

What you need to know about Emissions Trading



The air transport industry takes its environmental responsibilities seriously. IATA and its members are committed to finding effective and cost-efficient ways to improve aviation's environmental performance.

Aviation plays a key role in the world economy, moving people and products across the globe, safely, quickly and affordably. It contributes 8% to global GDP. At the same time, our industry must ensure its activities remain environmentally sustainable.

Climate change is a serious matter that concerns us all. Aviation fuel burn is responsible for 2% of global carbon dioxide (CO₂) emissions, the main greenhouse gas linked to climate change. This share is projected to grow to 3% by 2050.

Airlines improved their fuel efficiency 5% from 2003 to 2005. We are projecting at least a further 25% improvement between 2006 and 2020.

In spite of this achievement, we are being asked to do more. Some governments are considering the use of emissions trading to reduce further aviation's emissions. This may have important consequences for your airline.

This document clarifies what everyone in our industry should know about emissions trading – what it is, what it does, and what it means for our business.

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PRINCIPLES OF EMISSIONS TRADING

The purpose of emissions trading schemes is to reduce emissions in a cost-effective manner. Emissions trading is just like other types of trading. But instead of bonds or coffee beans what is traded are rights or "allowances" to emit a certain amount of emissions. Trading within the same sector or industry is called "closed" trading while trading across all sectors is known as "open" trading.

A central authority estimates emissions for a specific period of time and then sets an overall cap below that level. This is the maximum amount of emissions allowed during that period. The cap is then divided into allowances or individual emissions quotas distributed to each trading entity in the scheme. The total number of allowances cannot exceed the cap.

The authority distributes allowances either by auctioning them or by distributing them free of charge. The amount of free allowances is based on past emissions ("grandfathered") or on each entity's emissions' efficiency against a sector average using a mathematical formula ("benchmarked").

Compared to taxes, emissions trading is a flexible and cost-effective way of reducing emissions. This is because **each entity can choose the least costly option to meet its quota.** It can lower its production, improve its energy efficiency, or buy extra allowances from other entities that emit less than their quota. Thus the buyer is paying to emit more, while the seller is paid for having reduced its emissions.

However, flexibility can also mean volatility.
Unlike taxation, where the cost can be reasonably estimated in advance, the price of emissions allowances can vary significantly based upon market forces and political influence.

Emissions trading schemes are either mandatory or voluntary. Mandatory schemes can be found in the USA, where emissions trading is used to reduce sulphur dioxide from electric utilities, and in the EU where an emissions trading scheme aims to reduce CO₂ emissions. The Chicago Climate Exchange, where companies can trade carbon allowances, is an example of a voluntary scheme.

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Those States that have signed up to the Kyoto Protocol have obligations to reduce their greenhouse gas emissions, including those from domestic aviation. The Kyoto Protocol urges States to address emissions from international aviation through ICAO. Both the Protocol and ICAO endorse emissions trading as a mechanism to achieve this. Given the global nature of aviation and climate change, it is essential that emissions trading initiatives respect the global policies and guidance developed by ICAO.

Aviation CO₂ emissions result from fuel burn. If airlines were included as trading entities in an emissions trading scheme, they would be given individual quotas for CO₂ emissions and their combined amount of CO₂ would be capped. To meet emissions targets, operators would need to make some choices: shrink their business, improve fuel efficiency or purchase emissions allowances from others.

Aviation's projected growth means that emissions will increase and airlines will likely be net buyers of allowances. Cost to airlines would be determined by the price of allowances in the trading market (as a function of demand and supply) and the amount of allowances that have to

be purchased. The latter depends on the airline's total emissions, the level of its emissions quota and the distribution method used (auctioning, grandfathering or benchmarking). The auctioning of allowances could have a very substantial cost impact, as competing airlines will drive up the price. Allowance distribution based on past emissions (grandfathering) would penalise airlines that took early action to modernise their fleets, while a benchmarking approach, if designed properly, would reward more efficient operations.

An "open" trading scheme gives aviation access to a wide market as it allows aviation to buy allowances from other sectors. At the same time aviation is effectively funding emissions reductions in those sectors. A "closed" scheme would allow trading only within the aviation sector and would be expensive with too many airlines chasing too few allowances.

Any emissions trading scheme should avoid competitive distortions. This would occur if, on the same routes, some operators were subject to an emissions quota while others were not. Similarly, air transport would be unfairly penalised if other transport modes were not subject to emissions trading.

"Any emissions trading scheme should avoid competitive distortions."

Aviation is a global industry
Climate change is a global problem
A global approach is critical
ICAO global policies are the answer

