

# Greenhouse Gas Emissions Report 2023-24



Here for your journey



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**Birmingham Airport is an international airport located eight miles to the east of Birmingham city centre in the West Midlands region of the United Kingdom. The Airport is jointly owned by the seven Metropolitan Boroughs of the West Midlands and private investors led by Ontario Teachers' Pension Plan.**

The Airport welcomed nearly 12 million passengers last year, servicing around 50 airlines to directly connect with more than 140 destinations.

Birmingham Airport is committed to becoming a net zero carbon Airport by 2033, prioritising zero carbon Airport operations and minimising carbon offsets. Having first announced our ambition in 2019, we remain steadfast in achieving our 2033 target despite the impact of the pandemic. In April 2022, we launched our Net Zero Carbon Plan, which sets out our roadmap to 2033, building on a decade of learning and investments that have already delivered a reduction in emissions that the airport directly controls.

Birmingham Airport has a critical role to play in co-ordinating internal and external stakeholders' collective efforts to use energy more efficiently, and in moving towards lower carbon operations. This involves both leading by example in how we manage those emission sources that we control, and guiding and influencing others, for example airlines, handling agents, tenants, and concessions, in how they manage the emissions within their control.

Following the lifting of Covid travel restrictions in March 2022, the Airport has seen strong growth in passenger numbers to near 2019 levels as we emerged from the Covid deep-freeze. We seized this unique opportunity to learn lessons presented by the pandemic - to adjust, reprioritise and improve. Since 2019 we have made significant progress and have achieved a 25% reduction in carbon emissions.

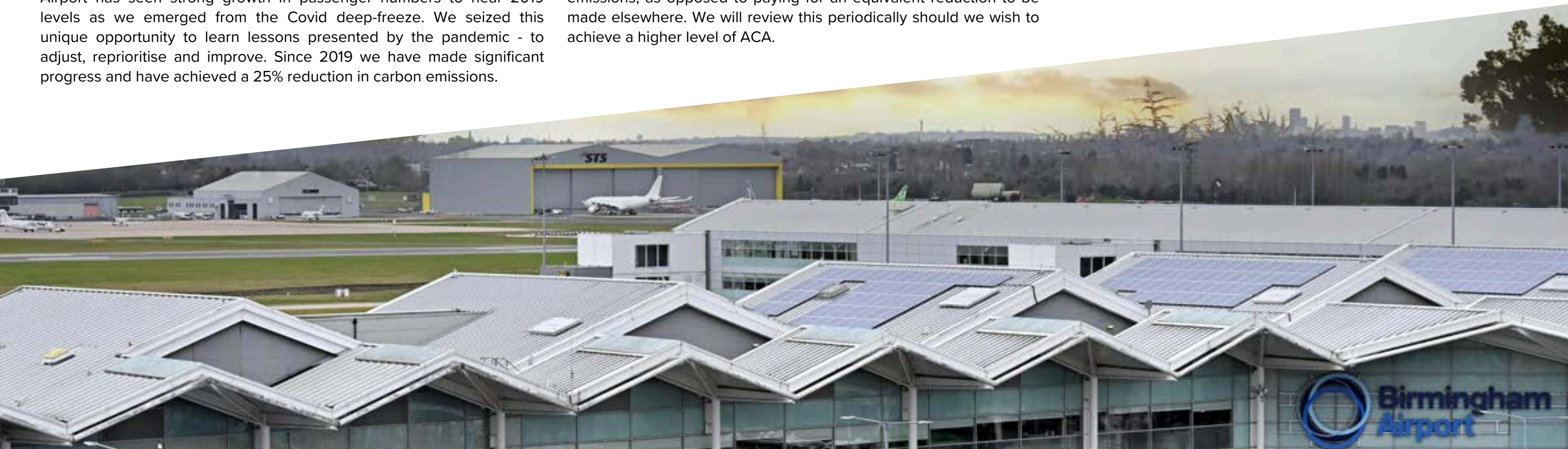
Our carbon management plan was independently recognised by the Airports Council International (ACI), which categorised us at Level 3 (Optimisation) on its Airport Carbon Accreditation (ACA) scheme. ACA is the only voluntary global carbon management standard for airports.

The purpose of ACA is to encourage and enable airports to implement best practice energy and carbon management to reduce greenhouse gas emissions. Key requirements include an annual carbon footprint calculation, having a net zero carbon target and decarbonisation plan, evidencing actions to reduce emissions and engaging with industry partners to guide and influence them to reduce their own emissions.

Achieving Level 3 brings our decarbonising activities and reporting under ACI Europe's framework of scrutiny, including comparison with over 500 airports worldwide. In the UK, 24 airports have achieved Level 1 ACA or above and 17 (including Birmingham) have achieved Level 3 or above. To achieve Level 3+ airports must offset their Scope 1 and 2 emissions. Birmingham Airport's current strategy is to invest capital in projects that will directly reduce our carbon emissions, as opposed to paying for an equivalent reduction to be made elsewhere. We will review this periodically should we wish to achieve a higher level of ACA.

