

Appendix 1: Extract from the 2022 Update to the Manchester Climate Change Framework

Aviation emissions

While aviation emissions, i.e., emissions from aircraft, are not part of Manchester's carbon budget, it is recognised that aviation emissions must be tackled as part of ensuring that the city, and the UK overall, play their full part in delivering the Paris Agreement on climate change.

To reach net zero, we need to work collaboratively across the aviation industry, with other core cities, national government, and international partners to ensure aviation emissions are reduced in line with the Paris Agreement.

We also need to enable and encourage residents and businesses to make informed choices about their travel behaviours, including an understanding of the climate impacts of those choices.

There are a range of related policies at local, regional, and national level that are driving and enabling change, including:

- Decarbonisation Roadmap: A Path to Net Zero – a report from Sustainable Aviation, a coalition of UK airlines, airports, and manufacturers, that outlines how the UK aviation industry can achieve net zero by 2050 including through sustainable aviation fuels, introduction of known and new more efficient aircraft, and better air traffic management and operating procedures. Interim targets were also published.
- Flightpath to the future: a strategic framework for the aviation sector – sets out the commitment to include international aviation and shipping emissions in the UK's sixth carbon budget (2033-2037) for the first time.
- The Sixth Carbon Budget from the Climate Change Committee – recommended that aviation emissions in 2030 should be 20% below 2019 levels, without carbon offsetting or removal.
- The UK government's Jet Zero Strategy sets a goal for net zero UK aviation emissions by 2050, acknowledging there are multiple pathways to achieve this.
 - It commits to five-year delivery plans structured around three principles (international leadership, delivered in partnership, and maximising opportunities) and six measures (system efficiencies, sustainable aviation fuels, zero emission flight, markets, and removals, influencing customers, and addressing non-CO2).
 - Introduces a CO2 emissions reduction trajectory to 2050.
 - Sets a target for all domestic flights to reach net zero by 2040 and for all airport operations to be zero emission by 2040.
 - Commits to have at least five UK sustainable aviation fuel (SAF) plants under construction by 2025 and a SAF mandate in place with a target of at least 10% SAF by 2030.
 - Commits to monitor progress on an annual basis, followed by a major review every five years, and undertakes to maximise opportunities to deliver wider benefits in jobs, skills, and investments that these new technologies will bring.

- The COP26 Declaration by the International Aviation Climate Ambition Coalition emphasises that international action on tackling aviation emissions is essential given the global nature of the sector and that co-operation by states and aviation stakeholders is critical for reducing the aviation sector's contribution to climate change.

There are significant economic, technical, institutional, societal, and regulatory challenges in decarbonising our aviation, including:

- Reconciling the city's climate change responsibilities with having a major international airport that brings significant employment, business, cultural and tourism benefits, within its boundaries.
- Regional policies that unilaterally impose costs in one region that are not shared nationally or internationally can distort the aviation market, resulting in emissions being displaced to another city, as travellers choose a different airport, rather than creating a reduction in aviation emissions. As such, decarbonising aviation must be tackled collectively at a holistic national and industry-wide level.

Although the challenges are great in transitioning to a zero carbon, climate resilient city, there are examples of good practice within Manchester, and across the UK, including:

- Jet Zero Council – a partnership between industry and government with the aim of achieving zero emission transatlantic flights within a generation and delivering new technologies and innovative ways to cut aviation emissions. Manchester Airport Group are represented on this Council and the Jet Zero Strategy was published in July 2022.
- The infrastructure to access the airport, and Airport City, has been made more accessible via public transport and walking and cycling, including a new pedestrian and cycle bridge over the motorway link, enabling more sustainable transport choices to be made when travelling to/from the airport.
- In 2022, Manchester Airports Group (MAG) became the first airport operator to be named a Financial Times European Climate Leader two years in a row and was the only one to feature on the list. In 2021, MAG was named the highest performing transport organisation, ranking 37th out of 300. In response to the Jet Zero Strategy, MAG has announced a series of new pledges on education, research, technology, sustainable aviation fuel and airspace modernisation to help drive the industry towards net zero aviation.

To support the common aim of establishing Manchester Airport, and the city of Manchester, as a national and international leader in sustainable aviation, Manchester Climate Change Partnership has worked together to develop and commit to the following agreement:

To work with the UK Government and other stakeholders to ensure that emissions from flights are kept within a carbon budget for UK aviation that is fully aligned with the Tyndall budget and the Paris Agreement (the "UK Aviation Budget"). This includes flights by Manchester citizens, businesses and other organisations, and all flights from airports in which the city has a stake.

As with the Manchester Climate Change Framework as a whole, the following principles underpin our approach to aviation:

- The principle of urgency, to ensure that high impact actions are taken in the short term to minimise cumulative emissions and their climate effects.
- The precautionary principle, to ensure that we are confident of remaining within the UK Aviation Budget by only adopting proven measures, while also supporting research into innovative approaches.
- The principle of equity, to ensure fair access to transport and an equitable distribution of the remaining global carbon budget.

To meet this sub-objective, we will pursue the following actions:

- Empower citizens, businesses, and other organisations to understand the climate impact of their aviation practices and take action to reduce it.
- Engage and collaborate with national government, regulatory agencies, other cities, and the industry to ensure aviation emissions remain within the UK Aviation Budget.
- Monitor progress through emissions reporting and budgeting, track the contribution of mitigation measures, and periodically review the underpinning science.
- Recommend actions to ensure that the city plays its fair part in keeping aviation emissions within the UK Aviation Budget, while mitigating the risk of redistributing flights, emissions and associated social and economic benefits.