

**Aviation and the European Union Emissions Trading System**  
Hearing of the Subcommittee on Aviation,  
House Committee on Transportation & Infrastructure - July 27, 2011  
Submission by Environmental Defense Fund

Beginning January 1, 2012, under the Aviation Directive, an amendment to the European Union Emissions Trading System (“EU ETS”), all civil aviation flights using airports in Europe will need to account for their global warming pollution. Flights to Europe from a third country can be exempted from the law’s requirements if the third country adopts an equivalent measure.

The EU law is carefully designed to respect sovereignty and recognize other countries’ actions. It is consistent with treaty-based requirements. Some U.S. airlines are challenging the EU law in foreign courts and lobbying the U.S. Congress and the Obama Administration to declare the law invalid. This submission addresses the EU law, the airlines’ claims, and H.R. 2594 - the proposed bill regarding the EU law.

**1. U.S. aviation industry and proposed House bill (H.R. 2594) on the EU Aviation Directive**

- The proposed House bill's prohibition on U.S. air carriers' compliance with the EU law is per se discriminatory on the basis of citizenship of carrier. Discrimination on the basis of the citizenship of the carrier is expressly prohibited under the Chicago Convention, to which the United States is a Party. Thus, by purporting to create an exemption for U.S. aircraft operators, H.R. 2594 places the U.S. in violation of the very international agreements that it claims to protect.
- The U.S. Congress should not be encouraging countries to forbid their companies from complying with U.S. health, safety, and environmental laws. But by prohibiting U.S. carriers from complying with the EU Aviation Directive, the proposed House bill sets exactly such a precedent.
- After improving fuel efficiency for a number of decades, there has been little improvement in fuel efficiency of aircraft in the last 20 years, with virtually no improvement over the last 10 years. The improvements in fuel use per passenger-mile travelled since 2000 come from a 10% increase in the utilization of places – merely by the airlines packing more passengers onto the same plane. While such gains have environmental benefit, they are not sufficient to drive the new technologies, and systems and management improvements necessary to see significant future reductions in emissions.

**2. What the EU law does**

The EU law limits the global warming pollution of all civil aviation flights - large airlines, discount carriers, freight, and business jets – within, from, and to the EU.

- The law applies to all carriers without discriminating on the basis of nationality.
- The law sets a modest 3% reduction in emissions in the first year (2012) and a 5% reduction in the years 2013-2020, from a baseline of carriers' annual average emissions in 2004-2006.
- The law establishes a pool of emissions allowances. Starting in 2013, each air carrier covered by the law must tender allowances equal to its total emissions in the prior year.

- The law gives airlines approximately 82% of the allowances for free. All U.S. airlines have applied for free allowances. Innovative, proactive carriers that reduce emissions below the amount of their free allowances can make money selling their surplus allowances.
- The law gives airlines broad flexibility to determine how to reduce their pollution. It doesn't dictate the use of any particular technology or operation. It allows airlines to purchase allowances from an auction, from other airlines (emissions trading), and from pollution credits outside the aviation sector.
- The law explicitly allows the EU to exempt flights from nations with equivalent measures, and to amend its law to provide for optimal interaction between its program and other nations' emissions trading systems for reducing emissions from aviation.

### 3. The airlines and their claims

In 2010, United Airlines (UAL), Continental (becoming part of UnitedContinental Holdings (UCH)), and American Airlines (AMR) filed suit in British court against the UK government, seeking to declare the EU law illegal under international law and therefore inapplicable to them. The case was transferred to the European Court of Justice (ECJ), which has jurisdiction over challenges to European laws. **The case was heard in the ECJ on July 5, 2011; a preliminary, non-binding opinion is expected in October 2011.**

The airlines claim that the EU law is illegal under the 1947 Chicago Convention on Civil Aviation ("the Chicago Convention"), the U.S.-EU Open Skies agreement, and customary international law.

The claim: It's a tax. The airlines claim the EU law is a fuel charge or tax, prohibited under Articles 11 and 12 of the Chicago Convention and Article 7 of the Open Skies Agreement.

