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Combined Energy and Carbon Savings of up to 30%



Introducing enPact ...

A complete, end-to-end energy saving, carbon reduction and monitoring solution.

Significant, evidenced energy savings, for your facility - guaranteed!

Guaranteed energy savings



The annual energy cost for the hospitality sector is more than £1.3bn, resulting in staggering carbon emissions of more than 8 million tonnes per year. This is a pressing environmental issue that demands immediate attention.

We have developed a revolutionary solution guaranteed to provide significant, evidenced savings, helping you monitor and reduce your energy costs and carbon emissions.



Air conditioning



Cold room and freezers



Unoccupied rooms



Additional savings across hotel

Hassle free installation

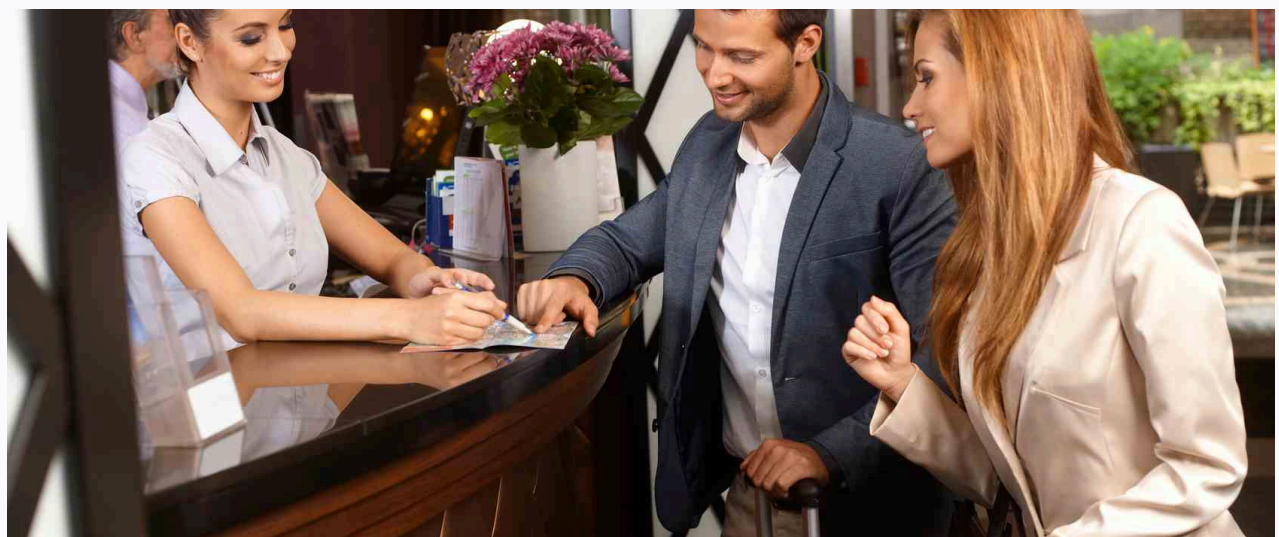
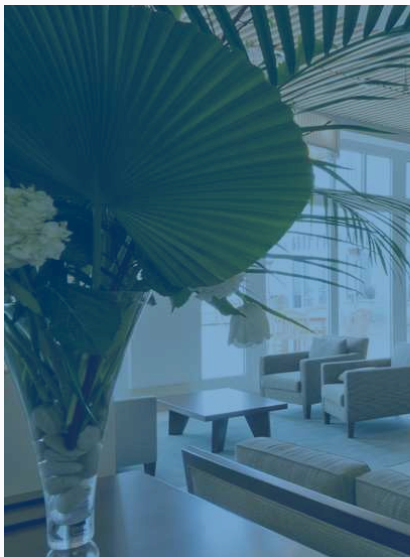


Maintaining guest comfort

We understand that guest comfort is paramount to you, so uninterrupted services are essential;

Our solutions are meticulously designed for hassle-free installation by our qualified engineers with minimal disruption to your operation.

Once installed, our solutions will operate effortlessly, requiring no maintenance or additional attention from your team. Now, you can focus on what truly matters: delivering exceptional experiences to your valued guests.



Restaurants & bars



Sustainability

Bottle Fridge Energy Saver

Introducing the Bottle Fridge **energysaver** into kitchens can bring significant benefits and contribute to a more sustainable and cost-effective operation.

