

Future Environmental Constraints on Emissions

Emissions trading schemes challenge the sustainability of existing economic models

There remains a high degree of uncertainty surrounding the future environmental constraints on the aviation industry in the period to 2025, the report noted.

Changes to aircraft emission standards are unlikely to have a significant impact on the industry over the next 15 years, the report said. Overall, the acquisition of new aircraft will continue to be driven by operational needs.

Aircraft emissions may keep pace with or grow faster than projected measures for fuel saving and CO₂ reduction, the report said.

Emissions trading schemes will challenge the aviation industry to secure the necessary carbon capacity to emit CO₂ and sustain growth, the report found.

The target of 10% alternative fuel use by 2017 remains relatively modest given the opportunity to mitigate the cost of the European Union's Emissions Trading Scheme or ETS, according to the study.

Meanwhile, the aviation industry's small contribution to CO₂ emissions is widely known, the study said. However, there is greater uncertainty about the impact of other aircraft emissions, in particular NO_x and water vapor at altitude. It is unlikely that these uncertainties will be resolved so that mitigating measures can be implemented by 2025, the report said.

The introduction of the EU ETS is likely to spawn a number of schemes worldwide aimed at reaching reciprocal rights agreements with the EU, according to the study.

While the ETS will have a direct impact on the cost of operations it will also have indirect effects on the economic model of operators. **Airlines may be forced to change their hub and passenger transfer configurations along with their route networks and frequencies.**