



# UW AIR TRAVEL EMISSIONS

**Part I: April 16, 2024**

**Marilyn Ostergren** (UW Sustainability)

**Jeremy Hess** (UW Medicine)

**Jamie Mayerfeld** (Political Science)

# WHO ARE WE? (POLL)

## Role and travel status

1 question

1. Who are you (select all that describe you) (Multiple choice)

- Tenured Faculty
- Untenured Faculty
- Non-tenure Faculty
- Staff
- Graduate student
- Undergraduate student
- I have traveled for the UW
- I have not yet traveled for the UW

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# WHO ARE WE? (POLL)

	Has traveled for UW	hasn't traveled for UW
<b>2 grad student</b>	1	
<b>1 non-tenure faculty</b>	1	
<b>18 staff</b>	8	5
<b>2 tenured faculty</b>	1	
<b>1 undergraduate</b>		1

# CONTEXT

## SOURCES OF EMISSIONS



**BUILDINGS**



**FLEET**



**COMMUTING**



**AIR TRAVEL**



**FOOD**

# CONTEXT

## SOURCES OF EMISSIONS



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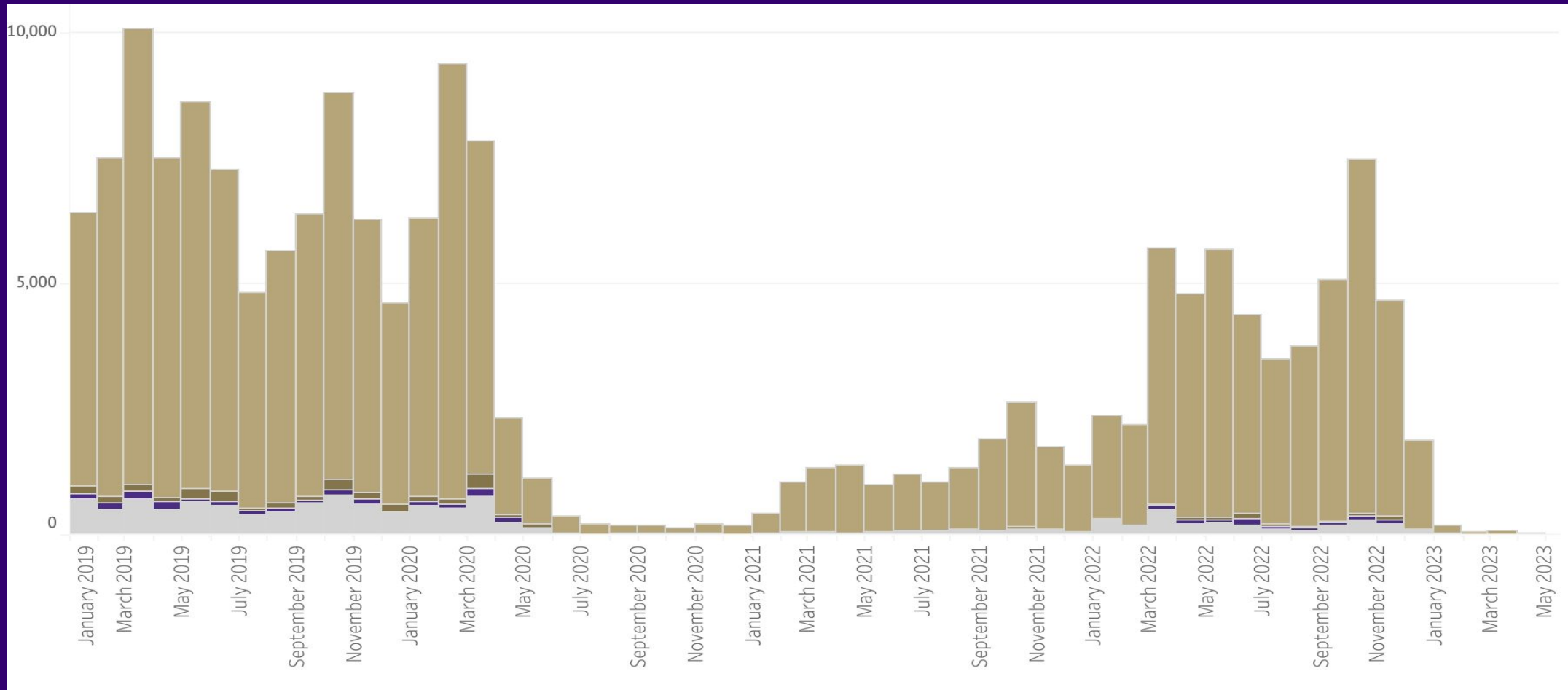


