

CAA's environmental sustainability strategy



Executive summary

OUR STRATEGIC INTENT:

Working together to improve environmental performance across the aviation and aerospace system.

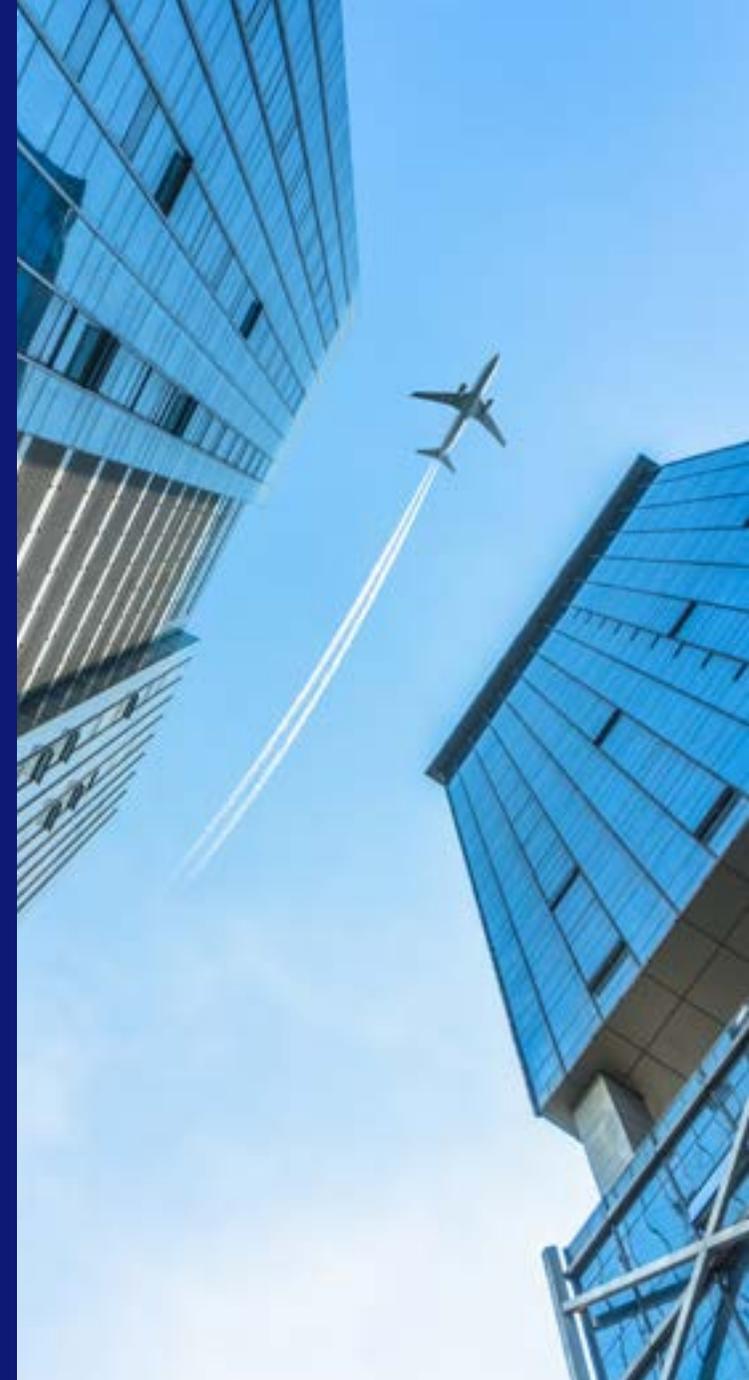
Aviation delivers significant connectivity, economic and cultural benefits both nationally and internationally. At the same time, aviation has a significant environmental impact which contributes to the threat to our planet from climate change. The whole industry must rise to the challenge to play a full part in mitigating this threat, while retaining its vital role connecting people and businesses around the world.

For the sector to continue to provide accessible, competitive and sustainable services to consumers, significant and sustained progress will be needed to improve its environmental performance in relation to emissions, noise, air quality and other adverse impacts. It will also need to continue to focus on safety and security, whilst delivering affordable and high-quality services to its customers.

The whole aviation system, both domestically and globally, needs to work together to address environmental performance.