This innovative product offers numerous advantages making it an ideal choice for kitchens that utilise back bar bottle fridges.

Saves 30%

Cellar Manager

The Cellar Manager achieves a 30% reduction in energy consumption of the primary cellar cooler through a clever principle: the beer in the kegs warms up at a considerably slower rate than the surrounding air in the cellar.

Saves 60%

Remote Optimiser

Given that a bar is not pulling beer 24/7, it is possible to significantly reduce the energy used by the remote cooler.

The Remote Optimiser links the coolers pump and condenser operation to the beer throughput, via the ice bank and recirculate temperature which saves in the region of £415 per remote cooler, per annum.



Average savings bottle fridge

30%

Ave savings beer pump

60%

Refrigeration



A significant amount of energy is wasted in the hospitality sector due to prolonged compressor operations that consume additional energy during the ice-melting process.

Our energy saver solution effectively tackles these issues, making it the ideal choice for large-scale compressor-driven refrigeration systems.

This technology can be easily installed in existing cooling systems to cool dairy products, drinks, wine, perishable foods, vegetables, or other items commonly found in kitchen operations.

By implementing our energy-saving solution, your business can achieve substantial energy savings of at least 2.5 kWh daily. This translates to significant cost reductions, making it a financially sound decision for your business.

Powered by our globally patented technology, energysaver excels in cooling and vending machine applications where the control temperature is above 0°C (32 °F). Its intelligent optimisation capabilities ensure that the refrigeration equipment operates efficiently, maximising energy savings and reducing environmental impact.

When you upgrade your refrigeration equipment with energysaver, you will not only reduce your running costs but also make a significant contribution to a more sustainable and energy-efficient future, aligning with your business's environmental goals.



Once integrated into your operations, our energysaver solution will unlock remarkable energy savings of a minimum of 2.5 kWh per day on your refrigeration equipment alone.

Average Savings - refrigeration

20% - 40%

Average Savings - freezers

20% - 25%

Unoccupied rooms



When lights are left on for an average of 8 hours per day in an unoccupied room, the energy consumption can range from 80 to 480 watt-hours per day.

If an AC unit runs for 8 hours a day in an unoccupied room, it could consume between 8,000 to 20,000 watt-hours (8 to 20 kWh) daily.

Combining both lighting and air conditioning, the total energy consumption in an unoccupied hotel room can range from approximately 8,080 to 20,480 watt-hours (8.08 to 20.48 kWh) per day.

Entire facility



Data compiled and produced by Hotstats and analysed by RSM UK shows that utility costs per available room were 51% higher in January than the same period in 2022 and more than doubled in 2020.

Chris Tate, head of hotels and accommodation at RSM UK, said: 'Many hotels have been able to cushion themselves without facing substantial increases to their energy bills, but with the colder weather and some fixed price energy tariffs coming to an end, there are signs these rising energy costs are starting to bite.'

Emissis can help you achieve significant energy savings across your entire operation.

Our suite of innovative energy-saving solutions is designed to reduce energy on air conditioning, fridge and cold storage, and unoccupied rooms.

And with Voltage Optimiser, you can achieve additional energy reductions across your entire operation.

Additional savings on your entire Hotel
5% - 10%

Tailored solutions

Energy Savings

Installation

enPact AC & Refrigeration

20-30%

2-8 Hrs p/device



Works with your AC units, chillers, refrigerator cabinets, walk-in refrigerators and freezers.

The system reduces compressor runtime, cutting electricity usage significantly. The technology uses dual temperature sensors and AI to monitor and adjust room temperature and refrigerant supply, optimising system performance and maintaining precise temperature control. Energy-saver solutions amplify energy efficiency in kitchen operations and boost savings by optimising power usage.

enPact Liquid

10-15%

2-day deployment



For larger hotel spaces with Water/Glycol cooling systems.

An advanced nanofluid additive that significantly enhances the energy efficiency of hydronic cooling and heating systems. It improves heat transfer fluid performance by up to 15%, reducing compressor workload in chiller systems and minimising electrical energy consumption.

enPact Voltage

6-12%

2-day deployment



Will reduce energy consumption of your whole facility in addition to any other savings.

