




# Hitting Net Zero in Retail:

Turning Sustainability  
Ambition into Action



**mitsubishi  
electric**  
*Changes for the Better*

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# Executive summary



**Chris Newman**, Zero Carbon  
Design Manager at Mitsubishi Electric  
Living Environment Systems UK

The UK retail sector is at a crucial turning point. Driven by **changing legislation**, **evolving consumer expectations** and **heightened investor scrutiny**, retailers are facing growing pressure to decarbonise their operations and reach targets for net zero. At the same time, the majority are having to navigate these demands against a backdrop of tighter budgets, fluctuating interest rates and wider economic uncertainty; all of which, in turn, are impacting consumer spending and shopping habits.

Progressing on sustainability against this backdrop is no easy feat. Yet with the built environment now accounting for **a quarter** of the UK's carbon emissions, decarbonising retail buildings will ultimately play a crucial role in these targets being met.

The people who run these buildings have an essential role to play in helping the retail sector reach net zero as they are directly responsible for how a building operates. Yet our research has found there is a growing disconnect between intent and implementation. While 89% of facilities managers feel their retail business is prepared to hit the UK's net zero targets of reduction in emissions by 2030, our research has shown 34% believe their retail estate will become uncompliant on its current trajectory.

Decarbonising these spaces is also not just an environmental imperative – it's an economic one too. Our research found that an estimated £139 million could be lost annually if these buildings are not upgraded to meet net zero regulations. Despite this, operations managers can still struggle to access the funding and leadership needed to modernise their estates at scale.

**The following report shines a light on how prepared the retail sector is for net zero and the crucial role facilities and estate managers can play in decarbonising these buildings. In doing so, it pinpoints the barriers that remain and shows how businesses can support the operations team in making this goal a reality.**

# Introduction

As the UK heads towards its **legally binding target** of reaching net zero emissions by 2050, intermediate milestones – including changes to the **Minimum Energy Efficiency Standards (MEES)** – are also fast approaching. This includes government proposals that, if implemented, could require all commercial properties to have a minimum Energy Performance Certificate (EPC) rating of B by April 2030.

Amidst growing scrutiny of environmental performance, investors are **increasingly incorporating** Environment, Social and Governance (ESG) criteria into their investment decisions. The government continues to see the local high street – and the wider retail industry – as a **centre** of potential economic growth, with a growing number of consumers now also considering the **environmental impact** of what they buy, too. There is an increasingly indelible link between the economic success of the retail sector and its sustainable credentials.

For good reason. The lifecycle of retail products accounts for **nearly a third** of all greenhouse gas emissions, placing the industry among the highest contributors to emissions in the UK. That is because virtually all aspects of retail add to greenhouse gas emissions. This includes those created from consumer usage and disposal of goods, the energy required to power store operations and delivery logistics, as well as those created from farms and factories down the supply chain. Then there's the energy required to heat, cool and ventilate these buildings while in operation.

Adapting these spaces can not only reduce carbon impact, but also affect long-term property value, attractiveness and operating costs – all the while complying with future regulations. The majority of the

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*There are over two million non-domestic buildings in the UK, with around **a quarter** of these being classified as 'shops'. The industry also has the third largest building footprint in the UK with around 16% of all non-domestic building space occupied by shops so this offers a substantial opportunity to decarbonise at scale. This starts with identifying the 'easy wins' now, and reviewing the systems responsible for heating, ventilating and cooling these spaces. In having an in-depth understanding of how this equipment operates, facilities managers are uniquely positioned to lead this drive and support the delivery of net zero estates in future.”*

**Chris Newman**, Zero Carbon Design Manager at Mitsubishi Electric Living Environment Systems UK



UK's **major retailers** have developed their own carbon reduction plans, with the British Retail Consortium (BRC) establishing a **Climate Action Roadmap** for achieving net zero by 2040. This includes recommendations to standardise data collection and transition to low-carbon heating alternatives.

Decarbonising these spaces can also be done via a phased approach over several years with minimal disruption. This can be as simple as replacing the systems operating in these buildings, or retaining parts of existing infrastructure.

