Birmingham Airport

Sustainability Strategy

2020 - 2025

Commitment • Investment • Progress

Proud of **every journey**

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01 - Foreword

Birmingham Airport is the 7th largest UK Airport, with around 50 airlines flying 12.5 million passengers a year to more than 150 direct destinations. The Airport is a key driver in the regional economy, where its current net economic impact is estimated at more than £1.5 billion and a total of 30,900 jobs.

Our newly-developed Corporate Purpose is “To be proud of every journey”. We want to create an Airport that our passengers, community and region can be proud of. This is the anchor for our new corporate strategy and is supported by six key pillars, or business imperatives: Growth, Customer, People, Efficiency, Safety & Security - and Neighbour. This Sustainability Strategy is central to delivering on the last of these and achieving the twin outcomes of being a responsible neighbour and reducing our environmental impact.

The Strategy brings together what we’ve learned and implemented to date and what we aim to do over the next five years. It addresses the key aspects of our environmental and community impacts and how we will deal with the challenges - and the opportunities - that present themselves, both in our day-to-day activities and in the long-term.

This Strategy presents nine sustainability themes. It outlines our vision for each, what we will do to implement that vision and how we will measure our progress. It references the policies, plans and procedures we have developed, or are developing, and these will be available on our website so that stakeholders can examine our approach in detail. It highlights too how our commitments align with the United Nations Sustainable Development Goals and the recently published Airports Council International (ACI) Sustainability Strategy for Airports.

I am confident that we have acted as a responsible business in the past; we have a recognised track record of finding solutions that minimise the negative impacts we have on our communities and our environment. Yet, while I may be confident, I am not complacent. We do not yet have all the answers and we can always do more. This is a strategy that will evolve.

The Sustainability Strategy is championed by our Executive Board, whose members take collective responsibility for driving the process of fully integrating its principles into the way we do business. We will continue to keep our stakeholders updated on how we’re progressing and will publicly report on our performance, against a range of measures, on an annual basis.

I welcome any comments you may have about our Sustainability Strategy and you can do this via email at Sustainability@birminghamairport.co.uk.

We undertake to consider your comments as part of the review process and in this way we aim to keep the Strategy relevant to the needs of our business and to all our stakeholders.

Nick Barton
CEO

02 - About Birmingham Airport

Birmingham Airport celebrated its 80th birthday in 2019, commemorating 80 years since HRH The Duchess of Kent officially opened Elmdon Airport, in 1939. The Airport has grown significantly over the last eight decades and is now the UK's 7th largest Airport. Its choice of airlines and wide-range of destinations make Birmingham the preferred national and international aviation hub for the Midlands.

In 2018/2019, the Airport handled 12.5 million passengers and 100,000 Air Transport Movements (ATMs). The operation is served by a single runway with associated aircraft stands and taxiways, the terminal building, transport access and car parking. A range of ancillary facilities providing air traffic control, aircraft maintenance, cleaning, catering and cargo operations are mainly located around the original Elmdon terminal building, which was awarded Grade II listed status in 2018.

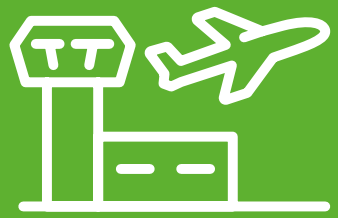
Birmingham is one of the UK's most accessible Airports. Not only is it at the centre of the national motorway system, it is the only UK Airport directly connected to the national rail network. A free, two minute 'Air-Rail' service links passengers to Birmingham International Station, which serves more than 100 direct destinations. From Birmingham International, seven services an hour make the 10-minute journey to and from Birmingham New Street Station, which provides onward connections to the rest of the country, while up to six services an hour provide a direct service to central London in as little as 70 minutes. Improving public transport links to the Airport remains key to our vision of sustainability and is covered both in this document and in more detail in our specific Surface Access Strategy here.

The Airport site itself is located 10 miles from the city centre and covers an area of 361 hectares. There are three watercourses flowing through the site - Low Brook; Hatchford Brook and Westley Brook – which empty into the River Cole approximately 3km downstream of the Airport. They are protected by a sophisticated flood and pollution control system which is discussed in more detail in the water section of this Strategy.

The Airport is located within the Metropolitan Borough of Solihull, bordering the City of Birmingham. To the north of the airfield are residential areas of east Birmingham and north Solihull. To the south are areas of countryside with small towns and villages. To the east and west are Marston Green and Elmdon respectively, which, while not directly overflown, are impacted by noise from arriving and departing aircraft, taxi-ing aircraft and from engine testing.

Earlier in 2019 we published our Master Plan 'the Midlands gateway to the world', focussing on our development to 2033, when we expect to handle around 18 million passengers. The Airport is a key driver in the regional economy, where its current net economic impact (GVA) is estimated at more than £1.5 billion and a total of 30,900 jobs. Our Master Plan projects this will rise to £2.1 billion GVA and 34,400 jobs by 2033. To meet this rising demand, we plan to invest around £500 million to expand and improve the Airport, to transform the experience for our passengers and to improve efficiency for our Airlines and partners.

Alongside the Master Plan, we have undertaken a close examination of our existing and future environmental impact to develop this new Sustainability Strategy. It aims to maximise the economic and social benefits the Airport brings to our region and minimise our impact on our neighbours and the global environment.



03 - Sustainability at a Glance

Passengers
2014/15: **9.9 million**
2018/19: **12.5 million**

Aircraft Movements
2014/15: **92,447**
2018/19: **100,147**

Average Load
2014/15: **79%**
2018/19: **83%**

% On Track Aircraft
2018/19: **98%**

% Continuous Descent Approaches
2018/19: **92%**

Public Transport Use
2018: 21.3%

Waste Recycled
2018/19: **53%**

Landfill Avoidance
2018/19: **100%**

CO_2 per Passenger
2014/15: **2.45 kg**
2018/19: **1.33 kg**

Jobs on Airport Site
2018/19: **7,739**

No. of Students Engaged
(total last 5 years)
15,306

Community Investment
(total last 5 years)
£1.2 million

04 - Global Context

It is widely acknowledged that the world is facing significant global challenges, including those related to the climate, environmental degradation and a shortage of material resources. We recognise this and have responded to changing policy and legislation as it has evolved to build a strong track record of environmental management.

This has resulted in a comprehensive, but separate set of individual management plans for each of our key impacts. In developing this Strategy, we have taken a more holistic approach; by taking a fresh review of every opportunity we have to avoid, reduce or mitigate our impacts and to maximise the economic and social potential of the Airport, we are reinforcing our commitment to the sustainable and inclusive growth of the Airport.

www.un.org/sustainabledevelopment

We have structured our strategy around two key policy documents; the newly-published Airport Council International (Europe) Sustainability Strategy for Airports and the United Nations Sustainable Development Goals.

However, adopting the principle of 'Think Global, Act Local' we have reviewed them in line with what is most relevant to the situation here at Birmingham Airport and we will work with our stakeholders to define priorities across the broad sustainability agenda. We have also carried out an extensive review of our existing environmental impacts and implemented a new Environmental Management System (EMS), aligned to ISO 14001 standards. The EMS has been implemented internally to manage our impacts in a structured way, with a focus on continuous improvement.

Although this Strategy covers a 5-year period, some of our targets will be delivered over a longer period. We will nevertheless strive to achieve these as soon as practicable and we are committed to reviewing this strategy on an annual basis.

In developing this new strategy, we have reviewed some key policy documents including;

- The United Nations Sustainable Development Goals
- The Airport Council International (Europe) Sustainability Strategy for Airports
- The Airport Master Plan and future impacts
- HM Government Environmental Reporting Guidelines (2019)
- HM Government 25 year Environmental Plan
- The Committee on Climate Change latest report Net Zero – The UK's contribution to stopping global warming
- The Department for Transport draft Aviation Strategy (2018)
- Environmental legislation

05 - Working with our Stakeholders

The Airport does not operate in isolation and the key to delivering this strategy will be to work in partnership with our stakeholders. These include the Airport community - those residents, small businesses, landowners and occupiers living close to the Airport and those tenants, concessions and staff who work here.

We also work with national and local government, with Parish and Town Councils and with Government funded organisations and large businesses around the region. Regionally, we will engage with initiatives such as the Regional Energy Strategy for the West Midlands and with the West Midlands Combined Authority's proposed target of reaching net-zero emissions no later than 2041.

At an industry level we work extensively with Sustainable Aviation, a collaboration of UK airlines, Airports, air navigation service providers and major aerospace manufacturers which sets a long-term strategy for collective action to tackle the challenge of ensuring a cleaner, quieter, smarter future for our industry.

