# Internationalisation and Air Travel
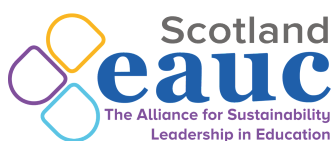
A Preliminary Overview of Opportunities and Challenges to Reducing Air Travel for non-Domestic Students in Scotland

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The Alliance for Sustainability
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# Acknowledgements

**Social Responsibility and Sustainability**

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# Summary

The following preliminary report uses data from semi-structured interviews with 10 international (non-domestic students) in Scotland to identify challenges and opportunities to reducing air travel amongst international students. The purpose of the report is to provide preliminary findings to be used for larger projects that may inform institution-led initiatives to improve international student life and decrease the amount of flights flown by international students.

# Sustainable Development Goals

This report aligns with SDG 12: Responsible Consumption and Production by supporting a reduction in flights and consequently a reduction in the consumption of kerosene used to fuel aircrafts.

The report also aligns with SDG 13: Climate Action by sharing knowledge about carbon intensive activities and impact reduction.

# Contents

# Project Brief

The following report will provide some insight into the interaction between the internationalisation of universities and institutions' efforts to achieve net-zero greenhouse gas (GHG) emissions to curb climate change. Specifically, the report will identify themes in air travel amongst non-domestic students in Scotland and further questions to inform initiatives addressing internationalisation amid the climate crisis.

**Internationalisation**

In this report, internationalisation of universities refers to the embedding of a global outlook and international dimensions into the major functions of an institution, or "encouraging the integration of multicultural, multilingual, and global dimensions within the education system, with the aim of instilling in learners a sense of global citizenship." Internationalisation may look like collaborative research with academics in many different countries or expanded mobility of staff and students (visiting lecturers, student exchanges). Encouraging non-domestic students to study in Scottish Universities is another avenue of internationalisation.

This report uses international and non-domestic students interchangeably to refer to students who are not from the United Kingdom and are either from the European Union or elsewhere.

**Internationalisation in Scottish Universities**

In a 2018 report, the Scottish Government encourages advancing internationalisation in Scottish universities, particularly through recruiting international students, as international students make a valuable contribution achieving the Government's ambitions (set out in the International Framework) to ensure "that [the Scottish population is] better able to engage in a global world; engaged in international exchange and learning opportunities; and [is] aware of the international environment and Scotland's place in the world." International students (both EU and non-EU) also benefit the Scottish economy and support many jobs in Scottish HEIs.

The same Government report found that in the 2017-2018, 22% of students in Scotland were not from the UK, compared to 19% in England. Although, some Scottish universities have more international students than others; for example, international students account for 47% of the student body at the University of St Andrews but just 2% at the University of the Highlands and Islands.

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Many universities in Scotland address internationalisation in strategic plans, highlighting their aim to advance their global outlook by increasing the diversity of staff and students and often setting targets to increase the number of international students attending their university.

**Internationalisation and Climate Change**

All Scottish universities have some sort of strategic plan to tackle climate change and reduce their direct and indirect emissions. Also, Scottish institutions report their yearly GHG emissions as part of the Public Bodies' Climate Change Duties Reporting scheme.

Although the connectivity, inclusivity and diversity that internationalisation brings is crucial to building better societies, the way we currently practice internationalisation may have serious implications for the environment and uncover conflicting priorities and strategic misalignment for institutions who have both internationalisation and sustainability targets.

Internationalisation, or in this case, increasing international students in Scotland means more air travel as students travel between home countries and institutions in Scotland, or elsewhere. As air travel is a carbon intensive form of transport, more air travel signifies increased emissions, conflicting with institutions' strategies to address climate change and contributing to GHG emissions that are propelling the climate crisis. Glasgow Caledonian University reports GHG emissions of end-of-term commuting via air travel amongst international students. These emissions accounted for 23% of reported emissions in 2018-2019, a significant proportion considering there are institutions with considerably more international students.

