FACT SHEET

Harnessing Aviation for Mitigation, Adaptation, and Equity

An Introductory Look at Options

Key policy goals for aviation and taxation

- **Climate Mitigation**: Achieving net-zero emissions in the aviation sector by mid-century, in line with other sectors, and applying the polluter pays principle, which ensures that those responsible for higher emissions bear the financial cost of their environmental impact.
- **Social and Equity Concerns**: Ensuring that the benefits of aviation are fairly shared, addressing disparities in access to air travel and the unequal distribution of its environmental and financial burdens across different income groups.
- **Economic Considerations**: Acknowledging aviation's importance to the German economy, particularly in terms of exports, tourism, and job creation, while balancing its environmental responsibilities.
- **Revenue Generation**: Leveraging aviation taxation to contribute to public budgets, support the sector's transformation, and fund public services and environmental initiatives.

This overview focuses primarily on the latter: revenue generation.

Key facts

- Aviation is among the most inequitable sectors in terms of consumption. Both globally and nationally, the majority of people never fly; while a disproportionate share of flights and associated emissions are caused by frequent and premium class flyers. The ultra-wealthy further exacerbate this imbalance by using private jets, either owned or leased.
- At the same time, aviation is one of the most carbon-intensive activities, uniquely occurring at high altitudes where its climate impact extends beyond CO2, amplifying its overall environmental effects.
- In 2022 alone, Germany lost EUR 4 billion due to exemptions in aviation fuels taxes, the EU Emissions Trading System (ETS), and Value-Added Tax (VAT), resulting in lost revenue that could have been used for decarbonisation efforts and international climate finance (Transport & Environment, 2023).
- If this trend continues, the German government is projected to forfeit EUR 6 billion annually by 2025, with EUR 1.4 billion of tax revenue lost specifically from the activities of its national carrier, Lufthansa (Transport & Environment, 2023).
- Germany loses EUR 566.8 million (out of the EUR 4 billion) annually due to untaxed flights by the wealthiest, who travel in private jets and business class (van der Graaf, 2024).
- While flying is widely acknowledged as carbon-intensive, the carbon footprint of a flight varies due to factors such as aircraft model, passenger load, luggage weight, time of day, and passenger comfort (Atmosfair, n.d.; Clark, 2010).
- Reform of aviation taxes could allow a portion of the revenue to be channelled into the development of sustainable technologies and fuels to accelerate the sector's decarbonisation, financing transformation according to the polluter-pays principle, and to support for international climate initiatives.

1 A framework of economic instruments to limit aviation emissions

At German level

- **Air Traffic Tax (Flugverkehrsteuer)**: This is the most prominent national tax instrument in the sector, regulated under the **Aviation Tax Act** (Luftverkehrsteuergesetz). It is a federally regulated transport tax imposed on commercial passenger flights departing from Germany and collected by customs authorities. Revenue from the tax goes to the federal budget. The tax features higher rates for longer distances (Bundesamt für Justiz, 2023; Bundesfinanzministerium, n.d.; Zoll, n.d.-a).
- The tax applies to all tickets sold in Germany, including those from foreign airlines, on the same terms as domestic carriers (von der Heyde, 2024).
- As of 1 May 2024, the government increased the Air Traffic Tax, aiming to raise EUR 500 million (von der Heyde, 2024).
- **Other key tax policies**: Germany exempts commercial aviation from taxes on aviation fuel or kerosene under §27 of the **Energy Tax Act** (Energiesteuergesetz), whereas private operators are required to pay this tax (Bundesamt für Justiz, n.d.; Zoll, n.d.-b). Germany also applies a 19% VAT on domestic flights (Klimaschutzportal, n.d.-b). Other instruments, such as ATM fees, charges and direct and indirect subsidies to airports, do exist but cannot be spelled out here.

At national level

- The **Energy Taxation Directive (ETD)** is an EU framework that taxes energy products like fuels to promote a low-carbon economy while allowing member states flexibility in their tax systems through established minimum excise duty rates. Kerosene, however, remains tax-exempt under the ETD. Although EU Member States can technically tax aviation fuel for intra-EU flights, none have done so in practice (European Commission, 2021; European Parliament, 2024).
- The **EU Emissions Trading System (ETS)** is a 'cap and trade' system aimed at reducing emissions through a carbon market. Since 2012, it has included aviation. The ETS sets a cap on total emissions and allocates some free tradeable allowances to airlines. Airlines operating within the European Economic Area (EEA), irrespective of their origin, are required to monitor, report, and verify their CO2 emissions as well as non-CO2 effects. If they need more, they can purchase allowances from companies with an excess (European Commission, n.d.) or, alternatively, pay a fine of EUR 100 for each additional metric tonne of carbon (Keating, 2014).

At international level

- The **Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)**, established by the International Civil Aviation Organization (ICAO) in October 2016, mandates that airlines monitor and report emissions on all international routes and offset any emissions growth above a specific level by purchasing eligible emission units from projects that reduce emissions in other sectors.

- To support CORSIA's development, the EU has temporarily limited the scope of the ETS to flights within the EEA until 2027. An assessment is planned to take place by July 2026 to determine whether to expand the ETS or maintain its current scope, depending on CORSIA's effectiveness (European Commission, n.d.).
- CORSIA is projected to offset merely 22% of total international aviation emissions by 2030, primarily due to its weak non-binding targets and a low baseline, set at 85% of 2019 emissions levels. The scheme's reliance on cheap offsets does not incentivise the aviation industry to decarbonise or adopt greener fuels (Murphy, 2019; Transport & Environment, 2022).

