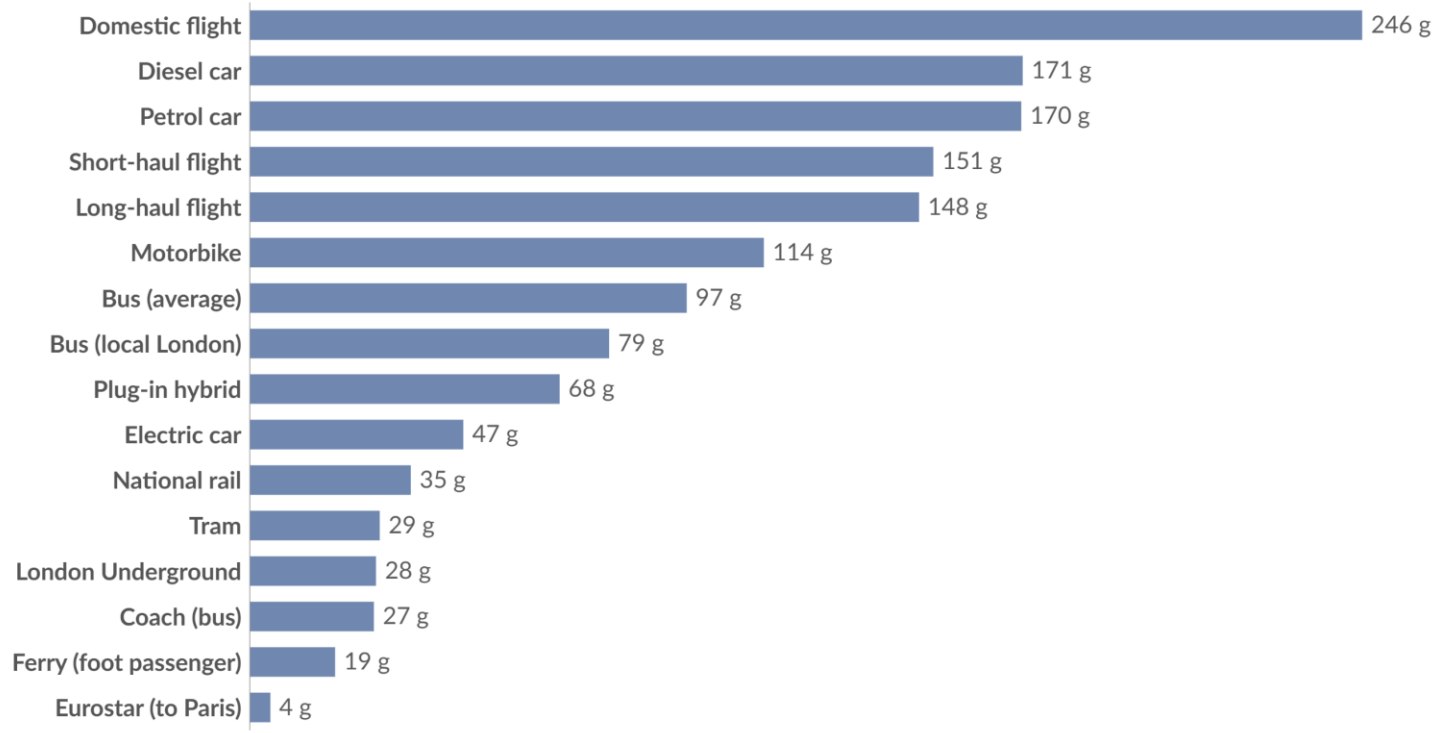
The carbon and other costs of travel

- CO2 emissions
- Biodiversity loss
- Overtourism
- Train travel is not zero carbon

Carbon footprint of travel per kilometer, 2022

Our World in Data

The carbon footprint of travel is measured in grams of carbon dioxide-equivalents[1] per passenger kilometer.
This includes the impact of increased warming from aviation emissions at altitude.



Data source: UK Government, Department for Energy Security and Net Zero (2022) OurWorldinData.org/transport | CC BY

Note: Official conversion factors used in UK reporting. These factors will vary across countries depending on energy mix, transport technologies, and occupancy of public transport. Data for aviation is based on economy class.