At a local level, we see the Airport Consultative Committee (ACC) as the key enabler to achieving our Strategy. The ACC, representing the interests of local authorities, resident groups, industry bodies and Airport users, plays a vital role as a communication channel between the Airport and its many stakeholders. It is our responsibility to ensure anyone who might be affected has an opportunity to comment on and shape our decisions. We understand that clarity and transparency are the keys to maintaining a positive dialogue with our community stakeholders. We are therefore committed to fully engaging with the ACC, recognising its role as a 'critical friend' and the primary channel for the formal expression of community views and concerns.

Key stakeholders

Industry	Airport Community	Local Community	Business Community	Government/ Regulators
• Sustainable Aviation • Airlines • NATS	• Employees • Tenants • Concessions	• Residents • Parish/Town Councils	• Small Businesses • Landowners • Regional Business Community • Chambers of Commerce	• Local Authorities • Department for Transport • Department for Environment, Food and Rural Affairs • Department for Business, Energy & Industrial Strategy • Civil Aviation Authority

06 - Birmingham Airport Adaptation of the ACI Sustainability Framework

Impact	Material Issue	Sustainable Development Goals
Environmental	Climate Change Mitigation	7 Affordable and Clean Energy; 13 Climate Action
	Climate Change Adaptation	13 Climate Action
	Local Air Quality	3 Good Health and Well-Being
	Waste, Supply Chain & the Circular Economy	9 Industry, Innovation and Infrastructure; 11 Sustainable Cities and Communities; 12 Responsible Consumption and Production
	Water	6 Clean Water and Sanitation; 14 Life Below Water
	Biodiversity	15 Life on Land
Social	Noise	3 Good Health and Well-Being; 9 Industry, Innovation and Infrastructure; 11 Sustainable Cities and Communities
	Quality of Life of Local Communities	3 Good Health and Well-Being; 4 Quality Education; 5 Gender Equality; 8 Decent Work and Economic Growth; 10 Reduced Inequalities; 11 Sustainable Cities and Communities; 16 Peace, Justice and Strong Institutions
Economic	Economic Development & Employability	5 Gender Equality; 8 Decent Work and Economic Growth

07 - Our Vision and Strategy

Our new Sustainability Strategy sets out a robust commitment towards a sustainable future for the Airport over the next five years. We have adopted a practical and responsible approach to our social and environmental responsibilities and the Strategy has been developed around the theme of Commitment, Investment, Progress. Our key priorities have been established and detailed action plans will be developed to enable us to achieve our commitments.

Our Strategy

Sustainability is clearly a huge concept, so we began formulating our Strategy by defining what Sustainability means to Birmingham Airport.

Our Vision for Sustainability is to:

"Maximise the economic and social benefits the Airport brings to our region and minimise our impact on our neighbours and the global environment."

Our Key Priorities

We believe our priorities to be:

Reducing our environmental impact

- Climate Change Mitigation
- Climate Change Adaptation
- Local Air Quality
- Waste, Supply Chain & the Circular Economy
- Water
- Biodiversity

Being a responsible neighbour

- Noise
- Community Investment & Wellbeing
- Economic Development & Employment

08 - Reducing our Environmental Impact

Climate Change Mitigation

It is now widely accepted that human activity, primarily industrialisation and the burning of fossil fuels, is responsible for increasing concentrations of greenhouse gases in the atmosphere.

There is concern that this is enhancing the natural greenhouse effect, raising the global surface temperature and impacting global climate systems. This challenge is being tackled at an international level via the Paris Agreement. Within the framework of the United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement aims to keep global temperatures "well below" 2.0°C (3.6°F) above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. It also aims to increase nations' abilities to adapt to the adverse impacts of climate change and to foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production.

In the UK, the Committee on Climate Change (CCC) recently published its climate change report 'Net Zero – The UK's contribution to stopping global warming' and recommends a new emissions target for the UK: net-zero greenhouse gases by 2050. The CCC report concludes that aviation's contribution can be reduced through operational measures, new aircraft efficiencies, constraining the growth in demand and the limited use of sustainable biofuels. Since the publication of the 'Net Zero' report, the CCC has written to the Secretary of State for Transport to clarify the rationale for including aviation and to re-state the measures outlined above and we wait to see how this advice is reflected in the forthcoming Aviation Strategy.

Our aim is to be a net zero carbon Airport by 2033, prioritising zero carbon Airport operations and minimising carbon offsets.

In this section of our Strategy, we address two categories of emissions; those that the Airport Company is directly responsible for (known as scope 1 and 2 emissions), and those that are a consequence of our operation, but for which we are not directly responsible (known as scope 3 emissions). We have set ourselves the ambitious target to be a net zero carbon Airport by 2033 for those emissions which we are directly responsible for and we outline how we aim to achieve this in more detail here.

Taking a wider industry perspective, aviation currently accounts for around 7% of the UK's total greenhouse gas emissions, but this figure is likely to increase as other sectors take advantage of technologies that enable them to decarbonise more quickly. While there have been great improvements in fuel efficiency, there are currently few immediate opportunities for aviation to take radical action and aviation could represent 25% of the UK's greenhouse gas emissions by 2050. Although it is airlines which bear the direct responsibility for managing these emissions, we work closely with airlines and with air traffic control to deliver an efficient airfield and airspace operation. This collaborative approach is best illustrated through our engagement with Sustainable Aviation to tackle the challenge of ensuring a cleaner, quieter, smarter future for our industry.

08 - Reducing our Environmental Impact

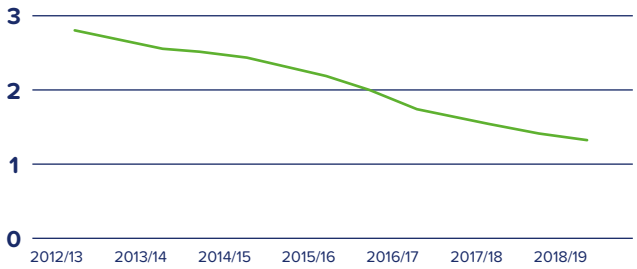
Climate Change Mitigation

Our Direct Emissions (Scope 1 and 2)

Scope 1 emissions are direct emissions from sources that the Airport owns or controls and include the consumption of gas, diesel consumption (through our owned and leased vehicle fleets) and refrigerants. Scope 2 emissions are derived from purchased electricity, where emissions are generated externally but which are attributed to energy consumption at the Airport. Our historical Scope 1 and 2 data, included in the table below, includes tenants and concessions within the terminal areas and all buildings on the Airport site where the Airport Company has control over the power supply. However, in April 2019 Streamlined Energy and Carbon Reporting was introduced by Government, requiring businesses to report on their emissions in their financial accounts, this means that tenants and concessions will separately report their emissions. Given that tenants and concessions make up around 35% of our Scope 1 and 2 emissions, predominately through energy supply, we expect our direct emissions to fall considerably from April 2019 as a result of the new guidance. However we will continue to report these emissions voluntarily and work with our tenants and concessions to reduce their emissions.

Traditionally our approach to carbon management has focussed on reducing our consumption of electricity. This has been achieved by investment in comprehensive metering across the Airport site, identification of high-consumption equipment and investment in its replacement, for example through the widespread replacement of conventional lighting with LED. We have also reduced electricity consumption through investment in on-site electricity generation by rooftop solar PV, by the use of combined heat and power plant, and through behavioural change programmes encouraging staff to switch off equipment when it is not required.

kg CO_2 per passenger

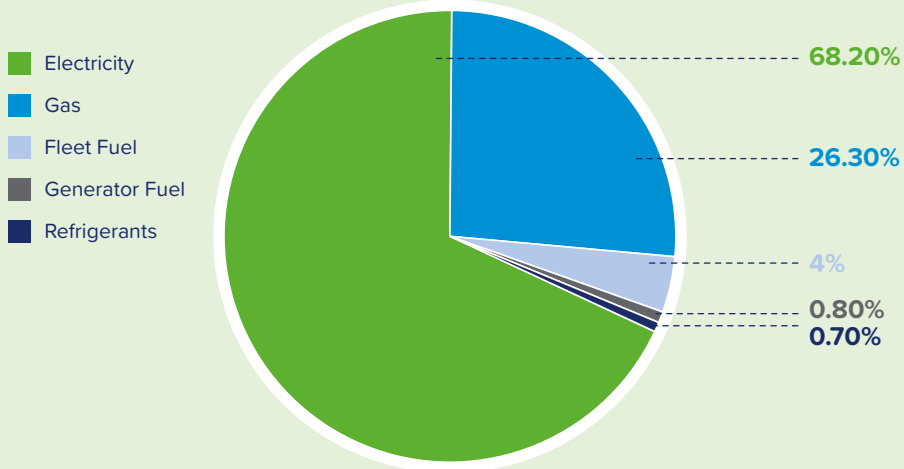


This has led to a reduction in electricity consumption of 15% since 2012/13. Taking into account that we, like all UK businesses, have benefited from the decarbonisation of the grid, we have seen a reduction in our absolute emissions of 40% and a reduction per passenger of 53%.