Voltage optimisation equipment reduces incoming grid voltage to save energy by using a low-voltage transformer. It precisely adjusts energy levels to achieve optimal voltage, ensuring equipment.

enPact HVAC AI

10-15%

30-day deployment



A platform that will monitor energy consumption throughout your hotel and utilise AI technology to optimise energy usage and savings.

Supporting Building Management Systems (BMS) with HVAC systems allows centralised control and automation, optimising operations to achieve energy savings and cost reductions for hotels.

Evidenced savings



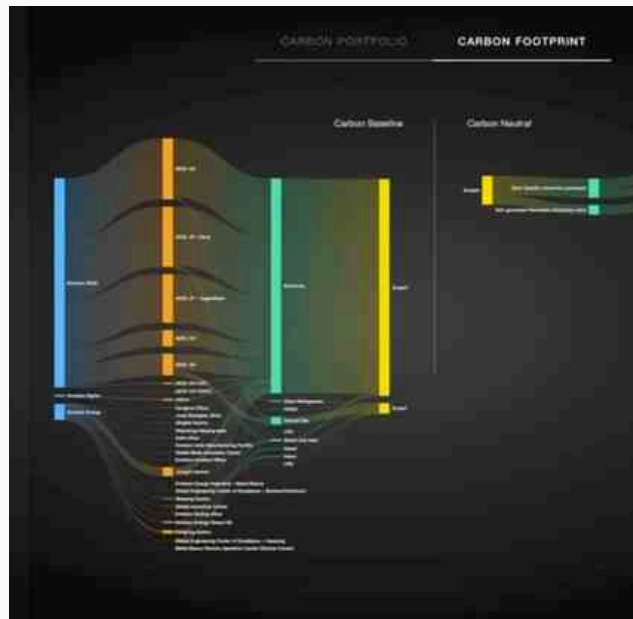
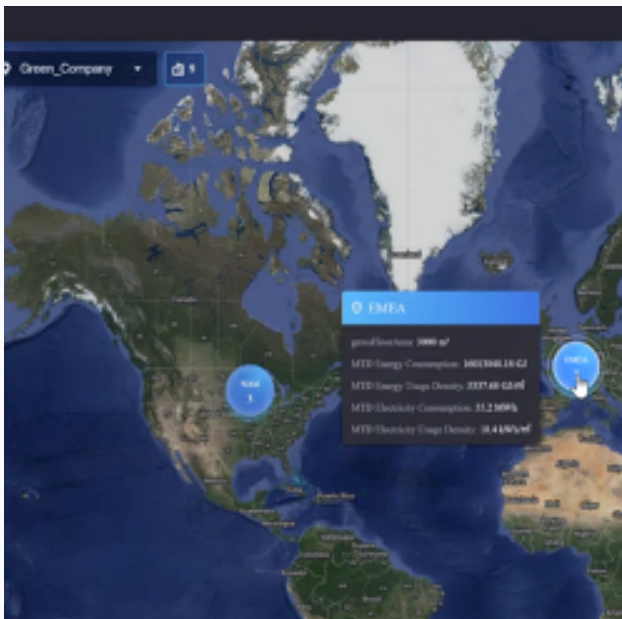
The World's most comprehensive decarbonisation system.

We help companies and countries optimise their energy systems and reduce carbon emissions with accurate, reliable, and actionable decarbonisation data.

Our monitoring platform connects on-the-ground operational technology and cloud intelligence to deliver real-time energy data and data-driven carbon monitoring, reporting, and abatement.

We will integrate data from your hardware and software systems and provide you with comprehensive, real-time visibility and control of your energy usage and carbon emissions.

+500 customers, 220M connected devices, 568 GW of managed energy assets. Every device, every asset, every operation, all connected.

