Environmental Politics

Peaking the Clouds

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Over the past two decades, beginning with the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, the European Union has established its position as *the* leader of global efforts to combat climate change. The EU has arguably surpassed the United States in this regard, and through its persistent efforts it established the legitimacy to pilot further initiatives to combat climate change effectively and efficiently. Yet the EU continues to face international opposition on this issue, and is currently experiencing difficulties with the implementation of its most recent scheme to reduce the carbon emissions of the aviation sector. The controversy lies in the immortal issue of infringement on state sovereignty, which usually presents enough of a red flag to override just about anything. The EU is walking a fine line between upholding its commitment to combat climate change and overstepping sovereign boundaries. It can, however, use its leverage in this area to achieve its goals and address mounting opposition.

EU Leadership in Climate Change

The UNFCCC, signed in 1992, set the precedent for future attempts to minimize greenhouse gas (GHG) emissions as developed countries agreed to reduce GHG emissions to 1990 levels by the year 2000. While the UNFCCC failed to meet its target, the stage was set for the Kyoto Protocol that was negotiated in 1997, which called on 37 industrialized countries and the European Community to reduce GHG emissions by approximately 5% against 1990 levels during the period 2008-2012. The EU took this one step further and agreed to cut its aggregate GHG emissions by 8%.[1]

Following the Kyoto Protocol, there began a series of talks on implementation measures to meet the targeted goals, and it was during this period that the EU emerged as a global leader of counter-climate change initiatives. Furthermore, any speculation that the U.S. would attempt to reenter the game died out with President Bush's denunciation of the Protocol as "fatally flawed," and his subsequent withdrawal of the U.S. from any further involvement with it. Thus, the Protocol was now completely in the hands of Europe to implement, and this signified, as EU Environmental Commissioner at the time Margot Wallström, commented, "…a change in the balance of power between the U.S. and the EU."[2]

The EU was also the first to initiate a discussion on commitments beyond the 2012 expiry date of the Protocol, and in 2007 it launched the 20-20-20 by 2020 plan which committed it to reducing its emissions, increasing its share of renewable energy and improving energy efficiency by 20%, by the year 2020. The EU's stringent regulations and dedication to mitigating climate change have arguably legitimized it as a world leader in environmental politics.[3]

In 2005, the EU introduced its Emissions Trading System (ETS) to help fulfill its Kyoto obligations. The ETS now operates in 30 countries as the largest international scheme for curbing greenhouse gas emissions. It functions on the "cap and trade" principle, which gives factories, power plants and other installations in the system a "cap" on the amount of GHGs they are permitted to emit. Each company can then trade emission allowances with each other, depending on their needs. By reducing the number of allowances over time, the scheme seeks to fulfill the EU's 2007 commitments by reducing emissions 21% by 2020. If companies exceed this amount in output, heavy fines are imposed, encouraging them to budget their emissions and trade emission allowances when necessary. The EU envisions a future in which similar trading schemes in other regions will link with the ETS.[4]

The EU has also launched other initiatives aimed at countering climate change. The European Climate Change Program, for example, was established in June 2000 with the primary goal of identifying and developing all the necessary elements of an EU strategy to implement the Kyoto Protocol. The EU has also been active in supporting the development

of carbon capture and storage technologies to trap and store carbon dioxide emitted by major industrial installations and in establishing binding targets to reduce overall carbon dioxide emissions from new cars and vans.[5]

Carbon Scheme in Aviation

On January 1, 2012, the ETS introduced a measure that will require all airlines operating to and from European airports to purchase allowances for their carbon dioxide emissions, beginning in the spring of 2013.[6] This aviation law is an extension of the ETS scheme and is intended to give airlines an incentive to invest in more modern, fuel-efficient technology to minimize pollution. In the beginning, the EU will provide airlines with 85% of the allowances for free and require them to purchase the remaining 15%. The number of free allowances granted by the EU will reduce gradually over time. The idea is that airlines will pass the cost of emissions to consumers through ticket prices, and as they do not have to buy 85% of the permits from the EU just yet, use the profit they make to improve their technology. A similar scheme was adopted for several European industries in 2005.[7]

It is about time that the ETS extended cap and trade to airlines, as aviation alone contributes 2-3% of global carbon dioxide emissions. While this is a modest contribution to aggregate global carbon emissions, the success of the scheme could pave the way for action on other sources that contribute heavily to GHG emissions.