This report presents Birmingham Airport's energy use, the associated greenhouse gas (GHG) emissions and calculation methodology for the financial year 2023/24 (01 April 2023 to 31 March 2024). The report covers assurance and a narrative description of the principal measures taken for the purpose of increasing the Airport's energy efficiency during the financial year. It is the third year of our commitment to report a full Scope 1, 2 and 3 GHG emissions footprint for the Airport annually. Any comments or questions in relation to the report should be directed to:

[Sustainability@birminghamairport.co.uk](mailto:Sustainability@birminghamairport.co.uk)







# HIGHLIGHTS: 2023-24

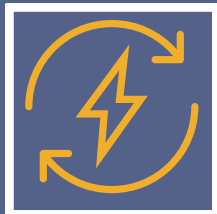


**ACA Accreditation  
Achieved for the  
second year**

**Reduction in electricity and gas  
consumption from 2022-23**



**Joined the Airport  
Sustainability Forum**



**550,000 kWh of energy saved through  
ongoing energy demand reduction  
activities**



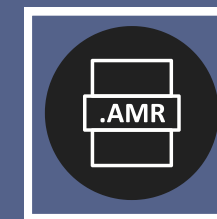
**Started construction of a  
6.8MW solar PV array on  
the airfield**



**Sustainable Surface  
Access Strategy  
launched**



**Meters connected with  
our energy management  
system**




**AMR devices installed on  
our two main incoming  
water supply meters**

# Streamlined Energy and Carbon Reporting (SECR) Policy

The UK's Streamlined Energy and Carbon Reporting (SECR) policy was implemented on 1st April 2019 under the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations (SI 2018/1155).


Birmingham Airport meets the definition of a 'large unquoted company' under the Companies Act 2006 and is therefore required to produce the following SECR report which includes:

 **UK energy use** (to include as a minimum purchased electricity, gas and transport)

 The associated **greenhouse gas emissions**

 At least one **intensity ratio** (for Birmingham Airport, passenger numbers are used)

 The **previous year figures** for energy use and GHG emissions

 Information about **energy efficiency** action taken during the reporting period

 Methodologies used in the calculation of **disclosures**

The SECR report can be found in the 2023/24 financial statements, published by the end of September 2024







# Setting the Operational Boundary

In setting the operational boundary and calculating the GHG emissions footprint, Birmingham Airport followed UK Government guidance (HM Government, 2019), the GHG Protocol Corporate Standard (WBCSD/WRI, 2004), GHG Protocol Scope 3 Standard (WBCSD/WRI, 2011) and sector-specific requirements of Airport Carbon Accreditation (ACI, 2023).

Birmingham Airport adopted the 'operational control' approach (WBCSD/WRI, 2004). As such, this report presents energy usage and associated GHG emissions from all Birmingham Airport operations as tonnes of carbon dioxide equivalent (t/CO2e). To convert raw information on a company's activities into GHG emissions, the Department for Business, Energy and Industrial Strategy (BEIS) and the Department for Energy Security and Net Zero (DESNZ) provides annually updated conversion factors. The 2023 GHG conversion factors published 28 June 2023 have been applied to this 2023/24 footprint following UK Government guidance (BEIS/DESNZ, 2023).

Birmingham Airport's GHG emissions footprint consists of three emissions 'Scopes'. Scope 1 and 2 emissions form the basis of standard practice and are the minimum requirement for reporting under SECR. Companies are encouraged to go beyond the minimum requirements and voluntarily include any other material source of energy use or GHG emissions, classed as Scope 3, indirect emissions. Birmingham Airport has voluntarily calculated and reported Scope 3 emissions every three years since 2012/13 and committed to do so on an annual basis as of 2021/22. This year we have added several new categories to our Scope 1, 2 & 3 emissions inventory in line with the updated ACA Level 3 guidelines. The new emission source categories will have zero emissions reported prior to this financial year.

## Scope 1 Emissions

Scope 1 emissions are direct GHG emissions that occur from sources that are owned or controlled by Birmingham Airport, including

- Gas consumption (excluding tenant and concession usage)
- LPG consumption
- Fuel consumption (owned and leased fleet)
- Diesel fuel used in generators
- Refrigerants
- De-icer (New category)

## Scope 2 Emissions

Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Although Scope 2 emissions physically occur at the facility where they are generated, they are accounted for in Birmingham Airport's GHG emissions inventory because they are a result of the organisation's energy use. Birmingham Airport includes the following Scope 2 emission sources within the GHG inventory:

- Consumption of purchased electricity (excluding tenant and concession electricity)

"Birmingham Airport calculates and publishes a full GHG emissions inventory annually, to be open and transparent about its direct and indirect carbon footprint and changes over time"

