

COP22: aviation emissions under Paris

Has ICAO come to grips with aviation's climate impact?

November 2016

Summary

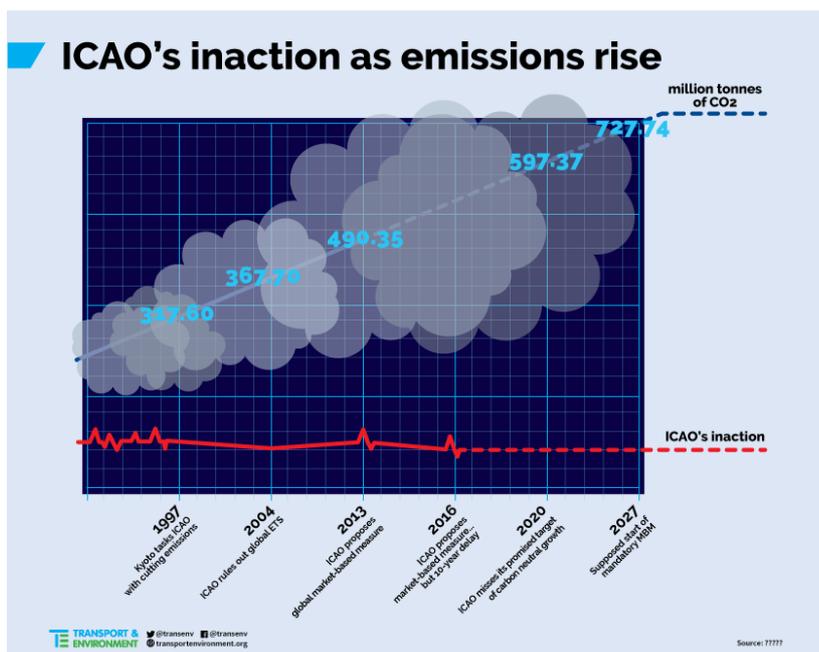
Aviation is responsible for an estimated 5% of climate change, however the Paris Agreement left it unclear who is responsible for regulating the sector's emissions. At the conclusion of COP21, the UN's aviation agency, ICAO, and the aviation sector itself committed to substantial climate action in 2016. Now is the time to evaluate whether they followed through on that commitment.

The two measures adopted in 2016 – a CO₂ standard for new aircraft and a global market based measure to stabilise emissions at 2020 levels fall far short of what the Paris Agreement requires. Neither will have a meaningful impact on aviation emissions.

Much more is needed – both greater ambition at ICAO, but also developed countries must go first and take serious action to reduce emissions from the aviation sectors which dwarf emissions from developing countries.

1. Aviation and the Paris Agreement

Aviation is responsible for an estimated 4.9% of climate change, and its emissions are projected to increase by up 300% by 2050 unless action is taken. Its growth is simply outpacing its efficiency gains. Emissions from international aviation sit outside of NDCs, however the Paris Agreement's reference to addressing all anthropogenic emissions (Article 4), and its 1.5/2°C temperature goal, means that action must be taken to reduce the sector's emissions.



At the conclusion of COP21, the UN's International Civil Aviation Organisation (ICAO) – the international body which regulates the sector – and industry committed to substantial action on aviation emissions in 2016. One year later, it's time to evaluate whether ICAO and industry lived up their promises, or whether further inaction will undermine efforts to limit the sector's climate impact.

2. What ICAO has done since

The Kyoto Protocol requested developed countries to work through ICAO to limit and reduce aviation emissions, though no such language exists in the Paris Agreement. However having established a work program at its triennial 2013 ICAO assembly, parties agreed that they would continue to work through ICAO to advance these measures.

The two key measures that ICAO agreed to develop were a CO₂ efficiency standard for new aircraft and a global market based measure (GMBM) to stabilise emissions at 2020 levels. Both were due to be finalised in 2016.