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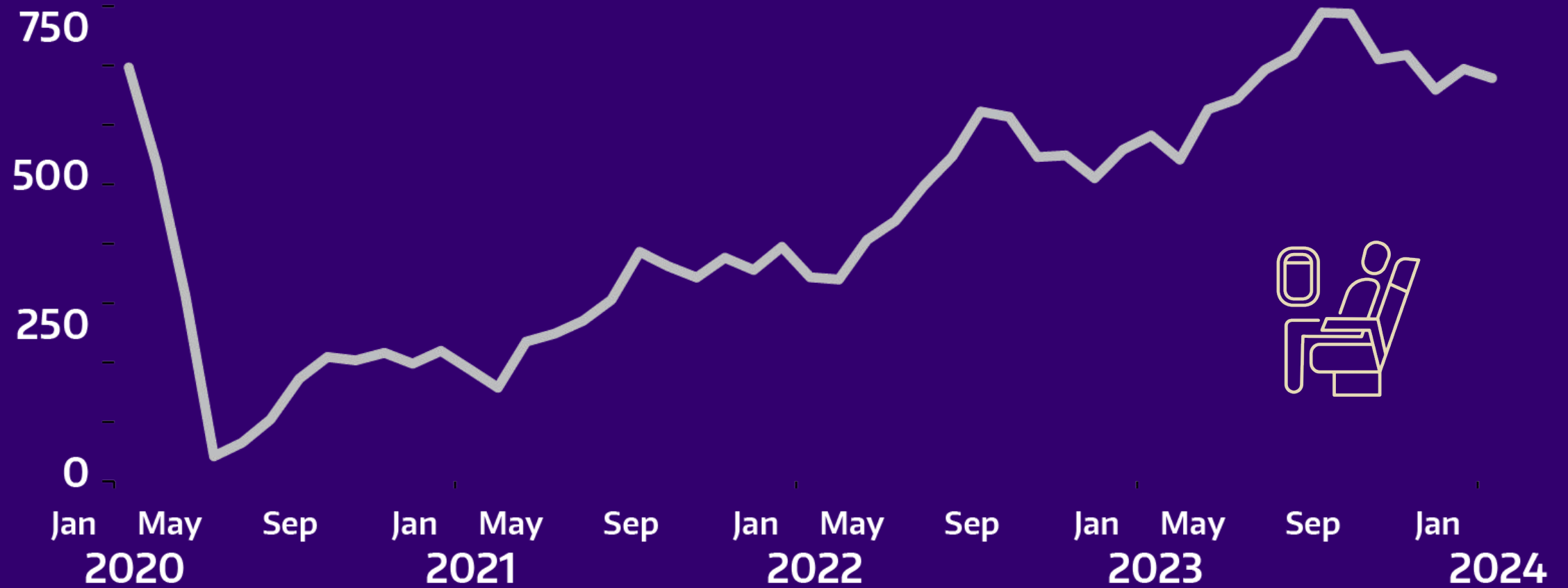
# UW Air Travel

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# UW FLIGHTS per MONTH 1/2019-5/2023

