Transport: International Aviation

This lever controls the sub-levers listed in the table, and ambition levels are for the end year shown on the right-hand side.

In 2016, international aviation demand in the UK (both arrivals and departures) was 686 billion passenger-km[1]. This corresponds to around 10,500 km per person, of which 6,100 km was for UK residents, with the remainder including international passengers in transit through the UK.

Rules for accounting for national emissions from international aviation are not yet agreed, but one approach is to account for departing flights only by halving the demand, as represented in the table.

The Department for Transport (DfT) forecasts that, given existing policy commitments, international passenger travel demand is likely to increase by around 68% on 2016 demand by 2050, corresponding to ambition Level 1 on a per person basis. Higher levels of ambition anticipate smaller increases in international aviation demand.

Key Interaction
Emissions from aviation can also be reduced through efficiency improvements, partial electrification/hybridisation and biofuels.

Level 1
40% increase in travel per person. Equivalent to the DfT's recent assessment of international aviation passenger travel demand, with a new north-west runway built at London Heathrow (LHR NWR scenario).

Level 2
25% increase in travel per person. This represents 1/3rd of the decrease between Level 1 and Level 4.
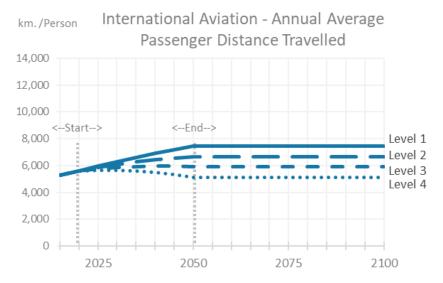
Level 3
10% increase in travel per person. This represents 2/3rds of the decrease between Level 1 and Level 4.

Level 4
There is around a 5% decrease in international air travel per person, at the lower end of the CCC Net Zero speculative scenario[2].

[1] https://www.gov.uk/government/publications/uk-aviation-forecasts-2017

[2] https://www.theccc.org.uk/publication/net-zero-technical-report/

Default Timing Start year: 2020, End year: 2050

Sub-Lever	Units	2015	Level 1	Level 2	Level 3	Level 4
International passenger travel	Psg km. / person	5,271	7,500	6,700	5,900	5,100

International Aviation - Annual Average Passenger Distance Travelled