**Purpose of the Report**

The purpose of the report is to provide preliminary information on international students in Scotland and air travel to be advanced by research projects and initiatives to further understanding of internationalisation amid the climate crisis.

This purpose of the report is not to villanise international students or to further the "Individualisation of Responsibility" onto international students to no longer attend or fly between home and Scottish universities. Instead, preliminary information found in this report hopes to be advanced and later used to develop institution-led initiatives and strategies to tackle air travel emissions from internationalisation targets.

As of 2019, only one Scottish university, Glasgow Caledonian University, includes commuting by international students in reporting for the Scottish Government as part of their Public Bodies Climate Change Duties. Additionally, their data is described as "low quality. Derived from student records, historic surveys and assumptions on travel frequency." This means that we do not know the real extent to which international students contribute to an institution's GHG emissions, and therefore their impact on reaching sustainability targets. Additionally, because this data is not reported, an increasing amount of air travel caused by more international students in Scotland may not appear as an obstacle to sustainability targets on paper, but is nonetheless a threat to tackling climate change and should be addressed by institutions for more credible and comprehensive moves toward net-zero GHG emissions.

Student travel to campus at the beginning and end of term is a type of commuting. The GHG Protocol Corporate Accounting and Reporting Standard defines commuting as a scope 3 emission and recommends that these emissions should be included in operational reporting boundaries if they are large relative to an organisation's scope 1 and 2 emissions and if the organisation has the potential to reduce those emissions.

Please note that although this report also discusses recreational student flights, the GHG emissions associated with these flights would fall outside the operational boundary of the institution. However, it may be useful to be aware of these emissions and consider whether institutions are able to influence them.

# Method

This preliminary report identifies themes amongst non-domestic students in Scotland and air travel and provides further research questions. Themes were identified through analysing data collected from semi-structured interviews. Analysis included identifying patterns in transcribed dialogue from the interviews.

Semi-structured interviews are interviews involving open-ended questions and loose adherence to pre-identified questions. Semi-structured interviews were the chosen method of data collection due to their flexible nature, allowing participants to discuss whatever they chose while also following a structure that would make the conversation relevant to the research goals.  Additionally, semi-structured interviews allow students to speak to their own experiences, perhaps facilitating the development of strategies influenced from the bottom-up, as opposed to top-down approaches.

Questions for the interviews included:

1.  Where did you grow up/where does your family live/where are you from?
2.  What drew you to study at [university name]?
3.  What are some challenges you face studying in Scotland?
4.  What are some benefits you have experienced from studying in Scotland?
5.  Do your friendships with domestic students vs. international students differ?
6.  Do you interact with people from the same background?
7.  What are your social networks and how do you access these social networks?
8.  What has your accommodation been like?
9.  Do you seek out products that remind you of home (ie. food, films etc.), and are they accessible?
10. Do you have relatives who live locally and do you see them?
11. How often do you visit home and how do you travel there?
12. Do you have anything else you would like to say about air travel or anything in general?

Questions were developed through research on air travel and the experiences of international students. Only two questions were centred on travel as to provide some holistic, nuanced insight into the experience of non-domestic students and how some aspects of their experiences may or may not act as challenges or opportunities to addressing air travel.

**Participants**

Participants were found through posting participant call-out proposals online, on Facebook, Instagram, Twitter and LinkedIn. Institutions shared call-out posts on their respective social media channels, including:

- The University of Edinburgh Department for Social Responsibility and Sustainability
- The Edinburgh Centre for Carbon Innovation
- The University of Edinburgh Geography Department
- The University of Strathclyde Business School
- Transitions University of St Andrews
- The Edinburgh Student Housing Co-Op
- Queen Margaret University International Students Society

Other institutions and organisations across Scotland were also asked to share information but did not reply to email requests.

