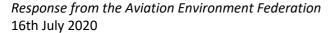
Decarbonising Transport: setting the challenge





We welcome the opportunity to comment on the Government's vision for decarbonising transport. The Aviation Environment Federation (AEF) campaigns for effective limits on the environmental impacts of the aviation sector. At ICAO, we are the lead representative of the NGO coalition ICSA (the International Coalition for Sustainable Aviation), which has observer status at discussions in relation to the UN's work on aviation's climate impacts. In the UK, we are in regular contact with the Department for Transport in relation to policy approaches for mitigating aviation's environmental impacts (including membership of several working groups related to the sector's noise impacts), and in recent years have given evidence on aviation's climate and other impacts to – among others – the Airports Commission, the Environmental Audit Committee and the Transport Select Committee. We are currently working with the UK COP Champion's team on ways to promote aviation emissions reductions in the run up to Glasgow.

Why the decarbonisation plan needs to include aviation

Given the urgency of action on climate change and the timeliness of ensuring that aviation plays a part in delivering a green recovery for the UK (an issue on which we recently co-wrote a joint NGO position paper¹), we are responding primarily to urge you to use the opportunity presented by the decarbonisation plan to ensure that the aviation sector is brought into line with the Government's climate commitments.

Many colleagues who campaign on transport have welcomed the tone, language and ambition of the decarbonisation plan. But as aviation campaigners all we see is - yet again – the Government's failure to come up with any plans for bringing the aviation sector into line with its wider decarbonisation agenda. We welcome the headline commitment to a plan that "will set out in detail what government, business and society will need to do to deliver the significant emissions reduction needed across all modes of transport, putting us on a pathway to achieving carbon budgets and net zero emissions across every single mode of transport by 2050". But to be credible, the plan must include and address the UK's share of emissions from international aviation. Such an approach, combined with formal inclusion of IAS in carbon budgets, is - we believe - complementary to international action at ICAO.

In this response, we set out five reasons for fully (and formally) including aviation in the transport decarbonisation plan.

1. The Transport Decarbonisation Plan would be incomplete without aviation

Despite claiming that the plan will apply to all transport modes, the presentation of data in the document makes it unclear how aviation emissions will be considered and addressed. The document states for example that "transport is now the largest contributor to UK domestic GHG emissions, contributing 28% of UK domestic emissions in 2018. Transport emissions are 4% higher than in 2013 and are only 3% lower than in 1990." The scale of the challenge would become clearer, however, if international aviation and shipping emissions were included, bringing total transport emissions to around 37% of the UK total, a proportion that's set to rise.

¹ https://www.aef.org.uk/2020/06/05/building-back-better-for-aviation-joint-ngo-briefing/

2. There's no policy coming from anywhere else any time soon

No Government department has yet been willing to take on the growing problem presented by aviation. We have, since last year, been anticipating the publication of an updated aviation climate change policy as part of the planned Aviation Strategy. The strategy appears to have been delayed indefinitely, although the decarbonisation plan suggests that a consultation on net zero aviation will be published 'later this year'. As the CCC's latest progress report noted, during the past decade there have been no major UK policies on aviation emissions.

Meanwhile, these emissions have grown 124% since 1990 (the baseline for the Climate Change Act). In 2018 they reached an all-time high of 38.5Mt, and by 2050, the Department's latest published figures (pre-Covid) anticipate that emissions will reach around 40Mt. The CCC's net zero analysis uses, in its Further Ambition scenario, an estimate of 30MtCO2 by 2050, though this is dependent on passenger numbers being limited to no more than 25% above the level in 2018, and on incentivising new technology. Even at this level, CCC anticipates aviation emissions being higher than those of any other sector, and it is unclear through what mechanism these emissions would be removed in order to achieve net zero not least given the 35 Mt emissions gap between the Further Ambition scenario and the net zero target. In the absence of policy action on aviation to ensure that the sector delivers emissions cuts and helps drive investment in carbon removals, the net zero commitment will not be achieved.

The pause in progressing the Aviation Strategy White Paper should allow the Government time to review its position on aviation in two ways:

- (1) Its earlier approach to airport capacity growth which was, based on the published evidence, manifestly incompatible with climate ambitions should be revised. In February 2020, the Court of Appeal ruled that the policy underpinning the Heathrow third runway was unlawful since it had failed to take account of the Paris Agreement on climate change. This has clear implications for the Government's approach to airport expansion more generally. We estimate that UK aviation emissions could rise to over 45Mt by 2050 if all planned airport expansions go ahead. While the case was won on the basis of the Paris Agreement rather than UK legislation, the two are clearly linked since the amendment to the Climate Change Act was designed to give effect to that Agreement, and the CCC has since explicitly recommended that the Government should revisit its support for airport expansion in light of the 2018 net zero law. It's very unfortunate that the Decarbonising Transport document repeats (at 2.49) this policy of supporting airport capacity growth in advance of such a review. The statement 'the expansion of any airport must always be within the UK's environmental obligations' appears totally meaningless in the absence of any policy about how this judgement should be reached.
- (2) The role that aviation should play in delivering a green recovery from the Coronavirus crisis should be considered. In Building Back Better for Aviation (footnote 1) we argued that the changes to people's travel (and to their lifestyles more generally) that have taken place in response to the pandemic present an opportunity to reconsider how to put the aviation sector on a more sustainable trajectory in future. The Government should reassess both the sector's financial contribution to public funds (by way of taxation) and the extent to which it is possible and beneficial to encourage people to consider more sustainable travel choices, such as holidays within the UK or to near-European destinations that can be reached by rail or coach.

Rather than wait until the time seems right to pick up the pieces of the draft aviation strategy (or perhaps to start again in writing it), it would be appropriate to consider these aspects of aviation policy, which directly impact the sector's emissions, by way of the Decarbonisation Plan.

3. We can't leave the aviation industry to sort it out

Representatives of the aviation industry typically argue (for example at the Transport Select Committee's recent inquiry into the impact of Covid-19 on the sector) that policy measures for their sector's emissions are unnecessary as they have their own plans to tackle it. The latest Sustainable Aviation carbon roadmap, for example, claims that its plans can allow the industry to grow by 70% while still achieving net zero emissions by 2050. At the moment, however, there is no evidence that the aviation industry has the technology or the incentives required to deliver anything like this transformation. In fact – pre-Covid – its emissions were rising.

The industry's presentation of its achievements to date should be treated with caution. In 2017, Airlines UK published a report claiming to 'set the record straight' about aviation emissions, and showing that "from 2006 to 2014, for the first time, growth in UK aviation has been delivered without any increase in CO2 emissions". It claimed that 'airlines are making enormous efforts to reduce their carbon emissions and negative externalities' and detailed how the industry was investing in new aircraft; maximising fuel efficiency per flight; and investing in sustainable aviation fuel. The report failed to mention, however, that the year selected for comparison, 2006, recorded the highest level of aviation emissions to date, that there followed a financial crisis, and that subsequently it took some time for aircraft load factors to return to their earlier levels, allowing passenger numbers to grow for a number of years even without any increase in emissions. The sector's emissions have since resumed their upward trend, and there is currently no policy in place that will prevent this from happening.

Decarbonising aviation is likely to be both difficult and costly. There are no easy technology or fuel solutions ready to be rolled out (though options do exist and, with the right investment, could deliver), and the idea that aviation must grow has historically been written deep into every piece of policy making, in a way that this no longer the case for road transport. Yet failing to decarbonise aviation increasingly risks legal challenge and undermines the Government's commitments on net zero.

4) We can't wait for international policies to sort it out either

The Government likes to talk up the role of the UN's International Civil Aviation Organisation in addressing the aviation emissions challenge. AEF actively engages in these discussions as part of the global NGO coalition ICSA (the International Coalition for Sustainable Aviation) which, like the aviation industry, has observer status at ICAO. We support the aim of the UK Government, as expressed in the Decarbonising Transport document, to "negotiating in ICAO for a long-term emissions reduction goal for international aviation that is consistent with the temperature goals of the Paris Agreement, ideally by ICAO's 41st Assembly in 2022."

We also welcome, however, the indication that "As a responsible national government, we need a contingency measure in case international progress does not go far enough or fast enough. That is why in the Government's response to the latest CCC Progress Report, we made it clear that we would be minded to include international aviation and shipping emissions in our carbon budgets if there is insufficient progress at an international level." We note also the clear implication from

² https://airlinesuk.org/wp-content/uploads/2017/01/Airlines-UK-Responding-to-the-Carbon-Challenge.pdf

Government staff and ministers at the time when the net zero law was passed that this would apply to all sectors, including international aviation and shipping.

While we welcome the Government's recognition that international measures may not go fast enough or far enough, we note that the consistent advice of the Committee on Climate Change has been that UK policy and measures on aviation emissions should not be seen as an alternative to international measures but as complementary to them. We agree. Before it was weakened by a decision to amend its baseline (with the result that the industry is unlikely to have any offset obligations for several years), CORSIA may have helped to limit global aviation emissions by beginning to put a price on the sector's CO2 emissions. But it does not – even if it can be strengthened in future – remove the need for the UK to account for our share of aviation emissions in order to ensure that at a national level we are reducing emissions in line with our net zero commitment.

The ICAO goal underpinning the CORSIA scheme currently looks less challenging to comply with than a pathway to net zero aviation defined by the Climate Change Act, making it a more attractive option for the aviation industry to support. But there can be no alternative in a net zero future to the aviation sector achieving net zero emissions. In the past, we might have argued that if aviation underperformed in terms of emissions reductions then other sectors would have to work harder. But with every sector in every country of the world now required to achieve net zero there is no slack in the system to allow for aviation to lag behind.

