## Three airports. One journey to a sustainable future.













## Welcome to AGS Airports' sustainability strategy

## This document sets out how AGS will balance the undoubted economic and social benefits of aviation with our climate change responsibilities.

AGS Airports Limited was established in 2014, however, our airports have been serving their respective communities for decades.

Aberdeen International, Glasgow and Southampton International airports, take great pride in the valuable contribution they make to their local economies in terms of generating employment, GVA and providing the vital connectivity that has allowed our regions to thrive.

The coronavirus pandemic has had a devastating impact on the entire aviation sector bringing our airports to an almost complete standstill but as **UN Secretary-General** Antonio Guterres rightly stated "aviation is an important engine of our world and will play a critical role in lifting the world to recovery from COVID-19." He also rightly stated recovery from the pandemic should be an opportunity for climate action. As we seek to regrow and safely re-establish the connectivity that will drive our economy and prosperity, AGS is committed to responding to the most fundamental challenge of our time – the climate emergency.

At AGS, we have always been acutely aware that operating such important pieces of infrastructure comes with responsibilities; to our people, to our communities and to the environment. It is an undeniable fact that we must act now to reverse climate change. To do so will require partnerships across all levels of government and society and it is partnerships that underpin the United Nations Sustainable Development Goals.

Prior to the pandemic, governments were enacting legislation in response to the climate emergency. In February 2020, the UK aviation industry also responded when it came together to unveil its **decarbonisation roadmap** which was the first national net zero aviation commitment anywhere in the world. It sets out how the UK will be able to grow passenger numbers by 70% whilst reducing net emissions from 30 million tonnes of CO2 per year today down to zero.

As a signatory to the roadmap, AGS has pledged to work with government and industry to decarbonise our sector but it's important we get our own house in order. I am pleased to say we have already made significant progress in addressing our environmental impacts. Since 2018, we have reduced our direct carbon emissions by 52% and in 2020 each of our airports achieved carbon neutrality status.

As a group, we have set ourselves the target of achieving net zero carbon for our direct emissions by the mid-2030s. These are positive and important first steps, however, we recognise our airports have a wider impact over and above our direct emissions. That is why we are committed to working with the wider aviation industry to support our sector achieve net zero carbon emissions (Scopes 1 to 3) by 2045.

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As an industry, aviation is making marked progress. Airlines have spent over a trillion dollars since 2009 in more efficient aircraft and the industry is investing \$15bn each year in development of more efficient technology. As a result, we have uncoupled growth in passengers from growth in emissions.

In just 10 years, the concept of biofuels has become a reality with 200,000 flights having taken place using sustainable aviation fuels (SAF). In September 2020, the world's first hydrogen fuel cell powered flight of a commercial-grade aircraft took to the skies at Cranfield University. And in Scotland, there are plans for the Highlands and Islands to be served by electric flight.

These developments demonstrate how far we have come in such a short period of time and clearly indicate what we can achieve through innovation and partnerships across the sector.

In November, the world will look to the UK to set the agenda on climate action and ambition when Glasgow hosts the United Nations Climate Change Conference, COP26. This will be the opportunity to agree a global response to what is a truly global challenge.

Aviation is a force for good. It's one of the most global industries, connecting people, cultures and businesses. With the support of government, it can also help address the most pressing global challenge of our time – climate change.

**Derek Provan Chief Executive AGS Airports** 



#### Achievements to date



AGS is carbon neutral



Targeting net zero for own infrastructure by mid-2030s



Our electricity is from 100% renewable sources



We divert 100% of waste from landfill



Glasgow was the first UK airport to introduce electric bus fleet



Southampton was the first UK airport to use LED lighting on aircraft stands

2045

Support the UK aviation sector achieve net zero by 2045



Over £2M to local communities since 2010





Signatory to Women in Aviation



SLAVE-FREE ALLIANCE Working Towards a Slave-free Supply Chain

Member

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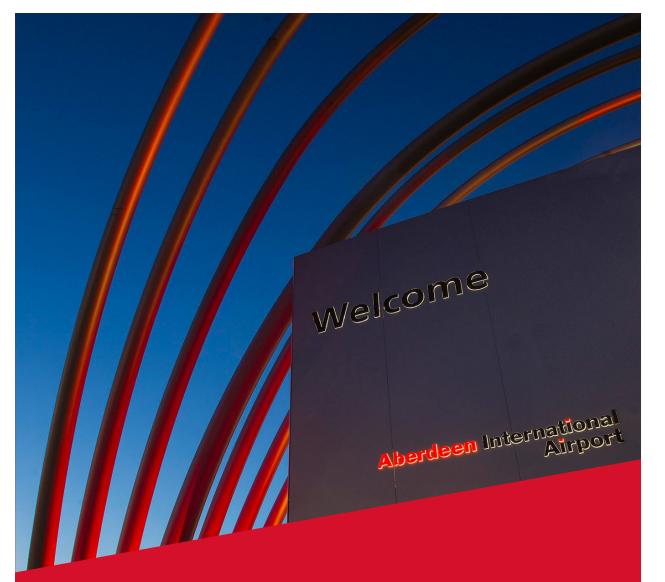


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## About AGS

AGS Airports Limited was established in 2014 and is jointly held by Ferrovial (via Faero UK Limited) and AGS Ventures Airports Limited, an entity managed by Macquarie Infrastructure and Real Assets (Europe) Limited.



#### **Aberdeen International Airport**

Aberdeen International Airport is the northeast of Scotland's major transport hub and is a vital economic driver for the region. It is the gateway to Europe's energy capital and is Europe's busiest commercial heliport.

#### **Glasgow Airport**

Glasgow Airport is one of the UK's busiest regional airports. A recent study by York Aviation calculated that the activities and connectivity associated with the airport support over 30,000 jobs and £1.44 billion of economic activity across Scotland.





#### **Southampton Airport**

Southampton Airport provides an international transport hub for Hampshire and is a vital economic driver for the region, contributing more than £160 million a year to the local economy. The airport is central to supporting Hampshire's strategy of building upon its strength in marine, advanced manufacturing, further education and tourism.

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# Our approach to sustainability



## Our approach to sustainability

AGS Airports' purpose is to "to make national and international connections that benefit our regions, helping people to prosper."

This purpose is underpinned by a commitment to growing sustainably. If we are to truly embed sustainability at the core of AGS, we need to set ambitious and stretching targets across all areas of the business, which demonstrate an absolute willingness to balance the clear economic and social benefits of aviation with our climate change responsibilities.

It is important we make firm commitments to ensure our people view us as an employer of choice, the communities we serve can share in our success and we set out how we will grow in a responsible and sustainable manner.

- Address our environmental impacts;
- Better understand our economic impacts; and

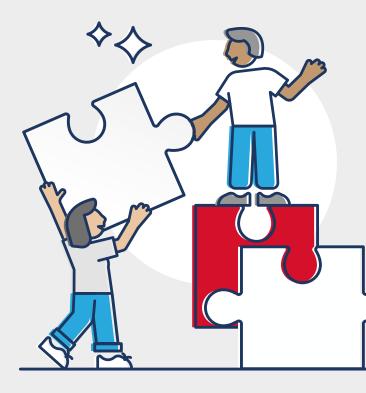


AGS is carbon neutral. We will continue our commitment to carbon neutrality as we work towards achieving net zero carbon for our direct emissions by the mid-2030s.



## Supporting our communities

As we seek to regrow, we will work to support and enhance the economic and social benefits of the communities we serve.



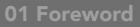
To achieve this, we must:

• Widen the social benefits we can deliver.

#### Supporting our people

We will provide good conditions of employment, respect diversity and equal opportunities for all staff through rigorous ethical, professional and legal standards.





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#### The Sustainable Development Goals

The common language for sustainability is defined in the **17 Sustainable Development Goals (SDGs)** which form the United Nation's 2030 Agenda for Sustainable Development and which it adopted in September 2015.