According to a study by the World Resources Institute, the transportation and electricity & heat industries contribute 14.3% and 24.9%, respectively to global carbon emissions.[8] If the EU is successful in lowering emissions from air transportation, it could eventually extend its scheme to other sectors of the transportation industry that are factored into the overall 14.3% of emissions. Transportation is the only sector where emissions are still rising and projections show that by the year 2050 transport emissions would overtake all other GHG emissions combined, which would make it impossible for the EU and other countries to meet their commitments to reducing GHG emissions.[9]

Opposition to the Scheme

The ETS' extension, however, has been met with adamant opposition by 17 countries that met in Washington at the end of July 2012 to discuss an alternate global solution to address the issue. The main point of contention is over sovereignty, as airlines are required to purchase permits to cover emissions for the entirety of flights and not just for the period spent in European airspace.[10] There is further disagreement about airlines profiting from the aviation law. A report by the Center for American Progress found that airlines would increase profits by 20-30% per year, gaining them between $380 million and $570 million. In 2009, moreover, an American trade association launched a lawsuit to dispute the legality of the ETS initiative; however, in 2011 the European Court of Justice overruled the concern as invalid.[11]

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Weeks after the ETS introduced the new measure, China's government banned all Chinese airlines from purchasing permits or compensating for it to abide by the European legislation. It views the system as a disguised trade barrier that runs contrary to the UN Convention on International Civil Aviation (1944), which regulates the freedom of airspace. A U.S. Senate committee approved a bill at the beginning of August 2012 that would similarly forbid all U.S. airlines from participating in the scheme. Airlines in the U.S., China and other countries that opt out could find themselves banned from all EU airports. Non-EU countries that are looking at alternate options to reduce carbon emissions would be forced to impose comparable measures against European airlines, thus triggering an unnecessary trade war.[12] In fact, India has already warned Brussels about banning European airlines from its airspace if the EU pursues the policy. In a time of globalization and economic uncertainty, such changes would be counterproductive.[13]

The only alternative the EU has agreed to thus far is for the UN's International Civil Aviation Organization (ICAO) to propose a comparable way to decrease carbon emissions from the aviation industry. After facing resistance from countries for months, the EU suspended the enforcement of the aviation law for a year to allow non-EU countries to formulate an alternate solution.[14] The opposing countries are keen to collaborate with ICAO to address the issue but they have not yet settled on anything concrete.[15] The pressure is now on ICAO as both sides push for a solution. Given the depth of divisions over the issue, it is questionable whether it will be able to satisfy everyone before airlines start being charged for allowances during or after the fall

of 2013.

Credibility Gap?

One could argue that the adamant resistance to the ETS carbon scheme is due to a credibility gap. According to Charles Parker and Christer Karlsson's assessment of the EU's leadership initiatives to counter climate change, the EU depends on three types of credibility:

- The ability to exert structural leadership, or at least perceived as having the tools and political will to do so;
- Reliability as a provider of knowledge and innovation; and,
- Delivery on commitments in a feasible manner.

The EU has thus far had little issue in upholding its credibility in terms of innovation and delivering on its commitments, however its ability to consistently exert structural leadership has been questioned.[16]

A major setback for the EU's credibility came about with the fiasco of the Copenhagen summit in December 2009. The meeting that was supposed to bring to life the proposals laid out in the Danish draft barely managed to come to a consensus on one clause alone. In addition to this, developing countries were left irked as the EU failed to meet its promise of fleshing out the details of its proposed "top-down" approach, in which developed countries would provide $100 billion to developing countries in financing to "enable and support advanced action on mitigation, including substantial finance to reduce emissions from deforestation and forest degradation, adaptation, technology development and transfer and capacity building."[17] The specifics of such a transfer were left ambiguous.

The Copenhagen summit was the first time the EU faced a serious threat to its leadership in the arena of climate change, when the U.S. along with Brazil, South Africa, India and China sidelined the EU with a different approach as it became evident that the summit would fail to meet the aspirations set for its agenda. The most pervasive explanation for why this occurred is that the EU was unsuccessful at presenting itself as a unified front, thus allowing other actors to intervene with alternate solutions that would suit their own national interests. This became a significant setback for the credibility of the Union in this area.