**-Warda Khan , Sustainability Co-ordinator**

## Scope 3 Emissions

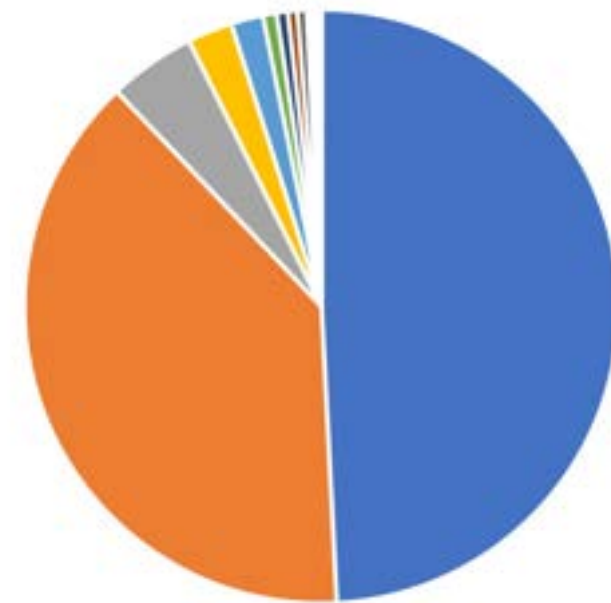
Scope 3 emissions are indirect emissions that are a result of operations associated with Birmingham Airport, but which occur from sources not owned or controlled by it.

As a minimum, the Airport follows Level 3 Airport Carbon Accreditation guidance (ACI, 2023) to determine which Scope 3 emission sources to include within the GHG emissions footprint. In addition, the Airport reports on Scope 3 emissions from waste management and water use and treatment in line with other major UK airports and the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (WBCSD/WRI, 2011).

The Airport will continue to assess the Scope 3 emission sources it reports on annually to ensure activities that are important to our stakeholders, activities we can guide and influence and activities with the greatest impact are included within the carbon footprint. The Airport endeavours to continuously improve the calculation methodology to provide an emissions total that is as accurate as is practical.

The Airport reports emissions from the following specific sources:

### Scope 3 Emissions Breakdown 23-24



Scope	Emission Source	Description	Responsibility	Data Source and Calculation Methodology	Accuracy of Data
Scope 1	Fuel - Vehicle Fleet	Diesel and petrol used in Birmingham Airport owned or leased airside and landside vehicles.	Finance, Sustainability	The fuel used by the directly controlled fleet of Birmingham Airport has been accounted for in the GHG emissions footprint.	High level of confidence
Scope 1	Fuel - Generators	Diesel generators operated by Airport under CAA Authority regulations	Airfield & Terminal Infrastructure, Finance, Sustainability	Fuel consumption was calculated using the number of hours the generators run multiplied by the hourly fuel consumption.	High level of confidence
Scope 1	Gas	Gas consumption includes gas burned in boilers and on-site CHP plant.	Airfield & Terminal Infrastructure, Finance, Sustainability	Consumption data has been obtained from meter readings and has been verified against financial invoices from the supplier.	High level of confidence.
Scope 1	Refrigerants	The emissions recorded were based on refrigerant used to service existing equipment.	Terminal Infrastructure, Sustainability	Record of equipment containing refrigerant and the type and quantity used to calculate total emissions.	High level of confidence.
Scope 1	Fuel - Fire Training	LPG used at fire training facility.	Finance Sustainability	Fuel consumption is based on transaction reports provided by the Finance department.	High level of confidence.
Scope 1	De-Icer	Quantities of liquid and solid de-icer used by BAL	Airfield Ops	De-icer usage data obtained from Airfield Operations was used to calculate the total emissions.	High level of confidence.
Scope 2	Electricity	Electricity purchased by Birmingham Airport and used in airport terminals, airfield and auxiliary.	Finance Sustainability	Electricity consumption information was obtained from supplier invoices and verified against consumption recorded through the energy software from the Airport's metering.	High level of confidence.
Scope 3	Fuel - Business Car Travel	Diesel and petrol fuel used in company cars, employee-owned vehicles used for business travel, or hire cars on business use.	Finance Sustainability	Data was obtained from fuel and mileage expense records from the Finance department.	Good level of confidence
Scope 3	Fuel - Business Taxi Travel	Taxi used for business travel.	Finance, Sustainability	Expense information obtained from Finance department.	Low level of confidence
Scope 3	LTO Cycle	The LTO cycle to a height of 3,000 feet. This includes emissions generated during approach, taxi and ground idle (in), taxi and ground idle (out), take off and climb.	Sustainability	Information on ATMs is downloaded from the airport operational database. Emissions are calculated using the ACERT tool provided by ACI.	High level of confidence
Scope 3	Cargo Goods and services	Emissions from deliveries to the airport.	Commercial	Goods delivery data is provided by the Commercial team.	Low level of confidence
Scope 3	Tenant and Concession - Electricity	Electricity supplied by Birmingham Airport to Tenants and Concessions.	Property Services Finance, Sustainability	Meter reads are sent through by Property Services quarterly and in some instances, monthly. The Finance department confirm recharge costs at the end of the financial year.	High level of confidence
Scope 3	Home-working	Emissions from employees working at home, including emissions from electricity and heating.	HR, Sustainability	Total employee number provided by HR and standard home working methodology used.	High level of confidence.
Scope 3	Engine Testing (Run-ups)	Aircraft ground idle and high-power engine tests.	Airport Control Centre Sustainability	Information on all engine testing is sent to the Sustainability team each month. The Airport refers to the latest version of the ICAO Aircraft Engine Emission Databank to find the fuel flow for each engine type and mode.	High level of confidence

