwave</b></p> <p><b>LED Lighting</b></p> <p><b>Hydraulics</b></p> <p><b>Battery Charging</b> Push button start</p>	<p><b>Heating</b> Diesel &amp; battery</p> <p><b>Water Pump</b></p> <p><b>LED Lighting</b></p> <p><b>Hydraulics</b></p> <p><b>Kettle Microwave</b></p> <p><b>'Air' Heating</b> Diesel &amp; battery</p> <p><b>Water Pump</b></p> <p><b>LED Lighting</b></p> <p><b>Hydraulics</b></p> <p><b>Battery Charging</b> Push button start</p>	<p><b>Heating</b> Diesel &amp; battery</p> <p><b>Water Pump</b></p> <p><b>LED Lighting</b></p> <p><b>Hydraulics</b></p> <p><b>Kettle Microwave</b></p> <p><b>Automatic Battery Charging</b></p>	<p><b>Boost battery charging speed with solar input</b></p> <p>Generator time reduced</p> <p>Upgrade from: <b>EcoSmart</b> <b>EcoSmart 'Air'</b> <b>AutoSmart</b></p>	<p><b>ZERO fuel on summer days</b></p> <p>All systems run from battery bank</p> <p>Generator for battery charging or power surges</p>	<p><b>ZERO fuel on summer days</b></p> <p>All systems run from battery bank</p> <p>Hydrogen Fuel Cell for battery charging or power surges</p>
<p><b>Instant Hot Water</b> 4 minutes warm up = 4 hours hot water on demand</p>	<p><b>Instant Hot Water</b> 4 minutes warm up = 4 hours hot water on demand</p>	<p><b>Instant Hot Water</b> 4 minutes warm up = 4 hours hot water on demand</p>		<p><b>Instant Hot Water</b> 4 minutes warm up = 4 hours hot water on demand</p>	<p><b>Instant Hot Water</b> 4 minutes warm up = 4 hours hot water on demand</p>