The aviation and aerospace industry sectors understand the challenge and many aerospace engineering companies, airlines and airports are already investing in new, more sustainable fuels, quieter aircraft and more efficient operating procedures that offer the most immediate prospects for mitigating aviation's carbon and noise impact. Longer term investment – in new forms of propulsion will improve carbon performance on short to medium distance commercial aircraft.

Governments globally are setting targets and introducing taxation and other market policies to create the conditions for industry to deliver the required improvements.



Executive summary

Aviation regulators have a distinct role to play in achieving the targets.

The CAA will focus its expertise and leadership in the following areas:

1. Enabling development of low and zero-emission novel technologies
2. Co-leading the modernisation of airspace
3. Reporting on the sustainability performance of industry, including noise, and providing information to consumers on the environmental impact of aviation
4. Advising and supporting the UK government on domestic and international policy
5. Reducing the impact of our corporate activities and operations
6. Assessing how relevant regulated activities impact the local environment
7. Using our powers and duties to take account of the impact on the environment in our regulation and oversight

To achieve this, we are putting in place:

- A new sustainability team to drive and coordinate work across the CAA;
- A new Environmental Sustainability Panel to advise and challenge us; and
- Specialist resource both in our innovation hub to enable novel technology, and in airworthiness, for safety certification of new aircraft and fuels.

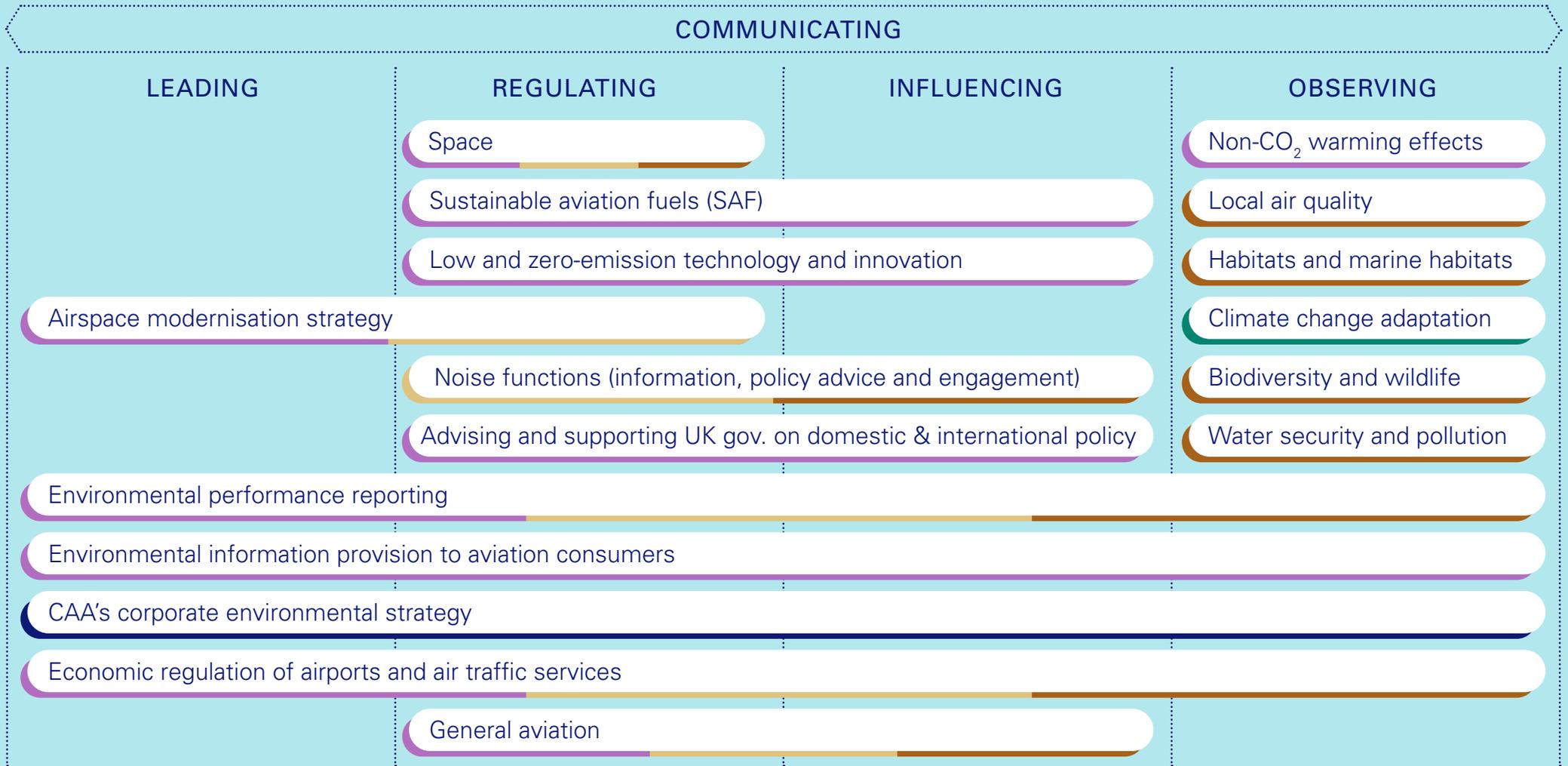
But, our work will also depend on:

