

# Reducing aviation emissions in the tertiary education & research sector

Briefing paper March 2024



# Reducing aviation emissions in the tertiary education & research sector

#### Briefing paper – March 2024

#### Top line:

Many UK and Ireland tertiary education and research institutions have set net zero targets for 2050 or earlier. Business travel is a significant source of sector operational emissions, with aviation taking up the majority share.

The aviation industry is relying upon technological fixes and carbon offsetting to decarbonise. However, technology won't go fast or far enough to meet our net-zero needs, and aviation offsetting schemes are dubious at best. This is also on a backdrop of a projected expansion of national and global aviation passenger numbers to 2050.

Consequently, as a tertiary education and research sector we need to enable systemic change at our institutions to reduce aviation demand and put in place supporting policies to enable colleagues to do so. By achieving this, we can not only reduce the environmental damage caused by operational practices, but also improve accessibility and inclusivity within the sector.

This briefing paper outlines the aviation decarbonisation challenge, current best practice, sector resources and future solutions to meet the net zero challenge.

#### Key points:

- Aviation emissions dominate both national and institutional emissions profiles, with the vast majority of institutional business travel emissions (typically over 90%) deriving from aviation.
- The technological 'fixes' of aircraft technology, sustainable aviation fuel (SAF) and offsetting won't go fast or far enough for institutions to meet their net zero targets by or before 2050.
- Some of the main sources of aviation emissions come from travel to conferences, international student emissions, international research and fieldwork.
- We need a cultural shift as a sector to reduce the demand for aviation and start to work in more innovative, increasingly digital ways.
- This shift will bring many opportunities to the sector: increased accessibility and inclusivity, financial savings, increased international collaboration opportunities outside of the western developed nations, and of course emissions savings.

- Institutional best practice case studies can be found from the University of Oxford, University of Edinburgh, University of Glasgow, University of Manchester and the University of Aberdeen. Learning from these institutions and taking forward their solutions will cause significant change across the sector.
- A selection of relevant resources, policy information and contact details are listed in this briefing paper to aid your institutional journey.

#### This briefing paper:

- 1. Details the current aviation demand trends in the UK and draws on Scottish college and university emissions reporting data to Scottish Government;
- 2. Summarises the main decarbonisation actions being taken by the aviation industry and draws on critiques of these within external publications;
- 3. Summaries the main drivers of aviation travel within the sector;
- 4. Details co-benefits associated with reduced aviation travel;
- 5. Highlights the policy context for institutional aviation emission reduction and emissions reporting;
- 6. Showcases institutional best practice and signposts to a range of further resources to support individuals and institutions to reduce aviation demand.

#### **Table of Contents**

1.	Aviation emission trends	4
2.	Aviation sector decarbonisation routes and critique	5
3.	The social context of aviation	7
4.	Drivers of aviation	8
5.	Opportunities presented by reducing sector aviation demand	9
6.	UK and Ireland policy and reporting context	
7.	Institutional best practice	
8.	Resources	14

#### **1.** Aviation emission trends

# • Aviation travel represents a significant proportion of UK national emissions.

In 2019, transport was the largest emitting sector in the UK, responsible for over a quarter (27%) of emissions (<u>Final UK greenhouse gas emissions</u> national statistics: 1990 to 2019).

In 2019, emissions from UK domestic flights (flights both originating and terminating in the UK) accounted for 1.4 MtCO2e (3.7% of the UK's aviation emissions), while emissions from the UK's international aviation activity, accounted for 36.4 MtCO2e (96.3%).). UK international and domestic emissions from aviation accounted for 8% of total UK greenhouse gas emissions (Net zero and the UK aviation sector, House of Commons Environmental Audit Committee, December 2023).

### • Aviation travel represents a significant proportion of UK tertiary education and research sector emissions.

In Scotland, 94% of business travel <u>emissions reported by colleges and</u> <u>universities</u> were from aviation travel for the academic year 2022/23. Business travel aviation emissions accounted for 16% of core reported operational emissions<sup>1</sup>.

Six institutions also reported international student relocation travel emissions for the academic year 2022/23, which represented between 10% to 42% of their total reported emissions profile (EAUC Scotland 2024 – publication pending).

It is expected that similar trends are experienced across the UK tertiary education and research sector.