Tonnes of CO_2 per year by emissions type

Tonnes of CO_2	Emissions Type		
	Scope 1 (gas, owned transport, fugitive emissions)	Scope 2 (purchased electricity)	Total Gross Emissions
2012/13 Baseline	6,041	19,001	25,042
2013/14	5,433	18,460	23,893
2014/15	4,939	19,302	24,241
2015/16	5,193	17,418	22,611
2016/17	5,049	15,743	20,792
2017/18	6,012	13,406	19,418
2018/19	5,309	11,383	16,691

Total GHG Emissions (Tonnes)



08 - Reducing our Environmental Impact

Climate Change Mitigation

It is more difficult to reduce gas consumption since we, like all infrastructure operators, are reliant on gas for space heating where consumption is directly associated with the weather conditions. Gas replacement solutions such as the widespread use of hydrogen are still in the early stages of development, but we will keep a close eye on evolving technologies.

We are committed to reducing our impacts and our overall aim is that Birmingham Airport will be a net zero carbon Airport by 2033, prioritising zero carbon Airport operations and minimising carbon offsets. How we will deliver this is set out in the future action table below and includes a substantial investment in more energy efficient equipment and on-site energy generation.

We recognise that climate change is one of the greatest challenges of our time and we have used this strategic review to take account of the latest evidence and guidance to inform our new Carbon Management Plan, which will be published next year.

Our Indirect Emissions (Scope 3)

Scope 3 emissions are a consequence of our operation, but they originate at sources which we do not own or control.

They include:

- Business travel – air, rail and private car travel for business reasons
- Passenger travel to the Airport site
- Aircraft landing and take-off cycle (ICAO LTO Cycle)
- Waste management
- Water use and treatment

The vast majority of emissions associated with aviation come from aircraft in flight, and it is the Landing Take Off cycle which makes the largest contribution to these emissions. The industry is taking steps to minimise this impact through improvements in aircraft and engine design. We continue to work with Sustainable Aviation and their CO_2 roadmap to support these initiatives. The second largest proportion of our scope 3 emissions is associated with passenger and visitor travel to the Airport. We have produced a dedicated Surface Access Strategy, to manage these through the setting of robust targets to increase the proportion of journeys to and from the Airport made by public transport.

We calculate our scope 3 emissions every 3 years:

Scope 3 Emissions (Tonnes CO_2e)

	2012/13	2015/16	2018/19
LTO Cycle	105,428	103,123	116,959
Passenger Travel	36,135	168,515	140,740
Train (Business Travel)	4	2	3
Flights (Business Travel)	212	143	97
Car (Business Use)	3	4	5
Waste Management	33	38*	60
Water Use & Treatment	208	394	386
1,501	1,501	1,438	967
Total Scope 3 Emissions	**143,524**	**273,657**	**259,216**

In 2015/16 we changed the methodology for calculating passenger travel. It is now more accurately calculated using route planning software which significantly increased the travel distance. In addition, we now count passengers being dropped off as two journeys, previously passengers being dropped off at the Airport were only calculated as making one journey. This explains the large increase in passenger travel emissions between 2012/13 and 2015/16.

08 - Reducing our Environmental Impact

Climate Change Mitigation

Carbon Actions

Our existing actions:

Scope 1 and 2 - Direct Emissions	
Measure scope 1 and 2 emissions annually	The Airport has been measuring scope 1 and 2 emissions annually since 2012/13.
Formulate high-level commitment to emissions reductions	The Airport has made high level commitments to reducing carbon emissions and significant progress has been made since 2012/13 leading to a 33% reduction in carbon emissions.
Investing in smart meter technology	Smart meters are the basis of our energy management system. Automatic readings are taken across the Airport site, allowing for detailed monitoring and for targeting building initiatives.
Building management system	This allows us to monitor and review individual meters and energy usage across the Airport site and to reduce consumption where possible, by the efficient management of our heating and cooling.
Scope 3 - Indirect Emissions	
Operation pathfinder	Operate this forum with Air Traffic Control and airlines to deliver a number of environmental initiatives including incentivising the use of Fixed Electrical Ground Power (FEGP) so that aircraft power their onboard facilities using ground power, rather than burning fuel via their Auxiliary Power Unit. We also facilitate CO_2 savings through better use of airspace and proactively supporting airlines in reducing CO_2 through fuel burn.
Continuous descent approaches	Continuous Descent Approaches (CDAs) reduce CO_2 and the noise impact of landing aircraft. CDAs involve aircraft staying higher for longer and maintaining a constant angle of descent, allowing for a smoother descent to landing.
Continuous climb departures	Similar to CDAs, Continuous Climb Departure (CCDs) are an operational procedure that allows aircraft to perform a continuous climb during take-off. Making efficiencies to the take-off procedure will provide environmental benefits by reducing fuel consumption and emissions.
Single engine taxi-ing	Encourage and support airlines to reduce fuel consumption and CO_2 emissions by using a single engine to taxi where possible.
Working with sustainable aviation	We work in partnership with Sustainable Aviation, including on their CO_2 Roadmap, which details how the aviation industry can achieve the target of halving CO_2 emissions by 2050, compared with 2005 levels, despite predicted growth in air travel.
Deliver airspace change	Work with NATS and the Civil Aviation Authority to identify and deliver changes to airspace to reduce fuel burn and emissions emitted by aircraft in flight. This is carefully considered against any changes to the noise impact.

08 - Reducing our Environmental Impact

Climate Change Mitigation

We will progress our commitment by (New Actions):

Carbon Actions

Our aim is to: Be a net zero carbon Airport by 2033, prioritising zero carbon Airport operations and minimising carbon offsets.

Scope 1 and 2 - Direct Emissions	
Develop a Carbon Management Plan to support the long-term target of net zero emissions by 2033	Develop a full detailed Carbon Management Plan to deliver a roadmap to become a net zero carbon Airport by 2033, prioritising zero carbon Airport operations and minimising carbon offsets.
Demonstrate emissions reductions	Continue to measure our carbon footprint and commit to demonstrate emissions reductions through annual reporting against the Carbon Management Plan.
Review of energy efficiency investment	Reviewing energy demand and appraising the latest technology for making investment decisions to reduce energy consumption.
Carry out an LED lighting replacement programme	Continue to invest in LED lighting across the Airport site.
Install solar controlled window film on Airport buildings	With less solar heat coming in and less heat escaping, there will be less demand from heating and cooling equipment, saving on energy consumption and CO_2 emissions.
Develop a Heating and Cooling and Ventilation Strategy	To include asset replacement and examination of energy efficient technology.
On-site generation	Investigate opportunities for on-site energy generation, including Solar PV Arrays.
Develop Energy and Sustainable Building Standards	Develop standards for major Airport developments and monitor their implementation.
We will work in collaboration with our regional partners on initiatives to reduce carbon emissions	
Scope 3 - Indirect Emissions	
Review airside and landside vehicles and encourage the greater use of low emission and electric vehicles	Carry out a detailed review of all Airport third party owned vehicle fleets and encourage the use of electric vehicles.
Develop infrastructure for electric vehicles (EVs) driven by passengers and employees	Provide additional EV infrastructure for use by passengers and employees.
Implement the Sustainable Travel Plan and Surface Access Strategy	Increase journeys to and from the Airport made by public transport. A target of 35% Public Transport Modal Share by 2030 (or upon reaching 27 million passengers) is in place. Improve cycling routes and bicycle parking provision.
Review Travel Plan and conduct new staff travel surveys every 12 months to monitor performance against our targets	These targets aim to reduce by 3% the number of passengers travelling to the Airport by car and to reduce by 2% the number of single occupancy car trips to the Airport made by staff by 2023.
Deliver airspace change	Continue to work with the NATS and the Civil Aviation Authority to identify and deliver changes to Airspace to reduce fuel burn and emissions emitted by Aircraft in flight. This will be carefully considered against any changes to the noise impact.

08 - Reducing our Environmental Impact

Climate Change Mitigation

Key Performance Indicators:

- Absolute CO_2 emissions (Scope 1, 2 and 3)
- Absolute CO_2 emissions (Scope 1, 2 and 3) per passenger.
- % of zero emissions energy in the Airport's consumption
- % of aircraft flying a continuous descent approach
- % of aircraft flying a continuous climb departure
- % availability of Fixed Electrical Ground Power
- % Public Transport Modal Share
- £ invested annually in energy projects

Supporting Policies and Plans

Carbon Management Plan

Case Study

We have installed 212 solar panels on the roof of our terminal building which in 2018/19 generated 51,840 kWh of electricity which is enough to run a typical domestic electric oven for 2,482 days or 6.8 years. We are committed to exploring the opportunities for further investment in green technology.

