

“Environmental information needs to be more readily available to consumers,” says AEF in response to CAA consultation



AEF CAA consumer environmental information response, 5th of April 2023

Consumer environmental information

1. What are your views on existing examples of aviation consumer environmental information (for example those listed in Appendix A)?

We support the CAA’s proposals for environmental information to be: reliable; available (at least) at the point of looking for and booking flights; based on standard data (and, we would add, standard methodologies); in an accessible, contextualised and understandable form; and able to support informed decisions about both whether and how to travel. With these factors in mind, it’s possible to identify both strengths and weaknesses in the aviation consumer environmental information currently available, while noting that the sources listed in Appendix A may have been produced for different reasons and may not have set out to address all these points directly.

Data reliability and accuracy

Airlines hold the most accurate information about their own fuel use and therefore emissions but unless that information is shared it will be difficult to ensure consistently accurate information across different booking platforms. We do not envisage any additional cost burdens on airlines stemming from a potential disclosure requirement since this data is already monitored, reported and verified by operators for the purposes of compliance with the UK Emissions Trading System (UK ETS) and ICAO’s CORSIA. In fact an agreement to share this reported data for other purposes, such as the provision of information for consumers, would ensure the highest levels of accuracy. Instead, the majority of calculators available today to inform the public, including ICAO’s carbon calculator, have to rely on modelled data which reduces reliability and can provide widely varying results which undermines public confidence.

Some of the sources in Appendix A, including airlines, do not, however, include an estimate for the non-CO2 impacts of flights. In considering the ‘accuracy’ criterion, the key question is whether it is sufficient to inform consumers only about the carbon impact of a flight, or whether it is necessary to provide data on the total climate impact of a flight. This question is distinct from wider questions about whether non-CO2 should be included in policy and Government targets. Reporting CO2 only gives, we would argue, an inaccurate impression about the climate impact of a flight. We note that some of the atmospheric scientists responsible for the latest scientific assessments came out publicly against Google’s decision to drop the use of a non-CO2 multiplier for flight emissions on its selling platform. Our position is that current scientific understanding is sufficient to inform the public and that these impacts should be included. Our views on how this can be achieved are set out in our response to Questions 12 and 13.

Availability at or before the point of sale

We welcome the fact that booking platforms such as Google provide CO2 information alongside price details. Consumers should not have to search out the emissions footprint of their flight. Information provided after the point of sale, or available only via a series of clicks that navigate consumers away from the site, miss a valuable opportunity to inform consumer choice about how and where they travel.

Appropriate contextual information should be provided at the same time. Ideally emissions information should be provided in advance of consumers looking for a flight so as to be most useful in the decision-making process. This could be, for example, on flight and holiday adverts, in the information shared by businesses with their own staff in relation to their policy on travel, or alongside travel journalism. While the CAA may not have powers to require this data provision, if the CAA were to make its data and methodologies publicly available there could well be a range of other applications for it, which would benefit consumers.

Accessible, contextualised and understandable information

The report AEF produced for the Foundation for Integrated Transport was intended to provide an evidence base for the consideration of the kind of contextualised emissions information that could and should be publicly available in relation to flying. We are delighted that the CAA is now considering how best to present such information. The form in which it appears is something likely to need careful consideration and consumer feedback.

In terms of contextual information we like the graphics published by Possible that give example comparisons with other activities commonly thought of as environmentally harmful such as eating certain foods or driving. Illustrative examples such as these could be selected for relevant flight lengths. <https://www.wearepossible.org/actions-blog/planes-vs-avocados>

We also like this visual, <https://twitter.com/kevpluck/status/1368788614709010432?s=20> of the barrels of oil required to transport one person and their luggage between the UK and New Zealand. Quantities of kerosene may be easier for most people to visualise and relate to than CO2 emissions so should be considered as a means of communicating this information, we suggest. Alternatively a CO2 pictogram with each graphic representing a certain number of kg of CO2 could work in a similar way and be more versatile across different energy modes (eg electricity/diesel as well as kerosene depending on transport mode)

While simplicity of the information is important in terms of making it accessible and understandable, we would urge caution about some of the ranking approaches currently in use by the providers listed. We would be opposed to any approach that used a green light or green leaf symbol for a flight. Since flying today remains a very carbon-intensive way to travel there should be no implication that any flights are green. In addition, while we welcome some aspects of the approach taken by Lite Flights, the attributions 'terrible', 'average', 'poor' and 'ok' are perhaps not granular enough information to inform consumer choices effectively.