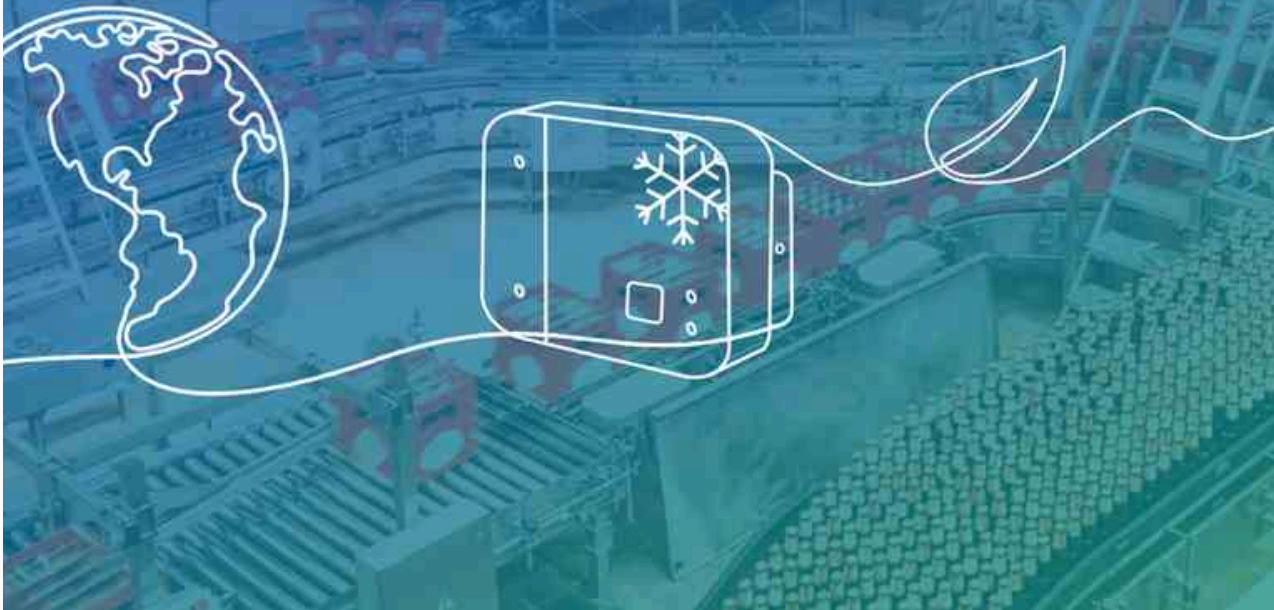


- We will track your savings daily, weekly, and monthly
- Provide you with real-time monitoring of your energy consumption
- site and portfolio levels Displaying power distribution, including electricity consumption ranking, trends, and breakdowns by operating hours, per floor,
- Provide advanced energy analytics
- Monitor and verify your CO2 reductions

About us



In a world increasingly dominated by rising energy prices and climate change, Emissis is proud to support some of the leading UK businesses on their journey towards net zero, saving them millions in energy overspend and waste in the process.

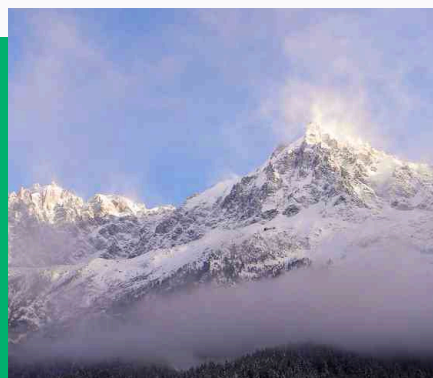


Emissis is a leading energy, carbon and cost reduction provider provider based in the UK, Ireland and Switzerland and an independent supplier of power and cooling solutions for critical, industrial, and commercial operations.

We deliver a powerful suite of globally patented, innovative energy reduction solutions for our clients using comprehensive tools to monitor, report, optimise, and significantly reduce their carbon emissions and energy usage.

For over two decades, we have been steadfastly committed to helping private and public sector businesses unlock the benefits of reducing carbon emissions and energy use.

We guide customers in leveraging proven modern technology and support services to transition to net zero carbon operations.