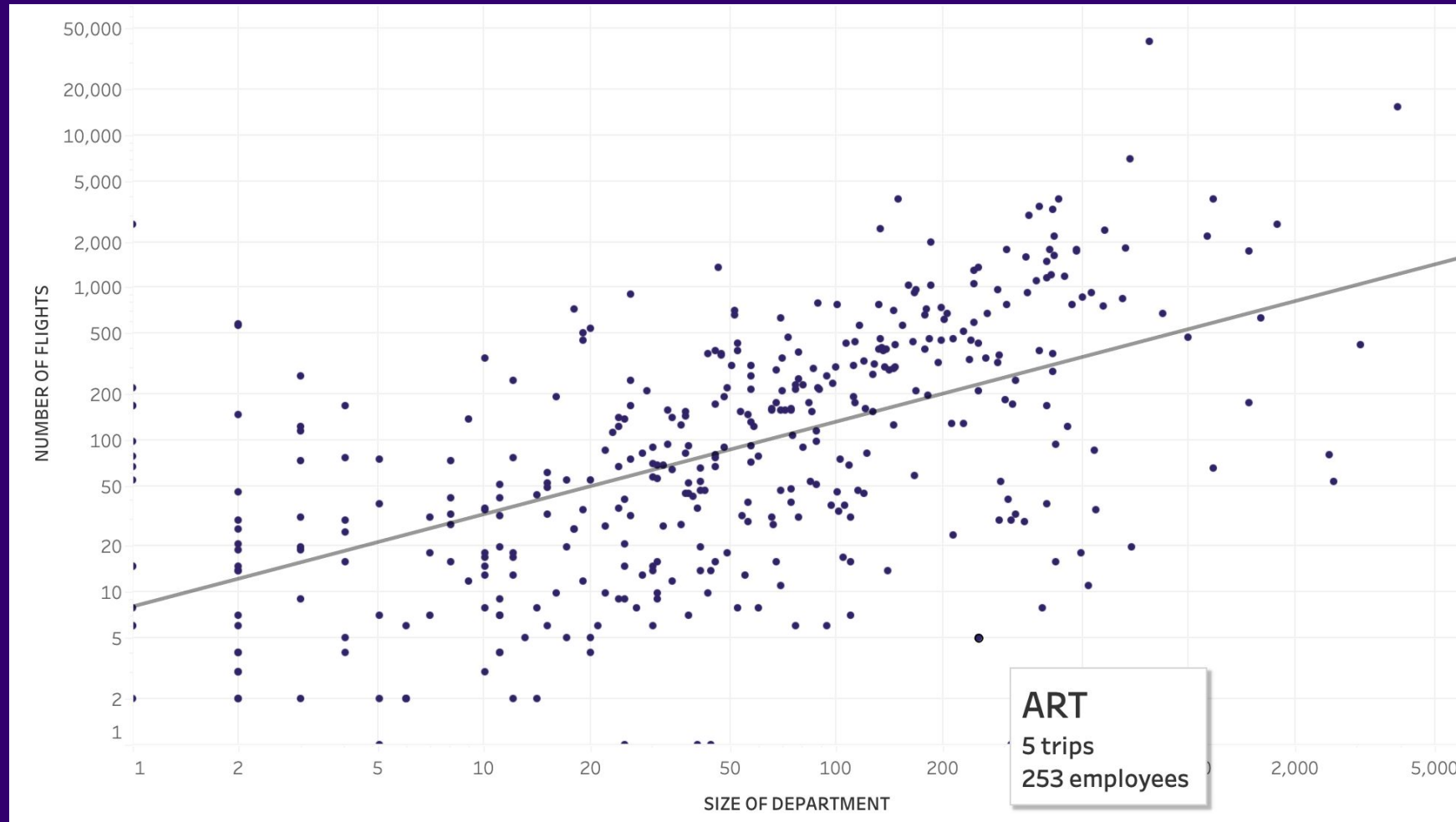


# globally, flying has reached pre-pandemic levels





# FLIGHTS VERSUS FTE, UW UNITS



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# The challenge

# WHY WE FLY

## REASONS FOR FLYING

1 question

### 1. Reasons for flying (Multiple choice)

- Conferences and Networking
- Research and Fieldwork
- Collaborations and Partnerships
- Teaching and Guest Lectures
- Professional Development
- Institutional Representation
- Access to Resources (libraries, archives, other collections, research equipment etc.)
- Performance and Funding Requirements
- Study abroad
- Athletic competition
- Other

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# WHY WE FLY

- 26 Conferences and Networking
- 9 Collaborations and Partnerships
- 8 Institutional Representation
- 8 Professional Development
- 7 Institutional Representation
- 6 Other
- 6 Study Abroad
- 3 Teaching & Guest Lectures
- 2 Access to Resources
- 1 Athletic Competition

# WHY WE FLY



Conferences and  
Networking



Research and Fieldwork



Collaborations and  
Partnerships



Teaching and Guest  
Lectures



Professional Development



Institutional  
Representation



Access to Resources



Performance, Funding  
Requirements



Study abroad



Athletic competition

# The impact of air travel

“The UW is committed to doing our part to reach a carbon-neutral future.”

*- Ana Mari Cauce, President of the University of Washington*

“If your university or research institution wants to treat the climate crisis like a crisis, it should take aviation seriously.”

*- Parke Wilde, Tufts University*

“We are beyond the point where ... climate change can be somebody else’s problem.”

*- Peter Thorne, Maynooth University*

# THE COSTS OF FLYING

- Flying is a large and increasing contributor to climate change.
- Flying is carbon-intensive.
- Flying is tied to climate injustice.
- Through frequent flying, a small portion of the world's population contributes disproportionately to climate devastation.
- Air traffic causes air and noise pollution harmful to communities near airports.

