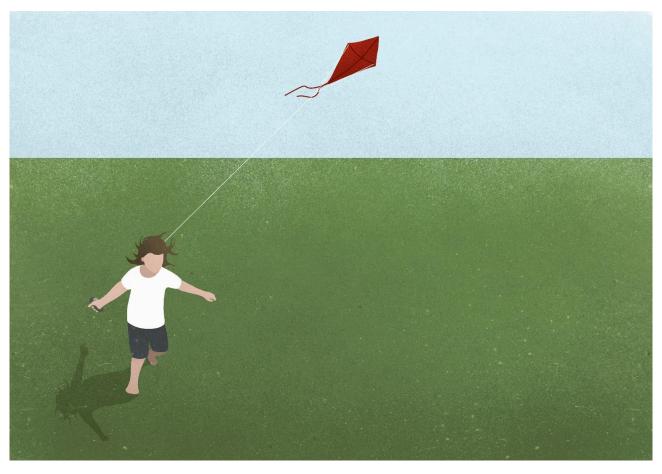


# **Factsheet 3: Staying grounded**



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Whether it's for a holiday or a business trip, boarding an airplane has become an everyday occurrence for many people. How can we change the way we think about lying? How do we turn an everyday occurrence to something special that happens less often? To eschew flights and bolster alternatives? And what voices are campaigning for us to fly less?

# Better to stay grounded! This has many facets for us:

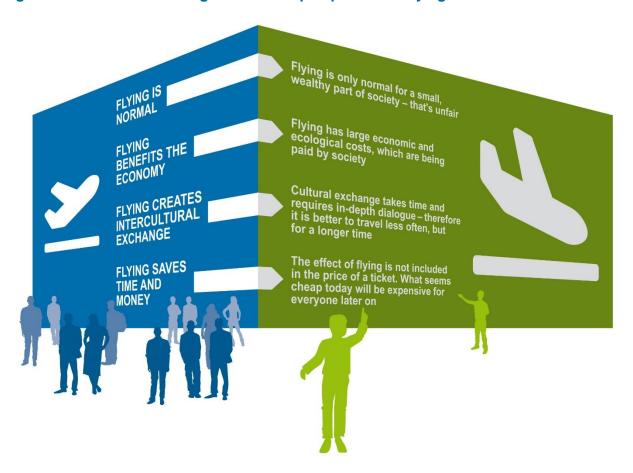
We address myths about flying and suggest alternative perspectives. We tell stories of people who have decided to fly less or even to stop flying altogether. We discuss how digital technologies could make some business trips unnecessary and show motivating examples of companies that incentivize their employees to travel differently. We show what every individual can do in day-to-day life to ensure more sustainable mobility. We analyze what needs to be done in freight transport and with a view to air freight. We present global protest movements against rising air travel, the expansion of airports and their impacts on the climate and the environment.

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# 1 Re-thinking – a different perspective on flying

Figure 1: Re-thinking – a different perspective on flying



Source: Oeko-Institut 2020

The norms and discourses about flying that we encounter every day have established a positive image of flying in our minds. These "mental infrastructures" act as habits to which we orient ourselves and which guide our thoughts and actions. What alternatives are there to these established discourses and how can we orient ourselves more strongly to them?



→ This is not true – flying is reserved for a small group of privileged people. Even in Germany, 6% of the population rarely or never fly, and for low-income groups, the figure is as high as 83% (Infratest dimap 2019). Only a small share of human beings has sat in an airplane. How often people fly depends strongly on their income. Therefore, the subsidies for aviation mainly benefit people with high incomes, who fly more than people with lower incomes (see factsheet 2) (Gössling et al. 2019).

## Flying creates economic value.

→ This is only partially true. The opportunity to fly creates economic value in many ways. However: the economic and environmental consequences of climate heating for large numbers of people in the world are disastrous. In addition, flying is highly subsidized compared to other modes of transport (see factsheet 2).

Flying is to be supported in principle - it is desirable to fly and morally valuable, because it contributes to cultural exchange, good economic relations, and the expansion of personal horizons; many social and economic relations simply occur over long distances.

Advertising presents flying as the key to happiness, exciting experiences, recreation....

→ We should question flying as a social norm. If we see climate protection and a moderate personal environmental footprint as a criterion for responsible and ethical action, the positive image of flying crumbles. In addition, terran travel and being on the move - that is, down-to-earth movement without airplanes - often leaves more time to engage with the places where we are. It also lends itself to visiting interesting places on the way from A to B that are otherwise only flown over. Slow travel can contribute more to intercultural understanding than a fast flight to a distant destination. For social relationships over very long distances, we will continue to depend on airplanes in the future. With the aim of acting more environmentally, we should always consider in which cases we can make long journeys less frequently and stay longer in one place.

People choose to fly for good, rational and understandable reasons because it is cheaper, faster, more convenient and more efficient.

