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Manufacturing solutions

→ Supporting the manufacturing sector with temporary power and temperature control hire solutions

The manufacturing challenge

Manufacturing is the backbone of the European economy, with several European countries considered to be amongst the largest manufacturing nations in the world. However, the sector needs to overcome key challenges to ensure continued growth. Grid constraints, higher energy costs, rising commodity prices and supply chain issues are significantly impacting operational efficiency, productivity and competitiveness.

We're here to make it simple.

Aggreko provides specialist power and temperature control hire solutions for the manufacturing sector. Through our flexible, modular approach, we deliver the most efficient and sustainable solutions to add resilience, efficiency and productivity to operations. Our temporary equipment comes with the same peace of mind as permanent systems and, with our dedicated experts on hand to support, we can find the optimal solution to overcome pressing sector challenges. Our team work collaboratively to go above and beyond to achieve the right results. Always delivering added value.

As a global energy provider, we are committed to developing and promoting cleaner energy solutions which reduce carbon emissions.

Our ambitions remain in supporting our customers in choosing the most efficient and sustainable solutions in line with their business objectives.

Delivering sustainable solutions

Our investment in new technologies such as Stage V generators, Battery Energy Storage Solutions (BESS) and alternative fuels, alongside our consultative approach, delivers sustainable solutions for our customers that maximise performance, improve efficiencies and lower costs.

To reduce emissions further our Hydrotreated Vegetable Oil (HVO)/B10 can be used as a drop-in fuel to save up to:

80%

NET CO_2 EMISSIONS.

Stage V generators

Compliant with the EU's Medium Combustion Plant Directive (MCPD) our Stage V generators are high performance. The engines deliver efficient power whilst limiting harmful pollutants such as carbon monoxide, NOx and PM.

Battery solutions

Harnessing power produced at one time that can be drawn upon when needed, our battery storage solutions are free from emissions, fuel costs and noise.

HVO/B10 fuel

Our generators can run on a range of biofuels including HVO and B10 to significantly reduce carbon and harmful emissions.

Innovative solutions for customer challenges

We design and manufacture our own equipment, so we understand the unique challenges and pressures faced by manufacturers. This invaluable experience and knowledge enables us to implement innovative solutions to overcome any power and temperature control.

Projects

Sub sector: Food and beverage
Client: National supermarket chain

THE CHALLENGE

→ Provide contingency cooling after vital element failed in on-site cooling system

THE SOLUTION

→ Turnkey package providing 4 MW of cooling capability, including 11 chillers, 51 low temperature air handler units (AHUs) and 13 generators

THE IMPACT

→ Avoided significant losses to stock, revenue and reputation

Sub sector: Plastics and packaging
Client: Global leader in the rigid plastic packaging and recycling industries

THE CHALLENGE

→ Deliver a secure power supply with an efficient, greener and cleaner energy solution

THE SOLUTION

→ Turnkey combined heat and power solution, recovering waste heat and steam and utilising across on-site processes

THE IMPACT

→ Significantly improved efficiency, reducing both energy costs and emissions

Sub sector: Paper and pulp
Client: Leading cardboard manufacturer

THE CHALLENGE

→ Stop moisture absorption during the production and storage of cardboard

THE SOLUTION

→ Comprehensive monitoring to understand humidity fluctuations highlighted an unexpected root cause, collaborated with customer to adapt existing cooling system

THE IMPACT

→ Identified and rectified root cause, avoiding unnecessary investment in ineffective solutions and further damaged stock

Sub sector: Chemicals
Client: Manufacturer of fine and basic chemicals

THE CHALLENGE

→ Provide off-grid power to facility during electricity network maintenance

THE SOLUTION

→ Temporary decentralised energy solution, including fuel management and 24/7 remote monitoring

THE IMPACT

→ Ensured 100% uptime for production to continue for the duration of the outage

Temporary hire for flexibility and reassurance

We provide the manufacturing sector with temporary solutions across a range of applications. Being agile to adapt to changes on demand, and gaining access to finance, can be a major hurdle for many manufacturers, especially when faced with economic uncertainty. With hire, companies can get plans underway straight away, accessing newer, more efficient technology with environmental benefits, whilst eliminating the need for capital expenditure. With operation and maintenance provision included, savings are also made on in-house resource and maintenance costs.