Scope	Emission Source	Description	Responsibility	Data Source and Calculation Methodology	Accuracy of Data
Scope 3	On-Stand Power (APU)	System used to power aircraft whilst parked on stands. This relates to fuel used in APUs only.	Sustainability Finance	Emissions are calculated using the ACERT tool provided by ACI.	High level of confidence
Scope 3	Tenant and Concession - Gas	Tenant and Concession gas consumption includes gas burned in boilers which provides space heating and hot water and gas used in catering operations.	Property Services Finance, Sustainability	Meter reads are sent through by Property Services quarterly and in some instances, monthly. The Finance department confirm recharge costs at the end of the financial year.	High level of confidence
Scope 3	Waste Management	Recycling or disposal of waste from Birmingham Airport operations.	Sustainability	Emissions from waste management were calculated using tonnage data by waste type multiplied by the appropriate GHG conversion factor.	Good level of confidence
Scope 3	Water use and Treatment	Water supply to the airport and wastewater treatment.	Finance Sustainability	Supply volumes, sewerage volumes and trade effluent volumes were used to calculate emissions by multiplying by appropriate GHG CF	High level of confidence
Scope 3	Electricity Transmission and Distribution	Transmission and distribution (T&D) losses (generation of electricity, steam, heating and cooling that is consumed (i.e., lost) in a T&D system).	Finance Sustainability	Electricity consumption information was obtained from supplier invoices and verified against consumption recorded through the energy software from the Airport's metering.	High level of confidence
Scope 3	Passenger Surface Access	Land surface access emissions for passengers traveling both to and from the Airport	Aviation Development Sustainability	Passenger surface access emissions are calculated using results of the annual passenger survey undertaken by the Civil Aviation Authority.	High level of confidence
Scope 3	Business Train Travel	Airport company staff business travel on train network.	Finance Sustainability	Expense information obtained from Finance department	Good level of confidence
Scope 3	Business Air Travel	Airport company staff business air travel.	Finance Sustainability	Expense information obtained from Finance department	High level of confidence
Scope 3	Staff Surface Access	Land surface access emissions for staff traveling both to and from the Airport.	Planning, Transport, Surface Access and Strategy, HR, Sustainability	Staff surface access emissions are calculated using results of the annual staff travel survey undertaken by Birmingham Airport.	Good level of confidence
Scope 3	Third-party Fuel	Fuel used in ground service equipment and vehicles belonging to third parties.	Finance Sustainability	Only the fuel used by third parties has been accounted for.	High level of confidence
Scope 3	Third-party refrigerants	The emissions recorded were based on refrigerant used to service existing equipment.	Third-parties	Record of equipment containing refrigerant and the type and quantity used to calculate total emissions	High level of confidence
Scope 3	Third-party de-icer	Quantities of liquid and solid de-icer used by third-parties	Airfield Ops	De-icer usage data obtained from Airfield Operations was used to calculate the total emissions.	High level of confidence
Scope 3	Third-party staff surface access	Land surface access emissions for third-party staff traveling both to and from the Airport.	Planning, Transport, Surface Access and Strategy HR, Sustainability	Third-party Staff surface access emissions are calculated using results of the annual staff travel survey undertaken by Birmingham Airport..	Good level of confidence





## The SECR report, as detailed in the Airport's annual report, is presented in the below table.

Our location-based greenhouse gas (GHG) emissions in 2023/24 (7,845 t/CO2e) increased by 0.6% compared to the previous year (7,797 t/CO2e), despite passenger numbers increasing by 13% and the UK electricity emissions factor increasing by 7%. Historically, the emissions factor has decreased by around 9% a year due to lower coal-fired and higher renewable generation in the UK. However, in the 2023 update there had been an increase in gas-fired generation and a decrease in renewable generation. Applying the 2022 emissions factor to our 2023/24 consumption would have seen our overall GHG emissions decrease by 3.2% to 7,550 t/CO2e. Our market-based GHG emissions in 2023/24 (3,391 t/CO2e) decreased by 5.7% from 2022/23 (3,597 t/CO2e) due to lower than forecast gas consumption and fewer refrigerant leaks.