Furthermore, in addition to strong leadership, climate change requires global cooperation and collective action – this was seemingly not present in Copenhagen, where each actor had a different agenda. The U.S. advocated a system in which countries independently verified emissions reductions and colluded with China. It was similarly apprehensive about an EU scheme designed to monitor such reductions. With this in mind, some experts commented that the Copenhagen climate summit marked "the dawn of a new multi-polar world order where large developing countries and the U.S. dominate any future post-Kyoto agreement."[18] As such, it undermined much of the EU's legitimacy in climate change politics that the EU has strived to establish over the past two decades.

The attempt to implement the ETS' carbon scheme in the aviation industry has also provoked negative reactions by non-EU countries, namely the U.S. and China. It has become clear that countering climate change does indeed require a unified effort, and the absence of this will likely result in an unfavorable outcome, where ultimately nothing is achieved and all suffer.

Future Challenges

The EU's struggle to implement its carbon scheme in the aviation industry is representative of a larger issue it faces. The withdrawal of the United States from the Kyoto Protocol during the Bush administration strengthened the EU's position as a leader in countering climate change. While the Obama Administration followed suit in rejecting the Kyoto Protocol, President Obama has made significant efforts since his election in 2008 to shift the focus in the global equation of climate change back to the United States.[19] U.S. involvement in the Copenhagen summit is the first major way that President Obama attempted to reengage the U.S. in global climate change talks. Despite its failure, it signified President Obama's pledge to place the U.S. back at the forefront of countering climate change, which is unlikely to change any time soon with his recent reelection.

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It is clear that the EU and the U.S. hold divergent approaches to combating climate change. The EU favors a top-down approach that is offered by the

Kyoto Protocol in which developed countries such as the United States and EU member states take the initial lead in adopting measures and gradually assist developing countries in the process. The U.S. on the other hand, is opposed to any approach (including Kyoto) that does not include developing countries as part of the solution. Furthermore, while the EU supports binding commitments, the U.S. is opposed to such an approach. Finally, the EU believes that climate change can be effectively countered through direct government intervention in industrial activity. Here is one of the main points of contention that the U.S. has with the ETS scheme. It has promoted domestic strategies of technological research and development to adapt industries rather than help them mitigate the problem. This approach, does not, however, offer any international architecture to address the global dangers posed by climate change.[20]

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Recommendations

The EU's robust strategy for reducing GHG emissions seems to be the most effective one presented so far. But it cannot be implemented more broadly without the support of the U.S. and other key international actors. It is apparent that the EU holds the capacity to counter climate change but falls short in coordinating its approach internationally. Alexander Ochs and Detlef Sprinz argue in a paper that a "transatlantic rapprochement" is in order if the EU would like to remain a global leader of counter-climate change initiatives.[21]

One element of *rapprochement* with regard to the aviation scheme is that the EU should continue to work with non-EU countries to find an alternate method of reducing carbon emissions in the aviation sector. For example, instead of requiring non-EU airlines to purchase allowances for their carbon emissions for the entire flight, the EU could alter the scheme to only account for flight time within European airspace. While this will significantly lower the impact of the scheme, it is a potential alternative that would likely gain more international support. Furthermore, by reducing the scale of the operation, the EU would be able to test the effectiveness of the scheme and assess its implications on future policy initiatives in the entire transportation sector and other industries.

Second, the EU should engage more with the U.S. regarding its technology policy. As stated by Ochs and Sprinz, "the idea of a choice between a target-based regime or a technology-based policy is a false dichotomy." The notion here is that the two approaches should not be viewed as substitutes, as an investment in technology without clear targets will not work efficiently, in the same way that targets could be more easily achieved and improved with the support of technology programs. The U.S. should in turn recognize the importance of a binding commitment scheme in achieving its goals. This recommendation requires active engagement from both sides regarding the development of climate change policies.

