19/02/2019

Better pricing of aviation emissions in the EU is needed, and the Netherlands is championing it

Aviation emissions have increased by 10% in Europe between 2014 and 2017, according to the 2019 Aviation Environmental Report, as efficiency improvements are not keeping up with growth of demand.

Last week, the Dutch finance minister invited other European Member States to consider the implementation of a European carbon tax for aviation, and announced an international conference on carbon pricing in the aviation sector, tentatively scheduled for June 20-21, 2019.

The Dutch proposal for an aviation carbon tax comes in the midst of an already heated debate about how to price emissions from the aviation sector. While industry groups exaggerate the impact of existing policies, recent research shows that existing and planned measures for aviation will not set this sector on a trajectory compatible with the Paris Agreement's objective.

The main carbon pricing instrument for aviation in Europe is the EU Emissions Trading System. It sets a maximum quantity of emissions for the aviation, industry and power sectors combined. Airlines receive a large number of pollution permits for free (representing 32.6 Mt of CO2e in 2017), and must surrender one permit for every tonne of CO2e emitted. The number of permits allocated to airlines is not enough to cover their emissions, which means they must buy permits from other sectors. In 2017, airlines purchased 26.8 million permits. This means they polluted over 70% more than they initially received permits for. In a perfectly functioning system, this would mean that emissions are reduced in the other sectors covered by the EU ETS (since they have fewer permits available after having sold them to airlines). The reality is, however, quite different. In 2017, the EU ETS was oversupplied by 1.65 billion permits, i.e. these permits were not needed by anyone. The quantity of allowances bought by airlines represents only 0,015% of this oversupply, and is hence unlikely to have generated any significant pressure for the other ETS regulated sectors to reduce their emissions.

So what is the financial impact of the EU ETS on airlines? First, the numbers above show that more than half of the aviation sector's carbon pollution under the ETS is free, as airlines do not pay for most of their initially allocated permits. In 2017, the total cost of complying with the EU ETS for airlines is estimated at €189 million, a mere 0,03% of their operating costs for the covered flights. Even a four-fold increase in this cost to account for the recent permit price hikes which occured over the course of 2018 would keep this burden below 1.5% of total operating costs.

Does this mean that the airline industry's pressure to get rid of the EU ETS and replace it with a global offsetting scheme would benefit the climate? You guessed it: no it does not. The International Civil Aviation Agency is in the process of setting up a system – the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) – which would oblige airlines to buy carbon offsets to compensate exclusively for the growth in their emissions above 2020 levels. There are multiple issues with this mechanism, including the fact that it is being set up in absolute secrecy and that it allows endless growth in emissions as long as those are "compensated". One of the major shortcomings is that it is unlikely to set any meaningful price incentive for the aviation sector to decarbonise. As we previously reported, without more ambitious safeguards, airlines could comply with the scheme by paying less than €1 per tonne of CO2e. As a point of comparison, the estimated cost of compliance with the EU ETS discussed above were for prices around €5/tCO2e. Today's EU ETS prices vary around €20/tCO2e, which is still much below the price levels needed to incentivise the necessary investments in low-carbon R&D for aviation, the uptake of clean fuels, or train travel. With extremely

low prices and a coverage limited to the growth in aviation emissions, CORSIA is unlikely to generate any meaningful carbon price for aviation, and is even weaker than the EU ETS.

Adopting an EU-wide carbon tax for aviation would therefore help bridge the gap between projected emissions and targets in line with the Paris Agreement. This would require unanimity from all Member States, which is difficult to reach. Alternatively, countries have the possibility to adopt mutual agreements to tax aviation fuels, which would be a first step towards an EU-wide taxing mechanism.

1 See for example this new paper on the case of Sweden