1. Carbon dioxide equivalents (CO_2eq) Carbon dioxide is the most important greenhouse gas, but not the only one. To capture all greenhouse gas emissions, researchers express them in "carbon dioxide equivalents" (CO_2eq). This takes all greenhouse gases into account, not just CO_2.
To express all greenhouse gases in carbon dioxide equivalents (CO_2eq), each one is weighted by its global warming potential (GWP) value. GWP measures the amount of warming a gas creates compared to CO_2. CO_2 is given a GWP value of one. If a gas had a GWP of 10 then one kilogram of that gas would generate ten times the warming effect as one kilogram of CO_2.
Carbon dioxide equivalents are calculated for each gas by multiplying the mass of emissions of a specific greenhouse gas by its GWP factor.
This warming can be stated over different timescales. To calculate CO_2eq over 100 years, we'd multiply each gas by its GWP over a 100-year timescale (GWP100).
Total greenhouse gas emissions – measured in CO_2eq – are then calculated by summing each gas' CO_2eq value.



My personal train map

- Train / ferry from home
- Plane assisted
- Booked for the future









Paris, Berlin, Leipzig, Greifswald













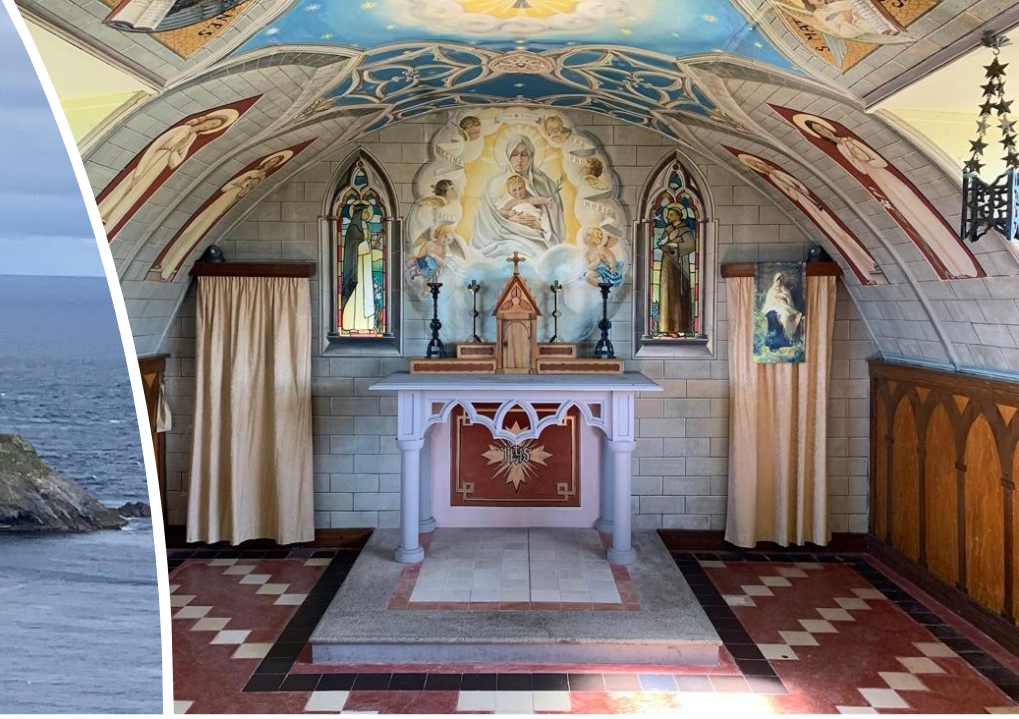


Cologne, Vienna, Salzburg, Innsbruck, Vaduz, Zurich, Aachen

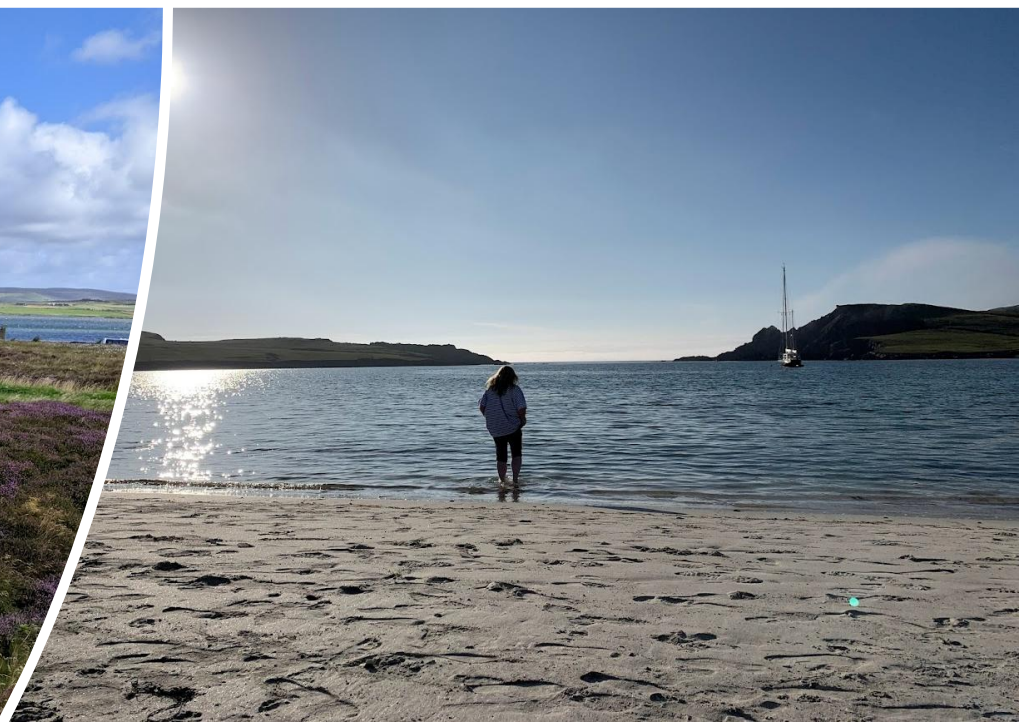
Inverness, Orkney, Shetland, Aberdeen

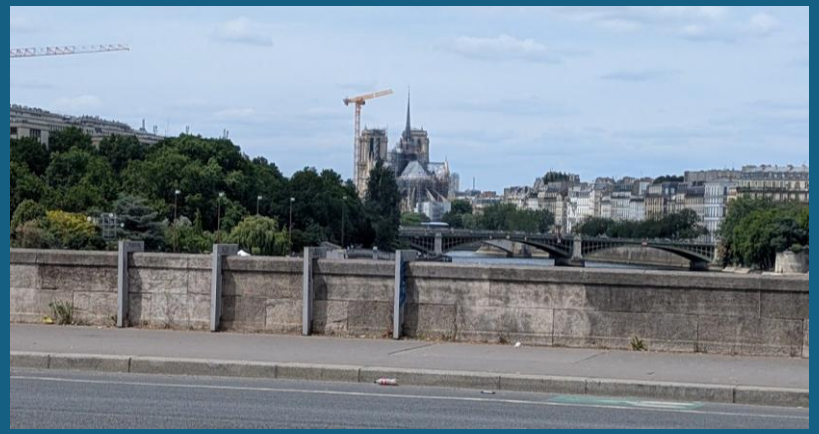
- Sleeper to Aberdeen
- Far North Line to Thurso
- Boat to Orkney
- Boat to Shetland
- Boat to Aberdeen
- Sleeper to London















