



# Environmental Action Plan 2021–22



## CEO message

London Southend is a community airport. Over many decades, it has supported military, freight, maintenance and passenger-related flying, contributing enormously to the social and economic life of our region. Although the past year has proved the most difficult in the history of the airport, we are now beginning to see a return to passenger flying. And as we start to grow again, the time is right for a reset.

We are clear that the airport delivers for our communities economically. Over 85% of all employees live in SS postcodes, for example. At the same time, we need to acknowledge our environmental impacts, to manage and, where possible, mitigate them.

We are determined to ensure our airport provides real benefits for our communities over the long term. This means managing our environmental impacts to the greatest extent practicable and investing in a sustainable future for our region to enjoy.

So in this document, we set out the key points of our Environmental Action Plan for 2021-2. We will define what we plan to do, why we plan to do it, what the benefit is to our communities and how we will monitor progress towards our objectives.



We are now beginning to see a return to passenger flying. As we start to grow again, the time is right for a reset.

We will review and update this document each year, as progress is made towards our targets and as new solutions emerge which enable us to consider different strategies and actions. This plan is very much part of our wider approach to connecting our community and will evolve as that wider agenda evolves.

I look forward to delivering against its commitments and to providing our communities with an airport that works, quite literally, for them.

Kind regards,

**Glyn Jones**  
London Southend Airport





## Context

**In 2019-20, the last year before COVID-19, the airport welcomed 2.15m passengers and supported the employment of 1500 people.**

It also generated 4,847 tonnes of CO<sub>2</sub> and received 6,711 complaints from 708 complainants, mainly around aircraft noise. The current capacity of the airport without further material investment is around 3 million passengers. We aim to work in line with Government aviation policy to make best use of that capacity in the short term. Independent research indicates that at 3 million passengers we could contribute to the community:

- 2,200 jobs at London Southend Airport
- 3,200 jobs in the wider, largely local economy
- And £400m per annum contributed to the economy

Of course, such growth and indeed further expansion would also see additional environmental impacts in terms of carbon, noise, air quality and other dimensions. London Southend Airport has therefore developed an Environmental Action Plan that puts sustainability at the core of its growth plans.

## Our approach

**Sustainable growth in aviation is not a challenge: it is an absolute requirement and our Environmental Action Plan sets out to deliver it at London Southend Airport.**

We want to ensure our processes and operations reflect best practice. We will focus on:

- Regular community engagement
- Efficient airport operations
- Engagement with our partners to support shared sustainable outcomes
- Establishing the right culture needed to succeed

We will communicate the actions we are taking clearly and consistently, actively listening to our communities so we can adapt our plan, where required and possible. Doing so will allow us to achieve the best balance that we can between economic benefit and environmental impact.

Our approach is based on responses to four questions:

- What is the issue?
- Why does it matter?
- What are we doing about it?
- What will the benefit be to our communities?

In all key areas of environmental impact, we set targets which are challenging, but achievable. Then we set strategies to reach those goals over time and individual actions to deliver those strategies. Finally, we put in place mechanisms which will allow for independent validation, as well as reporting, of our progress on an annual basis.





## Our policy

**We are a responsive and responsible airport operator.**

**This means we undertake activities that help us:**

- Work to deliver a shared sustainable future with our community
- Deliver a strong and consistent community engagement programme
- Actively manage our environmental impacts
- Work toward the right policies and practices
- Understand the needs of our stakeholders and partners
- Empower our people to be at the heart of our sustainability plan

## Our priorities

Our key priorities for sustainable growth are to:

- Progress toward a carbon neutral airport operation
- Ensure air quality around the airport continues to be within government limits
- Minimise the number of households impacted by noise and phase out all aircraft over 85 decibels
- Ensure efficient water use and manage our impact on local watercourses
- Play a leading role in supporting employment, education and community care in the Southend area, developing education and skills initiatives to support local residents into work



# The actions we are taking



## Carbon

### What is the issue?

Air transport accounted for 2.8% of global and 8% of the UK's 2018 GHG emissions (Source: ONS, UK Environmental Accounts).