Supporting consumer decisions on whether and how to travel

This is a key element of the purpose of information provision in our view and we return to it below. In terms of the examples of information provided we welcome the approach of Google in promoting rail options. Coach travel could also be promoted for some routes. There is a clear gap in information provision in this field, due partly to the commercial interests of information providers (such as airlines or even offset companies).

2. Please list/identify examples of existing schemes for the provision of aviation consumer environmental information beyond those listed in Appendix A

The Government conversion factors for company reporting of GHG emissions are a key resource for businesses. Strengths of the conversion factors include the provision of comparative data for other travel modes, the ability to be consistent with company GHG reporting, and the recommended inclusion of a multiplier to account for the additional radiative forcing from aviation's non-CO2 impacts (data is provided with and without a multiplier). The aggregated data does not, however, allow consumers to distinguish between individual flights.

<https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

Presentation of information to consumers

3. What are the key requirements for the presentation of: a) accurate, b) understandable, c) standardised, d) comparable e) accessible and f) useful consumer environmental information?

Some of our comments on the previous question are also relevant here.

Accurate - Data disclosure by airlines should support increased accuracy, while reasonable accuracy is essential, and we would support a requirement for disclosure of actual emissions, a desire for perfection should not be allowed to delay implementation of the consumer information proposals. When uncertainties are measured against a scenario where no information is made available to the public e.g. in relation to non-CO2 impacts (considered above), omissions may represent a bigger gap than the uncertainty margin.

Understandable - User needs will vary, from companies that require quantification, for example, to consumers who may benefit from examples of how emissions from flying relate to other modes or activities and for whom graphics and visual portrayals may be most relevant. Methodology links for further information and methodologies should always be provided.

Standardised - Trust is a key element in making the information provision effective and encouraging the public to act on it. Non-standardised methodologies will produce multiple results as is currently the case, decreasing consumer confidence regardless of accuracy.

Comparable - As discussed elsewhere the units for comparison should be applicable across different transport modes as well as between airlines.

Accessible - The information needs to be clearly displayed on the search page of a website without having to click through to find the results.

Useful - Information must be presented in a way which informs choice or can be readily used.

Consumers should be provided with information on the different environmental impacts of:

- Seating class - flying in economy versus premium economy, business or first class
- Flying with one airline versus another for a given route (taking account of evidence from ICCT that suggests there can be as much as a 60% differential in emissions between different carriers for transatlantic routes)
- The impact of distance - flying to Europe on holiday compared with flying to the Caribbean

- Flying compared with not flying (replacing a business trip with videoconferencing for example, or replacing a holiday abroad with a UK holiday reachable overland)
- Guidance on 'options to reduce the climate impact of your journey' next to all premium seat selections, as well as notifications where a viable rail or even potentially ship alternative exists. People searching for popular holiday destinations requiring a medium to long haul flight could be prompted with "Did you know that the further you travel, the more emissions your journey is likely to cause? Destinations nearer to you include x, x, and x" (on rotation)

4. What consumer environmental information should be presented to consumers?

As set out in our responses to other questions:

- Total kg CO₂e for the journey (single and return) by operator (not averaged for the route) should be provided, with a multiplier for non-CO₂ impacts (or other quantified method for displaying information on non-CO₂ impacts).
- CO₂ information should be based on actual emissions and not net of offset/traded emissions or the use of alternative fuels).
- Comparative information should also be provided.

5. When should consumer environmental information be presented to consumers? (For example on the results page when searching for a flight, on a boarding pass or after a flight)

To publish information after the point of sale would be a wasted opportunity and contrary to both the Government's and the CAA's stated objectives. While it could help improve general public awareness there is no guarantee that consumers would retain and apply that knowledge for future trips. In contrast, supplying data at or before the point of sale supports consumer choice, encouraging lower carbon travel choices (whether and how to travel). Consumer pressure has the potential to accelerate airline responses to climate change.

