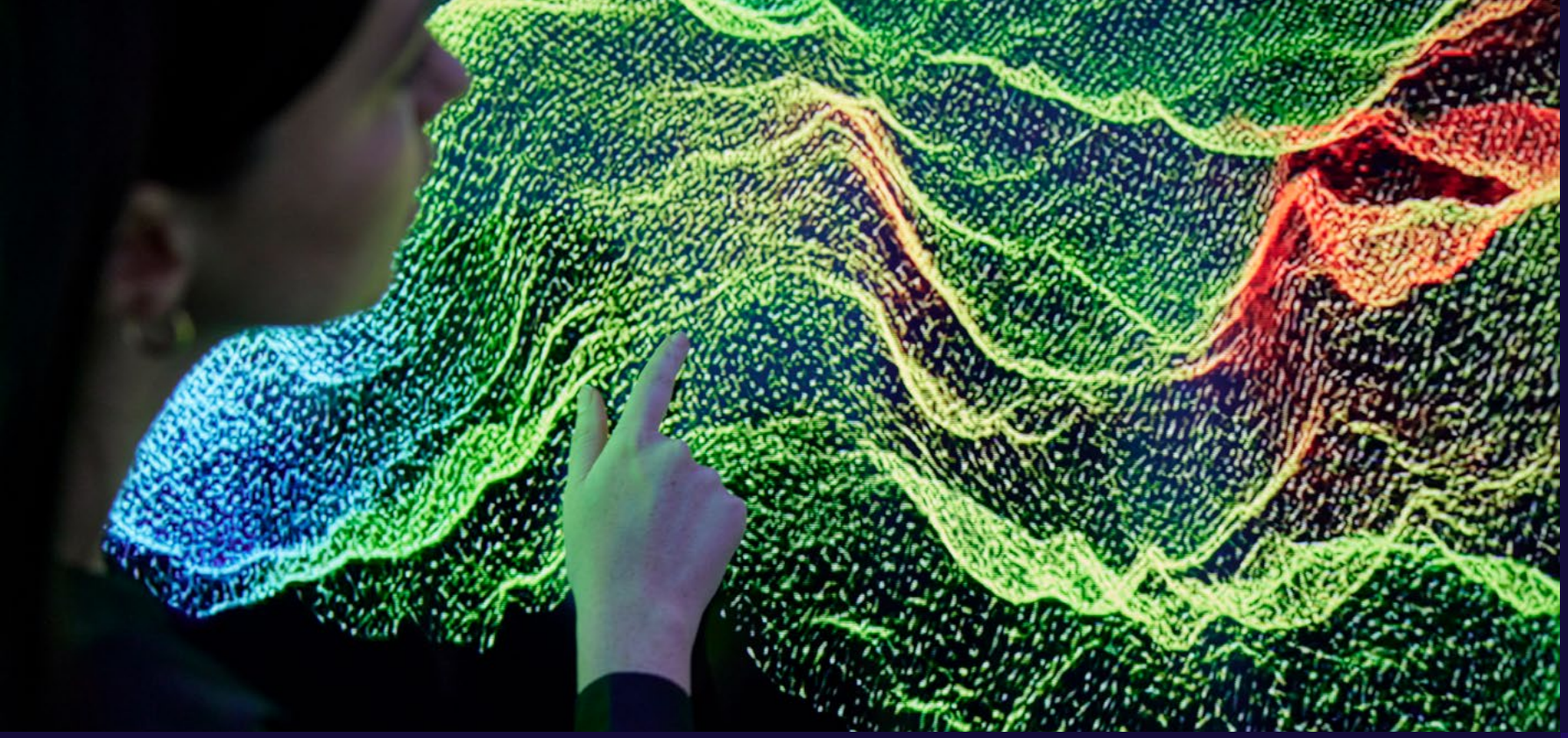
REDUCING ENERGY CONSUMPTION WITH HVAC SYSTEMS



Decarbonising heating and cooling systems

Gas has been used as a transition fuel for heating and cooling buildings but the development of renewable energy sources is enabling the decarbonisation of Heating, Ventilation and Air Conditioning (HVAC) systems.

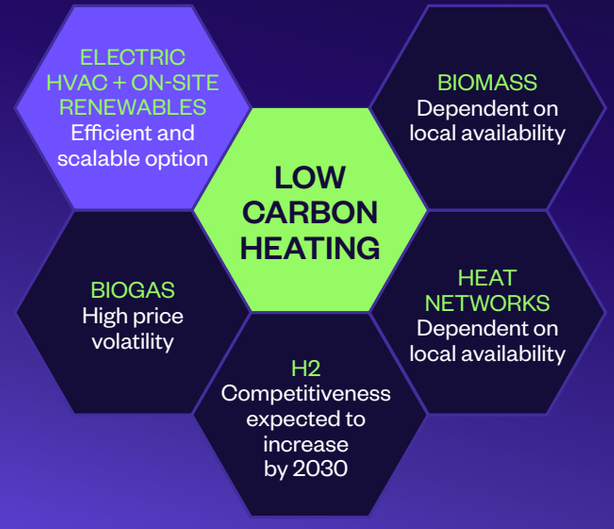
It's more important than ever to decarbonise warehouse and office HVAC systems by replacing them from gas-based to renewable energy-based sources.