## How your flight emits as much CO<sub>2</sub> as many people do in a year

Even short-haul flights produce huge amounts of CO<sub>2</sub>, figures show

**Niko Kommenda**  
Fri 19 Jul 2019 09.05 GMT

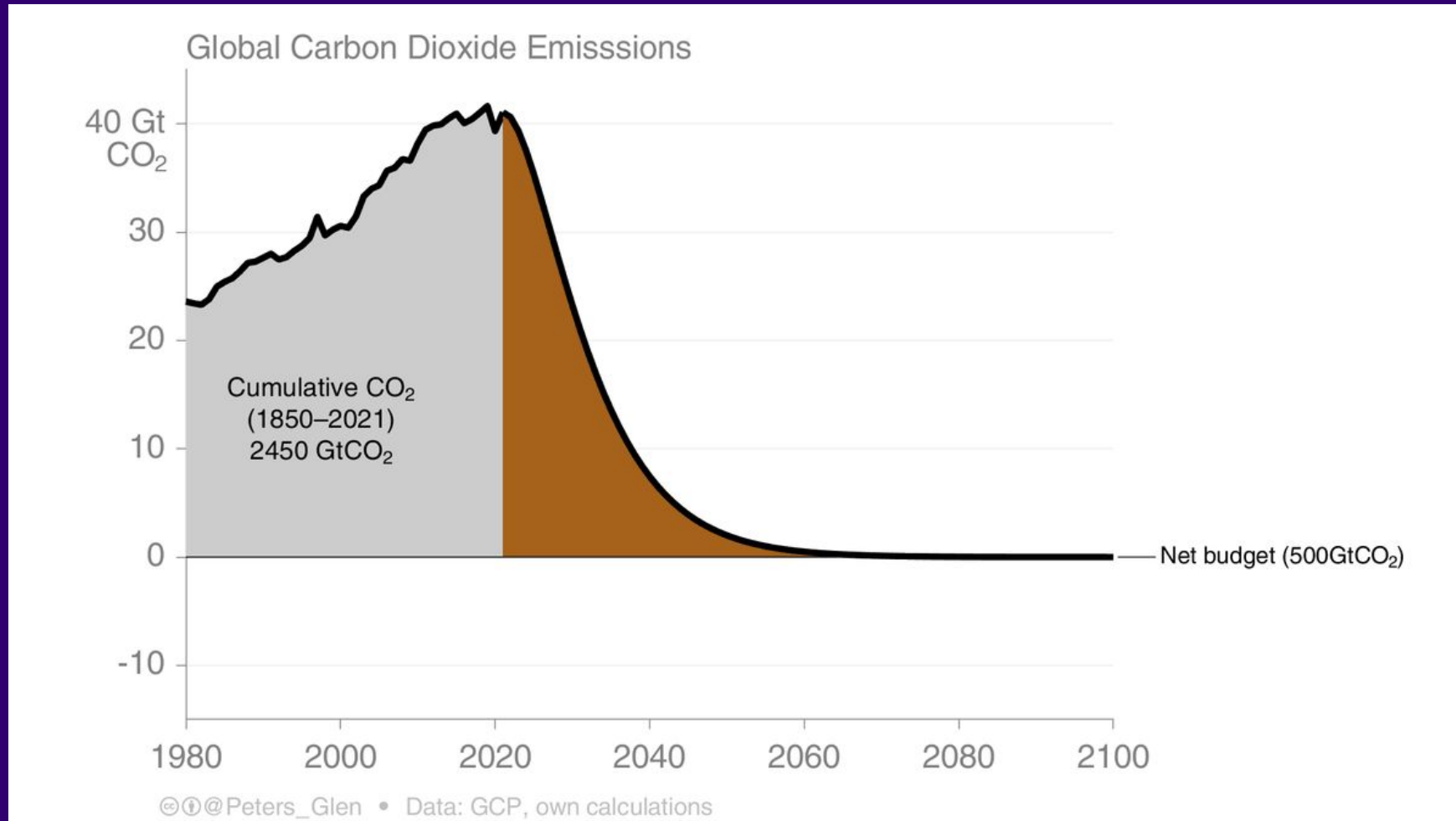
**The  
Guardian**



## THE LARGER PICTURE

- **Intergovernmental Panel on Climate Change (IPCC):** To avoid catastrophe, the world must limit average global temperature increase to 1.5° C above pre-industrial levels.
- This requires a significant reduction of greenhouse gas emissions
  - a roughly 50% reduction by 2030 and close to 100% net reduction by 2050, by IPCC calculations.
- **Carbon budget** = the total amount of greenhouse gas emissions we can still emit without causing catastrophe.
- IPCC's 2021 estimate of carbon budget: 400 billion tons of greenhouse gases. Recent studies lower the estimate to 150 billion tons.