08 - Reducing our Environmental Impact

Climate Change Adaptation

Climate change has the potential to impact the operations of Birmingham Airport and we are committed to ensuring that we adapt to the prospects of hotter, drier summers, warmer and wetter winters or to the potential for increasingly frequent extreme weather events.

Energy Security – reliance on fossil fuels and fossil fuel generated electricity. The level of impact is high as this could adversely affect Airport operations and have a financial impact on the Airport Company as a business.

Water Security – water supply and consumption, which could impact on our operations.

Markets Stability – changes in UK 'stay-cations' and increases in foreign markets could potentially have an impact on the Airport Company as a business and future development.

Infrastructure Stability – heating and cooling capacities for future expansion of the passenger terminal and offices may be affected if infrastructure is not 'future-proofed' when considering capital investments.

Flood Risk – risk of reduced capacity, impact on airfield operations due to flooding on the runway and aircraft stands and manoeuvring areas. Considered low to medium likelihood, but it would have a high impact should floods actually occur.

Planning for the future – and not just reacting to emergency situations - will save money and reduce the risks posed by the effects of climate change. We will continue to work with local and national stakeholders on climate change adaptation and report our progress.

Our existing actions:

Climate Adaptation Actions	
Implement existing Climate Change Adaptation Plan	Integration of climate change adaptation into major infrastructure projects, including runway extension works.

Polluted water storage tank – part of our North Airfield Drainage Scheme

08 - Reducing our Environmental Impact

Climate Change Adaptation

Our aim is to:

Ensure that the Airport remains resilient to a changing climate and in a position to benefit from any potential opportunities.

We will progress our commitment by (New Actions):

Climate Adaptation Actions	
Review latest climate predictions and assess them for relevance to the Airport locality	Review latest predictions in line with DEFRA Adaptation Reporting Process (2021) to identify potential climate changes in the Airport's location and assess risks to Airport infrastructure and operations.
Review latest climate global predictions and assess potential impact on Airport business model	Review forecasts in key countries on the served aviation route network and consider their potential impact, for example the likelihood of increased 'staycations' or mass migration to cooler climates such as the UK.
Identify climate adaptation and business continuity measures for extreme weather events	Identify measures and review the Business Continuity Plan for extreme weather events and establish adaptation plans.

Case Study

The design of the Air Traffic Control Tower considered the future climate predictions. As a result, the tower has many features to mitigate against future climate change which include a heating and cooling system designed to cope with more extreme hot and cold weather conditions, external shutters to limit solar gain, internal blinds to allow for optimum temperature control and stabilising technology to limit movement during stormy weather.

We will measure our performance by:

- % of actions completed as set out in the Climate Change Adaptation Plan

Supporting Policies and Plans

Climate Change Adaptation Plan

08 - Reducing our Environmental Impact

Local Air Quality

Local Air Quality is affected by emissions of chemicals and particles both from natural sources and human activity. Airport operations cause emissions which can impact local air quality, principally from aircraft engines during the landing and take-off cycle, but also from aircraft taxi-ing and engine testing, the use of aircraft auxiliary power units, airside ground traffic and passenger surface access traffic.

The management of air quality in the Birmingham and Solihull area is the responsibility of local authorities. The urban area and its outskirts are affected by a wide range of sources, the most significant of which is road traffic pollution from local roads and the motorway network. Contributions to ambient air pollution from the Airport are greatest within its immediate vicinity, and we have a role to play in minimising local air pollution.

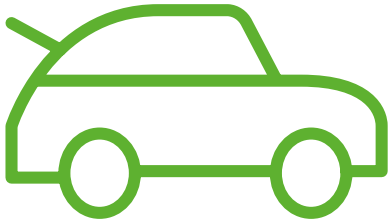
Our Air Quality results

Continuous monitoring:
We measure, monitor and report on ambient air quality levels. Our dedicated air quality monitoring station is located on the airfield and monitors key pollutants 24 hours a day, including carbon monoxide (CO), sulphur dioxide (SO_2), ozone (O_3), particulate matter (PM10) and various oxides of nitrogen (NOx). Pollutant levels are independently verified and are consistently below the limits set in the national air quality objectives and EU Air Quality Directive. We make this data publicly available and it can be accessed here.

Our data demonstrates compliance with annual mean, daily and hourly air quality standards for PM10 and NO_2 concentrations. However, the data does occasionally show exceedances of the 8-hourly mean ozone concentration which are usually associated with regional, rather than Airport specific events. Monitoring of extremely small particulate matter, known as PM2.5, is not monitored as the Airport is not a significant source.

Air Quality Modelling:
Air quality modelling was carried out as part of the development of the Airport Master Plan, using the 2016 actual data as the baseline and the 2033 base case forecast as the future scenario (under which the Airport grows to 18 million passengers per annum). The assessment was carried out using the ADMS-Airport dispersion modelling software and focuses on concentrations of nitrogen dioxide (NO_2) and particulate matter (PM10), which were compared against air quality standards in the EU Air Quality Directive.

Changes in road traffic emissions and aircraft activity were both considered in the assessment. For the 2033 base case scenario, modelled concentrations of NO_2 and PM10 at locations relevant for public exposure, that is in adjacent neighbourhoods and close to the local and strategic highway network, meet the 40µg/m^3 air quality standards. On average, these modelled concentrations remain the same as the current baseline for PM10 but reduce for NO_2 (except in some airside locations), due to an expected reduction in road transport emissions resulting from the replacement of older vehicles with newer, lower emission technologies. Expected reductions in emissions from aircraft engines however, have not been taken into account and the projected 2033 base case Airport emissions are therefore likely to be lower than forecast.



Comparison of modelled 2016 and 2033 NO_2 and PM10 concentrations (µg/m^3)

Monitor Location	Annual average NO_2		Annual average PM10	
	2016	2033	2016	2033
Birmingham Airport	24.2	23.9	16.0	16.0

08 - Reducing our Environmental Impact

Local Air Quality

Our existing actions:

Air Quality Actions		Source
Monitor air quality 24 hours a day and publicly report data	We have a dedicated air quality monitoring station on the airfield, which monitors key pollutants 24 hours a day, including carbon monoxide (CO), sulphur dioxide (SO_2), ozone (O_3), particulate matter (PM10) and various oxides of nitrogen (NOx).	**Aircraft emissions**
Carry out dispersal modelling	Carried out for all major Airport developments.	**All sources**
Invest in electric vehicles	We have invested in six 7900e Volvo single deck electric buses to serve our car parks and replaced our diesel pool cars with electric cars.	**Vehicles**
Minimise the use of auxiliary power units and ground power units	Minimise aircraft emissions by providing and encouraging the use of Fixed Electrical Ground Power (FEGP). The use of FEGP allows for aircraft power their onboard facilities using ground power, rather than burning fuel via their Auxiliary Power Unit.	**Aircraft**
Encourage aircraft operators to taxi with fewer than all engines operating	Birmingham Airport was the first UK Airport to recommend within the UK Air Pilot (manual for pilots operating from Airports) to taxi with fewer than all engines operating. We will continue to encourage and support airlines to reduce fuel consumption and CO_2 emissions by using a single engine to taxi where possible.	**Aircraft**
Facilitate and encourage Continuous Descent Approaches (CDA) for arriving aircraft	CDAs are designed to reduce CO_2 and the noise impact of landing aircraft. CDAs involve aircraft staying higher for longer and maintaining a constant angle of descent, allowing for a smoother descent to landing.	**Aircraft**

08 - Reducing our Environmental Impact

Local Air Quality

Our aim is to:

Ensure the Airport does not cause Air Quality emission exceedances in the region, and work proactively to reduce emissions at the Airport.