### Why does it matter?

Although this is a relatively small proportion (40% derives from households, for example) it is in absolute terms a large number – around 1bn tonnes a year globally, pre-pandemic. And aviation internationally has been on a strong growth path for many years, suggesting further increases in emissions over the long term.

### What are we doing about it?

We have signed up to the internationally recognised Airport Carbon Accreditation (ACA) programme, which sets the airport on the path to carbon neutrality through four main and progressively more stringent levels of accreditation:

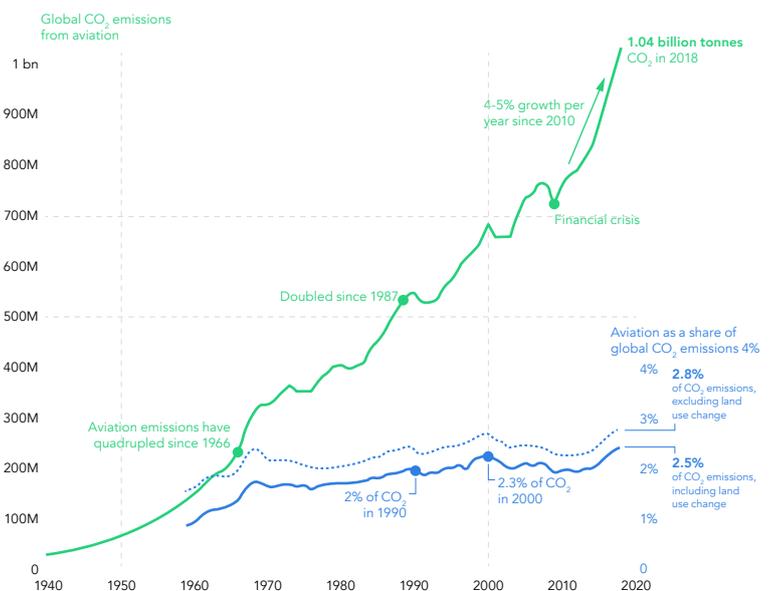
- Mapping our own carbon emissions
- Reducing those emissions
- Mapping partners' emissions and working with them to seek reductions
- Offsetting residual emissions to zero

### What will the benefit be to our communities?

In essence, we will reduce carbon emissions at the airport to the greatest practicable extent, then use offsetting techniques (for example, tree planting) to achieve carbon neutrality.

## Global carbon dioxide emissions from aviation

Aviation emissions includes passenger air travel, freight and military operations. It does not include non-CO<sub>2</sub> climate forcings, or a multiplier for warming effects at altitude.



OurWorldInData.org – Research and data make progress against the world's largest problems.  
Source: Lee et al. (2020). The contribution of global aviation to anthropogenic climate forcing for 2000 to 2018; based on Sausen and Schuman (2000) & IEA.  
Share of global emissions calculated based on total CO<sub>2</sub> data from the Global Carbon Project. Licensed under CC BY by the author Hannah Ritchie.

## Objective

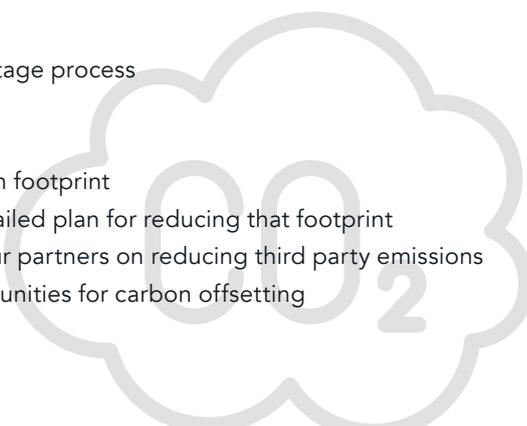
Achieve carbon neutrality

## Strategy

Follow the ACA four stage process

## Actions

- Map our carbon footprint
- Establish a detailed plan for reducing that footprint
- Engage with our partners on reducing third party emissions
- Explore opportunities for carbon offsetting





## Air quality

### What is the issue?

Aircraft are responsible for 1% of the UK's Nitrous Oxides (NO<sub>x</sub>) and Sulphur Dioxide (SO<sub>2</sub>) national emissions (Source: UK Govt Clean Air Strategy 2019).