Participants were also found through snowball sampling whereby the researcher would ask participants to share the project with individuals who may also be interested in participating.

Most participants had an interest in and concern for air travel's impact on the environment due to the network in which participants were found. All but one participant travels home by air. The one non-flying participant is from an EU country and travels home by bus due to environmental concern.

Between December 2019 and February 2020, 10 participants were interviewed. Interviews lasted 30 minutes to one hour. 7 interviews took place in person, 2 interviews took place on the phone and 1 interview took place on Zoom. Before interviews began, the project and its aims were explained, verbal consent was requested by the researcher and provided by participants and anonymity was assured by the researcher to the participants. Table 1 provides information on participants, including institution, home country, year of study and discipline.

| Participant | Gender | Year | University | Home Country | Discipline |
|---|---|---|---|---|---|
| 1 | Female | Postgraduate (1-year course) | University of Edinburgh | United States of America | Human Rights Law |
| 2 | Female | Postgraduate (1-year course) | University of St Andrews | Canada | Biology |
| 3 | Female | 4th year | Edinburgh Napier University | France | International Events Management |
| 4 | Female | 3rd year | University of Edinburgh | France | Geography |
| 5 | Male | 3rd year | University of Edinburgh | Denmark | Geography |
| 6 | Female | 1st year | University of St Andrews | United Arab Emirates | Neuroscience |
| 7 | Male | 1st year | Queen Margaret University | Poland/Switzerland | Film |
| 8 | Female | Postgraduate (1-year course) | University of Edinburgh | Thailand | Geosciences |
| 9 | Female | Postgraduate (1-year course) | University of Edinburgh | United States of America | Geosciences |
| 10 | Female | 1st year | University of Edinburgh | Japan/China | Geography |

Table 1: Participants

## Limitations

The report faces several limitations, including:

- a very small sample size due to the lack of capacity of the researcher which limited the number of participants interviewed. The small sample size means themes are based off of less than 10 participants mentioning or discussing various topics, negatively affecting data saturation

- a lack of variation in the the sample size, with participants who are mostly female, postgraduate and/or from the European Union due to few willing and able participants

- a lack of representation from Scottish universities with most participants from the University of Edinburgh and all participants from institutions from the west of Scotland due to few willing and able participants

- a lack of data on air travel amongst domestic students meaning that there is no comparison between international and domestic students and data must be understood in absolute terms

- the call-out for participants included information about the project and EAUC-Scotland, attracting students who either study, or are interested in sustainability and air travel and may skew results

## Recommendations for Addressing Outlined Limitations in Further Research

- Increase sample size by lengthening the duration of project to give researcher more time to find willing participants and to meaningfully interview participants

- Improve variation of sample size and improve representation of all Scottish universities in sample size by increasing duration of the project and reaching out to more institutions, their departments and societies. An increased duration of the project can allow researchers to identify the most effective ways to reach out to certain institutions/societies

- Re-phrase call-out and communications to reach students from diverse disciplines (ie. not necessarily environment-related), look into accessing willing participants from informal networks to find more participants not necessarily interested in sustainability

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# Results

The following section discusses themes amongst participants and air travel. Within the themes are opportunities and challenges to reducing air travel which are addressed in "further questions."

## Employment Opportunities/Work Experience

Half of participants discussed either currently having a job and being unable to fly home for popular holidays, including Christmas, or hoping to find a job where their institution is located and staying in Scotland during the summer and other holidays. By having some income and a reason to remain in Edinburgh, students can avoid a return flight during the summer or winter holidays.

A few students mentioned that having part-time jobs persuaded them to stay in Scotland during the Christmas holidays. One student noted that she did not want to fly home and felt a familial obligation to do so, but having a job made her family more accepting of staying in Edinburgh. These specific jobs are not necessarily degree-related but in service and hospitality.