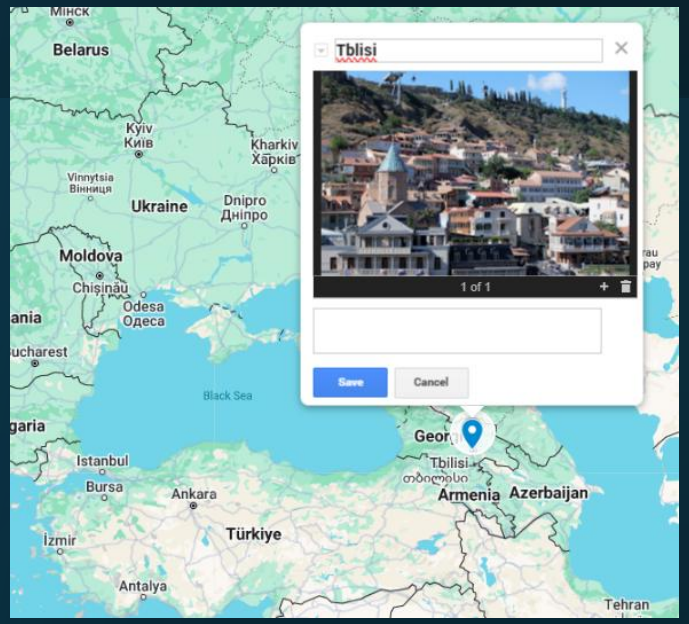


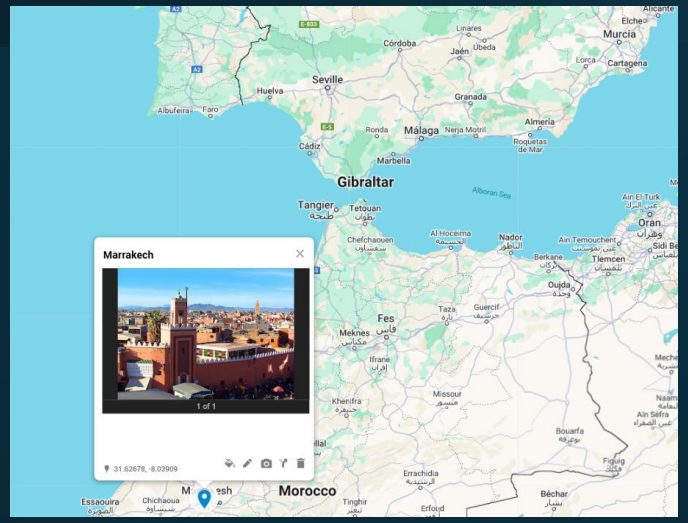


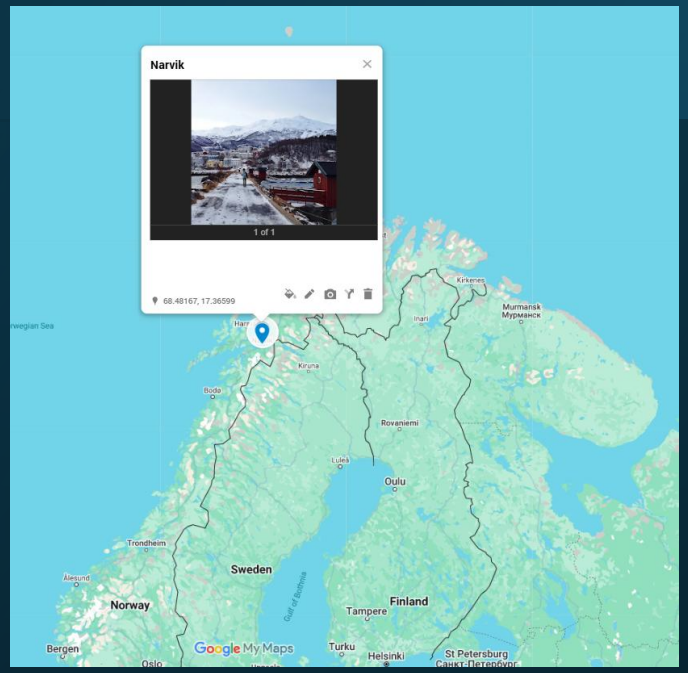


Business travel to Milan

Where is the furthest you can go?





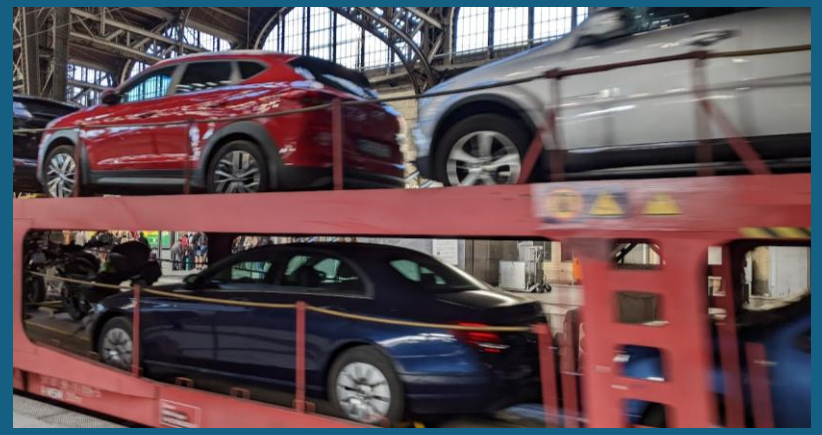














Trains are romantic, trains are fun!