#### The SDGs are defined as a

"blueprint to achieve a better and more sustainable future for all. They are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity."

The SDGs are interdependent and based on the three pillars of sustainable development:

- Social progress
- Economic growth
- Environmental protection

We have aligned our sustainability strategy with the SDGs as well as the Airport Council International (Europe) Sustainability Strategy for Airports. Using both the SDGs and ACI Europe's recommendations we have identified key priorities which have been grouped into the three pillars of environmental, social and economic impacts, referred to as the "triple bottom line" by the Global Reporting Initiative (GRI), the international institution that sets global sustainability reporting.











In 2020, Glasgow was ranked as the best performing airport in the Global Real Estate Sustainability Benchmark (GRESB) which assesses the Environmental, Social and Governance (ESG) performance of real estate and infrastructure portfolios.

Together with Aberdeen it received a five-star rating for its sustainability performance, and both were recognised as "airport transport sector leads."

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#### Setting sustainability standards





#### **Innovation & partnerships**



"The SDGs can only be realised with strong global partnerships and cooperation." <u>United Nations</u>

Climate change is a global challenge that will require a coordinated global effort if we are to successfully reverse it. Inclusive partnerships underpin the SDGs and at AGS we are creating partnerships with other organisations, to advance aviation's journey to net zero and create a platform for economic and social development in the regions we serve.

AGS will create a start-up accelerator hub that will serve our communities by promoting collaboration with local entrepreneurial organisations and academia. Some of the projects we are currently developing partnerships for and which we will advance through our accelerator hub include:

- Energy infrastructure and on-site generation a project to develop opportunities for self-generation of power at our airports.
- Micro-grid and energy efficiency drivers a project to develop smart infrastructure for the intelligent use of energy.
- Electrification of ground operations working with stakeholders to transition away from carbon intensive power to more sustainable energy sources.



AGS is leading a consortium that includes the NHS West of Scotland Innovation Hub, the University of Strathclyde and leading air traffic control provider NATS to develop and trial what will be the UK's first national distribution network to use drones to transport essential medicines, blood, organs and other medical supplies throughout Scotland.

The CAELUS (Care & Equity – Logistics UAS Scotland) project, which brings together 13 organisations, successfully secured £1.5 million from the UK Industrial Strategy Future Flight Challenge Fund to demonstrate how autonomous drone technology can enhance access to essential medical supplies, particularly in rural parts of Scotland.

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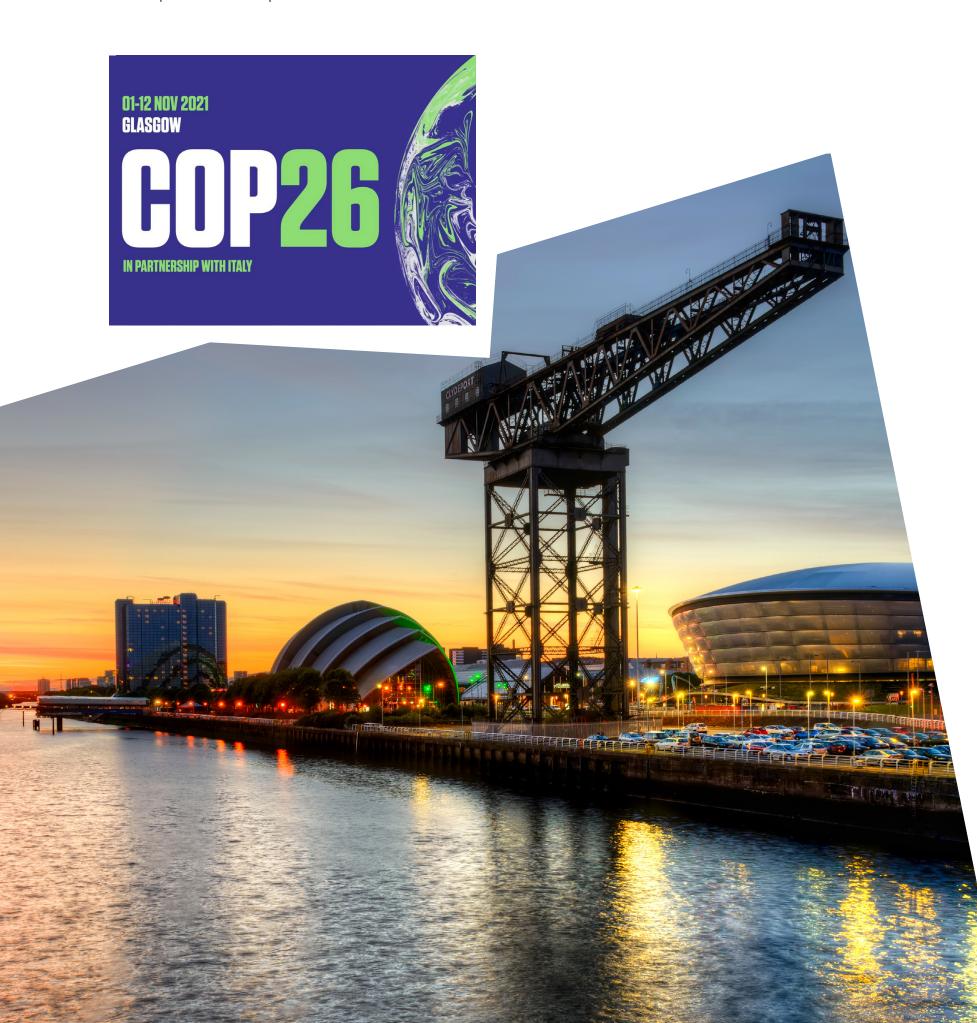
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## **Global & political context**

On 1 to 12 November 2021, all eyes will fall on Glasgow when it hosts the 26th UN Climate Change Conference of the Parties (COP26).

It will be the most significant COP since 2015 when on 15 December world leaders signed the Paris Agreement. In doing so, they committed to limiting global warming to well below 2°C, and to strive to limit the rise to 1.5°C compared to pre-industrial levels.



In October 2018, the Special Report of the Intergovernmental Panel on Climate Change (IPCC), called for "urgent & drastic action to limit global warming in line with the Paris Agreement", including "unprecedented & deep emissions reductions in all sectors" so that global emissions decline by -45% by 2030 and reach net zero by 2050.

In line with these findings and prior to the outbreak of COVID-19, all levels of government were enacting policies and legislation in response to the climate emergency.

On 27 June 2019, the UK Government became the first major economy in the world to **pass laws** to end its contribution to global warming by 2050. The target requires the UK to bring all greenhouse gas emissions to net zero by 2050, in line with the United Nations' target.

On 25 September 2019 the Scottish Parliament voted to pass the **Climate Change (Emissions Reduction Targets)(Scotland) Bill** committing Scotland to becoming a net-zero society by 2045. The Scottish Government also adopted an ambitious new target to reduce emissions by 75% by 2030 which it described as "the toughest statutory target of any country in the world."

In December 2019, the president of the European Commission, Ursula von der Leyen, announced the objective for Europe to become the first climate neutral continent by 2050, supported by a disruptive, unprecedented new policy strategy, the European Green Deal.

The United Nations has stated that COP26 must be a platform for all governments to "agree a balanced negotiated package that delivers the Paris Agreement and moves the UN Climate Change process forward."

AGS is committed to working with governments to ensure we play our role in addressing the climate emergency. We want to help secure a low carbon future that is socially inclusive, respectful of human rights and connected.

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# Applying the Sustainable Development Goals





## Applying the Sustainable Development Goals

Using ACI Europe's Sustainability Strategy for Airports and through speaking with our colleagues and local communities, we have identified 10 material issues that form the basis of our sustainability strategy. We have set out clear actions for each and through our Sustainability Steering Committee, which reports to the AGS Executive Committee, we will continually assess our performance against our objectives and report on our progress.

