











Briefing: Building back better for aviation

Summary:

This briefing sets out the government steps necessary to create a more sustainable aviation industry as it recovers from the covid pandemic.

To be clear, the aviation sector presents a problem for the climate in terms of its greenhouse gas emissions because there is no zero carbon aviation, and no prospect of this soon. If we are to have a resilient, green recovery, the sector needs to a) be fully accounted for in the economy-wide drive to achieve net zero emissions b) be taxed to help fund the green recovery and to reduce demand for flying c) use technology to mitigate remaining emissions.

Context:

Just before the Covid-19 pandemic, there was evidence emerging¹ of a shift in public thinking in relation to aviation and climate change, including a desire for better regulation of the sector, and a willingness to consider steps such as flying less. Aviation is on an unsustainable path, with the sector representing nearly 10% of the UK's CO₂ emissions, a figure that does not even include warming caused by non-CO₂ emissions (which roughly double the impact), and is anticipated to be the highest emitting sector by 2050². Since the crisis, bailout demands coming from airlines with billionaire tax exile shareholders have generated a strong public backlash. Clearer, cleaner air³ and peaceful skies⁴ have meanwhile been viewed as by-products of lockdown which the public would like to maintain, and businesses have started to see benefits from attending international meetings by videoconference.

The aviation sector has been generously supported through the Covid crisis – with no environmental conditions attached – by the UK government. British Airways has received £300 million in government-backed loans, Easyjet £600 million, and Ryanair £630 million. While furlough support for workers otherwise facing sudden job losses has been essential, the government should not be providing finance intended to return the sector to its business as usual path. In a survey⁵ of over 200 leading global economists, unconditional aviation bailouts were ranked worst from among a wide range of options for government stimulus measures for economic multiplier effects as well as likely climate impacts.

The Government should use the opportunity represented by the slowdown in air travel to reset the UK's aviation strategy and, as the Prime Minister put it, "build back better" by initiating a

https://www.cardiff.ac.uk/news/view/1591846-two-thirds-of-people-support-limiting-air-travel-to-tackle-climate-change

https://www.independent.co.uk/news/uk/home-news/coronavirus-uk-lockdown-end-poll-environment-food-health-fitness-social-community-a9469736.html

https://inews.co.uk/opinion/columnists/birdsong-not-road-traffic-coronavirus-lockdown-better-environment-2866715

¹ Such as this Yougov poll

² https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/

⁵ https://theconversation.com/why-airline-bailouts-are-so-unpopular-with-economists-137372

green recovery⁶. Such a recovery would set aviation on a fairer and more sustainable course, while providing any support necessary for workers to shift to green jobs. Now is the right moment to put in place three key measures to help ensure that in future the industry acts responsibly in terms of both emissions and taxation.

1. Include international aviation and shipping emissions in net zero law

For aviation to be part of a resilient recovery, it must be part of the UK's net zero plan. So far, emissions from international aviation and shipping (IAS) have not been formally included in carbon budgets under the Climate Change Act but instead have been allowed 'headroom' in the 2050 carbon target (without taking account of aviation's non-CO₂ impacts), with the budgets for other sectors set lower than they would otherwise have been, to allow for IAS emissions.

Not formally including IAS in carbon budgets runs the risk that aviation emissions exceed the allowance in the headroom and creates uncertainty for investors over what will be expected from the sector in terms of future emissions cuts.

A commitment now to legislate for formal inclusion of these emissions in carbon budgets, at least from the sixth carbon budget onwards, would achieve the following:

- Implement the advice of the Committee on Climate Change
- Complement international approaches and allow the UK to demonstrate leadership in advance of the COP
- Ensure that the DfT's commitment to net zero across all transport modes is delivered
- Set a policy framework through which the aviation industry is held to account for its own promises to achieve net zero emissions by 2050

With emissions likely to be lower than previously anticipated in the coming years as a result of the huge impact of Coronavirus on air travel, inclusion in carbon budgets as recommended by the CCC from 2033⁷ will be less challenging for the industry than it would otherwise have been.

2. Ensure the sector pays a fair contribution towards public finances to fund the green recovery and reduce demand

Despite the fact that flying is a highly polluting activity undertaken largely by those on higher incomes, it has always been very lightly taxed, being exempt from both fuel duty, and VAT on tickets. The Air Passenger Duty rate paid by 78% of air travellers (£13) has increased only £3 since 1997, and, adjusting for inflation, has fallen in real terms. If aviation paid the same level of duty and VAT on its fuel, as motorists currently do on theirs, revenue for the Chancellor would increase to over £11billion a year compared to the £3.8billion that APD raises today.