- **In fact, the EU law is not a charge or tax on fuel. It is a market-based mechanism for reducing emissions.** Unlike a fuel charge or tax, which is based solely on the amount of fuel used or consumed, the EU law uses fuel consumption as one of a number of calculation parameters to determine how many allowances to allocate to each aircraft operator and how many allowances each operator must surrender at the end of each year. Airlines only have to pay money to purchase more allowances (or pollution credits from other sectors) if the airlines choose not to reduce pollution below the number of allowances they hold. If the airlines' claims that they are reducing their global warming pollution are accurate, then the airlines will not need to purchase allowances or credits. In fact, by using sustainably produced biofuels with accurately accounted for emissions, or by using more efficient engines or operating procedures, an airline could drastically reduce the number of allowances or credits they have to purchase, or even avoid having to purchase allowances altogether. In fact, United, American, Frontier, Alaska Airlines, JetBlue, US Airlines, Southwest, and FedEx have announced agreements to use biofuels on flights from Bay Area airports beginning in 2015 and Lufthansa is already using biofuels regularly on selected flights within Europe. Further, airlines could make a profit by selling unneeded allowances allocated to it for free. And many pollution reduction measures allow the airlines to operate more efficiently – so they can make money in two ways, from more efficient operation and from selling surplus allowances. An industry association, the International Air Transport Association, has predicted that the EU law has a “net impact [that] is slightly positive for [both] the profitability of airlines operating extra-EU flights and the overall profitability of flights arriving and departing the EU.” A law that helps airlines boost profits by cutting pollution cannot be considered a tax or charge.
- The governing body of the Chicago Convention, the International Civil Aviation Organization (ICAO), has consistently distinguished – often at the request of the airlines themselves –

between taxes/charges, on the one hand, and “market-based measures,” including emissions trading, on the other. See, for example, the Report of the Executive Committee on Agenda Item 15 of the ICAO’s 35th Assembly of 2004, A35-WP/352, P/84, 12/10/04, at page 15-30, in which the Executive Committee explicitly endorsed the development of “open” emissions trading (i.e., emissions trading in which airlines can purchase reductions from other sectors).<sup>1</sup>

The claim: It’s an invasion of sovereignty. The airlines claim that addressing the total global warming pollution emitted by flights between the U.S. and the EU, including pollution emitted in U.S. airspace, is an invasion of sovereignty and illegal under Article 1 of the Chicago Convention and customary international law.

- **In fact, the EU law respects other nations’ sovereignty.** The law does not mandate any specific action outside of the EU. It simply holds flights that land in the EU accountable for their total emissions of pollution that affects the territory of European countries. The EU law is thus similar to many U.S. laws that set requirements for aircraft and ships coming into, and departing from, U.S. territory, and to other laws with similar reach.
  - For example, legislation enacted by Congress after the Exxon Valdez oil spill requires all oil tankers in U.S. waters to have double hulls. The effect of the law is to require the ships to have double hulls when they depart from their ports of origin.
  - The U.S. charges every air traveler \$16.30 tax each time the traveler departs - or arrives in - the U.S.<sup>2</sup>
  - The U.S. Department of Transportation requires all flights departing from and landing in the United States to comply with security regulations, even though the effect of these regulations is to require specific actions – including expensive and burdensome actions - at the airports of origin of the flights, in foreign territory.
  - The U.S. Foreign Account Tax Compliance Act, which enters into force in 2013, requires foreign banks to report their American clients to the U.S. Internal Revenue Service.<sup>3</sup>
- In addition, a methodology under which nations may only regulate aviation pollution that occurs within their sovereign airspace, as the airlines demand, would be inconsistent with decisions of the ICAO and the UN Climate Treaty, and lead to “orphan” emissions and perverse results.
  - If every nation could only regulate airplane global warming pollution emitted in its sovereign airspace, then a substantial portion of airplane pollution – that which occurs while planes are flying over the high seas – would be “orphan” pollution, the responsibility of no one.
  - Moreover, applying a sovereign-airspace methodology would mean, in the case of a plane flying from the U.S. to Europe and traversing Canadian airspace, that a significant portion of the flight’s pollution would be the exclusive responsibility of Canada, even though the flight didn’t touch down anywhere in Canadian territory. The pollution from a flight from Europe to Asia that traverses Russian airspace would be the exclusive responsibility of Russia even though the flight never touched down in Russian territory.
  - The prospect of such “orphan” emissions and perverse results led the Parties to the UN Climate Treaty (the UN Framework Convention on Climate Change or UNFCCC) – including the United States – to reject the methodology of accounting for aviation pollution based on the airspace where the pollution occurred. In 1996, the UNFCCC’s Subsidiary Body for Scientific and Technological Advice (SBSTA), in which all UNFCCC Parties, including the U.S. and the EU, participate, considered eight different

methodologies for accounting for the emissions of flights traveling between different countries.<sup>4</sup> SBSTA formally dropped from consideration the eighth – i.e., the airspace-based methodology – precisely because of the “orphan emissions” and perverse results problems. In 1998 the Conference of the Parties to the UNFCCC endorsed SBSTA’s decision,<sup>5</sup> thus rejecting the airspace-based methodology.