→ This perspective is supported by cheap flights, incentives for frequent flyers and discourses on economic development and intercultural communication. Of course, no one wants to miss out on getting to know the world. But at the same time, a framework must be set for our transport behaviour from an ethical perspective. We don't have to be ashamed of every flight per se, but we should personally weigh up whether flying is necessary for us and whether the benefit of a flight is greater than the harm done to the climate. It is challenging to decide to fly less. At least for longer distances, the alternatives are more expensive, more uncomfortable, take longer, and you may have to substantiate them to friends or colleagues. But: for many journeys there are good alternatives. For short and medium distances, rail travel is now almost as fast. Relaxation can also be found in slower travel to destinations that are not as far away: a train journey can already bring about moments of relaxation as well as time for reading, thinking, playing and talking; it also offers more space than a cramped airplane. A train journey also provides the opportunity to work longer and with less disturbance because no check-in procedure is necessary and electrical devices like laptops cannot be used continuously on the plane.

Ultimately, policymakers bear a great deal of responsibility for implementing climate protection and adjusting the relevant parameters. Only political regulation sets rules for everyone and does not leave our actions to personal moral judgment alone. Nevertheless, individual action and political regulation influence each other. Without clear signals from society that many people are in favour of rules for more climate protection and are prepared to change their behaviour, politics will barely change.

# Re-thinking transport behaviour

As long as politicians do not act, we must do something voluntarily. To do this, we need to question established patterns of thought and action. There are movements that are trying to establish alternative discourses and anchor alternatives more firmly in our minds. The association terran e.V., for example, is committed to spreading the concept of "grounded" travel.

Terran: Travelling grounded, down-to-earth, without an aeroplane.

The debate about flight shame has prompted people to re-think their transport behaviour and increased social awareness about the climate impact of flying. In Germany, it almost certainly contributed to a significant reduction in the number of domestic flights in 2019. The same can be observed in Sweden. This is not just about flying per se. It is also about the reasonableness of taking a flight in terms of the distance traveled, the reason for the trip, and the frequency with which a person boards a plane (ISOE 2020).

In addition, our personal behavior influences other people because it is a first sign of possible change. In a study conducted by Cardiff University, for example, half the people surveyed said they had changed their flying behaviour because someone in their circle of acquaintances had given up flying altogether for climate reasons (Westlake 2017). Another study concludes that researchers with a low environmental footprint are perceived as more credible because they fly less than those with a high footprint (Attari et al. 2016).

At the same time, we should not focus the debate about the future of air transport on personal renunciation. While flying is a privilege for a minority of the world's population, it is also a privilege to be able to choose not to fly if one can pay more for other modes of transport, if family members live

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nearby and do not have to move far away to look for work, and if one's passport is not an obstacle to cross-border journeys. Those who have this privilege should take advantage of it but should not pass judgment on others' occasional flights.

### 2 Personal stories

We asked around and talked to some people who have decided to fly less. For them, the alternatives they have found are not a sacrifice, but a gain. And they show us how we can change our perspective on flying.

"I wouldn't think of flying on holiday - where would I get the right to do that? Train, bus, bike, hiking shoes and very rarely a ferry are enough."

---- Niko Paech, professor, growth critic (link to interview)

"When I hear I have to fly somewhere for something, I don't even have to think about whether I'm going to do it and how I'm going to arrange it all with a small child, so I avoid that stress and can spend more time with my family."

----- Britta Steffen, swimmer, businesswoman (link to interview)

"I don't want to be responsible for any more harmful CO<sub>2</sub> emissions than necessary, and I also want to be consistent with others in my environmental commitment."

---- Josephine Löwenstein, limnologist, yoga teacher (link to interview)

"I'd make an exception if, as a result of the flight, e.g. by participating in a specific project, I can make a greater contribution to climate protection than I cause damage to the climate by flying."

---- Veit Bürger, researcher, energy expert (link to interview)

"The journey can become the destination when you travel only by land and water [...] Recreation and adventure can be had without getting on a plane. For grounded, so-called "terran" alternatives, it takes time and a little courage to try something new. Travelling sustainably now is the basis for be-ing able to travel at all in the future."

----- Patrick Allgaier, world traveller, filmmaker (link to interview)

The complete interviews are available on the webseite <a href="www.fliegen-und-klima.de/en\_index.html">www.fliegen-und-klima.de/en\_index.html</a> zu finden.

# More stories of people who have travelled long distances without taking off:

• <u>Travelling the world without flying</u>: Gwen and Patrick from Freiburg, Germany, travelled the world for three years without taking off.

- <u>Eins2frei</u>: Leo and Sebastian travelled for one and half years and crossed the Pacific in a container ship.
- <u>Blown Away</u>: Ben and Hannes are musicians and travelled the world by bus and sailing vessel.
- <u>Berlin to Canberra</u>: Our former colleague Graham Anderson reports on travelling by land from Germany towards Australia.

# 3 Business trips: Initiatives of companies and institutions to avoid air travel

Around one third of outbound flights in Germany are business trips (DLR 2020). The share of business trips in domestic flights is also particularly high at 65% (BDL 2018). The number of business trips has also grown strongly in recent decades. According to the German business travel association (VDR), business travel in Germany increased by around 8% between 2014 and 2018 alone (Verband deutsches Reisemanagement e.V. 2019).