Some of the opportunities to provide the information prior to booking perhaps fall outside the CAA's remit, but the establishment of consistent emissions data could facilitate information provision on flight or holiday adverts, for example.

6. How should consumer environmental information be presented? For example is kg/CO₂ per journey appropriate and / or should consumer environmental information be presented as a comparison with other transport modes or other equivalent activities?

Please see our responses to earlier questions.

7. Please list/identify examples of consumer environmental information in other sectors which enable complex information to be provided in an accurate, understandable, standardised, comparable, accessible and useful way.

We have limited experience to draw upon, but we're not aware of any examples that offer a good enough model to emulate. We note that colour coding is commonplace alongside quantified results for both foods and electric goods but we've highlighted the dangers of using a traffic light system, or green symbols, in our answer to question 1.

Consumer protection

8. How should we (the CAA) use our existing powers to protect consumers from misleading environmental information?

A standardised methodology, with regular checks to ensure consistency and accuracy, would reduce the risk of information being misrepresented.

Misrepresentation often comes in the form of misleading statements or terms rather than inaccurate data. Offering customers a ‘net zero flight,’ for example, probably creates the impression that the emissions *from that flight* are lower, for example than those from a competitor airlines, but may just mean that a certain amount of offsets have been purchased. The claim that using Sustainable Aviation Fuel reduces the emissions from a flight is perhaps even more misleading, since very few customers will be aware that the emissions reduction is only a net basis, and that the CO2 emitted by that flight will be no lower than from using kerosene. The CAA could publish best practice guidance for airlines in terms of how public information is given out that addresses these and similar issues, drawing where appropriate on the rulings of UK and other advertising standards bodies in relation to airline adverts.

9. Please list/identify examples of regulatory regimes in other sectors that work well to protect consumers from misleading environmental information.

We don’t have particular expertise in this area. The EU taxonomy and the anti-greenwash legislation being drawn up could be useful reference points.

10. How should the provision of consumer environmental information be monitored?

AEF’s view is that some aspects of information provision should be mandatory, in which case the CAA should enforce those requirements. The topic of misleading information and claims can be more subjective and the CAA may feel this falls outside its scope, in which case it should signpost the appropriate channels (the Advertising Standards Authority for example) for members of the public to report cases of information they consider misleading.

Potential and existing methodologies for the provision of consumer environmental information

- 11. If you have an existing relevant methodology for calculating emissions from a journey:**
- a. please describe it and the reasoning behind it, including details of the types of information you include in the methodology and the assumptions you make.**
 - b. If your organisation has made a conscious choice not to include certain types of potentially relevant information in your methodology yet, please set out the reasons why.**
 - c. If potentially relevant information may be included in your methodology in the future, please describe the information and any necessary background to its potential inclusion.**

Not relevant

12. If you haven’t developed a methodology, what would you expect to see in a methodology (for example different aircraft types, fuels, average load factors, the airline’s overall fleet, and routes including generalised indicators relating to destination / origin airports)?

We have answered this question in terms of different confidence levels, acknowledging that some features of a methodology would be desirable but that if the CAA faces barriers in terms of claimed

cost or confidentiality issues this need not prevent progress in implementing the consumer information proposals.

Highest level of confidence

The 'gold standard' would be actual emissions data based on carrier-specific information for the route flown (taking into account which aircraft was flown on the day, fuel consumption and load factors). Non-CO2 impacts cannot currently be accurately determined on a flight-by-flight basis but average multipliers could be produced on a fleet or airline-by-airline basis using a standardised methodology. .

Medium level of confidence

A good alternative would be to use modelled data and a methodology based on:

- Distance flown (historical averages for a given route based on actual track miles, or Great Circle Distance plus a standard uplift factor to account for additional track miles)
- Typical aircraft type and fuel burn for the route
- Airline-specific seat configuration and load factors
- Appropriate differential non-CO2 factors applied for long-haul, medium-haul, short-haul and domestic flights

Lowest level of confidence

Less accurate but still valid would be a methodology based on average airline emissions (across an operator's fleet) per passenger km for short, medium and long-haul operations, multiplied by distance. A non-CO2 multiplier based on global averages could be applied for all flights. BEIS's advice for company reporting is to use a 1.9 multiplier to reflect non-CO2 impacts, though the latest scientific evidence would suggest that a factor of 3 is more appropriate.