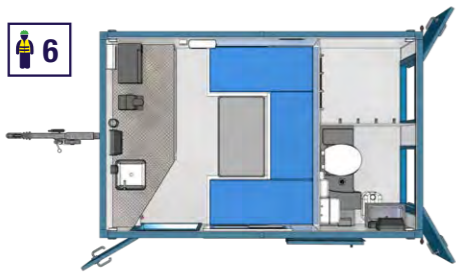
Choose  
**Layout**

Multiple layouts  
Multiple sizes  
Ultimate choice

**Mobile Hydraulic Trailer**

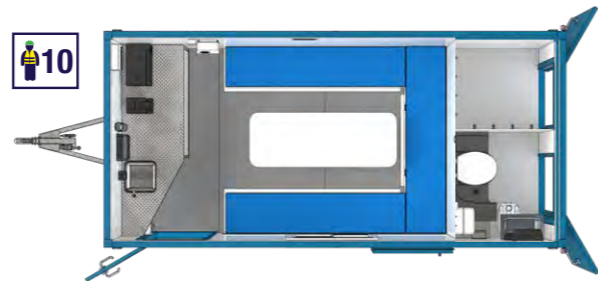
**12**

**6**



**16**

**10**



**16 +**

**7**



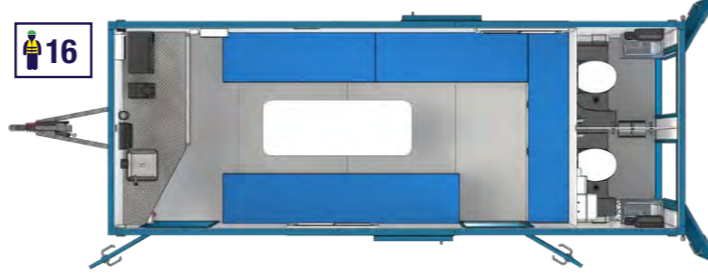
**20**

**12**



**20 Xtra**

**16**



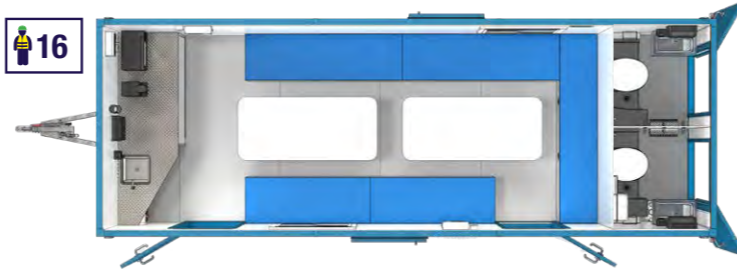
**22.9**

**13**



**22.9 Xtra**

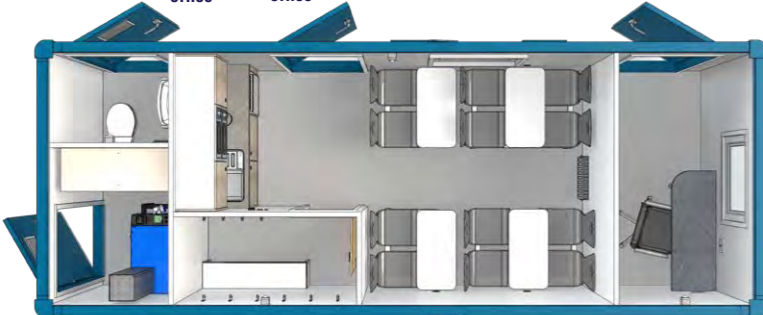
**16**



**Static Cabin**

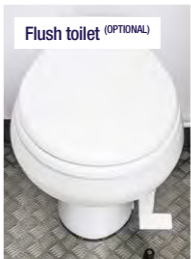
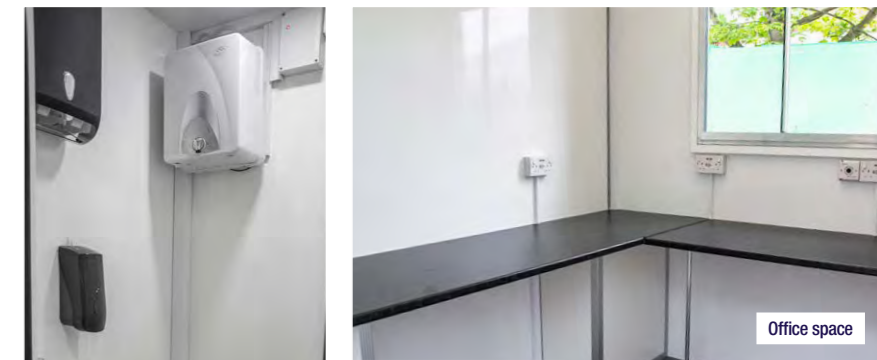
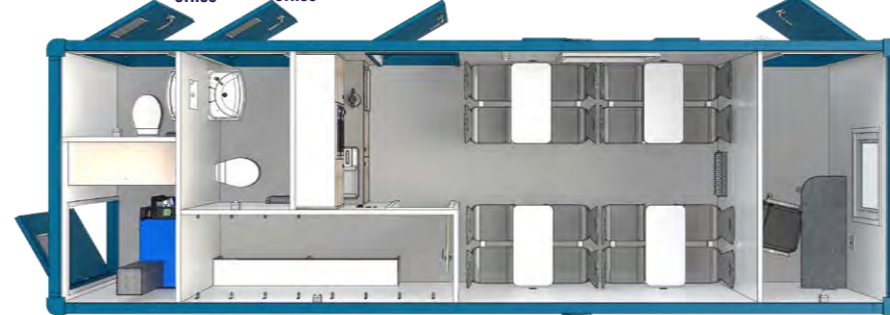
**24**

