

BUSINESS TRAVEL GUIDE



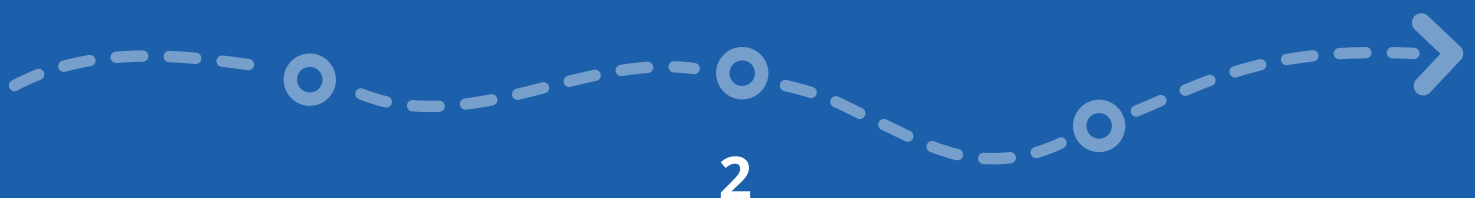
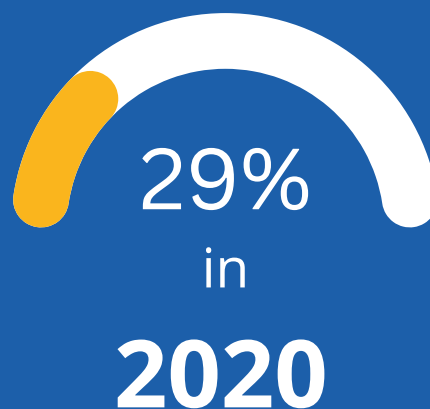
Preface

Welcome to EAUC Scotland's Guide to Business Travel in the Further and Higher Education sector. This guide highlights the Scottish and social drivers for addressing business travel emissions, and showcases best practice in strategies, reporting and reduction activities.

This guide aims to:

- **Inform institutions** of the Scottish policy context, reporting obligations and background information on emissions.
- **Inspire with best practice** case studies from Scotland and around the globe.
- **Provide suggested actions** to take in the five areas of:
 - **Leadership and Governance**
 - **Learning, Teaching and Research**
 - **Estates and Operations**
 - **Partnerships and Engagement**
 - **Monitoring and Evaluation**
- **Signpost** towards further resources.

Scotland's emissions from transport comprised



Glossary

Commonly used abbreviations and terminology:

Active travel – Active travel refers to modes of travel that involve a level of activity. The term is often used interchangeably with walking and cycling, but active travel can also include trips made by wheelchair, mobility scooters, adapted cycles, e-cycles, scooters, as well as cycle sharing schemes ([Gov.uk](#), adapted from the definition in the [Future of Mobility: urban strategy](#)).

CO2 equivalent (CO2e) - The universal unit of measurement to indicate the global warming potential (GWP) of each greenhouse gas, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis ([GHG Protocol](#)).

Emissions - The release of greenhouse gases (GHG) into the atmosphere. For the purposes of this guide, GHG are the six gases covered by the UNFCCC: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF₆) ([GHG Protocol](#)). ([GHG Protocol](#)).

FHE – Further and Higher Education.

FHEI – Further and Higher Education Institution.

ICE - Internal Combustion Engine vehicle.

PBCCD – Public Bodies Climate Change Duties ([Scottish Government](#), [SSN](#)).

Public transport – A system of vehicles such as buses and trains that operate at regular times on fixed routes and are used by the public ([Cambridge Dictionary](#), 2022).

Shared transport – Shared transport covers services that share cars, bike and e-bikes, rides in cars, e-scooters and Digital Demand Responsive Transport services (DDRT) ([CoMoUK](#)).

Table of Contents

Click on the section link to navigate directly to the page of interest.

Preface	2
Glossary	3
Context setting: Climate change risk	5
1. Introduction	6
2. Leadership and governance	8
• Leadership and governance case studies	10
3. Emissions reporting	14
• Emissions reporting case studies	15
4. Emissions reduction	17
• Emissions reduction case studies	27
5. Emissions offsetting	40
6. Equality, Diversity and Inclusion	42
7. Business Travel Action Plan	50
• Business Travel Action Plan Infographic	52
• Leadership and Governance	53
• Learning, Teaching and Research	58
• Estates and Operations	61
• Partnerships and Engagement	66
• Monitoring and Evaluation	74
8. Further resources	77
Conclusion	78
Acknowledgements	79



Context setting: Climate change risk

Further and Higher Education Institutions, the communities that form them, and the communities they are a part of, will experience increasingly significant climatic changes on an organisational and personal level.

Despite being the 7th largest world economy and ranked 18th out of 189 countries on the Human Development Index ([UNDP 2022](#)), the UK is not immune from the effects of human-induced climate change. The Committee on Climate Change ([CCC 2020](#)) recognises that:

- The UK has already experienced 1.2C of warming compared to pre-industrial levels (vs global average increase of 1.1C).
- The UK has already experienced a mean sea-level rise of 16cm since 1900.
- There is now a 10-25% chance each year of UK heatwaves compared to a <10% chance each year 30 years ago.



**The UK has
already
experienced
1.2C of
warming**

Based on the latest research from the Intergovernmental Panel on Climate Change (IPCC) and the UK's Met Office, the CCC (2020) also recognises that under most global emissions pathways it is likely to be inevitable that the UK will experience:

- A further 0.6C of warming by the mid-2050s.
- Between 3 - 37cm further sea-level rise by 2060.
- A 10% increase in UK heavy rainfall compared to present by 2050.
- A 50% chance each year of a heatwave by 2050.

The CCC's Independent Assessment of UK Climate Risk ([CCC 2021](#)) highlights that nationally the gap between the level of risk we face and the level of adaptation underway has widened and that acting now will be cheaper than waiting to deal with the consequences.

This five minute [video](#) by [Perth and Kinross Council](#) is a good introduction to the basics of climate change.

1. Introduction

Scotland is committed to achieving a 75% cut in greenhouse gas emissions by 2030 and net zero emissions by 2045. Public bodies are expected to show leadership by swiftly reducing their own emissions. Most sectors, including the public sector, will need to reduce emissions close to zero without offsetting for Scotland to meet its national climate change goals ([PBCCD Guidance](#)).

All Further & Higher Education Institutions (FHEIs) in Scotland are required to report the greenhouse gas (GHG) emissions associated with business travel annually to the Scottish Government via their Public Bodies Climate Change Duties (PBCCD) submissions. These reports are publicly available on the [Sustainable Scotland Network](#) website. However, in 2021 only 86% of institutions reported business travel emissions in their PBCCD submission ([EAUC Scotland](#)).



86% of FHE institutions are currently reporting business travel emissions

In 2019/20, business travel from the FHE sector was responsible for 36,859 tonnes of carbon dioxide equivalent (CO₂e) or 10% of total sector reported emissions. As other key sources of emissions, such as electricity, are decarbonised, the significance of business travel emissions is projected to increase. The vast majority (90%) of business travel emissions arose from air travel. 59% of air travel emissions were from long haul flights. The 2019/20 reporting period included approximately five months of COVID related travel restrictions, where the sector saw an unprecedented 46% drop in business travel emissions compared to 2018/19. Pre-COVID business travel emissions from the FHE sector were 68,556 tonnes CO₂e, or 18% of total sector reported emissions ([2018/19 FHE PBCCD Reporting](#)).



90%
of FHE sector business travel emissions arose from air travel in 2019/20

1. Introduction

The changes to working practices made necessary by the COVID, and the subsequent reductions shown in 2019/20, present a huge opportunity to deliver long-term organisational change for FHE sector business travel. Virtual meetings and attendance at conferences became the norm and should be encouraged as the default option in the long term. To deliver this, institutions must develop sustainable business travel strategies, set ambitious targets and improve reporting quality to monitor progress.

FIGURE 2
Business travel carbon emissions, flight, rail, fleet and 'grey' fleet (domestic car use) 2016-17 to 2018-19

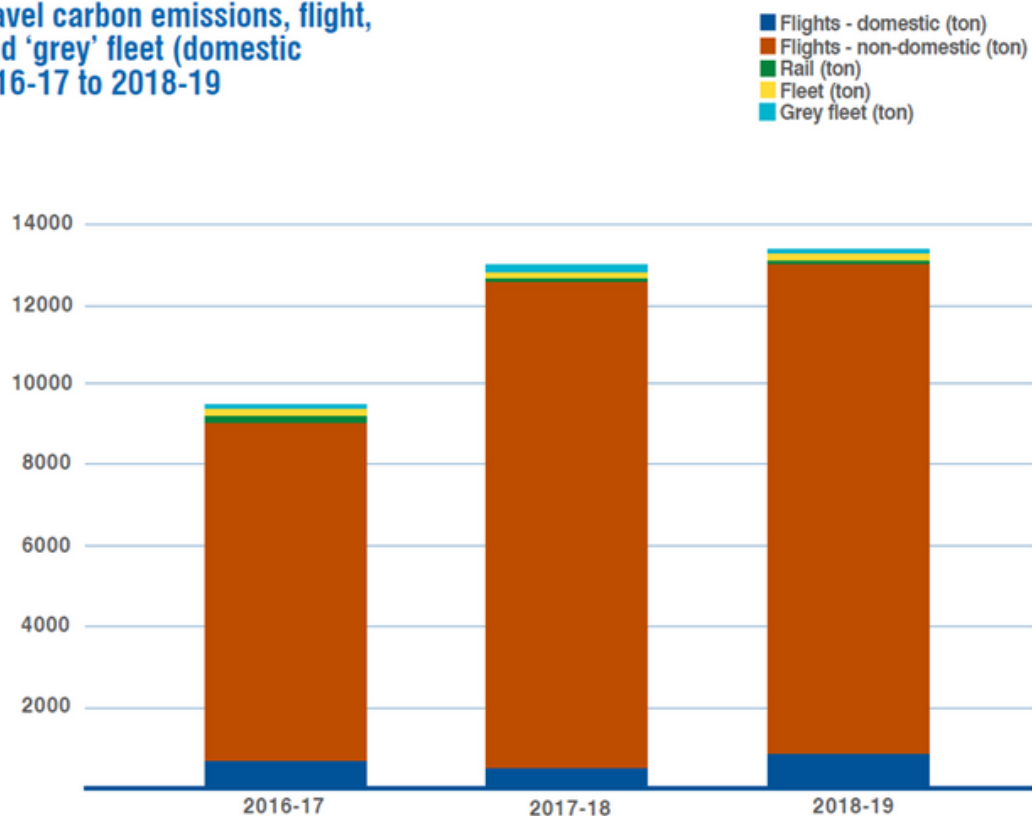


Figure 1: An example of the share of emissions taken up by non-domestic flights (orange) and domestic flights (dark blue) at the University of Glasgow (Guidance for Sustainable Business Travel for Staff and Postgraduate Researchers, University of Glasgow). Without reducing absolute emissions from aviation, institutions that are currently reliant on flights will not meet their PBCCD expectations from Scottish Government.

2. Leadership and Governance

EAUC Scotland encourages every institution to develop a sustainable business travel policy that includes targets for the reduction of GHG emissions related to all aspects of business travel, as well as articulating how those emissions will be monitored, reduced and, if necessary, offset.

Target setting

Emissions from business travel are classed as indirect emissions in the GHG Protocol and, from 2022, the [Climate Change \(Duties of Public Bodies: Reporting Requirements\) \(Scotland\) Amendment Order 2020](#) 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.

In [Public Sector Leadership on the Global Climate Emergency: Guidance](#) the Scottish Government recommends that all air travel should be minimised and that mainland UK air travel should be eliminated.

Where air travel is unavoidable, it is advised that the most emission efficient passenger class is used (i.e. economy class as default). It is important for senior leaders to lead by example, setting the norms and aspirations for the rest of the organisation. See the [Leadership and Governance](#) sections in the [Business Travel Action Plan](#) for more suggested actions in this area.

Leadership at all levels

Leadership is needed at all levels, across departments and dedicated senior leader time to progressing it. The University of St Andrews explains how it leads on Net-Zero via Institutional, Embedded and Community Leadership. They have chosen a high-profile individual, Prof Sir Ian Boyd, former Chief Scientific Advisor to Defra, to chair their Environmental Sustainability Board meetings. Sustainability is now a pillar of their institutional strategy. See this [talk by Dr Emma Read Kallblad](#), Environmental Sustainability Board Chair, Principal's Office to hear more.

2. Leadership and Governance

Recognising the social dimension to business travel

Whilst it is important for institutions to set ambitious targets for reducing business travel, the social context of travel also 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 ([New Economics Foundation and Possible, 2021](#)). In academia, King's College London ([2019](#)) found that, by the size of emission, the top 1% of fliers produced more than the bottom 50% of fliers.

More widely, [research shows](#) that senior male 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](#) section.

Future trends - Emission intensity of travel

Aviation is more difficult to decarbonise than road transport as the potential for battery electricity to run planes is limited by the range and power required. Improved efficiency and alternative aviation fuels will help to reduce the emissions intensity of air travel, however, the [International Council on Clean Transportation](#) estimates that only 5% of aviation fuel in the EU could come from sustainable sources by 2030. These small gains in emissions reductions will quickly be negated by the projected growth of the aviation sector if we continue with business as usual ([Stay Grounded](#)). Significant absolute reduction in flights are needed to reach net-zero before 2045.

In the UK, 70% of flights are taken by 15% of the population.

Approximately 50% don't fly at all in a given year.



Leadership and Governance Case Study

University of Glasgow

The University of Glasgow declared a climate emergency in 2019 and has signed the UNFCCC Race to Zero for Universities and Colleges. Pre-COVID, the University was on course to miss their whole-institution emissions target because emissions reductions were being substantially eroded by an increase in flying (see Figure 2 for an emissions breakdown by source).

As part of its Climate Change Strategy and Action Plan, Glasgow Green, the University have now committed to reduce business travel by 7.5% each year until 2030 and have published their Guidance for Sustainable Business Travel for Staff and Postgraduate Researchers.

The key messages in the guidance are:

- **Avoid travelling** where possible.
- **Identify opportunities** to fund and use virtual solutions in grant proposals.
- **Choose public transport** where travel is required.
- **Maximise the value** of any given travel episode.

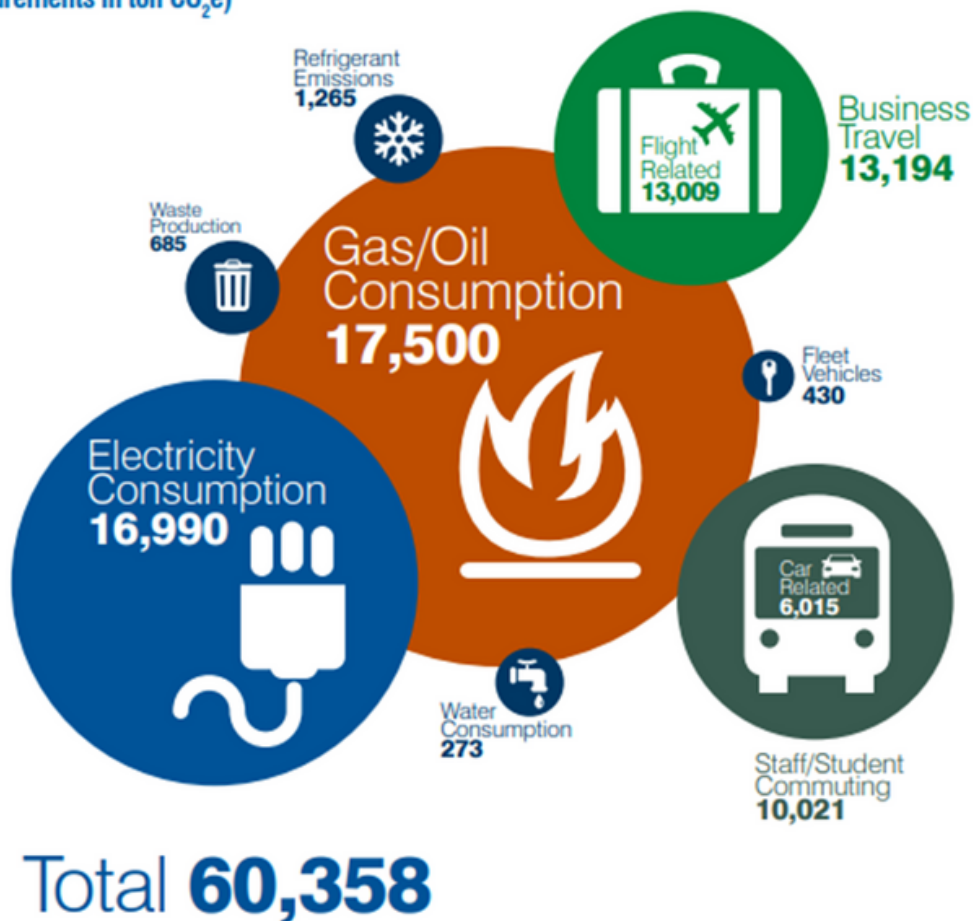
To support the transition, the University have produced a sustainable travel decision aid and each School, Institute and Service will be required to report their progress bi-annually to monitor progress.