- The ICAO has also effectively rejected the airspace-based methodology. In 2004, the ICAO Executive Committee asked ICAO to provide guidance to countries that are members of ICAO on incorporating emissions from international aviation into the States’ emissions trading programs. In so doing, the ICAO Executive Committee specified that the guidance be “consistent with the UNFCCC process.”<sup>6</sup> Since the UNFCCC process specifically rejected the airspace methodology, resuscitating that methodology would contravene decisions of both the UNFCCC and ICAO.
- **In fact, the EU law explicitly accommodates other countries’ sovereignty concerns by providing that if any nation adopts an equivalent measure to limit the pollution of flights coming from its territory to Europe, those flights can be exempted from the EU law.** The exemption is quite broad, and in no way dictates any specific steps countries would need to take in order to achieve equivalent outcomes.

The claim: Any regulation of aviation emissions should be done through a consensus-based approach under ICAO, not by individual nations or groups of nations.

- **In fact, as the attached timeline indicates, nations have sought for nearly 15 years to obtain a consensus in ICAO on regulating emissions from international aviation.** ICAO has failed to deliver any meaningful progress toward an agreement on how to reduce emissions from the aviation sector.
- Moreover, ICAO has already specifically rejected the creation of an emissions trading system under ICAO auspices. At the sixth meeting of the ICAO Committee on Aviation Environmental Protection (CAEP) in 2004, the CAEP agreed that an aviation-specific emissions trading system based on a new legal instrument under ICAO auspices “...seemed sufficiently unattractive that it should not be pursued further.”
- Instead, the ICAO 35th Assembly in 2004 explicitly requested the ICAO Council “in its further work on this subject, to focus on two approaches. Under one approach, ICAO would support the development of a voluntary trading system that interested Contracting States and international organizations might propose. Under the other approach, ICAO would provide guidance for use by Contracting States, as appropriate, **to incorporate emissions from international aviation** into Contracting States’ emissions trading schemes consistent with the UNFCCC process. Under both approaches, the Council should ensure the guidelines for an open emissions trading system address the structural and legal basis for aviation’s participation in an open emissions trading system, including key elements such as reporting, monitoring and compliance.”<sup>7</sup> (Emphasis added.)
- In 2010, ICAO adopted guidance for Contracting States to incorporate emissions from international aviation into their emissions trading schemes.<sup>8</sup> Although many nations, including the EU and the US, registered reservations to that guidance,<sup>9</sup> the design of the EU Aviation Directive (which was enacted prior to 2010) generally follows that guidance.

The claim: The EU is imposing a one-size-fits-all system on airlines.

- **In fact, nothing in the EU law dictates how an airline shall reduce its pollution.** The EU could have adopted a one-size-fits-all technology mandate for flights landing in the EU, akin to the US double-hull tanker requirement. It did not. Instead, the law gives airlines

extremely broad flexibility to decide where and how to reduce pollution and even allows an airline to make no reductions but instead to submit additional allowances. The exemption for nations that adopt equivalent measures is extremely broad, affording each nation the opportunity to tailor domestic measures to its particular circumstances.

The claim: The EU's system is objectionable because moneys spent by U.S. airlines to purchase allowances at auction from the EU would stay in Europe.

- Insofar as the EU retains the prerogative to determine how to spend auction revenues collected on flights arriving in Europe from abroad, **the EU is exercising the same kind of sovereign prerogative that the U.S. exercises when it collects taxes on flights arriving in the U.S. from points abroad.**
- Moreover, any airline that does not wish to have the EU decide how auction revenues will be spent, can reduce its aviation pollution to allowable levels, or purchase pollution credits.
- And, any nation that wishes to assert its sovereign prerogative over how auction revenues are spent can establish its own equivalent measure that entails an auction of emissions allowances, and retain the revenue generated from the auction.

The claim: The EU is trying to disadvantage US airlines and favor its own carriers.