**In fact, 61 % of retailers have already implemented or have a plan to implement proactive steps to reduce energy use and improve efficiency on their sites.**

This proactivity demonstrates concern about their estate's regulatory readiness for net zero. While there's clearly good progress that's already been made, there is still a long way to go in supporting facilities managers in adapting their estates. Reducing energy use and improving efficiency on retail estates will allow the retail sector to not just attract investment and consumer expectations on sustainability but also support the UK on its journey to reaching net zero by 2050.





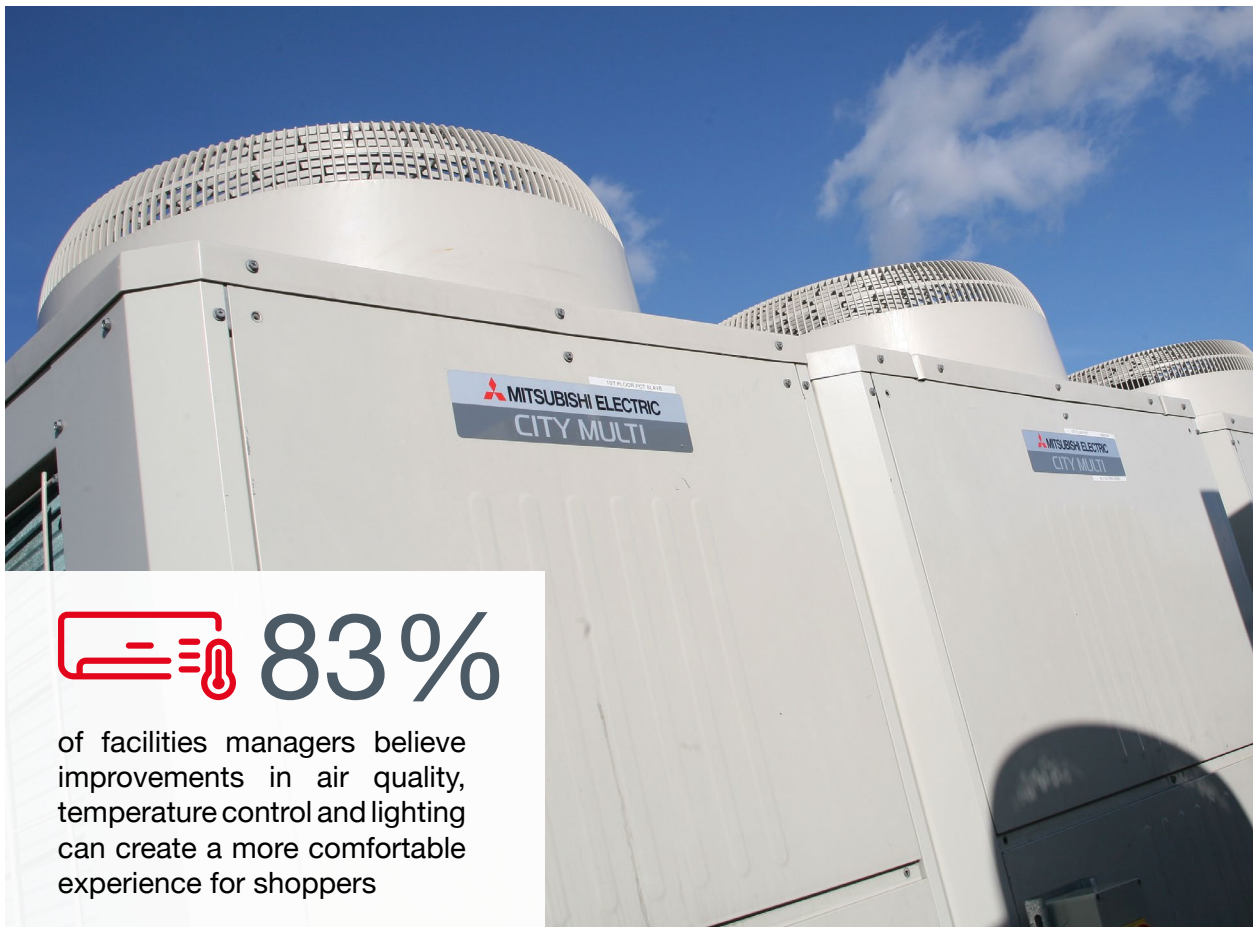
# Facilities managers understand the benefits