- Government to set out objectives and targets for decarbonisation
- Government and industry to support upscaling of sustainable aviation fuel (SAF) production to meet the 10% blending ambition for 2030, and on setting out appropriate mechanisms to encourage both investment and uptake
- Industry to continue to make progress in delivering new technology



Our strategy at a glance...

Working together to improve environmental performance across the aviation and aerospace system, by:



We keep our own house in order

We measure progress

We are a custodian of the long term

We use regulation to enable and challenge

We partner with others

- Emissions
- Noise
- Local impacts
- Adaptation



Our environmental sustainability strategy

OUR STRATEGIC INTENT:

Working together to improve environmental performance across the aviation and aerospace system.

Welcome to the CAA's environmental sustainability strategy.

The strategy provides our colleagues, stakeholders, and those we regulate with clarity on our roles, remit and ambition as we work together to improve environmental performance in the aviation and aerospace systems for the benefit of consumers, users and the wider community.

This means:

Setting out how we enable improved performance within our statutory and regulatory framework in an agile, ambitious and credible way;

Being clear about what we can and can't do;

Understanding our role in relation to other actors;

Recognising the long-term nature of climate change and the evolving nature of the government and industry's approach; and

Galvanising action in our organisation, empowering colleagues to explore innovative solutions.

Achieving successful and sustainable aviation is a significant challenge for the industry, which is one of the hardest sectors to decarbonise. All parts of the aviation system need to work together on this goal, from those investing in and developing new technologies, the Government that sets targets and key policy levers, and the regulator.



Our environmental sustainability strategy

The aviation and aerospace industries are already focused on decarbonisation, despite the challenges brought on by the Covid 19 pandemic. Many airports and airlines are setting their own net zero targets through responsible management of their corporate activities. Industry is investing and introducing new operating models to improve engine efficiency, developing next generation propulsion and exploring the emission reduction potential of sustainable aviation fuels. Many of these initiatives are also directed at reducing aircraft noise.

We continue to prioritise the safety and security of the aviation sector ensuring protection of consumers, but we take the environment into account where we can, within our legal and policy frameworks. Climate change will have a long-term effect on how consumers and society interface with aviation and we will continue to look for ways to use our powers and influence to drive improvements.

We will be ambitious in the way we prioritise sustainability in our work. We will work with UK government and industry on these issues, including:

Establishing dedicated capability to respond to the demands of the net zero future;

Playing a role internationally, collaborating with ICAO and other National Aviation Authorities;

Reporting on the sectors' environmental performance; and

Delivering our proposal for sharing environmental information on the impacts of aviation with consumers.

We will lead by example, reducing the impact on the environment of our own operations through our stretching corporate environmental strategy to drive progress.

We will be agile in our approach. We recognise there is a lot of uncertainty in the industry and wider economy including how we recover from the Covid 19 pandemic and face rising energy prices. Research into both climate change and technology will continue to raise new challenges and offer innovative solutions. Our strategy does not aim to provide all the answers at the outset, but it will adapt and develop as our knowledge and understanding improves. Our roles will also evolve in response to the changing external context.

Some of what we do now, particularly in relation to technology and innovation, will create a catalyst for carbon reduction in aviation and other areas. Our role will evolve from facilitating to certifying, making those solutions a reality.