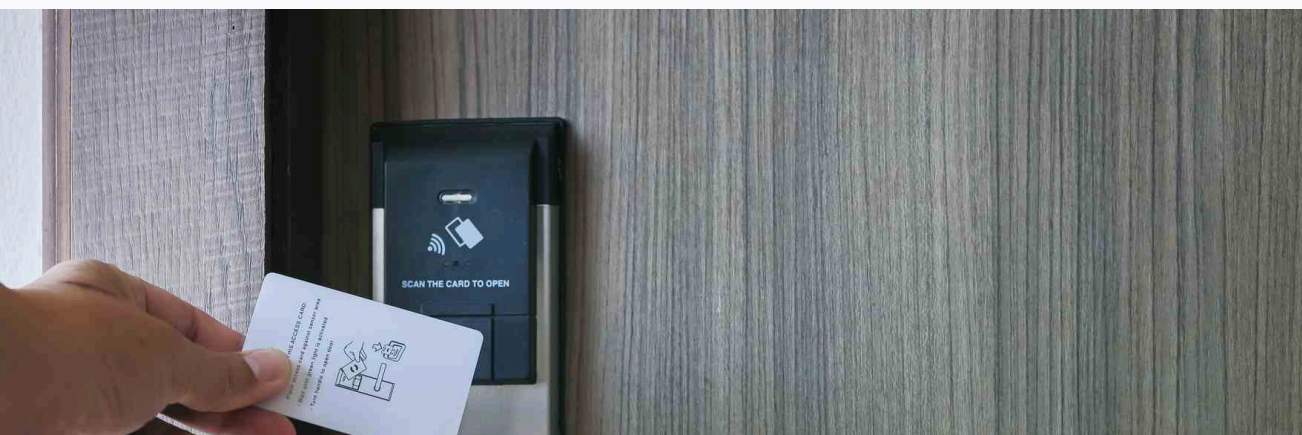


We work alongside and support businesses on their journey towards net zero.

Our customers



Case study



Find out how we have helped other hospitality operations

Premier Inn, UK

Whitbread is the owner of Premier Inn, the UK's biggest hotel brand has 820 hotels in the UK and over 80,000 rooms.

The trial

energysaver units were installed and connected to a Freezer room at the Stockton-upon-Tees Premier Inn restaurant.

A smart meter was connected to the external condenser of the Freezer unit to accurately measure the kWh consumption of the unit.

The trial commenced at the beginning of November 2023, where the controls were set to run in weekly cycles with the units set to OFF followed by setting to ON.

During the pilot, the metered half-hourly data was downloaded and analysed.

Results of pilot

Energy consumption reduction p/a

13.38%

Financial saving p/a

£862.65



Next steps

enPact is non-invasive and fits into your existing IT landscape



Choose from 3 deployment scenarios

- 1 enPact as a standalone solution**

Operates independently from the existing energy management solutions available on site and features a quick deployment. It provides real-time visibility of the achieved savings.
- 2 enPact as an add-on**

Integrates with pre-existing energy cloud based platforms and BMS, EMS etc. to provide real-time data and showcase savings, enhancing overall efficiency.
- 3 enPact as a net zero platform**

With real-time capabilities to track energy consumption reductions, enPact facilitates the monitoring of your carbon footprint and helps set targets for achieving carbon neutrality.

Choose
Deployment
scenario

Book
a Teams
Session with
one of our
experts.

Get a
Desk Top
Proposal

We will need:

- HVAC refrigeration list or FGas Register.
- The price you are currently paying for energy.
- Your facility operating times.
- Half-hour data from your last bill.

Get in touch



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Net Zero is coming

The UK and EU are legally bound to reach net zero by 2050 and several other major economies are doing the same. More businesses than ever before are now having to report on carbon emissions.

Start your net zero journey today and reap the benefits sooner. We deliver a powerful suite of solutions that reduce your carbon emissions, save you money with lower energy bills and generate revenue from being a more flexible energy user with the help of today's leading technology.

Platform features



Evidenced Based

Evidence-based energy monitoring – IPMVP standard-based, baselining and monitoring.

End-to-End Solution

End-2-End Net Zero Platform – renewable management, battery storage, EV charging, microgrid, energy management and orchestration, carbon accounting.

Highly Scalable

The ability to manage millions of IOT devices.

Robust

99.95% availability.

Easy to Connect

Non Invasive

Cloud or on Premise

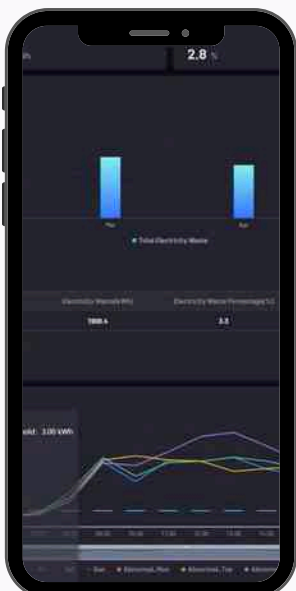
Typically hosted in Azure (Microsoft) Data centres, also deployed in AWS, Google Public Cloud.