One key aspect of the strategy is the recognition of the social dimensions of travel. It outlines that business travel emissions reductions are to be proportionate, fair, and equitable, whilst also seeking to redress existing inequalities within the sector (for example by gender, career stage, global inequalities of opportunity, caring responsibilities, disability and other characteristics). One identified action is to adapt promotion criteria so that staff who reduce or eliminate international travel are not disadvantaged. EAUC Scotland commend the University of Glasgow for being so explicit in their consideration for reducing inequalities as part of their business travel strategy.

Leadership and Governance Case Study

University of Glasgow

FIGURE 1
UofG carbon footprint 2018-19
(measurements in ton CO₂e)



Our footprint equates to the annual carbon cost of producing the food for 22,999 meat eaters, 43,403 vegetarians, or 57,220 vegans*

*based on Scarborough, P., Appleby, P.N., Mizdrak, A. et al. Climatic Change (2015) 125: 179-192

Figure 2: University of Glasgow carbon footprint 2018-19 (tCO₂e). As seen above, flight related emissions account for over 98% of overall business travel emissions.

Leadership and Governance Case Study

University of Oxford

University of Oxford - Diverting funds from high to low carbon travel

As of August 2022, the University of Oxford implemented an ambitious Travel Policy. It includes a flight reduction target, flight levy and succinct explanations for readers of the policy. Some of the key aspects of the policy that impressed EAUC Scotland include:

Flight reduction target*

The University has set a target of reducing emissions from flights by 35% by 2035 against the 2018/19 travel baseline with interim targets of:

- A 20% reduction by 2024/25.
- A further 10% reduction by 2030/31.
- A further 5% reduction by 2034/35.

To reduce flights, unless exceptions or reasonable adjustments are applicable:

- Rail should be used for all domestic journeys under 7 hours. Exceptions include flights to Northern Ireland, the Shetland Islands or the Outer Hebrides. Flights are also permitted to the Channel Islands and the Isle of Man.
- Eurostar should be used for all journeys to Paris and Brussels.
- First-class flights are not permitted.
- Premium economy and business-class flights require pre-approval by departments, with evidence retained.

Leadership and Governance Case Study

University of Oxford

Flight levy*

A flight levy of £30/tCO₂e for all flights is recharged to departments for all flights paid for or reimbursed by the University to compensate for those flights' carbon emissions. The levy is then allocated to the Oxford Sustainability Fund (OSF) for implementing the [University's Environmental Sustainability Strategy](#).

For further information in estimating flight levies, view a list of [estimated levies to common destinations](#) or use the [carbon emissions calculator](#).

Green Travel Fund

Along with measures to curb high-carbon travel, Oxford also provide a [Green Travel Fund](#) to encourage sustainable travel behaviour. This fund awards small grants or part-funding for projects ranging from installing or improving departmental showers for cyclists through to subsidising departmental pool bus passes. The fund is financed by income generated by the University car parking permits and amounts to approximately £85,000 per annum.

EAUC Scotland are impressed by the University of Oxford's multi-faceted approach to encouraging sustainable travel behaviours and hope this case study might provide inspiration for institutions looking to implement similar initiatives.

*Note: text copied and adapted from [University of Oxford's Considering Travel website](#), accessed January 2023.

3. Emissions Reporting

The first step to addressing FHE sector business travel emissions is to have a comprehensive GHG emissions inventory of all activities. This will help to identify emissions hotspots and key opportunities for emissions reduction as well as accurately monitor progress towards targets.

What should be reported

Business travel emissions arise from the transportation of staff and students for university or college related purposes, such as conferences and field trips, in vehicles that do not belong to the institution.

The [Sustainable Scotland Network](#) and the Scottish Government recommend that all institutions should report business travel by air, rail, car (grey fleet, hire car and taxi), bus and ferry. The GHG emissions associated with staff and students staying in hotels on business can also be reported.

In line with the principles of the [GHG Protocol](#), reporting of business travel data should be accurate, transparent and complete. When collecting data, institutions should adhere to the [GHG Protocol decision tree for selecting calculation methods](#). Where possible the fuel or distance-based method should be employed as these have a lower level of uncertainty. If this data is not available a cost-based method can be used, with efforts to move towards improved reporting quality over time. Where assumptions have been used, these should be clearly stated and the level of uncertainty acknowledged.

Air travel data should be broken down by distance travelled (domestic, short haul, long haul and international) and class of travel (economy, premium economy, business and first).



Emissions Reporting Case Study

University of Edinburgh

University of Edinburgh Business Travel Reporting Tool

Accurate, transparent and engaging datasets are a powerful tool through which to engage different stakeholders within an institution on business travel issues.

The University of Edinburgh's Department for Social Responsibility and Sustainability have created their own [Business Travel Report](#), which displays the University's business travel data from 2012-13 to 2021-22 (see figure 3).

The tool enables users to view business travel data attributes for different transport mode, including by:

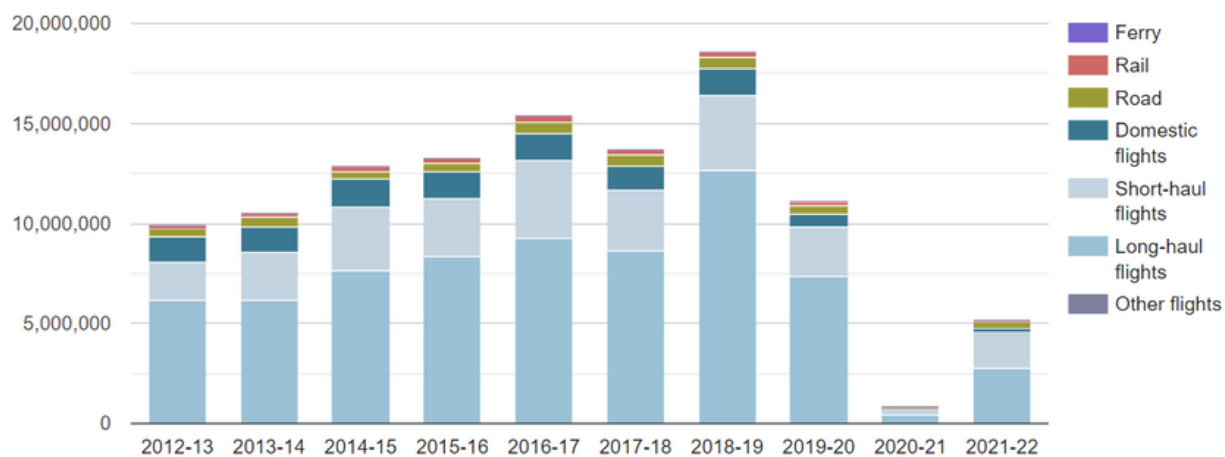
- Greenhouse gas emissions.
- Cost.
- Distance travelled.
- Number of trips.

The tool also allows individual departments within the institution to see their own bespoke breakdown of business travel data. Using this approach, institutions are able to do more with their PBCCD business travel emissions data, for example through engaging stakeholders, determining particular emission and cost 'hot spots', and informing business travel strategies and policies.

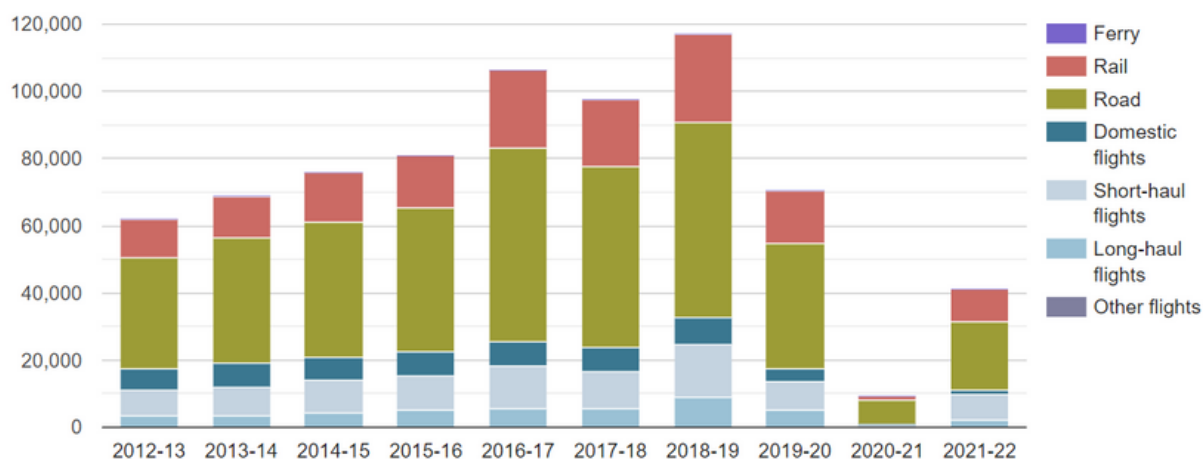
EAUC Scotland commend the University of Edinburgh for being so transparent with their business travel emissions and for creating an interactive platform with which to explore the data. This approach has enabled University of Edinburgh staff and students, as well as institutions and individuals across Scotland, better comprehend the scales at which business travel operates on an emissions, cost and distance basis.

Emissions Reporting Case Study

University of Edinburgh



Kilograms CO₂e / Academic year



Number of journeys / Academic year

Figure 3: University of Edinburgh Business Travel Report, created by the University of Edinburgh Department for Social Responsibility and Sustainability. Images created in January 2023, selecting the 'carbon emissions' (above) and 'count' (below) tabs. For further information visit their [Travel webpage](#).

4. Emissions Reduction

Whilst it is important to look at reducing business travel emissions holistically, there will be strategic differences between institutions and between the college and university sectors in where to prioritise reductions. In particular, colleges should focus on ensuring the continued minimal or no use of flights and improving use of public transport and EV pool vehicles for business travel. For universities, without taking significant steps to reduce flights taken in absolute terms, there can be limited progress towards achieving net-zero or PBCCD expectations.

Flights

Flights are often the most significant source of business travel emissions, particularly for universities. The University of Edinburgh calculated that in 2018-19 they spent £8.86 million and emitted 17,726 tCO₂e from flights alone (see [Business Travel Reporting Tool](#)). They have also estimated that flights represent 95% of their travel emissions ([University of Edinburgh Travel](#)). Pre-COVID this trend was mirrored across the Scottish university sector, with emissions from flights accounting for 93% of the sector's reported business travel emissions ([EAUC PBCCD HE Analysis 2019](#)).

Technology innovations are not moving quick enough for the pace of change that is needed ([Stay Grounded](#)). Our behaviours must also change. Some nations are acting to curb aviation emissions, including France banning short-haul domestic flights ([BBC 2021](#)). One politically popular solution to curbing aviation emissions includes introducing a frequent flier levy, where those that fly the most are taxed at an increasing rate for each flight taken ([Independent, 2021](#), [The Conversation, 2022](#)). It is seen to be a progressive and fair tax, that doesn't unfairly burden those with smaller travel allowances.

For some inspiration on what other institutions are doing to reduce their aviation emissions, [Flying Less in Academia: A Resource Guide](#) compiles resources from across the globe on policies, practical guides, research and more on flying less in FHE. EAUC Scotland also helped form the Slack community "[Plane Talk: Reducing travel emissions in academia](#)". This 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.

4. Emissions Reduction

Furthermore, EAUC Scotland developed the Travel Better Package which includes a tool to evaluate whether travel is necessary and may help staff prioritise their travel choices.

Driving

Although flights tend to have the highest emissions, driving some medium and large cars are worse than flying. As seen in the graph below, based on UK Government greenhouse gas conversion factors for 2022, driving a large petrol car has a higher carbon footprint than taking a short-haul, long-haul or domestic economy class flight and is second only to long-haul business class. According to the International Energy Agency, sport utility vehicles (SUVs) rank second only to power as a leading cause of energy-related carbon dioxide emissions growth over the last decade (IEA, 2021). Sales of SUVs grew to a record 42% of the global car market in 2020 (IEA, 2021).

Suggestions to curb the use of SUVs for business travel could include removing them from any salary sacrifice or company car schemes, implementing higher parking permit charges for more polluting vehicles and/or banning their use for grey fleet mileage.



4. Emissions Reduction

The chart below shows the emissions of different travel modes as measured in grams of carbon dioxide equivalents per passenger kilometer using the [2022 UK Government conversion factors](#). The footprints include carbon dioxide, but also other greenhouse gases, and increased warming from aviation emissions at altitude (with Radiative Forcing). Transport modes have been grouped into flights (purple), individual mobility (blue), and public and shared mobility (green). Some readers might be surprised at how emissions from large, luxury and average internal combustion engine cars are higher than some classes of flight, and up to nine times higher than taking a trip via national rail.

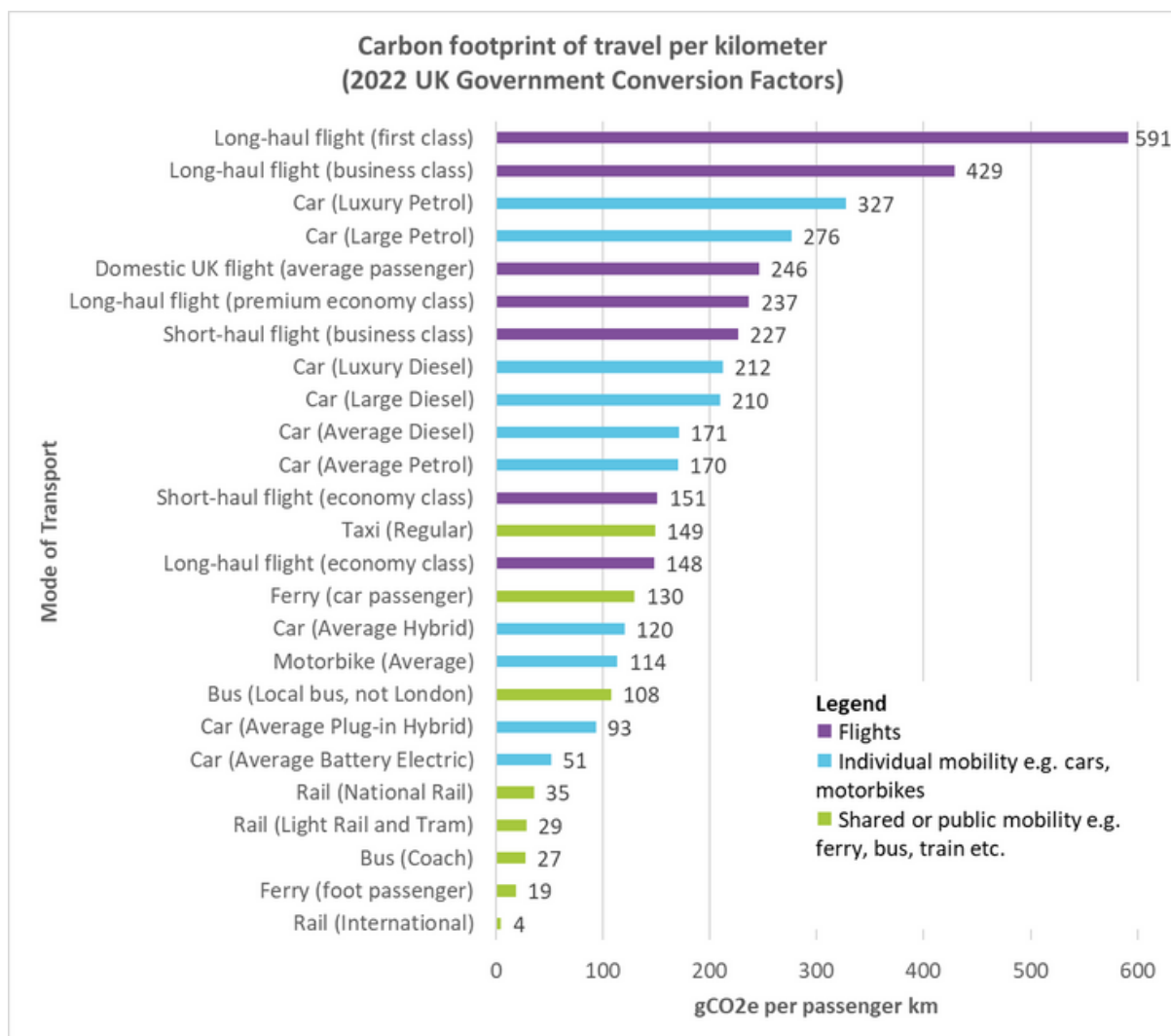


Figure 4: Carbon footprint of travel per kilometer 2022, based on 2022 UK Government conversion factors (EAUC Scotland). Large, luxury and average internal combustion engine cars (e.g. SUVs) have higher emissions than flying in some cases. To explore this data further with an interactive graph, visit [Our World In Data](#) (based on conversion factors for 2019).