This concern is being reflected in a growing confidence among the operations teams in their ability to decarbonise these buildings. 84% agree they are in an important position to improve the sustainability of retail estates and have a greater understanding of the value it can bring to their business. Rather than a purely regulatory obligation, many facilities managers recognise sustainability as a crucial driver of operational and financial improvement. More than 8-out-

of-10 (83%) believe it can drive better financial outcomes for their business in the long term, and the same number report it can also help avoid financial losses through stranded assets.

**The majority (83%) of facilities managers also believe improvements in areas such as air quality, temperature control and lighting can create a more comfortable experience for shoppers, in turn supporting greater customer and staff satisfaction. Sustainability is therefore not just an ethical or regulatory imperative, but a commercial and operational one too.**

It's clear that facilities managers are aware of the advantages modernising their estates can bring, yet something is holding back progress.



# 83%

of facilities managers believe improvements in air quality, temperature control and lighting can create a more comfortable experience for shoppers

# The business misalignment issue

Despite sustainability performance being a high priority, there is a growing disconnect between facilities managers and broader corporate buy-in when it comes to implementing net zero strategies? Our research suggests facilities managers sometimes lack the influence and visibility to drive change at scale.

While 83% of facilities managers believe sustainability can drive better financial outcomes for their business in the long term, almost half (43%) feel net zero is not currently viewed as a business priority. However, this may be indicative of the broader challenge of demonstrating return on investment (ROI) on sustainability to senior stakeholders and the wider business.

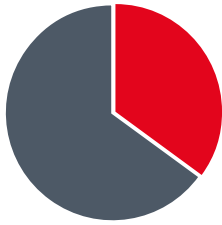
**This is translating into a lack of resources – and therefore budget – being attributed to retrofitting these spaces with HVAC that can reduce energy use, improve efficiency and increase comfort levels for customers.**

While phased action can be implemented even with limited budgets, this absence of funding represents not only a logistical constraint but a strategic liability. Without dedicated investment, ambition on sustainability cannot be converted into tangible change.

What's clear is that facilities managers are not short on capability or commitment; they are short on visibility and influence. They need to modernise infrastructure, reduce emissions, and maintain comfort for tenants and customers – yet lack the funding needed to deliver lasting impact. Closing this gap between intention and implementation will be essential if the retail sector is to meet its net zero obligations in time.



# Stranded assets



35%

of operations managers estimate that more than a third of their estate could become stranded assets by falling short of these upcoming standards.



## A commercial and environmental risk

As regulatory requirements tighten and sustainability expectations rise, inefficient commercial buildings are becoming a growing liability. The concept of ‘stranded assets’ – properties that are no longer economically viable due to their environmental performance – has become a tangible concern for the retail sector. Investors and real estate funds are already applying discounts to assets with poor EPC ratings, signalling that environmental performance is fast becoming a proxy for management quality and future readiness.

Under MEES, all commercial lettings in the UK must achieve at least EPC Band E today, with a proposed uplift to Band B by 2030. Alarming, 35% of facilities managers estimate that more than a third of their estate could become stranded assets by falling short of these upcoming standards – if implemented.

**They also anticipate £139 million annually in losses from buildings that may become stranded assets if they are not upgraded to meet net zero regulations by 2050**

The implications are clear: non-compliant properties risk becoming unlettable, losing asset value, facing increased operational costs, and struggling to attract or retain tenants. Late-stage compliance may also lead to more expensive and disruptive retrofits, adding avoidable strain to capital expense budgets.

Yet, according to a **report from BESA**, just one in ten heads of property and facilities in the UK have a dedicated retrofitting budget. These figures suggest a concerning disconnect between the scale of the risk and the resources allocated to address it. Without timely intervention, many retail properties could face functional obsolescence.



