Climate Change and Trade: The EU Aviation Directive

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The UN Climate Change Negotiations

- The UNFCCC
- The Parties to the Kyoto Protocol
  » Does not include the U.S.
- Conference of the Parties (COPS)
  » Copenhagen ‘09, Cancun ‘10, Johannesburg ‘11, Doha ’12
  » Top-down - Bottom-up
- Second commitment period
  » EU, Australia mainly
The Major Economies Forum

• Forum for worlds largest economies and emitters of greenhouse gas emissions
  » Bush II - Obama

• US, China, EU, Canada, Japan, Germany, France, South Korea, India, Brazil, Russia….
  » China now the world’s largest GHG emitter
The World Trade Organization

- Common framework for trade relations
- Administers WTO Agreement - **Rules** to provide predictability for trade
- Forum for negotiations
  - Doha Round
- Dispute settlement & enforcement
  - Panel and Appellate Body
What it’s for, why it matters

WTO Preamble: Increase standards of living, attain full employment, growth in income and demand, expansion of production & trade in goods and services - while protecting the environment and taking developing country needs into account.

Principles: Non-discrimination, reduction of trade barriers, predictability, fair competition, development.

Broader and more intrusive than GATT ever was – with much stronger enforcement.

Stable, predictable trading relations in a system based on the rule of law.
WTO Members & Secretariat

- **157** Members (153 governments, the EU, + 3 separate customs territories (Taiwan, HK, Macau).

  » Even a non-State like Hong Kong or Taiwan can be a Member if it controls its own policy on WTO issues

  » Newest Members: Russia, Montenegro, Samoa, Vanuatu

- Geneva missions carry on major work of WTO (though 24 Members have no Geneva mission)

- WTO Secretariat: 629 regular staff, in Geneva, headed by Director-General Pascal Lamy + 4 Deputy Directors-General from Chile, Rwanda, India and US

- Technical + professional support for WTO bodies, negotiating groups and dispute settlement
The Contribution of Aviation to Climate Change

- IPCC - aviation represents approximately 2.5 percent of global greenhouse gas emissions and 13 percent of all CO$_2$ emissions from the transportation sector.
- CO$_2$ emissions from aviation are growing at approximately 3 to 4 percent annually.
- Aircraft also emit NOx which can encourage the formation of ozone, an important contributor to global warming.
- Aircraft also produce contrails which can diffuse into cirrus-like clouds that contribute to global warming.
- The impact of NOx and contrails on global warming could be 2-4 greater than the impact from CO$_2$ emissions alone.
U.N. action on aviation

- Kyoto Protocol Article 2.2 requires the parties to find ways to reduce CO\textsubscript{2} emissions from aviation by working through ICAO, the UN agency responsible for international aviation.

- In 2001 ICAO called on states to promote scientific research to address the contribution of the aviation industry to climate change.

- In 2007, ICAO established a Group on International Aviation and Climate Change, which recommended, among other measures:
  - Improving average fuel efficiency of airplanes by 2 percent per annum
  - Carbon neutral growth by 2020

- Aviation traffic is growing at 4-5 percent annually, this would not reduce the growth of CO\textsubscript{2} emissions from aviation.

- In 2010 ICAO recognized that improving fuel efficiency by 2 percent is unlikely to stabilize CO\textsubscript{2} emissions from aviation.
The EU Aviation Directive

- Came into effect on 1 January 2012
- Extends the EU cap and trade system to include CO$_2$ emissions from aviation
- Applies to all flights arriving and departing the EU
  - Airlines will need to hold allowances for each ton of CO$_2$ emitted over EU airspace, third countries and the high seas.
- CO2 reduction targets below average annual aviation emissions from 2004-2006
  - 2012 - 3 percent
  - 2013-2020 - 5 percent
The EU Aviation Directive

Allocation of Free Allowances

• In 2012: 85 percent of allowances allocated for free / 15 percent offered for sale.
• 2013-2020: 82 percent free/ 15 percent sale / 3 percent for new airlines & new flights to Europe
• Enough free allowances that airlines may make windfall profits

Ways to comply with Directive

• Airlines can reduce their CO2 emissions in line with the declining cap
• Purchase allowances
• Use certified emission reduction units (CERs) and emission reduction units (ERUs) to satisfy up to 15 percent of the number of allowances in a given year.
The EU Aviation Directive

Penalties

• €100 per ton of CO₂ in addition to the cost of purchasing permits to cover their CO₂ emissions.

Use of Revenues

• EU member states should use these funds for climate change purposes

  » But the Directive does not require members to use these funds for any particular purpose.

• Aviation Directive, Article 3d paragraph 4 –

  “It shall be for Member States to determine the use to be made of revenues generated from the auctioning of allowances.”
When other countries regulate CO2 emissions from aviation

• Directive - where other countries “adopt measures for reducing the climate change impact of flights departing from that country”, the EC is to consult with that third country and consider options to provide for the “optimal interaction between the scheme and that country’s measures.”

• Directive’s preamble –
  » Measures that have an environmental effect at least equivalent to the Aviation Directive.

• Possible approaches:
  » countries could reduce aviation emissions through means other than pricing carbon, such as by improving air traffic control systems that reduced fuel burn by reducing the time planes spend in holding patterns above airports.
  » Might not require the same level of effort captured in the Directive
Diplomatic Reactions

• US Secretary of State Clinton and Secretary of Transportation LaHood “strongly object on legal and policy grounds” to the application of the Aviation Directive to US airlines and urged the EU to halt, suspend or delay application of the Directive.