### 94% fewer emissions - due to video conferences

Virtual meetings in the form of video conferencing can reduce the emissions associated with business travel. If a five-hour video conference replaces two trips of 1,000 km and 5,000 km by plane, at least 94% of the emissions are saved, depending on the technology used (Ong et al. 2014).

The use of digital communications has also increased significantly over the past decades, however. Digital technologies alone are not enough to reduce the number of business trips. This is because their availability simultaneously enables contacts and induces new business trips (Borderstep Institut 2019). Nevertheless, video conferencing naturally remains a more environmentally-friendly way of going about this.

# Rules and approaches for companies to avoid aviation emissions

Companies, too, need to rethink their approach to climate protection and review the need for travel. The Covid-19 pandemic offers a good opportunity to do this.

There are several rules or approaches that companies and institutions can use to incentivize flight-free travel of their employees:

- Some companies and institutions give their employees extra holiday time if they holiday
  without travelling by plane. Examples include the email provider posteo and the Berlin-based
  cooperative Weiberwirtschaft (Tagesspiegel 2019; posteo 2020).
- Some companies and institutions go even further. For example, they have banned shorthaul flights by their employees: The Berlin University of Applied Sciences (HTW) and the Eberswalde University for Sustain-able Development, for example, have taken this measure. Some companies and institutions no longer reimburse the costs of short-haul flights. This applies, for example, to the SFB 1287 research unit at the University of Potsdam or the Institute for Energy Technology at the HSR University of Applied Sciences Rapperswil in Switzerland (Scientists for Future 2019). Employees of Deutsche Telekom and Deutsche Bahn are also no longer allowed to book airline tickets for short domestic routes that can be easily done by train. Overall, however, the willingness among Dax companies to forgo flights is rather low (Zeit Online 2019; Süddeutsche Zeitung 2020).

- New technical possibilities for video-conferencing and virtual collaboration also offer opportunities to avoid travel and conduct meetings digitally. The Covid-19 pandemic has significantly accelerated this trend. Examples of conferences that have been held virtually and included not only substantive presentations but also a social program such as joint yoga classes, concerts and shared drinks at the end of the day or open, informal discussion groups with speakers for in-depth, personal exchange include the <a href="Berliner Energietage">Berliner Energietage</a> and IST 2020.
- In 2019, scientists from Scientists for Future in Germany launched a campaign to voluntarily refrain from short-distance business trips by air. More than 4,000 scientists signed the campaign "<u>Under 1,000 km, I won't do it</u>".
- As of January 2020, the German Federal Business Travel Act no longer situates the price
  of a trip as the most important criterion. Federal employees can now travel by train, even if
  the trip costs more than a flight. Such a rule should also be introduced in business travel
  regulations for other employers in order to set the right incentives.

For every business trip, it should be weighed up whether there are alternatives to air travel: Can the meeting take place virtually as a telephone or video conference? Is it possible to travel by train, which might even allow more time to work during the journey than would be the case when travelling by plane? There are many opportunities for climate protection here as well.

### 4 What can I do?

What can we change in our everyday life and actions to contribute to more sustainable travel and to work towards a change in the political framework? Here we want to show ways in which we can travel more sustainably. Rethinking how we are mobile can also mean being less mobile overall. In the end, of course, it is always up to each individual to decide what is reasonable.

### 4.1 Holidaying differently

Global tourism is responsible for large quantities of greenhouse gas emissions, largely caused by people from rich countries. Travel by air is the most important factor (Lenzen et al. 2018). But we can holiday differently!

For this, we need to re-define our understanding of holidays and address the following questions:

- Where could I relax that is accessible by other modes of transport than flying?
  - For example, <u>scuba diving in Apostelsee in Baden-Württemberg</u>? Or climbing on the <u>Soonwald trail</u> with an <u>overnight stay in a tree house</u>? Or renting a <u>houseboat in Hamburg</u>?
- Can I satisfy my need for adventure, recreation, exchange or education through new activities and other forms of holiday that do not require long-distance travel?
  - Our list of ideas for alternative holidays: hiking, canoeing, adventure parks, sport courses (surfing, dancing, horseback riding, climbing, cycling, yoga, sailing), adventures such as paragliding, farm vacations for families, discovering adventure worlds (virtual reality games, knight games, visiting centre parcs), visiting festivals, regional cultural festivals, donkey trekking, covered wagon rides, renting a camper, bike tours, wine tasting, working in a sustainable project, e.g. reforestation in forest areas, archery, pottery making, beekeeping, learning Italian or photography.... e.g.

reforestation in forest areas, archery, pottery, beekeeping, learning Italian or photography...

A motto for more climate-friendly holidays could be "travelling instead of flying". Slow, grounded travel creates more space for encounters than fast air travel. For trips to distant destinations, we should consider whether we can travel less often and stay longer.

In a 2019 survey by the European Investment Bank (EIB), 36% of European respondents said they already fly less often for holidays for climate reasons. 75% said they would do so in 2020 (EIB 2019). To rein-force this trend, good alternatives for destinations that are closer to home need to become better known. Sustainable tourism has to be cool.