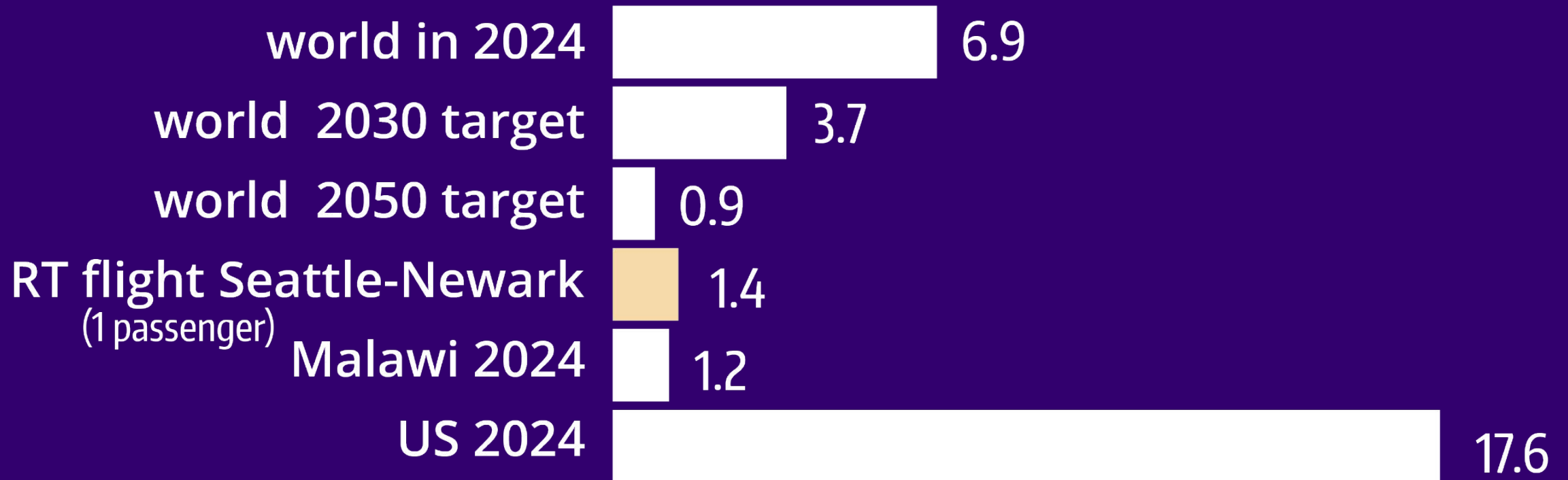
# OUR SHRINKING CARBON BUDGET



## CLIMATE INJUSTICE

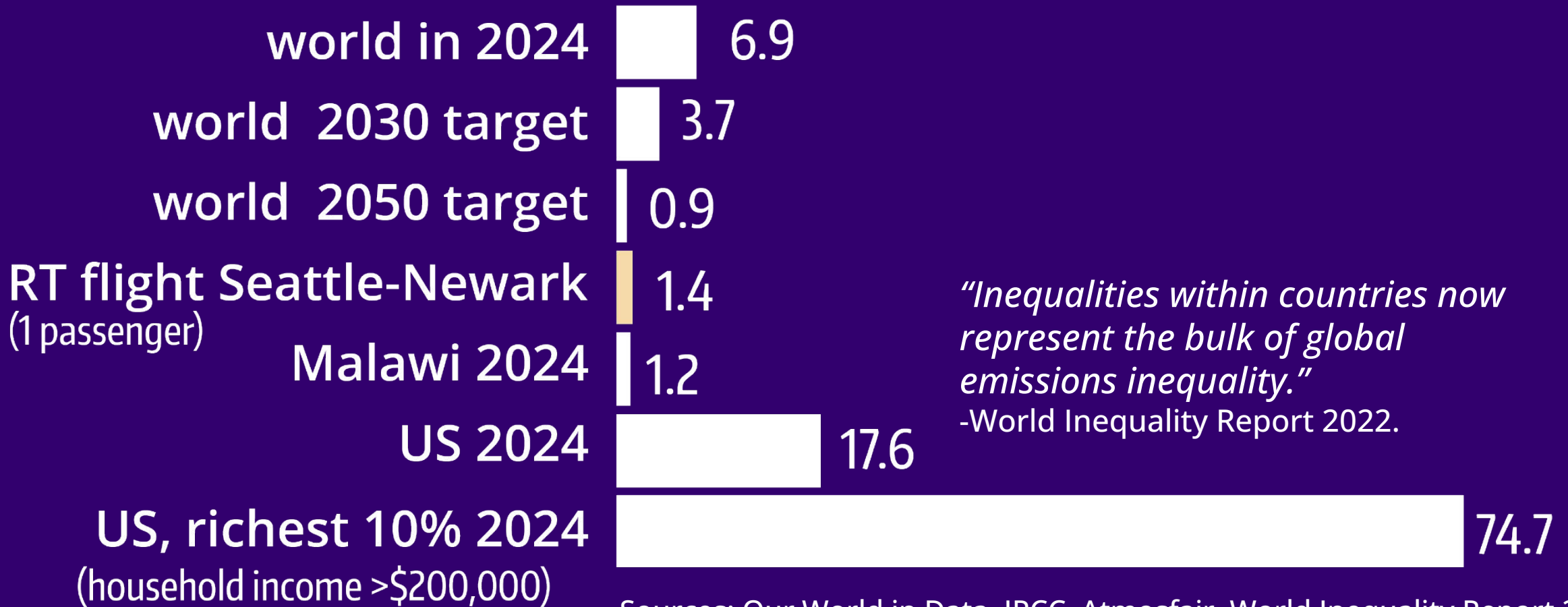
- Today, countries, groups, and individuals are using up the carbon budget at highly unequal rates.
- We live in a world of climate injustice. Those who contribute the most to climate change will tend to escape its worst effects.
- Flying epitomizes climate injustice.
- “Taking a long-haul flight generates more carbon emissions than the average person in dozens of countries around the world produces in a whole year.” *The Guardian*, July 19, 2019.
- Per capita emissions offer a window into climate injustice and the role of flying.