Component Architecture

The ability to reuse existing components (we call them Component Building Blocks or CBBs), new CBBs can be developed and then effectively 'plugged' together to construct new applications solution.

Cyber Security

Cyber Security – enOS.





Save energy for your entire building

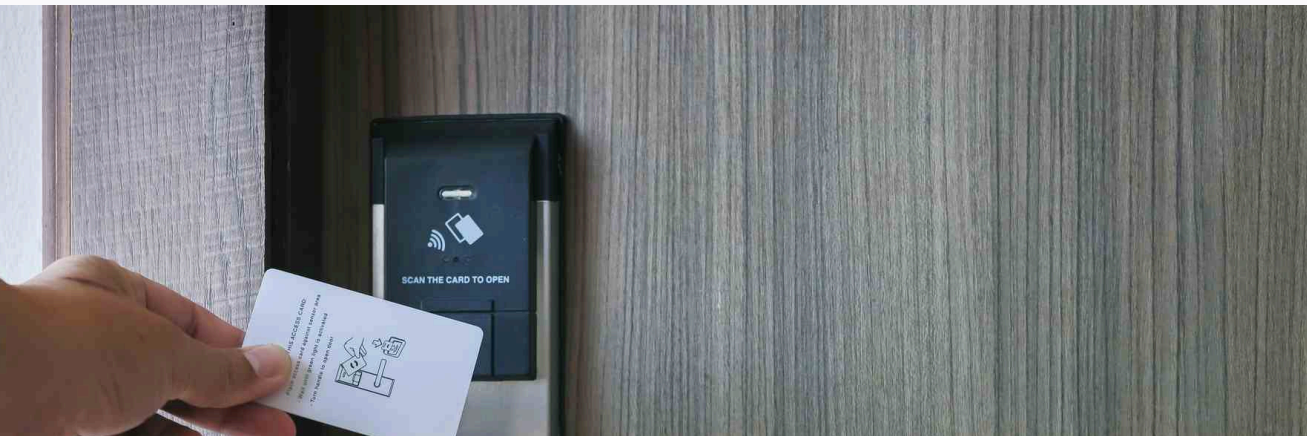
VoltControl is our latest technology and is designed to give consumers visible, proven savings in real-time, averaging from 9-12%

Voltcontrol uses Voltage Jump Technology to measure actual savings in real-time, giving the consumer total transparency. Furthermore, this measurement is carried out without any impact on the consumer's operation.

VoltControl, through Inverse Induction, provides a higher level of savings, particularly in consumer facilities that do not provide similar savings using conventional Voltage Optimisation

In addition to Direct Savings, there are also Life-cycle savings, hence reducing OPEX and CAPEX. These indirect savings can add up to a further 4% to 7%.

Following our analysis of consumer power utilisation, we provide a savings calculation, which, as mentioned above, is seen in real-time by the consumer, in terms of financial savings and carbon reduction.



Find out how we have helped other hospitality operations



Premier Inn



Luxury Hotel

A luxury hotel with 60 rooms and a spa is located on top of a mountain in Central Switzerland. Electricity is a significant part of the building's operating costs, even during the lower season.

Following the installation of a VoltControl voltage stabiliser, electricity consumption was reduced by 14,5%, with a calculated return on investment of 3,8 years for the hotel owner.

At the reception desk, clients waiting for check-in may discover live data showing the current savings realised with the VoltControl on electricity and CO2.

Guaranteed energy savings



We deliver a powerful suite of solutions that reduce your carbon emissions, save you money with lower energy bills, and generate revenue by being a more flexible energy user with the help of today's leading technology. The figures below show the average energy savings you can expect from our technology.

Average energy savings

10-30% of buildings energy usage



Guaranteed energy savings



The annual energy cost for the hospitality sector is more than £1.3bn, resulting in staggering carbon emissions of more than 8 million tonnes per year. This is a pressing environmental issue that demands immediate attention.

We have developed a revolutionary solution guaranteed to provide significant, evidenced savings, helping you reduce energy costs and carbon emissions.