<sup>&</sup>lt;sup>1</sup> Operational emissions boundary is defined here as all scope 1 and 2 emissions sources, and selected scope 3 emission sources (transmission and distribution; water supply and treatment; waste management; business travel; and homeworking).

#### 2. Aviation sector decarbonisation routes and critique

- There are three main routes to reduce emissions from aviation:
  - 1) improvement in aircraft efficiency
  - 2) use of sustainable aviation fuels
  - 3) demand management
- Improvements in aircraft technology will not go fast or far enough to meet net zero by 2050.

<u>The Sixth Carbon Budget: Aviation, Climate Change Committee 2020</u> distils why significantly impactful technology is further away that we think. The report acknowledges that there could be breakthroughs in aircraft technology, but the time taken to design, build, test, scale-up, certify and manufacture new aircraft propulsion systems will take several decades to achieve.

They state that: "even if one of these options were commercialised in the 2040s, it would be challenging to immediately achieve a large % share of aircraft sales, and given the 20-30 year lifetimes of aircraft, this will not lead to a significant fleet penetration by 2050. These full electric or hydrogen options have energy storage limitations, and would be most suited for domestic or short-haul flights and/or smaller airplane classes, which make up a relatively small share of UK aviation emissions. [...] Long-haul flights dominate UK aviation emissions and are likely to stay using a hydrocarbon fuel until 2050 or beyond".

# • Increased use of Sustainable Aviation Fuels (SAF) presents a significant environmental and social threat.

SAFs are another solution promoted by the aviation industry as a way of decarbonising air travel. However, this technology also has significant flaws:

- Current SAF supply remains low at less than 0.05% of total EU aviation fuel use. Furthermore, the European Commission has proposed a SAF blending mandate for fuel supplied to EU airports, with minimum shares of SAF gradually increasing from 2% in 2025 to 63% in 2050. That reduction in conventional jet fuel is too little too late (European Union Aviation Safety Agency European Aviation Environmental Report 2022).
- ii) Land use and habitat destruction is another significant issue. <u>The Royal Society (2023)</u> published a report focussing on the resource requirements and environmental impacts of emerging sustainable aviation fuels. If the UK were to meet its 2018 jet fuel consumption using just SAFs, we would need to use between 30% 68% of all UK agricultural land to grow the crops needed for SAF demand. But if the UK doesn't use this land for growing SAF crops, then we must import it from other parts of the world presenting significant risks of land

grabbing, human rights abuse, and deforestation. In particular, global SAF markets present a risk of expansion of palm oil plantations.

Another ethical implication of SAF is that the EU is highly regulated as to what defines 'sustainable' aviation fuel. The UK might not follow the EU's lead. This may lead to competition with other transport modes. For example, the road haulage sector is also eyeing up similar fuels to decarbonise which could cause intense competition for fuel. This may lead to deforestation, use of palm-oil and potential use of dead animals (using pig fat as green jet fuel will hurt planet, experts warn BBC News). All have many ethical implications for animals and the ecosystems they inhabit, alongside potential human rights abuses, flooding and pollution issues for humans.

# • The aviation sector has promoted carbon offsetting as an alterative route to decarbonisation, with negligible positive impacts.

Carbon offsetting can be a widespread source of both greenwashing and a delaying mechanism for meaningful action. According to The Guardian in 2023, "The research into Verra, the world's leading carbon standard for the rapidly growing \$2bn (£1.6bn) voluntary offsets market, has found that, based on analysis of a significant percentage of the projects, more than 90% of their rainforest offset credits – among the most commonly used by companies – are likely to be "phantom credits" and do not represent genuine carbon reductions" (The Guardian, 2023). These revelations caused the then Verra CEO to resign (The Guardian, 2023).

Offsets should only be used as a last resort, to reduce so called "residual emissions" that cannot be reduced through available reduction measures. They should not be used to prolong business as usual and to not transition away from fossil fuels.

The <u>Woodland Carbon Code</u> and <u>Peatland Code</u> offsetting schemes are credible, however they are only available for UK-based emissions. Thus, any flights leaving the UK mainland or arriving from overseas would not be able to be offset with this scheme. Only internal domestic flights are eligible, and they make up a very small part of overall emissions.