Decentralised energy

Decentralised energy enables flexible power generation that can reinforce security of supply, stabilise energy costs, cut carbon emissions and, in some cases, generate revenue.

At a time when energy costs are uncertain and over-reliance on the grid can be a risk to operations, our range of short to medium term decentralised power hire options can support in managing cost and energy supply more effectively.

Our hybrid solution, combining generators with battery storage, delivers a secure source of clean, lower cost energy, maximising operational output whilst minimising downtime and emissions.

Additionally, using combined heat and power technology, waste heat can be recovered to generate power, heat, steam or hot water. This can deliver greater efficiencies and cost savings, especially in processing environments.

Supplementary power, heating and cooling

Our temporary power, cooling and heating solutions can supplement production processes during peak production times. Sector specialists work to find the right engineered solution for the application – increasing output, maximising efficiency, and protecting profit margins.

We can also support in managing ambient conditions during seasonal temperature changes with additional cooling or heating capacity.

Our modular design enables operators to quickly increase or decrease their power or temperature control, depending on changing requirements. Capacity can be added or reduced to meet actual demand, as opposed to total upfront deployment.

STAY COMPETITIVE

→ A decentralised energy solution could provide a fast, flexible way of reducing energy costs, or even generate revenue, through mechanisms such as demand side response.

INCREASE PRODUCTION

→ Hire allows manufacturers to adapt to changes on demand by increasing output in an efficient way.

Maintenance and upgrades

Maintenance is crucial for gaining greater reliability and efficiency and extending the life of equipment. We provide a range of hire power and temperature control equipment to support during planned maintenance, changeouts or upgrades. Our sector experts find the optimum way to run temporary equipment, maximising performance and minimising fuel consumption, emissions and costs.

Customers can focus on managing their maintenance project, with the reassurance that with Aggreko they are receiving industry-leading product design and technological expertise, supported by sector experts and skilled engineers.

Emergency

We understand that an unexpected halt to production can be extremely costly, resulting in orders not being met, stock spoilage or loss and reputational damage.

We provide a range of emergency hire equipment including generators, chillers, air handling units, heaters and boilers as backup power, cooling and heating. Our solutions ensure production can continue, preventing spoilage and saving stock.