There are already a plethora of operators and platforms that support this:

- Tour operators for sustainable tourism:
  - o Forum anders reisen: association of sustainable holiday operators
  - o Alpine Pearls: environmentally-friendly holidays in the Alps
  - Renatour: journeys throughout Europe for families, hiking fans and people who want to take a break in nature
  - More providers for travelling without flying can be found on the <u>fluglos-glücklich</u> website
- Portals for sustainable accommodation:
  - Wirsindanderswo.de: extensive information on sustainable travel
  - Good Travel: special sustainable accommodation for different kinds of holiday in Europe
  - Bookitgreen: environmentally-friendly accommodation around the world
  - Bookdifferent.com: environmentally-friendly holidays
  - <u>Fair unterwegs</u>: information portal for fair travel
- Home exchange, e.g. via GuestToGuest, Haustauschferien, Homelink International, Intervac
- Apps and providers of non-aviation transport:
  - Gleisnost in Freiburg: travelling by train to different countries, tips for different kinds of journey (city breaks, adventure trips, nature holidays...)
  - Kopfbahnhof in Berlin: travel agency that specializes in rail travel
  - <u>Die Bahnfüchse</u> in Berlin: travel agency that specializes in rail travel
  - Traivelling: online booking of rail travel around the world
  - The Trainline: plan and book rail travel in Europe
  - Seat Sixty-One: online assistance for booking rail journeys around the world
  - Rome2Rio: online tool for finding connections with different modes of transport around the world

https://www.langsamreisen.de/: adventure holidays without travelling by plane

# Environmentally-friendly alternatives – on holiday and in everyday life

To truly travel sustainably, more aspects are important than just the mode of transportation used to get to a there. A few thoughts on this can be found in <a href="this article">this article</a>. If we have a good experience on sustainable holidays, we can also contribute to shaping the discourse about more climate-friendly travel. The more we spread the word about greener alternatives, the more compelling and established they can become.

Even outside of our holidays, there are ways to travel more sustainably and fly less. For example, students can help to make their **class trips** more sustainable. EPiZ Berlin has compiled a list of tips on how to do this <u>here</u>, and specific travel tips and offers are available from <u>Naturfreunden</u> or <u>WWF</u>, for example.

# 4.2 Night-time alternatives

For those wanting to protect the climate, night trains are a perfect alternative to flying on journeys of 600 to 2000 kilometres. For distances that could potentially be covered by night trains, according to a study, the average emissions from flying are 190 to 215 g CO<sub>2</sub> per passenger kilometre. If the indirect climate-damaging effects are also considered, the climate-damaging effect is currently even about three times as high on average (see factsheet 2). By contrast, rail emissions are only 15 to 45 g CO<sub>2</sub> per passenger kilometre, i.e. six to ten times less CO<sub>2</sub> arises per passenger kilometre (UIC 2013). If the electricity for the trains comes from renewable energies, they even run practically CO<sub>2</sub>-free. In addition, night trains run at times when there are fewer bottlenecks on the routes. Additional night trains therefore do not require any new infrastructure and could contribute relatively quickly to the necessary reduction in transport emissions by 2030.

# Night trains - services reduced and expanded again

Unfortunately, Deutsche Bahn (DB) discontinued all night train services in 2016, however. France also greatly reduced its night train network in 2013 and 2017 (Fraunhofer ISI et al. 2017). But there are also changes that offer a more optimistic outlook. For example, Austrian Federal Railways (ÖBB) has taken over Germany's night trains and many of its routes. The Swedish government also announced in 2020 that it will provide funding for new lines connecting Stockholm and Malmö with Hamburg and Brussels from 2022 (Euractiv 2020). The French transport minister has also pledged new night train services. Furthermore, a new night connection between Brussels and Vienna has been running since 2020. The eastern EU countries Slovakia, the Czech Republic, Hungary, Slovenia and Croatia have also been served by a new night train service since June 2020. In Switzerland, new routes are also being considered. The Dutch railway plans to operate a night line from Amsterdam to Nuremberg and Vienna starting in December 2020. In Germany, the U.S. company RDC has been operating the new Alp-Sylt night express since 2020. However, all these new launches have been particularly difficult due to the Covid-19 pandemic. It is to be hoped that they will become permanently established despite the pandemic.

# 4.3 Potentials of night trains

Night trains are currently used more for city trips on vacation than for business trips. For the latter, night trains are an alternative if they depart between 7 p.m. and 11 p.m. (i.e. after the last flights have taken off) and arrive between 7 a.m. and 9 a.m. the next day. According to a study by

international rail operators, the western corridor in Europe, i.e. London-Madrid and Amsterdam-Madrid, an axis from Spain via Paris, Amsterdam and Brussels to London, and the southern corridor in particular have high potentials for competitive operation compared with flying (UIC 2013). In a study conducted for the German Ministry of Transport, Fraunhofer ISI calculated a CO2 reduction of approx. 50 kilotons CO2 per year and a maximum of 100 kt CO2 per year in a realistic scenario for seven night train services (Fraunhofer ISI et al. 2017). However, if night trains were expanded more widely, their climate protection potential would also substantially increase: Transport & Environment calculates that the potential CO2 reduction of 30 new night train services amounts to 13 Mt CO2 per year (T&E 2020).

