



THE FUTURE OF LONG-DISTANCE TRAVEL 2022: FOCUS ON SUSTAINABILITY

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AUTHORS

DIDIER BRÉCHEMIER
Senior Partner

JAN-PHILIPP HASENBERG
Senior Partner

RON ZHENG
Senior Partner

How ecosystem players can cut emissions and ease traveler concerns

According to our recent survey, concerns about sustainability are now a key issue for travelers when planning trips. Industry players therefore need to address these concerns as they transition to a more sustainable future. The question is how?

Growing consumer concerns about sustainability are driving major changes in the travel industry. The issue is now among the most important for passengers when planning trips, according to Roland Berger's "[The future of long-distance travel 2022](#)" report and survey, forcing sustainability up operators' agendas. The impact on air travel is particularly significant.

Our report and survey made three key findings, all of which have significant implications for sustainability initiatives:

- Travel bounced back in 2022, beating predictions made in 2021 but falling below pre-Covid levels. However, a full global recovery is not expected in 2023.
- The recovery is fragile – survey respondents are now more reluctant to travel long distance than they were in 2021, with an overall decline in willingness to travel of 29% for private trips and 28% for business trips. Air travel is likely to be hardest hit.
- The key reasons behind the decline and behavioral changes are the use of virtual communications and growing concerns over sustainability.

In this follow-up article we look at the sustainability challenges facing ecosystem players, focusing on carbon emissions and ever-stricter regulations, and what travelers, companies and regulators can do to address them. We include a set of actions for players in the long-distance mobility ecosystem to cut emissions and build a green reputation. These include communication tools to address customer concerns about sustainability, explain the challenges involved and help travelers monitor their carbon footprint.

• **Travel's emissions problem**

In 2019, CO₂ emissions from passenger transport (car, rail and air) accounted for 15% of all man-made CO₂ emissions. They are projected to increase by a further 69% by 2030, with international travel contributing most emissions.

Historically, road traffic emissions made up the greatest share of transport emissions. But regulation, such as taxes on heavily polluting vehicles and higher fuel taxes, and the emergence of electric vehicles, have largely addressed these. Now, aviation emissions are the fastest-growing source of transport emissions. CO₂ emissions in the industry are expected to more than triple by 2050 (compared to 2015 levels) if no action is taken to mitigate them, jumping from around 3% of all man-made CO₂ emissions to around 12% by 2050. This figure does not include non-CO₂ emissions, for example from nitrogen oxides and contrails, which some scientists believe could double the total volume of aviation emissions. Such forecasts explain why regulatory attention is now shifting to aviation.

• **Regulators clamp down on air travel**

The year 2022 saw several unprecedented moves towards sustainable air travel. At the 41st Assembly of the International Civil Aviation Organization (ICAO), the industry's UN-backed watchdog, around 200 member states adopted a goal of achieving net-zero aviation emissions by 2050. The target is based on the accelerated adoption of aircraft technologies, streamlined flight operations and increased deployment of sustainable aviation fuels (SAFs). The agreement followed similar commitments made by industry groups.

Another major regulatory first in 2022 was the introduction of the first national ban on short-haul domestic flights. France became the first EU country to receive permission from the European Commission to ban flights on routes that can be completed in less than 2.5 hours by train (excluding connecting flights). The law was agreed despite several airlines and airports claiming it was an infringement on free competition, with the Commission ruling that the environment came before profits. Austria has already banned flights between Vienna and Salzburg, and several other EU countries, such as Germany, Spain and Denmark, are considering such moves.

Short-haul bans are likely to be effective at reducing emissions: Roland Berger estimates that substituting short-haul flights for rail travel could reduce European carbon emissions by 5%.

- **Are short-haul routes the best target for flight bans?**

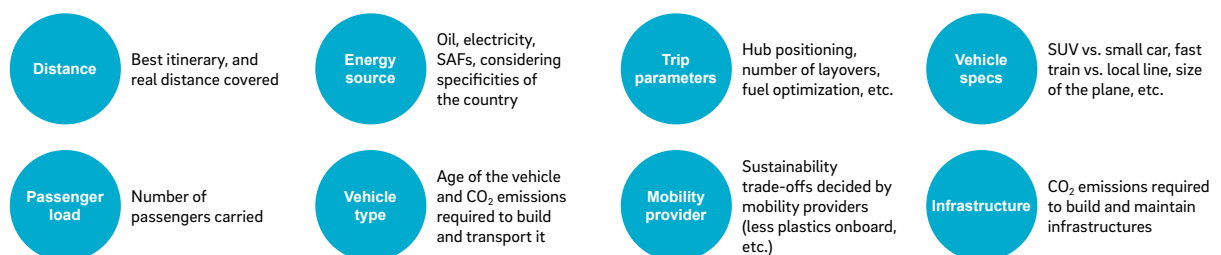
While any reduction in CO₂ emissions is good news for the environment, short-haul bans are only a drop in the ocean. A 2022 study¹ by researchers at the Free University of Brussels found that flights of less than 1,000 km account for 57% of departures yet only 18% of fuel burnt, whereas flights longer than 4,000 km account for 6% of flights but 47% of fuel burnt. The figures were based on departing flights from 31 European countries.

So, while banning all short-haul flights could cut global aviation CO₂ emissions by 12%, much more needs to be done. The targeting of long-haul flights, whether by operators or regulators, will be essential to meaningfully reduce aviation's carbon footprint and reach net zero by 2030. Roland Berger's [Roadmap to True Zero](#) study looks at this issue in detail. It proposes a route to complete decarbonization of the industry by 2050 by deploying new technologies, such as SAFs and hydrogen power, fleet regeneration, and advanced air traffic control.