Impact	Material Issue			
	Climate Change			
	Local Air Quality			
Environment	Material Resources			
	Water			
	Biodiversity			
	Noise			
Social	Supporting Our Communities			
	Supporting Our People			
Economic	Economic Development & Employability			
LCOHOTTIC	Sustainable Supply Chain			

## Sustainable Development Goals 13 CLIMATE CONSUMPTION AND PRODUCTI 14 LIFE BELOW WATEF $\approx$ Q 15 LIFE ON LAND





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# Our commitments



#### Our environmental commitments

Material issue	What we will do	By when	SDG	Material issue	What we will do	By when	SDG	
	<ul> <li>We will maintain our commitment to carbon neutrality through PAS 2060 accreditation.</li> <li>We will support the continued development of Sustainable Aviation's Decarbonisation Road-Map including the promotion of Sustainable Aviation Fuels, hydrogen and electric flight</li> </ul>	2021 2021	7 AFFORDABLE AND CLIMATE 11 SUSTAINABLE CITIES 11 SUSTAINABLE CITIES 11 SUSTAINABLE CITIES 11 SUSTAINABLE CITIES 13 CLIMATE	T1 SUSTAINABLE CITIES	<ul> <li>We will continue the roll-out of electric charging infrastructure.</li> <li>We will develop and implement an air quality strategy across all airports.</li> <li>Our airports will work with local and national government to enhance surface access provision at the strategy across and the strategy across at a strategy across and surface access provision at a strategy across and strategy across at a st</li></ul>	2022 2022 2022	3 GOOD HEALTH AND WELL-BEING 11 SUSTAINABLE CITIES 11 AND COMMUNITIES	
	<ul> <li>electric flight.</li> <li>Our airports will implement an integrated management system (Managing Responsibly System) and all three airports will achieve ISO 14001:2015 accreditation.</li> <li>Each of our airports will achieve Airport</li> </ul>	<ul> <li>our airports including the delivery of the Glasgow Metro.</li> <li>We will work with our airlines and partners to reduce air quality impacts during the landing and take-off cycle.</li> <li>We will transition our fleet of vehicles to ultra-low</li> </ul>	2023					
Climate Change	<ul> <li>Carbon Accreditation Level 3+.</li> <li>We will produce a climate change adaptation plan for our airports and</li> </ul>	2022		022		emission vehicles.	2030	
	<ul> <li>incorporate climate change risks into the AGS Risk Register to ensure it is embedded within the business.</li> <li>AGS will establish an accelerator hub to</li> </ul>	2022		Water	• We will continue to monitor our surface water run-off to ensure pollution is prevented in our surrounding water courses and groundwater.	2021	6 CLEAN WATER AND SANITATION	
	progress energy infrastructure including on-site generation and smart infrastructure.	2022			<ul> <li>We will implement a water stewardship plan with our airport partners.</li> <li>We will carry out a feasibility study to determine the potential for water harvesting and invest in water harvesting technologies.</li> </ul>	2022	14 LIFE BELOW WATER	
	<ul> <li>We will deliver our net zero roadmap to achieve net zero carbon for our direct emissions (Scopes 1 to 2).</li> </ul>	Mid- 2030s				2022		
	<ul> <li>Support UK aviation sector achieve net zero carbon emissions (Scopes 1 to 3) by 2045.</li> <li>2045</li> </ul>		• We will improve the biodiversity value of our airports by working in partnership with our ground maintenance contractors.	2021	15 LIFE			
Material Resources	• We will continue our 100% diversion from landfill policy on all non-hazardous waste.	2021	12 RESPONSIBLE CONSUMPTION AND PRODUCTION		<ul> <li>Our airports will achieve the Wildlife Trust's Biodiversity Benchmark.</li> <li>We will partner with local groups and schools</li> </ul>	2022		
	<ul> <li>We will incorporate circular economy principles to enhance and encourage sustainable development at our airport.</li> </ul>	2022		Biodiversity	to implement biodiversity protection initiatives around our airports.	2022		
	<ul> <li>We will ban all unavoidable single-use products within our terminals.</li> </ul>				<ul> <li>Any planting undertaken around our airports will use native species.</li> </ul>	2022		
					<ul> <li>We will target no net loss of biodiversity across AGS Airports.</li> </ul>	2022		

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#### Our social commitments

#### **Our economic commitments**

Material issue	What we will do	By when	SDG	Material issue	What we will do	By when	SDG
Noise	<ul> <li>We will deliver our Noise Action Plans and report on our progress annually.</li> <li>We will establish Noise Insulation Schemes at each of our airports.</li> <li>We will engage directly with local planning authorities to ensure awareness of aircraft operations is considered in the development of sensitive land uses.</li> <li>We will establish a community noise forum at each of our airports.</li> </ul>	2021 2021 2021 2022	3 GOOD HEALTH AND WELL-BEING AND WELL-BEING	Economic Development & Employability	NHS, to trial the UK's first medical drone	2022 2022 2022	4 EURLITY EURLING 8 ECENT WORK AND ECONOMIC GROWTH ECONOMIC GROWTH
Supporting Our Communities	<ul> <li>We will re-establish our community funds and charitable partnerships post-COVID.</li> <li>We will establish a Community Health Fund at Southampton Airport.</li> <li>We will support our colleagues by providing two days of paid volunteering leave per year.</li> <li>Each of our airports will establish partnerships with local schools, colleges and universities to provide advice, guidance and information on careers within aviation as the industry seeks to regrow.</li> </ul>	2021 2021 2022 2022		Sustainable Supply Chain	<ul> <li>We will work with the Slave Free Alliance to review our approach to modern slavery and develop and publish an action plan.</li> <li>We will establish a supplier code of conduct.</li> </ul>	2021	5 EQUALITY   EQUALITY   EQUALITY   EQUALITY   EQUALITY   Image: Ima
Supporting Our People	<ul> <li>We will implement a gender equality strategy with objectives focused on flexible working, pay equality and gender composition.</li> <li>We will align our policies and processes with the UN Guiding Principles on Business and Human Rights.</li> <li>Aberdeen and Glasgow airports will sign the Scottish Business Pledge.</li> </ul>	2021 2021 2021	5 EQUALITY EDUALITY B ECENT WORK AND ECONOMIC GROWTH EDUALITY				16 PEACE, JUSTICE IND STRONG INSTITUTIONS

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# Addressing our environmental responsibilities



#### **Emissions profile**

Greenhouse gas emissions are categorised into three groups or 'Scopes' by the most widely-used international accounting tool, the Greenhouse Gas (GHG) Protocol.

They are categorised as:

**SCOPE 1** – Direct emissions from fuel combusted in company-owned or controlled facilities and vehicles.

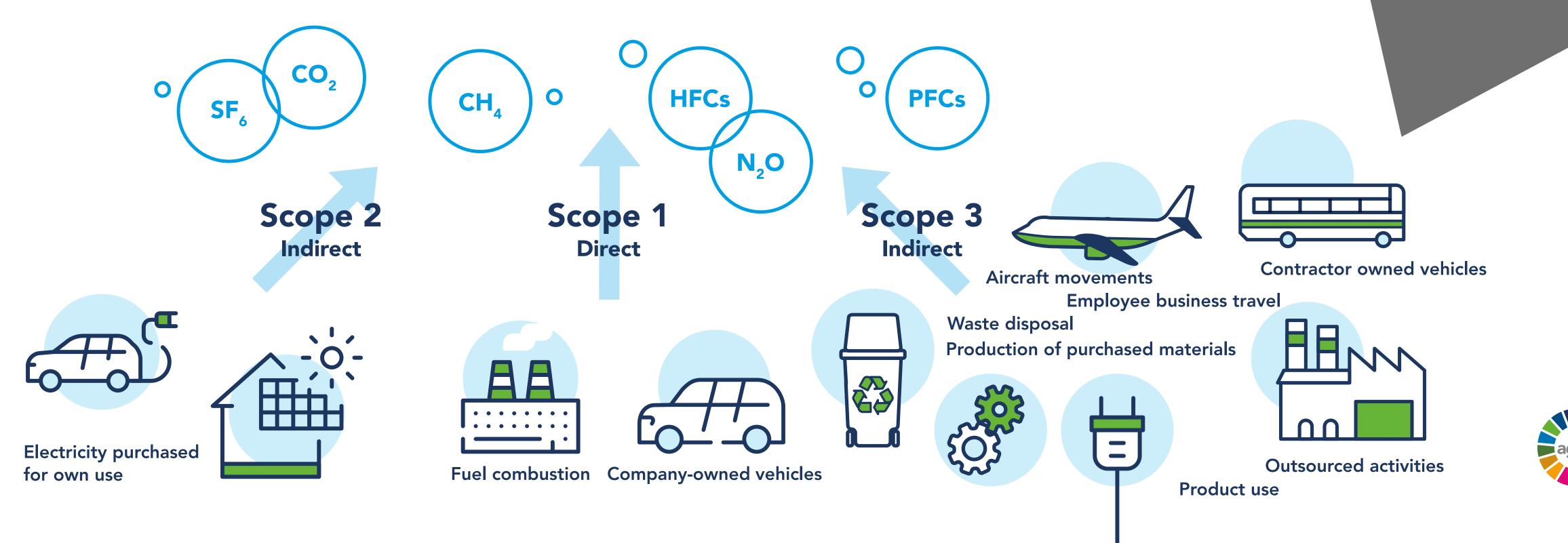
**SCOPE 2** – Indirect emissions from the generation of purchased electricity by the reporting company.

**SCOPE 3 –** All other upstream and downstream emissions in a company's value chain.

The diagram below illustrates this definition of scopes:

AGS participates in **Airport Carbon** Accreditation which is the only institutionallyendorsed, global carbon management certification programme for airports.

All of our airports have achieved Airport Carbon Accreditation Level 2 and will apply for Level 3+ in 2022.



#### Towards net zero





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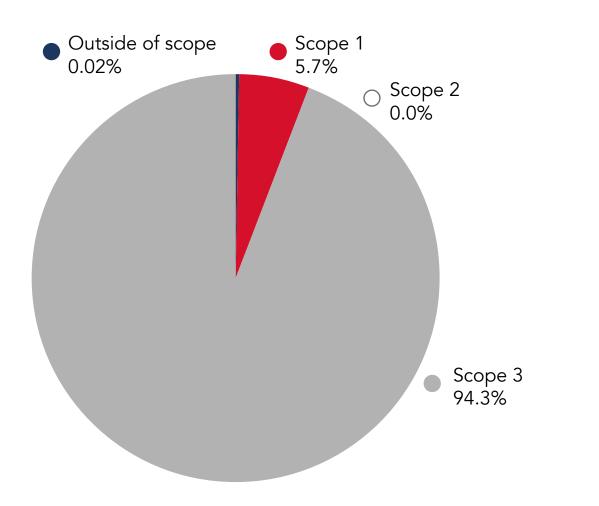
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### AGS Airports' carbon emissions by Scope 2020

Our direct emissions account for just 5.7% of AGS' overall footprint. Since April 2018, 100% of all electricity purchased across AGS is from renewable sources under a "Green Energy" contract. This means our Scope 2 emissions are net zero.

We have achieved carbon neutrality status for the remaining emissions under our direct control through the British Standard Institute's PAS 2060 accreditation and the purchase of offsets. By investing in the carbon reduction measures identified within our net zero roadmap we aim to achieve net zero emissions for Scopes 1 and 2 by the mid-2030s.



	Total 2020 emissions (tCO <sub>2</sub> e)	% of total emissions
Scope 1	4,574	5.7%
Scope 2	0	0.0%
Scope 3	76,343	94.3%
Outside of scopes	19	0.02%
Total	80,936	100%

### Carbon emissions by source and activity 2020

The combined AGS Airports' emissions can be broken down by activity as seen in this table.

Emissions source	Scope 1 (tCO <sub>2</sub> e)	Scope 2 (tCO <sub>2</sub> e)	Scope 3 (tCO <sub>2</sub> e)	Outside of Scope (tCO <sub>2</sub> e)	Total (tCO <sub>2</sub> e)	% of total emissions
Aircraft movements	0	0	53,792	0	53,792	66.5%
Passenger surface access	0	0	14,937	0	14,937	18.5%
Utilities	4,092	0	1,658	0	5,750	7.1%
Staff commute	0	0	3,508	0	3,508	4.3%
Aircraft engine tests	0	0	1,247	0	1,247	1.5%
Operational vehicles	400	0	804	12	1,217	1.5%
Waste	0	0	344	0	344	0.4%
Fire training	82	0	0	7	89	0.1%
Business travel	0	0	53	0	53	0.1%
Total	4,574	0	76,343	19	80,936	100.0%

The coronavirus pandemic brought our airports and the wider aviation sector to a complete standstill. Clearly, this had impact on our carbon footprint with the following sources experiencing the largest decrease in emissions from 2019:

- Passenger surface access emissions reduced by 81%
- Staff commute emissions reduced by 75%
- Aircraft movement emissions reduced by 56%
- Waste emissions (Scope 3) reduced by 90%

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#### Our roadmap to net zero

Since 2018, we have reduced our direct emissions by 52% and aim to achieve net zero for our direct emissions by the mid-2030s. This is an important first step, however, we recognise our airports have a wider impact over and above our direct emissions.

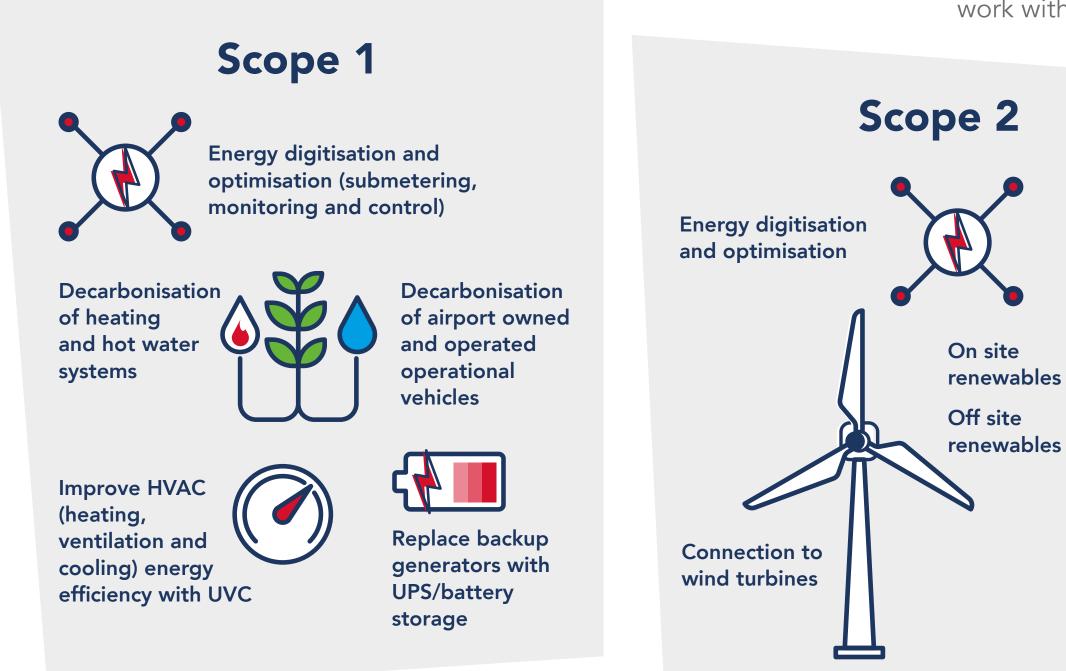
Working with Ricardo Energy & Environment, each of our airports has developed a net zero roadmap setting out the carbon reduction measures we will implement to achieve our net zero target.