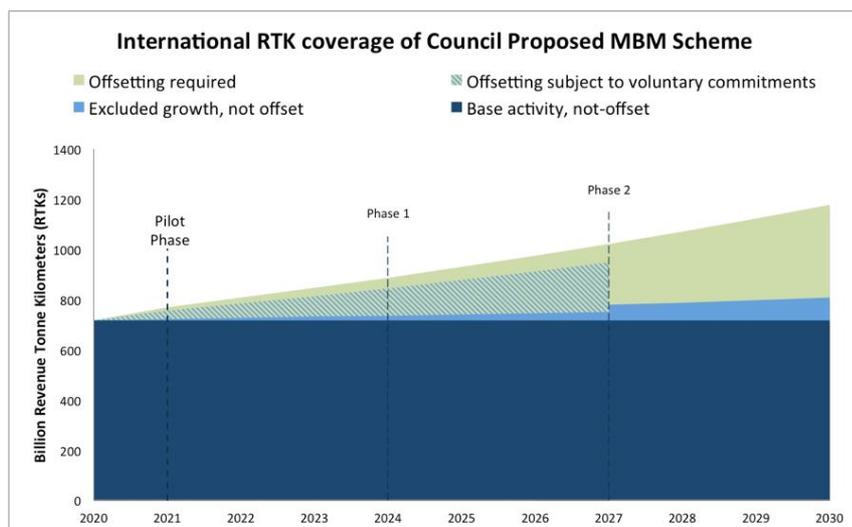
In February 2016, ICAO's environment committee (CAEP) adopted a draft CO₂ standard for new aircraft. However this standard is based on current technology but won't come into force until 2028 – by which time it will be out of date. This was a huge missed opportunity – when work began on the standard six years ago, the stated purpose was to increase efficiency gains beyond what would happen without a standard. This was essential because efficiency gains in the sector are declining. The standard falls well short of this aim.

Last month, the ICAO triennial general assembly adopted the outline of a GMBM to stabilise international aviation emissions at 2020 levels. However, as discussed below, this deal falls well short of what was promised and what is required.

3. ICAO's global market based measure

When ICAO started work on its GMBM (now known as CORSIA – carbon offset and reduction scheme for international aviation) in 2013, there were a number of options on the table – including a global emission trading system, an offsetting mechanism with revenue raising and an offsetting mechanism without revenue raising. After short deliberations, the small number of states and industry involved decided to go for the least effective of these measures – offsetting without revenue raising. Revenue could have been used for climate finance, so this represented a huge missed opportunity.

After several years of further discussion, with limited public scrutiny and restricted civil society engagement, a proposal emerged at the start of 2016 which, after some further discussions, would see the measure be voluntary for the first six years and lack important rules as to the quality of the offsets which could be used.



The target of stabilising emissions at 2020 levels is already well short of what the Paris Agreement requires – one study indicates that it deviates 55% from the 2°C objective, let alone *well below* 2°C or pursuing 1.5°C (European Parliament, 2015). The target needs to be reached and then quickly ratcheted up.

The rules for offsets – so far yet to be developed – need to be strict and transparently applied if the mistakes of the past are to be

avoided. Among other rules, there needs to be a strict prohibition on double claiming – where both of country

hosting the offset and the airline purchasing the offset claim the same emission reduction. Without these rules and transparency the measures risks having zero environmental impact.

And of course the Paris Agreement, which aims to reduce or eliminate emissions from all parties and all sectors, means that offsetting can only ever have a limited lifespan. In time countries will need to retain these emission reductions for their domestic efforts, and won't be willing to sell them to airlines. CORSIA, even if successfully implemented, can only ever be a stop-gap measure.

If properly implemented, the GMBM can be an important first step. However if aviation is truly to contribute to the Paris Agreement, there must be measures at international, regional and national level which directly reduce aviation's climate impact.

4. What action at national level?

Along with efforts at ICAO level, some efforts are also underway at national and regional level to limit aviation emissions. The US Environmental Protection Agency (EPA) accepts that it must regulate aviation emissions and will issue rules to this effect next year. US domestic aviation is responsible for 18% of all global aviation emissions (and US domestic and international equals 27%), and any action it takes will have huge consequences globally. Flights within Europe are included in its emission trading system (ETS) and that ETS functions and has the potential to deliver significant emission reductions. Both China and Mexico have signalled an intention to include domestic aviation emissions in their respective national emission trading systems. Canada may include domestic aviation in its recently announced federal carbon pricing plan.

Such national and regional efforts can play an important role in driving ambition, as ICAO's lowest common denominator approach will never deliver the sort of action which is required by the Paris Agreement. Effective national and regional efforts can be used to deliver a clear price signal to the overall aviation sector, and will encourage manufacturers and operators to invest in greater efficiency. Rather than pit ICAO against national/regional measures, such extra ambition should be welcomed. This is especially the case from developed regions such as North America and Europe, which are large aviation emitters.

5. Conclusion

Addressing aviation emissions requires much more ambition, at international, national and regional level. ICAO measures are an important starting point, and represent a step forward for developing countries. However big aviation emitters such as those in Europe and North American can and should do much, much more. Aviation should be used as a source of climate finance, especially given it is used predominantly by the wealthy yet its climate impact will be felt disproportionately by the poorest.

Further information

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