## PER CAPITA ANNUAL GREENHOUSE GAS EMISSIONS (in tons)



Sources: Our World in Data, IPCC, Atmosfair

# PER CAPITA ANNUAL GREENHOUSE GAS EMISSIONS (in tons)



*"Inequalities within countries now represent the bulk of global emissions inequality."*  
 -World Inequality Report 2022.

Sources: Our World in Data, IPCC, Atmosfair, World Inequality Report 2022.

“If it were a country, the aviation industry would be the world’s 7th largest carbon emitter. Its emissions are more than twice that of California, which accounts for 1.2% of global emissions.... By 2050, [aviation emissions] could rise to 22% of global emissions.... Aviation emissions epitomize climate inequity: 1% of the world’s population is responsible for 50% of carbon aviation emissions. ”

*-Nives Dolšak and Aseem Prakash, “Different approaches to reducing aviation emissions: reviewing the structure-agency debate in climate policy,” Climate Action 1 (2022).*

## **EXCLUSIONS AND INEQUITIES OF CURRENT PRACTICES:**

- Some individuals are (partly or wholly) excluded from the benefits now tied to academic flying: graduate students, contingent faculty, people with disabilities, people with health conditions, people with caring obligations, people with visa restrictions, people with financial constraints, people who don't fly because of climate conscience.

## **OPPORTUNITIES FOR GREATER INCLUSION:**

- Non-flight alternatives (online workshops and conferences, internal and regional conferences, multi-hub conferences) allow more people to participate.
- We now have the knowledge and experience to improve the quality of non-flight meeting spaces.
- Some trade-offs are justified to reduce climate harms.

## LOOKING AHEAD

- We should look for feasible ways to reduce UW-related flying.
- When we do fly, we should look for ways to take responsibility for those emissions.
- Tackling the problem will require a combination of top-down and bottom-up efforts.
- This is a task that will require **commitment, leadership, coordination, and broad participation and support.**



“We are beyond the point where ... climate change can be somebody else’s problem.”

