



Market-based Measures and Climate Change

Why MBMs?

- MBMs are a cost-effective way to reduce aviation's emissions and can provide a lower-cost option than other emissions reduction measures.
- The forecasts by ICAO Committee on Aviation Environmental Protection (CAEP) show that, after the implementation of technology and infrastructure improvements, and assuming 3 per cent use of sustainable alternative fuels, the emissions gap from carbon neutral growth in 2020 would be on the order of 500 Mt by 2040.
- MBMs are necessary to fill this emissions gap, together with sustainable alternative fuels.

Developments on MBMs at ICAO

- The 37th Assembly in 2010 requested the development of a framework for MBMs and the exploration of the feasibility of a global MBM scheme for international aviation.
- Progress on the MBM framework included the assessment of geographical coverage of emissions, and possible means to accommodate special circumstances and respective capabilities of States.
- Assessment on the economic impacts of global MBM options showed that they could contribute to achieving carbon neutral growth from 2020 at relatively low costs compared to the cost of in-sector reductions.
- The ICAO Council recognized that all three MBM options were technically feasible and had the capacity to contribute to achieving ICAO's environmental goals (197th Council Session in November 2012).

Key Figures



% of global CO₂ emissions contributed by international aviation



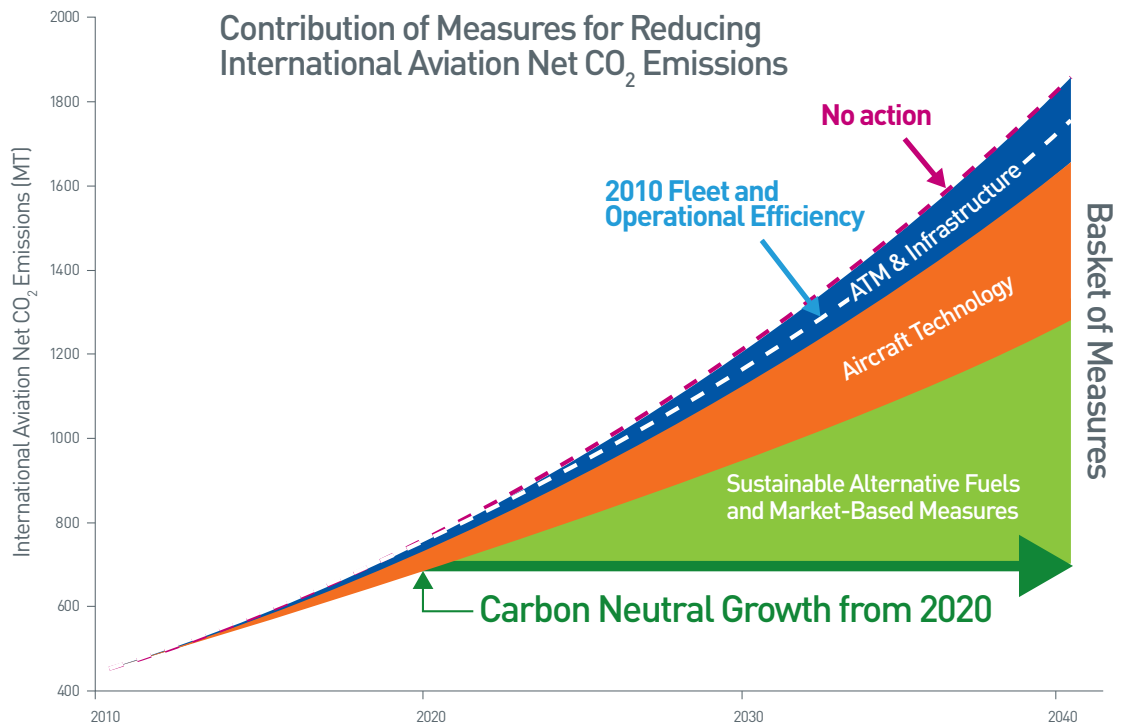
Megatonnes of CO₂ emissions due to international aviation (2010 total)



Megatonnes of CO₂ emissions due to international aviation (2020 forecast)

MBM options considered by ICAO:

- **Global Mandatory Offsetting** – a scheme where emissions reductions made outside the sector are used to offset emissions from the sector above agreed levels.
- **Global Mandatory Offsetting with Revenue** – same as above but a fee is also introduced to generate revenue.
- **Global Emissions Trading** – a scheme where allowances are created for each tonne of CO₂ under an emissions cap and used by participants to meet their obligations.



The ICAO Environmental Report

also contains helpful information on ICAO's Climate Change activities in Chapter 4.



ICAO

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www.icao.int/env or www.icao.int/Meetings/a38

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