

Existing Environmental Constraints on Emissions

Measures to reduce aircraft emissions produce mixed results

The proportion of aviation emissions remains relatively low compared to other sectors – it is responsible for less than three percent of carbon emissions in all sectors combined. However, aviation emissions have increased a massive 87% since 1990, the report noted, setting the framework for international efforts to set more environmental constraints for the industry.

The report identified and analyzed each environmental constraint on emissions around the world, grouping the constraints into four categories: air passenger charges, emission trading schemes, aircraft engine emissions charge systems and other environmental initiatives such as constraints on the use of auxiliary power units and the agreement between the French government and the French aviation industry to aim for a 50% reduction in carbon emissions by 2020. **Air passenger charges reduce traffic and have a negative impact on the economy**, the report found. They are generally a pure revenue generating tool for governments with no real environmental objective, the study said.

Emissions trading schemes, however, affect airline strategies and revenues. They represent the most cost-effective environmental constraints because they are market-based mechanisms, the report said. The European Union's Emission Trading Scheme or ETS aims to reduce emissions by 20% by 2020 from 1990 levels or by 30% if a global agreement is reached.

The EU ETS is expected to cost the aviation sector around five billion euros annually. The EU ETS has strong opponents, the study found, including IATA and U.S. airlines that have filed a legal case against the scheme. The main drawback to the scheme is that the revenue does not have to be used to fight climate change, the report said.