4. Emissions Reduction

Shared transport

Encouraging the shared use of vehicles to travel to sites is a smart business move. On top of the base rate of 45p/mile, HMRC allows an extra 5p per mile per work passenger tax-free to individuals transporting colleagues ([HMRC](#)).

Along with being an incentive for the driver, this will also save money for the institution. For two passengers sharing, the saving will be 40p per mile, for three passengers 80p and for four passengers £1.20 per mile. This amounts to significant cost and carbon savings, particularly if staff are travelling long distances. Mandating car-sharing for relevant journeys could be incorporated in to your business travel policy.

To encourage shared trips, institutions could set up a Teams channel for staff to share lifts for business journeys (informal measure) or implement a more formal platform such as [Liftshare](#) or [Kinto](#). 'Have you offered this journey on Liftshare (or Teams)?' could be a question before business mileage is approved by line management.

Pool vehicles are also a great option for reducing Business Travel emissions. Pool cars (including car club vehicles) can often be less polluting than the average vehicle and, if it is electric, be significantly less polluting ([CoMoUK Scotland Report 2021](#)). In our Edinburgh College case study in the next section, introducing electric pool cars saved a significant amount of money on grey fleet travel claims, along with a whole host of other benefits. Hosting car club vehicles on your campus is another win-win situation to be considered. CoMoUK can provide advice on this ([CoMoUK Scottish Bespoke Advice Service](#)).

4. Emissions Reduction

Public Transport

In Scotland, the main modes of public transport include travel by train, bus, subway, tram and ferry. Many FHE institutions are well connected to public transport and will be relatively easy to get to, especially during working hours. However it is understood that there will be instances where public transport will not serve the area you need to travel to. In those instances, other modes should be considered.

Benefits of public transport

There are a multitude of benefits of travelling by public transport for business. Some include, but are not limited to:

- **Cost:** Public transport fares are often cheaper than driving, especially where only one staff member is travelling to a destination. Costs are reduced even further via discounts if a staff member is under-22 (young person free bus travel), over 60 (bus concession scheme), has another transport discount card (e.g. 26-30 railcard) and/or tickets are booked in advance. Public transport also often transports people straight into the centre of towns and cities, often removing or reducing the need for onward travel compared to airports.
- **Capacity for work:** Staff can often work whilst travelling on public transport. Trains, for example, include tables and WiFi and do not often induce travel sickness. When staff are driving, they must concentrate on the road and their attention should not be diverted to work tasks. Furthermore, when comparing public transport to flying, almost all of the travel time by train can be used for work, whereas only a fraction of air travel time can. This is due to time lost in transit to and from the airports and the final destination, time for check in and security and instances where computers must be stowed away (turbulence and take/off landing time). When staff are able to work whilst travelling, this reduces costs for the business compensating paid travel time via wages.
- **Health and wellbeing:** Before or after a business trip, staff members can relax and recuperate on the journey, increasing health and wellbeing and reducing levels of fatigue. This can benefit work outcomes and reduce stress and burnout.
- **Greenhouse gas emissions:** Traveling by public transport, compared to flying or single occupancy car usage, emits significantly less carbon and other GHG emissions.

4. Emissions Reduction

- **Risk reduction:** When staff are driving for work purposes, they can sometimes become distracted by work emails or calls, heightening risk for themselves and other road users. Furthermore, staff driving home after a business trip can increase fatigue, especially at night, which can lead to an increased risk of traffic accidents. Work calls and emails can easily be attended to on public transport (as long as the content isn't confidential), and as a mode, buses and trains also have better safety statistics than driving.
- **Positive image for the institution:** When staff travel by public transport, particularly senior colleagues, this gives social licence for others to do the same. This also gives credibility to any net-zero plans in the eyes of staff, students and wider stakeholders. If (senior) staff turn up to meetings in a SUV, or a taxi from a flight, for example, this reduces staff and student faith in the robustness of any sustainability plans or practices. This is the same for any lecturers or support staff working on sustainability-related research or practice. Travelling sustainably equals positive PR. Taking a few photos for internal and external communications can help spread the message further.
- **Shifting commuting and personal travel habits:** As seasoned public transport users, on a few occasions EAUC Scotland staff have overheard Scots in their mid-life saying to other bus or train users that this is the first time in their lives that they are taking the bus or train. When staff are asked to travel by public transport for business, they might be pleasantly surprised at their experience. This could open previously closed minds and help to shift commuting and personal travel behaviours too, further impacting any Scope 3 emissions targets. Sometimes it helps if inexperienced colleagues travel together with another more seasoned public transport user to overcome any fear or knowledge barriers.
- **Increased talent pool:** Reducing the number of positions mandating a driving license can increase the talent pool and increase accessibility to job opportunities.
- **First class train travel:** First class train travel via LNER, for example, includes ample leg room, unlimited drinks, cooked meals and a very smooth service. Including this option for longer journeys might help sway staff towards taking the train.

4. Emissions Reduction

Barriers to public transport use

There are undoubtedly barriers to taking public transport, both real and perceived. Bus patronage, for example, has been dropping year on year across Scotland and has struggled further due to the effects of the pandemic ([Transport Scotland Statistics, 2021](#)). One task for your institution is to work out how to change the mindsets of perceived barriers (time, cost etc) and how to try to alleviate some of the real barriers (timetable issues, public transport network availability).

It is often the case that staff advocate for driving and/or flying because it is habitual and thus does not involve change. Staff are also biased towards what mode they like the most, as they are not personally having to spend money on travel or worry about departmental emissions. It also suits many people that they are paid to sit in the most luxuriant travel mode on offer on business time. This behaviour unfortunately costs the institution and the planet significant sums of both money and emissions.

With a small amount of research, it is clear to see that for the parameters considered in figures 5 and 6, the business case falls in favour of public transport - the train in particular. One source of opposition to taking a different mode is often fear of the unknown. Dig a little deeper to understand the real barriers to your staff travelling sustainably. One way to understand barriers to public transport usage is to include questions on a travel survey. This could also provide a good staff or student research opportunity. Research into the barriers faced and incentives needed to shift transport behaviour could bear fruit for your institution. Many psychologists are employed by the motor and aviation industries to make their products as appealing as possible to the general public. If your institution has a psychology department, perhaps they could do the same for more sustainable modes?

Public Transport Time, Cost and Emission Comparison

To bust a few myths about driving and/or flying always being the most efficient mode for business travel, EAUC Scotland have done two comparative analyses for typical business trips within Scotland. As seen in the examples given in figures 5 and 6, bus and train travel are both cheaper than driving in both absolute terms and from money lost in wages, emit significantly less carbon and, when travelling by train, take less time.

4. Emissions Reduction

Aberdeen to Glasgow Travel Mode Comparison Table

Mode	Time	Cost	Emissions	Capacity for work
Single occupancy car (medium diesel car)	2 hr 42 min + parking + short walk to destination	£65.25 (145 miles @ 45p/mile) + parking charges + LEZ charges + 2-3hr in lost staff wages	38.49kg CO2e	Cannot work. Have to concentrate on driving.
Bus (coach)	3 hr 10 min + walk to destination	£25.30 (£19.80 an hour later or £13.30 in advance) + potentially 3 hr in lost staff wages	6.25kg CO2e	Might be able to work. Depending on bus travel sickness.
Train	2 hr 34 min + walk to destination	£46.70 without railcard (£21.20 booked in advance)	8.27kg CO2e	Can work on the train.
Plane	5 hr 5 min + transport time to and from airport + waiting time in security etc.	£212 + transport cost to and from airport + time lost in wages (£54 if booked in advance, with 6 hr 35 min travel time)	324kg CO2e 174Kg CO2e Aberdeen to London + 150kg CO2e London to Glasgow + carbon emissions of transport to and from airports.	Partially. Could work for approximately half of the flying time.

Figure 5: Aberdeen to Glasgow travel mode comparison tables for time, cost, emissions and capacity to work by car, bus, train and plane. Data sources: Travel times and distances from [Google Maps](#). Emissions from [PBCCD 2022](#) data set (medium diesel car, coach, National Rail train) and [LNER Carbon Calculator](#) (plane). Costs from [HMRC](#), [National Rail](#), [Megabus](#) and [Skyscanner](#). All sources accessed between 10am - 11am 30th January 2023 for the next available service. Advance ticket prices were sought for 23/02/2023, three weeks in advance.

4. Emissions Reduction

Edinburgh to Glasgow Travel Mode Comparison Table

Mode	Time	Cost	Emissions	Capacity for work
Single occupancy car (medium diesel car)	1hr 11min + parking + short walk to destination	£21.60 (48 miles @ 45p/mile) + parking charges + LEZ charges + >1 hr in lost staff wages	12.74kg CO2e	Cannot work. Have to concentrate on driving.
Bus (coach)	1hr 24 min + walk to destination	£8.99 (£4.30 in advance or £5.40 an hour later) + potentially 1-2 hr in lost staff wages	2.07kg CO2e	Might be able to work. Depending on bus travel sickness.
Train	52 min + walk to destination	£14 without railcard (£10.40 an hour later)	2.74kg CO2e	Can work on the train.

Figure 6: Edinburgh to Glasgow travel mode comparison tables for time, cost, emissions and capacity to work by car, bus and train. Data sources: Travel times and distances from [Google Maps](#). Emissions from [PBCCD 2022](#) data set (medium diesel car, coach, National Rail train). Costs from [HMRC](#), [National Rail](#) and [Megabus](#). All sources accessed between 10am - 11am 30th January 2023 for the next available service. Advance ticket prices were sought for 23/02/2023, three weeks in advance.

Active Travel

Walking, wheeling and cycling may not make huge emissions savings compared to reducing flying, but they do add up, especially if replacing polluting vehicle miles for regular short trips. It is typical to encourage active journeys if colleagues can walk, wheel or cycle to a destination in 30 minutes, which is approximately 2km for walking and 8km for cycling. You could draw a [Radius Travel Time map](#) around your sites to see where someone could realistically travel to by active means. Encouraging active travel will not only benefit emissions reductions targets, but will also boost employee health and wellbeing, productivity, morale, and thus result in lower turnover for the employer ([Way to Work Scotland](#)).

4. Emissions Reduction

Virtual infrastructure

Investing in virtual infrastructure could save your institution a significant amount of money and emissions. Developing a robust digital strategy supported by integrated, easy to use software and hardware is key to transitioning away from high-emission business travel.

Is it easy for your colleagues to host virtual or hybrid meetings or learning opportunities? If not, why is this the case? What infrastructure, software or systems could be implemented to make this the first choice for meetings, especially long-distance calls? Read our [case study on West Lothian College](#) for one example of the successful implementation of virtual meeting pods.

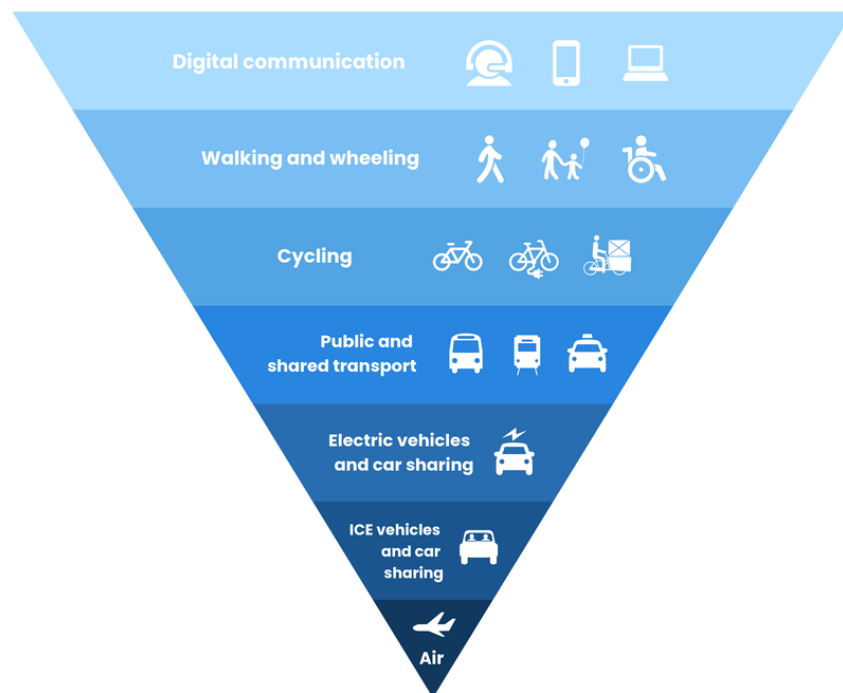


Figure 7: Sustainable Travel Hierarchy, Energy Saving Trust. The inverted pyramid structure aims to illustrate that sustainable modes should be both the most aspirational and utilised modes, with the highest polluting modes actively relegated to the final choice, once all other options have been exhausted. EAUC Scotland would like to emphasise that the first three sections of digital communication, walking and wheeling and cycling, are all seen of equal standing, with negligible emissions, and in the case of active travel, include high health and wellbeing benefits. If staff can walk, wheel or cycle to a destination in 30 minutes, active travel is highly encouraged as a top choice mode for business travel. Note: ICE vehicle = Internal Combustion Engine.

Emissions Reduction Case Study

Edinburgh College

Edinburgh College's Electric Vehicle Pool Car Fleet

Since 2012, Edinburgh College have been transitioning their pool car fleet from Internal Combustion Engine (ICE) vehicles to Electric Vehicles (EV). From their first electric car, a Mitsubishi i-MiEV, they now have a full complement of seven electric Nissan Leaf pool cars.

Their cars are procured via a leasing model that is renewed every four years. Each time, Stephen Parry-Jones, Edinburgh College's Transport Co-ordinator, looks for the best deal. Since 2012, they have had Mitsubishi, BMW and Nissan models. As the diesel vans' lease comes to an end, the vans will be replaced with e-vans.

The vehicles are mainly used for intercampus travel between their sites in Granton, Midlothian, Sighthill and Milton Road. Staff induction sessions are in high demand and the cars are constantly booked out. If budgets permitted it, they could justify a further seven pool cars due to demand. From 2019 to 2022, the EVs have collectively travelled over 92,000 miles, saving approximately 18 tonnes CO₂e*.

*PBCCD 2022 emissions factors used for 'Business Travel Car - Battery Electric Small' subtracted from 'Average Diesel Vehicle of Unknown Engine Size'.



Figure 8: Edinburgh College Electric Vehicle Pool Car (Photo credit: Stephen Parry-Jones, 2023).

Emissions Reduction Case Study

Edinburgh College

Stephen has found that the academic and support staff are incredibly supportive of the electric pool cars. A few have bought their own EVs as a result of having tried Edinburgh College's fleet. Some staff members that had previously been neutral towards EVs, came away from their inductions positively surprised by their experience.

Technical detail summary:

- **Funding**

- Funding for the charge posts was via Scottish Government grants – either through Transport Scotland or one of their grant awarding bodies. The cars were funded by Edinburgh College.

- **Staff and student numbers**

- This initiative aids business travel for Edinburgh College's 1,125 staff supporting approximately 27,500 students.

- **Induction process**

- Before a staff member is permitted to drive a pool car, their driving license is checked and they complete a vehicle induction (including the rules of use, the vehicle controls and emergency procedures). They then complete a test drive with Stephen to ensure they are a competent driver. This is all mandatory before booking.

Emissions Reduction Case Study

Edinburgh College

- **Electric vehicle charging and parking policy**
 - **Charging posts:** There is a charge post network spread across all 4 campuses consisting of 13 charge post outlets, including one rapid charger. These posts are used by the college vehicles but also by staff, student and members of the public to charge their cars.
 - **Charge post maintenance contract:** Edinburgh College are currently in the process of setting up a maintenance contract.
 - **Charging post income:** Prior to 2023, Edinburgh College had not requested payment for use of their charge points. As of 4th January 2023, Edinburgh College implemented a charge to use the charge posts across all 4 campuses. The charges are: £1 connection fee, with a £0.25 per kWh on AC and £0.35 per kWh on DC with a maximum stay of 4 hours. There is a £30 overstay fee for exceeding 4 hours.
 - **Parking management:** Edinburgh College outsource their parking attendants to an external company. There is a permit system in place for staff and students and if the correct permit is not displayed on the windscreen, or if a car is parked in a disabled and/or charging bay (a common occurrence with ICE vehicles), a fine of £85 (reduced to £50 if paid within 14 days) is issued.
- **Bay blocking challenges:**
 - Another challenge is bay blocking, where drivers will put their EV car on charge, go to work and come back at 5pm. There is a limit of 4 hours max stay at the charge post and, if exceeded, there is an automatic £30 fine charged via Chargeplace Scotland.

