

CCC review suggests that the UK's share of international shipping emissions should be included in climate targets

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The Committee on Climate Change (CCC) said today that the UK's share of international shipping could account for up to 11% of total emissions permitted under the Climate Change Act by 2050 (i.e. 18MtCO₂ of total 160MtCO₂).

Given that international shipping emissions are likely to be material, and to have implications for approaches in other sectors, the Committee recommends that these should be included now in the 2050 target, and sets out options for inclusion in carbon budgets.

The Committee also recommends that the Government should work with the EC to gain access to fuel use data from ship operators in order to resolve uncertainties over current emissions, and that the Government should support market based approaches to reducing shipping emissions, ideally global but if not at the EU level.

Emissions from international aviation and shipping are not at present included in carbon budgets or in the UK's target to reduce emissions in 2050 by 80% below 1990 levels.

Under the Climate Change Act, however, Parliament must decide by the end of 2012 whether to include emissions from international aviation and shipping in carbon budgets.

The review published today provides the first detailed assessment of the UK's share of current international shipping emissions, projects emissions out to 2050 and estimates the abatement potential from shipping.

There is a great deal of uncertainty around what the appropriate UK figure for international shipping emissions. This is a result of issues concerning the appropriate

methodology for calculation, the lack of data that is currently available and the extent of transshipment (i.e. docking of ships at ports on route to the UK).

CCC analysis shows that current emissions are likely to be in the range of 12 – 16 MtCO₂ but could be higher.

Going forward, the report suggests that there is significant scope to reduce emissions through a range of technical and operational measures including:

Technological

- Upgrading propulsion systems and engines to improve efficiency or using towing kites to allow ships to use wind energy.
- Applying hull coatings or increasing the frequency of hull cleaning to reduce friction and fuel consumption.
- Installing supplementary power systems to make use of solar or wind power and improving boiler technology.

Operational

- Reducing the speed at which ships travel in order to save fuel.
- Using software to help navigators find the safest and most efficient route, by combining route mapping and weather data.
- Improving port turn-around times and providing more information on port congestion.

Fuel

- **Biofuels** could become economically viable depending on the relative price of fossil fuels and biofuels, including whether shipping is covered by a carbon price.
- **Liquefied Natural Gas (LNG)** has a lower carbon intensity per unit of energy compared to conventional fuels. However, LNG has lower energy density than conventional fuels and requires more space for storage.

Based on this assessment of potential, ranges for base year emissions, and demand projections, the Committee sets out scenarios in which international shipping emissions in 2050 are up to 18MtCO₂, compared to total allowed emissions of 160 MtCO₂e under the 2050 target in the Climate Change Act.

Given the potential importance of international shipping emissions, and therefore the need to include them in the framework set out under the Climate Change Act, the Committee suggests 3 options for inclusion:

1. International shipping emissions are included in the 2050 target and carbon budgets now.
2. They are included in the 2050 target and carbon budgets when progress has been made on a methodology to accurately reflect international shipping emissions.
3. They are included in the 2050 target now, and in carbon budgets when progress has been made on a methodology to accurately reflect UK international shipping emissions.

The Committee will recommend the appropriate option for inclusion as part of formal advice to the Government on inclusion of aviation and shipping in carbon budgets in March 2012.

David Kennedy, Chief Executive of the Committee said:

“Our report highlights the high degree of uncertainty over current and future shipping emissions and the need to resolve this. However, it is clear that shipping emissions could well be significant, and so cannot be ignored – they should be included under the Climate Change Act. It is also clear that there is scope to reduce emissions, which would reduce costs of inclusion. In order to ensure this, the Government should proactively support development of new policies aimed at encouraging investment in cleaner shipping technologies and more efficient operational practices.”

ENDS

Notes to Editors

Committee on Climate Change (the Committee)

The Committee on Climate Change (the Committee) is an independent statutory body established under the Climate Change Act to advise the UK Government on setting carbon budgets, and to report to Parliament on the progress made in reducing greenhouse gas emissions: www.theccc.org.uk/

- The Review of UK Shipping Emissions will be available <http://www.theccc.org.uk/reports> on Thursday 3rd November

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