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*The longer we leave it, the harder adapting these buildings is going to get. Now is the time for retailers to be creating long-term strategies that align 'business as usual' with concrete commitments for net zero. This will not only support compliance with existing and proposed regulations like MEES, but also protect asset value and lower costs at a time when the majority can ill-afford further financial strain. This will allow retailers to not just stay competitive, but fully operational within an increasingly sustainably minded market.”*

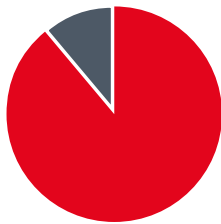
**Chris Newman**, Zero Carbon Design Manager at Mitsubishi Electric Living Environment Systems UK

Even with limited budgets, some forward-thinking retailers are already showing how to take practical, phased action. By aligning HVAC upgrades with lease events or planned refurbishments, they're spreading investment over time, typically over three, five, or ten years. This staggered approach helps improve energy performance and compliance ratings, while minimising business disruption.

To support this kind of strategic planning, how retail estates are assessed also needs to evolve. That means going beyond simple cost analysis to include regular reviews of EPC ratings, retrofit potential, and the timing of upgrades in relation to lease cycles. With regulatory pressure mounting, the risk of inaction isn't just theoretical; it's becoming an existential financial liability.



# HVAC systems play a crucial role



89%

of facilities managers say their buildings are ready for net zero.



54%

have implemented energy-efficient heating, ventilation & air conditioning systems and are using smart thermostats.

HVAC systems are at the heart of any effort to decarbonise retail buildings. With high footfall, long operating hours, and the need to maintain customer comfort, these systems run nearly nonstop and can account for **up to 60%** of a retail building's total energy consumption.

Despite this need to decarbonise, our findings reveal many retail estates aren't on the front foot when it comes to energy-efficient HVAC operations. In fact, our research found that UK retailers are losing £146.47 million in energy leakage annually.

**While 89% of facilities managers say their buildings are ready for net zero, only 54% have implemented energy-efficient heating, ventilation and air conditioning systems and are using smart thermostats.**

Getting the infrastructure in place to measure the energy impact of HVAC equipment and understand where savings can be made is vital to decarbonising. When this happens, the impact is measurable, and it's possible to track performance against benchmarks, quantify return on investment, and present findings in board-friendly formats that support long-term planning.

- **Majestic Wines, one of the UK's largest wine retailers, partnered with Mitsubishi Electric to revamp the air conditioning system at its head office. By installing heat recovery air conditioning units and standardising scheduling across its estate, it cut overnight HVAC energy usage by 30%.**

In addition to better measurement, considering moving to heat pumps – one of the most efficient methods of low-carbon heating – is a good option for most facilities managers. But they currently remain significantly underutilised in the UK's commercial sector, with many relying on gas-fired boilers and legacy chillers, which can increase both emissions and maintenance costs.



There are numerous examples of how air conditioning and heat pumps are helping retail estates to get on track with decarbonising:

- **Matalan's flagship Oxford Street store installed Mitsubishi Electric VRF air conditioning for lower-GWP, energy efficient cooling. The retrofit enabled full climate control while aligning with sustainability goals, using existing infrastructure to minimise installation time and disruption.**
- **McDonald's replaced legacy HVAC units across multiple UK sites with Mitsubishi Electric air conditioning and Air Handling Units (AHU). This retrofit cut CO<sub>2</sub> by 20 tonnes and saved £4,515 annually per site, achieving payback in just over two years.**
- **The Co-op Dagenham store upgraded to Mitsubishi Electric HVAC to address ceiling height and comfort challenges. The solution improved efficiency and staff comfort, contributing to energy savings and reliable zone control within a busy retail environment.**

Taken together, modern HVAC systems, like heat pumps, and intelligent monitoring, form the backbone of working towards net zero in retail. They make it possible to improve and keep energy consumption down, while also keeping comfort high – and can be installed as part of a phased retrofit with minimal impact to business operations. In doing so, they can empower the facilities team to lead from the front – delivering meaningful change from the plant room to the boardroom.



