

June 2024



# Manchester Airports Group Net Zero Carbon Roadmap



## About MAG

Manchester Airports Group (MAG) is the UK's largest airport group. It owns and operates Manchester, London Stansted and East Midlands airports.

Our purpose at MAG is to connect our customers to the world through exceptional airport experiences and innovative travel. Our vision is to be a world leader in the provision of airport facilities and travel services, delivering value for all stakeholders.

Our Corporate Strategy drives our purpose through a series of strategic priorities, one of which is to decarbonise aviation. We will take the lead on decarbonisation by working with industry partners and governments to decarbonise air travel by 2050. Through a range of programmes we will pursue our net zero carbon roadmap to deliver net zero airport operations by 2038.

MAG's refreshed Corporate Strategy also lists sustainability as a strategic priority – an approach that underpins our future success. Our five-year [Corporate Social Responsibility \(CSR\) Strategy, Working together for a brighter future](#), shows how, as a responsible business, we plan to deliver against our strategic objectives, and how we will account for and protect the values of our customers, colleagues and stakeholders. Our CSR Strategy sets out three principles for the future:

- Protecting the environment must be central to the plans we make.
- The UK must remain globally connected to be successful.
- The UK economy needs rebalancing to enable all parts of the country to benefit from growth.

Our CSR Strategy takes a comprehensive, industry-leading approach to deliver on these principles. Our commitment to environmental sustainability is ingrained in our approach to CSR. It places climate change at the forefront of our work under our strategic pillar of Zero Carbon Airports. Within this pillar, we made commitments for MAG airports to become net zero carbon no later than 2038, to transition our fleet to ultra-low-emission vehicles by 2030 and to operate on 100% renewable energy by 2030.

## MAG's net zero transition and decarbonisation journey

We recognise the significant global impact of climate change, and acknowledge the societal and environmental challenges it presents, as well as the opportunities it could offer our business. Our corporate strategic priority to decarbonise aviation and our CSR Strategy pillar, Zero Carbon Airports, address these challenges. Together, they maximise the opportunities to improve our global environment. At an airport level, our approach is driven by cutting any remaining reliance on fossil fuels, and by working alongside our partners to reduce waste and emissions from our operations.

Since 2007, when MAG first announced its plan to make its operations carbon-neutral, our efforts to reduce our carbon emissions and climate impacts have been industry-leading. In 2012, we achieved carbon neutrality at East Midlands Airport. Manchester Airport and London Stansted Airport followed in 2015 and 2016 respectively, making MAG the UK's first carbon-neutral airport group. We achieved this through a concerted effort to reduce energy consumption and to transition to renewable electricity. Our airports' carbon neutrality is independently certified by Airport Carbon Accreditation<sup>1</sup>.

<sup>1</sup> [Airport Carbon Accreditation](#)

<sup>2</sup> [World Resources Institute Greenhouse Gas Protocol](#)

<sup>3</sup> [Department for Transport's Jet Zero Strategy](#)

To build on our carbon neutrality, we set our next sustainability target in 2020: to achieve net zero carbon emissions for our operations (scope 1 and 2 emissions, as defined by World Resources Institute Greenhouse Gas Protocol<sup>2</sup>) by 2038. This target shows the strength of our approach to climate action. It puts us ahead of both the Government's national target of net zero by 2050 and the Department for Transport's Jet Zero Strategy<sup>3</sup> 2040 target for airports. Our target is also consistent with regional climate ambitions published by Greater Manchester.





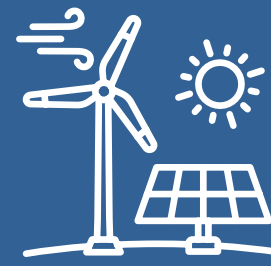
2007

MAG commits to carbon neutrality – our airports have since reduced their emissions by 88%.



2011

East Midlands becomes the first UK airport to install its own on-airport wind turbines.



2012

MAG achieves 100% transition to renewable energy.



2012

Carbon neutrality achieved at East Midlands Airport.



2015

Carbon neutrality achieved at Manchester Airport.



2016

Carbon neutrality achieved at Stansted Airport.



2016

MAG becomes UK's first carbon-neutral airport group.



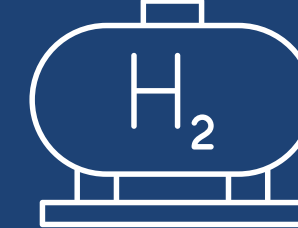
2021

Manchester and Fulcrum BioEnergy enter a partnership to support North West produced sustainable aviation fuel at Manchester.