### Why does it matter?

The last UK Air Quality Strategy (Defra, 2007) painted a positive picture, reporting progress and improving air quality over recent decades. Air in the UK is now cleaner in overall terms than at any time since the industrial revolution. However, this does not negate the fact that poor air quality does still exist in some areas with potentially serious adverse effects, both to human health and ecology and the airport has a role to play in addressing that situation.

### What are we doing about it?

We have been monitoring air quality on and around the airport for many years, with a focus on NO<sub>x</sub>. Our monitored emissions have been well below Government targets and have reduced, year on year, for the past 10 years. We will continue to monitor those NO<sub>x</sub> emissions, working towards continual improvements and ensure we remain well below the Government's evolving air quality targets.

Particulate matter (PM), however, is an emerging area where there is more to be done. This is acknowledged as a risk to public health, albeit one where data is emerging slowly, especially on ultra-fine particles (UFP). Government policy is not yet as fully developed as it is on, for example, NO<sub>x</sub>. We will therefore establish a network of monitoring points on and around the airport, utilising a hybrid of technologies capable of both compliance level monitoring and mobility to ensure a detailed understanding of particulate matter at a range of locations. This will enable us to develop PM reduction plans against detailed information.

### What will the benefit be to our communities?

In essence, we will ensure that air quality at the airport is both well understood and within Government-set limits at all times.

### Objective

NO<sub>2</sub> and PM levels at the airport within Government-set limits

### Strategy

Continue with NO<sub>2</sub> monitoring and introduce PM monitoring

### Actions

- Continue to monitor NO<sub>x</sub> emissions and seek improvements to ensure we operate within Government limits
- Install a PM network to monitor PM down to 2.5 microns
- Establish a PM baseline on and around the airport
- Develop a plan to seek reductions against that baseline as the airport develops
- Monitor the evolution of science around UFP and develop our own policy to address it





## Noise

### What is the issue?

There's no getting away from the fact that aviation can be noisy. When aircraft land and take off, as they fly overhead and as they are serviced on the ground they produce a considerable amount of noise which can and does affect local communities. Aircraft noise has reduced enormously over recent years but it remains an issue for some.

### Why does it matter?

In 2020, the airport received complaints, very largely noise related, from 400 households. Whilst this is a very small proportion of the 75,000 in Southend (half of one percent), it nevertheless represents a real issue for real people and is likely to grow as the airport develops.

### What are we doing about it?

The airport operates within the noise controls agreed with Southend, Rochford and Essex councils through the planning process and to the terms of its approved Noise Action Plan. However, although those are necessary conditions, for some in our community they are not sufficient. We have, therefore, taken additional steps, such as limiting the use of auxiliary power units (APU - a small but noisy engine which aircraft use when on the ground), routing aircraft on the ground to avoid impact on housing where possible and minimizing the use of intrusive reverse thrust (the use of aircraft engines to assist braking) at night. What we now propose is to go further, on the basis of both investment and further engagement with our communities.

### What will the benefit be to our communities?

In essence, we will increase community input to noise management and by so doing reduce to the greatest extent possible the impact of aircraft and wider airport noise on our communities.

### Objective

Significantly reduce community annoyance from noise.

### Strategy

Adopt the ICAO Balanced Approach to noise management.

### Actions

- Establish a Community Noise Forum that reflects ICANN best practice guidance
- Focus on identifying and implementing noise reduction procedures
- Evaluate a holding loop at the end of runway 05 to reduce the impact of ground noise from taxiway Charlie by removing the need to hold aircraft close to houses
- Work towards a phase out of all aircraft with a noise profile over 85db, reducing noise at source by banning noisier aircraft
- Work with our global logistics customer to introduce quieter cargo aircraft
- Introduce a new tariff incentivising the use of quieter aircraft





## Water

### What is the issue?

The airport is a consumer of water – a limited resource – and a user of chemicals, for example in fire-fighting, which could potentially contaminate local watercourses.

### Why does it matter?

Reducing water consumption preserves a valuable and limited natural resource and protecting watercourses is in itself supportive of the natural environment.