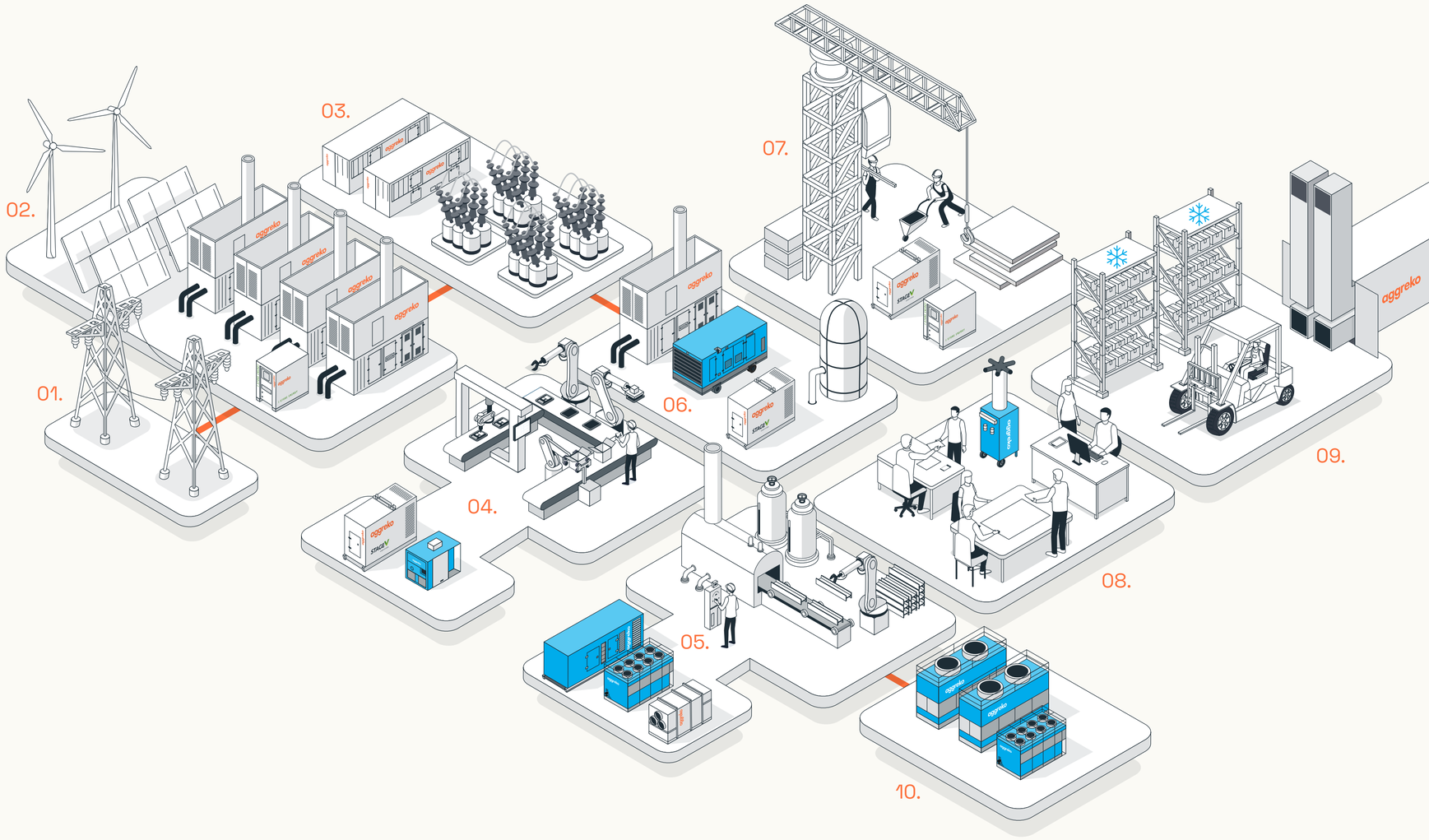
Contingency planning

It is essential for manufacturers to add resilience to operations by planning ahead for emergencies. Our emergency planning service means we can tailor a plan to assess the risks faced should an outage occur. Our engineers examine a site's power, cooling, heating and dehumidification needs. A contingency plan will be drawn up, covering equipment, engineering and logistics, that can be put into action the moment it is needed.

Seamlessly connect to existing infrastructure

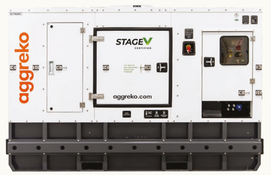
Our equipment can easily plug into the existing infrastructure of a manufacturing facility

01. **Grid**	Benefit from demand-side response schemes, with power solutions that synchronise with the grid.
02. **Decentralised energy**	Off-grid power generation solutions. Combined heat and power systems. Battery storage to incorporate renewable technologies.
03. **Substation**	Transformers for stepping voltages up or down.
04. **Production cell one**	Generators for supplementary capacity or emergency replacement. Dehumidifiers for air humidification and environmental control.
05. **Production cell two**	Back up or supplementary chillers, VLT chillers, heat exchangers, heaters and compressors.
06. **Power/boiler room**	Generators, compressors and industrial boilers for maintenance, breakdowns or supplementary capacity. Temporary combined heat and power systems.
07. **Facility expansion**	Generators for temporary power. Heaters and dryers for construction processes and worker welfare.
08. **Offices**	Comfort heating and cooling. Back-up or supplementary power.
09. **Warehousing**	Cooling for supplementary capacity or emergency replacement. Comfort heating or cooling. Back-up power.
10. **Cooling towers**	Cooling towers for supplementary capacity or maintaining production during breakdown or maintenance.



Our equipment

Aggreko provides the manufacturing sector with a wide range of equipment for all power, heating and cooling requirements. Modular and mobile and with a large fleet and depots across Europe, customers benefit from a flexible, reliable and sustainable hire.