Emissions Reduction Case Study

Edinburgh College

- **The college fleet**

- **Fleet vehicles:** The college fleet consists of 17 vehicles which breakdown to 7 pure electric Nissan Leafs and 10 diesel van/busses (mixture of Ford Transits and Citroen Relays).
- **Fleet use:** The electric cars are used by both teaching and support staff to do cross campus journeys. The diesel minibuses are used for class trips and the diesel vans are used by the Facilities and Maintenance teams for reactive works.
- **Training courses:** Electric vehicles that have come to the end of their life are used to train students. The initial Mitsubishi i-MiEVs were owned outright (before the leasing model came in for subsequent cars). They are now used as training vehicles in the workshops. Courses are aimed at technicians from garages who learn how to safely work on and isolate EVs. Edinburgh College, along with institutions such as [Dundee and Angus College](#), are at the forefront of this training. Please see [IMI Level 2 & 3 Award in Electric/Hybrid Vehicle Routine Maintenance, Repair and Replacement Activities](#) for more information on this training.

- **Challenges**

- Range anxiety is the highest concern of drivers. Stephen spends time educating people that they can go quite far without running out of charge. Lecturers and support staff are 100% on board with the e-cars. However, the maintenance team who use vans to go from campus to campus are not so keen on using e-vans. A diesel van has a range of 500 miles, whereas e-vans go about 110 miles per charge. However, as the vans are used for intercampus travel, they don't do a significant amount of mileage in one day. Hopefully the steady transition of vans to electric models might allay some concerns as staff become accustomed to their use.
- The technology is not quite there yet to transition the minibus fleet. However it is hoped this will change in time.

Emissions Reduction Case Study

Edinburgh College

Words of advice

EAUC Scotland asked Stephen for his words of advice for any other institutions considering transitioning their fleet. 'Just go for it' he said, 'it is definitely the way to go'. He mentioned many of the positives of implementing electric pool cars, including:

- Low maintenance costs, compared to ICE vehicles.
- Lower environmental impact – no idling emissions, less noise pollution, fewer particulates and less fossil-fuel burned. Taking ICE vehicles off the road.
- Positive PR for the college via branded vehicles. They are seen as they are driven around Edinburgh.
- Significantly lower costs from grey fleet travel claims.
- Helping staff to experience EVs and changing opinions and minds.

Additional positives added by EAUC Scotland include:

- Compliant with the [Edinburgh Low Emission Zone](#) regulations.
- Supports targets set out in the Scottish Government's [Public Sector Leadership on the Global Climate Emergency guidance](#) (2021).

With many thanks to Stephen Parry-Jones, Edinburgh College's Transport Co-ordinator, for meeting with EAUC Scotland in November 2022 to provide such detailed information on their EV fleet. Details accurate as of January 2023.

EAUC Scotland commend Edinburgh College in their efforts to electrify their fleet and bring staff along with them on the journey, changing hearts and minds. This is a key example of where a change in one department can have ripple effects across an organisation and into wider society. It is hoped more institutions follow suit and change their fleet cars for a better tomorrow.

Emissions Reduction Case Study

West Lothian College

Hybrid Working at West Lothian College

Since March/April 2020 staff at West Lothian College had to adapt to Working From Home (WFH). Initially this was due to lockdown policy, but then many staff transitioned to a hybrid working pattern to continue to support the benefits of WFH and to combine working on campus with an hybrid element.



The campus underwent a complete refurbishment of its first-floor staff and student support areas with consideration to how the faculty staff areas within all buildings would transition to and accommodate hybrid working. The design and layout of these areas were based on innovative and creative ideas from the Hybrid Working Group involving staff from across all areas and faculties.

One key aspect that came from feedback was the need to have confidential and private spaces to hold Microsoft Teams meetings. To support the hybrid working strategy, staff members needed the ability to connect with their team members who could be working from home, hold confidential Teams meetings and create that connection with external stakeholders and organisations necessary to support their function and objectives. Initially staff had their meetings next to each other which created some challenges if there were confidential and private discussions to be had. Meeting rooms would also be taken up, which wouldn't allow socially-distanced group team meetings to take place.

The decision was made to procure individual acoustic meeting pods and have these within all staff areas. Some are sit-stand desk type pods with adjustable chairs so staff can work for longer periods of time. The college also have a 4-person acoustic pod for smaller confidential meetings if the bookable spaces are unavailable. Single person pods are mainly used for Teams meetings.

Emissions Reduction Case Study

West Lothian College

Staff quotes in support of the pods:

“Absolutely fabulous. Amazingly private, can’t hear a thing outside them, comfortable and easy to use, just plug and play. The addition of the screens have made a huge difference as you can now have a larger view of things and certainly for reading documents that people share is much much easier. I want one for Christmas.”

“I just wanted to add that I think the pods are great and I use them regularly. Often, I’ll have days where I have to be on campus, but also attend meetings on Teams and sometimes these meetings include other staff members in the general vicinity so the delay in the audio combined with the general background noise in the office makes these calls difficult. Since the introduction of the pods, it’s made the hybrid nature of these onsite/teams’ meetings much more manageable. The soundproofing in the pods is really good and they have a good amount of privacy so you don’t feel disturbed by what’s going on around you in the office.”



Figure 9: Row of standard sound-proof meeting pods at West Lothian College (Photo credit: Vicki Tierney 2022).

Emissions Reduction Case Study

West Lothian College

Staff quotes in support of the pods:

“The booths are excellent and by adding the screens I think we have enhanced them even more. They give you privacy, enough room to work in and have a professional look about them.”

“I really love the Pods, they make teams meetings much more achievable in office and especially when working Hybrid as we don't all have the same on/off site working practice.

I've found them very good to use having used the ones in the staff zone and the ones beside HR I much prefer the bigger standing desk ones as sometimes on longer meetings it can be difficult to stretch in the smaller ones. Overall I think they are brilliant, and one of the genuinely best things that the college has done over the last few years to support hybrid working.”

For a few technical details of the initiative:

- **Funding**

- Thirteen pods were funded by Scottish Funding Council for approximately £120,000. This included 7 x HUSH Hybrid pods, 5 x HUSH SitStand Pods and 1 x 4-person meeting pod. The funding was inclusive of installation and delivery.

- **Installation**

- Once it is decided where the pods are going to be situated, this is not easily changed. The pods must be situated where there are high weight-bearing floors. West Lothian College have located theirs on the concreted ground floor. They must also be electrically wired in.
- The pods are delivered in crates and cannot be easily taken up stairs.

Emissions Reduction Case Study

West Lothian College

- **Booking process**

- Pods are used on an ad-hoc basis and there is no booking system. This has worked well so far. If staff would like the certainty of a bookable space, they can pre-book meeting rooms instead.

- **Future plans**

- The pods have been so successful, two more two-person meeting pods are arriving at the start of 2023.

With many thanks to Vicki Tierney from West Lothian College's Estates and Sustainability Team for providing detailed information on the meeting pods, providing staff quotes and taking photos of the pods in-situ. Details are accurate as of January 2023.

It is inspiring to see such positive action being taken to encourage seamless hybrid working. EAUC Scotland hope many more virtual pods appear across FHE institutions worldwide.



Figure 10: Sit-stand pod (left) and standard pod (right) at West Lothian College (Photo credit: Vicki Tierney 2022).

Emissions Reduction Case Study

ETH Zurich

ETH Zurich - Stay Grounded Keep Connected

Business trips account for a significant part of the total emissions generated by [ETH Zurich](#), with 93% of this due to air travel. Working in a participatory process in 2018, the departments, Executive Board and administrative units at ETH Zurich agreed to a per capita emissions reduction of, on average, 11% from 2019 until 2025 (taken against the average for 2016-2018). In 2021, some of the departments increased their reduction ambition so that the ETH-wide reduction target is now 15% by 2025.

Some of the innovative measures ETH Zurich have taken as mentioned in their [ETH Zurich flight emissions: Reduction targets and corresponding measures](#) document include:

- Annual communication of (anonymised) emission values per professorship within the department.
- Real-time monitoring of CO2 emissions for each professorship.
- Making the CO2 footprint visible as “costs” in evaluations.
- Establishing guidelines for flights:
 - 1-2 intercontinental flights per doctoral student.
 - Conferences in Europe where possible.
 - Flights for major presentations, not poster presentations.
- Doctorate exams: European co-referees or video preferred.
- Considering flight emissions when developing the curriculum; encourage local excursions.

Emissions Reduction Case Study

ETH Zurich

Academic Air Travel Reduction and Offsetting Projects Map

This map was created in 2019 by Agnes Kreil as part of a PhD project at ETH Zürich, and is now maintained by Ariane Wenger. It can be edited by anyone and includes a wide array of reduction and offsetting activities from institutions across the globe. If your institution is not yet on the map, perhaps you could add it in.

Another helpful resource includes the [Measures for Academic Air Travel Reduction catalogue](#), also created by Agnes Kreil, listing measures spanning the full spectrum from individual to global, immediate to long-term, small to large, and incremental to transformative actions, and also includes suggestions which have been criticised and contested.

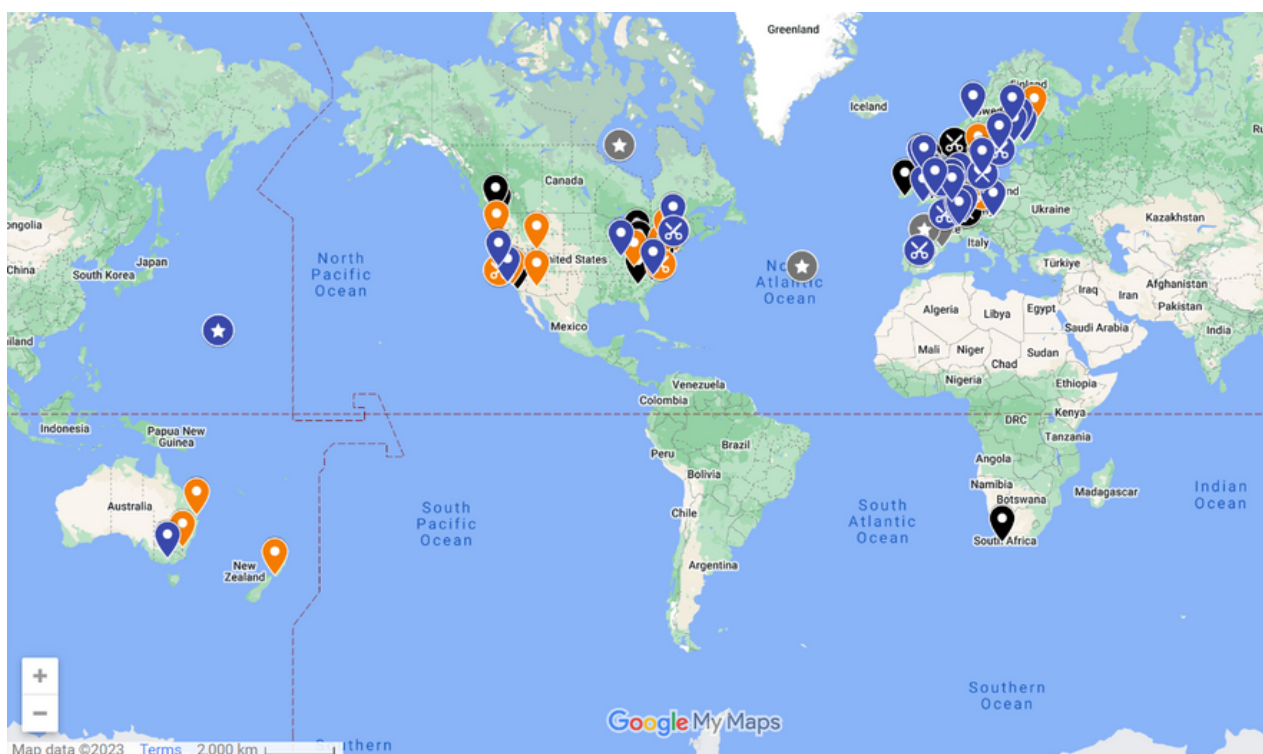


Figure 11: Academic Air Travel Reduction and Offsetting Projects Map (Agnes Kreil and Ariane Wenger, accessed January 2023).

Emissions Reduction Case Study

ETH Zurich

As mentioned in their [ETH Zurich flight emissions: Reduction targets and corresponding measures](#) document, train over plane trips should be prioritised for journeys of less than 6-8 hours and first class train tickets bought for journeys longer than 4 hours only. The map below makes it easy for staff to view the journey times and carbon emissions for travel they are considering booking.

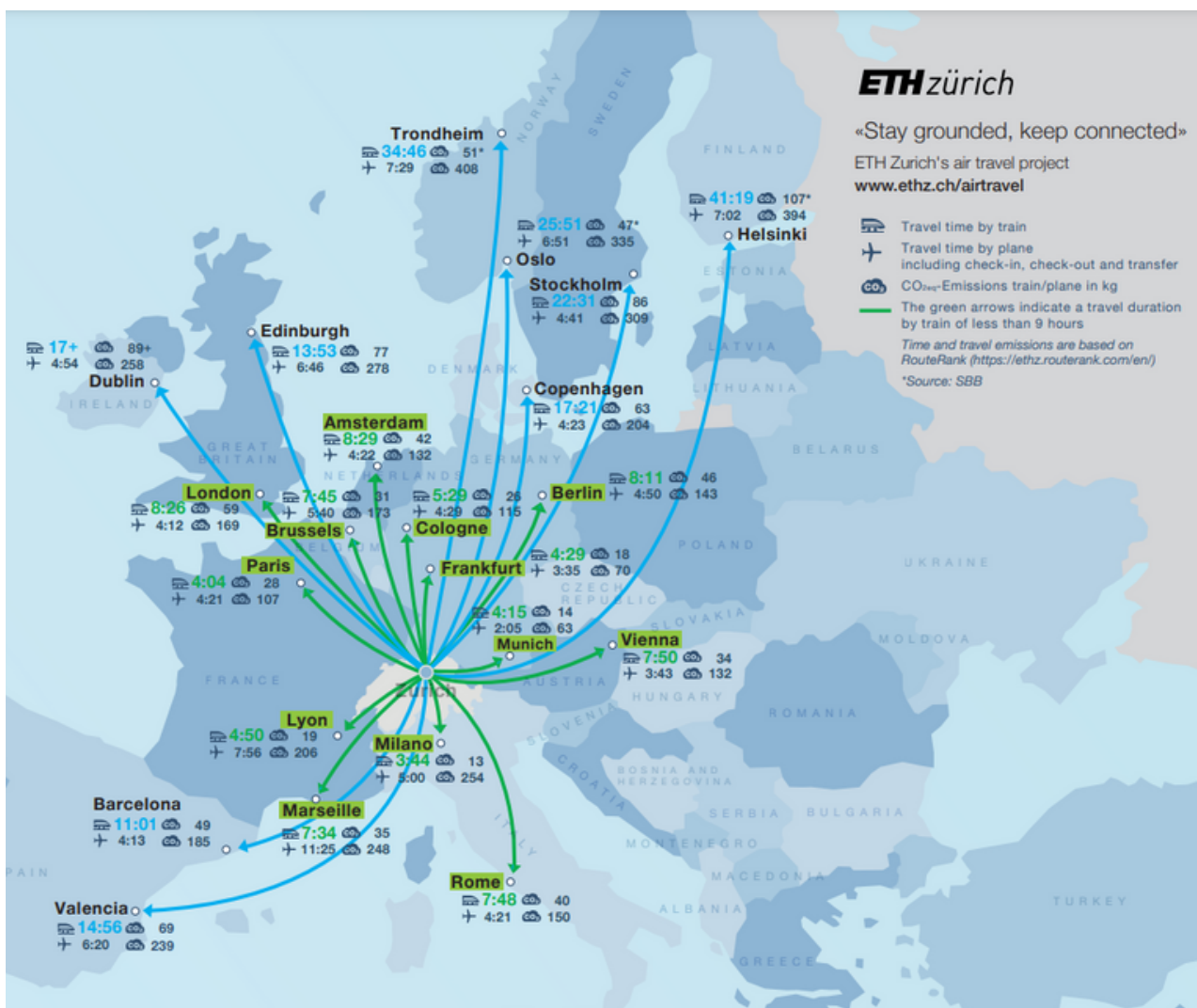


Figure 12: Transport times and carbon emissions by train and plane from Zurich to common destinations. The green arrows indicate a travel duration of less than nine hours by train (ETH Zurich - Stay Grounded, Keep Connected).