The strategy will act as a reference point for colleagues and stakeholders seeking clarity and direction as we collectively work together for a successful and sustainable aviation sector.



Our approach

We are going to be role-centric

We already undertake a number of activities where sustainability is central or where environmental objectives are taken into account as a material factor in the exercise of our functions.

Our environmental sustainability strategy clarifies how our general regulatory role aligns with delivering our sustainability ambitions. Starting from defining our different roles as a leader, a regulator, an influencer, a communicator and an observer.

The strategy is designed to provide direction for our colleagues as much as for our stakeholders, recognising that our colleagues perform at their best when there is a clear intent, and that a coordinated and systemic approach leads to the best outcomes.

With this in mind, the strategy breaks down our generic regulatory role into the different ways in which we apply it: leading, regulating, influencing, observing and communicating. This approach helps to better understand how we work across

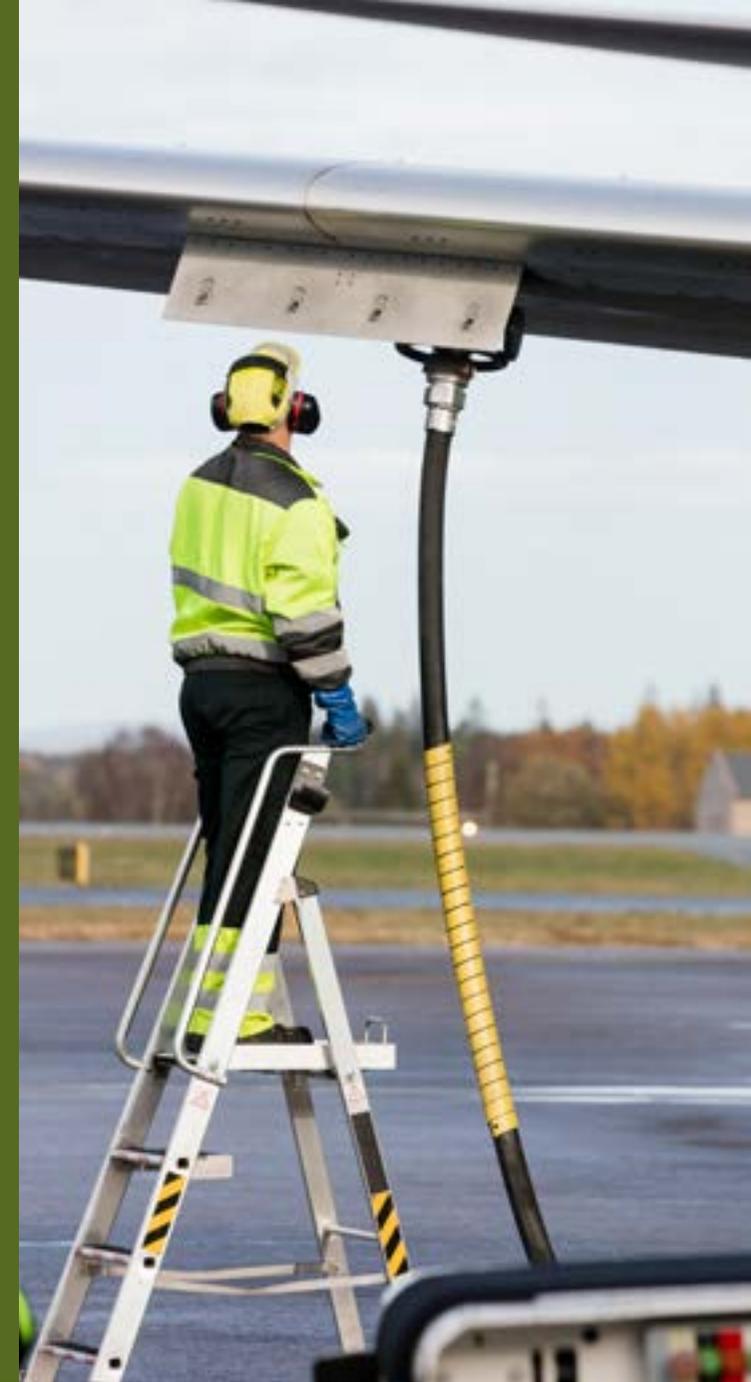
our high-level programmes by describing what each role involves. It also provides direction where colleagues are faced with situations where the environment needs to be newly considered.