Stage V generators

- Sizes from 30 – 1250 kVA
- Reduced emissions as standard
- Flexible 50 and 60 Hz units
- Quieter sound
- Suitable for alternative fuels like HVO and B10

Battery energy storage

- Sizes from 45 kVA – 1 MW
- Minimal noise light and compact
- Reduces emissions and fuel costs
- Plug and play with Aggreko eco-system
- Manages variable loads and eliminates light load periods
- Remote monitoring

Diesel generators

- Sizes from 20 – 2100 kVA
- Canopy and containers prevents spillage of fuel and engine fluids
- Synchronising and load-sharing capabilities on most models

Natural gas generators

- Sizes from 3 – 45 kW
- Provides air temperature rise up to 75°C
- Power supply 230 single phase and 400 V 3 phases
- Completely fume, flame and moisture-free

Fuel tanks

- 1000 – 2,0000 litres
- Double-walled: virtually eliminates the possibility of internal fuel spill
- Provides safety and environmental protection
- Meets varying capacity needs; minimises refill cycle
- Hydrotreated Vegetable Oil (HVO), B10 and diesel fuel available

Our equipment

Air handlers

- Sizes ranging from 5000 – 45000 m3/h
- Specialist very low temperature air handlers available
- Designed to work alongside our chillers and boilers to provide cool or warm air

Oil free air compressors

- Electric driven variable speed drive (VSD) oil-free air compressors
- Delivers from 22 – 45m3/min at pressures up to 10 bar
- Energy saving for customers when running at 70% approx

Cooling towers

- Single tower 2500 kW CTI
- Modular design and interconnectivity allows infinite expandability
- Regulates fan speed proportional to sump temperature

Moisture control

- Desiccant and refrigerant systems capabilities from 600 – 7000 m3/h
- Moisture removal up to 971 l per day
- Cascade system with air handlers, dryers and heaters
- Extra low dew point

Electric heaters

- Sizes from 3 – 45 kW
- Provides air temperature rise up to 75°C
- Power supply 230 single phase and 400 V 3 phases
- Completely fume, flame and moisture-free

Chillers

- Sized from 50 – 1550 kW EUROVENT
- Leaving fluid temperature from -41 to +30°C
- Water and air-cooled chillers available
- Combine with our air handlers for ambient temperature control or HVAC applications

Air conditioners/ Heat pumps

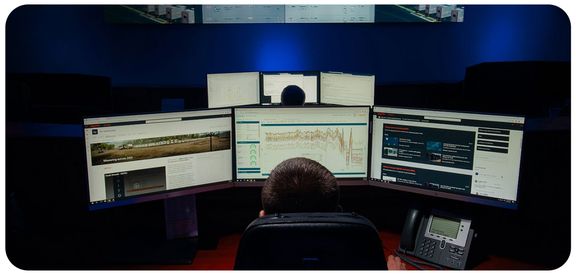
- Individual units from 6 – 230 kW EUROVENT
- 100% cooling, heating and ventilation
- Heat pump leaving air temperature from 12 to +40°C
- Dedicated units for cold store from -35 to 12°C
- Can operate 100% fresh air or return air for energy efficiency

Boilers

- Water boilers range from 500 – 2500 kW
- Steam boilers range from 2 – 5.5 t/h
- Temperatures up to +200°C and pressures up to 14 bar

The Aggreko solution

Our commitment to innovation, coupled with our insight, experience and knowledge of the manufacturing industry, allows us to deliver the right solutions with optimum operating capabilities.



Aggreko Remote Management (ARM)

With ARM we can monitor the health of our equipment from a central operation centre and remotely control it to ensure maximum efficiency, reducing emissions and saving fuel costs. You can view the live data of any of your on-hire kit through ARM on Aggreko Connect at any site. It will also highlight should equipment stop or if a fault occurs so any issues can be remedied. These insights at your fingertips prevent downtime and deliver peace of mind. You'll benefit from round the clock monitoring, rapid response to emergencies and proactive equipment maintenance and fuel services.

Right sizing

Generators that are oversized or poorly matched for their chosen application lead to inefficiencies. We apply innovative thinking to right sizing our equipment to match its application to ensure greater efficiency and further reduction in carbon emissions.

Alternative fuels

We made the commitment to phase out offering diesel with our fuel management services, providing HVO as an alternative. We are continuing to test methanol and hydrogen and have carried out multiple pilot projects which will run alongside our battery energy storage system.