The model is based on Ricardo's Net Zero Gap Analysis Tool that allows for the modelling of carbon emissions out to a date in the future. This is done by extrapolating historical energy/carbon data and utilising predicted growth trends and estimated future carbon emissions factors.

The Net Zero scenario models the impact of a broad range of energy saving / carbon reduction measures from small scale local projects to large scale infrastructure projects. 17 energy/carbon saving measures were modelled as part of this exercise.

The results of the modelling indicate that if all of the identified measures are implemented by AGS, either through direct action or by influencing third parties, we can reduce our 2045 carbon footprint by 66% compared to continuing along a business as usual trajectory (this is modelled against 2019 data). Over the 25-year period that has been modelled, the total saved carbon is approximately **3,211,347 tCO2e**, or around three times 2019's total carbon emissions.

Of the identified measures, many of them affect the Scope 3 emissions where AGS does not have direct control. In these cases, we will continue our work with industry and government to decarbonise our sector.



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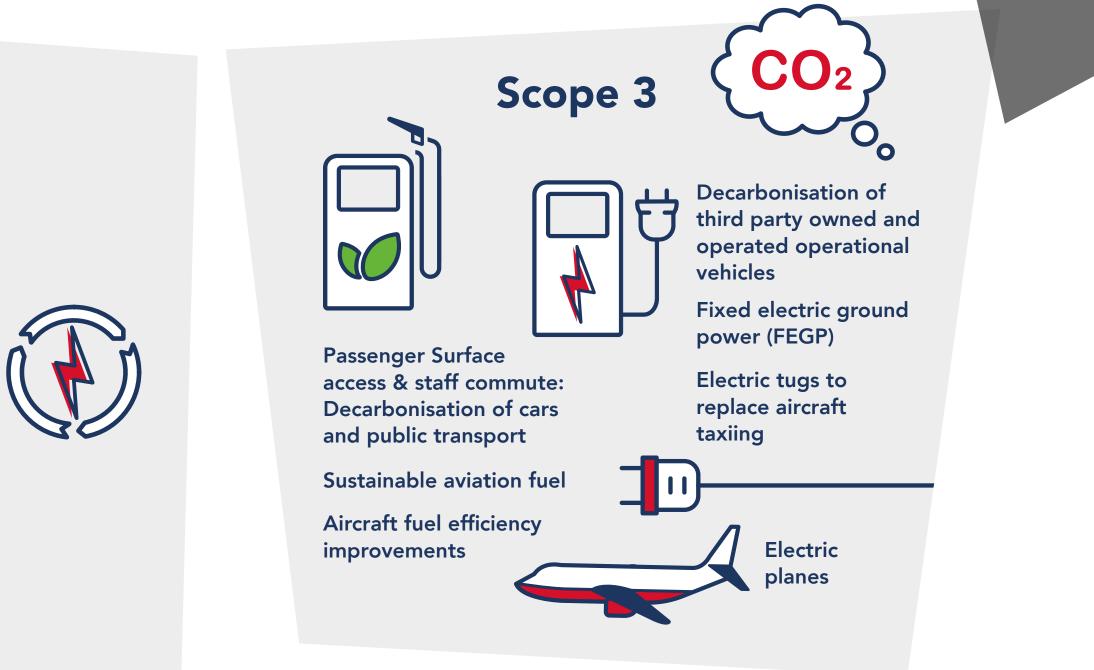
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In October 2019, Glasgow became the first UK airport to introduce a full-electric bus fleet into its operation.

The buses, which replaced the diesel fleet, are used to shuttle passengers between the terminal and the airport's Long-Stay Car Park and reduced the associated carbon emissions from 143 tonnes per year to zero.



Our LED lighting programme is being rolled out across our airports. Southampton was the first UK airport to use LED lighting on aircraft stands and the first to install solar powered LED runway safety lighting. Operating 24/7, they store enough energy for 120 days' operation.

LED lights are being used in Southampton's terminal and car parks. The lights can operate for up to 100,000 hours (10 years) continuous usage, reducing energy consumption, maintenance costs and carbon emissions. Lighting controls in the car park also allow un-used lights to be switched off when they aren't required.

#### Fixed Electrical Ground Power (FEGP)

Both Glasgow and Southampton airports have installed FEGP units. This technology replaces the generators used by stationery aircraft.

contract.



#### Southampton switches to LED



In addition to reducing noise, the FEGP have net zero emissions as all of our electricity is purchased from renewable sources under our "Green Energy"

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#### Working with industry towards a sustainable future

AGS is a signatory to Sustainable Aviation which is a long-term strategy that sets out the collective approach of UK aviation to tackling the challenge of ensuring a cleaner, quieter, smarter future for our industry.

In February 2020, Sustainable Aviation published what was the first national net zero aviation commitment anywhere in the world when it launched its "Decarbonisation Road-Map: A Path to Net Zero."

The Road-Map sets out how UK aviation can accommodate a 70% growth in passengers by 2050 whilst reducing net carbon emissions from levels from just over 30 million tonnes of CO2 per year down to zero.

The reductions will come from a range of measures including smarter flight operations, new aircraft and engine technology, modernising UK airspace, the use of sustainable aviation fuels, and high-quality market-based policy measures.

#### Sustainable Aviation Fuels (SAF)

**SAF give** us the ability to fly on recycled carbon. Produced from a range of feedstocks, including ethanol, household and agricultural waste, SAF can deliver up to 80% carbon reductions for each litre of fuel used instead of traditional jet-fuel.

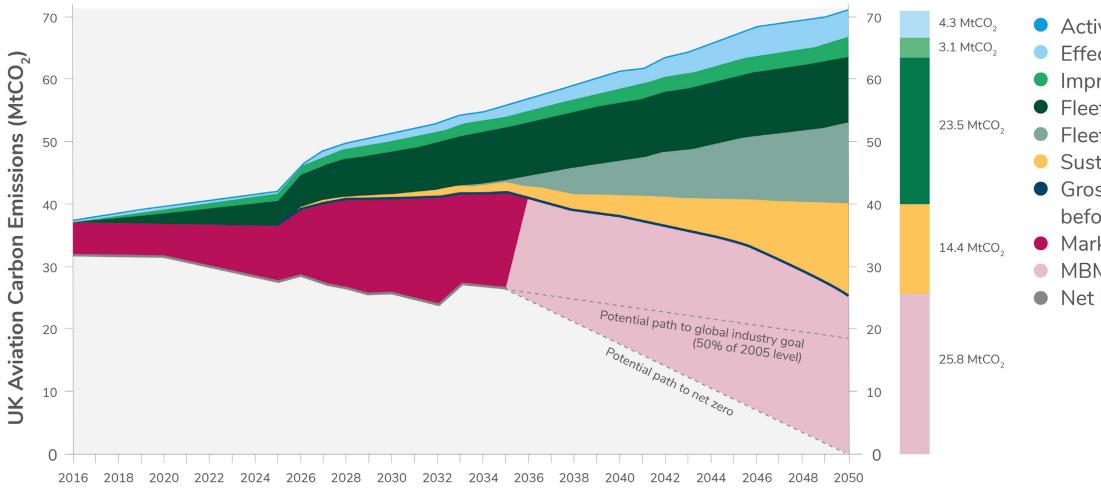
Out of all available solutions to decarbonising aviation, SAF is market ready. As set out in the Decarbonisation Roadmap, SAF have the potential to start reducing UK aviation emissions in the mid-2020s and to reduce aviation emissions by at least 32% in 2050.