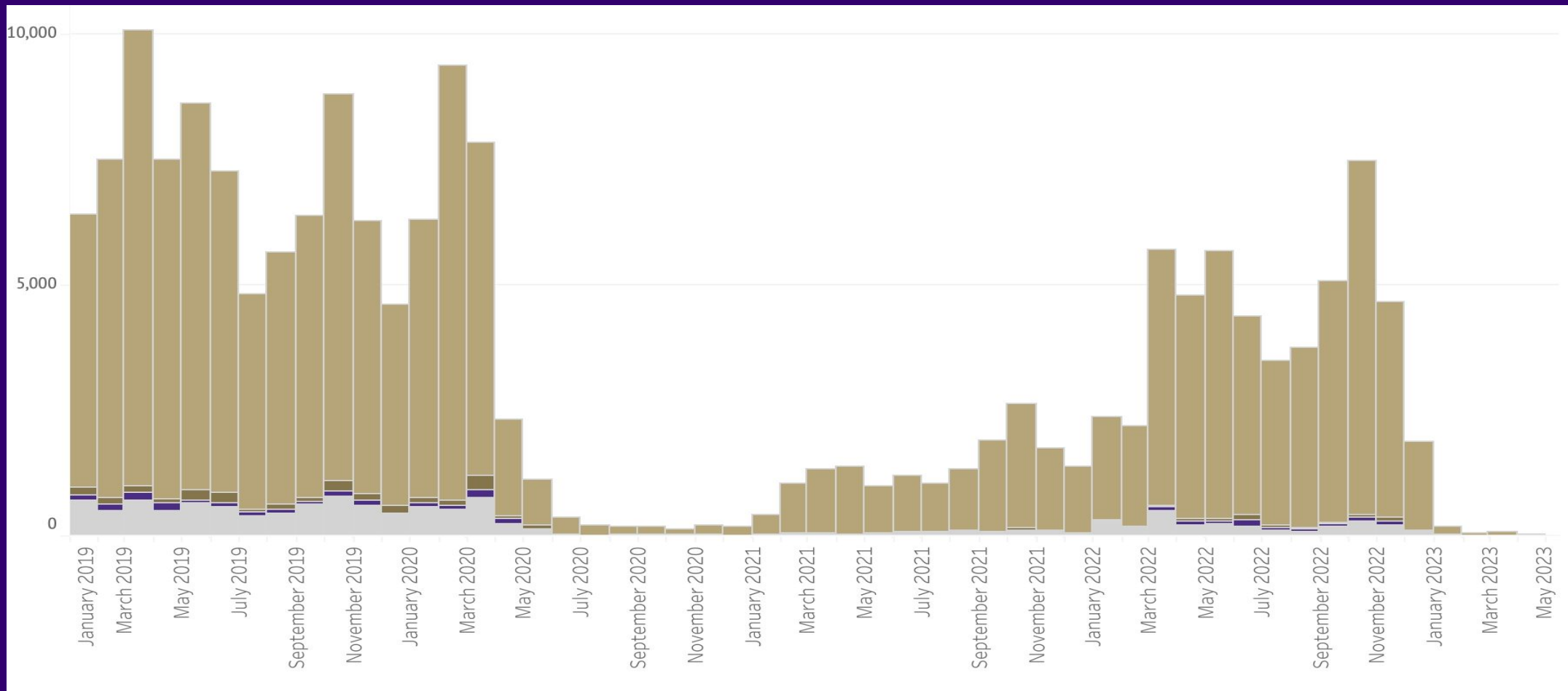
*-Peter Thorne, Maynooth University*

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# WRAP-UP

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# WE FLY A LOT



# WE GET A LOT FROM IT



Conferences and Networking



Research and Fieldwork



Collaborations and Partnerships



Teaching and Guest Lectures



Professional Development



Institutional Representation



Access to Resources



Performance, Funding Requirements

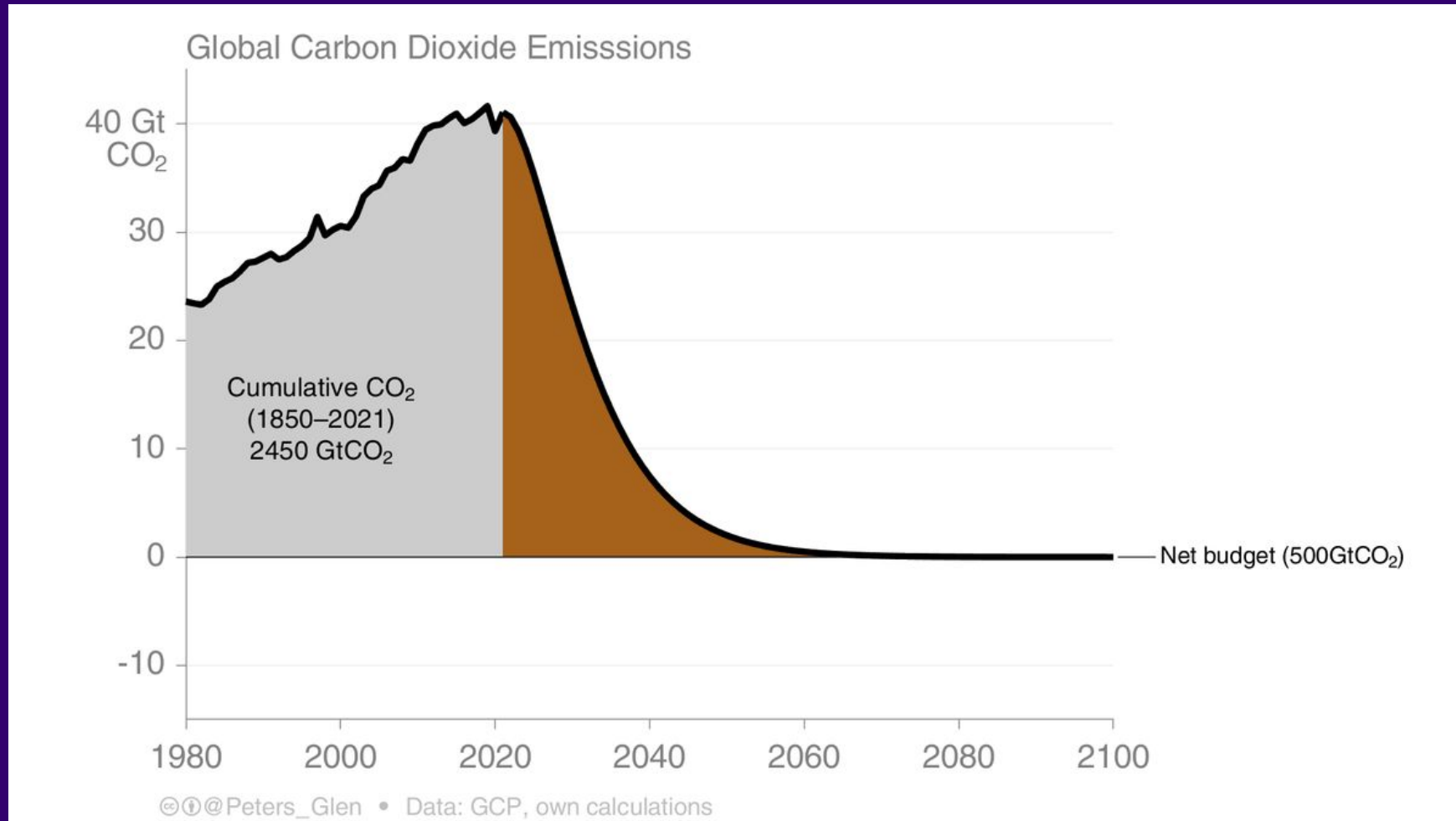


Study abroad



Athletic competition

# BUT FLYING CAUSES HARM



# SO WE NEED TO FIGURE OUT HOW TO FLY LESS

## SOURCES OF EMISSIONS



**BUILDINGS**



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**FOOD**



# WHAT DO *YOU* THINK WE SHOULD DO?

## UW ACTION

1 question

1. What would you like to see the UW do to reduce air travel emissions? (Long answer)

Please input

0/200

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# WHAT DO *YOU* THINK WE SHOULD DO?

What would you like to see the UW do to reduce air travel emissions?

## SAF

Is Sustainable Aviation Fuel a real possibility, and can UW require flights on airlines that use SAF in the future?

## Offsets

sponsor carbon offsets

consider mitigation for flying (eg, if you have to fly, you also have to purchase a carbon offset of some sort)

## Virtual/Local options

host regional conferences, facilitate zoom attendance at seminars, meetings and events

AT highest level - try and push for conferences to offer zoom

Having more conferences, workshops, etc. taken place virtually sounds like a great start to reducing air travel emissions; saves costs, time, and importantly, reducing carbon emissions

