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The EU Aviation Emissions Policy and Border Tax Adjustments

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Abstract

This WCO Policy Research Brief provides an update on the European Union's aviation emissions policy ("EU Aviation Directive"), especially the analogousness to carbon border tax adjustments (BTAs) and the implications for customs. The EU Aviation Directive, which came into effect on 1 January 2012, is a new component of the EU Emissions Trading System (EU ETS) and is a response to the inability thus far of the international community to establish a global pricing instrument for aviation carbon emissions. By including non-EU aviation as well as EU aviation, the EU reduced the potential carbon leakage and thus augmented the Aviation Directive's domestic political sustainability. Similarly, in 2010 several U.S. policymakers incorporated BTAs into their proposed carbon pricing legislation to increase the domestic political feasibility of the bill's passage and upon implementation reduce the potential for carbon leakage. The EU Aviation Directive faces opposition from stakeholders in developed and developing countries, especially non-EU governments and the aviation industry. The impact of international relations on the EU aviation emissions policy could be an edifying premonition of what awaits the adoption of carbon border tax adjustments.

Key words

Customs and Climate Change, aviation emissions, EU Aviation Directive, carbon border tax adjustments

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Introduction

This WCO Policy Research Brief provides an update² on the European Union's aviation emissions policy ("EU Aviation Directive"), especially the analogousness to carbon border tax adjustments (BTAs) and the implications for customs. The EU Aviation Directive, which came into effect on 1 January 2012, is a new component of the EU's most important global warming mitigation policy instrument, the EU Emissions Trading System (EU ETS). The new policy is a response to the failure thus far of the international community to establish a global pricing instrument for aviation carbon emissions. By including non-EU aviation as well as EU aviation, the EU reduced the potential carbon leakage and thus augmented the Aviation Directive's domestic political sustainability. Similarly, in 2010 several U.S. policymakers incorporated BTAs into their proposed carbon pricing legislation to increase the domestic political feasibility of the bill's passage³ and upon implementation reduce the potential for carbon leakage. The EU Aviation Directive faces opposition from stakeholders in developed and developing countries, especially non-EU governments and the aviation industry. The impact of international relations on the EU aviation emissions policy could be a microcosmic premonition of what awaits the adoption of carbon border tax adjustments to complement broader global warming mitigation policies.

Carbon Emissions and Global Warming

Global warming is predominantly caused by the anthropogenic carbon emissions that are accumulating in the Earth's atmosphere. In 2010 "global carbon dioxide emissions from fossil-fuel combustion and cement production grew 5.9%" to a record annual high of 9,139 Teragrams of oxidized carbon (Tg-C) or 33.5 billion metric tons (Peters et al., 2012). Carbon parts per million (ppm), which is the measurement indicator of the atmospheric carbon concentration, reached 396.78 in May 2012, also a new record (NOAA-ESRL, 2012). Several climate scientists contend that the carbon concentration in the atmosphere should be lowered to approximately 350 ppm to prevent dangerous warming (Hansen et al., 2008). The "risk to collective civilization"⁴ is evidenced not only by rising average global temperatures, but also current observations of the "melting of glaciers and ice sheets, ocean heat content, rainfall patterns, atmospheric moisture, river runoff, stratospheric cooling, and the extent of Arctic sea ice" (Nordhaus, 2012).

A leading global warming mitigation policy prescription entails raising the price of carbon with the use of market-based regulatory instruments (see for example, Krugman, 2010; Victor, 2011). Signalling a carbon price under such an approach can be implemented by levying carbon taxes or establishing emission trading systems where emitters must acquire and surrender emission allowances. If sufficiently robust, the impact of such a policy is the reduction of carbon emissions and ultimately the placement of carbon atmospheric accumulation at a manageable level to forestall dire consequences.

¹ Dylan, Bob (2006), "Rollin' and Tumblin'," *Modern Times*.

² At the WCO Permanent Technical Committee's 193rd and 194th Sessions in October 2011, the Chairperson asked the WCO's Research and Strategies Unit to continue providing updates on the Customs and Climate Change topic.

³ The 2010 U.S. proposed legislation for a carbon pricing instrument did not become law.

⁴ See Romme (2011) at <http://thinkprogress.org/climate/2011/09/28/330109/science-of-global-warming-impacts/>

The EU Aviation Emissions Policy⁵

Aviation currently produces about 2-3% of all human CO₂ emissions affecting global warming and is one of the fastest growing sources (Leggett, et al., 2012: 4-5). The EU added aviation⁶ emissions to its ETS because, under the auspices of the International Civil Aviation Organization (ICAO), nation-states have not adopted thus far a corollary global pricing instrument (Truxal, 2011). With a few minor exceptions, the EU ETS now covers the CO₂ emissions of all EU and non-EU cargo and passenger flights taking off from or landing in the EU unless their home country has in place at least *equivalent measures* (a comparable aviation CO₂ emissions regime).