Without government support and with simultaneous subsidization of air travel, cross-border night trains can often barely be operated profitably. This is because there are a number of obstacles that need to be overcome in order to create and use the climate-friendly alternative to flying at night and during the day. These include, for example, excessively high track access charges, a lack of political will, and a lack of technical compatibility and infrastructure for cross-border train services.

# 4.4 Less flying after Covid-19?

In the wake of the Covid-19 pandemic, air travel unexpectedly plummeted (see factsheet 1). Suddenly, a lot of people were forced to find alternatives to travelling by plane. What can we learn from the Covid-19 crisis in terms of transport? Where are we already independent of flying?

According to a forsa survey carried out by the German Federal Environmental Foundation (DBU), 86% of respondents are in favour of organizing meetings and conferences more by video or telephone, even after the Covid-19 crisis. Almost three quarters of the citizens believe that work should increasingly be carried out from home in the future (DBU 2020).

So there seems to be a lot of support for reducing business travel. In summer 2020, 80% of citizens in Germany wanted to avoid flying for both holiday and business. This was due to the fear of contracting the Covid-19 virus as well as the travel restrictions still in place (Zeit Online 2020).

### New behaviour patterns, eco-friendly alternatives

We made the experience at Oeko-Institut in 2020 that co-operations work very well even without business trips and physical meetings. Of course, not every meeting can be replaced by a video conference. But what we learn from the Covid 19 pandemic can influence our travel behaviour in the long term.

The unprecedented circumstances of the pandemic can help us rethink our behaviours and experiment with more climate-friendly alternatives. Positive experiences with holidaying by car or train that we would not have made under "normal" circumstances may lead us to continue to behave differently after the pandemic ends (see also Gossen and Ziesemer 2020). At the same time, the forced deceleration can also lead to isolation and less participation. Perhaps the urge to travel long distances will be all the greater after the pandemic ends. In which direction the development will go cannot be foreseen in the fall of 2020. Let's hope that the crisis will be used as an opportunity for more eco-sufficiency.

### Links to further information

 Tips for sustainable holiday travel from the German Federal Environment Agency: <a href="https://www.umweltbundesamt.de/umwelttipps-fuer-den-alltag/garten-freizeit/urlaubsreisen#unsere-tipps">https://www.umweltbundesamt.de/umwelttipps-fuer-den-alltag/garten-freizeit/urlaubsreisen#unsere-tipps</a>

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- VCD guidelines for sustainable business trips: <a href="https://www.vcd.org/themen/tourismus/geschaeftsreisen/">https://www.vcd.org/themen/tourismus/geschaeftsreisen/</a>
- More tips for soft tourism:
  - o <a href="https://utopia.de/ratgeber/sanfter-tourismus-urlaub-reisen-tipps/">https://utopia.de/ratgeber/sanfter-tourismus-urlaub-reisen-tipps/</a>
  - Fairunterwegs.org
  - https://www.wirsindanderswo.de/themen/urlaub-sanft-mobil/
- Blog Postwachstum: Die Corona-Krise als (positive) Suffizienzerfahrung? <a href="https://www.postwachstum.de/corona-krise-konsumreduktion-als-positive-suffizienzerfahrung-20200325">https://www.postwachstum.de/corona-krise-konsumreduktion-als-positive-suffizienzerfahrung-20200325</a>

# 5 What can be done in freight transport?

Air freight transport forms part of global aviation (see factsheet 1). The fastest way to transport goods is by plane; however, due to the high costs of air freight, companies are al-ready very interested in circumventing this mode of transport and using others wherever possible. There are several ways to do this:

- The most effective option seems far away in our globalized world with supply chains with multiple branches: companies can optimize these in such a way that they are more strongly geared to regional production and preference is given to regional suppliers and vendors. This would reduce not only air freight, but also freight traffic overall. In addition, optimized planning and (re-)introduction of warehousing, for example of spare parts, can help to avoid situations in which particularly fast delivery is required.
- Freight forwarders and logistics companies can improve the processes and monitoring of temperature-controlled transport by sea to ensure that the temperature always remains within specified parameters throughout the transport chain.
- Optimizing packaging can reduce the weight and volume of goods. The use of lightweight
  materials can also reduce the weight of transport containers. While this does not keep the
  goods on the ground, it does reduce the amount of unnecessary weight transported over long
  distances.
- Companies can also draw on alternatives to solely using aviation for deliveries that are time-sensitive but do not need to be in the destination country within a few days. In recent years, for example, freight train traffic between Germany and China has steadily increased. The first train started from Beijing to Hamburg in 2008; in 2017, there were 3,600 eastbound and westbound trains, and in 2018, there were already 6,300 eastbound and westbound trains. Nearly 10,000 trains are forecast for 2030 (TRANSA Spedition GmbH 2020). With rail, the transit time can be significantly reduced compared to maritime transport for example, from China to Duisburg by 12 to 15 days but it is significantly higher than that of air freight services.
- In addition to rail transport, it is also possible to combine air and maritime transport of goods.
   In this case, the goods do not remain on the ground, but are flown over a shorter distance.
   For example, freight can be transported from China to Dubai by ship and then flown to Germany, which almost halves the distance flown.