# • Aviation demand reduction is the only viable route to meet sector net-zero needs.

Taking all of the above issues into account, EAUC would strongly recommend institutions focus on demand reduction actions first, with the last remaining essential flights offset with credible schemes such as the EAUC's <u>Carbon</u> <u>Coalition</u>.

#### 3. The social context of aviation

• Whilst we need to significantly reduce aviation emissions, we need to do so in an equitable way. Access to air travel is currently inequitable within society and within the tertiary education and research sector.

Travelling for business is not accessible for all within the sector and the social context of aviation travel needs to be considered. For example, flights are often taken by an elite few: in the United Kingdom, 70% of flights are taken by 15% of the population (<u>New Economics Foundation and Possible, 2021</u>). People with caring responsibilities are also less able to undertake business travel, with women in the UK providing significantly more hours of care than men (<u>Centre for Progressive Policy 2022</u>).

In academia, King's College London (2019) found that, by the size of emissions, the top 1% of fliers produced more than the bottom 50% of fliers. More widely, <u>research shows</u> that senior academics travel the most, while early career researchers travel much less. Additionally, at times, early-career academics and non-tenured faculty may feel forced to fly to conferences, despite their climate concerns, due to its normalisation in academia and perceived links to career progression and success. To consider the social dimension of business travel in more depth, please see the Equality, Diversity and Inclusion (ED&I) section in <u>EAUC Scotland's Business Travel Guide for the FHE Sector</u> where issues of accessibility, sex and gender, visa availability, benefits of virtual conferences, climate justice and intersectionality of travel are discussed.

#### 4. Drivers of aviation

- Aviation is typically driven by research culture, business travel culture, perceptions of status and entitlement, and not always by need. It is also driven by financial necessity via international student recruitment.
- Aviation travel arises for a wide range of sector operations and processes.

These include:

 Business Travel: attendance at conferences, workshops, meetings, fieldwork, student field trips, research, training, fundraising activities and initiatives, travel to the institution's international sites and properties, recruitment and admissions interviews, examinations (e.g. PhD viva examinations), and student field trips.

Note that business travel activities are more within an institution's control and are the main focus of decarbonisation action presented within this briefing.

ii) International students relocating: it is recognised that international student emissions are a significant source of aviation emissions and demand for universities in particular. We also note that in the current funding environment it may not be possible to reduce these numbers. We encourage institutions to measure and report on these figures, even if demand-reduction is not actionable right now. This gives institutions and the sector a better understanding of where we are at with this significant emissions source and how policy makers might be able to support institutions in future to drive these emissions down.

Please refer to the <u>Domestic and International Student Relocation Travel</u> <u>Emissions Calculator Tool</u> to accurately report these emissions.

#### 5. Opportunities presented by reducing sector aviation demand

There are a range of benefits to be realised in reducing sector aviation demand and in enabling increased digital connectivity.

#### • Financial savings

By reducing aviation travel, institutions can save money. As shown by toggling the 'cost' tab of the <u>University of Edinburgh Business Travel</u> <u>Reporting Tool</u>, the cost for flights in 2018-19 (pre-COVID) was £8.86 million across all departments. Post-COVID, with shifted behaviours and more virtual working, this cost reduced to £5.04 million in 2022-23. By implementing a sustainable behaviour shift, University of Edinburgh saved £3.8 million pounds that can go towards other institutional activities.

See the <u>Sarabipour</u> bullet point below for further financial savings information, leading to widened participation and diversity.

# • Equity, Diversity and Inclusion and a strengthened scientific community

As highlighted above, business travel is not accessible for all within the sector. However, increasing digital collaboration can enable significant ED&I benefits and strengthen our educational and scientific communities.

Research by <u>Sarvenaz Sarabipour (2020)</u>, based on data from in-person and virtual conferences in a range of subjects, describes how "virtual conferences are more inclusive, more affordable, less time-consuming and more accessible worldwide, especially for early-career researchers. Making conferences more open and inclusive will provide both immediate and long-term benefits to the scientific community." Highlighted benefits include: overcoming financial and logistical barriers by reducing both costs and travel times, reducing the need for visas, making it easier for those with disabilities or vulnerabilities and those with caring responsibilities to take part, cheaper to organise for societies, more efficient use of funding and attracting large, worldwide audiences.

