For business sustainability leaders

How can your company align with best practice in accounting for the full climate impact of business air travel?

A 5-point plan

Ensure that the full climate impacts of business flying are visible at the point of decision.

1. Ask for both CO2 and non-CO2 emissions of aviation to be included in travel agency services and the booking information visible to travelers.

Take steps to reduce all greenhouse gas emissions from business flying.

2. Lower the overall number of flights by reducing frequent flying, shifting to rail for regional travel, and substituting virtual collaboration tools for long-haul flights.

3. Reduce those flights particularly conducive to contrail formation, such as high-altitude long-haul flights and cold-air winter evening or night flights.

Report the full climate impacts of business flying, using the best available standard.

4. Report annually on air travel, including both CO2 and non-CO2 emissions.

5. Use a methodology that applies a Radiative Forcing Index factor of at least 1.7 to CO2 emissions, such as the UK BEIS\(^1\) conversion factors for company reporting of greenhouse gas emissions.

\(^1\) UK Department for Business, Energy & Industrial Strategy, now succeeded by the UK Department for Energy Security & Net Zero.
When an airplane burns jet fuel, it releases carbon dioxide (CO2), and produces additional emissions which contribute to global warming. The most visible of these take the form of contrails, the long cloudy strips that usually form at high altitude and through cold and humid air, where moisture in ice-saturated air freezes around soot particles released from jet engines.

These contrails, and nitrogen oxide (NOx) emissions, are the largest contributors to so-called “non-CO2” effects, which warm the climate twice as much as do CO2 emissions.

Policy measures such as pricing of NOx emissions, adapting flight plans to avoid contrail formation, improving jet fuel quality and increasing the use of sustainable e-fuels, are needed in order to mitigate these impacts. While scientific understanding of non-CO2 effects must be further improved, in light of the increasingly critical climate challenges we face, it is both necessary and possible to take actions to resolve one of aviation’s biggest climate problems.
Tools to account for the full climate impacts of business air travel

Findings

Non-CO2 emissions are referenced in the Greenhouse Gas (GHG) Protocol and UK BEIS calculation factors, but their reporting is left optional.

Travel agencies offer corporate clients the option of integrating non-CO2 emissions into booking information, however this is left to the choice of the business.

The most commonly used Radiative Forcing Index (RFI) factor is that of UK BEIS, which is 1.7 in the conversion factors 2023.

Regulations affect requirements for reporting standards, which affect the use of GHG calculation methodologies, which affect the practices of travel agencies as regards booking tools.

Conclusions

Having an international consensus on using an RFI factor of a minimum value could significantly improve measuring, reducing and reporting GHG emissions.

In the short term, the following revisions could effectively ensure that GHG calculation methodologies adopt the RFI factor:

- The UK BEIS conversion factors should remove the factors excluding non-CO2 effects from the tool, so that opting out is no longer possible.
- The GHG Protocol for company reporting should move the RFI factor mention to an extra bullet under ‘should’ in the section entitled ‘emissions factors needed.’

Regarding reporting standards, the EU Corporate Sustainability Reporting Directive should contain a specific obligation on reporting business air travel emissions, including non-CO2 effects, so that this becomes part of reporting frameworks for companies that are mandatory, publicly accessible, and independently verified.

Travel agents should use an RFI factor as a default when calculating emissions, and offer the option of opt-out instead of opt-in to profile themselves as more sustainable.

The Travel Smart Campaign is a global effort to encourage businesses to reduce their air travel emissions, improve their sustainability, and help to significantly reduce aviation’s climate impacts in the present decade.

The 2023 Travel Smart Ranking revealed that a large majority (85%) of top global flyers publish annually their corporate travel emissions data. Among these, 40 leading global companies (12%) account for the full climate impacts of their flying.