Emissions Reduction Case Study

Zero Waste Scotland

Zero Waste Scotland - No Fly Zone

In Zero Waste Scotland's Our Path to Net Zero, they have committed to cap and reduce flight miles by 20% per annum until 2023. To help deliver this they have introduced:

- A quarterly flight allowance which must be considered in all travel booking requests.
- A no-fly zone for mainland UK travel that was implemented in 2018/19 and expanded to include Belgium, Paris, Luxembourg and the Netherlands the following year.

The approach has been very successful with corporate air travel GHG emissions reducing by 70% in 2019/20 (pre-COVID travel restrictions).

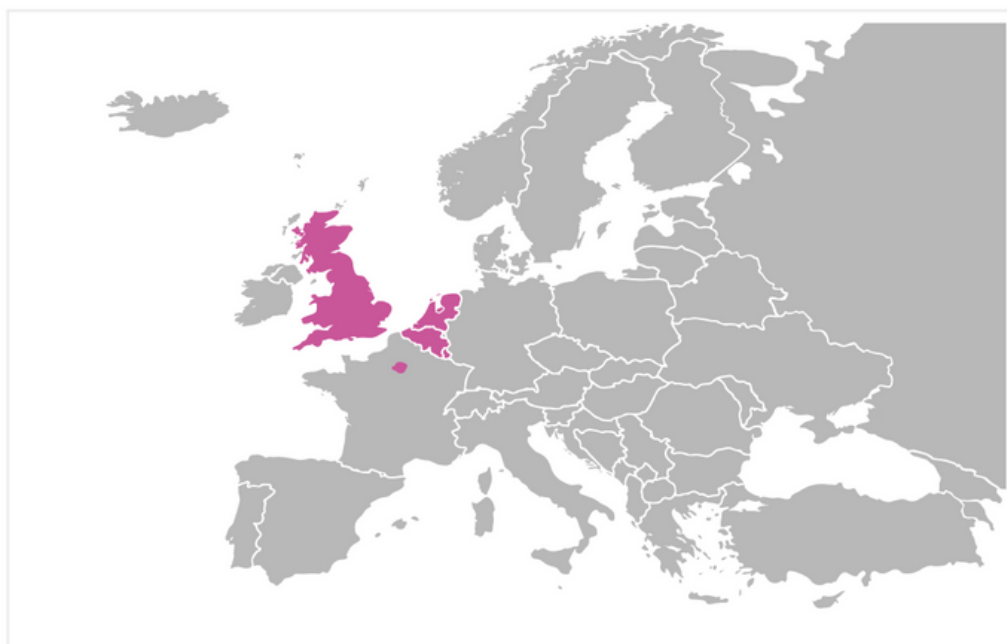


Figure 13: Zero Waste Scotland's no-fly zone (mainland UK, Belgium, Netherlands, Luxemburg and Paris) (Zero Waste Scotland's On the Path to Net Zero, 2020).

5. Emissions Offsetting

Offsetting greenhouse gas emissions cannot be the default action in managing institutional emissions. Absolute reduction of emissions must be the priority focus. The Scottish Government presently views public body offsets as only applicable to unavoidable emissions. See [PBCCD Guidance pages 45 – 49](#) for more details.

In the UK Government's [Carbon offsetting in transport: government response](#) (July 2021), consultees' reasons for opposing offsetting included:

- That it **paves the way for a business-as-usual approach** or distracts the focus away from reducing emissions at the source.
- **Scientific objections** relating to the movement of carbon from the lithosphere to the biosphere.
- That offsetting schemes are **ineffective** in sequestering carbon.
- That it could **incentivise negative behavioural shift** if not properly implemented.

These concerns must be kept in mind when designing any offsetting scheme.

Offsetting Principles for the UK FHE Sector

The COP26 Universities Network Briefing on [How can carbon offsetting help UK Further and Higher Education Institutions Achieve Net Zero Emissions?](#) and [The Oxford Offsetting Principles](#) are the two main sector resources bringing together consensus on when and how carbon offsetting should be used by the sector.

Offsetting and Business Travel

Increasingly institutions are including business travel emissions within net zero targets, and in Scotland all colleges and universities are expected to set business travel reduction targets from November 2022. In addition, research grant bodies are also requesting that business travel emissions for funded projects are calculated and offset in line with a departmental or institutional offsetting strategy (for example, see [Wellcome Trust guidance](#)).

5. Emissions Offsetting

EAUC Carbon Coalition: Sector Offsetting Scheme

The [EAUC Carbon Coalition](#) sector offsetting scheme is a mechanism through which institutions can offset emissions credibly. The scheme includes an advisory board of leading sector academics on offsetting to ensure selected offsetting projects are robust, sustainable and cost-effective. The scoring methodology used by the Advisory Board is based on the principles set out in the [Offsetting Briefing](#) published by the UK Universities Climate Network.

Offsetting at the University of St Andrews

The University of St Andrews estimates that their emissions for staff travel (business and commuting) are approximately [8,500 tCO₂e](#). They have predicted that in order to meet their net zero goal for 2035, they will need to reduce this figure in absolute terms by 5,500 tCO₂e. They will offset the remaining emissions.

The University have set their [carbon offsetting price to £100/tonne](#). St Andrews hope that by 2045, offsets will only be secured via their own projects to reduce carbon via afforestation, seagrass and seaweed restoration and expansion and by restoring peatlands. See the [St Andrews Forest case study](#) for more information.



6. Equality, Diversity and Inclusion

Research on how travel in academia may affect equity and diversity in the sector is sparse. However, there are some findings and news reports that indicate a reduction in air travel and an institutionalised inclusion of other forms of communication and collaboration may improve equity in academia, whilst also increasing the quality of research.

It is important to emphasise that EAUC Scotland accepts that a complete elimination of air travel is not possible, and may not be an option for many individuals in the sector, including those from underrepresented groups. Instead, we promote recognising the value in more varied forms of collaboration, networking and research and a reduced reliance on air travel to make academia as accessible, and thus equitable and diverse, as possible.

Note: Many of the following reflections on equality, diversity and inclusion are taken directly from EAUC Scotland's [Travel Better Package Questions and Answers Tool](#).

Sex and gender

Various articles have explored the demand for individuals working in FHEIs to regularly travel for business and the differing implications this expectation has for men and women. [Research](#) has found that at the early-career stage, male and female academics are equally mobile. However, after a certain point, on average the mobility of female academics lowers when they get married and/or have families as these events may enforce traditional gender roles, where women take on domestic duties including childcare and caring for elders.

A 2013 [book](#) on experiences in academia found through surveys that female graduate students or post doctorate researchers who have children are more than twice as likely than childless women and new fathers to leave their career in academia. They also found that amongst a sample of tenured academics, 70% of men were married with children versus only 44% of women.

6. Equality, Diversity and Inclusion

These findings highlight barriers female academics may face in accessing travel opportunities to advance their careers, including accumulating social capital from networking, exposure and research opportunities. If institutions reduced their reliance on air travel and encouraged more varied and flexible forms of collaboration, women may be able to more easily participate in the FHE sector without having to decide between their careers and their personal ambitions.

It is important to note that although mobility for female academics has improved in the past few decades, this improvement is dependent on country, career stage and length of stay abroad. There is limited information about female academics and mobility in the Global South.

Visa availability

Multiple [articles](#) in the past year have exposed incidences where academics, particularly those from the Global South, have struggled to obtain or have been denied visas to enter the United States and the United Kingdom.

A 2018 [study](#) commissioned by the Wellcome Trust looked at international movement amongst researchers and academics in science. Through surveying 2,465 academics from 109 countries, the study found that researchers from countries in Africa and Asia were 3 and 4 times more likely, respectively, to have issues obtaining a visa to travel for work than their European counterparts. Advancing different forms of collaboration, and relying less on in-person meetings through air travel, could mean more equal access to opportunities for all individuals in the global FHE sector.

6. Equality, Diversity and Inclusion

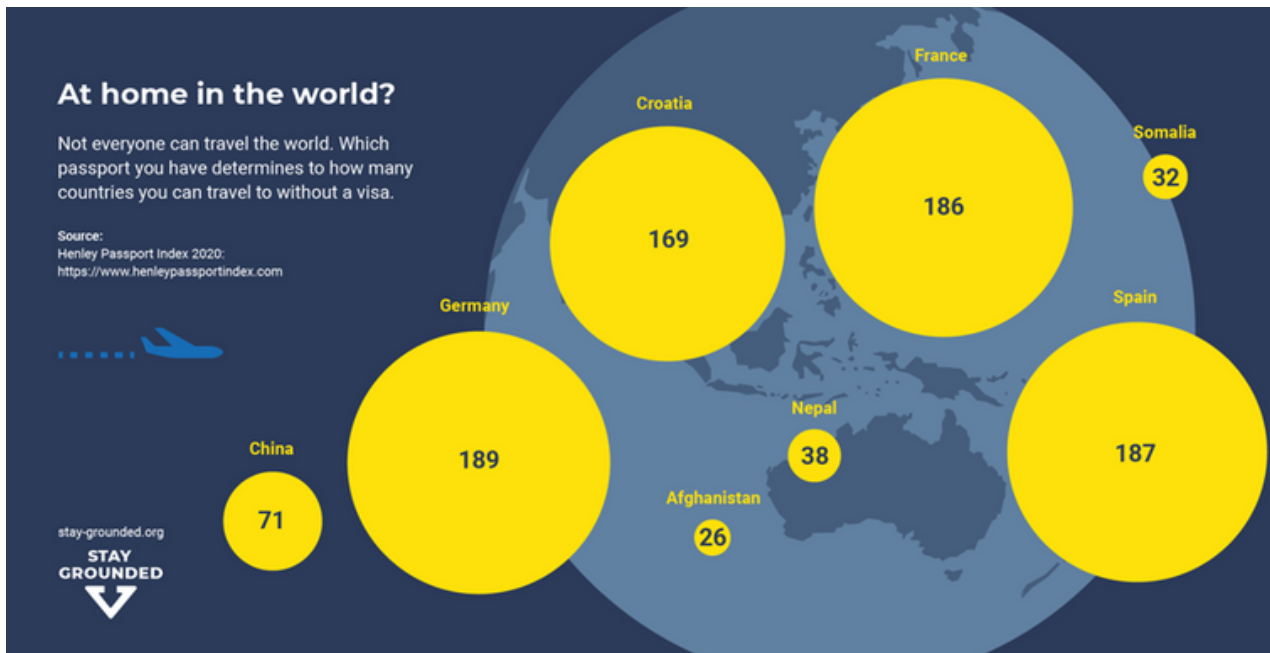


Figure 14: Stay Grounded infographic illustrating the number of countries a select number of passport-holders can travel to without a visa.

Accessibility

Although there is limited research on the matter, it is important to note that recognising the value in multiple ways of collaborating, instead of placing emphasis on flying to non-local meetings, may improve academia's accessibility. For example, regular air travel is tied to concepts of hyper-productivity, which can exacerbate issues with mental well-being. Advancing the Slow Scholarship movement and taking the time to travel by train and conduct research may include many more voices in academia. Additionally, reducing air travel and consequently diversifying methods of research, networking and collaboration will improve accessibility for all individuals in the sector, including neurodiverse individuals or individuals with disabilities.

Virtual conferences

Research by Sarvenaz Sarabipour (2020), based on data from in-person and virtual conferences in a range of subjects, describe 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

6. Equality, Diversity and Inclusion

will provide both immediate and long-term benefits to the scientific community." The many positives of virtual conference formats are described by Sarabipour in their paper. They 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, much reduced carbon footprint, cheaper to organise for societies, more efficient use of funding and attracting large, worldwide audiences.

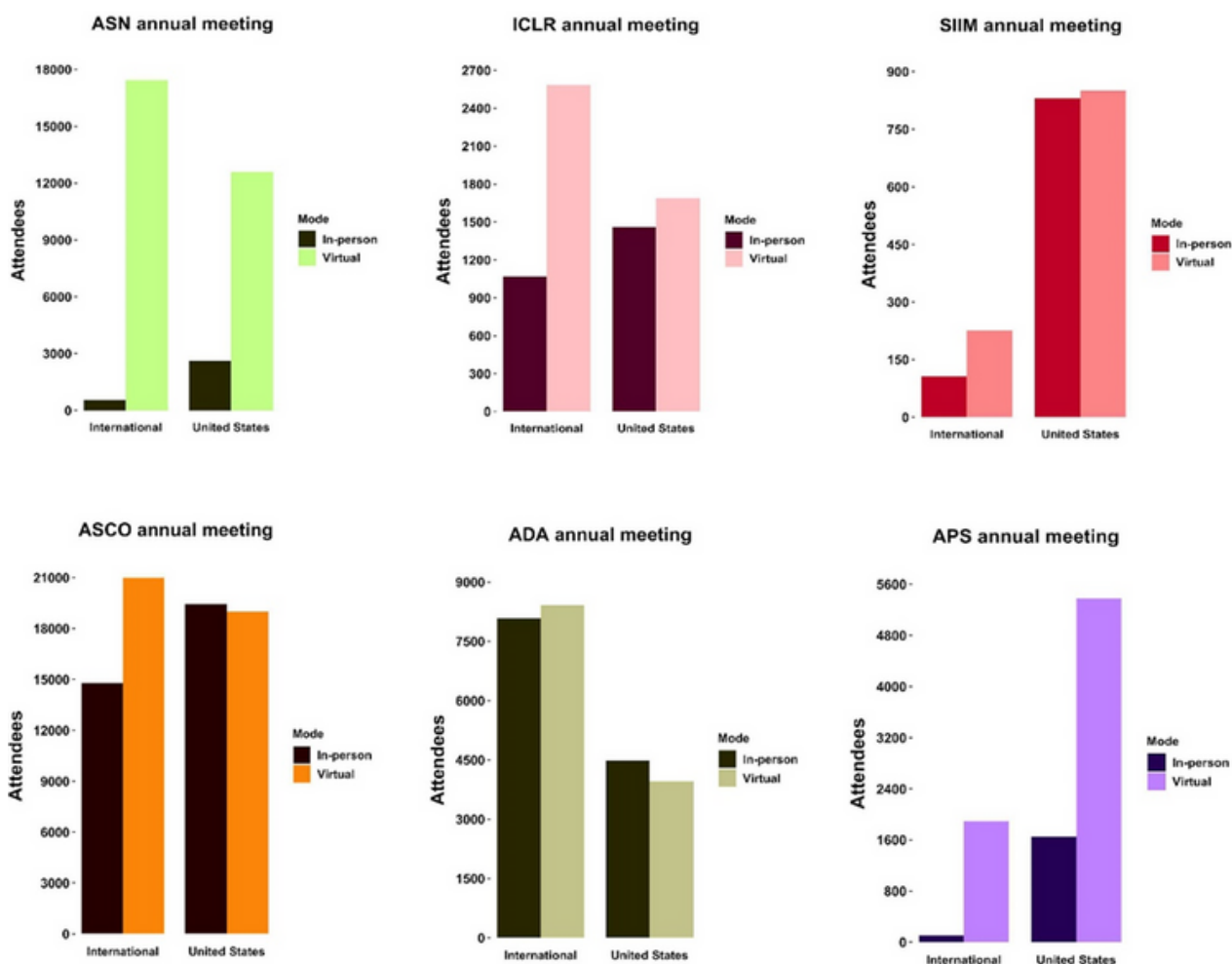


Figure 15: Attendance to six conferences in either their in-person or virtual formats, showing both international and United States attendance. [Research Culture: Virtual conferences raise standards for accessibility and interactions](#) (Sarvenaz Sarabipour, 2020).