- **In fact, the EU law applies to all flights within the EU and between the EU and any other place in the world – whether from Paris to Nice, New York to London, or Beijing to Brussels.** It applies regardless of the citizenship of an airline or of its passengers. It is non-discriminatory. Its application both to internal flights and flights between Europe and other countries makes clear that it is not a charge for entry to or exit from the European Union and thus does not violate Article 15 of the Chicago Convention or Articles 3(4) and 15(3) of the US-EU Open Skies Agreement.
- Moreover, the proposed bill's prohibition of compliance with the EU law is per se discriminatory on the basis of citizenship of carrier. Discrimination on the basis of the citizenship of the carrier is expressly prohibited under the Chicago Convention, to which the United States is a Party, so the bill would place the United States in breach of its obligations under international law.

The claim: The law will generate more pollution, since airlines will re-route via Dubai and other ports in order to escape the additional costs entailed in flying into Europe.

- **Fact: Most airlines fly between the U.S. and Europe because that's where their passengers want to go.** So re-routing via Dubai will not serve their passengers.
- **Fact: Sophisticated modeling estimates of the cost of compliance with the EU ETS range from roughly \$6 to \$50 per long-haul seat.** The low end of that range is less than the \$10/ticket charge that the United States unilaterally instituted last year under the 2010 US Travel Promotion Act, which imposes the fee on foreign travelers from the 35 countries with which the U.S. currently has a visa-waiver agreement (the money is used to promote foreign travel to the United States). The high end is comparable to the travel promotion fee plus the \$16.30 unilaterally instituted departure tax per ticket that all departing passengers must pay when leaving the United States.<sup>10</sup>

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<sup>1</sup> See [www.icao.int/icao/en/assembly/a35/wp/wp352\\_en.pdf](http://www.icao.int/icao/en/assembly/a35/wp/wp352_en.pdf) at page 15-30.

<sup>2</sup> "US International Departure Tax - \$16.30 – This tax applies to any transportation beginning in the US (including Alaska or Hawaii) and ending outside the US, with the exception of transportation from the US to a port or station within the Buffer Zone. The US International Departure Tax also applies to passengers who stop over in the US for more than 12 hours while traveling to an international destination....US International Arrival Tax - \$16.30 – This tax applies to any transportation beginning outside the US and ending in the US (including Alaska or Hawaii), with the exception of transportation from a port or station within the Buffer Zone to the US. The US International Arrival Tax also applies to passengers who stop over in the US for more than 12 hours while traveling from an international destination. Any such passenger is treated as having traveled to such Stopover port or station and begun a new trip from such Stopover port or station." Airline Industry Agents' Handbook Section 7.0 (2007).

<sup>3</sup> "Banks in desperate battle over US tax law," Financial Times, Monday June 13, 2011, page 1.

<sup>4</sup> See FCCC/SBSTA/1996/9/Add.1, paras. 27-30.

<sup>5</sup> See Report of the Subsidiary Body for Scientific and Technological Advice on the work of its Fourth Session, Geneva, 16-18 December 1996, Item IV B.2 Conclusions, Endorsed by the UNFCCC Conference of the Parties at its Third Session, see UNFCCC COP Decision 2/CP.3, reprinted in FCCC/CP/1997/7/Add.1 (25 March 1998) at page 31.

<sup>6</sup> See [www.icao.int/icao/en/assembly/a35/wp/wp352\\_en.pdf](http://www.icao.int/icao/en/assembly/a35/wp/wp352_en.pdf) at page 15-30.

<sup>7</sup> See [www.icao.int/icao/en/assembly/a35/wp/wp352\\_en.pdf](http://www.icao.int/icao/en/assembly/a35/wp/wp352_en.pdf) at page 15-30.

<sup>8</sup> See "Guiding Principles for the Design and Implementation of Market-Based Mechanisms (MBMs) For International Aviation," Annex to Resolution 17/2: "Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change," ICAO A37-WP/402, P/66, at 17-17, [http://www.icao.int/icao/en/assembly/a37/wp/wp402\\_en.pdf](http://www.icao.int/icao/en/assembly/a37/wp/wp402_en.pdf).

<sup>9</sup> See [http://www.icao.int/icao/en/assembly/A37/Docs/10\\_reservations\\_en.pdf](http://www.icao.int/icao/en/assembly/A37/Docs/10_reservations_en.pdf) for text of reservations.

<sup>10</sup> Note: This tax just expired as the FAA Reauthorization bill has not yet been passed.