# Putting this into practice

We know that facilities managers have the potential to make net zero a reality in the retail industry, but they need to have the scope and right tools to act.

This starts with establishing what they want to achieve by decarbonising their building, including any intended outcomes. These can either be set against internal criteria, such as average store energy usage, or an external framework such as the UK **Net Zero Carbon Buildings Standard** (UK NZCBS).

Once this has been decided, it's important to get a clear view of the current retail estate. This will provide the evidence needed to prioritise improvements, and can include:

1. Mapping the condition and age of HVAC systems
2. Identifying sites with low EPC ratings or high energy use
3. Benchmarking performance using tools such as CIBSE TM46

Once this baseline is understood, immediate gains can be made. Adjustments to controls and scheduling can reduce energy use without major capital spending. These changes will provide the data needed to prove ROI and build the case for further funding.

When it comes to replacing or upgrading equipment, retaining as much of the original infrastructure as possible – including pipework – can allow costs to be reduced, installation time to be shortened and embodied carbon emissions to be lowered.

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*Today's technology means replacing existing equipment with a like-for-like comparison can be done simply with minimal disruption. This can be as straightforward as replacing indoor and outdoor units while retaining existing pipework, insulation and interconnecting cables – allowing retailers to enjoy the benefits of a new system while avoiding the challenges associated with installing a complete replacement. This includes significant energy and cost savings, and ultimately reliable, better-performing equipment in the long-term.”*

**Chris Newman**, Zero Carbon Design Manager at Mitsubishi Electric Living Environment Systems UK

HVAC upgrades should be considered in line with lease renewals, refurbishment cycles and anticipated equipment failures to reduce disruption to retail estates. This is where it can be helpful to consider whether retailers want to adopt a 'step by step' or 'in one go' approach towards retrofitting. Again, facilities managers and the operations team are the best placed to manage this planning, keeping in mind the needs of an entire estate.

Throughout this process, being able to communicate the benefits in commercial terms is key. Being able to link energy reduction or efficiency gains to business benefits, customer comfort or cost control is more likely to gain support from wider stakeholders. In this way, facilities managers can strengthen their strategic role while delivering practical outcomes that help the wider organisation move towards net zero in an achievable way.



# From intention to implementation

The transition to net zero presents a significant challenge for the UK's retail sector – and one that facilities managers are uniquely positioned to overcome. We know that they understand the benefits modernising their estates can bring to both their day-to-day role and the wider business they operate in. Yet despite working towards these targets, the majority struggle to influence the very decision-making that will determine their achievement. Without greater alignment between leadership and those managing estates on the ground, the retail sector risks falling behind on net zero, and the financial losses, stranded assets and regulatory non-compliance that follow.

The groundwork for reaching this target across the retail sector and wider economy has already been laid. Building on this means placing estate managers and operations teams at the heart of the sustainability conversation, right across the business. By giving them the authority to shape investment decisions and act on the insight they already have, the retail industry can use this knowledge to adapt its estates and close the gap between intention and implementation.

The HVAC systems that contribute to the sector's emissions output will also play a crucial role in achieving this target. Case studies have shown that replacing or adapting this infrastructure, whether that's via switching to a heat pump or a new chiller, can have a significant impact on energy usage and overall productivity – and can be done with minimal disruption. But we need to equip facilities managers with the tools to measure and compare environmental performance. Without this,

they cannot make the case for proving ROI and unlock the budget needed to replace these systems both now and further down the line.

The retail sector can and must play a leading role in supporting the UK's journey to net zero. With the right tools, data and support, facilities managers can translate these targets into action – and ultimately make this goal a reality.

Download a free guide showing practical examples of energy efficiency and carbon reduction in the retail sector [here](#).

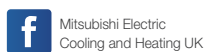
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Note: The fuse rating is for guidance only and please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R515B (GWP:292), R454C (GWP:148), R1234ze (GWP:7) or R1234yf (GWP:4). \*These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a hydrocarbon, R290 (GWP:0.02). \*These GWP values are based on IPCC 6th edition.

Effective as of June 2025