Not only companies have the power to reduce air freight; consumers can also help ensure that as few flights as possible are taken. Perhaps a single rose might be enough on Mother's Day? Maybe the cell phone or game console doesn't need to be replaced just yet? Maybe the laptop can be repaired rather than replaced? Maybe we could eat more regional produce instead of exotic food flown in from abroad? A tax on air freight would also help reduce the consumption of goods transported by plane.

## **Cut flowers from Africa**

A large share of the roses imported to Germany today come from Africa. In 2019, for example, over 300 million roses were imported directly from Kenya to Germany (Statista 2020). To ensure that the flowers bloom for a long time after purchase, it is important that the cold chain is not interrupted along the entire way and that the temperature is about 3°C. The roses are ordinarily transported by cargo plane and reach Germany after about two days and 8,000 km. After four days at the latest, the roses should be in the supermarket (DVZ 2016).

Some companies have tested alternatives: transport by container ship. This takes 25 days, is carried out at 0.5°C, but is not suitable for all rose varieties. This can reduce freight costs and green-house gas emissions. It is also possible, of course, to avoid air freight transport when the roses are grown in Europe. This can reduce transport-related greenhouse gas emissions. However, significantly higher emissions may result from agricultural production than is the case with imported roses (Treeze 2018).

### 6 Protest movements

Many civil society voices around the world are campaigning for less air traffic. Through protest actions, people are trying to prevent the expansion of airports and promote more climate-friendly alternatives.

One important network of civil society organizations in this regard is <u>Stay Grounded</u>, which unites more than 160 organizations and NGOs, groups and projects that advocate for transport alternatives and/or fight for climate justice. In a <u>position paper</u>, the network shows how global air transport is directly linked to the issue of climate justice. Stay Grounded not only wants to reduce global air traffic, but also to clarify problematic aspects of offsetting (see factsheet 4) and biofuels (see factsheet 5). For this purpose, the initiative connects people who are directly affected by the negative impacts of aviation or who fight for global climate justice on other levels.

A <u>world map</u> provides a closer look at the specific protest actions and conflicts. In India, for example, the network supports the protest of farmers who see their livelihood threatened by the planned expansion of Karad Airport. In 2019 the protest achieved its first successes. In France, farmers and environmental activists successfully protested the construction of an airport in Notre Dame; the site became known as ZAD (Zone à défendre).

Stay Grounded acts as an umbrella organization for local groups, the majority of which are active in Europe. In Germany, members include <u>Am Boden bleiben</u>, <u>Attac</u>, <u>terran e.V.</u> and <u>Explane</u>. In addition, many other NGOs and movements from climate and environmental fields, such as <u>BUND</u>, <u>Greenpeace</u> and <u>Fridays</u> for <u>Future</u>, are calling for a reduction in air traffic. The organization <u>Back</u>

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on Track is also lobbying rail operators and governments to expand the night train network; and the alliance "loving the atmosphere" is calling for fewer business trips by air.

The project "Flying high or staying grounded? The relation between aviation and climate protection" has been financed through donations. All information is available on the website <a href="www.fliegen-und-klima.de/en\_index.html">www.fliegen-und-klima.de/en\_index.html</a>.

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The Oeko-Institut is one of Europe's leading independent research and consultancy organisations working for a sustainable future. Founded in 1977, it develops principles and strategies for realising the vision of sustainable development at global, national and local level. The institute is based in Freiburg, Darmstadt and Berlin.