There are sound business, social and environmental reasons for taxing aviation more in future, to help fund the large-scale public investment needed as part of the green recovery. Low taxes have acted as an indirect subsidy to aviation, artificially boosting its rate of growth. As noted by Fatih Birol from the IEA, aviation represents just 1% of the global economy but 8% of global oil use. In the UK, aviation emissions were, pre-crisis, forecast to exceed the maximum level that the CCC considers compatible with net zero, even without taking account of the sector's non-CO₂ impacts. Flights from

 $^{^{6}\,\}underline{\text{https://www.businessgreen.com/news/4015783/boris-johnson-owe-future-generations-build}}$

 $[\]frac{https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf\#page=264$

UK airports are overwhelmingly discretionary leisure travel by UK households⁸ in the top half of the income spectrum⁹. The 15% of the UK population who fly frequently are responsible for 70% of all of our flights¹⁰, with the 1% most frequent flyers accounting for close to a fifth of all flights by English residents¹¹.

Higher taxes, equitably levied, on flights from the UK would help both to reduce demand and to put the sector on a trajectory compatible with net zero. There are numerous taxes which could be combined to achieve this including:

- A frequent flier or air miles levy, which would be the most equitable instrument
- VAT on plane tickets
- Introducing excise duty on aviation kerosene
- Raising Air Passenger Duty

Low oil prices have reduced operating costs so the argument for raising taxes as the recovery builds is particularly strong.

Alongside this, the government should announce a moratorium on future expansion of airport infrastructure including terminals and runways. A recent Court of Appeal judgement ruled that the Airports National Policy Statement which allows for the expansion of Heathrow Airport was unlawful on climate grounds. Most schemes have already been put on hold and the sector must be sent a clear message that the era of unconstrained aviation growth is over.

3. Make the UK a leader in zero carbon aviation to mitigate remaining emissions

Technology solutions for zero carbon flight are not yet mature. Demand management will therefore be essential alongside the efficiency improvements that generally come with new aircraft types. For aviation to achieve net zero emissions by 2050, however, significant new measures will also be needed. The cost for developing and rolling these out should be borne by the aviation industry, but the government will have an important role in setting the policy framework. The industry's current preference is for buying carbon offsets, since these are cheaply available and do not require any changes to the industry's own operations. However, even theoretically this cannot work for long, as all sectors and all countries need to reduce their emissions to net zero by 2050. Moreover, there is limited global land availability, and biological sinks are not equivalent to leaving fossil fuels in the ground; offsetting is not a solution.

Electric or hybrid planes generate considerable interest, but are likely to make only a marginal contribution until after 2050¹². Sustainable aviation fuels particularly electrofuels (e-kerosene, produced using CO₂ and combined with renewable hydrogen) can provide an opportunity¹³. The UK Renewable Transport Fuels Obligation includes a Development Fuels target for fuels like e-kerosene, but no requirement for airlines to purchase the fuel. A small but growing mandate on the sector to use an increasing share of genuinely sustainable aviation fuels, along with the requirement to reduce overall emissions once IAS is included in the UK's carbon budgets, could boost investment and

 $\frac{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/adhocs/10657averageweeklyhouseholdexpenditureoninternationalairfaresukfinancialyearending2016tofinancialyearending2018}{\text{ending2018}}$

https://www.theguardian.com/environment/2019/sep/25/1-of-english-residents-take-one-fifth-of-overseas-flights-survey-shows

⁸ https://www.ons.gov.uk/peoplepopulationandcommunity/leisureandtourism/articles/traveltrends/2019 9

¹⁰ https://fullfact.org/economy/do-15-people-take-70-flights/

¹² https://s3-eu-west-1.amazonaws.com/media.afreeride.org/documents/Electric+Dreams.pdf

¹³ https://www.transportenvironment.org/publications/roadmap-decarbonising-european-aviation

innovation. The introduction of e-kerosene would also progressively raise the costs of fuel helping to manage aviation demand.

This briefing was prepared jointly by AEF, Possible, Greenpeace, Transport and Environment and Friends of the Earth as part of the Climate and Transport Working Group which is organised jointly between Cutting Carbon Now and The Climate Coalition. For further information please contact Cait Hewitt cait@aef.org.uk