A country or various countries taking “domestic action” to overcome international inertia to mitigate transport CO₂ emissions was predicted by Oberthür (2003). Indeed, developments during 2011 and 2012 have shown that the EU Aviation Directive has woken the dormant discussions at ICAO for a global market-based pricing instrument for aviation emissions. The conflict between the EU and other nations that has ensued over the policy was probably inevitable (Paterson, 2008: 149-150) and is playing out in international political, legal, and media arenas (see Table 1).

EU Aviation Directive and BTAs: Policy and Politics

The discord over the EU Aviation Directive could be a proxy for future clashes over carbon border tax adjustments. Similarities between the EU Aviation Directive and BTAs have been noted before.⁷ The EU Aviation Directive is probably the first occasion where a domestic carbon pricing policy covers imports (Faber and Brinke, 2011: vi); BTAs would also cover imports. The EU Aviation Directive targets the carbon emitted by aircraft that departs from or arrives in the EU, while BTAs target the embodied carbon (the carbon emitted during the production process) in goods crossing borders. Both are measures intended to equalize national climate policies by pressuring other countries to adopt comparable carbon pricing regimes.

Both policies seek to soothe the fears of political domestic constituencies about carbon leakage and loss of competitiveness. For instance, the EU Aviation Directive inoculates against possible complaints from EU airlines; if EU airlines were the sole participants in the EU Aviation Directive, they would be at a competitive disadvantage with their non-EU rivals. In the context of BTAs, if Country A imposes an ETS or carbon tax on domestic chemical producers, foreign chemical producers that are not under a comparable regime will enjoy a competitive advantage. Moreover, chemical companies in Country A would probably lobby against an ETS or carbon tax that in their view created an unlevel international playing field.

⁵ For a comprehensive analysis of the EU Aviation Directive especially the trade law considerations, see Bartels (2012a).

⁶ There is also a policy vacuum in the pricing of maritime CO₂ emissions, which predominantly emanate from freight transport. The International Maritime Organization (IMO) has estimated that all maritime shipping (domestic and international) emitted 1,046 million tonnes of CO₂ in 2007, which corresponds to 3.3% of all global CO₂ emissions in 2007; the same study estimated that international maritime shipping emitted 870 million tonnes in 2007, or about 2.7% of all global CO₂ emissions in 2007 (IMO, 2009). The IMO set regulations in 2011 to improve shipping efficiency which will marginally reduce maritime CO₂ emissions (IMO, 2011), but is not currently formulating a market-based pricing instrument.

⁷ See for example, Ellerman, et al., 2010: 265-266; Ireland, 2011; Meckling, 2011; Kulovesi, 2011; Bartels, 2012a; Meltzer, 2012; Tunteng, 2012.

Non-EU countries and airlines have several conceivable opposition responses to the EU Aviation Directive including (1) publicly criticize the policy; (2) refuse (or threaten to refuse) to participate;⁸ (3) retaliate (or threaten to retaliate) with trade barriers or other trade-related actions; (4) cease flights to the EU (Bartels, 2012a: 7); (5) restrict traffic rights to their airports for EU aviation (Bartels, 2012a: iv); (6) take legal action in non-World Trade Organization (WTO) courts; and (7) take legal action at the WTO. Alternatively, the non-EU countries and airlines could (8) comply with the EU Aviation Directive; (9) apply equivalent measures nationally in the form of a comparable ETS or carbon tax; or (10) collectively adopt under the auspices of ICAO a global aviation ETS or carbon tax.⁹

Thus far, opponents have pursued (1), (2), (3), and (6). The aviation industry, and also governments from developed and developing countries, have criticized the policy. The opposition stems from, among other reasons, sovereignty matters and costs. Developing countries also base their opposition on the “common but differentiated responsibilities and respective capabilities” principle within the United Nations Framework Convention on Climate Change (UNFCCC) that holds that such countries should not be obligated to reduce emissions to the same degree as developed countries. The U.S. Government wrote in a letter to the EU that it “strongly object[s] on legal and policy grounds to the EU’s plan to subject [U.S.] operators to the EU’s ETS” (Clinton and LaHood, 2011). According to media reports, China directed its airlines not to comply with the EU Aviation Directive (Financial Times, 2012) and may have delayed purchasing European Airbuses in retaliation (The Wall Street Journal, 2011). On the legal front, a consortium of U.S. airlines filed a lawsuit at the European Court of Justice; the case culminated in the court ruling that the EU Aviation Directive is compatible with international law.

No country has thus far brought a case against the EU Aviation Directive at the WTO. If a WTO member did bring an action, the eventual decision would likely concentrate on the environmental exceptions contained in WTO law. Bartels (2012a: 15) explains that this particularly means GATT Article XX(g) “in relation to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption,” and also GATT Article XX(b) which allows WTO members to adopt policies “necessary for the protection of human or animal or plant life or health.” Similarly, legal scholars have analyzed BTAs for their legality under WTO law, especially with respect to the aforementioned environmental provisions (Pauwelyn, 2012).