- **The complex path to lower emissions**

Such studies demonstrate that identifying the key levers to reduce carbon emissions is essential to decarbonization goals. This is true not just in aviation, but across the transport sector. Yet doing so remains complex, as it means comparing carbon emissions by travel mode, and considering all the parameters that may affect a trip (number of passengers, fuel source, type of vehicle, etc.).

Plan A: Travel sustainability involves multiple factors; a single tool to help travelers reduce their climate footprint is needed



Need for a homogeneous and detailed carbon-emission comparison tool

- Regulators address the priorities to reduce the carbon emission footprint of long-distance mobility and reach net zero in 2030
 - Should countries ban short-distance flights or focus on long-haul?
- Travelers understand the carbon emissions of their long-distance travels and select the best travel mode considering all the specificities of the travel mode
- Ecosystem players optimize their efforts to best contribute to the reduction of carbon emissions of the sector, while addressing customers' expectations
- Countries highly dependent on international travel and tourism in their GDP address their priorities (offsetting, etc.)

Source Roland Berger



¹ [Banning super short-haul flights: Environmental evidence or political turbulence?](#)
Dobruszkes et al, Journal of Transport Geography, October 2022

Reducing global carbon emissions will therefore require a multimodal carbon-emission plan, with a homogeneous and detailed comparison tool to help ecosystem players address the top priorities and help travelers take actionable decisions.

- **Actions to cut emissions and foster a green reputation**

Despite the lack of a single multimodal tool, there are numerous actions mobility ecosystem players can take to address decarbonization and attract environmentally conscious travelers:

Communication: Communication is key to understanding the challenges of sustainability, and where it can be improved. Ecosystem players therefore need to clearly communicate the impact of their sustainability strategies on emissions, highlight ongoing initiatives, such as compensation mechanisms, and make clear the limitations they face. For example, giving travelers and corporates tangible tools to estimate the emissions of long-distance trips across all travel modes is key to overcoming sustainability concerns.

Engagement: Decarbonization of the transport sector cannot be achieved without engaging customers in efforts to reduce its carbon footprint. Tools include adapting the product offering (fleet size and specs, type of fuel, offsetting, etc.) and offering reward programs (offsetting as a reward, etc.).

Supply & demand: The COP27 meeting in Egypt in 2022 highlighted the need for a financial framework for sustainable investment in transport and common processes among industry players (for example, a global book & claim mechanism for the purchase of SAFs). This will mean finding a balance between demand (still growing strongly in countries like India), production (which is limited to just a few technology pioneer countries) and consumption.

Supply chain transformation: Fuel and fleet optimization requires a revolution in supply chains, particularly in the aviation industry. But the shift to technologies such as SAFs and next-generation aircraft must be anticipated well in advance. For example, the production of biofuels in France could generate estimated additional costs of EUR 9 billion by 2050, a 45% increase in airlines' operating expenses. These extra costs will come at a time when airlines are already facing financial difficulties due to the uncertainty in travel demand, scarcity of resources and rises in fuel prices.

Investment: Developing SAF production will also be expensive. For example, meeting the projected global demand for biojet fuels (a type of SAF) in 2050 will require an investment of EUR 1,700 billion to develop the fuels. This amount excludes subsequent production costs. The estimate breaks down into around EUR 1,200 billion in Asia, EUR 210 billion in the US and EUR 130 billion in Europe. But countries are well behind on these targets. The French government, for example, has announced an investment of EUR 350 million in biofuel production – a tiny fraction of its EUR 9 billion 2050 target.

Partnerships: Collaborations between ecosystem players will likely become essential to improve operational efficiencies and product offerings. For example, as bans on short-haul flights spread, rail and air operators will need to work together, while aviation companies will need to collaborate on new technology changes to improve standardization and reduce costs.

Final word

Driven by traveler concerns, sustainability is now an established priority among all players in the long-distance travel ecosystem, from regulators to operators. As such, it's time for the next steps. Industry players must embrace transparency and communicate more on their sustainable strategies and the limitations they face, focus on carbon footprint reduction all along the value chain and align on building common frameworks and tools. Not doing so as a matter of urgency could mean missing already ambitious 2050 sustainability targets.

Further reading

- WHERE NEXT FOR THE LONG-DISTANCE MOBILITY INDUSTRY?
- PARTIAL RECOVERY:
HOW THREE TRENDS ARE CHANGING LONG-DISTANCE TRAVEL
- THE FUTURE OF LONG-DISTANCE MOBILITY:
HOW COVID JOLTED LONG-DISTANCE BUSINESS TRAVEL
- THE FUTURE OF LONG-DISTANCE MOBILITY:
HOW COVID CHANGED CONSUMER APPETITES
- SMART MOBILITY

CONTACT:

DIDIER BRÉCHEMIER

Senior Partner
Paris Office +33 1 53 67 09 26
didier.brechemier@rolandberger.com

JAN-PHILIPP HASENBERG

Senior Partner
Hamburg Office +49 69 29924 6506
jan-philipp.hasenberg@rolandberger.com

RON ZHENG

Senior Partner
Shanghai Office +86 21 5298 6677 163
ron.zheng@rolandberger.com

NOUHA REBHI

Project Manager
Paris Office +33 1 53 67 03 84
nouha.rebhi@rolandberger.com

WIAM HAOUACH

Consultant
Paris Office +33 1 53 67 03 47
wiam.haouach@rolandberger.com