Similarly, research by <u>Skiles, Yang, Reshef et al. (Nature Sustainability, 2022)</u> found that transforming in-person conferences to virtual conferences improved diversity, equity and inclusion in science and engineering conferences. Factors including cost, gender, career stage and geographic location were evaluated. Virtual conferences demonstrated a clearly discernible and, in some cases, orders of magnitude improvement across nearly all metrics.

In discussions on reducing air travel within the sector, there is a common perception that air travel supports both improved science and career progression. However, this is challenged by <u>Wynes et al's (2019) findings</u> that there was "no relationship between air travel emissions and metrics of academic productivity". <u>Kreil (2021)</u> also found that: "While the dominant assumption was that reducing air travel would harm science, this study reveals alternative assumptions that science would benefit or remain unaffected. Results also show that the debate on reducing air travel may encourage transformations in the organization of academia." Opinion pieces that shine personal views on the matter include: <u>Grounded PhDs</u> (Kriel and Ullstrom 2022), <u>Academic travel</u> (Ambrose 2021), <u>Cash incentives</u> (Ellsworth-Krebs and Möbius 2023) and <u>Making flying fairer</u> (Ellsworth-Krebs 2023).

Overall, increased digital connectivity within educational and scientific communities enables more people, from more diverse backgrounds, to engage with learning and sharing of knowledge and expertise.

#### • Emissions reductions

Research by <u>Tao, Steckel and Klemeš (Nature Communications, 2021)</u> found that "transitioning from in-person to virtual conferencing can substantially reduce the carbon footprint by 94% and energy use by 90%. For the sake of maintaining more than 50% of in-person participation, carefully selected hubs for hybrid conferences have the potential to slash carbon footprint and energy use by two-thirds."

Further commentary on the emissions reductions benefits of reducing aviation can be found in <u>EAUC Scotland's Business Travel Guide</u>.

#### 6. UK and Ireland policy and reporting context

- **Scottish-only policy:** there is a legal duty for further and higher education institutions in Scotland to report their GHG emissions via the Public Bodies Climate Change Duties (PBCCD) reports. These reports are compiled on the <u>Sustainable Scotland Network's reporting webpage</u>. Regarding transport in particular, the Scotlish Government specifies:
  - Emissions from business travel are classed as indirect emissions in the GHG Protocol and, from 2022, the <u>Climate Change (Duties of Public</u> <u>Bodies: Reporting Requirements) (Scotland) Amendment Order 2020</u> sets out that all public bodies must set a target to reduce these emissions as much as possible, in line with the national 2045 net zero target.
  - ii) The Scottish Government recommends that all air travel should be minimised and that mainland UK air travel should be eliminated in <u>Public Sector Leadership on the Global Climate Emergency: Guidance</u>.
- UK-wide policy: other than the UK's overarching Net-Zero target for 2050, there is currently no mandatory legal requirement for institutions in England, Wales or Northern Ireland to report their aviation emissions. It is, however, recommended that institutions follow the <u>Standardised Carbon Emissions</u> <u>Framework (SCEF)</u> to report their business travel and international student travel-related emissions.

A further reporting framework available to English colleges is the Streamlined Energy and Carbon Reporting (SECR) framework. EAUC, in partnership with Hillside Environmental Services, have developed the <u>SECR Tool</u> that provides institutions with an easy-to-use solution to creating their SECR. There is more of a focus on grey fleet than flights, but colleges can put this information in the 'Other Scope 3' areas in the tool. Large and luxury internal combustion engine cars (e.g. SUVs) have higher emissions than flying in some cases (<u>EAUC Business Travel Guide</u>).

In Wales, institutions are encouraged to report their business travel emissions via the <u>Net-Zero carbon reporting spreadsheet</u>. The <u>Welsh Public Sector Net</u> <u>Zero Carbon Reporting Guide (Version 3)</u> provides technical guidance to do so. The <u>Welsh Government Energy Service</u> assists universities and colleges to reduce their emissions in line with the rest of the public sector.

The UK's Department for Energy Security & Net Zero (DESNZ) may bring out further reporting guidance in 2025, but details are not clear at this stage.