13. How should we (the CAA) take non-CO2 emissions and their effects into account?

We recognise that non-CO2 impacts vary by individual flight depending on location, altitude, weather and time of day but that these variables are currently difficult to predict in advance, particularly given the lead time between booking and the flight taking place. However, given the scientific evidence on the impact of non-CO2 to date (<https://www.sciencedirect.com/science/article/pii/S1352231020305689?via%3Dihub>) we believe that it would be more misleading to exclude non-CO2 impacts from consumer information altogether than to include them imperfectly. Information provision to the public is a different application for a non-CO2 multiplier compared to the more contested topic of whether to apply a multiplier to climate policy measures for aviation, so remaining scientific uncertainties present less of a reason to omit these effects.

We have suggested three possible approaches to including non-CO2 impacts in our response to Question 12, namely airline-specific non-CO2 factors, average non-CO2 factors for long, medium, short and domestic flights, or a multiplier based on global averages.

Data

14. Which existing standardised datasets do you think could be repurposed (with the necessary safeguards) to provide environmental consumer information? For example, the International Civil

Aviation Organization (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) CO2 Estimation and Reporting Tool.

Tools have been developed to assist with accurate reporting of emissions under ICAO's CORSIA and the EU Emissions Trading System, notably the CERT tool and EuroControl's Small Emitters Tool respectively. The databases underpinning these results have been informed by actual data reported by airlines, and represent a high degree of accuracy. We note that airlines have provided this data on the understanding that it is only to be used for the intended purposes. However, if an agreement can be reached, this data would assist greatly in providing consumers with robust results.

15. Should there be a mandatory requirement for airlines to provide relevant environmental data to the CAA and if so how should this be aligned with existing requirements?

This data is currently reported by operators for CORSIA and ETS compliance. We would support a requirement to make this information available to the CAA for the purposes of verifying published information for consumers.

Relevant research

16. The CAA published research on what consumers want from consumer environmental information in 2021. Have you undertaken similar or related relevant research which you can share with us?

Not directly. But our discussions to date with airlines, booking sites and institutional bodies suggests that the public is interested, and wants trusted results achieved through standardisation, transparency and accuracy. The growth in company CO2 reporting and consumer awareness amongst the travelling public also suggests that there is an audience for this information, and this is only likely to grow over time.

Potential pitfalls and any other additional information

17. What do you think are the potential pitfalls relating to the provision of consumer environmental information?

The key risk would seem to us to arise from a failure to communicate clearly the relevance and context of the information, leading to consumer confusion, indifference or at worst resistance.

18. What strategies should we consider to mitigate potential negative consequences?

The proposals, including when and how the information is presented as well as any plans for supporting communications (such as advertising the change and/or communicating about it in advance with appropriate spokespeople and journalists) should be discussed with behavioural change and public engagement experts. They should be tested in advance with focus groups or alternative social research methods, and again after roll-out to ensure that the objectives are being met.

19. Is there anything else that you think we should be aware of in relation to the provision of consumer environmental information, beyond the areas mentioned above?

In order to future proof the approach it's worth considering how adaptable it would be to new aircraft technologies and fuels. Our view is that any actual emissions reductions from the aircraft

tailpipe should be accounted for in the consumer information. For example if an airline were to start operating hydrogen or electric aircraft then the CO2 emissions from those flights could be zero (plus any non-CO2 impacts associated with hydrogen based on the available evidence) and this should be shown in the consumer information for that flight. For indirect emissions reduction such as the purchase of offset credits, investment in carbon capture technologies or the purchase of Sustainable Aviation Fuel, information could be made available in a separate information box, or via a link, about these initiatives on an airline by airline basis. It should not, in our view, be accounted for by way of a reduction in the published emissions per flight. Doing so would undermine the integrity of the data. It is important to note that liquid SAF generates as much CO2 as kerosene when combusted so should be put in the same category as carbon offsets and removals for the purpose of CO2 information for consumers, we would argue.

In relation to future considerations, AIA's RECCE approach could also be helpful in looking at the different climate impacts from new aviation technologies and alternative fuels.