• US House of Representatives - passed legislation making it illegal for US airlines to comply with the Directive.

• China - the Directive violates the UNFCCC principle of common but differentiated responsibility and breaches the Chicago Convention.

• 2011 Eighth BASIC Ministerial Meeting on Climate Change expressed ‘strong concern’ with the Aviation Directive.

• ICAO Declaration opposing application of the Directive to non-EU airlines.

• Key Issue – Application of Directive to non-EU Airlines
The Decision of the Court of Justice of the European Union

• The airline industry challenged the legality of the Aviation Directive before the UK High Court.

• Preliminary ruling from ECJ on consistency of the Aviation Directive with CIL, the Chicago Convention, the Kyoto Protocol, and the 2007 US-EU Open Skies Agreement.

• On December 21, 2011, the ECJ ruled as follows:
  » The EU is not a party to, and therefore not bound by, the Chicago Convention.
  » The Kyoto Protocol does not provide a legal basis for challenging EU action.
  » The Aviation Directive does not breach the US-EU Open Skies Agreement obligation to exempt fuel from taxes and other fees.
  » The Aviation Directive does not breach CIL principles of state sovereignty as it only applies to aircraft that chose to operate in EU airspace.
Competitiveness and Carbon Leakage Issues

- Pricing carbon in advance of other countries raises competitiveness and carbon leakage concerns.
- Costs passed through to ticket prices could lead to consumers flying non-EU airlines, leading to no net reduction in CO$_2$ emissions.
- Incentive for airlines departing from inside the EU for another EU destination to transfer passengers outside of the EU and to then fly from that point to the destination within the EU.
  » Longer routes – increased CO$_2$ emissions
- Incentive to change EU hubs to avoid holding allowances for flights that transit the EU.
Costs of the Directive for Airlines

Costs
• Competitiveness and carbon leakage will depend on costs
• In 2012 costs are around US$2.86 billion / 2015 costs increase to US$4.3 billion (Merrill Lynch)
• 2012 = US$2.15 per passenger for low cost airlines / US$5 per passenger for mainline carriers
• 2015 = US$2.6 per passenger for low cost airlines / US$6 per passenger for mainline carriers.

How airlines can reduce their CO2 emissions:
• Use more fuel efficient aircraft – fuel already comprises ≈ 25 % of airlines operating expenses
• Increase passenger load – already happening

Other options
• Switch to biofuels - under development.
• Upgrade airport traffic control from radars to satellites
The WTO Rules

- Airline industry provides a service
- Airlines enable economic activity such as tourism
- Airlines transport goods
  - Carry 0.5 percent of global cargo in volume but 35 percent of global cargo by value
Non Discrimination

- WTO rules prevent the following forms of discrimination
  - Treating domestic goods and services more favorably than like imported goods and services – National Treatment
  - Treating goods and services from one country more favorably than like imported goods and services from another country – Most Favored Nation
- The EU Aviation Directive applies equally to all airlines
  - So no formal discrimination
- But could be de facto discrimination – the effect of the EU Aviation Directive.
More on Discrimination

- Goods and services from countries located further away will face higher costs
  - The cost of the Directive increases according to distance flown
  - Possible MFN violation
- Goods and services flown within the EU will face lower costs than goods and services from countries located further away from the EU
  - Possible National Treatment violation
WTO Exceptions

- Measures relating to the conservation of exhaustible natural resources
- ENR – read in light of contemporary concerns of the community of nations (Shrimp Turtle)
  - Gasoline – clean air is an ENR
  - UNFCCC – goal of nations to address climate change
- Measures necessary for the protection of human animal or plant life or health
  - IPCC report on impacts of climate change
GATT and GATS Chapeau

• Is there arbitrary or unjustifiable discrimination or a disguised restriction on international trade

• Key questions:
  » Is the price signal from the Aviation Directive consistent with the policy justification of reducing CO2 emissions?
  » Does the Directive lead flights to transit, resulting in longer flights and increased CO\textsubscript{2} emissions?
  » How will the EU condition application of the Directive – take into circumstances in other countries?
Implications for the UN Climate Change Negotiations

• Shift from multilateralism to unilateralism
  » From ICAO to EU Action

• Addressing climate change requires global action
  » No obligation to pursue a multilateral outcome

• Shrimp Turtle – no obligation to negotiate.
  » Pursing a negotiated solution with some countries and not others could be arbitrary and unjustifiable discrimination
  » Would give a veto power to countries opposed to action

• The inability to achieve a multilateral outcome so far can justify unilateral action.
Common But Differentiated Responsibility

• Significant concern amongst developing countries about the implications for CBDR

• No common understanding of what CBDR means

• Starting point - all countries are not equal - developed countries should do more to address climate change than developing countries.

  » US and EU - developed countries should have heightened responsibilities, developing countries should also participate in addressing climate change

  » China - developing countries should not be obliged to participate in non-differentiated emission reduction methods like the EU ETS.
Aviation Directive and CBDR

- EU argues that CBDR does not apply because the Directive applies to businesses (airlines)
  - CBDR governs obligations between states
- Also not clear whether CBDR applies to climate change measures countries take unilaterally
- The Directive does apply to states – exempts airlines coming from states that are regulating CO2 emissions
- And, even where the Directive regulates airlines, it is adopted by the EU, an entity that is also covered by CBDR principle.
- Requiring the same level of effort by all countries to be exempt from the Directive would not be consistent with CBDR
- What next?