**"I would sacrifice Christmas at home for the work experience [in Scotland]- I don't care about that."**

Students also mentioned they were interested in finding degree-related jobs in Scotland during the holidays, instead of going home. For example, one student had recently found out their dissertation project plans, which involved working for and doing research with a Scottish organisation, had been cancelled. Having planned to spend the summer in Scotland, the student was worried they would be unable to stay without a job and began making plans to find an organisation in their home country, or elsewhere, which would likely involve some air travel.

However, one student noted that they would only choose to work in Scotland during the summer if the wages were as high as wages in their home country and if it were relevant to their degree.

**Further questions**

- How can work opportunities support students in staying in Scotland during breaks?

- What types of opportunities are more enticing than others?

- How can we alter final projects (dissertations, senior honours projects etc.) to support and encourage students to stay in Scotland? Does this change across disciplines?

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## Familial Obligations

**"Christmastime is symbolic family time and not going back is a bit hard – it's mostly hard for my family"**

**"My parents would have been really bummed if I didn't come back [for Christmas]. I would have been sad too, I haven't spent a Christmas without them."**

Most participants discussed obligations to visit their families in their home country, or elsewhere, during holidays. Two participants from the EU emphasised that the Christmas holidays are very important for their families and it is difficult to imagine being away from their families.

Some discussed difficulties in navigating these obligations amid their concerns about climate change. One EU participant discussed informing their family that they would be staying in Scotland for the holidays, only for multiple members of their family to visit them in Scotland instead. They grappled with asking them not to come, and the realisation that it would be a new and enjoyable experience for them to visit Scotland for Christmas.

One participant's parents surprised them with flight tickets home to celebrate a 50th birthday as they wanted the entire family together. The participant had no idea their parents had bought these tickets even before they had moved to Scotland.

### Further Questions

- At what point do families/students begin considering returning home for the holidays? How can we use this knowledge to guide initiatives and make student life more sustainable?

- How can we develop resources to support parents when their children study abroad? How can we circulate these resources?

- How can we develop resources to support environmentally-conscious students discuss sustainable choices with parents?

- How can we alter scheduling and timetables to benefit both students and parents?

## Financial Constraints

**"The prices play against us.
It would be doable, if trains cost the same as bus it would be fine"**

Most participants mentioned financial constraints either stopping them from flying, or forcing them to fly. For example, students from Europe mentioned that taking the train back to home was often too costly, forcing them to fly instead. A few of the participants expressed sadness at having to fly instead of taking the train.

**"It makes me pretty sad every time [I take a flight]"**

For some non-EU postgraduate students, financial constraints play a role in not returning home, or considering not returning home, during the year. Regular flights between the United Kingdom and outside of Europe are often too expensive, posing as a hindrance to flying home. One EU participant noted that their North American friends would stay in Scotland during the Christmas holidays as it was too expensive to fly home. However, none of the participants mentioned a financial hindrance to flying within the United Kingdom and Europe and some actively acknowledged their air travel around Europe.

**"I've come to think about it more in the past year. I think I can reduce [flying home].
But when I do that it's about money rather than the environment"**

### Further Questions

- How can institutions support students in taking more sustainable forms of transport?

- How can scholarships, grants, loans etc. support sustainable travel?

- What proportion of non-EU international students fly home for Christmas? How are they able to do so?

## Length of Time Spent Living Abroad

**"I was so excited to be [in Scotland] the first two years, then I started getting a little homesick"**

Based on a few comments from participants, the length of time students had spent studying in Scotland may contribute to how often they fly home. For some undergraduate participants, the more years spent in Edinburgh, the more they begin to miss home, which could entail flights back home for breaks that had not previously been considered, and short holidays.  For one undergraduate participant, more time spent in Scotland contributed to more independence and solid social networks and the desire to spend summer holidays working and with friends in Scotland instead of returning home.

The postgraduate students who were in interviewed are undertaking one-year long programmes and therefore, it is not possible to understand how their flying habits may change with more time spent studying in Scotland.