Here's why:

Environmental impact
Gas-based HVAC systems rely on fossil fuels, which contribute significantly to greenhouse gas emissions and global warming. By switching to renewable energy-based HVAC, like electric heat pumps, a building's carbon footprint can be drastically reduced. Based on data collected from our portfolio, around 30% of all energy used in logistics buildings are related to HVAC systems.

Economic impact
The transition to renewable energy can lead to long-term cost savings. Although the initial investment in gasless HVAC systems are higher, these systems have lower operating costs for our customers compared to traditional gas-based systems. Also, renewable energy-based systems are less susceptible to price volatility associated with fossil fuels, enabling more stable and predictable energy costs.

Regulatory and corporate responsibility
Many European governments are implementing stricter regulations and policies to reduce carbon emissions, and businesses that fail to comply may be exposed to higher carbon taxes and levies. Additionally, consumers and investors are increasingly favouring companies that demonstrate a commitment to sustainability.



Which technologies are available?
The optimum gasless heating technology uses electric HVAC systems coupled with on-site renewable energy consumption, resulting in an efficient installation with a low carbon footprint.

At Goodman, we are committed to supporting your decarbonisation journey. We are actively retrofitting existing gas-based HVAC systems across our portfolio and have the expertise in-house to analyse your operations and discuss how we can help.



WHAT IS IN IT FOR YOU?

Around 30% of all energy used in logistics buildings are related to HVAC systems.



Case study Hamburg South Light Industrial Park

Electric heat pumps running with natural refrigerants. Click on the image to learn more.

Decarbonising your HVAC system has many benefits:

+ Using electric heat pumps instead of gas-fired heating systems can lead to **energy cost savings of up to 50%** due to their higher efficiency in converting energy to heat. Also, electric heat pumps can provide both heating and cooling, reducing the need for separate systems
+ Electric heat pumps are more efficient than traditional heating systems, typically **generating more than three times the energy they consume**, compared to gas boilers. Their high efficiency comes from utilising renewable energy sources
+ Using renewable energy to run your HVAC system, contributes to the **decrease of your carbon footprint by lowering scope 2 emissions** with the potential to reach net-zero HVAC-related consumption
+ Goodman only procures the lowest global warming potential available refrigerants, **giving priority to natural refrigerants**
+ Electric heat pumps have **lower maintenance requirements** compared to gas-fired HVAC systems, leading to reduced service and repair costs. Additionally, heat pumps eliminate the need of combustion-related inspections
+ Heat pumps generally have a **longer lifespan** than gas-fired HVAC systems, often lasting 15-20 years compared to 10-15 years for gas systems. This extended durability is due to fewer mechanical components and reduced exposure to high-temperature combustion processes
+ With regular monitoring and temperature sensors, gasless HVAC systems **can support the health and wellbeing** of people that work in your building.



Reach out and connect

Engage with your dedicated asset manager or contact our HVAC expert Rafael Cardoso and explore how our energy team can support your decarbonisation journey.

GreenSpace+

Goodman CE's range of sustainability solutions offers our customers resilient low-carbon spaces — inside our properties and beyond.

At Goodman, we provide essential infrastructure, offering our customers the properties they need to support their progress. We do this by owning, developing and managing high-quality properties that are close to consumers in key cities around the world. We aim to make space for greatness, and with those great ambitions come great, ever-evolving needs and responsibilities.

That's why we've developed GreenSpace+ as our signature offering for providing high-performance essential infrastructure that considers Environmental, Social and Governance at its core.

By fostering collaboration, research and experimentation, Goodman CE's properties integrate a range of GreenSpace+ innovation features to support our customers achieve their sustainability ambitions.

Our Greenspace+ features aim to help the wider community too. We support our customers, our people, and our supply chain partners – who are all key to our long-term success. We promote effective and regular dialogue with our stakeholders including our customers, investment Partners, securityholders, debt investors, our people, suppliers and local communities.



Goodman is a provider of essential infrastructure. We own, develop and manage high quality, sustainable logistics properties and data centres in major global cities, that are critical to the digital economy. Goodman Group has operations in key consumer markets across Australia, New Zealand, Asia, Europe, the United Kingdom, and the Americas. Goodman Group, comprised of the stapled entities Goodman Limited, Goodman Industrial Trust and Goodman Logistics (HK) Limited, is the largest property group on the Australian Securities Exchange (ASX: GMG), a top 15 entity by market capitalisation, and one of the largest listed specialist investment managers of industrial property globally.

Our property portfolio includes logistics and distribution centres, warehouses, light industrial, multi-storey industrial, business parks and data centres. We take a long-term view, investing significantly alongside our capital partners in our investment management platform and concentrating our portfolio where we can create the most value for customers and investors.

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