Here is an example of a flightless conference being held later this year, where the conference is organized in regional hubs:

<https://www.event2024.org/>

Provide alternatives to air travel for study abroad, or ways to mitigate carbon emissions. I work for the Global Business Center so flying is necessary for our study abroad programs.

## Data

Data tracking - make it easy for everyone to see how much they're flying. Perhaps even make this public.

Require emission / mileage tracking (eg with reimbursement) and reporting back to units so informed decisions can be made.

Post/report air miles per department annually, with trendline and comparison to other comparable departments



## WHAT ARE OTHERS DOING?

**Colorado State University (CSU):** Air Travel Offset Program

**University of California, Los Angeles (UCLA):** Air Travel Mitigation Fund

**University of California, Berkeley:** Business Air Travel Carbon Mitigation Program

**University of Oxford:** The Travel Policy & A flight levy of £30 per tonne of carbon

**University of Edinburgh:** Sustainable Travel Policy with a “Climate Conscious Travel” approach.

**University of Toronto:** Mandatory carbon offsetting program.

**University of Pennsylvania:** Purchases carbon offsets for air travel emissions

**Oregon State University:** Purchases carbon offsets

**University of Minnesota:** Encourages students studying abroad, including carbon offset programs.

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**STAY TUNED.**

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# **UW AIR TRAVEL EMISSIONS**

**Part II: May 15, 2024, 2:00-3:00**