We will progress our commitment by (New Actions):

Air Quality Actions		Source
Map Airport emissions sources and calculate associated emissions	Carry out an emissions inventory and develop an Air Quality Action Plan.	**All sources**
Implement emissions reduction actions and measure their effectiveness	We currently have a number of emission reductions in place but do not measure their effectiveness. We will develop methodologies to enable us to do this.	**All sources**
Monitor PM2.5	Although the Airport is not considered to be a significant source of PM2.5, we will investigate the feasibility of monitoring PM2.5 in response to community concerns.	**Vehicles**
Review airside and landside vehicles and encourage greater use of low emission and electrical vehicles	Carry out a detailed review of all Airport owned, and third party owned fleet vehicles and continue to move to electric and hybrid vehicles wherever possible.	**Vehicles**
Develop infrastructure for electric vehicles	Evaluate the requirements for and provide additional EV infrastructure for use by passengers and employees.	**Vehicles**
Implement the Sustainable Travel Plan and Surface Access Strategy	Increase the journeys made by public transport to and from the Airport. A target of 35% Public Transport Modal Share by 2030 (or upon reaching 27 million passengers) is in place. Improve cycling routes and bicycle parking provision.	**Vehicles**
Review our Travel Plan and conducting new staff travel surveys every 12 months to monitor performance against our targets	These targets set out to reduce passengers travelling by car to the Airport by 3% by 2023 and to reduce staff travelling by single occupancy car trips to the Airport by 2% by 2023.	**Vehicles**

Case Study

In November 2019 we will replace all the diesel buses serving our car parks with six new electric buses. The buses not only offer a 70% lower energy consumption when compared to an equivalent diesel bus, but they also don't produce any of the harmful gases and pollutants associated with combustion engines, such as Nitrogen Oxides (NOx) and Particulate Matter (PM).

We will measure our performance by:

- The number of air quality exceedances
- Production of emissions inventory and air quality action plan
- The modal split of passenger journeys
- The modal split of staff journeys

Supporting Policies and Plans

Surface Access Strategy

08 - Reducing our Environmental Impact

Waste, Supply Chain & the Circular Economy

We understand that limited material resources and growing consumption patterns represents a global challenge and we have a long-term ambition to embed the principles of the circular economy into our business and beyond. To date, we have focussed on waste; reducing it where possible, re-using some materials and recycling as much other waste as we can. We understand that the creation of waste is an inevitable consequence of the operation of a busy Airport and we know me must take active steps to minimise the amount we produce and to recycle whatever we can. While we have made good progress in recent years, with 100% of our waste diverted from landfill and any non-recyclable waste sent to an Energy from Waste facility, we know that we need to monitor and review to ensure we are continuously improving our performance.

Waste is generated directly by Birmingham Airport staff, our on-site partners and the passengers who use the Airport. We have tried to make waste segregation for both staff and passengers as simple as possible by providing segregated bins for general and recyclable waste. This waste is primarily handled through our two dedicated service yards, which allow for appropriate disposal. In addition, our service yards also handle other waste streams including food, electrical and some hazardous waste streams such as fluorescent tubes. Food waste originating from countries outside of the European Union is known as Category-1 waste under the Animal By-Products Regulations and must be disposed of in accordance with strict criteria. Therefore, all waste coming off aircraft, regardless of its origin, is dealt with by the airline's ground-handling agent.

The Airport is also committed to waste prevention where this is possible. Practical examples include the collection of clothes and pushchairs left at the Airport by local charities, rather than sending them to waste disposal.

We are very conscious of the impact that plastic usage can have on the environment. We know that plastic waste takes a significant amount of space in landfills, but we are also aware of the growing threat to the marine environment of microplastics and the issue of single-use plastics. The Airport currently generates over 4 tonnes of plastic waste each year and we are seeking to reduce the use of plastics on site substantially.

As part of our commitment to be a responsible business we have implemented our Plastics Reduction Policy, which makes a clear commitment to reducing plastic usage throughout the Airport site. This will be achieved through measures such as site-wide audits, review of catering suppliers, the addition of a "plastics free" clause in new commercial contracts and the development of internal and external campaigns to highlight the importance of plastics reduction.

08 - Reducing our Environmental Impact

Waste, Supply Chain & the Circular Economy

Our existing actions:

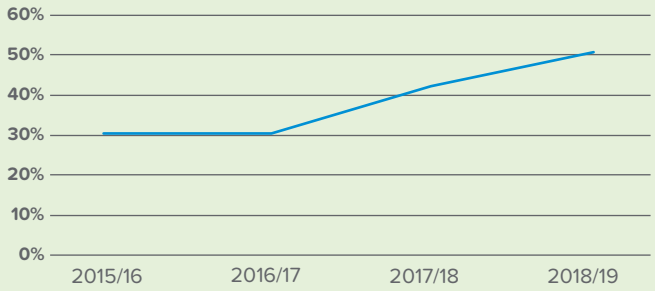
Waste, Supply Chain & the Circular Economy Actions	
Operate dedicated service yards for waste disposal	Allow for an area to segregate and sort different waste streams to allow for them to be disposed of via the appropriate waste route.
Provide segregated bin facilities in terminal and office spaces	Allows staff and passengers to segregate waste at point of disposal.
Issuing of re-usable coffee cups to all existing staff and new starters	Helps to minimise the number of single-use coffee cups and plastic sachets used in meeting rooms and on-site coffee shops.
Part of the Refill Campaign	Free drinking water refill points are available throughout the Airport and can be found on the Refill App. This allows passengers to refill their reusable bottles once through security, reducing the amount of bottled water that is purchased.
Categorise and quantify waste streams and identify relevant stakeholders	We continue to identify the types of waste that come through our service yards and work with stakeholders to reduce or seek greener alternatives.

Our waste results

Over recent years we have improved our waste performance, with an increase in recycling rates from 32% in 2015/16 to 47% in 2018/19. In 2018/19 we generated 2,792 tonnes of waste. General waste accounted for 1,473 tonnes, waste sent for recycling, including card, paper and plastic accounting for 719 tonnes and the remaining 599 tonnes was made up of food waste sent for anaerobic digestion.

All waste taken from our service yards is sent to licenced facilities and records of its transport and disposal are kept in accordance with legal requirements and are tracked through a dedicated online portal.

Recycling Rate



08 - Reducing our Environmental Impact

Waste, Supply Chain & the Circular Economy

Our aim is to:

Minimise the amount of waste we generate and improve our recycling rate to 65% by the end of 2020.

We will progress our commitment by (New Actions):

Waste, Supply Chain & the Circular Economy Actions	
Develop and implement a comprehensive waste management strategy to minimise waste, optimise waste treatment and recovery	Our strategy will look to minimise the amount of waste generated on site and identify better disposal routes.
Optimise use of material resources - circular economy principles	Ensure that we consider the full life cycle of a product when we procure it.
Progress towards a site-wide reduction in single-use plastics	Work with tenants and concessions towards a site-wide reduction of single-use plastics.
We will work to reduce food waste on-site and we will measure waste per passenger	Work with food and beverage outlets to minimise the amount of food waste produced.

Case Study

In 2019 we joined the national 'refill' campaign and embarked on a mission to reduce the amount of single-use plastic waste generated from water bottles. We installed water fountains throughout the Airport and uploaded their locations on the refill app, engaged our food and beverage outlets to provide free tap water refills and installed a sink immediately before passengers pass through our security screening. This enables passengers to empty liquids from their reusable water bottles to meet security requirements, before refilling from one of the refill points in the departures area. By joining the refill campaign we are saving the use of tens of millions of plastic bottles each year.

We will measure our performance by:

- The total amount of waste we generate
- The percentage of our waste that is recycled
- The percentage of our waste that we send to landfill

Supporting Policies and Plans

Plastic Reduction Policy

08 - Reducing our Environmental Impact

Water

Three watercourses flow through the Airport site. These are Low Brook, Hatchford Brook and Westley Brook, which merges with Hatchford Brook to the west of the runway. These brooks ultimately join the River Cole, a tributary of the River Trent. We understand that good management of these watercourses is essential in order to protect the aquatic habitat and that operating in a responsible manner will ensure that local communities can enjoy these important local amenities. We operate a comprehensive Flood & Pollution Control System which captures contaminated surface run-off, such as that containing de-icing fluids.

Our system diverts it from the brooks, holds it for testing and then releases contaminated water into the foul water network for processing as trade effluent. We have also developed a recharging mechanism whereby onsite partners are recharged for their share of the costs associated with processing contaminated surface water runoff. This helps ensure that the use of de-icer across the Airport site is kept to a minimum.

We also understand the importance of reducing our consumption of drinking (potable) water across the site and are committed to finding sustainable ways to minimise water consumption. This will range from educational campaigns with staff to minimise water wastage in buildings, through to projects to look at the feasibility of implementing rainwater harvesting schemes for activities such as the flushing of toilets, which do not need drinking water.

Our existing actions:

Water	
Operate a dedicated Flood and Pollution Control System	The system ensures that water quality from surface run-off is continuously monitored. When the quality of the water exceeds the limits stipulated in our discharge permits then the water will be diverted to the foul network. The system also includes the addition of a further, large polluted water holding tank to the north of the Airfield which was installed during the runway extension works. This tank further improves our ability to manage contaminated surface run-off on site.
Monitoring/sampling	We have an established water sampling regime for the local watercourses to verify that our Flood and Pollution Control System is operating correctly.
Monitor water usage within Airport buildings	Monitor water usage by area to understand where there is high demand and where water saving initiatives are best targeted.
Map areas where the Airport may pose a risk to watercourses	Our Environmental Management System identifies where our operations may pose a risk to local water quality and ensures that appropriate mitigation measures are put in place.