**Further Questions**

- How can we tailor initiatives and information to reduce air travel and be more sustainable to different years of study? Would this be more effective than general initiatives?

- How do students develop strong social networks and independence and how can institutions support this?

- Does homesickness amongst students contribute to more flights home? Does this differ between domestic and non-domestic students?

## Living Abroad/Living in Scotland

**"My plan is to travel and experience different things"**

**"if you're here for a limited amount of time you want to travel a lot"**

Some non-EU and postgraduate participants mentioned that one reason for studying in Scotland was the opportunity to live abroad and to visit new places. The importance of this goal differed amongst participants. They also mentioned this was also a goal for their other non-domestic friends studying in Scotland. For non-EU participants, living abroad and seeing new places includes visiting parts of the United Kingdom and Europe, as these places would not normally be as accessible. Participants also mentioned visiting friends or family who live in parts of Europe.

Participants stated they normally fly on these short holidays. One participant discussed coming to terms with their carbon footprint from exploring Europe while living in Scotland and has since tried to make more local trips. This same participant, along with another, acknowledged that travelling extensively while living abroad feels like an expectation of them, or a social norm, that they do not necessarily want for themselves.

Some EU participants mentioned their decision or desire to stay in Scotland for at least a few holidays to experience Scottish events they may normally miss, including Hogmonay and the Edinburgh Fringe Festival.

**Further questions**

- How do institutions currently promote local travel and how can this be improved for maximum impact?

- How can institutions support international students in gaining global experiences more sustainably? What do we currently do and is it working?

- What are the GHG emissions of holiday travel by non-domestic students? How does this differ to domestic students?

## Time Constraints

**"If it wasn't a question of time, I'd maybe take the train"**

Alongside financial constraints, most EU participants mentioned that they do not travel home by train because the journey would take too long.  For most participants, a one or two-day journey is too long, particularly for shorter holidays like Winter break and Spring breaks.

One participant acknowledged the difficulty in travelling from Scotland to France by bus, but was determined to avoid travelling by air. Another would rather travel by air as trains to France involve "too many connections."

One non-EU postgraduate participant noted that they do not travel as they only have some free time on the weekends due to their studies and that travel would be "exhausting."

### Further questions

- How can institutions alter timetables to support students in taking more sustainable forms travel?

- Can students be offered work accommodations to travel by train home (ie. ability to catch up on a lecture another day)

- Can recording lectures support more flexible schedules? Can more flexible schedules encourage students to take longer, more sustainable forms of transport?

- How can we increase flexibility in schedules without encouraging air travel for holidays? Would this be an issue?

**Visitors**

**"My friends are enthusiastic about visiting me in Scotland- nine of my high school friends have visited me"**

**"They said 'oh we should come [to Scotland],' and I thought 'what should I say?' I do want them to see [Scotland] though"**

Every participant has hosted multiple friends and/or family in Scotland during their time in Scotland. All but one mentioned their visitors traveled by air to visit the participant. One student mentioned struggling with their concerns for the environment and visits from their parents and grandparents, ultimately deciding it was better for them to come and visit.

One student mentioned that one visitor took the bus to Scotland, inspired and influenced by the participant's commitment to reducing air travel.

**Further questions**

- What are the GHG emissions of visitors for international students? Does it differ from GHG emissions of visitors for domestic students?

- Although institutions may not be responsible for these emissions, how can they offer support in tackling them? Do they have any influence in tackling these emissions?

- How can universities support students and their friends and families in taking sustainable transport?

- How can encouraging sustainable travel amongst visitors affect the institution's reputation?

# Conclusion

Through semi-structured interviews with 10 international students studying in Scotland, 5 themes were identified that can provide insight into internationalisation and sustainability. Further questions highlight opportunities and challenges to addressing air travel amongst international student and can inform research projects or institution-led initiatives to make internationalisation more sustainable.

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