Relative to pre-COVID, as the airport re-opened, we have retained the majority of the energy and carbon emission reductions achieved whilst there were fewer passengers and our GHG emissions are c.2,500 t/CO2e less than 2019/20, a 25% reduction.



**Energy Usage & Tonnes of CO2e by Emissions Type**

Emissions Type	2022/23		2023/24			% Change Tonnes of CO2e	
	Consumption	Unit	Tonnes of CO2e	Consumption	Unit		Tonnes of CO2e
Scope 1 (Gas)*	13,765,338	kWh	2,513	13,263,095	kWh	2,426	-3.4%
Scope 1 (Fuel – Owned Transport)	213,511	litres	544	244,182	litres	612	12.4%
Scope 1 (Fuel – Diesel Generators)	60,200	litres	154	90,280	litres	227	47.3%
Scope 1 (Refrigerants)	184	kg	350	40	kg	65	-81.5%
Scope 1 (De-icer)**	-	litres	-	49,100	litres	41	-
	-	kg	-	13,525	kg	-	-
Scope 1 (LPG)	6,659	litres	10	2,092	litres	3	-68.6%
<b>Scope 1 (Total)</b>	-	-	<b>3,572</b>	-	-	<b>3,374</b>	<b>-5.5%</b>
Scope 2 (Purchased Electricity; Location-Based)*	21,717,207	kWh	4,200	21,512,300	kWh	4,455	6.1%
Scope 2 (Purchased Electricity; Market-Based)***			0			1	-
<b>Total (Scope 1 &amp; 2; Location-Based)</b>	-	-	<b>7,772</b>	-	-	<b>7,829</b>	<b>0.7%</b>
<b>Total (Scope 1 &amp; 2; Market-Based)</b>	-	-	<b>3,572</b>	-	-	<b>3,375</b>	<b>-5.5%</b>
Scope 3 (Business Car Travel)****	6,392	miles	25	10,986	miles	16	-36.2%
	10,437	litres		6,006	litres		
<b>Total (Scope 1, 2 &amp; 3; Location-Based)</b>	-	-	<b>7,797</b>	-	-	<b>7,845</b>	<b>0.6%</b>
<b>Total (Scope 1, 2 &amp; 3; Market-Based)</b>	-	-	<b>3,597</b>	-	-	<b>3,391</b>	<b>-5.7%</b>

We have continued to monitor and deliver energy savings through a combination of energy demand reduction, investment in more energy efficient equipment and colleague engagement with energy and carbon management.

Birmingham Airport is committed to working with our partners to reduce our indirect (Scope 3) carbon footprint. Scope 3 emissions are indirect emissions which are a consequence of our operation, but which occur from sources not owned or controlled by the Airport. The largest components of our indirect carbon footprint are emissions from the aircraft landing and take-off cycle and passenger travel to / from the Airport. We have been increasing our focus on these emission sources to understand how we can best assist and facilitate the transition to lower-carbon aircraft fuels and more sustainable surface access.

“We have made great progress this year on our journey to net zero carbon by 2033. Our pipeline of carbon reduction projects, including LED upgrades and a 6.8 MW solar array, will ensure progress continues in the upcoming financial year”

**-Jon Davies, Energy and Carbon Manager**

\*Gas and electricity used by tenants and retail concessions are excluded as they are reported under SECR by these third-party companies.  
 \*\*Reporting of emissions from de-icer is a new Airport Carbon Accreditation (Level 3) reporting requirement for this year.  
 \*\*\*100% of electricity procured through the Airport's group power contract is green, generated by renewable sources such as solar and wind power. Electricity used by the Airport's community noise monitors is not part of the group contract, nor is electricity from public EV charging points used in personal/hire cars on business use. These sources account for the 1 t/CO2e in 2023/24.  
 \*\*\*\*Business car travel emissions were calculated using both mileage claims (miles) and fuel receipts (cost converted into litres). These were added together for an overall business car travel emissions figure