Our water results

We continue to maintain good water quality in our brooks as we divert polluted surface water away and into the foul network.

Passenger growth and an increase in water consumption usually go hand in hand. However over the last 5 years we have seen 26% growth in passengers and only a 10% increase in water consumption. We are committed to further working to reduce our water usage per passenger.

08 - Reducing our Environmental Impact

Water

Our aim is to:

Minimise the amount of water we use and ensure surface run-off discharged to the brooks meets Environment Agency requirements.

We will progress our commitment by (New Actions):

Water	
Develop a Water Reduction Policy	Develop a policy to reduce the amount drinking water used across the Airport site. This will consider new developments and the feasibility of implementing initiatives such as rain water harvesting.
Develop new de-icing standards	Investigate new de-icing practices and to enable us to continuously reduce the amount of de-icer used where possible.
Develop and implement improvement targets	Develop challenging water reduction targets.
Carry out a full review of the Flood and Pollution Control System	Carry out a full review of the Flood and Pollution Control System and implement changes where practicable.

Case Study

We operate a dedicated Flood & Pollution Control System across the site which is made up of four Total Organic Carbon (TOC) monitors and 10 polluted water holding tanks. In 2019 we replaced all of the TOC monitors in the system at a cost of over £60,000. The system is designed to prevent surface water contaminated with substances such de-icing fluid from entering our watercourses. In the winter of 2018/19 over 300,000 litres of de-icer was used on aircraft and on the airfield so the system has a very important role to play.

We will measure our performance by:

- Measuring the volume of potable water that is consumed on site
- Measuring the volume of water discharged from the Airport site
- Measuring the amount of de-icer used in Airport operations
- Monitoring our compliance with environmental permits and legislation

08 - Reducing our Environmental Impact

Biodiversity

Biodiversity in the UK and across the world is declining. We have a responsibility to reduce our negative interactions with ecosystems and to make a positive contribution to increasing biodiversity where we can.

Careful management of the natural environment is therefore a critically important task and, like all Airports, we are faced with balancing our responsibilities as stewards of the environment with the overriding requirement for ensuring the safety of our passengers. Safety requirements mean we must adhere to strict regulations to minimise the amount of wildlife on the Airport site, particularly in relation to birds. For example the grass on the airfield is kept to 20cms to discourage feeding and nesting and there are other active bird deterrent measures carried out across the Airport site.

We are able to make a more positive contribution to increasing biodiversity on the land we own to the south of the A45, which is managed as part of our Historic, Environment and Ecology Landscape Management Plan (HEELMP). Here we manage rare grasslands, provide nesting and roosting opportunities for protected species of birds and bats and ensure that hedgerows are appropriately maintained.

We are also conscious of the potential for wildlife trafficking, with Airports seen as a means of illegally bringing rare and endangered species into the UK. Historically, this has not been a significant issue for us as we do not have a major freight or dedicated animal import facilities. However, we remain vigilant and will continue to to work with Border Force to ensure that the risk of this kind of activity is managed.

Our existing actions:

Biodiversity	
Assess and monitor the status of biodiversity	We will continue to meet the conditions of the plan and commit to maintaining biodiversity within the HEELMP.
Biodiversity initiatives further outside the Airports vicinity	We will continue make funds available for tree planting in the local area, in line with our S106 agreement and continue to work with partners to consider biodiversity enhancements off-site.

Our Biodiversity results

We continue to successfully manage the designated HEELMP area to the south of the Airport, to improve the ecology and biodiversity in this area. This is demonstrated through the monitoring of the HEELMP through an annual survey by a chartered ecologist and provision of over £60,000 per annum to manage the site.

We also provide £10,000 a year to Solihull MBC for tree planting schemes, which can be accessed by local environmental groups. To date the Airport has spent circa £40,000 on tree planting.

08 - Reducing our Environmental Impact

Biodiversity

Our aim is to:

Ensure that our management of the Airport site is environmentally responsible, legally compliant and encourages biodiversity wherever possible.

We will progress our commitment by (New Actions):

Biodiversity	
Implement biodiversity protection initiatives	We will look to develop biodiversity protection initiatives for future Airport developments.
We will work with regional partners to improve biodiversity in the local area, where appropriate	We will expand our employee volunteering programme to include initiatives that enhance biodiversity. Biodiversity continues to be a key criteria for our Community Trust Fund.
Educate communities on biodiversity	We will engage with local communities to raise the awareness of biodiversity.
Raise awareness of wildlife trafficking	We will continue to engage with our partners onsite to raise the profile of wildlife trafficking.

Case Study

When we extended our runway we made a commitment to mitigate the immediate ecological effects of the construction works and to enhance the surrounding area to the south of the A45 in the long term. To do this we developed a Historic Environment, Ecological, Landscape Management Plan (HEELMP) covering over 42 hectares of land. The HEELMP is a complex management plan requiring the management of grassland, trees, hedgerows and ecological habitat. Progress is monitored in partnership with ecologists and landscape architects. To date we have carried out projects such as the installation of owl and bat boxes throughout the site and scrub clearance. We remain committed to managing this land, ensuring that biodiversity continues to be encouraged and nurtured on the site.

We will measure our performance by:

- Monitoring our performance against the requirements of our HEELMP

Supporting Policies and Plans

HEELMP

Section 106 Agreement

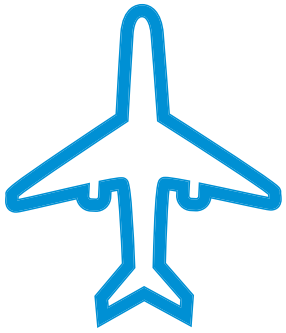
09 - Being a Responsible Neighbour

Noise

Bordered as we are by densely populated communities, the management of aircraft noise has always been a top priority for Birmingham Airport. We have seen significant progress in aircraft technology which has led to a substantially reduced noise footprint over time.

Aircraft noise can be categorised in terms of airborne noise and ground noise. Airborne noise is created by engines and airframe turbulence while aircraft are taking-off and landing while ground noise is generated by taxi-ing aircraft and engine ground running on the airfield. It is often difficult to describe the effect that aircraft noise has on the local community, as noise perception is very subjective. Indeed, there is no direct correlation between the noise levels modelled and the community concerns we receive.

Aircraft in operation today are considerably quieter than those of 20 years ago and looking ahead, we anticipate that today's aircraft will be replaced by quieter models as airlines renew their fleets with the newest aircraft types, such as the Airbus A320 NEO. Despite this, we recognise that noise disturbance remains a concern for many local residents.



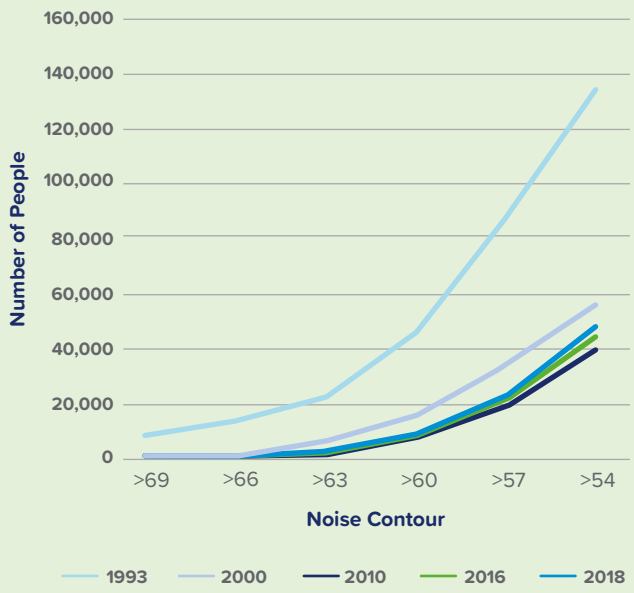
Our noise footprint

Aircraft noise is measured using the A-weighted Decibel, dB(A). The decibel is a ratio that compares the sound pressure of the noise source (e.g. an aircraft) to reference pressure (the quietest sound we can hear). The A-weighting approximates the sensitivity of our ear to different frequencies (pitch) in the sound and helps to assess the relative loudness of various sounds.

The dB LAeq metric is the standard method of measuring average noise levels at Airports in the UK, and is the method used in producing noise contours. The contours are produced for an average day time noise exposure based on actual traffic data (0700 – 2300 hours) for the 92-day summer period (16th June – 15th September). Noise contours are produced independently for us every 2 years. When required, contours are also produced for an average night time noise exposure (2300 – 0700 hours). The noise contours are produced to estimate the average noise levels experienced by people living around the Airport.