• **Republic of Ireland:** As set out in the <u>Key legislative and policy obligations</u> on public bodies with respect to energy efficiency and climate action (Sustainable Energy Authority of Ireland, 2023): The Climate Action and Low Carbon Development (Amendment) Act 2021 commits Ireland to reach a legally binding target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels). This target encompasses the EU emissions trading scheme (ETS) and non-ETS sectors. These targets are aligned with Ireland's obligations under the Paris Agreement, and with the EU Green Deal objective to achieve an economy-wide reduction in GHGs of at least 55% by 2030 and to achieve climate neutrality in the European Union by 2050.

To support public sector bodies in leading by example, a Public Sector Climate Action Mandate applies to public bodies covered by the Climate Action Plan (CAP) decarbonisation targets. The Mandate highlights the main climate action objectives for public bodies and is reviewed annually. The current <u>Public Sector Climate Action Mandate</u> was reviewed and updated as part of the preparation for <u>Climate Action Plan 2024</u> (CAP24) and was approved by Government in December 2023. The Mandate will be reviewed again as part of the drafting process for Climate Action Plan 2025 (CAP25).

Specifically on business travel:

- i) As set out in the <u>Annual Report 2023 on Public Sector Energy</u> <u>Performance</u>, public bodies are obliged to report annual data on business travel to the Sustainable Energy Authority of Ireland (SEAI) for the years 2021 onwards. It is not however, within the scope of the 2030 public sector targets. Of the 305 public bodies reporting 58,877 individual flight segments in 2022, 34% of those flights were taken by the Education subsector (excluding Schools and Education and Training Boards), the largest share of any public subsector in Ireland.
- ii) Despite business travel currently being out of scope of the 2030 public sector targets, the <u>Public Sector Climate Action Strategy 2023-2025</u> states that "The public sector has a significant role to play in influencing travel demand, particularly through the delivery of its services, and must lead by example in the provision of sustainable mobility facilities, for its staff as well as service users, and normalise the use of low- and zero-carbon transport options to reduce transport emissions from the public sector." Furthermore, the strategy states that public bodies should:
  - "Encourage the use of sustainable transport modes for essential business-related trips, and provide staff with education, advice and supports to avail of sustainable options for such trips."
  - "Give the maximum possible priority to reduction in commuter or work-related travel. This could include a 'remote-first' approach to meeting arrangements wherever possible, unless the holding of a physical meeting is deemed essential."
  - "Foster a culture of equivalence between physical and digital attendance, ensuring staff who attend remotely do not suffer any resultant disadvantage."

#### 7. Institutional best practice

We have compiled a number of best practice case studies in the <u>Business Travel</u> <u>Guide for Further and Higher Education</u>. We have referenced the page numbers these can be found at if you would like to read more.

- University of Edinburgh: the <u>University of Edinburgh's Department for</u> <u>Social Responsibility and Sustainability</u> have created their own <u>Business Travel</u> <u>Report</u>, which displays the University's business travel data from 2012-13 to 2022-23 by GHG Emissions, Cost, Distance and Number of Trips (pages 15-16 <u>Business Travel Guide</u>).
- University of Glasgow: as part of its <u>Climate Change Strategy and Action</u> <u>Plan, Glasgow Green</u>, the University have committed to reducing business travel emissions by 7.5% each year until 2030 and have published their <u>Guidance for Sustainable Business Travel for Staff and Postgraduate</u> <u>Researchers</u> (pages 10-11 <u>Business Travel Guide</u>).
- University of Oxford: as of August 2022, the University of Oxford implemented an ambitious <u>Travel Policy</u>. It includes a <u>flight reduction target</u>, <u>flight levy and succinct explanations for readers of the policy</u> (pages 12-13 <u>Business Travel Guide</u>).
- **University of Aberdeen**: the University of Aberdeen, in collaboration with EAUC Scotland, created <u>The Domestic and International Student Relocation</u> <u>Travel Emissions Calculator Tool</u> (2023). This calculator provides robust methodology for reporting scope 3 domestic and international student travel at the start and end of the academic year. This work was awarded the prestigious <u>Higher Education Strategic Planners Association (HESPA)</u> <u>Innovation Award</u> in 2024.
- **University of Manchester**: one of the most ambitious aviation decarbonization strategies to date is The University of Manchester's aim to <u>limit annual emissions from air travel to 50% of their 2018/19 level</u> (pre-COVID). This target was effective immediately after being published, to capitalise on COVID travel trends and to prevent rebound emissions.