Load on demand (LOD)

LOD power solutions replace a large constantly operating generator with a group of smaller generators which can power up or down automatically according to demand. If you require a total peak output of 1500 kVA, it is possible to use three 500 kVA generators together. As power demand fluctuates and reduces to 500 kVA, two of the generators can power down – minimising emissions and fuel usage.

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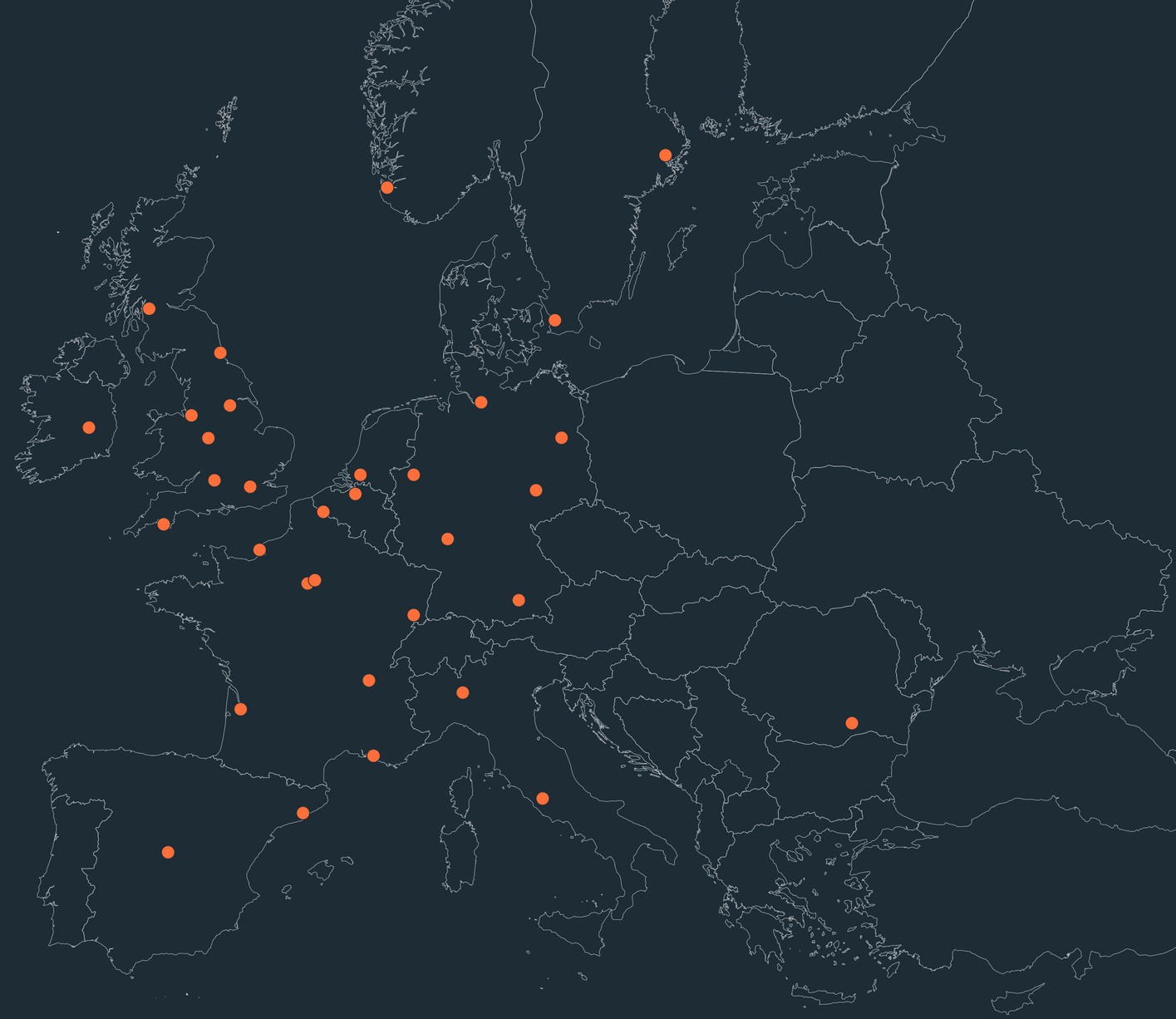

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