2021

MAG named in the Financial Times's listing of European Climate Leaders.



2022

Manchester partnership with HyNet for pipeline supply of hydrogen for use in aviation.



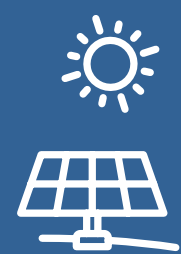
2023

MAG achieves a 5-star GRESB ESG rating.



2023

MAG engages its supply chain as part of its Sustainable Supply Chain Strategy.



2023

Permission granted to build a 14.3 megawatt solar farm at Stansted.

114,000

2023

Scope 1 and 2 emissions reduced by 114,000 tonnes between 2008 and 2023 through reductions in energy consumption and a transition to renewable electricity.



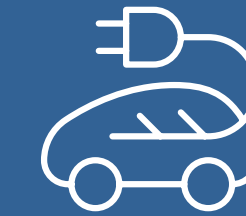
2024

MAG rated Gold Medal by EcoVadis sustainability benchmark.

3,500

2024

Emissions reduced by more than 3,500 tCO<sub>2</sub>e through first green gas transaction.



2024

Electric vehicle forecourt opens at Stansted, with ten rapid chargers available to airport users.



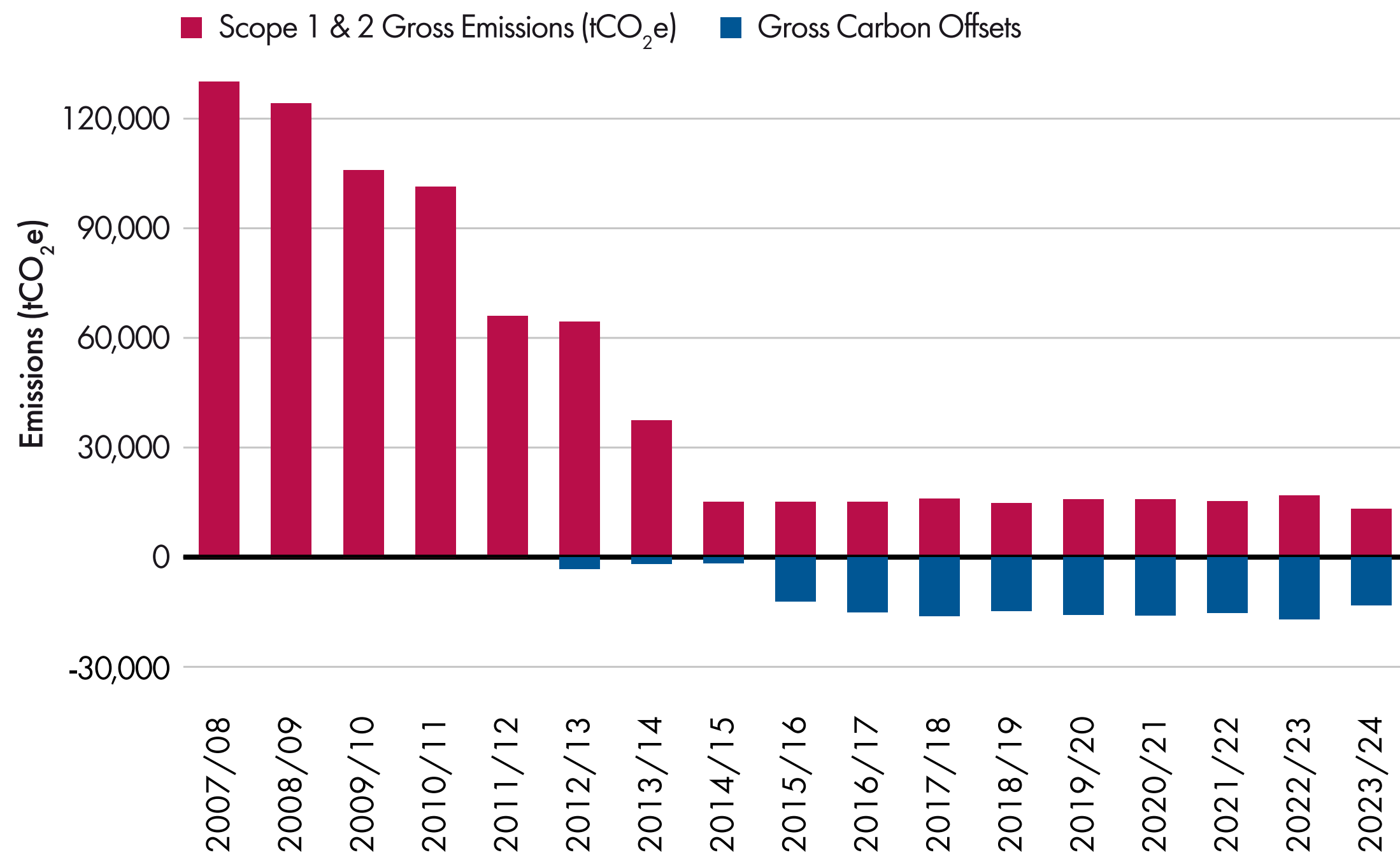
2024

MAG commits to establish near-term target under the Science Based Target Initiative (SBTI).