If you would like to tell us about how your institution is reducing aviation emissions, please do not hesitate to contact EAUC Scotland (<u>scotland@eauc.org.uk</u>) to be considered for inclusion in our best practice case studies.

#### 8. Resources

EAUC has a range of tools, resources and networks to support the sector on sustainable travel, including:

- <u>Business Travel Guide for the FHE Sector</u> (2023): this guide highlights the Scottish policy and social drivers for addressing business travel emissions, and showcases best practice in strategies, reporting and reduction activities. The 'Action Plan' section contains a comprehensive menu of actions institutions could enact in their own institutions.
- <u>The Travel Better Package</u> (2020): aims to support the reduction of air travel in the FHE sector, specifically amongst academics and staff. It also aims to support reflection on and reconfiguration of the FHE sector's relationship to air travel on an institutional and individual basis.
- <u>The Plane Talk Slack Channel</u>: provides a platform for teaching, research and sustainability professionals who are interested in or working on reducing travel emissions in academia to ask questions and exchange knowledge.
- <u>The Domestic and International Student Relocation Travel Emissions</u> <u>Calculator Tool</u> (2023): provides UK FHE institutions with a user-friendly, prepopulated framework for reporting scope 3 domestic and international student travel at the start and end of the academic year.
- The EAUC Scotland <u>Travel and Transport Topic Support Network</u> and mailing list: a community of professionals and academics working together to share knowledge on the topic of sustainable transport focussed on the Scottish context.
- The EAUC <u>Transport Community of Practice</u> and mailing list: the same as the Topic Support Network, but focussed more widely on a UK & Ireland context.

External sector resources include:

- Principles for Responsible Management Education (PRME)'s <u>Sustainable Travel</u> <u>and Events Guidance</u>, including their <u>Five Fundamentals</u> for sustainable meetings and conferences.
- <u>Flying Less in Academia: A Resource Guide</u> is a collaborative guide by academics and professionals covering many of the main resources on flying less in academia.

- Zeferina and Hoolohan (2022) from the <u>Tyndall Centre for Climate Change</u> <u>Research</u>, prepared the report "<u>Academic aeromobility post-COVID 19</u>" outlining the results of a workshop on reducing aeromobility, increasing inclusivity, cultural changes needed to decouple aeromobility from academia and effective reporting methodology.
- Although specifically related to official travel within the Irish Government, the <u>Circular 01/2020: Procedures for Offsetting the Emissions Associated with</u> <u>Official Air Travel</u> from the Department of Public Expenditure and Reform sets out a clear methodology for recording and costing in the emissions associated with air travel in line with Ireland's Carbon Tax. These funds are directed to their Climate Action Fund which is then used to support domestic climate change initiatives. This model could be replicated by institutions internally, similar to the <u>University of Oxford's Flight Levy</u> and <u>UCLA's Air Travel</u> <u>Mitigation Fund</u>, for those wanting to show true leadership in the sector and increase funds for internal climate initiatives.
- The <u>Oxford Flying Less Podcast</u> by Noah Birksted-Breen is a podcast which asks: what do you and your university stand to gain by flying less? Also available on <u>Apple Podcasts</u>.
- The <u>Climate Action Barometer (CABie<sup>™</sup>)</u> is a rolling global benchmark, tracking and comparing sustainability policies, practices, and emissions for international education across time.
- RouteZero, a platform to help businesses and institutions accelerate decarbonisation action by addressing the UK & Europe's greatest source of emissions, travel. Resources include travel planners for <u>individuals</u> (free) and extra resources such as carbon budgeting, scenario planning, smart policy integration and integrated booking for <u>businesses</u> (paid).
- <u>Stay Grounded</u> is a people-powered, science-based, and action-oriented network for more than 200+ member initiatives around the world. Many of their infographics are powerful for explaining complex concepts visually.
- <u>Sarabipour et al. (Nature Human Behaviour, 2021)</u> provide a graphical checklist of "key considerations for organizers and attendees" to make conferences both lower carbon and more socially just.
- Quiggin (2023), from Chatham House, the Royal Institute of International Affairs, compiled the research paper "<u>Net zero and the role of the aviation</u> <u>industry: How flying less frequently and less far can buy time for</u> <u>decarbonization solutions</u>." Quiggin provides robust evidence for the need for managing the demand of aviation as the main route to net zero and supplies solutions to achieve this.