Since ICAO's current emissions goal (no net increase in emissions from 2020) falls well short of the ambition required to meet the Paris Agreement, and the prospects of a stretching long-term goal by 2022 look politically challenging, we would argue that the proposed benchmark for national intervention, namely that international action has not gone far enough or fast enough, has in any case already been met. If ICAO is in fact able to agree to a long-term climate goal in line with the Paris Agreement and puts in place measures to deliver this, the UK will have lost nothing by including the sector in our carbon budgets; we will simply find it easier to achieve them than might otherwise have been the case.

We support the proposals from BEIS to include aviation in a UK ETS linked to the EU ETS on a basis that aims to provide a similar, or greater, level of ambition to the EU's scheme. We would oppose the use of CORSIA permits for compliance with this scheme since CORSIA does not have an equivalent level of ambition.³) We note however that one effect of including aviation in the UK ETS will be higher costs on flights between the UK and other EU countries than will be imposed by CORSIA on flights to countries outside Europe. If these costs are incorporated in ticket prices there is a risk that this could provide a small perverse incentive for consumers to choose more distant locations for a holiday. The Government should therefore consider what measures could be introduced in parallel, such as an air miles tax, to help mitigate this effect, while continuing to advocate for more ambition at the global level.

5) Initiatives such as the Aviation Restart, Recovery and Engagement Unit, and the Jet Zero Council, currently have no policy underpinning in terms of climate change

While key decisions relating to aviation policy and climate change have yet to be taken, the Government has meanwhile announced several initiatives relevant to the future of aviation, and its decarbonisation, including the Aviation Restart, Recovery and Engagement Unit (which is due to

³ See our response to the BEIS consultation on the future of UK carbon pricing https://www.aef.org.uk/2019/07/15/aef-response-to-governments-consultation-on-the-future-of-uk-carbon-pricing/.

consider climate impacts in its second phase); the Jet Zero Council (charged with delivering a zero carbon transatlantic flight within a generation); and the net zero transport board, which includes representatives from the aviation industry and which, at its inaugural meeting, appears to have touched on the issue of aviation's inclusion in carbon budgets⁴. In order for these groups to work in a coordinated fashion, and avoid undermining the efforts of others (for example by embedding levels of aviation growth that are not compatible with achieving net zero) it is important to be clear about the climate goal for the aviation sector, and about how the Government plans to ensure that the goal is delivered, including the ways in which these various groups are expected to contribute.

How to decarbonise aviation

The most important overarching measure that could and should be implemented to decarbonise aviation would be the explicit inclusion of international aviation emissions in the UK's carbon accounts, as outlined above. This would give the Committee on Climate Change a clearer role in advising on aviation policy, and would make the aviation industry accountable for its climate commitments.

We would be very pleased to engage with the Department for Transport and others about the appropriate next steps after this. We anticipate that these should include:

- An update to the aviation demand and CO2 forecasts, last produced in 2017, to better understand the scale of the challenge in closing the gap between likely emissions and net zero
- An assessment of how to ensure that the appropriate technology solutions for aviation (such as zero carbon fuels) will be delivered between now and 2050, and what policy interventions will be needed in order to ensure that these are delivered across the sector as a whole (noting that the jet zero council currently has a much more limited remit)
- A review of the Government's support for airport capacity growth plans
- Consideration of new financial incentives to limit aviation emissions such as the introduction of an air miles tax, and how to end inappropriate incentives such as loyalty schemes that offer air miles
- A review of the extent to which services from aviation can be delivered in lower carbon ways, and how the Government might support this transition (increased use of virtual meetings, for example; support for UK tourism and rail/coach access to near-European destinations including ensuring that these transport choices present minimal risk in terms of Coronavirus transmission)
- Consideration of how best to support staff currently employed in aviation to transition to green jobs where appropriate, given the need to limit demand growth in the sector together with the demand impact caused by the Coronavirus crisis, and other changes in the industry such as automatic check-in and the rise of low-cost travel, which have reduced the number of employees required per passenger

 $^4 \ \underline{\text{https://www.theguardian.com/environment/2020/jul/08/international-aviation-and-shipping-likely-to-be-added-to-uks-net-zero-carbon-target\#: $^:\text{text}=Greenhouse $^20gas $^20emissions-, International $^20aviation $^20and $^20shipping $^20likely $^20to $^20be, UK's $^20net $^20zero $^20carbon $^20target $^20carbon $^20and $^20aviation $^20and $^20aviation $^20and $^20aviation $^20and $^20aviation $^20and $^20aviation $^20and $^20aviation 20aviat