Almost 200,000 flights worldwide have taken place using SAF which is now included in the UK Renewable Transport Fuel Obligation. What's more, it requires no modifications to existing aircraft or airports' refuelling infrastructure. What is needed is the ability to produce it on scale and encourage demand. As it stands, there is not enough supply and costs are too high with SAF costing approximately seven times more per litre than jet fuel.

using

less

fuel



Sustainable Aviation's 'Decarbonisation Road-Map for UK Aviation', highlighting aviation's potential path to net zero by 2050 (Sustainable Aviation, Decarbonisation Road-Map: A Path to Net Zero, February 2020)

- Activity Growth (without carbon price)
- Effect of Carbon Price on Demand
- Improved Operations / ATM
- Fleet Upgrades, with known aircraft types
- Fleet Upgrades, with future aircraft types
- Sustainable Fuels
- Gross Emissions (CO<sub>2</sub> emissions from UK departing flights
  - before offset and removal)
- Market Based Measures MBMs specifically EU ETS + CORSIA
- MBMs (Carbon removal measures)
- Net Emissions

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"It is likely that aviation will need around 450-500 million tonnes of SAF per annum by 2050. Analysis shows that this is achievable, with rigorous sustainability criteria ensuring a transition that does not impact food or water use. There is enough feedstock to produce the necessary SAF and hydrogen is a realistic possibility for some aircraft. Efficiency will continue to improve and modern air transport will remain a key driver of connectivity, business and social connections across the world well after 2050."

Air Transport Action Group (2020). Blueprint for a Green Recovery. September 2020.



A number of companies are getting ready to scale up production including Neste, Lanzatech and, closer to home, Velocys which will build the UK's first waste-to-jet-fuel facility in Immingham, England. Velocys will take hundreds of thousands of tonnes of non-recyclable everyday household and commercial waste per year, which would otherwise have gone to landfill or incineration, to produce SAF.

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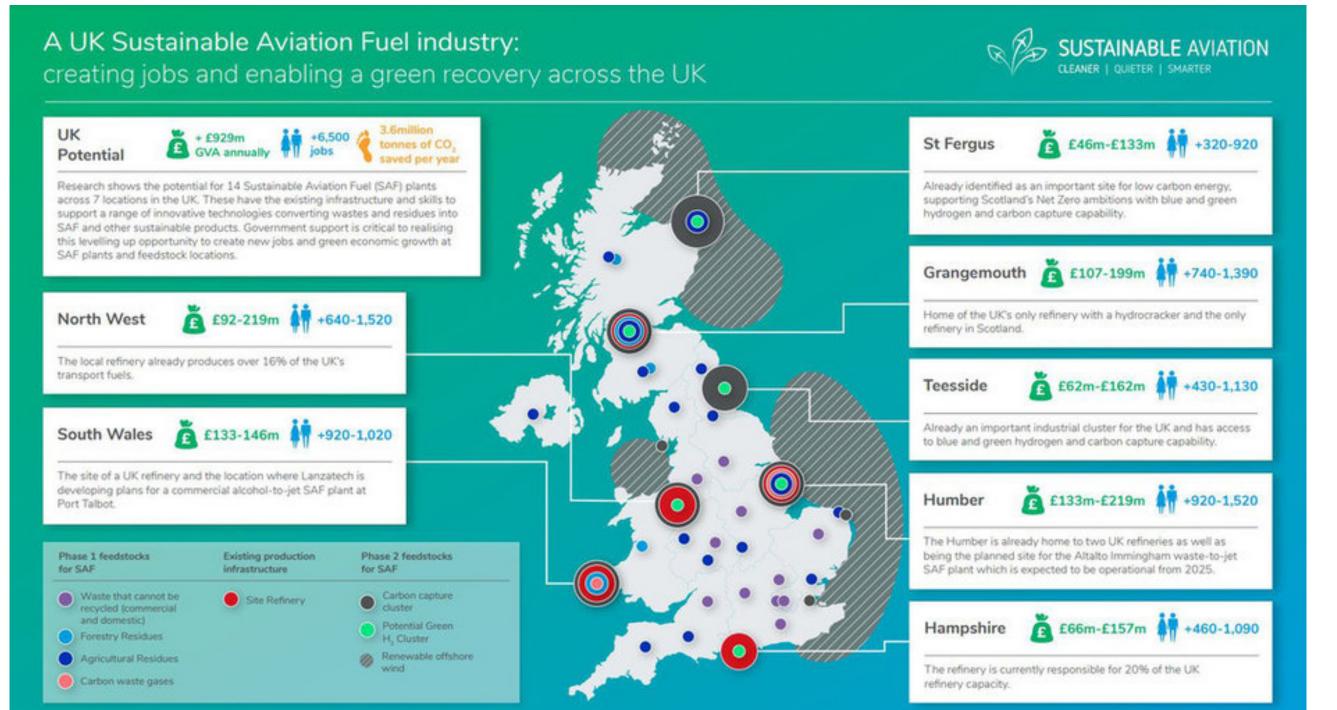
### **SAF** – the opportunity

Independent work conducted by **<u>E4tech</u>** on behalf of Sustainable Aviation has found that by 2037 there could be up to 14 SAF production facilities in the UK which would create 6,500 direct jobs and contribute £929 million annually to the UK economy. With export and overseas opportunities included, this grows to 13,600 jobs and £1.9 billion.

These sites were identified based on the availability of feedstock and enabling infrastructure such as low carbon hydrogen, the location of prospective carbon capture usage and storage (CCUS) clusters, and locations of existing refineries. This means SAF investment will help retain and create jobs in these regions.

Adam Morton, Chair of Sustainable Aviation, said: "Sustainable aviation fuels will be essential for the global aviation industry in a net-zero world, and the UK has a golden opportunity to become a world-leader by commercialising this technology at an early stage.

"There are enormous benefits in terms of jobs and growth across these clusters. By backing SAF in this way, Government can kickstart a green recovery, create high quality and futureproof jobs for thousands of people. All of this can be delivered at the same time as slashing carbon emissions."



To get this nascent industry off the ground, Sustainable Aviation has called on the Government to:

- commit to £500m of Government funding to support the essential commercialisation of sustainable aviation fuels, including £429m in Government-backed loan guarantees for the initial first-of-its-kind SAF production facilities;
- £50m in grants and development support for new SAF technologies; and
- £21m to establish a UK clearinghouse to enable SAF testing and approval.

If we are to achieve our net zero target and transition away from fossil fuels, it is important government seizes the opportunity to support the rapid scaling up of SAF.

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#### Hydrogen and electric to take flight

As we seek to scale-up the production of sustainable aviation fuels it is important we continue to accelerate research into hydrogen and electric flight, both of which are becoming increasingly viable options for regional and short-haul aircraft.

In September 2020, Airbus revealed three concepts for the world's first zeroemission commercial aircraft which could enter service by 2035. All of these concepts rely on hydrogen as a primary power source – an option which Airbus believes holds exceptional promise as a clean aviation fuel and is likely to be a solution for aerospace and many other industries to meet their climate-neutral targets.

In the same month, Airbus unveiled its three hydrogen concepts, Cranfield University supported ZeroAvia in achieving the world's first hydrogen fuel cell powered flight of a commercial-grade aircraft. The flight took place at the company's R&D facility at the University-owned Cranfield Airport. The Piper M-class six-seat plane completed taxi, take-off, a full pattern circuit, before landing back at the airport.

Scotland's airline, Loganair, is part of a consortium taking forward plans to trial a zero carbon, hydrogen-fuel-cell-powered flying demonstrator by September 2022. If trials are successful, this could see the world's first hydrogen-powered passenger flights take off in Orkney in late 2023.

Andy Smith, Head of Sustainability Strategy at Loganair, said:

"Hydrogen based propulsion systems for aircraft are an exciting emerging technology with the potential to eliminate emissions for sub-regional air transportation."

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#### Air quality

Aircraft emissions contribute 1% of the UK nitrogen oxide (NOx) emissions and 0.1% of UK particulate (PM10) emissions. The UK aviation industry has already delivered a wide range of emission reduction initiatives, including changes to the way we operate, which can often deliver consequential benefits in other areas such as noise reduction or carbon savings (SA).

Emissions from aircraft on the ground contribute to local air quality. This includes taxiing, and during landing and take-off. The main source of NOx emissions around the airport however is from road vehicles both on and off airport roads.