- Research funders differ in their guidance on expensing travel, it is worth checking them for their conditions. For example:
  - i) The funder, Wellcome, have a <u>Carbon offset policy for travel</u>, which states they expect the people they fund to: minimise the number of journeys taken by using alternatives where possible (for example video conferencing), choose travel that has a lower carbon impact, where practical, and offset the carbon emissions of journeys they do make. This policy forms part of their grant conditions.
  - UK Research and Innovation's (UKRI) <u>Concordat for Environmental</u> <u>Sustainability of Research and Innovation Practice</u> is anticipated to be published in 2024 and may have wide implications for the sector (see <u>Draft version 4.4 (July 2023)</u>).
  - iii) UKRI's Science and Technology Facilities Council's <u>Travel and</u> <u>Subsistence policy</u> will consider funding more expensive, but less carbon emitting, forms of travel where this is permitted by the research organisation's policies. However, the cost of carbon offsets is not an admissible cost on research grants.

#### **Potential future solutions:**

#### • Frequent flier levies

In Yes! Solutions Journalism, Dr Katherine Ellsworth-Krebs describes how a progressive tax on the small percentage of people flying more than once per year, also known as a <u>frequent flier levy</u>, could help make flying fairer. Those that contribute least to the climate crisis, often bear the brunt of climate impacts the most (<u>Extreme carbon inequality briefing, Oxfam 2015</u>). This solution would pave the way to a more equitable distribution of costs. Although this has not yet been enacted by any educational institutions to the best of our knowledge, this could be implemented in a similar way to the <u>University of Oxford's Flight Levy</u> or <u>UCLA's Air Travel Mitigation Fund</u> to further increase the fairness for those in institutions that, by choice or circumstance, do not fly often, or at all, for business purposes.

#### Climate income

Another solution proposed by Dr Katherine Ellsworth-Krebs and Dr Wolfram Moebius in Times Higher Education, is the concept of <u>climate income</u>. Also known as <u>carbon fee and dividend</u>, this is a solution that is already in place in <u>Austria</u> and <u>Canada</u> and theoretically could be enacted at an institutional level. A fee is imposed on the consumption of fossil fuels and all revenue is then shared amongst citizens. Those with a lower impact on the climate get, in effect, to keep more of that money by paying less for the right to pollute. Suggestions for how to implement this solution at an institutional level are provided within the <u>article</u>.

If institutions would like to pilot these ideas, please get in touch via the contact details below. EAUC would love to assist where possible.

#### How you can help:

- You can help shift the culture and progress change at your institution.
- There are many resources to help and EAUC Scotland are here to help too.
- Talking about aviation and engaging with your colleagues on the topic is the first step to change. Gather like-minded people into a working group to find solutions. You may find the 'Action Plan' section of the <u>Business Travel Guide</u> useful for picking potential solutions for your institution's situation.

#### Authors and contributors

Principle authors:

- Lara Fahey, Scotland Sustainability Project Officer, EAUC Scotland
- Matt Woodthorpe, Scotland Programme Manager, EAUC Scotland

Contributors:

• Fiona Goodwin, Deputy CEO, EAUC

#### Contact us

Do you have a business travel case study from your institution? Would you like it included in our case studies? Share it with EAUC Scotland via <u>scotland@eauc.org.uk</u>.

Found a broken link or a gap in information? This briefing was published in March 2024 and will be reviewed on a regular basis. Please email us about any errors or omissions.

We are a home-based organisation so please contact us by email at <u>info@eauc.org.uk</u>. Our website can be found <u>here</u>. We are also available to reach via X (formerly Twitter) (<u>EAUC</u>, <u>EAUC Scotland</u>) and <u>LinkedIn</u>.

EAUC are a registered charity with the Charity Commission for England and Wales (No. 1106172). We are an incorporated company limited by guarantee, registered with Companies House (No. 5183502).