

Air travel

and why we should rather stay grounded

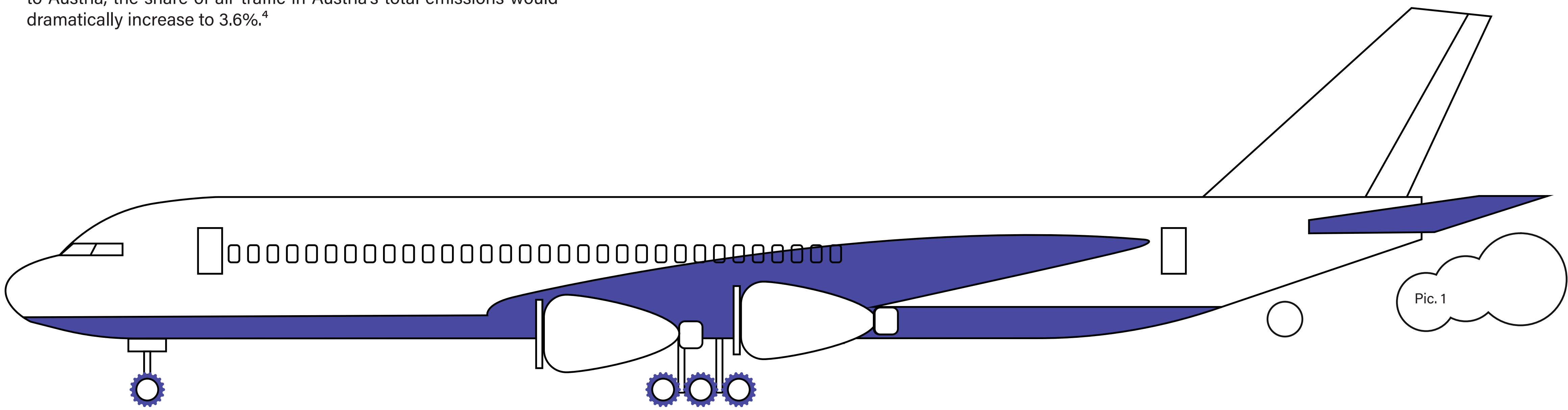
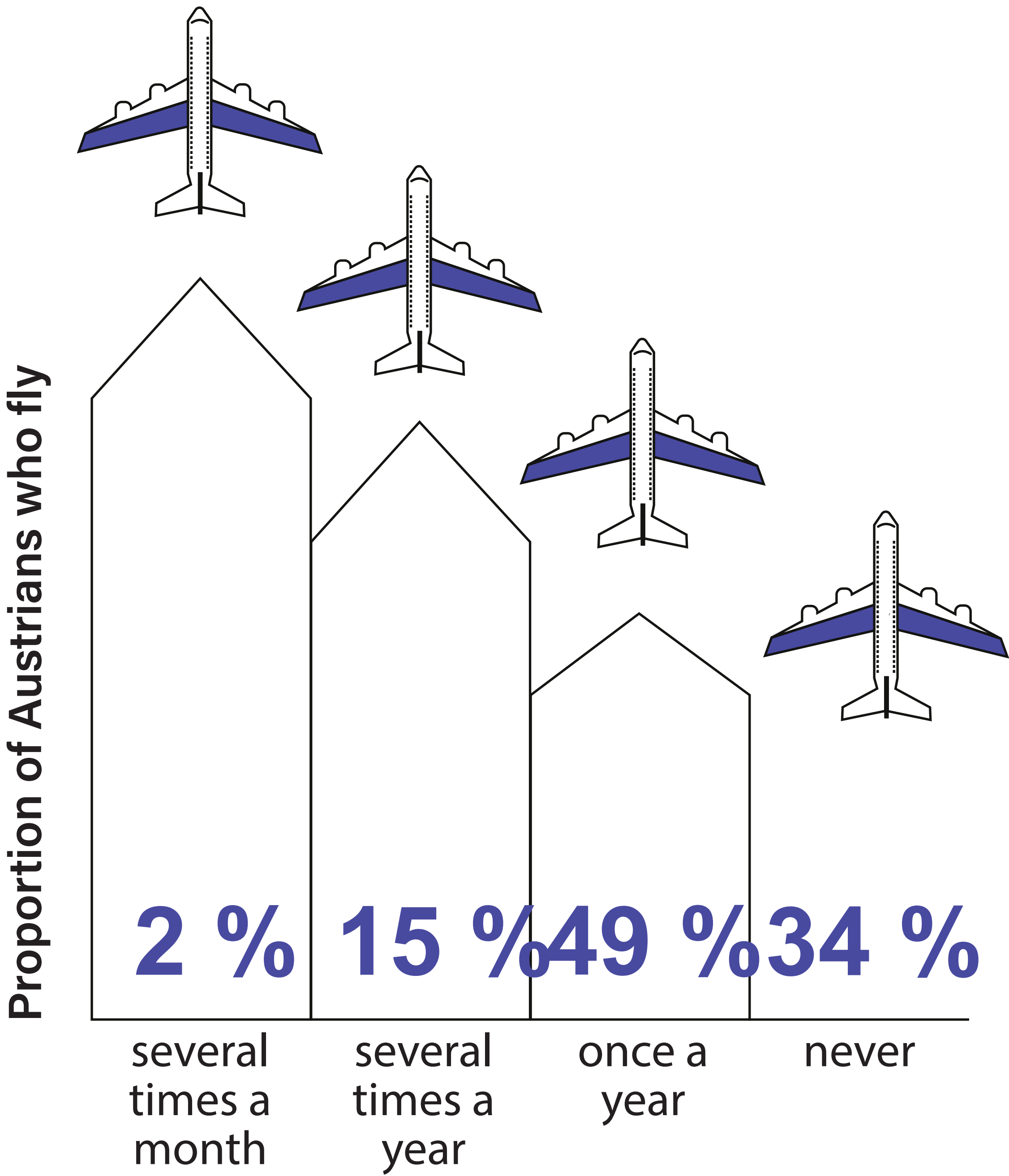
Globally, many people cannot afford a flight or do not wish to fly. In Austria, 34% never fly, and 49% only fly once a year or less. Meanwhile, 15% fly multiple times a year, and a very small number fly very frequently; 2% fly several times a month.¹ A quick weekend trip to a European metropolis has become accessible to many since the arrival of low-cost carriers, no longer a privilege of the wealthy.