Our airports undertake Air Quality Monitoring every three years for NOx emissions and particulates on a voluntary basis. We have also implemented a series of measures such as single engine taxiing, the introduction of zeroemission airside equipment to replace diesel versions and the introduction of fixed electrical ground power (FEGP) units.

A key component of improving air quality will be addressing surface access challenges, particularly at **Glasgow Airport where surface access** accounts for 37% of all emissions (50,161 tCO2e in 2019).

In addition to addressing air quality, improving transport links to airports can create economic growth and boost prosperity, with around <u>one third</u> of these benefits likely to accrue to the local economy surrounding the airport.



In April 2019, the Glasgow Connectivity Commission, an independent body established by Glasgow City Council, put forward proposals for a city-wide metro system.

In February 2021, plans for the Glasgow Metro took a huge step forward when the Phase One report of the Scottish Government's second Strategic Transport Projects Review (STPR2) confirmed that the Metro would be included and work would continue on the strategic business case.





#### Glasgow Metro is on track

The city's Metro proposals are compelling and demonstrate real ambition to deliver a much needed, sustainable transport system. With surface access emissions accounting for 37% of Glasgow Airport's carbon footprint, the Metro will have a transformative effect, alleviating congestion, reducing emissions and boosting public transport use.

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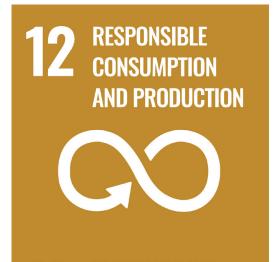
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#### Material resources

Reducing waste is a key part of our environmental management plans and it is right that we aim to achieve zero waste. Goal 12 of the Sustainable Development Goals is ensuring "sustainable consumption and production patterns." As part of our efforts to achieve zero waste, AGS will incorporate circular economy principles within our supply chain. As a group, we continuously engage with our onsite waste contractors in order to incorporate innovative ways of increasing our recycling at source.

The "waste hierarchy" ranks waste management options according to what is best for the environment. It gives top priority to waste prevention; where waste is created, priority is given to preparing it for re-use, then recycling, then recovery. Waste disposal (e.g. landfill) features at the bottom of the hierarchy options and should be a last-resort.

Aberdeen Airport diverts 100% of waste generated onsite from landfill. Onsite waste generation has dropped by over 85% since 2017.

Glasgow Airport has successfully achieved 100% diversion of non-hazardous waste from landfill since 2015 while Southampton Airport has a 65% on-site segregation target and works with waste vendors to ensure it achieves 100% diversion of non-hazardous waste from landfill.

Glasgow Airport has also installed recycling stations to provide a sustainable solution for the disposal of single-use coffee cups.

#### Water

Good quality water is essential for our health and prosperity. A number of activities within an airport environment can adversely impact water quality; these include use of de-icer, fire-fighting foam, accidental spillages (e.g. oil and chemicals) and pointsource releases (e.g. suspended solids) arising from construction works. Effective control measures to prevent accidental releases and to ensure regulated discharges operate within prescribed limits are essential.

AGS is also committed to promoting effective water management. Water consumption across our airports is monitored and water consumption is tracked via our Automatic Meter Reading (AMR) system. Any abnormal usage is then investigated to determine whether this has been caused by leaks.

#### AGS trials biodegradable security bags

AGS was the first UK airport group to trial a new Oxo-Biodegradable 100ml security bag which are available free of charge to passengers in the security areas across our airports.

By introducing the Oxo-Biodegradable version, AGS removed more than two million single-use plastic bags each year across the group.

The technology involved ensures the product will begin to degrade over a selected period of time – between 17 and 24 months of a bag's lifespan – down to a natural bio-mass rather than the more damaging micro-plastics associated with single-use alternatives.



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#### Biodiversity

The UK was the first country to produce a national biodiversity action plan. This described the biological resources of the UK and provided detailed plans for conservation of these resources. Action plans for the most threatened species and habitats were set out to aid recovery and national reports showed how the UK BAP was contributing to the UK's progress towards reducing biodiversity loss. At AGS we recognise we have a responsibility with respect to protecting local biodiversity.

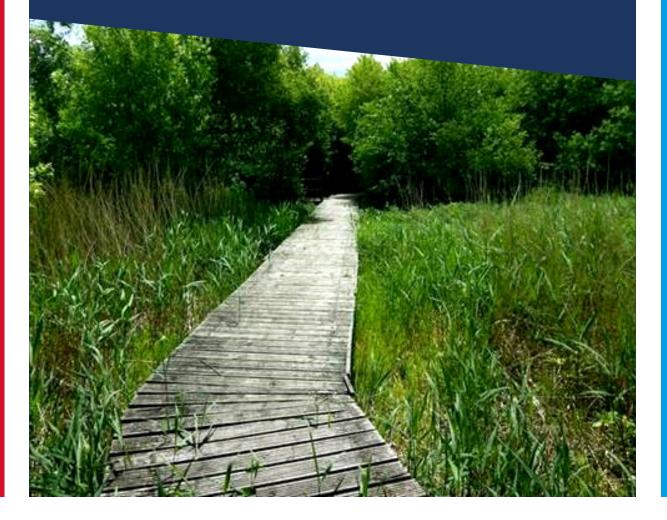


#### The River Don

Aberdeen Airport is working with the University of Aberdeen to assess the biodiversity, both plants and animals, in and around the airport. This includes conducting a bird specific survey of the local area. The studies will not only provide an improved understanding of the local environment but will identify areas where we can better promote natural growth, habitats and ecosystems. Aberdeen Airport's current biodiversity report highlights over 40 tree and grass species in the local area, as well as numerous small mammals including badgers, rabbits and foxes. Continual surface water improvements aim to ensure that the River Don, which circulates the northern half of the airport, remains a prime site for salmon fishing and recreation.

#### Paisley Moss

Located between the west of Glasgow Airport and the motorway slip road is a Natural Nature Reserve "Paisley Moss". This Nature Reserve supports a wide array of plants, animals, reed beds, marshes and ponds throughout all four seasons. The area also supports the bumble bee, crucial for pollination of fruits, vegetables plants and wildflowers. In 2018 Glasgow Airport upgraded the cycle route improving access through the campus, including Paisley Moss.





#### Marlhill Copse

Located on land to the south of Southampton Airport's runway is an ancient semi-natural woodland, Marlhill Copse. It contains a valuable range of habitats including woodland, exotic trees and shrubs all requiring sensitive management to protect its ecological value.

Southampton Airport has implemented a detailed management plan to protect biodiversity and promote public access in the area. Future plans include; bat walks, educational projects for children and numerous volunteering programmes in association with the Hampshire Gardens Trust.

Southampton also borders the Itchen Valley Country Park; a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC). Due to the proximity of the Itchen Valley Country Park, the airport has agreed to voluntarily set aside an area of land to form a buffer zone between its operational area and the SSSI. The buffer zone is intended as a natural break area between Southampton Airport and the surrounding habitats and contains an array of wild plants and insects that complement the adjoining SSSI habitat.

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# Supporting our communities



Noise from aircraft and airports has an adverse effect on local communities. In talking to our neighbouring communities, we know airport-related noise is an important issue. Managing noise effects is an integral part of how we grow our airports responsibly and that is why we have introduced a comprehensive package of noise-related measures over a number of years.

Each of our airports has a published Noise Action Plan which sets out how we manage and reduce the adverse effects of aviation-related noise. They are aligned with the International Civil Aviation Organisation (ICAO) Balanced Approach which aims to address noise management in an environmentally responsive and economically responsible way, and encompasses four principal elements:

In order to evaluate the effective and delivery of the Noise Action Plans, we have established performance indictors, timescales and targets where appropriate and committed to reporting on our progress through various avenues:



In addition, we will:

You will find our airports' Noise Action Plans using the following links Aberdeen, Glasgow and Southampton.