### 7 References and links to further information

- Attari, S. Z.; Krantz, D. H.; Weber, E. U. (2016): Statements about climate researchers' carbon footprints affect their credibility and the impact of their advice. In: *Clim.Change* 138 (1-2), S. 325–338. DOI: 10.1007/s10584-016-1713-2.
- BDL (2018): Wofür braucht es innerdeutschen Luftverkehr? Available online at https://www.bdl.aero/de/publikation/wofuer-braucht-es-innerdeutschen-luftverkehr/.
- Borderstep Institut (2019): CliDiTransWerkstattbericht 3-2: Wege zu einer neuen Konferenzkultur. Reisen erschweren Teleconferencing entwickeln. Available online at <a href="https://www.borderstep.de/wp-content/uploads/2020/01/AP3-2Reisen-und-Konferenzkultur27-01-2020-1.pdf">https://www.borderstep.de/wp-content/uploads/2020/01/AP3-2Reisen-und-Konferenzkultur27-01-2020-1.pdf</a>.
- DBU (2020): DBU-Umweltmonitor: Bürger halten Klima-Krise langfristig für gravierender als Corona-Krise. Available online at https://www.dbu.de/123artikel38644\_2362.html.
- Deutscher Speditions- und Logistikverband e.V. (2013): DSLV. Berechnung von Treibhausgasemissionen in Spedition und Logistik gemäß DIN EN 16258. Available online at <a href="https://www.dslv.org/dslv/web.nsf/gfx/8F102DF8C3E4A2F141257BB7007779CB/\$file/DSLV-Leitfaden%20Berechnung%20von%20THG-Emissionen%20Stand%2003-2013.pdf">https://www.dslv.org/dslv/web.nsf/gfx/8F102DF8C3E4A2F141257BB7007779CB/\$file/DSLV-Leitfaden%20Berechnung%20von%20THG-Emissionen%20Stand%2003-2013.pdf</a>.
- DLR (2020): 2020 weniger Urlaubsflüge ab Deutschland. Available online at <a href="https://www.dlr.de/content/de/artikel/news/2020/01/20200302\_touristischer-luftverkehr-schrumpft.html">https://www.dlr.de/content/de/artikel/news/2020/01/20200302\_touristischer-luftverkehr-schrumpft.html</a>.
- DVZ (2016): Die Reise der Rosen, Deutsche Verkehrszeitung. Available online at <a href="https://www.dvz.de/login.html?redirect\_url=/rubriken/logistik/detail/news/die-reise-der-rosen.html">https://www.dvz.de/login.html?redirect\_url=/rubriken/logistik/detail/news/die-reise-der-rosen.html</a>.
- EIB (2019): Zweite Umfrage der EIB zum Klimawandel. Was wollen die Menschen 2020 gegen den Klimawandel tun? Available online at <a href="https://www.eib.org/de/surveys/2nd-climate-survey/new-years-resolutions.htm">https://www.eib.org/de/surveys/2nd-climate-survey/new-years-resolutions.htm</a>.
- Euractiv (2020): Sweden's night train to Brussels to debut in 2022. Available online at <a href="https://www.euractiv.com/section/railways/news/swedens-night-train-to-brussels-to-debut-in-2022/">https://www.euractiv.com/section/railways/news/swedens-night-train-to-brussels-to-debut-in-2022/</a>.
- Fraunhofer ISI (2017): Wissenschaftliche Beratung des BMVI zur Mobilitäts- und Kraftstoffstrategie. Schlussbericht "Entwicklung eines attraktiven europäischen Nachtzugsystems und Potenziale für den Nachtzugverkehr von, nach und innerhalb Deutschlands". Available online at <a href="https://www.bmvi.de/SharedDocs/DE/Artikel/G/MKS/schlussbericht-entwicklung-nachtzugsystems.pdf">https://www.bmvi.de/SharedDocs/DE/Artikel/G/MKS/schlussbericht-entwicklung-nachtzugsystems.pdf</a>?\_\_blob=publicationFile.
- Gossen, M.; Ziesemer, F. (2020): Die Corona-Krise als (positive) Suffizienzerfahrung? Available online at <a href="https://www.postwachstum.de/corona-krise-konsumreduktion-als-positive-suffizienzerfahrung-20200325">https://www.postwachstum.de/corona-krise-konsumreduktion-als-positive-suffizienzerfahrung-20200325</a>.
- Gössling, S.; Hanna, P.; Higham, J.; Cohen, S.; Hopkins, D. (2019): Can we fly less?, Evaluating the 'necessity' of air travel. In: *Journal of Air Transport Management* 81. DOI: 10.1016/j.jairtraman.2019.101722.
- IASS (2020): Klimaschutz im Homeoffice? Available online at <a href="https://www.iass-potsdam.de/de/blog/2020/03/klimaschutz-im-homeoffice">https://www.iass-potsdam.de/de/blog/2020/03/klimaschutz-im-homeoffice</a>.
- Infratest dimap (2019): Sechs von zehn fliegen selten oder gar nicht. Available online at <a href="https://www.infratest-dimap.de/umfragen-analysen/bundesweit/umfragen/aktuell/sechs-von-zehn-fliegen-selten-oder-generell-nicht/">https://www.infratest-dimap.de/umfragen-analysen/bundesweit/umfragen/aktuell/sechs-von-zehn-fliegen-selten-oder-generell-nicht/</a>.
- ISOE (2020): Zur Legitimität des Fliegens. Eine Diskurserweiterung der Flugscham-Debatte (ISOE Materialien Soziale Ökologie, 58). Frankfurt am Main.