6. Equality, Diversity and Inclusion

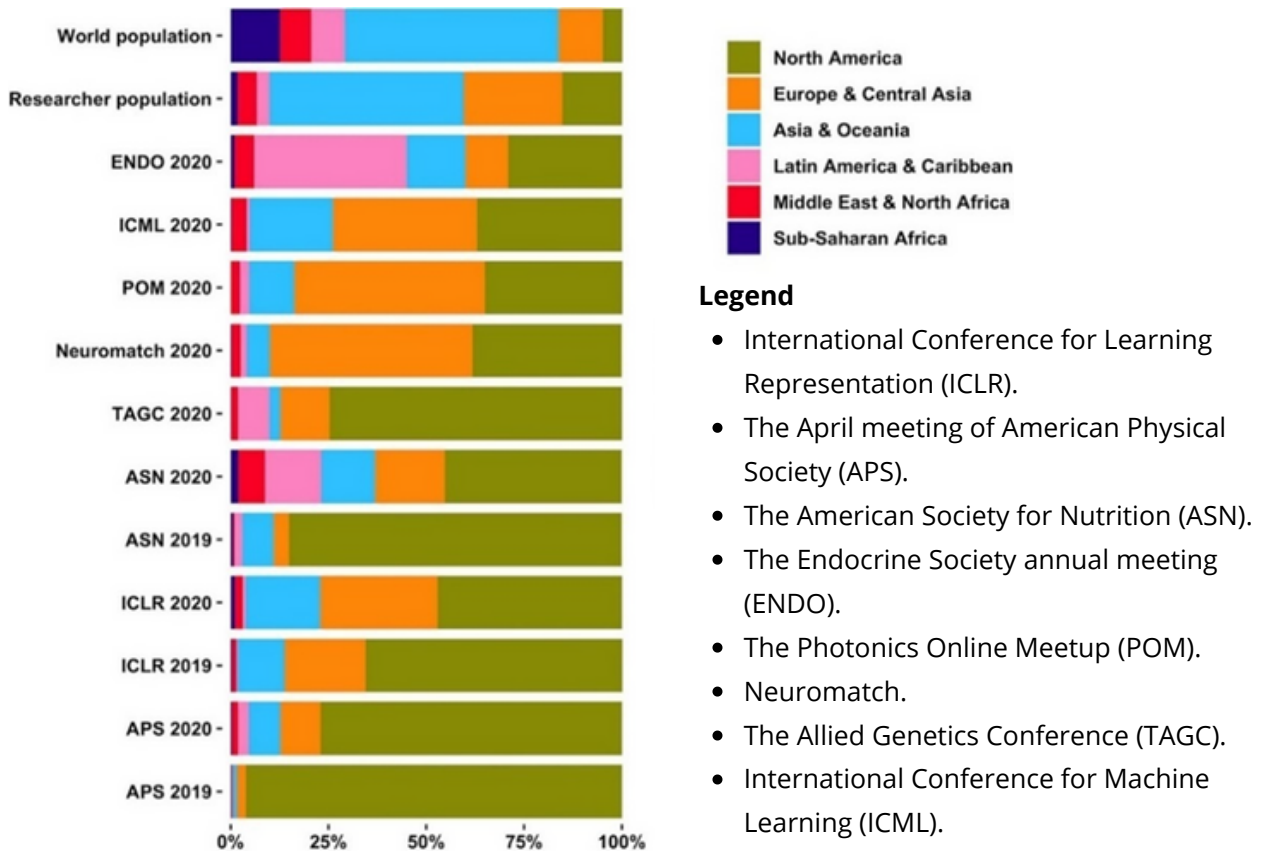


Figure 16: Virtual conferences are more inclusive and help improve the geographic diversity of attendees. In-person (2019) and virtual (2020) meeting attendee continental distributions are shown. The APS 2019, ASN 2019, ICLR 2019 and ENDO 2020 meetings were held at full registration cost of in-person meetings. The TAGC 2020, POM 2020, ASN 2020, ICLR 2020, APS 2020, ICML 2020 and Neuromatch 2020 meetings were held at low registration cost or were free of registration cost for all. Slightly edited text and graph for formatting purposes from: [Research Culture: Virtual conferences raise standards for accessibility and interactions](#) (Sarvenaz Sarabipour, 2020).

[Sarabipour et al. \(2021\)](#) in *Nature Human Behavior* provide a graphical checklist of “key considerations for organizers and attendees” to make conferences both lower-carbon and more socially just.

6. Equality, Diversity and Inclusion

Climate justice

As illustrated in the Stay Grounded infographic below, one flight can emit as much CO₂e as many people do in a year. To put this into a Scottish perspective, one return economy flight from Edinburgh to Stockholm emits between 616kg and 843kg CO₂e and a return economy flight from Edinburgh to New York emits between 2.3t – 2.6t CO₂e ([Atmosfair](#) data, 2022). In comparison, the average carbon footprint of an Indian person is 2.6 tCO₂e/year and an Ugandan person 1.1 tCO₂e/year. This illustrates the injustice of flying from a global perspective. Those least responsible for the climate crisis are bearing the brunt of our carbon intensive lifestyles without enjoying any of the benefit.

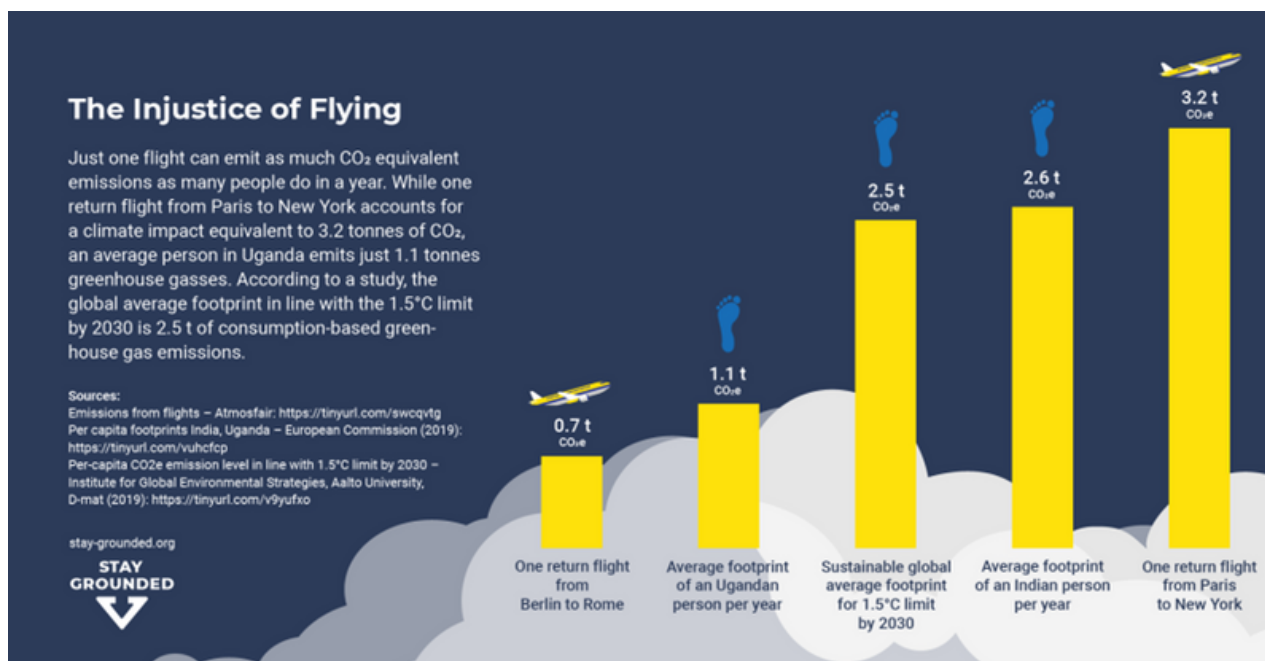


Figure 17: The injustice of flying infographic ([Stay Grounded](#)).

6. Equality, Diversity and Inclusion

Intersectionality

It must be understood that this section on Equality, Diversity and Inclusion is limited in scope and not all of the complexities surrounding the compounding impacts of belonging to multiple socially disadvantaged groups have been explored. As this topic is expansive and under-researched, we have included quoted excerpts from a research paper dedicated to intersectionality-based mobility policy analysis in lieu of an inadequate introductory description of the topic.

Quoted from the abstract of Kakar, I. S., Peden, M., Jagnoor, J., 2021: [Intersectionality based policy analysis: Equity in mobility in India](#):

“Access to affordable, reliable, good quality transport is necessary for accessing socio-economic opportunities and resources. Transportation inequities have serious implications for public health, and thus transport policy becomes an important social determinant of health. [...]

Intersectionality states that an understanding of individual experiences based on a single aspect of identity (such as class, gender, ability, age, etc.) is unrepresentative of individual needs. Adopting an intersectional lens for analysing policies allows for a deeper understanding of the impact of multi-level interacting social locations and structures of domination that shape human experience. Thus, helping in creating more effective policies to make transportation accessible to vulnerable groups. [...]

In order to advance a social justice agenda, an intersectional evidence-based understanding of transportation inequities is required to inform policies.”

EAUC Scotland hopes that in developing a Business Travel policy, some of the intersecting needs of colleagues from an equality, diversity and inclusion perspective are considered and acted upon.

6. Equality, Diversity and Inclusion

Summary

What we have covered is just brushing at the surface, but there are many equality, diversity and inclusion elements to be considered. Opening up meetings and conferences virtually can bring vast benefits, including the potential to improve research science. Including researchers from all over the world, and with many diverse abilities and life stages, can improve the exchange of ideas and inject a fresh perspective that may not be heard at conventional in-person events. Flying less may also improve research science, as researchers can focus more on their research and home institutions, and less on travelling around the globe ([Kreil, 2021](#)).

Academia must adapt and innovate so that our institutions and research activities can continue in the decades and centuries ahead. We must use our privileged positions in terms of education, access to the resources we need and knowledge of the climate crisis to lead the way and see this as an opportunity, rather than be held back by business as usual.

Leadership comes from all levels, but those at the top of their career, with most access to resources and knowledge, have the most responsibility to use their privilege to lead the way.



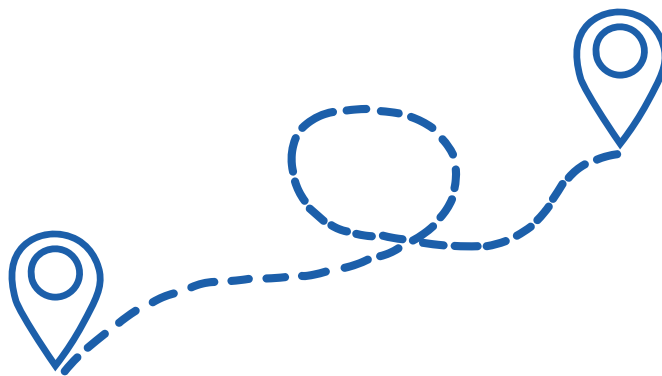
7. Business Travel Action Plan

The EAUC Scotland Business Travel Action Plan compiles suggested actions from a range of institutions from Scotland and around the world. Every FHE institution is unique in its own context, so not all actions will be applicable to all FHEIs. This Action Plan is intended as a point of inspiration. Relevant actions can be adopted into strategies or action plans to help accelerate emissions reductions.

Many actions listed in this section will also support sustainable commuting, especially when the travel is local or regional. This has the benefit of reducing emissions from both sources with the same action.

As every institution is on its own journey, we have split actions up by:

1. **Emerging** – an institution starting out on its business travel net-zero journey.
2. **Established** – an institution that has all core initiatives in place and is beginning to ramp up its ambition and accelerate the pace of change.
3. **Leading** – an institution that has already seen significant reductions in emissions from its business travel initiatives and is working to remove final absolute emissions within its control.



7. Business Travel Action Plan

Suggested actions are categorised into the following five areas:

1. **Leadership and Governance.**
2. **Learning, Teaching and Research.**
3. **Estates and Operations.**
4. **Partnerships and Engagement.**
5. **Monitoring and Evaluation.**

These categories have been chosen to align with the [FE Climate Action Roadmap](#) and [Sustainability Leadership Scorecard](#). Inspiration for the infographic on the following page has been taken from the [FE Climate Action Roadmap](#). It is intended as an appealing visual for the actions suggested. It is not comprehensive in its scope, but illustrates the key points.

One potential route for adopting actions could be led by the findings from your baseline data collection and/or surveys of staff, students and wider key stakeholders. Significant absolute emissions reductions are needed ahead of any offsetting. This section aims to inspire action leading to absolute emissions reduction.

Business Travel Action Plan

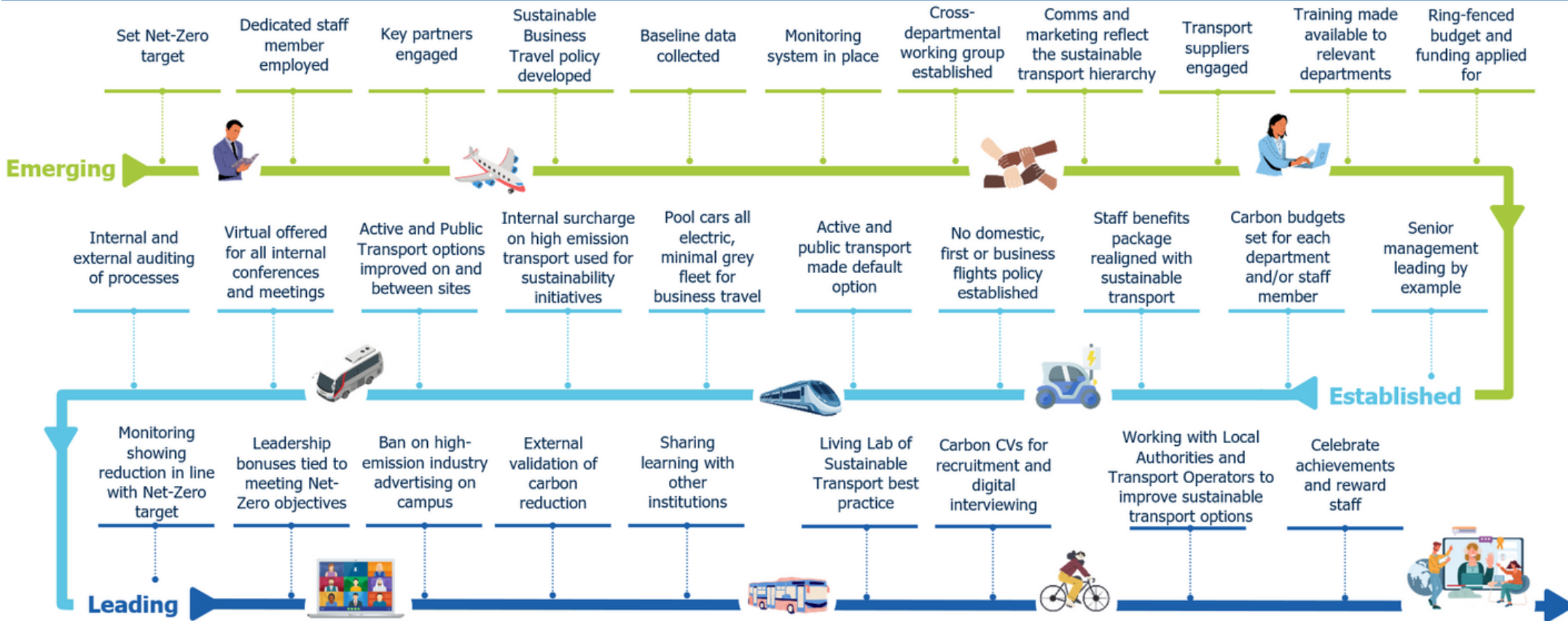


Figure 18: Business Travel Action Plan Infographic (EAUC Scotland).

Leadership and Governance

Emerging Institutions: Leadership and Governance

- **Set net zero emission targets for business travel.** Set the target at or pre-2045, as per Scottish Government [guidance](#). The example given in the guidance could be to: 'Reduce business related travel emissions by 80% by 2030 (against 2018-19 baseline), with an interim target of 45% by 2025. The remaining carbon emissions will be offset.'
- **Sustainable Business Travel Policy developed.** Create a co-developed and enforceable Business Travel Policy in partnership with senior leaders, human resources, researchers, procurement, students, estates and sustainability.
- **Ring-fenced sustainable transport budget.** Create a ring-fenced internal budget for sustainable travel initiatives (e.g. for installing virtual meeting pods for staff).
- **Dedicated staff member employed.** Employ a Transport Co-ordinator, or equivalent, who is dedicated to working on transport and implementing key actions.
- **Cross-departmental working group established.** Create a cross-departmental staff working group for transport. Members can share learning with their departments and feedback on initiatives.
- **Explore and apply for funding to improve sustainable transport initiatives.** The [Sustainable Scotland Network](#) and [Way to Work Scotland](#) funding pages list possible funding opportunities.

Leadership and Governance

- **Senior leaders to clearly and succinctly communicate the vision and the 'why' for sustainable business travel to the institution.** Bring colleagues along with you. Focus on the collective goal. Publish this both externally and internally on staff intranet pages.
- **Arrange meetings with senior leaders and high emitters to discuss the challenge and find solutions.** Often a small proportion of the staff body emits most of the emissions. Find out who these colleagues are and bring them into a discussion to find solutions.

Established Institutions: Leadership and Governance

- **Senior management leading by example.** This could include:
 - All staff, including senior leaders, travel economy class as standard for necessary travel.
 - No dedicated parking bays for individuals, including for senior leaders.
 - Senior leaders using sustainable transport, including pool cars and public transport.
 - Communication of business travel strategy and surveys from senior leaders to give weight to its importance and aid compliance.
- **Internal surcharge on high carbon transport used to pay for sustainability initiatives.** This is not the same as offsetting. Carbon intensive modes are 'taxed' and money put towards the institution's sustainable transport initiatives. For example, The [University of Oxford](#) has implemented a flight levy of £30/tCO₂e for all flights. This is then recharged to departments for all flights paid for or reimbursed by the University to compensate for those flights' carbon emissions. The levy is allocated to the Oxford Sustainability Fund (OSF) for implementing the [University's Environmental Sustainability Strategy](#).