The evolution of aircraft technology continues to yield reductions in noise emissions and we have significantly reduced the size of all our airports' noise footprints. Managing noise can only be achieved through effective partnerships, with our airlines and our communities and we are committed to delivering all the targets set out within our Noise Action Plans.

3 noise

abatement

operational

procedures

4 operating restrictions on

aircraft

2 land-use

planning and

management

#### Noise

X

1 reduction

of noise at

source

• Establish Noise Insulation Schemes at each of our airports.

• Establish a Community Noise Forum at each of airports.

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## Supporting our communities

It is important we ensure the communities surrounding our airports can share in our success. Since 2010 our airports, through their community funds and charitable partnerships, have awarded in excess of £2 million to local charities and community groups. The onset of the Coronavirus pandemic meant our community funds and charitable partnerships were put on hold but that did not stop us from supporting our neighbouring communities. In the early weeks of the pandemic, AGS responded to the #GiveHope appeal launched by homeless charity, Simon Community Scotland, by pledging £40,000 which was used to purchase of hotel accommodation for some of the most vulnerable people in society during the pandemic.

As we emerge from the pandemic, we will:

- re-establish our community funds and charitable partnerships;
- support our colleagues who wish to offer up their time by volunteering with charities in the communities we serve by providing two days of paid volunteering leave per year; and
- seek to establish partnerships with local schools, colleges and universities to provide local people with advice, guidance and information on how to pursue a career within aviation as the industry seeks to regrow.

Since it was established in 2010, Glasgow Airport's FlightPath Fund has awarded more than £1.6 million to over 600 local charities and community groups.

The fund focuses its investment on the communities in the four local authority areas of Glasgow, Renfrewshire, East Dunbartonshire and West Dunbartonshire which lie under the airport's flight path. Funding is targeted in three key areas of education, employment and the environment and as the FlightPath Fund has grown in popularity, it has attracted an increasing number and diverse range of applications, from small communitybased groups to national charities delivering local projects.





#### Aberdeen and Southampton serve up support

Aberdeen Airport supported thousands of the most vulnerable people in society by making weekly food donations to local charity, Aberdeen Cyrenians which has been providing outreach and support services to people who are homeless for more than 50 years. Working with its retail and catering partners, the airport has been donating excess food items that are still consumable to Aberdeen Cyrenians since August 2020 which helped the charity during its highest demand for services. Southampton Airport put its resources to good use supporting a Winchester-based community scheme to sew scrubs for health workers. The airport's engineering department also put its 3D printer to good use to create adjustable straps for much needed face masks.

#### Flightpath fund makes a difference



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## Supporting our people

At AGS, we are committed to providing good conditions of employment, respecting diversity and promoting equal opportunities for all staff through rigorous ethical, professional and legal standards.

Put simply, without a motivated and engaged workforce we would be unable to function. It is our people who run and operate our airports, ensuring they deliver for the regions they serve. AGS wants to be viewed as an employer of choice. We believe it is important to recruit and retain a wealth of talent and, where possible, seek to recruit from within the business and our local communities.

Both Aberdeen and Glasgow airports are signatories to the Scottish Business Pledge which is described as a values-led partnership between Government and business that is based on boosting productivity and competitiveness through fairness, equality and sustainable employment.

"Investing in education and training, ensuring good working conditions, and providing a working environment that enhances (or, at the very least, does not negatively affect) well-being is important for the long-term sustainability of an organisation."

Jonathon Porritt (2007). Capitalism as if the World Matters

Our airports are signatories to the Women in Aviation and Aerospace Charter. The charter was launched in 2018 by companies and organisations within the UK's aviation and aerospace sectors who collectively committed to working together to build a more balanced and fair industry for women.

With more than 200 signatories, the charter reflects the aspiration to see gender balance at all levels across the industry for both women and men in the sector.



#### Women in Aviation and Aerospace Charter



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# Supporting economic growth



### **Economic development and employability**

Aviation plays a critical role in supporting the growth of the UK economy; providing the connectivity that drives tourism, generates employment and supports businesses to export and attract inward investment.

Prior to the outbreak of the Coronavirus pandemic, our airports supported tens of thousands of jobs and contributed in excess of £2 billion in GVA to the UK economy every year.

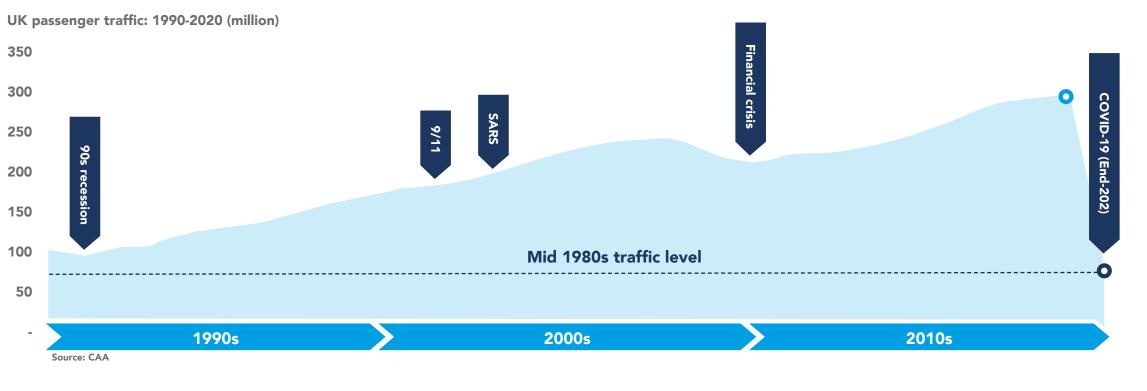


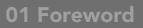
Like every part of society, our airports came to an almost complete standstill in March 2020 due to the impact of the pandemic and that remains the case today. Airports throughout the UK are operating at just a fraction of their capacity, with UK passenger traffic collapsing to levels not seen since the mid-1980s.

The biggest impact has been on the livelihoods of the people who keep our airports moving, as well as those who work in the sectors that are so reliant on aviation, namely tourism and hospitality. Tens of thousands of jobs have been lost and we know it is going to be the latter part of this decade before we recover.

Ours will be a slow recovery, but what won't change is the role of aviation in driving the economy. Now more than ever, it's crucial we provide the connectivity which will drive growth, employment and prosperity.

Once this crisis has abated, AGS Airports will be ready to play its part. We will ensure the communities in which we operate have access to employment opportunities as they become available again. We will also create a start-up accelerator hub that will serve our communities by promoting collaboration with local entrepreneurial organisations and academia.





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Impact of COVID-19 on the UK aviation sector. Airport Operators Association, Steer Report (2021).



#### Sustainable supply chain

AGS is committed to tackling the growing issue of modern slavery and human trafficking. The International Labour Organisation estimates there are more than 40 million people around the world who are victims of modern slavery, including 24.9 million in forced labour.

Our AGS Sustainable and Ethical Procurement Policy reflects our commitment to acting ethically and with integrity in all our business relationships, and to implement and enforce effective systems and controls to ensure slavery and human trafficking is not taking place anywhere within our business or supply chain.

We continually review our supply chain and focus on continuous improvement and the delivery of effective strategies to meet our commitment of compliance with the Modern Slavery Act 2015.





In 2020, AGS joined the **Slave Free Alliance**, a social enterprise and membership initiative launched by anti-slavery charity Hope for Justice which aims to end modern slavery by preventing exploitation, rescuing victims and restoring their lives.

The Slave-Free Alliance is the business sector's acknowledgement that slavery in supply chains is real and a key factor driving human trafficking in the developing world and across borders to countries like the UK. It can affect any unprepared business, no matter their sector.

As a social enterprise, all profits made by the Slave Free Alliance are reinvested into charitable anti-slavery projects around the world.

#### AGS partners with the Slave Free Alliance

#### **SLAVE-FREE** ALLIANCE

Working Towards a Slave-free Supply Chain

#### Member

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## Three airports. One journey to a sustainable future.

To view our individual airport sustainability pages click the logos below