### What are we doing about it?

We already use technologies in the terminal as well as grey water to limit our consumption. We will continue to seek out new opportunities to improve water use efficiency.

In dialogue with key stakeholders, we will also publish a Water Quality Action plan by the end of 2022, including a water chemistry monitoring programme, a site wide oil and chemical storage register and a de-icing code of practice.

### What will be the benefit to our communities?

Clean watercourses will support not only water quality but also biodiversity.

### Objective

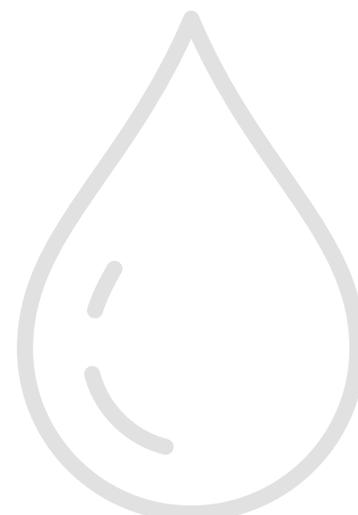
Reduce water use to the greatest extent possible and ensure no contaminations of local water courses.

### Strategy

Develop and implement a Water Quality Action plan.

### Actions

- Maintain regular dialogue with the Environment Agency, Southern Water and other key stakeholders
- Publish a Water Quality Action plan by the end of 2022
- Set a baseline report for water quality
- Conduct environmental assessments on development projects to ensure water quality issues are considered
- Develop and continuously upgrade our Flood Resilience Strategy for the airport





## Community care

### What is the issue?

London Southend Airport has already established its reputation as a leading employer in the area, providing a range of training and career opportunities. We will now coordinate our community efforts through our Connecting Communities commitment.

The airport is a community airport; engaging with our communities is increasingly part of what we do.

### Why does it matter?

The airport employed 1500 people in 2019 but also generated environmental impacts on some parts of the community. It is important the airport engages to ensure the best possible balance of benefit and community impact mitigation.

### What are we doing about it?

We have already established a strong programme of charitable giving, employee support for community activities such as educational work and conversations with residents groups. We are now building on those foundations, developing apprenticeship schemes, career fairs, wider community consultation and sector specific engagement for example becoming signatories to the Military Covenant.

### What will the benefit be to our communities?

Aligning the airport more closely with our communities will mean we are better placed not only to deliver the benefits our communities want, for instance in terms of pathways to work, but also to understand in greater detail the best way to mitigate any downsides for example in terms of road traffic impact or noise.

### Objective

Maximise the community benefits the airport brings whilst mitigating its environmental impacts through engagement.

### Strategy

We will co-ordinate our efforts more tightly through our Connecting Communities campaigns.

### Actions

- Establish our Connecting Communities campaign
- Develop our charitable giving framework to build a long term, sustainable relationship with our charity partner
- Establish an apprenticeship programme
- Hold regular community engagement events and periodic career fairs
- Become a signatory to the Military Covenant



## Our plan for 2021



### Carbon

1. Validate our carbon footprint map and achieve "Mapping" accreditation status
2. Establish detailed carbon reduction plan
3. Start to implement our carbon reduction plan



### Air quality

1. Continue to monitor NOx to achieve evolving Government targets
2. Install new PM/UFP infrastructure and establish first year results



### Noise

1. Establish a Constructive Community Engagement plan
2. Establish a Noise Forum following best practice guidance from ICANN
3. Adopt the ICAO 9829 Balanced Approach as the basis for noise planning
4. Focus initially on "noise abatement operational procedures"



### Water

1. Establish regular dialogue with the Environment Agency, Southern Water and other key stakeholders
2. Produce the first Water Quality Action plan by the end of 2021
3. Establish a water chemistry monitoring programme
4. Set a baseline report for water chemistry by end FY21
5. Develop and maintain a site wide oil and chemical storage register which can be annually updated
6. Develop and maintain a de-icing code of practice guide
7. Implement a plan to identify, record and maintain water quality critical assets



### Community

1. Launch Connecting Southend campaign
2. Appoint local charity partners
3. Establish a programme of community engagement events