The following chart illustrates how populations within the LAeq noise contours have changed over time. It shows that the number of people affected by noise in 2018 is still considerably less than the number before 2000. The number of people affected by noise will increase over the initial 5 years of this strategy as we grow. Our Master Plan forecasts passengers to grow by 40%. However, this does not mean there will be 40% more flights. Airlines are filling their aircraft more effectively, with a combination of higher load factors and more seats on board, we predict we can grow passenger numbers by 40% with flights only increasing by 21%. It is important to remember that increases are significantly less than earlier forecasts and as we regularly review the strategy we will continue to monitor and update noise information.

Population count within noise contours



09 - Being a Responsible Neighbour

Noise

Alongside this, we have, over many years, developed a comprehensive noise management programme to minimise disturbance. This includes us constantly measuring aircraft noise at six noise monitors located in the local community. The community noise monitors feed into the Airport Noise and Operations Monitoring System (ANOMS), which allows us to monitor noise and track-keeping and respond comprehensively to community concerns. This is detailed in a separate Noise Action Plan.

Nevertheless, we acknowledge that noise remains the number one concern for those living close to Birmingham Airport and we remain committed to reducing its impact on our neighbours.

Our existing actions:

Noise Actions	
Implement actions within the Noise Action Plan	A Noise Action Plan is produced every 5 years in consultation with the Airport Consultative Committee. The latest plan was adopted in February 2019.
Measure Aircraft noise and investigate community complaints	Use the Airport Noise and Operations Monitoring System to monitor noise and track-keeping and investigate community complaints within 5 working days.
Continue to apply financial penalties to aircraft on departure that breach our noise limits	Financial penalties apply to aircraft on departure that exceed 90dB(A) during the day-time and 83dB(A) during the night-time.
Continue the Sound Insulation Scheme to provide high specification glazing to provide sound attenuation	Continue the Sound Insulation Scheme to provide sound proof glazing to properties most affected by aircraft noise (within 2002 63 dB LAeq noise contour). We have insulated over 7000 properties to date and offered every eligible property under the scheme insulation. We have recently provided sound insulation to Gossey Lane School and continue to review this programme.
Operate a Night Flying Policy between 23:30-06:00	Operate a stringent Night Flying Policies including limiting the number of flights that can operate during the night and prohibiting the noisiest aircraft from being scheduled.
Operate a policy to limit and reduce the impact of Engine Ground Running	We will continue to operate an Engine Ground Running Policy between 2300 – 0600 (0800 hours on Sundays) to reduce the noise impact of these operations during sensitive times.
Continue to support Sustainable Aviation	Support work towards the Advisory Council for Aeronautics Research in Europe (ACARE) goal of a 65% reduction in aircraft noise by 2050, relative to 2000.

09 - Being a Responsible Neighbour

Noise

Our aim is to:

Work with our local community, airlines and partners to adopt the best practicable means to assess, manage and minimise the impact of aircraft noise.

We will progress our commitment by (New Actions):

Noise Actions	
We will investigate the feasibility of decreasing the day and night time noise limits	Investigate the feasibility of decreasing the day-time limit from 90dB(A) and the night-time noise limit from 83dB(A) to 81dB(A).
Investigate operations procedures to reduce the noise footprint and impact on communities	Investigate the feasibility of a 3.2° glide slope to runway 33 (and possibly runway 15). It should be noted that to implement slightly steeper approaches requires a policy change from the CAA, which is dependent on the outcome of a trial at Heathrow.
Work with Airline operators to place the quietest fleet practicable at this Airport	We will write to airlines and continue to work with them to encourage them to deploy the most quietest fleet practicable.

Case Study

We have a strong track record in noise management. Since 1993 the number of people living within the 54 dB(A) 16-hour LAeq contour, which government defines as marking the onset of significant community annoyance, has reduced by 64.7%. This has been achieved primarily through changes to the aircraft fleet operating at Birmingham, but the introduction of quieter operational procedures, such as the implementation of Continuous Decent Approaches, has played its part. Not withstanding this, we know there is still more to be done. Sustainable Aviation is a long-term strategy which sets out the collective approach of UK aviation to tackling the challenge of ensuring a cleaner, quieter, smarter future for the Aviation industry. Launched in 2005, it is a world first, bringing together major UK Airlines, Airports, manufacturers, air navigation service providers and key business partners. We have fully engaged with Sustainable Aviation, taking on the role of chairing the organisation's 'Quieter' group. In partnership, we will continue to develop and implement best practice to further minimise and mitigate the impact of our operations.

We will measure our performance by:

- % of actions completed as set out within the Noise Action Plan
- Number of people within the 54dB(A) noise contour
- Number of night flights
- Number of noise violations
- Number of engine ground runs, by location

Supporting Policies and Plans

Noise Action Plan

09 - Being a Responsible Neighbour

Community Investment & Wellbeing

We are committed to mitigating the negative impacts of operating an Airport in a densely populated region, but our ambitions go beyond this; we want to be a force for good by investing in the wellbeing of those communities impacted by our operations, many of which are in real need.

Cuts to local services in recent years have meant that many communities have been faced with the prospect of having to take on roles and responsibilities previously undertaken by a range of service providers. While goodwill and expertise may be readily available, funding is often in short supply and can be a block to the plans of those who are motivated to serve others; our Community Trust Fund can provide the support they are looking for as they strive to improve the health and wellbeing of their communities. By these means, our vision is to play an active role in building community capacity, with a focus on those neighbourhoods where the need is greatest and where our investment can have the greatest impact.

Our '30-30-40' policy targets investment into areas suffering from high levels of deprivation. We aim to ensure that 30% of all of our Community Investment, both direct and in kind, is directed towards east Birmingham, 30% towards north Solihull while the remaining 40% supports communities in other areas impacted by our operations. Through the Airport Health Forum, we aim to align our policies and programmes with the health priorities of local government, both to manage the known health impact of our operations and to support projects that promote health and wellbeing in local communities.

The Birmingham Airport Community Trust Fund makes grants of up to £3,000 to small community-based organisations. Core funded directly by the Airport Company and topped-up by any penalties levied on airlines breaching our noise limits, grants are awarded by a board of independent Trustees representing local authorities and the Airport Consultative Committee. Typically the Trust Fund makes grants of around £80,000 each year and a total of more than £1.6 million has been awarded to date.

Our dedicated education facility, The Learning Hub, is located in the terminal building with views across the Airfield and provides a unique and stimulating learning environment in which we deliver a range of work-related education programmes. We work in partnership with education professionals such as The Schools of King Edward VI in Birmingham and Enabling Enterprise to help students of all ages develop the life skills they will need to succeed beyond the classroom.

We will ensure we deploy our greatest asset – our people – in the service of local people by encouraging an active culture of employee volunteering and we recognise too the value of a charity partnership where we can deliver significant social impact by supporting a charity partner whose work aligns with the themes of inclusive growth we identify in our Master Plan.

09 - Being a Responsible Neighbour

Community Investment & Wellbeing

Our existing actions:

Community Investment & Wellbeing Actions	
Operate our 30-30-40 policy, to target investment into areas suffering from high levels of deprivation	We recognise that our community investment can be most effective when targeted at areas where it is likely to have most impact.
Finance the Community Trust Fund and provide effective management and administration of the fund	We currently make £86,000 available to the Trust Fund each year and this grows in line with inflation. We ensure it is efficiently operated and meets the regulatory requirements of The Charity Commission.
Provide funding for projects that may fall outside the remit of the Trust Fund	We understand the Trust Fund may not always be the most appropriate source of funding and ensure we have the flexibility to respond to other funding opportunities.
Operate the Learning Hub to provide a focus for our education support programme	Working with industry partners and education professionals, including King Edward VI Foundation we provide a range of work-related activities with the aim of developing awareness of the aviation industry and raising levels of aspiration and achievement.
Engage with a charity partner as the primary beneficiary of our fundraising for the third sector	Our charity partner is the focus for staff fundraising activity, but we provide support for other charities on a smaller scale where appropriate.
Operate our Sound Insulation and Vortex Protection Schemes	Our Sound Insulation and Vortex Protection Schemes are funded at £200,000 and £100,000 respectively on an annual basis. We aim to make best of available funds to minimize the impact of aircraft operations on properties within the scheme boundaries.

09 - Being a Responsible Neighbour

Community Investment & Wellbeing

Our aim is to:

To play an active role in building community capacity in areas impacted by our operations, with a focus on those neighbourhoods where the need is greatest and where our investment can have the greatest impact.