# Full GHG Emissions Inventory



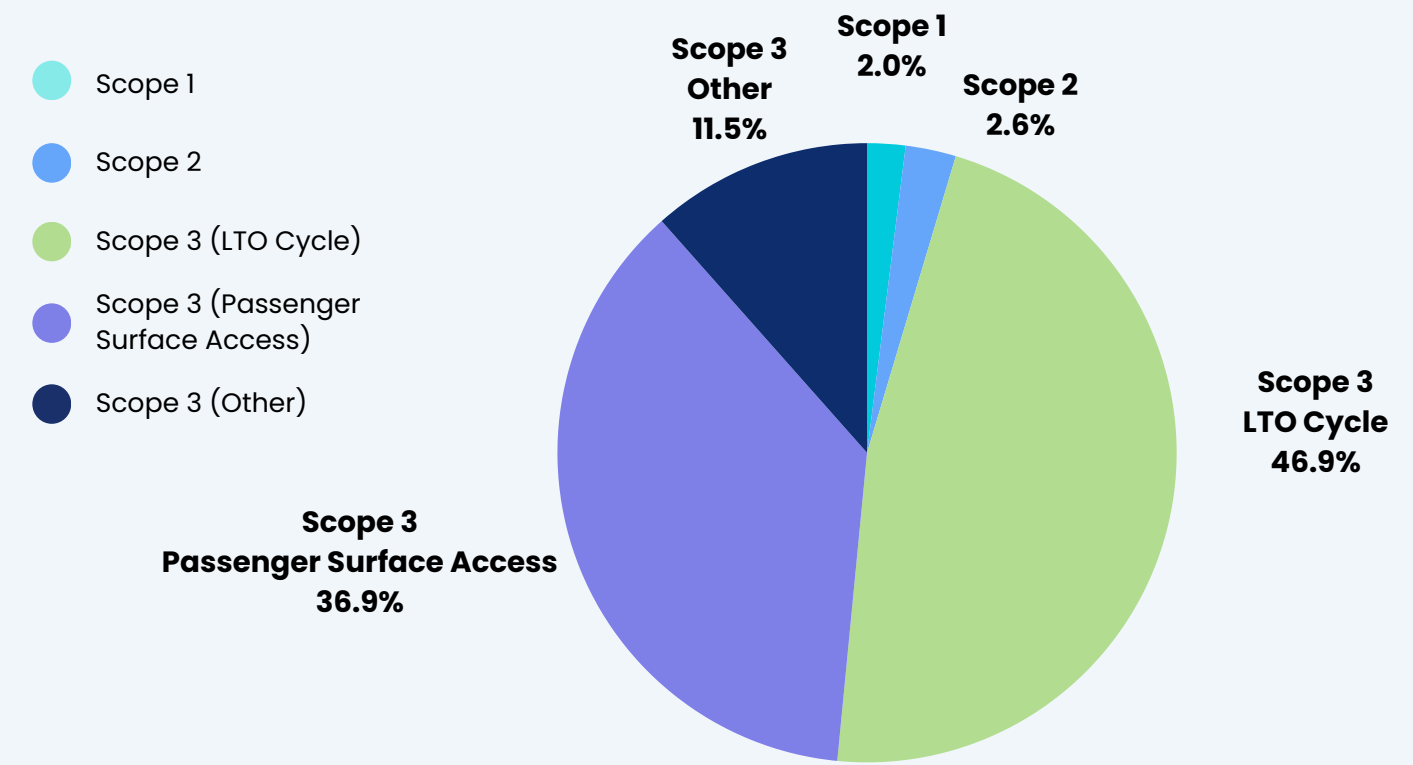
GHG Emissions Inventory (t/CO2e)		
Emissions Type	2022/23	2023/24
Scope 1 (Gas)	2,513	2,426
Scope 1 (Fuel – Owned Transport)	544	612
Scope 1 (Refrigerants)	350	65
Scope 1 (Fuel – Diesel Generators)	154	227
Scope 1 (LPG)	10	3
Scope 1 (De-icer)	0	41
<b>Scope 1 (Total)</b>	<b>3,572</b>	<b>3,374</b>
Scope 2 (Purchased Electricity; Location-Based)	4,200	4,455
Scope 2 (Purchased Electricity; Market-Based)	0	1
<b>Total (Scope 1 &amp; 2; Location-Based)</b>	<b>7,772</b>	<b>7,829</b>
<b>Total (Scope 1 &amp; 2; Market-Based)</b>	<b>3,572</b>	<b>3,375</b>
Scope 3 (LTO Cycle)	71,398	79,317
Scope 3 (Passenger Surface Access)	67,263	62,438
Scope 3 (Third-party surface access)	0	7,643
Scope 3 (On-stand Power (APU))	3,185	3,952
Scope 3 (Tenant and Concession – Electricity)	2,623	2,816
Scope 3 (Staff Surface Access)	907	1,202
Scope 3 (Third-party GSE Fuel)	829	977
Scope 3 (Tenant and Concession – Gas)	939	830
Scope 3 (Aircraft Engine Testing)	811	813
Scope 3 (Electricity Transmission and Distribution)	384	385
Scope 3 (Third-party Refrigerants)	0	291
Scope 3 (Third-party De-icer)	0	247
Scope 3 (Water Use and Treatment)	165	135
Scope 3 (Business Travel – Air)	87	92
Scope 3 (Home-working)	0	73
Scope 3 (Waste Management)	40	42
Scope 3 (Business Travel – Car)	25	16
Scope 3 (Goods Deliveries)	0	4
Scope 3 (Business Travel – Train)	1	1
Scope 3 (Business Travel – Taxi)	0	1
<b>Scope 3 (Total)</b>	<b>148,658</b>	<b>161,275</b>
<b>Total (Scope 1, 2 &amp; 3; Location-Based)</b>	<b>156,430</b>	<b>169,104</b>
<b>Total (Scope 1, 2 &amp; 3; Market-Based)</b>	<b>152,230</b>	<b>164,650</b>

