

ATA ISSUE BRIEF

THE AIR TRANSPORT ASSOCIATION CLIMATE CHANGE COMMITMENT: A GLOBAL, SECTORAL APPROACH

Today, commercial airlines account for less than two percent of carbon dioxide (CO₂) emissions in the United States and only two percent on a worldwide basis.¹ This is a remarkably small portion, especially given that commercial aviation drives a much larger percentage of economic activity.²

The primary reason the aviation industry has been able to deliver more value to the economy while maintaining a low carbon footprint is because we are constantly investing in fuel efficiency improvements. In fact, U.S. airlines now move passengers and cargo more than twice as far on a single gallon of fuel than in 1977, having saved as much CO₂ as taking almost 19 million cars off the road each of the intervening years.³

Even so, the Air Transport Association of America (ATA) airlines acknowledge the need to take additional steps to address the emission of this greenhouse gas (GHG) from our operations. Accordingly, we join with the International Air Transport Association (IATA) in adopting an ambitious set of targets to mitigate GHG emissions from our industry under a global, sectoral approach, including collective industry commitments to:

- Continue industry fuel (and, hence, CO₂) efficiency improvements, resulting in an average annual CO₂ efficiency improvement of 1.5 percent per year on a revenue ton mile basis from 2009 to 2020;
- Cap industry-wide CO₂ emissions from 2020 (carbon-neutral growth) subject to critical aviation infrastructure and technology advances achieved by the industry and government; and
- Contribute to an industry-wide goal of reducing CO₂ emissions by 50 percent by 2050, relative to 2005 levels.

¹ Domestic U.S. figures come from U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2007* (April 15, 2009) (calculated from Table 1-4), while the worldwide figures are from IPCC, *Aviation and the Global Atmosphere* (1999).

² FAA figures confirm that commercial aviation drives over 5.2 percent of U.S. gross domestic product (GDP), \$1.1 trillion in U.S. economic activity (gross output), an estimated 9.5 million jobs and \$322 billion in earnings. See FAA, *The Economic Impact of Civil Aviation on the U.S. Economy* (July 2007).

³ Fuel/savings/traffic source: U.S. DOT Form 41; automobile equivalent calculations from www.epa.gov/cleanenergy/energy-resources/calculator.html.

Achieving Our Commitments

Airlines are the first global industry to make such bold commitments. To achieve them, a multi-faceted approach is required with a strong commitment from all aviation stakeholders: airlines, manufacturers, fuel suppliers, airports, air navigation service providers and governments. However, the airlines should not be penalized for the failure of others to do their part. Further, the need for the airline industry to continue to have the capacity to invest in emissions-mitigation measures must be central to any approach.

Accordingly, provided that prohibitive policies by governments are not imposed, the ATA airlines will continue to invest in new aircraft, fleet upgrades, operational improvements, sustainable alternative fuels and other innovations to achieve the bulk of the fuel- and GHG-efficiency improvements needed to meet our commitments, while keeping safety as our number one priority. As a number of additional and complementary aviation initiatives are not under the airlines' control, we urge our industry partners and government to join us in the following necessary programs:

1. Support for efforts to accelerate modernization of the air traffic control (ATC) system and federal infrastructure investment in the necessary equipage: Transitioning to a satellite-based system will significantly reduce the inefficiencies that are inherent in the outdated, radar-based ATC system – saving 10-15 percent in unnecessary fuel burn and emissions. Thus, the ATA carriers urge the federal government to use federal funding to accelerate the Next Generation Air Transportation System (NextGen) program into “NowGen.” This will bring significant energy and environment benefits, while providing much-needed operational and infrastructure improvements.⁴ As a case in point, had we had this modernized system in 2008, even at the mid-range of savings (approximately 12 percent), an additional 22 million metric tons of CO₂ would have been saved, equivalent to taking 4 million cars off the road that year.
2. Comprehensive energy policy: GHG emissions and energy are inextricably linked. Thus, climate change policy must be developed in the context of a comprehensive national energy policy that expands environmentally responsible access to domestic energy supply, reforms energy commodities markets, accelerates development of alternative fuels and promotes conservation and efficiency. With specific respect to energy commodities markets, undue speculation, which has caused and continues to cause volatility that is counterproductive to sound business investment and sustainability, must be reined in.
3. Investment in sustainable aviation alternative fuels: ATA and its airlines are making extensive resource commitments to stimulate the development of commercially viable, environmentally friendly alternative fuels. As a framework for doing this, we are a founding and principal member of the Commercial Aviation Alternative Fuels Initiative (CAAFI), a consortium of airlines, government, manufacturers, fuel suppliers, universities, airports and other stakeholders who hold the various keys to research, development and responsible implementation of alternative jet fuels. Developing

⁴ For more information, see the ATA white paper entitled “21st Century Aviation: A Commitment to Technology, Energy & Climate Solutions,” at <http://www.airlines.org/government/issuebriefs/Techonology-Energy-Climate-Solutions.htm>

alternative jet fuels is a “higher hurdle” than developing alternative fuels for ground-based units, as jet fuel must meet rigorous FAA specifications, which include reliability and stability at altitude and in greatly varying temperature and pressure conditions to ensure safety. Federal support for pilot and full-scale production plants, further support for fuel and equipment certification and incentives for emissions-reducing processes and feedstocks specific to alternative jet fuels are needed in the near term to get to commercial viability.

