

Net Zero Carbon Plan

2022



Foreword

The climate crisis presents society's greatest challenge. We are already experiencing the effects of climate change - which will affect all of our lives, across all parts of our world, today, and for generations to come.

At Birmingham Airport, we are playing our part in limiting the Earth's temperature increase to well below 2°C, in line with the United Nations' ambition, and have committed to becoming a Net Zero carbon Airport by 2033. We recently published our Sustainability Strategy covering a wide range of topics across the Airport. This has helped us to capitalise on previous steps made towards reducing our carbon emissions and also to make good use of the unique learning opportunity the pandemic has presented. As the recovery takes shape, we are taking time to readjust, reprioritise and focus on the next steps towards 2033 and Net Zero.

While we have a track record in achieving low carbon operations, we know that meeting our commitment will require more impactful and immediate action and new investment to deliver significant change across our Airport over a short time-period.

So, we have built on a decade of learning, which has involved our first phase of solar power installation, electric vehicle transition, energy efficient lighting and smart metering, to prepare our Net Zero Carbon Plan.

This involves an initial multi-million pound investment by 2025, including our next phase of on-site renewable energy generation and energy efficient operations, that will reduce the emissions we directly control by up to 60%. Alongside this, we will prepare a subsequent phase of investment to complete our Net Zero transition.

Engaging our own people – and everyone who holds a stake in Birmingham Airport – is a strand that runs through our approach to sustainability.

We will continue to collaborate with a range of partners to enable the introduction of lower carbon aircraft and operations, fuels and technology to our Airport, as well as enabling better ways to travel to and from the Airport. By contributing towards the ongoing reduction in emissions associated with air travel, we will support increasing sustainability within the wider aviation sector.

This Net Zero Carbon Plan sets out what we will do to deliver against our 2033 commitment. It will enable our partners and stakeholders both to participate where they share our interest, and to hold us to account in delivering against our commitment.

Nick Barton
Chief Executive

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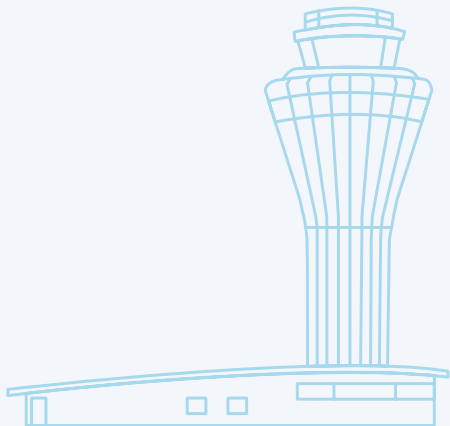
Our commitment to Net Zero

Our commitment is:

“ to be a Net Zero carbon Airport by 2033, prioritising zero carbon airport operations and minimising carbon offsets ”

We announced our Net Zero commitment for emissions that we directly control (Scope 1 and Scope 2) in 2019 as part of our Sustainability Strategy.

We're also committed to working with our airport partners to reduce the carbon emissions that we can influence (Scope 3) in and around our Airport.



Headlines

£ Multi-million pound investment

Significant investment in on-site renewable energy generation, energy efficient lighting and improvements in energy management technology.

Planning to source up to **40%** of the electricity used at the Airport through solar power.

40%

100%

Switching to a **100%** green tariff from April 2022 for electricity provided throughout the Airport.

Extending the network of 25 electric vehicle charging points to enable more low carbon vehicles in and around the Airport boundary.



Renewing the Airport's heating and cooling infrastructure, including upgrades to the building fabric and a gradual transition to low carbon heating.

Building on relations with a range of partners, and our colleagues, to create the awareness, interest and capability that will enable Birmingham Airport to achieve its Net Zero goal.

Net Zero Goal



Our journey towards a sustainable future



Our track record in reducing carbon emissions

We have a track record in trialling emerging technology and innovative operational practices to drive energy and carbon efficiency:

- Installing solar panels on the terminal roof generating around 50,000 kWh electricity per year.
- Transitioning to energy efficient lighting across large parts of the terminal building, car parks and airfield.
- Installing 25 electric vehicle charging points across the airport, for use by passengers, commercial partners and our own operations.
- Operating a fleet of 20 electric vehicles, including six electric buses for passenger transfers.
- Recycling 47% of airport waste and diverting 100% of airport waste from landfill.
- Supporting airlines to reduce emissions during flight through efficient airspace design and facilitating procedures for lower-carbon take-off and landing.
- Enabling airlines to reduce emissions when on the ground through reduced engine taxiing and providing electricity for use by aircraft when at the stand.