## Emissions baseline

Figure 1 shows how MAG’s scope 1 and 2 emissions have changed over time. Gross market-based emissions reduced from 130,000 tonnes CO<sub>2</sub>e in the financial year ending 31 March 2008 to 13,166 tonnes CO<sub>2</sub>e in the financial year ending March 2024. All of our residual emissions are offset using independently verified Gold Standard carbon offsets. Information about our carbon offsets is provided in our annual Greenhouse Gas Emissions Report.

Figure 1. Market-based direct and indirect emissions (scope 1 and 2)



## Our decarbonisation targets

Our 2020 CSR Strategy committed us to achieving net zero scope 1 and 2 emissions no later than 2038. It also set a target for our fixed infrastructure to operate on renewable energy from 2030, with any new or replacement infrastructure operating on renewable energy from the earlier date of 2025. Our CSR Strategy also committed us to transition to a fleet of ultra-low-emission vehicles (ULEVs) by 2030.

Additionally, using the baseline year of 2019, we have committed to setting a near-term target under the Science Based Targets Initiative (SBTi) which covers scope 1 and 2 emissions. Following validation of our science-based target commitments, we plan to apply to upgrade our Airport Carbon Accreditation to Level 4: Transformation. This requires us to transform our airport operations – and those of our business partners – to achieve absolute emissions reductions, i.e. a defined reduction in actual carbon emissions rather an offset, against that 2019 baseline year.

To meet our commitment and align with the Paris Agreement, we are implementing a programme of projects across our business to drive our net zero carbon roadmap. The programme will reduce carbon emissions across our assets and operations to achieve a further reduction of 48% in our market-based scope 1 and 2 emissions by the end of the financial year ending 31 March 2031 (FY31). The reduction is measured against our baseline emissions from FY20. The annual rate of decarbonisation between FY20 and FY31 is set at 4.2% of our FY20 baseline, followed by a straight-line trajectory to net zero in 2038.

# Achieving our decarbonisation targets

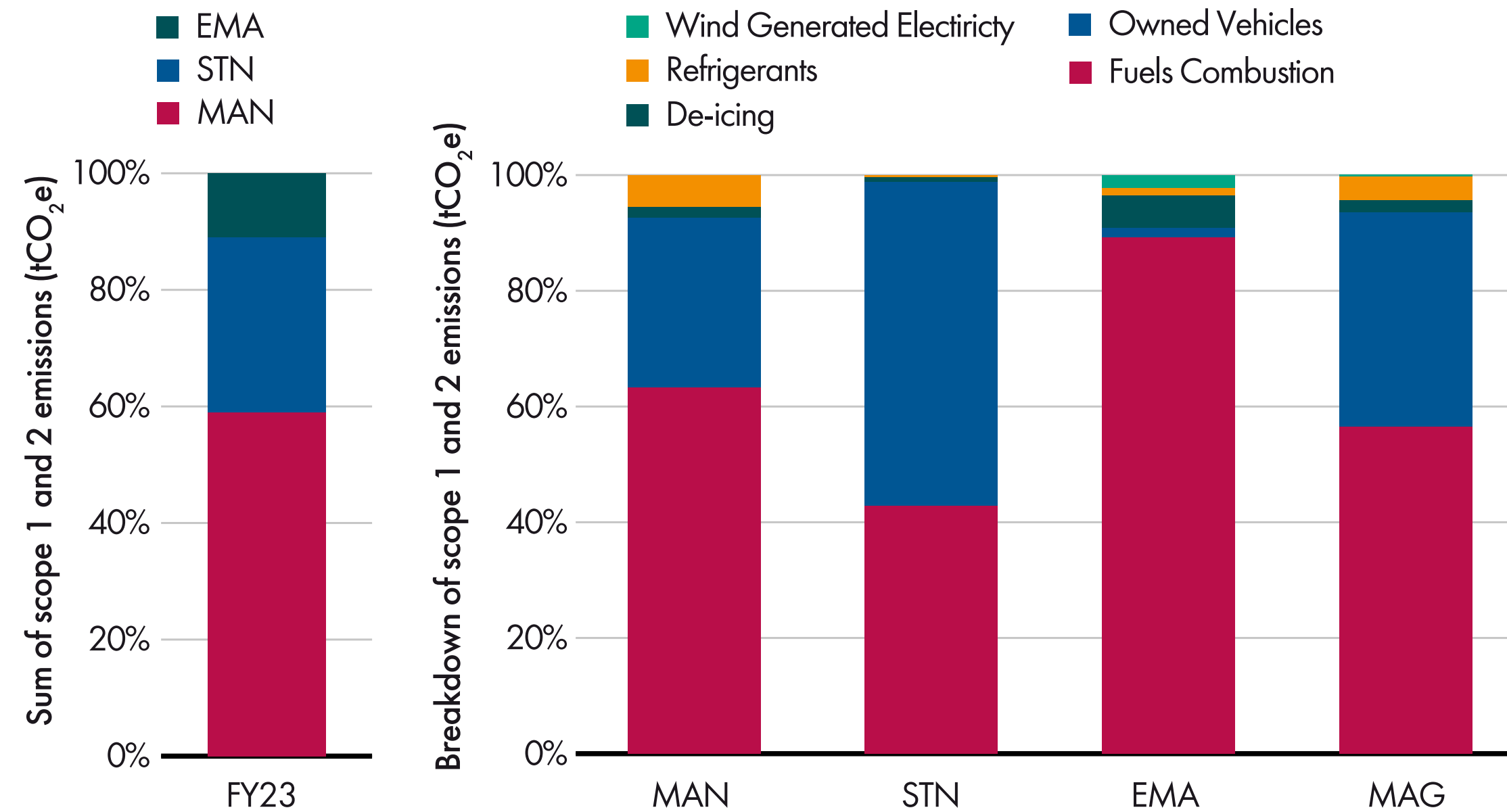
Our Strategic Decarbonisation Programme addresses a wide range of climate-related issues, including:

- Achieving our scope 1 and 2 net zero targets.
- Reducing scope 3 emissions.
- Decarbonising aviation.
- Climate-related corporate risk and opportunities.

## Achieving our scope 1 and 2 net zero targets

Although we have significantly reduced our scope 1 and 2 emissions, some emissions remain. Figure 2 provides a breakdown of these remaining emissions by airport and by source. Most arise from the use of gas for heating and hot water, the use of diesel in vehicles and refrigerant leaks from air-conditioning systems. The use of gas to provide heating and hot water is the single largest source of our remaining emissions.

Figure 2. Scope 1 and 2 emissions by airport (left) and by source (right) (FY24 data)



Our Decarbonisation Programme includes a range of initiatives that will collectively deliver our net zero commitment. These include:

- Maintaining our commitment that all of the electricity we use will be generated from renewable sources, while identifying, assessing and, where appropriate, implementing opportunities to generate renewable energy at our airports.
- Ensuring that, from 2025, all our new and replacement infrastructure runs on renewable energy.
- Transitioning all our remaining airport infrastructure to operate on renewable energy by 2030.
- Transitioning to a fleet of ULEVs by 2030, with a focus on zero-emission vehicles.
- Accelerating the replacement of assets with net zero alternatives and exploring innovation in net zero vehicles.

## Decarbonising heat

Roughly 70% of our remaining emissions are associated with the use of natural gas for heating and hot water. To cut back further, we are investigating technology-led solutions for producing low-carbon heat. As an interim solution, we are using green gas to keep our emissions within our science-based targets.

## Decarbonising our fleet

We are prioritising the transition of our vehicle fleet to zero-emission or ultra-low-emission alternatives. Our approach is to replace vehicles through their natural renewal cycles where suitable vehicles are available. We have committed to transitioning our fleet to ULEV by 2030, five years ahead of the Government's ICE vehicle phase-out date. To support this, we are also investing in electric-vehicle infrastructure.

For a small proportion of our vehicles, there is currently no suitable zero-emission alternative on the market. These vehicles include snow-clearing, emergency service and heavy-load towing vehicles. We are monitoring the market for potential zero-emission alternatives for these types of vehicles and, when we need new vehicles, focusing on shorter-term solutions.

We are also investigating the role of green diesel to support the decarbonisation of our vehicle fleet, together with generators and a small number of gas oil boilers.

## Reducing our scope 3 emissions

Despite a large proportion of MAG's scope 3 emissions originating from sources beyond our direct control, we know that we must collaborate with our value chain to drive down emissions. We believe in working with our suppliers and industry partners to achieve net zero carbon.