**Birmingham Airport's full GHG emissions inventory is presented in the table. Our Scope 3 emissions in 2023/24 (161,275 t/CO2e) increased by 8%, from 2022/23.**

This year we have added new Scope 3 categories to our GHG emissions inventory, reflecting our ambition to continuously improve our reporting and to remain compliant with Airport Carbon Accreditation requirements. On a like-for-like basis, our 2023/24 Scope 3 emissions, not including the new emission sources, increased by 3% from 2022/23

Air traffic movements (ATMs) increased by 6% in 23/24 from 22/23, which led to an increase in emissions from the landing and take-off cycle, and on-stand power. A combination of employee numbers increasing, more employees driving to work and generally travelling further meant staff surface access emissions increased by 33%. Passenger surface access emissions decreased by 7%, despite the Airport welcoming 13% more passengers this year reflecting a modal shift to train (14%, up from 8% in 22/23) and a reduction in car travel (82% down from 88% in 22/23). Third-party ground service equipment (GSE) fuel emissions increased by 18%, in line with the increase in passenger numbers, while tenant and concession gas emissions were 12% less than 22/23, benefiting from a milder winter.

## BHX Greenhouse Gas Emissions 2023-24







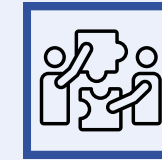
# Progress Summary – Scope 1 and 2 Emissions



## Airport Carbon Accreditation

**The Airport achieved Level 3 (optimisation) of the ACA scheme for a second year.**

The ACA scheme, overseen by Airports Council International (ACI), is a global carbon management standard for airports. The scheme brings the Airport's decarbonising activities and reporting under ACI's framework of scrutiny, including comparison with other airports worldwide.



## Sustainability Week

The Airport held the inaugural Sustainability Week in 2023, hosting a variety of activities designed raise awareness about the team, what we do and how everyone has a part to play in achieving more sustainable operations.



## Energy demand reduction

Birmingham Airport has continued to focus on energy demand reduction. Through monitoring our energy consumption using submetering, overnight energy walkarounds and monthly meetings of the Operational Energy and Cost Reduction Group, the Airport made 110 interventions, delivering savings of c. 550,000 kWh of energy (2%) and 114 tonnes of carbon - equivalent to planting 30 trees. This included LED lighting replacements and installation of better controls, HVAC optimisation and switching off assets not in use.



## Investment in metering

'You can't manage what you can't measure'. The Airport has continued to invest in metering this year, installing automated meter reading devices to our incoming water supplies, improving visibility of our consumption and reducing the risk of water leaks going undetected. Work to connect 66 electricity sub-meters to our energy management system was also completed.



## Journey to Net Zero

Birmingham Airport launched its Net Zero Carbon Plan in April 2022, which sets out a roadmap to net zero by 2033. Progress is being made across all workstreams within the Plan including LED lighting, solar PV and electric vehicle charge point installations.

Installation of onsite renewable generation is a key component of our net zero journey. This year construction started on a 6.8-megawatt configuration of c. 12,000 solar PV panels on the 1.5km-long embankment know as the 'Alpha Bund', which provides residents of Marston green with protection from ground noise on the airfield.

Once operational in August 2024, the 6.8-megawatt array will provide at least 20% of our on-site electrical power. This will reduce our reliance on the power grid and reduce our emissions by 19%, moving us closer to our goal of becoming a net zero carbon airport by 2033.





# Progress Summary – Scope 3 Emissions



## Collaboration

We continue to be a part of the **Hydrogen Valley consortium**, working across the Midlands to develop the hydrogen economy. In 2023, the Airport entered a long-term partnership agreement with ZeroAvia to make hydrogen refuelling and domestic flights of zero-emission aircraft a reality.

We are also a long-standing member of **AirportsUK** (formerly the Airport Operators Association), and we work with **Sustainable Aviation** who are a coalition of UK airlines, airports, manufacturers, and air navigation service providers, who have a long-term strategy with the aim of making aviation a cleaner, quieter and smarter industry.

This year, the Airport joined the **Airport Sustainability Forum**, a consortium of UK airports working together to overcome the challenges to decarbonising airport operations. We continue to be an active member of the **Solihull Sustainability Visioning Group** and signed up to the **West Midlands Net Zero Business Pledge**, a regional commitment to reducing emissions and reaching net zero carbon.