Our carbon footprint

33%

We have reduced Scope 1 and Scope 2 emissions by 33% between 2012/2013 (our baseline year) and 2018/19 (our last full year of normal operations before the COVID pandemic).

Pie Chart 1 - Scope 1 and Scope 2 Emissions (2020/21)

Total GHG Emissions (Tonnes)

Electricity	4,218
Gas	3,029
Fleet Fuel	236
Generator Fuel	166

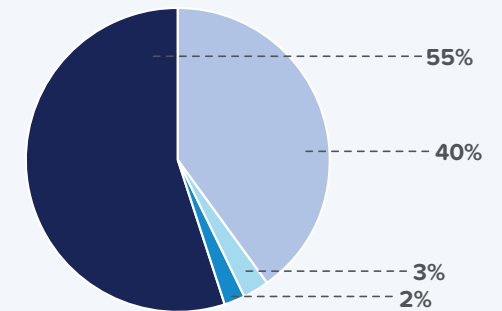


Table 1 - Scope 3 Emissions (2018/19)

Source	Total Greenhouse Gas Emissions (Tonnes)
Landing and Take-off (LTO)	116,959
Passenger Travel	140,740
Train - Business Travel	3
Flights - Business Travel	97
Car - Business Use	5
Waste Management	60
Water Use and Treatment	386
Electricity Transmission and Distribution	967
Gas - Tenants & Concessions	1,136
Electricity - Tenants & Concessions	4,593
Total Scope 3	264,945

Our plan to transition to Zero

Vehicles

- Transitioning to a low carbon fleet by **2030**.
- Expansion of our electric vehicle charging network to meet the needs of our partners and customers.



Measuring our progress

- We have invested in the installation of over

450

automated meters across large parts of the Airport. We will complete the upgrade to our metering network and connectivity to our Building Management System by **2024**.

- We are collaborating with local partners to use SMART Network technology that aligns energy generation, distribution, storage and forecasting data with financial, operational and environmental outcomes in a way that meets the Airport's ever-changing needs.

Heating and cooling

We will re-think how heating and cooling will deliver sustainable outcomes for the future. Our heating and cooling 'blue-print' will be developed by **2023**, including:

- Better insulation and shading.
- New, energy efficient boilers, chillers, ducting and air handling units.
- A district heating network across our terminal.
- Embedding carbon efficiency in the design of future assets.



Low-carbon energy generation

Increasing the amount of solar power we generate to meet up

40% to 40% of the Airport's electricity needs by **2026**.

Planning to invest in new, emerging technologies to generate low-carbon heating from **2030**.

Lighting

We have already switched to more energy efficient lighting across parts of our terminal building, car parks and airfield. We intend to complete this transition by **2026**, including:

- Installation of low energy lighting and refreshing specific zones with lighting that best meets operational needs and passenger experience.
- Connection of lighting controls to our Building Management System to enable the optimal use of energy for lighting based on needs.



Our engagement with stakeholders

Government and Local Authorities

The Airport does not operate in isolation and the key to delivering net zero will be to work in partnership with Government and our Local Authority stakeholders.

Key stakeholders:

- Local Authorities
- Department for Transport
- Department for Environment, Food and Rural Affairs
- Department for Business, Energy & Industrial Strategy
- Civil Aviation Authority
- Airport Consultative Committee



Airlines

Aircraft landing and taking off contribute around 40% of the Airport's Scope 3 emissions. We will continue:

- Working with airlines to raise awareness of the capability of Birmingham Airport to accommodate energy saving landing and take-off procedures, as well as partnering with airlines to explore other opportunities.
- Working with NATS and the Civil Aviation Authority to identify and deliver airspace changes that enable more efficient aircraft operations.
- Providing electricity for aircraft to use when at the stand and accommodating the use of reduced engine taxiing.



Tenants and Concessionaires

Around one third of energy used at the Airport relates to our tenants and concessionaires. To assist with our stakeholders' own Net Zero ambitions, we will:

- Make green tariff and renewable energy available to all Airport partners.
- Extend our engagement activities and awareness campaigns to everyone.



Passengers

Passengers travelling to and from the Airport contribute around 55% of the Airport's Scope 3 emissions.

- We will work towards our target of 37% passengers taking public transport to and from the airport by 2030.



Employees

Our people will be central to success in achieving Net Zero. We will:

- Help our colleagues to make good travel choices when they travel to work and for business purposes.
- Set clear carbon management responsibilities and targets for senior leaders and align these with personal objectives.
- Engage our own colleagues, and those of companies operating at the Airport, to raise carbon awareness and encourage energy saving behaviour through Net Zero Champions, provision of performance data and motivational communications.

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