2 Private jets: A blind spot in the taxation of air travel

- Despite being the **most polluting mode of travel** per capita, private jets and their **ultra-wealthy users** remain **exempt from aviation taxes**, revealing a significant gap in environmental accountability.
  - **Carbon emissions**: Private jets are 5–14 times more carbon-intensive than commercial flights. Germany alone is responsible for nearly 10% of European private jet emissions, ranking fourth overall, behind the UK, France, and Italy.
  - **Affluence of users**: The average net worth of private jet users is EUR 1.3 billion, making them largely unaffected by price increases. Chartering a private jet from Berlin to Frankfurt costs EUR 7,000–15,000. Flights beyond the EU can be far more expensive. A flight to Bali, for example, can cost up to EUR 100,000, making even a high tax on such a flight negligible in comparison.
- While Germany technically taxes private jet kerosene (§27 of the Energy Tax Act), loopholes enable large operators to avoid this tax.

The case of Volkswagen

In 2022, the VW Group operated over 2,800 private jet flights, averaging nearly eight per day, significantly more than in previous years. While primarily serving employees, VW also offers charters priced between EUR 2,000 and EUR 15,000 per hour using a fleet of eight state-of-the-art jets. As a result, VW is not only a car manufacturer but also functions as a commercial aviation provider. This status allows VW to benefit from (energy) tax exemptions it wouldn't have if it used the jets exclusively for internal purposes. With this arrangement, VW realises substantial tax savings, all while leasing jets to itself through subsidiaries (Clark, 2010; Heubl & Kunkel, 2023).

- Most private jets are not subject to the ETS, allowing them to avoid accountability for their significant emissions at the EU level.
- These loopholes persist although 85% of the German public supports measures to curb private jet emissions, with only 5% opposed to taking any action.
- Despite being marketed as time-savers for (business) executives, 46% of private flights are for family use and 45% for second-home visits, with only 35% designated for business.
- Moreover, 72% of private jet flights have commercial alternatives, raising questions about their necessity.

- If private jets were taxed based on their climate impact, Germany could generate EUR 263.8 million annually. The additional tax revenue could be allocated to promote the production and use of CO2-neutral, electricity-based aviation fuels, in line with the federal government's coalition agreement. This commitment remains unfulfilled, as last year's budget crisis led to significant cuts in funding for renewable fuels (van der Graaf, 2024), affecting the entire aviation sector, not just private jets.

3 Air Travel Tax: A missed opportunity due to its regressive structure

- The current structure of Germany's Air Travel Tax (Flugverkehrssteuer) disproportionately impacts economy-class passengers.
- The Air Travel Tax applies a **flat rate to all passengers regardless of ticket class**. This means economy travellers pay the same tax as those in business or first class, even though premium travellers have a much larger carbon footprint per seat.

Carbon Disparity

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- Germany's aviation tax would be more equitable if business- and first-class passengers were taxed proportionally to their larger carbon footprint. A differentiated tax in Germany could raise an additional EUR 303 million annually, impacting only 8% of passengers.
- The aviation tax is currently capped at EUR 2.33 billion per year. This means that **when flight** numbers **exceed projections**, the **Ministry of Finance must lower tax rates to remain under this cap**. This approach is counterproductive as it reduces taxes when more people are flying, while creating a disincentive to reduce emissions and undermining efforts to promote sustainable travel practices.
- The cap also limits how much tax can be collected overall, which in turn **restricts the government's ability to implement higher taxes specifically on business-class tickets**. Removing it would enable the government to collect more revenue as air travel demand grows, without the concern of exceeding the annual EUR 2.33 billion (van der Graaf, 2024).

4 International Financial Architecture Reform

- Legal obstacles to pricing fuels used in international aviation arise from both multilateral and bilateral agreements. The 1944 Chicago Convention prohibits taxing fuel that arrives in aircraft tanks, and subsequent ICAO resolutions have established a reciprocal exemption for fuels taken up for international flights. Additionally, approximately 4,000 Bilateral Air Service Agreements (BSAs) typically include similar exemptions. (IMF & World Bank, 2011)
- Changing the Chicago Convention requires two-thirds majority approval from its member states, while amending BSAs can often be simpler, needing only mutual consent where allowed. (IMF & World Bank, 2011)
- While Germany could technically tax kerosene for domestic flights, it has opted not to do so in order to safeguard the competitiveness of European airlines compared to non-EU carriers (Klimaschultz Portal, n.d.-a, n.d.-b).
- Germany could explore options for implementing measures at the international level by fully participating in the Global Solidarity Levies task force, which seeks to cultivate political support for progressive climate levies and economic instruments that align with the commitments of the Paris Agreement. The task force could help gather the political capital needed for amending the Chicago Convention or, at the very least, the BSAs. More broadly, it can assist in developing creative approaches to effectively tax international aviation.
- At the EU-level, Germany can advocate for the adoption of the EU ETD revision (currently under negotiation within the EU Parliament), which includes provisions for taxing fossil fuels used for intra-EU transport while temporarily exempting Sustainable Aviation Fuels (SAFs) (European Commission, 2021; European Parliament, 2024).

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