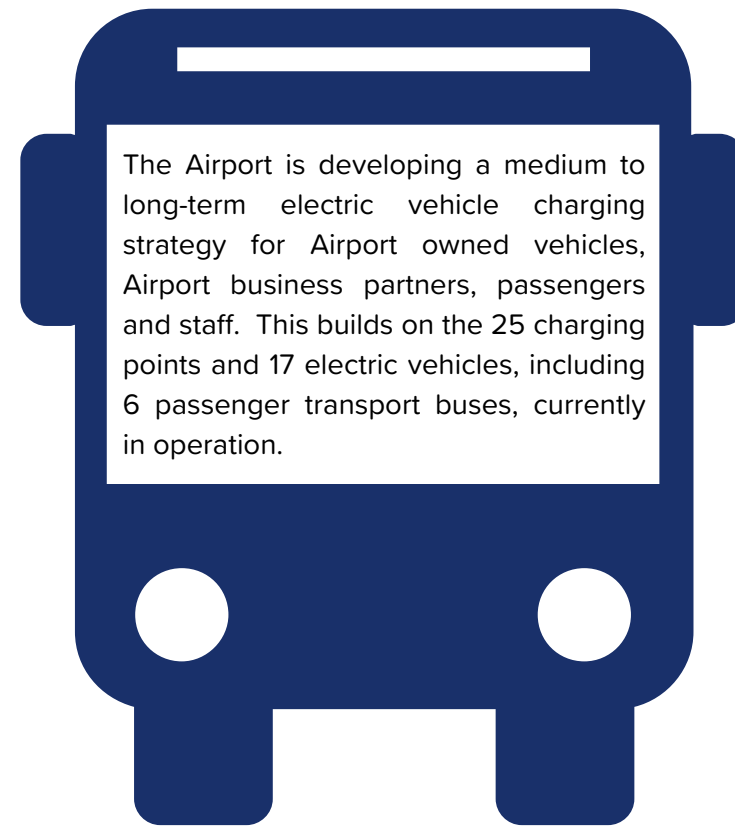


## Surface Access

**Our vision for surface access is to make Birmingham Airport the most accessible Airport in the UK by providing integrated and accessible multi-modal transport options for all.**

The key objectives for the Airport are to enhance accessibility, improve public transport connections including improving access through the day, i.e. earlier and later public transport, and meet increases in demand as our passenger numbers grow. Our current Surface Access Strategy for 2023 onwards, sets out how Birmingham Airport will meet these objectives.

## Electric Vehicles



The Airport is developing a medium to long-term electric vehicle charging strategy for Airport owned vehicles, Airport business partners, passengers and staff. This builds on the 25 charging points and 17 electric vehicles, including 6 passenger transport buses, currently in operation.



## Future Aviation Fuels

**The Airport understands that collaboration with internal and external stakeholders is key to reducing emissions.**

We are supporting airlines to reduce emissions during flight through efficient airspace design and facilitating procedures for lower-carbon take-off and landing including providing renewable electricity for use by aircraft when on stand. We continue to pursue the implementation of a range of initiatives through **'Operation Pathfinder'** aimed at supporting more efficient aircraft operations at the Airport.

We are developing our position on future aviation fuels and are in discussion with the relevant industries and decision makers, including airlines, fuel providers and other airports, regarding the use of SAF – **Sustainable Aviation Fuel**. As a future fuel, SAF offers up to 80% lower lifecycle carbon emissions compared to conventional jet fuel, playing a crucial role in our journey towards net-zero aviation







## Assurance

The emission calculation methodologies are aligned with UK Government guidance and the GHG Protocols.

Internally, the Airport's Environmental Management System aligns to ISO 14001, ensuring robust processes are in place for the collection of data and reporting of energy use and associated emissions. The Energy and Carbon Manager has responsibility for collection of data and emissions calculations following the Sustainability team's local operating procedures. All the data and calculations are scrutinised by Sustainability team members and a final review is undertaken by the Finance department.

The GHG emissions data and calculations reported under SECR, and included within the Airport's annual report, are audited by an external company as part of the financial audit.



## References

ACI APPLICATION MANUAL ISSUE 14. (2023). <https://www.airportcarbonaccreditation.org/wp-content/uploads/2023/12/ACA-AM-14-FINAL-UPDATE1.pdf>

DEFRA. (2023, June 7). Greenhouse gas reporting: conversion factors 2023. GOV.UK. <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023>

HM Government (2019) Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance. [Online] [Accessed on April 25th 2024]  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/850130/Env-reporting-guidance\\_inc\\_SECR\\_31March.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf)

WBCSD/WRI (2004) The Greenhouse Gas Protocol Corporate Standard. World Business Council for Sustainable Development and World Resources Institute Geneva. [Online] [Accessed on March 20th 2024]  
<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>

WBCSD/WRI (2011) Corporate Value Chain (Scope 3) Accounting and Reporting Standard. World Business Council for Sustainable Development and World Resources Institute Geneva. [Online] [Accessed on March 14th 2024] [https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard\\_041613\\_2.pdf](https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf)





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