**x13 with office** **x20 without office**



**28**

**x17 with office** **x24 without office**



# Standard Features

Ecosmart

SOLAR **MAX**



**3.5kVA Stage 5 HVO Generator**

(No fossil fuels, low emissions)

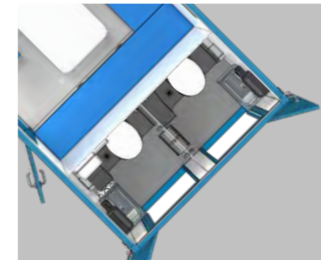
**ZERO** CO<sub>2</sub>



**Hydrogen Fuel Cell**

(Zero Local Emissions)

# Choose Upgrades



## Sustainability

- Large solar array, uses whole of the available roof space
- Large, powerful lithium battery banks power storage
- Zero fuel with solar panels. On summer days up to 100% of the power demands can be met from the solar panels only.
- Fully insulated walls and roof system with no cold bridging
- LED lighting & hot water without the need for the generator or fuel cell
- Low noise pollution
- Low fuel consumption
- Low or ZERO CO<sub>2</sub> emissions
- No need for fossil fuels
- Automatic generator or fuel cell, stop/start technology for economical fuel usage
- All electrical systems and appliances available without the generator or fuel cell operating

## Movability

- Lightweight easy to tow
- Soft cushioning Hydraulic system
- Balanced loading, with generator or fuel cell in the front, for better towing
- Accessible wheels. Ability in the event of a puncture to change at the side of the road with ease
- Road lights and number plate holder built in, No need for a tailboard to be fitted
- Accidental collision can occur, however our corners are designed to absorb impact and are easily maintained

## Facilities

- Easy to use canteen facilities; hot water boiler, microwave & fridge
- Comfortable seating area
- Lots of storage space
- Warm water washing facilities
- Recirculating toilet
- Forearm wash basin in toilet
- All interior and exterior surfaces are tough, durable and wipe clean
- Spacious drying room with hanging clothes facility OR second toilet

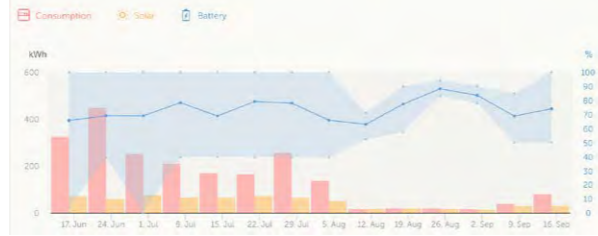
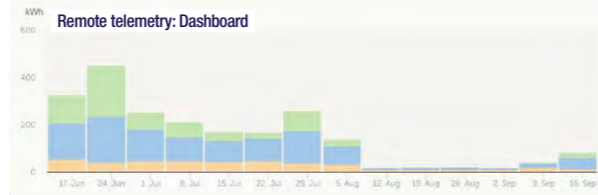
## Security / Safety

- Dual heavy duty locking system per door
- Robust galvanised exterior with high impact resistance
- Unique hydraulic system for setup in under 45 seconds
- Carbon monoxide detectors

## Remote Monitoring

**Power generation and flow at your finger tips 24/7. Access via WiFi or 4G connection.**

- Fuel level monitoring and low level fuel alerts
- Battery power and monitoring displays
- Diagnostics and troubleshooting
- Event logging
- Fuel Cell & Generator controls, ON/OFF, load management
- Solar & Battery information



## Options

- Fresh flush ceramic toilet
- Dual toilets
- Air conditioning
- Wind turbine increases battery charging speed
- Tilted solar panels to increase solar gain in winter months
- Pin boards
- Extra storage / shelving
- External signage / branding
- Chapter 8 livery & reflective kit

## Wind turbine upgrade:

Adjustable tower mounted to the chassis frame. Increase battery charging speed. > Greater than 99% system efficiency.