4. Restoration of U.S. investment in aviation environmental research and development programs: Congressional funding to NASA and FAA for aeronautics research and development – specifically including for environmental projects – has been cut significantly (by about 50 percent) in the past 8-10 years, compromising the public-private partnership for exploring and bringing to market products with significantly improved environmental performance. We continue to urge Congress and the administration to restore this funding, and seek the administration’s support.
5. Ensuring that domestic climate change policy is not counterproductive to continued improvements within the industry: The airlines’ tremendous fuel- and GHG-efficiency record, past and future, depends on continual, substantial capital investment on our part – investment in new aircraft, winglets to improve aerodynamics, aircraft engine improvements, new procedures, etc. These investments are critical not only to environmental progress with our industry, but also to the nation’s economy. Legislation currently being considered in the United States, such as the cap-and-trade program proposed under the Waxman-Markey bill, would siphon away the very capital we need to continue our investments. This legislation would require all jet fuel purchased in the United States – whether for a domestic or international flight – to be covered by U.S.-specific emissions “allowances” to be purchased by the oil companies. The costs for these allowances would be passed on to the airlines as an additional, exorbitant tax on every drop of jet fuel. And yet the Waxman-Markey bill does nothing to address the potential for multiple countries or even U.S. states to impose multiple taxes and requirements on the airlines for the same units of emissions. To be viable, the airlines cannot be subject to a patchwork of varying, unilateral programs throughout the world.
6. A global, sectoral approach to aviation climate change policy: The countries of the world currently are negotiating terms for a new international agreement on climate change under the United Nations Framework Convention on Climate Change (UNFCCC). This new agreement is intended to replace the Kyoto Protocol, which expires in 2012. In these negotiations, we urge countries to agree to address all of aviation emissions under a global, sectoral approach, to be overseen by the United Nations’ body charged with setting standards and recommended practices for international aviation, the International Civil Aviation Administration (ICAO). To ensure that airline CO₂ emissions are addressed appropriately, on a sector basis, we join IATA in supporting the following key principles for the inclusion of all aviation CO₂ emissions in the broader international framework:

Global sectoral approach covering all aviation CO₂ emissions

In a post-Kyoto framework, aviation CO₂ emissions should be addressed through a global sectoral approach, accounting for emissions at a global level, not by country.

Due to the global, interconnected nature of air transport, the sectoral agreement should apply equally to both domestic and international aviation, without distinction. Policy measures must be developed at a global level to avoid the unilateral imposition of targets

and measures and to avert creating a patchwork of conflicting and potentially overlapping national, regional and local policies.

Accounting for emissions

It is essential that emissions be accounted for at a global, not regional, national or local level. The aviation industry should be held accountable for its emissions once, whether from international or domestic activities. Any emissions-related measures should result in recognition for their contribution to achieving the sectoral targets for reducing the industry's global CO₂ emissions.

Full integration of aviation emissions in UNFCCC framework

For a sectoral approach for aviation to be effective it must have an open architecture. This means that aviation should have unrestricted access to market instruments to meet its obligations, on a par with other sectors. The full integration of aviation emissions in the UNFCCC framework, accompanied by specific reduction targets, should make this possible.

ICAO leadership in the UNFCCC process

The airline industry reiterates its support of ICAO and endorses ICAO as the appropriate United Nations body for making aviation-specific recommendations in the Copenhagen climate negotiations to develop a sectoral approach to address aviation emissions.

Equal treatment and differentiated responsibilities

The industry believes that, with some political leadership and innovative solutions, the principles of equal treatment between airlines and differentiated responsibilities for countries are consistent in the context of international aviation.

ICAO has traditionally recognized and accommodated states with special needs that have difficulty complying with standards or recommended practices, either through technical and financial support or via differentiated timelines for the implementation of measures. A global sectoral approach is the best way of achieving this, bearing in mind the need to minimize competitive distortions.

Balance of measures

The key abatement opportunities for the aviation sector are the implementation of new technologies, including sustainable alternative aviation fuels, ongoing improvements in operational efficiency and the upgrading of outdated air traffic management and processes. In considering various mitigation measures, it is important to consider the interactivity of measures: some mitigation measures are mutually supportive while others are not. For example, unduly stringent economic measures can reduce the sector's ability to invest in further emissions-reducing technology, operational and infrastructure measures. Thus, a balance across the full range of mitigation measures must be achieved.

Government action

The airline industry calls on governments to make the necessary investments to modernize the air traffic management system and improve airport infrastructure. They must also establish the right legal and fiscal frameworks to facilitate and increase investment in new aircraft fleets, low carbon sustainable alternative jet fuels, as well as the potential use of cost-effective economic measures and full and unrestricted access to all available abatement measures outside the sector.

Cost-effective economic measures

Any economic measures to address aviation emissions must be cost-effective and non-discriminatory. These measures should be implemented globally, on the basis of consensus, provide full and open access to the global markets, and developed and agreed through ICAO. Economic measures must not create “carbon leakage” where emissions transfer between countries or carriers leading to market distortions.

Use of revenues

Finally, any revenues from the economic measures under a global scheme to address aviation emissions should be clearly earmarked for investment in aviation emissions reduction technology. Such revenues should be reinvested in additional measures to directly improve the emissions profile of aviation, for instance by supporting the development and deployment of more fuel-efficient aircraft and low carbon jet fuels. The balance of such revenues may be used to acquire certificated emission reductions derived from recognized climate mitigation and adaptation projects, provided that airlines are able to gain the benefit of these reductions.