A round trip from Graz to London corresponds to about one ton of CO₂ equivalent. A round trip from Vienna to New York accounts for about one-third of the average CO₂ footprint of an Austrian – but also more than three times the 1.5 tons of CO₂ equivalent that would fairly be allocated per person per year.² Flying somewhere is no longer trendy in the face of the climate crisis.

Why is flying such a problem?⁴

Let's first look at greenhouse gas emissions: Domestic air traffic accounts for 0.1% of greenhouse gas emissions in Austria.³ International air traffic is currently not attributed to any country. If one were to allocate these emissions to a country, the simplest method would be to assign the greenhouse gas emissions of a flight to the departure airport based on the fuel used. If the 2.9 million tons of CO₂ equivalent from international air traffic were attributed to Austria, the share of air traffic in Austria's total emissions would dramatically increase to 3.6%.⁴

In addition to the direct CO₂ emissions from kerosene combustion, nitrogen oxide (NO_x) emissions affect the concentrations of methane (CH₄), ozone (O₃), and water vapor in the stratosphere. Soot and sulfur particle emissions also contribute. These processes have both cooling and warming effects. Overall, however, they result in additional warming.⁵ This means that global air traffic is responsible for 3.5% of the anthropogenic greenhouse effect.⁶



CO₂

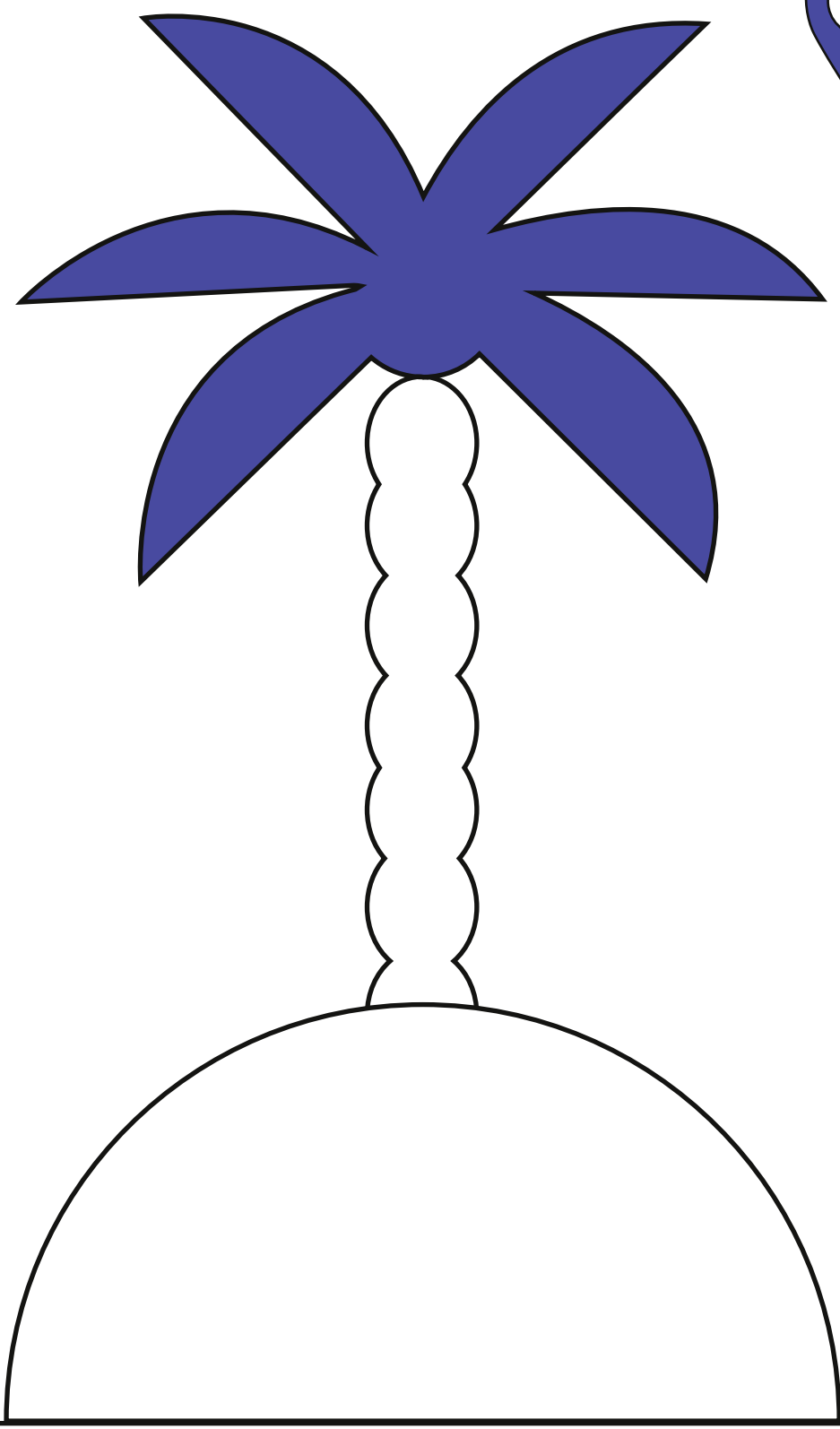
Ozone

condensation trails

Additional cloud formation

Water vapor

Soot



What can we do?

The largest share of emissions during a vacation comes from transportation – far outweighing accommodation and activities on-site.⁷ Almost two-thirds of greenhouse gas emissions from travel in Austria are caused by airplanes, only 1.3% by trains and buses. The remaining third is caused by cars.⁸ The choice of transport mode and the distance traveled are therefore crucial for greenhouse gas emissions.⁹ The most effective climate protection in this context is to stay grounded and travel by train or bus.

Choice of travel destination