We will progress our commitment by (New Actions):

Community Investment & Wellbeing Actions	
Ensuring that our 30-30-40 policy remains relevant and applicable	We will review our performance against the policy and take action to ensure we meet our targets.
Building a culture of volunteering and community service among our employees	We will actively engage with staff to provide a programme of opportunities and support for those wishing to volunteer and to develop an understanding of the personal, professional and societal benefits of volunteering.
Reviewing local health priorities to ensure our policies remain relevant and aligned to local need	We will engage with the Airport Health Forum to review and understand local health priorities and we will ensure that our community investment and wellbeing activities continue to have an impact in addressing these priorities.
Better understanding stakeholder expectations of our community investment activity	By engaging with the Airport Consultative Committee and other stakeholder bodies, we can better understand the priorities of local communities in relation to their expectations of the Airport's role in the local community, using the results to inform the development of our health and wellbeing programmes.
Establishing the Community Trust Fund as a significant source of local funding for small community groups	Through targeted promotion and support, we will ensure the Community Trust Fund is a recognized and accessible source of funding for small community groups which may struggle to access funding elsewhere.
Refining our education provision to focus on the development of essential employability skills in young people	Working with specialist partners we will ensure that all our educational activities fit into a systematic framework supporting local schools to deliver measurable skills to improve the employability of young people.
Increasing the scale of our financial and other contributions to our charity partner	We will ensure that our choice of charity partner aligns with our community investment and wellbeing priorities. We will agree a set of objectives for three-year partnerships which encompasses fundraising targets and opportunities for employee volunteering and engagement.
Reviewing our Community Protection Schemes	We will ensure our Community Protection Scheme are regularly reviewed so that they remain appropriate to the local situation, in compliance with relevant legislation and agreements and are efficiently managed so as to achieve best value for householders.

Case Study

Our Community Trust Fund made an award of £3,000 to Springfield House School in Temple Balsall, where children with emotional and behavioural difficulties benefited from the installation of outdoor gym equipment.

We will measure our performance by:

- Measuring our community investment, both financial and in-kind
- Monitoring the geographical spread of our community investment
- Reporting annually on our Corporate Responsibility activities
- Reporting the number of properties that have benefited from the Sound Insulation and Vortex Protection Schemes

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09 - Being a Responsible Neighbour

Economic Development & Employment

One of the most important contributions we can make to the health and wellbeing of both communities and individuals is the provision of long-term, stable employment.

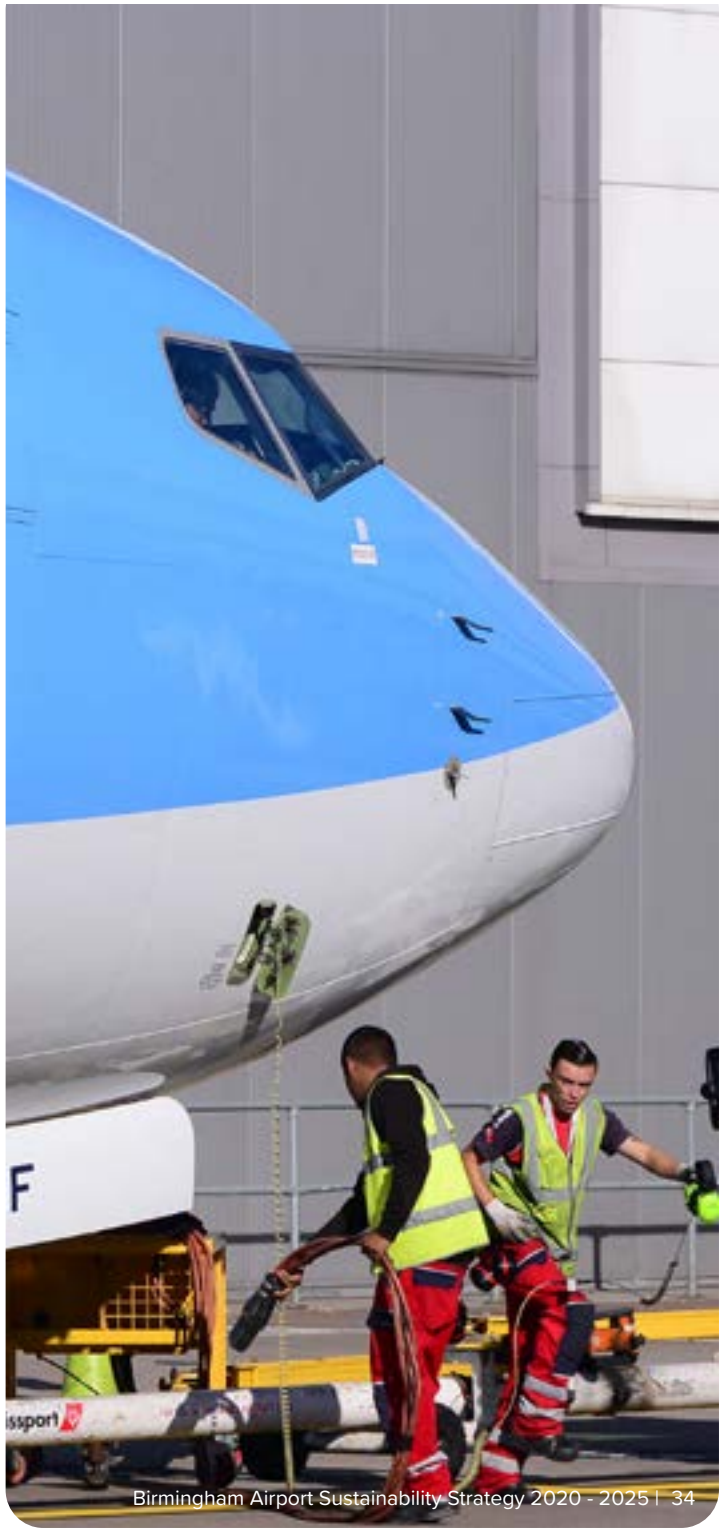
Youth unemployment rates in Birmingham stand at 11.9%, compared with a UK rate of 5.8%. Birmingham also has a high proportion - some 12% - of its working age population with no formal qualifications. Many of the areas most impacted by these statistics lie close to the Airport in the east of the City and the situation is similar in neighbouring areas of north Solihull.

We know that our growing business can provide employment in these communities and our education programmes can raise aspirations and deliver work-based learning for young people as they prepare to enter the world of work.

Around 150 companies on site currently employ more than 7,000 people, a figure which is set to increase over the coming years as the demand for air travel continues to grow. With areas of significant deprivation on our doorstep, here is an opportunity to make a real difference to people's lives.

Our existing actions:

Economic Development & Employment Actions	
Meeting our S106 obligations with reference to employment	We continue to support the development and delivery of Solihull Metropolitan Borough Council's programmes to enable residents to access employment opportunities at the Airport.
In partnership with one site employers, funding programmes like The Prince's Trust 'Get into Airports'	The programme provides unemployed young people aged 16-30 with pre-employment training, coaching and support for Airport-specific roles, with guaranteed interviews or placements for those successfully completing the course.
Making use of the Community Trust Fund to fund projects which enhance the ability of unemployed young people to move into employment	Our Trust Fund eligibility criteria include one aimed at encouraging applications from organisations which promote employment opportunities.



09 - Being a Responsible Neighbour

Economic Development & Employment

Our aim is to:

To enhance individuals' abilities to access the full range of employment opportunities the Airport represents, recognising that this is one of the most significant contributions we can make to tackling wider social issues.

We will progress our commitment by (New Actions):

Economic Development & Employment Actions	
Continuing to meet our S106 obligations with reference to employment	We will work with SMBC to ensure our support continues to assist unemployed local people in accessing Airport site employment opportunities, through the coordination of vacancy information and services to provide candidate referencing and training.
Explore opportunities to work with existing and new partners to develop innovative schemes to assist unemployed young people into work at the Airport	We will review the success of existing schemes and be receptive to new ideas and approaches to take down the barriers to sustainable employment that disadvantaged young people face.
Encourage those local organisations supporting unemployed young people into work to take advantage of Airport funding	We will continue to ensure funding is available for projects which target unemployment, worklessness and issues surrounding the disadvantaged in the labour market in our region, with particular emphasis on those communities identified in our '30-30-40' policy.
Ensure our apprenticeship, placement and work experience programmes provide effective support for the local and regional skills agenda	We will provide opportunities for apprenticeships, work placements and work experience which will develop vocational and life skills to improve access to the labour market for those taking part and help meet the needs of Airport employers.

Case Study

Our support for the Prince's Trust's 'Get into Airports' programme provides training, mentoring and experience for unemployed young people aged 16-30, focusing on employability skills to help them move into a job after the course.

We will measure our performance by:

- Measuring the rate at which our funded schemes achieve positive outcomes by placing unemployed people in work, training or further education.

Supporting Policies and Plans

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