Leadership and Governance

- **Staff benefits package realigned with sustainable transport.** This could include:
 - No discounts, salary sacrifice schemes or leasing packages for vehicles with internal combustion engines.
 - No institutionally-funded luxury cars; this drives aspiration and entitlement to drive highly polluting vehicles.
 - HR to negotiate staff benefits that are easier on the environment. Options could be put to staff to crowd source ideas. Assistance towards everyday necessities such as groceries, home broadband, childcare, gym memberships, phone deals etc. could be negotiated instead.
 - A Cycle to Work scheme, with the cost limit increased to accommodate electric, cargo and/or adaptive cycles.
- **Ensure a robust Digital Strategy is in place.** This will help to reduce physical travel, particularly to overseas destinations. An example can be found from [Edinburgh College](#).
- **No domestic, first or business class flight policy established and implemented.**
 - The emissions associated with air travel are allocated based on the proportion of the plane that a passenger occupies. For example, the emissions per passenger km for a first class seat are four times higher than for an economy seat. Thus economy air travel should be the only permitted mode when flying for business.
 - Furthermore, on short journeys, such as UK mainland routes, flights should be banned (see [Scottish Government Public Bodies Guidance](#)).
 - First class travel on trains should be allowed. LNER, for example, have a very comfortable and enjoyable first-class experience with the option of booking a singular seat. It is also a comfortable environment to work in and staff can be productive for their whole journey if they so wish. Trains also afford being able to stand up and walk around and order complimentary cooked food, potentially boosting morale and enjoyment of travel. The cost difference is greatly reduced if tickets are booked in advance.

Leadership and Governance

- **Flight justification tool in use and embedded into processes.**
- **Promotion criteria decoupled from travel.** The University of Glasgow state in their Sustainable Business Travel Strategy that they will: ‘adapt promotion criteria so that staff who reduce or eliminate international travel are not disadvantaged.’
- **Carbon budgets set for each department and/or staff member, including senior leaders.** This could include:
 - When booking travel, a departmental cost code and individual carbon code could be used for each booking. If the carbon budget is exceeded, travel cannot be booked and must be negotiated on a case-by-case basis with management. An example given in the PBCCD guidance is: ‘Introduce organisational policy whereby Director level approval is required for all remaining air travel.’
 - Gradual decrease of the carbon budget each year.
 - Ensure there are no loopholes in the policy e.g. staff booking on their own card and claiming expenses back, rather than booking through the travel provider.
 - Empower departments to develop carbon reduction solutions. Compile a suggestion guide for departments to work out how to manage their carbon budgets. Senior management might set the overall target, but departments should then develop their own action plan depending on their specific needs.

Leading institutions: Leadership and governance

- **Leadership bonuses tied to meeting Net-Zero objectives.** This could accelerate action amongst senior leaders and provide motivation when other benefits are taken away e.g. ban on company luxury cars or regular first or business class flights.
- **A ‘carbon diary’ could be included in professional review questions.** Staff could be rewarded for avoided emissions and/or reductions on previous years. This could be included in promotions criteria.

Leadership and Governance

- **Carbon CVs for recruitment.** This could include:
 - Sustainability questions included in interview and/or application packs.
 - Candidates could include instances where they reduced their business travel carbon emissions and how they might continue this in their potential new role.
 - One example of a Climate CV can be found by [Prof. Gerhard Reese at Universität Koblenz-Landau](#).
- **Digital interviewing.** The first round of interviews are conducted digitally. Only when deciding between final candidates would in-person interviews be conducted.
- **Implement a Frequent Flier levy.** Staff that fly the most are taxed at an increasing rate for each flight taken ([New Economics Foundation, 2021](#), [Independent, 2021](#), [The Conversation, 2022](#)). It is seen to be a progressive and fair tax, that doesn't unfairly burden those with lower travel allowances.



Learning, Teaching and Research

Emerging Institutions: Learning, Teaching and Research

- **Allowing adequate opportunities for staff to trial new transport modes.** This could include:
 - Partnering with organisations that allow staff trials of e-cycles, e-cargo cycles, and electric vehicles, for example. Departments could also give away free passes or discounts for public and shared transport.
 - Trialling hybrid and/or virtual conference software and video editing packages for learning, teaching and research.
 - Providing training with local providers such as [Cycling Scotland](#), [JogScotland](#), [Active Travel Hubs](#), among others, to give staff the skills and confidence to travel actively.
 - Find staff 'buddies' within the organisation that can accompany their colleagues on new transport modes e.g. if someone is travelling by bus for the first time, they could be accompanied by a colleague 'buddy' to ease any fears.
- **Training made available to relevant departments.**
 - Ring-fence training budget for key staff to complete professional development courses on sustainable transport topics.
 - Include mandatory sustainability training as part of staff inductions and/or professional review.
 - [Climate Literacy Training](#) is a good introduction to the basics of climate change.
 - Singapore University of Technology and Design developed a [short two-minute explainer video on Sustainable Transport](#). Perhaps a similar video could be developed for your institution.

Learning, Teaching and Research

- **Encourage undergraduate students to choose research projects that do not involve flying.** This reduces carbon 'wastage' when students are in training mode and research has a low probability of being published. This also benefits the local area as students focus on local issues.
- **Institutions should always question whether travel is necessary.** Ask if the meeting, conference or research could be effectively undertaken using virtual options. The [Oxford Flying Less podcast](#) includes plentiful ideas for conferences.
- **Engage with research funders on their travel policies** and explore opportunities to use funding allocated for flying or high carbon travel for other research activities i.e. if a student or academic attends a conference virtually, the funding initially allocated for travel could be shifted to further research activities.

Established Institutions: Learning, Teaching and Research

- **Virtual offered for conferences and meetings.** This could include:
 - Ensuring that your staff use one of the many [Travel Justification Tools](#) before accepting invitations to speak at in-person events.
 - Ensuring that speakers, particularly from overseas locations, know that the option for a virtual speech or presentation is available to them.
 - If an in-person visit is needed, ask whether they could be picked up from the nearest train station instead of taking a taxi to/from the airport.
 - Discourage flying if possible and offer to pay for first class train travel. If flying is unavoidable, consider offsetting their flights with a credible offset scheme such as the [EAUC Carbon Coalition](#).
- **Innovative modes for collaboration and research taught that reduce the need to travel.** Ensure the next generation of learners know the latest, most sustainable ways to collaborate and conduct research.

Learning, Teaching and Research

- **Increase the number of diploma and degree level courses on offer that expose the next generation to sustainable transport issues.** Allow students the opportunity to engage with your institutional business travel policy as a real-world example.
- **Increase the number of short and CPD level courses for staff** already working in transport to upgrade their knowledge. For example, Dundee and Angus College offer courses to help accelerate the transition to electric and hybrid vehicles. Hosting events or talks on sustainable transport issues are another way to spread awareness.
- **Investigate the opportunity of paid internships for students** to write up briefs of the latest research for business travel and make recommendations to improve your current practice. Bright Green Business internships are one potential avenue, along with your own Careers Service internship pathways.
- **Develop research partnerships with other nations and train local technicians and researchers to collect data on your behalf.** This may reduce the need for regular travel and may allow instead for occasional check in visits. This can have benefits not only for the host institution, but for the local people. One example of this is Australian research body CSIRO and their project on marine conservation in Papua New Guinea.

Leading Institutions: Learning, Teaching and Research

- **Living Lab of Sustainable Transport best practice.** Use your institution as a Living Lab for trialing and reporting on the results of different business travel interventions. Share your findings with other institutions. This could include:
 - Economics, Business and Management students exploring institutional incentives for using different modes of transport and how this affects behaviour. Students could present on their findings and potential solutions.

Estates and Operations

Emerging Institutions: Estates and Operations

- **Improve facilities for sustainable transport and investigate funding opportunities for doing so.** The [Sustainable Scotland Network](#) and [Way to Work Scotland](#) funding pages list possible funding opportunities. These could include:
 - Improving cycle provision and facilities through Cycling Scotland's [Cycling Friendly Campus Fund](#).
 - Improving active travel paths through Sustrans' [Places for Everyone](#) fund and general support via their [Workplaces Team](#).
 - [Energy Saving Trust](#) have funding opportunities for e-cycles, e-cargo cycles and electric vehicles, among other schemes.
 - Partner with car clubs to offer cars on campus. CoMoUK can offer [impartial advice](#) on opportunities for improving car clubs and shared mobility on your site. For example, [University of Edinburgh](#) host [Enterprise Car Club Cars](#) on their campus. Another large provider of car club vehicles are [CoWheels](#).
 - Support the use of EVs through investment in infrastructure and engagement. For example:
 - Ensure EV chargers are available in every car park.
 - Ensure EV pool cars are charged and ready.
 - Offer short introductory sessions to EVs for staff.
 - Create an accessible, smooth booking system for pool cars.
 - Create a robust parking policy to discourage bay blocking, potentially by fining offenders.
- **Transport suppliers engaged.** This could include:
 - Asking your Travel Management Company for their sustainability credentials. Work with them to ensure sustainable transport options are the easiest to book and high carbon modes are more difficult. Potentially engage someone experienced in UX design to explore the customer journey booking process.

Estates and Operations

- Work with public and shared transport operators to negotiate transport discounts.
 - If necessary, explore the opportunity to increase public transport pass loan amounts to cover actual pass costs e.g. if a loan amount is £1000, this may not cover annual train passes from many destinations.
 - Work with HR to provide salary sacrifice schemes for sustainable transport modes e.g. Cycle to Work schemes, EV salary sacrifice schemes.
 - Engage your fleet supplier to ensure all pool cars are electric by 2025, as stated in the [PBCCD guidance](#).
- **Ensure all Estates and Operations website pages and information on travel are up to date.** Confirm all transport information is in line with the [Sustainable Travel Hierarchy](#) and there is a plan to update and review website pages at least every six months.

Established Institutions: Estates and Operations

- **Active and public transport options improved on and between sites.** This could include:
 - **Active transport options made comfortable and easy:**
 - Footpaths and cycleways: swept clean, gritted and well-lit at night. Smooth path surfaces without tripping hazards or blockages via pavement parking, bins, a-frame signs etc. Appropriate minimum path widths based upon [Cycling By Design guidance](#). Dropped kerbs and tactile pavement for increased accessibility.
 - Cycle parking: secure and covered cycle parking close to entrances.
 - Pool cycles: Well maintained pool cycles, e-cycles and e-cargo cycles in sheltered areas and training on how to use them.
 - Roads: reduced speeds on campus to make active travel feel safer and more enjoyable. Reduce motor vehicle through-routes to reduce 'rat-running' behaviour and slow traffic down.

Estates and Operations

- Wayfinding: Walking and cycling times displayed on wayfinding signs. Create a digital sustainable travel map, highlighting footpaths, cycle infrastructure, EV charging, showers and other facilities for sustainable transport.
- **Public transport options made comfortable and easy:**
 - Digital public transport screens with accurate and timely information in common areas.
 - Sheltered (and warm if possible) waiting areas for public transport.
 - Public transport timetables and live feeds promoted on dedicated travel pages.
 - Well maintained and accessible foot and cycle paths to/from public transport stops.
 - Public transport stops not far from institutional buildings.
 - Up to date paper copies of transport timetables and maps.
 - Promote offers such as free bus travel for under-22s and railcard offers.
 - Fare deals could be negotiated with public transport operators.
 - Chartered night-buses could operate on campus, such as the St Andrews Night Bus from 10pm – 2.30am.
- **Shared transport options made comfortable and easy:**
 - After blue badge spots, pool car, car-share, pool cycle and cycle share parking spaces in the most desirable parking spots.
 - Easy to use booking process and support hotline available.
 - Consider operating a staff shuttle bus for staff to get from one site to another, for example for Estates staff carrying tools and equipment.
- **Conduct regular audits of sustainable transport facilities and information.**
- **Follow best practice design guidance for new construction projects** including Transport Scotland's Cycling by Design and Wheels for Wellbeing's Guide to Inclusive Cycling. An example of an active travel FHE campus is the UHI Inverness Campus with associated design guidance. The campus has good cycle and pedestrian permeability, designs in personal safety best practice and connections to public transport, as well as being an attractive place to work and study.

Estates and Operations

- **Active and public transport made the default option.** This could look like:
 - On the Travel Management Company website, aviation options are the last option after sustainable modes. The aviation option could also be 'locked' on the website until more senior permission is granted e.g. each staff member needing sign off from a management level above them. Domestic, business and first-class flights are not available for booking and are negotiated on a case by case basis.
 - Aviation and driving are also demoted to the last option on visitor and staff travel information leaflets and pages. Expenses forms are re-ordered such that cycle mileage and public transport reimbursement are ahead of motor vehicle and aviation options.
 - Communications are worded such that active and public transport are seen as the norm. Ensure it is easier to find out information about sustainable travel modes than unsustainable modes.
- **Minimal grey fleet for business travel.**
 - Car club cars could be hosted on campus and corporate rates negotiated.
 - Set a target e.g. '90% reduction in grey fleet business travel by 2035.'
 - Require manager sign-off before a personal vehicle is used for work journeys.
 - Minimising grey fleet for use with business travel reduces any mileage overclaims and it stops the subsidisation of private vehicles by public bodies.
 - Some staff justify owning their car due to their perceived need to use a personal vehicle for business travel. Institutions should try to stop this misperception via the avenues available to them.
 - Minimising grey fleet for business travel also aids control of vehicle emissions standards and safety standards.
 - Exemptions for Blue Badge Holders should be made to this as vehicles may need to be modified to suit their specific needs.
 - Ensure job roles eliminate the need for a personal vehicle in the person specification and reduce the number of contracts needing a driving license. Reducing the need for a driving license can also open up your recruiting pool to the 19% of households in Scotland that do not have access to a car ([Scottish Transport Statistics 2021](#)).

Estates and Operations

- **Pool cars all electric by 2025.** The PBCCD Guidance states: “Set target date for zero tailpipe emissions from fleet (where possible). Have all new cars as zero emission by 2025, and all new light commercial vehicles as zero emission by 2025; replacing all larger new vehicles in the fleet with zero emission alternatives, no later than 2030.”

Leading Institutions: Estates and operations

- **Investment in high quality production studios for staff.** These could be used to record keynotes, quality online teaching content and for interviews for television and/or radio. It could also remove the need for media crews and/or staff to travel for long distances at short notice to give press appearances.
- **Implement a fair reward system for colleagues that choose to take a sustainable transport option over flying.** This could include allowing staff to take annual leave at the destination, or remote working if possible. Considering a flexible working approach is key.
- **Once the majority of absolute emissions reductions have been reduced, institutions might consider offsetting unavoidable emissions.**



Partnerships and Engagement

Emerging Institutions: Partnerships and Engagement

- **Communications and marketing reflect the sustainable transport hierarchy.** Institutions should promote the sustainable travel hierarchy and encourage active, shared and public transport wherever possible. This could include:
 - Ensure Business Travel and Visitor Travel pages explicitly promote sustainable modes of transport first. Ensure it is more difficult and shown to be less socially acceptable to travel to the site by high carbon means. See example from University of Leeds.
 - Inclusive and diverse images of staff on campus using different sustainable transport modes. Try not to use stock images. If people can recognise their colleagues and the locations they are in, this can drive more engagement.
 - Develop a Sustainable Transport Map illustrating foot and cycleways, cycle parking, showers, public transport stops, car club locations etc. Examples include Transition University of St Andrews and Pindar Creative. Direct staff to the maps in print and online via physical or digital noticeboards, visitor information sites and other key areas.
 - Engage staff on sustainable transport in person via stalls and celebrating key transport dates such as World Car Free Day or Cycle to Work Day. The Step Count Challenge, Cycle September and #Try20 tips are a few other events and resources to base a behaviour change campaign around.
 - Hang up sustainable transport information in cycle shelters, in car parks and near entrances. Another option is on the back of toilet doors or wherever you might have a captive audience.
 - Prompt thought and imagination via road space reallocation such as hydrail by UBC Okanagan or do a pop up parklet event in the car park.

Partnerships and Engagement

- Feature staff that travel by sustainable modes in newsletters and in internal communications. A nice video compilation from Way to Work of different people actively travelling to work can be found [here](#).
- Offer prizes for sustainable business travel journeys. Word of mouth can travel faster if colleagues know there are prizes involved.
- Spread awareness of and create informative blogs and social media posts based on the [Travel Better package](#).
- **Take advantage of 'context change' moments to suggest new travel behaviours.** This could be at new staff inductions, campus or site moves or changes to funding or the policy environment.
- **Engage a team of travel 'champions' in each department.** Champions would ideally be paid to use a percentage of their time to embed sustainable travel initiatives into their team. This could include being a key point of contact for staff to ask questions, they could run training sessions and spread awareness. Staff that are allowed to use paid time to work on these initiatives often have greater success in the long-term.
 - Examples include the [University of St Andrews' Active Travel Champions](#) or [Edinburgh Napier University's Active Travel Champions](#).
 - Other Sustainability Champion examples include the [University of Leeds' Sustainability Architects](#).
 - Initiatives such as the [College Learning for Sustainability Champions training](#) (and [case study](#)) could also be tailored to transport.
- **Set up Microsoft Teams groups for active, public and shared transport.** This helps to form communities where people can swap tips and share ideas. This could be one avenue for asking staff for ideas on how to solve barriers to sustainable transport and collating them into the strategy.