# UK wide Support



**We have a dedicated service department, ready to respond.**

- UK Wide on-site servicing and repair
- Over the phone technical support
- Diagnostics and troubleshooting
- Hydrogen Fuel Cell experts
- Solar & battery experts
- Comprehensive training packages
- Welfare fleet care
- Detailed product manuals
- Online Parts shop for account customers

SUSTAINABLE

### Solar technology

Solar hybrid patent pending technology for sustainable free energy to power the electronics.

EASY TO USE

### Automatic operation

Just add fuel and use. The system will distribute power where it's needed and the generator will start/stop automatically.

FAST & EFFICIENT

### Heating & hot water

Efficient heating provides more heat for less energy. Hot water is supplied on-demand, no waiting.

POWERFUL

### Economical back-up

Efficient HVO generator or fuel cell waiting in the background to step in when the sun is not shining.

INTELLIGENT

### Ecosmart

Power management system, minimises power usage of the generator, to operate in the most efficient way possible.





# Fuel Efficiency Comparison

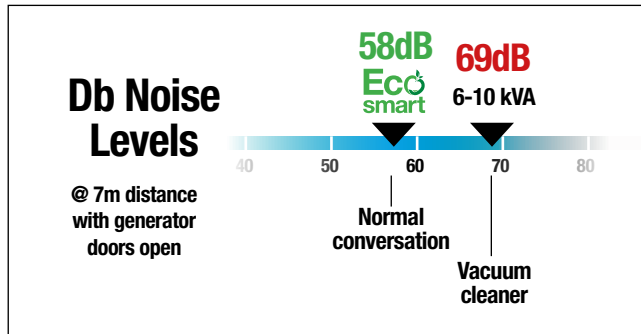
**Open plan mobile unit**  
Office NOT used

		STANDARD 10 kVA welfare unit	STANDARD 6 kVA welfare unit	MAX 12	MAX 16	MAX 20
<b>ANNUAL</b>	Litres of fuel used	6,110 L	4,875 L	149 L	185 L	214 L
	Cost of fuel used <sup>(i)</sup>	£ 8,554 Diesel	£ 6,825 Diesel	£ 178 HVO	£ 222 HVO	£ 256 HVO
	CO <sub>2</sub> produced <sup>(kg)</sup>	16,375 kg	13,065 kg	39 kg	49 kg	57 kg
				99.8% Betterment	99.7% Betterment	96.6% Betterment

**Mobile unit with office**  
Full office usage

		STANDARD 10 kVA welfare unit	STANDARD 6 kVA welfare unit	MAX 16 +	MAX 20 22 <sup>o</sup>
<b>ANNUAL</b>	Litres of fuel used	7,006 L	5,590 L	601 L	601 L
	Cost of fuel used <sup>(ii)</sup>	£ 9,808 Diesel	£ 7,826 Diesel	£ 721 HVO	£ 721 HVO
	CO <sub>2</sub> produced <sup>(kg)</sup>	18,776 kg	14,981 kg	161 kg	161 kg
				99.1% Betterment	99.1% Betterment

- (i) Based on 10 hours per day, 130 days in winter mode and 130 days in summer mode. Each day is a typical usage day.
- (ii) £1.20p per litre of HVO / £1.40 per litre for Diesel
- (iii) Includes 500w office output
- (iv) 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.
- (v) This assessment doesn't take in consideration the usage of the hydraulics
- (vi) This assessment is guidance only
- (\*) ZERO fuel potential, 100% of power needs can be met by solar alone. In summer months May to September, when sunlight is strong and daytime hours are long. Each day is a typical usage day.



Award winning welfare Designed & built in the UK



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[info@easycabin.co.uk](mailto:info@easycabin.co.uk)

DESIGNED & BUILT IN THE UK

EasyCabin Head Office & Factory, Unit 10, Cosgrove Way, Luton, Beds, LU1 1XL

## FOOTNOTES

As part of our on-going commitment to improvement we reserve the right to alter specifications, designs or figures, without prior notice. All dimensions and weights are approximate.  
A full energy presentation is available on request.

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