Being clear about our role helps us to calibrate our decisions and actions with determination and credibility. It will help us identify where we must exercise leadership or collaborate with others to maximise value, and add clarity on areas where we only have a watching brief.

It also clarifies how we prioritise the many different things we could do, so we can focus our resources on the impacts that we are best able to mitigate and where we can add most value.

We are going to balance our long-term vision with short-term deliverables

Our longer term position helps to set the pace for the strategy, by highlighting what success looks like across all broad areas of our work.



Our approach

They represent our vision for the future to drive our decision-making and enable us to focus on what we are working collectively to achieve, recognising that we do not control all the levers.

Our short-term deliverables ignite our ambition and empower our colleagues to focus on things that provide environmental benefits and quick wins, and things that enable other initiatives. They also show our determination that our strategy will start to deliver benefits quickly.

We are going to be clear on our organisational position

We have identified five key policy positions that set out the strategy's framework and boundaries. Together with the roles, outcomes and deliverables, they steer colleagues and stakeholders in navigating and realising our sustainability ambition.

Our Key Positions

- We believe there must be in the long term a **successful aviation sector which is also sustainable**.
- **Sustainability is a complex and multi-faceted issue**, needing collaboration from a range of actors. We will support and advise government as it leads in this space.
- We will be open to dialogue and ideas from others connecting to external developments to understand where best to lead and how **to pitch our unique contribution**.
- **Sustainability is a long-term challenge**: the strategy is agile and will evolve as our understanding of the issues and how they can be addressed deepens.
- **Equally, sustainability is not the only issue**: we have many priorities, some more proximate. We will not ignore these, and we will calibrate our efforts accordingly as we go forward.

Our areas of work

1. Enabling development of low and zero-emission novel technologies
2. Co-leading the modernisation of airspace
3. Reporting on the sustainability performance of industry, including noise, and providing information to consumers on the environmental impact of aviation
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More details on each of these programmes can be found in the **Environmental Sustainability Strategy – Our areas of work**.



Prioritisation

Our prioritisation of impacts

There are a number of areas in our regulatory framework where we have a duty to take environmental factors into account when we make our decisions. This applies, for example, to the need to consider the UK government's guidance on environmental objectives when we make decisions on airspace change, including prioritising noise over carbon below 4,000 feet, or when we assess the effects of spaceflight on people, wildlife and the marine environment.

In some areas of our work, however, there are no explicit targets or guidelines set by the government or in legislation to drive down the effects of emissions, noise or other local impacts.

Although we always consider the specific facts of any case in our decision-making, where we have discretion in how we take the environment into account, we propose to apply the following prioritisation of impacts.

This will help our stakeholders understand how we apply our discretion in seeking to mitigate the environmental impacts of the activities we regulate:

1. First, mitigating the impact of global warming, with a focus on carbon emissions; then
2. Mitigating noise impacts on local communities; then
3. Mitigating impacts on tranquil spaces and biodiversity; then
4. Mitigating impacts on air quality and on other environmental elements



Prioritisation

This prioritisation is informed by a number of factors.

- It is in line with the UK government's ambition to meet the legally-binding 2050 net zero emission target. In 2019 the UK became the first major economy in the world to pass laws to end its contribution to global warming. The government's commitment to the 2050 objective was set out in its recent Jet Zero Strategy consultation. The government's response to this consultation is due imminently. In 2021, international aviation and shipping emissions were included in the 6th Carbon Budget (2033-37) for the first time.
- It supports the UK's alignment with international policies and agreements including the 2015 Paris Agreement - one of three key United Nations Climate Treaties - which sets the global context for tackling climate change and decarbonisation, enshrining in international law a commitment to limit global warming to below 2°C, preferably to 1.5°, compared to pre-industrial levels.
- It considers noise in relation to existing government frameworks, including the Air Navigation Guidance, the Environmental (England) Noise Regulations and the UK Airspace Policy.
- It is in line with the **CAA's own deliberative research**, carried out in 2021, which indicates consumers tend to consider carbon before noise.
- We will consult with stakeholders and the public on this proposed prioritisation of impacts before we apply it to our decision-making. We will keep this principle under review as science and government policy develop and we will reconsult as necessary.