Partnerships and Engagement

- **Key partners engaged.** There are a whole host of charities, public bodies and organisations wanting to help you reach your sustainable transport goals. Key partners could include:
 - Your Local Authority:
 - Linking in with your Local Authority's area plans and guidance is essential for keeping abreast of the latest developments. Examples include [Low Emission Zone](#) guidance, local Mobility Plans ([Edinburgh](#), [Edinburgh City Centre Transformation](#), [Glasgow](#)), Climate Action plans ([Dundee](#), [Stirling](#), [Perth and Kinross](#)), [Workplace Parking Levies](#), [Low Traffic Neighbourhoods](#), new cycle lanes or other transport infrastructure, transport and planning strategies.
 - Local Authorities also often have advice and funding for employers to help their staff travel more sustainably.
 - [Regional Transport Partnerships](#) e.g. [Tayside and Central Scotland Transport Partnership](#) (Tactran), [North-East of Scotland Transport Partnership](#) (Nestrans).
 - Active Travel Delivery Partners e.g. [Paths for All](#), [Sustrans](#), [Cycling Scotland](#), [Living Streets](#).
 - Public Transport Operators e.g. [FirstBus](#), [Stagecoach](#), [Scotrail](#), [Lothian Buses](#).
 - Sustainable transport charities or initiatives e.g. [CoMoUK](#), [Transform Scotland](#), [Way to Work Scotland](#), [Sustainable Travel Scotland](#).
 - Campaign organisations e.g. [Stay Grounded](#), [Flight Free UK](#), [ExPlane](#), [Erasmus by Train](#).



Partnerships and Engagement

- Engage with organisations who have set up sustainable transport award schemes.** Working through an award framework could help provide a structure for action and create external accountability. Many awards also have beautiful trophies, certificates and email signature badges that always look good on websites or in the reception area. Examples include:
 - Walk at Work Award** by Paths for All. They also have an [online course for walk leaders](#), a [Step Count Challenge](#), plus [other resources](#). [Ayrshire College](#) have been successful at attaining the award.
 - Cycling Friendly Campus Award** by Cycling Scotland which includes funding opportunities, Campus Cycling Officer internships, staff and student cycle training, and award recognition for institutional work. Some great case studies include those from [West College Scotland](#), [City of Glasgow College](#), [North East College Scotland](#), [South Lanarkshire College](#) among others.
- Use infographics to illustrate the scale of different transport carbon footprints.** Taking one return flight can often dwarf action in other areas. If people have limited capacity to think about climate change, focus their attention on the actions that will make the biggest difference.

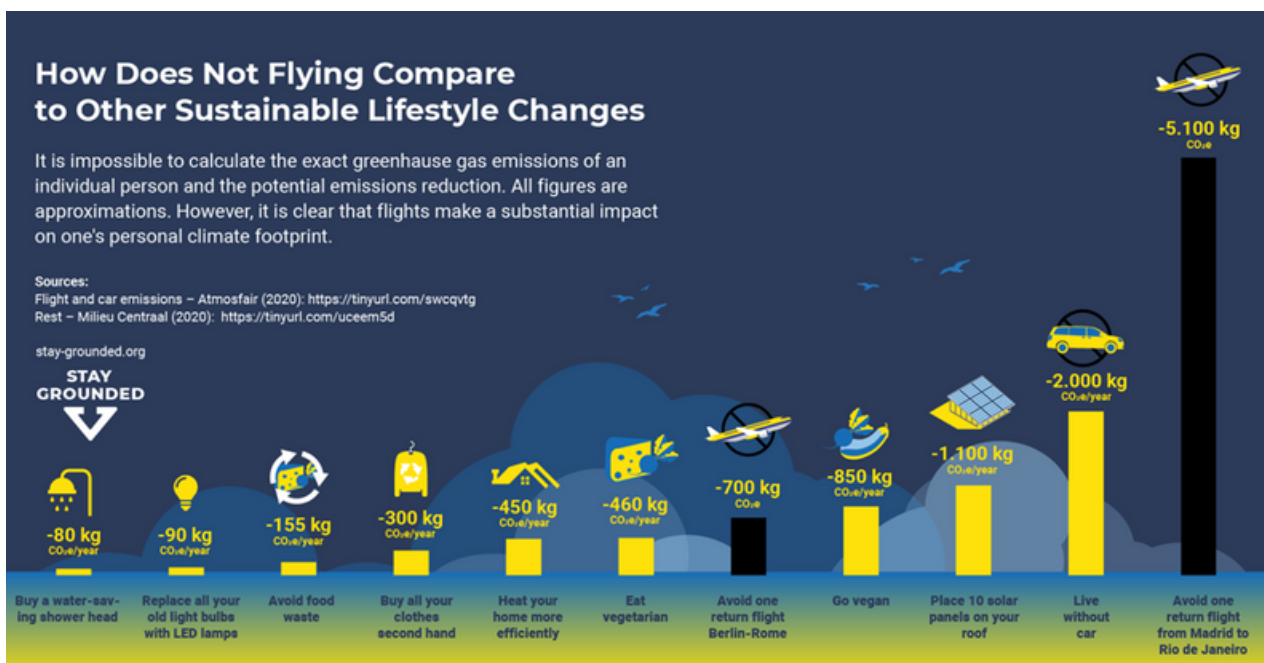


Figure 19: The carbon impact of flying versus other sustainable lifestyle changes ([Stay Grounded](#)).

Partnerships and Engagement

Established Institutions: Partnerships and Engagement

- **Ensure websites and information on travel and transport are updated regularly.** Transport information can become obsolete quickly and thus can erode trust in information if it is frequently incorrect. Staff may default to driving if this is the case because it is familiar and easy. This could also include:
 - Ensuring public transport timetables and maps are updated in common areas and websites are reviewed regularly.
 - Promote sustainable transport information with car parking permits, at staff inductions, travel information emails etc.
 - A steady stream of newsletter features, blog and social media posts focusing on transport.
- **Make travel and transport policies and information publicly available.** Ensure strategies, action plans and blogs are available on external facing websites and not hidden by a sign-in page. This action benefits:
 - Ranking organisations that compare institutional sustainability action.
 - Collaboration with other institutions - we can all learn from each other to tackle the climate emergency. It also goes both ways – your institution will be able to learn and improve from other institutions too if all sustainability and transport policies are made public.
 - Environment consultants and sustainability professionals are constantly looking at institutional webpages for good case studies to share with others.
 - Transparency with the public about where their publicly-funded money is going.
 - Prospective staff researching your institution ahead of accepting a job offer.

Partnerships and Engagement

- **Engage logistics organisations.** This could help optimise regular business travel routes for most efficient use of time, money and emissions. This could also be achieved via relevant data scientists based at your institution.
- **Communications campaigns unpacking misconceptions around travelling.**
 - Information campaigns could change the conversation around driving and flying. Possible topics to highlight include:
 - People still miss meetings due to traffic, inability to find parking and roadworks.
 - Flying is not always cheaper or faster than taking the train. Glasgow Caledonian University created a short, informative video [here](#).
 - Flying can leave a strain on travellers through inconsiderate or even [aggressive fellow passengers](#), issues with visa and passport control, risks of personal safety, security officials overstepping personal contact boundaries, delays and cancellations, baggage allowance issues, missing connections, being denied refunds, altitude interacting with various medical conditions, lack of sleep, jet lag, among other possible grievances.
 - Two light-hearted media pieces that tackle these issues include [The Ten Most Annoying Things About Flying](#) article and [The Worst Things About Flying BuzzFeed video](#).
 - Workplace culture change has the potential to mobilise huge shifts in behaviour, but it often takes a while of laying the foundations before changes to modal shift statistics occur. See the [Scottish Government's ISM Model](#) for a more detailed look into some of the key driving factors behind sustainable behaviour change.

Partnerships and Engagement

Leading Institutions: Partnerships and engagement

- **Sharing learning with other institutions.** Meeting with equivalent staff members at other FHEIs helps to spread awareness and learning. No one institution is doing everything and all institutions have learning to take away. This meets the SDG17 Partnerships for the Goals. This could include:
 - Presenting at EAUC's Travel and Transport Topic Support Networks and Communities of Practice.
 - Influencing conference and meeting practice by suggesting and implementing alternatives. Creating conversations on the topic at those conferences and meetings.
- **Working with Local Authorities and transport operators to improve sustainable transport options.** As anchor institutions, it is important that FHEIs feed in to local mobility plans, public transport routes and timetabling, transport and planning consultations, negotiating reduced corporate rates with transport operators, among other actions.
 - Your institution might be able to influence and feedback on plans to ensure that your staff, students and visitors have ample opportunity to travel between your sites sustainably now and into the future.
- **Ban on high emission industry advertising and investment on campus.** Institutional investment in and acceptance of high emission advertisers reinforces messages of social approval for said industry. This could happen at conscious or subconscious levels and could undermine other messages from sustainability teams/management on net-zero objectives. This could include:
 - Aviation and internal combustion engine representatives barred from careers fairs e.g. Birkbeck, University of London and The University of the Arts London, University of Bedfordshire, and Wrexham Glyndwr University.
 - Negative screening of sponsors for university events and infrastructure builds.
 - Divestment of endowment and pension funds from highly polluting industries.

Partnerships and Engagement

- **Celebrate achievements and reward staff.** Celebrating and rewarding staff reinforces positive behaviour and helps to maintain behaviour changes over time. Initiatives could be paid for via an internal surcharge on high emission transport. This could include:
 - Bonuses to departments to hold staff celebratory activities and/or prizes for achieving emission reduction goals.
 - Physical medals, certificates or trophies for the departmental awards cabinet.
 - Vouchers for staff that met their emission budget, or saw significant reduction on previous years.
 - Rewarding staff for engaging in active and public transport for business travel and commuting. Platforms include [Better Points \(UK Better Points app\)](#) and [DoNation](#), among others. Users can track their progress for rewards.
 - Take part in sustainable transport challenges that offer rewards to participants e.g. [Step Count Challenge](#), among others. These challenges can be used for business travel, commuting and personal travel.



Monitoring and Evaluation

Emerging Institutions: Monitoring and Evaluation

- **Baseline data collected.** To ensure that any sustainable transport campaign is working, it is important to collect baseline data before the initiative begins. This will help provide evidence to team members and funders that interventions are working, or, if not, what changes should be made to be more effective in future. Data collected could include:
 - Travel expense claims and travel management company data.
 - Modal share and demographic surveys e.g. how many pedestrians or cyclists are passing by a particular point at certain times of day. What are the demographics of those people? Can people with mobility impairments navigate the space? If not, why not?
 - Parking permit monitoring and car park survey data.
 - Fleet usage data.
 - Procurement data monitoring.
 - Staff survey data collected on attitudes to business travel and awareness of sustainable alternatives.
 - External platform data such as Mobilityways, Liftshare for Work and car club data e.g. CoWheels or Enterprise.
- **Monitoring system in place.** Baseline data is compiled into spreadsheets and future data collection inputted at least annually. Monitoring system to be agreed and signed off as part of the Business Travel Strategy.
- **Create an institutional travel policy, including business travel, and ensure it is updated at least every two years.** This will help to ensure its relevance and adjust targets and actions as necessary. Creating an all-inclusive travel policy will also ensure that any measures taken to make business travel more sustainable will join up with wider travel measures for commuting and visitor travel.

Monitoring and Evaluation

Established Institutions: Monitoring and Evaluation

- **PBCCD reporting on business travel completed and uploaded to SSN.**
- **Senior management promoting travel surveys** when they are released to show importance to organisation. This will tend to drive up engagement with data collection.
- **Apply for awards.**
 - Awards can provide good frameworks for action and evaluation of specific transport modes e.g. Walk at Work Award, Cycling Friendly Employer. They can also provide confidence in internal processes.
- **Internal and external auditing of processes.**
 - Internal review of policies and processes could be carried out by cross-departmental transport working groups. Think about what departments are most affected and ask for their feedback before going to external partners or auditors. A 'Citizen's Jury' approach, as exemplified by the University of Leeds could be one approach to this.
 - Peer-review by other FHEIs could provide a fruitful source of ideas and constructive criticism. Peer-review events for PBCCD reporting occur via EAUC Scotland. They only partially cover business travel reporting, but more targeted peer-review events could be initiated if there is the interest to do so. Email us on scotland@eauc.org.uk if you would like us to initiate this.
 - Partnership organisations, particularly charities funded by Transport Scotland, often have departments dedicated to helping workplaces improve the sustainability of their practices. CoMoUK can provide free consultancy advice, as well as Energy Saving Trust and the Sustrans Workplaces Team. They will often be more than happy to review policies and processes without having to pay high consultancy fees.

Monitoring and Evaluation

- **Ensure there are regular feedback mechanisms so issues can be dealt with swiftly.** This could include:
 - An internal email address to pick up questions, compliments and complaints.
 - A phone number to call and/or office open hours.
 - Regular information sessions held virtually to run through the business travel policy and process. Presentations can be recorded to watch at a later date.
 - Staff surveys could also be conducted annually to prompt evaluation from staff, particularly if feedback is not forthcoming during the rest of the year.
- **Review monitoring strategies frequently.**
 - Ask yourself: Is this the best way to collect data? Do we have high confidence in this data or is it mainly estimation?
 - Collecting data annually allows easier comparison between years, is better for PBCCD reporting, can make it easier to pivot strategy year on year and can accelerate action. Key lessons can be learned and pinpointed easier. This can, in turn, save the institution money and carbon in the process through rationalised business travel trips.

Leading Institutions: Monitoring and Evaluation

- **Monitoring showing reduction in line with net zero target.** The implementation of your institutional policies and procedures are working and rapid decarbonisation of your business travel is on track to net-zero.
- **External validation of emissions reduction.** This provides confidence in results and could result in positive marketing opportunities through accreditation. Other benefits include:
 - Badges and/or certificates being placed on the website.
 - Increased opportunities to supply products and services to organisations with strict sustainability supplier screening criteria.
 - A 'USP' for a competitive market for attracting students, staff and funding.
 - Increased opportunity for applying for funding and to attract investment.

8. Further resources

Travel Better Package

Developed by EAUC-Scotland, the [Travel Better Package](#) aims to support the reduction of air travel in the FHE sector, specifically amongst academics and staff.

The Travel Better Package includes:

- A [Q&A tool](#) addressing concerns individuals may have about reducing air travel.
- The [Travel Better Pledge Template](#) used to inform individual behaviour change, as well as departmental and/or institutional policies, pledges and statements.
- The [Air Travel Justification Tool](#), which is an extension of a decision tree. The tool supports individuals in justifying/reflecting on attending a conference, meeting and/or event that is only accessible through flying.

EAUC Scotland Travel and Transport Topic Support Network

EAUC Scotland's [Travel and Transport TSN](#) brings together sector travel and transport leads twice a year to share best practice, promote case studies and new technologies, and discuss sector opportunities and challenges. The TSN is open to all Scottish institutions and non-Scottish EAUC members. EAUC members can also join [EAUC Travel Community of Practice](#) events.

Plane Talk: Reducing travel emissions in academia

EAUC Scotland, in collaboration with Wolfram Moebius at the University of Exeter and Jo Allatt from the Sustainability team at UK Research and Innovation, developed the Slack community "[Plane Talk: Reducing travel emissions in academia](#)". Plane Talk 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. It is modelled on similar supportive communities already operating on Slack. Join the discussion now!



Figure 20: Plane Talk: Reducing travel emissions in academia. [Join the Slack discussion](#) (EAUC Scotland).

Conclusion

“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.”

- Margaret Mead

EAUC Scotland hope this guide has been useful at providing inspiration for ideas to take into your own institution. There will never be a 'one size fits all' option, but with perseverance and dedication, you can tailor the solutions relevant to your institution to reduce the environmental impact of business travel and create a better future for us all.

Do let us know what has been useful, or where gaps can be filled. This is a living document and will be modified as new solutions emerge.

We wish you the very best of luck in your efforts to improve the sustainability of business travel in Scotland, and beyond. As Peter Drucker says: “The best way to predict the future is to create it.”



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Contact us

Do you have a business travel case study from your institution? Would you like it included in this guide? Share it with EAUC Scotland via scotland@eauc.org.uk.

Found a broken link or a gap in information? This guide was published in February 2023 and will be reviewed on a regular basis. Please [email us](#) about any errors or omissions.



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