To achieve a reduction in scope 3 value-chain emissions, we are:

- Working tirelessly with our aviation industry partners to reduce emissions from flying, including working through Sustainable Aviation, the Government's Jet Zero Council and trade associations such as the Airports Council International and the Airport Operators Association.
- Improving public-transport options by working with travel providers to enhance rail, bus and coach services, and promoting active travel and public-transport discounts for airport staff.
- Engaging with our supply chain to understand their sustainability performance and to explore the ways we can work together to accelerate sustainability.
- Developing our understanding of the carbon emissions that are embodied in airport developments, assessing these emissions and identifying opportunities to prevent them.

## Decarbonising aviation

Our commitment to decarbonisation goes beyond our own operations, which is why we are committed to playing our full part in decarbonising the aviation industry. In 2005 we became a founding member of the industry coalition, Sustainable Aviation, and, in 2020, were one of the two airport operators that were founding members of the Government's Jet Zero Council. Through Sustainable Aviation, and under MAG's chairmanship, the UK aviation industry became the first in the world to commit to net zero carbon by 2050. The industry also publishing a detailed roadmap setting out the way it plans to decarbonise. To support the roadmap and the Government's 2022 Jet Zero Strategy, we are:

- Working to accelerate the production of sustainable aviation fuels, including through our partnership with Fulcrum BioEnergy. We have also committed to the introduction of an incentive scheme to reward airlines operating at our airport that exceed the Government's sustainable aviation fuel mandate.
- Offering two zero-emission incentives, both of which involve five years' worth of free landing fees: one to the first zero-emission aircraft to operate from our airports, the other for the first zero-emission aircraft to operate transatlantic flights from our airports.

- Educating local school children about aviation decarbonisation, including interactive lessons on sustainable aviation fuel.
- Funding academic research on air travel.

## Climate-related risks and opportunities

In addition to focusing on emissions reduction, we have developed a detailed understanding of the risks and opportunities that climate change presents to our business. Our work informs the development of our business strategies, and is outlined in our detailed Climate Change Adaptation Reports (which we submit to the Government) and our climate-related financial disclosures (which appear in our annual report). Our reporting aligns with the recommendations from the [Task Force on Climate-related Financial Disclosures](#) (TCFD)<sup>1</sup> and the requirements for [UK Climate-related Disclosures](#) (CFD)<sup>2</sup>.

<sup>1</sup> [Task Force on Climate-related Financial Disclosures](#)

<sup>2</sup> [UK Climate-related Disclosures](#)

## Engagement plan

We are actively engaged in addressing climate-related issues at all levels, including:

- Stakeholders at each of our airports, with whom we engage through our Airport Consultative Committees, Airport Operators' Committee and other local forums.
- Colleagues, with whom we engage through internal communications, including our dedicated series of Climate Matters events.
- Industry partners, with whom we engage through industry coalitions and trade associations, such as Sustainable Aviation, Airports Council International and the Airport Operators Association.
- Suppliers, with whom we engage through our sustainable supply chain strategy, supplier sustainability benchmarking and sustainability summits with our supply chain partners.
- Government, with which we engage through the Jet Zero Council and its subgroups.



Our Board and Executive Committee are also actively engaged on climate-related matters, as is our Corporate Social Responsibility (CSR) Committee, the sub-committee of our Group Board that oversees climate initiatives. Our Decarbonisation Programme is governed through an Executive-level Programme Board and through Decarbonisation Project Boards at each of our airports. More information on Board engagement and climate-related governance is detailed in our Climate-related Financial Disclosures.

## Reporting our progress

We are committed to publishing information to help stakeholders understand the progress we are making in reducing the impacts of our business, and to understand how climate change could impact our business.

You can find more information in:

- MAG [Annual Report](#) and Accounts, which includes an overview of MAG's energy use and emissions, as required for Streamlined Energy and Carbon Reporting (SECR) and our climate-related financial disclosures (which align with recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) and UK Climate-related Disclosures (CFD) requirements).
- Our [CSR Report](#), *Working together for a brighter future*, which details our climate-related achievements and performance against our CSR Strategy. This is accompanied by an overview of our carbon footprint and an insight into our CSR Programmes.
- A detailed [Greenhouse Gas Emissions Report](#) which provides information about how we measure our energy use and greenhouse gas (GHG) emissions, as well as an inventory of our direct and indirect emissions, carbon neutrality and carbon offsetting.

- MAG's Climate Change Adaptation Report, which we submitted to Government in December 2021. The Report outlines our latest views on the impact of climate change on our airport operations, and the actions we are taking to minimise them. The Report is available on our website.