The travel destination largely determines which means of transport is necessary for the journey. Within Austria, almost all holiday regions can be reached by public transport. Where regular routes are not available, there are often micro-transport systems or (call) taxis. Popular holiday destinations by the sea or cities are also well accessible by train and bus.

A

Bus & train

B

Car

C

Airplane

Longer stays

Those traveling to destinations that cannot be reached by train or bus should consider extending their stay at the destination. This allows for a better exploration of a country or city. Naturally, it would be climate-friendly to avoid using a car locally. Longer stays can also be facilitated for business trips within Europe – not only for flights – to offset travel by train or bus, for example.

Short-haul and connecting flights

Short-haul flights are an unnecessary burden on the climate because viable alternatives exist. About 35% of all flights from Vienna-Schwechat in 2019 were shorter than 800 km.¹⁰ Connecting flights (e.g., from Graz via Vienna) are particularly avoidable thanks to railway expansion.

How can your company take off in terms of climate protection?

Frequent flyers are primarily business travelers.¹¹ In this regard, significant amounts of greenhouse gases can be saved. Companies can set reduction targets. Corporate mobility management favoring train/bus over flights can support this. First-class tickets or private compartments in sleeper cars, with costs covered, can be established as the standard. Within Austria, it could also include (subsidies for) the Climate Ticket. Flying could also be made more expensive internally.

Revenue from such measures could subsidize climate-friendly modes of transport. Additionally, non-reimbursement of flight costs could be an option if alternative travel methods are reasonable. Such and other measures have, for example, been adopted by Graz University of Technology.¹²

As an alternative to business travel, the use of digital communication tools can be further expanded. Switching to online meetings has already become standard practice in many sectors and is significantly more climate-friendly than flying.