If an ICAO agreement is not reached, the EU faces various options. For those aircraft operators that do not comply with the EU Aviation Directive, the relevant EU Member State is authorized to issue fines of 100 Euros per allowance and require the non-compliance be remedied the following year.¹⁰ If this or other measures fail to ensure compliance, the administering EU Member State may request the European Commission to impose an “operating ban.”¹¹ Alternatively, the EU could defer, weaken or abandon this component of its global warming mitigation policy. Much will depend on developments at ICAO.

⁸ Not participating would entail not submitting emissions data, or not acquiring and surrendering emissions allowances.

⁹ The European Commission has stated that the EU Aviation Directive “legislation is designed to be amended in the event of an agreement on global measures to reduce greenhouse gas emissions from aviation” (Delbeke, 2012).

¹⁰ EU Aviation Directive (2008), Article 16 (3).

¹¹ EU Aviation Directive (2008), Article 16 (5)

Conclusion and the Implications for Customs

The EU aviation emissions policy has various potential implications for customs, including the possibility that customs would be required to apply nationally mandated retaliatory trade measures. Moreover, the ongoing political and legal processes could influence future policy decisions about border tax adjustments on the embodied carbon in goods (which in many countries would likely be administered by customs). Alternatives such as ICAO formulating and implementing a global aviation emissions pricing instrument or the emergence of a more selective “major emitters club”¹² could conceivably occur. Border tax adjustments may eventually follow the same path as the EU Aviation Directive, and this suggests customs would be prudent in continuing to monitor this subject.

¹² See Victor (2011) for his idea of a small “club” of major emitters that would negotiate climate policy agreements.

Table 1 – EU Aviation Directive, Milestones, 2008-2012

Date	Summary
19 November 2008	EU adopts Directive 2008/101/EC “so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community.”
30 September 2011	The <i>New Delhi Joint Declaration</i> is adopted by 21 countries and expresses opposition to the EU Aviation Directive. The Declaration is signed by Argentina, Brazil, Chile, China, Colombia, Cuba, Egypt, India, Japan, Republic of Korea, Malaysia, Mexico, Nigeria, Paraguay, Qatar, Russian Federation, Saudi Arabia, Singapore, South Africa, United Arab Emirates, and the United States.
6 October 2011	Advocate General Juliane Kokott of the European Court of Justice issues opinion that “concludes that the inclusion of international aviation in the EU emissions trading scheme is compatible with the provisions and principles of international law invoked” (Kokott, 2012).
24 October 2011	The U.S. House of Representatives passes bill H.R. 2594 “to prohibit operators of civil aircraft of the United States from participating in the European Union's emissions trading scheme.” Subsequently, the U.S. Senate considers a companion bill (S. 1956).
2 November 2011	The ICAO Governing Council agrees to adopt a working paper based on the <i>New Delhi Joint Declaration</i> ; 26 of 37 Members of Governing Council agree to sign. The working paper is adopted by Argentina, Brazil, Burkina Faso, Cameroon, China, Colombia, Cuba, Egypt, Guatemala, India, Japan, Malaysia, Mexico, Morocco, Nigeria, Paraguay, Peru, Republic of Korea, Russian Federation, Saudi Arabia, Singapore, South Africa, Swaziland, Uganda, the United Arab Emirates, and the United States.
16 December 2011	The U.S. Government writes to the EU protesting the EU Aviation Directive (Clinton-LaHood letter, 2011).
21 December 2011	The European Court of Justice issues judgment that the EU Aviation Directive is compatible with international law.
1 January 2012	The EU Aviation Directive enters into force.
February 2012	China apparently bars Chinese airlines from complying with the EU Aviation Directive (Financial Times, 2012).
22 February 2012	Under the auspices of ICAO, the <i>Moscow Joint Declaration</i> is issued and states “the EU and its Member States must cease application of the Directive 2008/101/EC to aviations/aircraft operators registered in third States.” The Declaration is signed by 23 countries: Armenia, Argentina, Belarus, Brazil, Cameroon, Chile, China, Cuba, Guatemala, India, Japan, Republic of Korea, Mexico, Nigeria, Paraguay, Russian Federation, Saudi Arabia, Seychelles, Singapore, South Africa, Thailand, Uganda, and the United States.
15 May 2012	The EU announces that most airlines covered by the Aviation Directive met the deadline of 31 March 2012 for reporting CO ₂ emissions data for 2011; 10 airlines from China and India did not provide the information (The Guardian, 2012).
June 2012	The ICAO Secretary General states that he expects one global aviation emissions mitigation proposal will be selected in March 2013 and voted on at the September 2013 ICAO Assembly in Montreal (Montreal Gazette, 2012).
26-27 June 2012	ICAO’s Council discusses three remaining options for reducing emissions of greenhouse gases from aviation as recommended by 20 Experts and the Ad-hoc Working Group on Market-based Measures.

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