- Lenzen, M.; Sun, Y.-Y.; Faturay, F.; Ting, Y.-P.; Geschke, A.; Malik, A. (2018): The carbon footprint of global tourism. In: *Nature Clim Change* 8 (6), S. 522–528. DOI: 10.1038/s41558-018-0141-x.
- Ong, D.; Moors, T.; Sivaraman, V. (2014): Comparison of the energy, carbon and time costs of videoconferencing and in-person meetings. In: *Computer Communications* 50, S. 86–94. DOI: 10.1016/j.comcom.2014.02.009.
- posteo (2020): Posteo: Impulse für mehr Nachhaltigkeit im Internet. Available online at https://posteo.de/site/nachhaltigkeit.
- Scientists for Future (2019): Gute Beispiele von Universitäten und öffentlichen Verwaltungen. Available online at <a href="https://unter1000.scientists4future.org/de/selbstverpflichtung-gute-beispiele/">https://unter1000.scientists4future.org/de/selbstverpflichtung-gute-beispiele/</a>.
- Statista (2020): Wichtigste Herkunftsländer für Rosenimporte nach Deutschland nach Importvolumen im Jahr 2019. Available online at <a href="https://de.statista.com/statistik/daten/studie/252806/umfrage/herkunftlaender-fuer-rosen/#professional">https://de.statista.com/statistik/daten/studie/252806/umfrage/herkunftlaender-fuer-rosen/#professional</a>.
- Süddeutsche Zeitung (2020): Deutsche Bank setzt künftig auf die Bahn. Available online at <a href="https://www.sueddeutsche.de/wirtschaft/deutsche-bank-nachhaltigkeit-deutsche-bahn-1.4945275">https://www.sueddeutsche.de/wirtschaft/deutsche-bank-nachhaltigkeit-deutsche-bahn-1.4945275</a>.
- Tagesspiegel (2019): Wie Flugscham die Wirtschaftswelt befällt. Available online at <a href="https://www.tagesspiegel.de/wirtschaft/dienstreisen-wie-flugscham-die-wirtschaftswelt-befaellt/24460380.html">https://www.tagesspiegel.de/wirtschaft/dienstreisen-wie-flugscham-die-wirtschaftswelt-befaellt/24460380.html</a>.
- TRANSA Spedition GmbH (2020): Bringen Sie Ihr Geschäft ins Rollen: Innovative schienenbasierte Logistiklösungen zwischen China und Europa. Available online at <a href="https://www.dbschenker.com/resource/blob/629322/74c68e3c1eb50c00089375e00d1e2414/innovative-schienenbasierte-logistikloesungen-zwischen-china-und-europa-data.pdf">https://www.dbschenker.com/resource/blob/629322/74c68e3c1eb50c00089375e00d1e2414/innovative-schienenbasierte-logistikloesungen-zwischen-china-und-europa-data.pdf</a>.
- T&E (2020): Air2Rail: Reducing CO2 from intra-European aviation by a modal shift from air to rail. Available online at <a href="https://www.transportenvironment.org/sites/te/files/publications/2020\_03\_Air2Rail\_Koios\_strategy\_rev.pdf">https://www.transportenvironment.org/sites/te/files/publications/2020\_03\_Air2Rail\_Koios\_strategy\_rev.pdf</a>.
- Treeze (2018): Life cycle assessment cut roses. Max Havelaar Foundation (Hg.). Available online at <a href="https://www.maxhavelaar.ch/fileadmin/CH/Was\_ist\_Fairtrade\_/Wirkungsstudien/2018\_Cut-Roses\_Life\_Cycle\_Assessment.pdf">https://www.maxhavelaar.ch/fileadmin/CH/Was\_ist\_Fairtrade\_/Wirkungsstudien/2018\_Cut-Roses\_Life\_Cycle\_Assessment.pdf</a>.
- UIC (2013): UIC-Study Night Trains 2.0: New opportunities by HSR? International Union of Railways. Available online at <a href="http://www.nachtzug-retten.de/wp-content/uploads/2016/05/2013-04-30\_uic\_study\_night\_trains\_2.02.pdf">http://www.nachtzug-retten.de/wp-content/uploads/2016/05/2013-04-30\_uic\_study\_night\_trains\_2.02.pdf</a>.
- Verband deutsches Reisemanagement e.V. (2019): VDR-Geschäftsreiseanalyse 2019, 17. Ausgabe. Available online at <a href="https://www.vdr-service.de/fileadmin/services-leistungen/fachmedien/geschaeftsreiseanalyse/VDR-Geschaeftsreiseanalyse-2019.pdf">https://www.vdr-service.de/fileadmin/services-leistungen/fachmedien/geschaeftsreiseanalyse/VDR-Geschaeftsreiseanalyse-2019.pdf</a>.
- Westlake, S. (2017): A Counter-Narrative to Carbon Supremacy: Do Leaders Who Give Up Flying Because of Climate Change Influence the Attitudes and Behaviour of Others? In: SSRN Journal. DOI: 10.2139/ssrn.3283157.
- Zeit Online (2019): Kaum Flugscham im Dax. Available online at <a href="https://www.zeit.de/mobilitaet/2019-08/klimaschutz-elektromobilitaet-flugreisen-nachhaltigkeit-dax-unternehmen">https://www.zeit.de/mobilitaet/2019-08/klimaschutz-elektromobilitaet-flugreisen-nachhaltigkeit-dax-unternehmen</a>.
- Zeit Online (2020): Mehrheit der Menschen in Deutschland will im Sommer nicht fliegen. Available online at <a href="https://www.zeit.de/mobilitaet/2020-06/flugreisen-deutsche-corona-krise-lufthansa-flughaefen-frankfurt-muenchen?wt\_zmc=sm.ext.zonaudev.twitter.ref.zeitde.share.link.x.">https://www.zeit.de/mobilitaet/2020-06/flugreisen-deutsche-corona-krise-lufthansa-flughaefen-frankfurt-muenchen?wt\_zmc=sm.ext.zonaudev.twitter.ref.zeitde.share.link.x.</a>