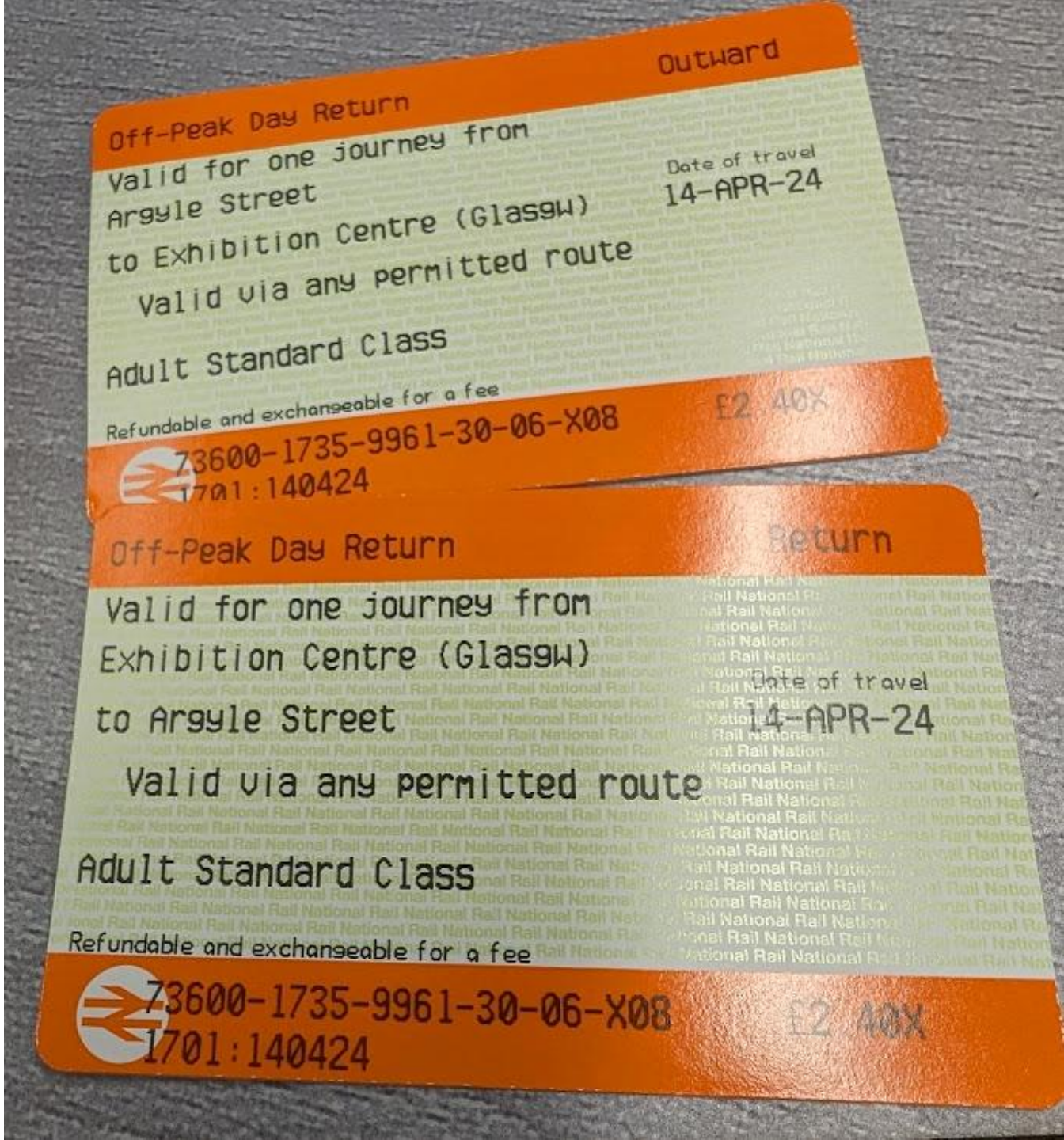


A very few practical thoughts

Booking tickets

- **Booking**
  - Eurostar
  - Deutsche Bahn
  - Booking agents e.g. Rail Europe, Trainline
  - Travel Agents

- **Rail Passes**
  - Interrail
  - Swiss Rail pass
  - Deutschland Ticket
  - British rail rovers and rangers



Links and Inspiration for travelling by train

Information and booking

- Seat 61 www.seat61.com @seatsixtyone.bsky.social
- Cross Border Rail (Jon Worth) crossborderrail.trainsforeurope.eu @jonworth.eu
- Byway Travel https://www.byway.travel/ for a fully supported itinerary (NB I have no personal experience of this company but I know some happy customers)
- Deutsche Bahn https://int.bahn.de/en buy tickets for Germany and beyond
- Interrail https://www.interrail.eu/en buy Interrail passes here
- Swiss Rail Pass https://www.swissrailways.com/en/buy-swiss-travel-pass

Fun and inspiration

- Travelling Turtle (Jo Kibble) https://www.youtube.com/@travelling_turtle @politicanimal.bsky.social
- Jet Lag the Game https://www.youtube.com/c/jetlagthegame
- Downie Live Arctic to Africa https://www.youtube.com/@DownieLive
- Steve Marsh https://www.youtube.com/@steve-marsh
- Facebook group Interrail and Eurail Travelers https://www.facebook.com/groups/InterrailTravelers
- Geoff Marshall https://www.geofftech.co.uk/