Finally, if the EU is serious about pursuing its agenda as a leader of counter-climate change initiatives, several experts deem it crucial for the EU to accommodate the needs of developing countries. Having said this, however, the ETS scheme does not seem to put developing states at any economic disadvantage. In fact, the European Commission has argued that the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDRRC) does not apply to the ETS scheme at all. The CBDRRC principle came about with the UNFCCC and established a common responsibility among all states for climate change, recognizing the limitations of developing countries and their greatly lessened contributions to initial global greenhouse emissions. As the Commission has argued, the ETS aviation scheme only applies to businesses active in the EU market and not to states, thus not conflicting with the principle of CBDRRC.[22]

Conclusion

The European Commission insists on implementing the scheme to mitigate the long-term environmental impact of emissions, regardless of the negative repercussions it would have on a number of sectors in an already struggling global economy, and despite opposition to it. Yet if the EU goes ahead with the plan and does not take non-EU countries' concerns into account, it would likely result in a series of overlapping measures that would not only further politicize the issue, but would also be unnecessarily messy and difficult to effectively implement. This raises the question of whether those countries disputing the ETS' extension to airlines have legitimate reason to do so, or if they can put aside their differences to address the more critical issue at hand.

With the reemergence of the U.S. in the global climate change arena, countries are divided between those that support EU climate change initiatives and those that do not. The countries that are against the EU

in this regard tend to look to the U.S. as the obvious alternate leader in finding solutions. The presence of such a bipolar system is proving to be detrimental to combating climate change and *rapprochement* between both sides will be necessary to change this.

Regarding the belief that the scheme's infringes on national sovereignty: if we want to move toward a unified, effective approach to climate change, such action is necessary. Climate change is a collective challenge that requires unified rather than divided action. It is impossible for states to maintain complete autonomy if they want to successfully decrease their GHG emissions, especially in a highly globalized industry like aviation. States will need to address this issue if they want to reach their 2020 targets, and drawing up individual regional schemes with minute nuances that mirror the ETS would be redundant. □

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NOTES

1. United Nations, Framework Convention on Climate Change, Kyoto Protocol, http://unfccc.int/kyoto_protocol/items/2830.php
2. John Vogler and Charlotte Bretherton, "The European Union as a Protagonist to the United States on Climate Change," *International Studies Perspectives* (7) 2006, accessed September 6, 2012, DOI:10.1111/j.1528-3577.2006.00225.x
3. Charles F. Parker and Christer Karlsson, "Climate Change and the European Union's Leadership Moment: An Inconvenient Truth?" *Journal of Common Market Studies* (48) 2010, accessed September 15, 2012, DOI: 10.1111/j.1468-5965.2010.02080.x
4. "Emissions Trading System," European Commission, November 14, 2012, accessed December 17, 2012 http://ec.europa.eu/clima/policies/ets/index_en.htm
5. "What is the EU doing about climate change?" European Commission, September 10, 2012, accessed December 17, 2012, http://ec.europa.eu/clima/policies/brief/eu/index_en.htm
6. "Greening the skies," *The Economist,* January 7, 2012, accessed August 12, 2012, http://www.economist.com/node/21542454
7. Rebecca Lefton and Samuel Grausz, "Curbing Aviation Emissions 101," *Center for American Progress,* July 20, 2012, accessed, August 3, 2012, http://www.americanprogress.org/issues/green/news/2012/07/20/11919/curbing-aviation-emissions-101/
8. "World Greenhouse Gas Emissions," *World Resources Institute*, July 2, 2009, accessed December 17, 2012, http://www.wri.org/chart/world-greenhouse-gas-emissions-2005
9. Christian Egenhofer, "The EU should not shy away from setting CO2-related targets for transport," *Centre for European Policy Studies,* January, 2011, accessed November 10, 2012
10. "Greening the skies," *The Economist*
11. Samuel Grausz, Nigel Purvis and Rebecca Lefton, "Is the Sky Falling for Airline Profits in the European Union?" *Center for American Progress,* February 21, 2012, accessed August 3, 2012, http://www.americanprogress.org/issues/green/report/2012/02/21/11123/is-the-sky-falling-for-airline-profits-in-the-european-union/
12. Christopher F. Schuetze, "US Fight Against E.U. Airline Emission Plan Heats Up," *International Herald Tribune Rendezvous,* August 6, 2012, accessed, August 15, 2012, http://rendezvous.blogs.nytimes.com/2012/08/06/u-s-fight-against-european-airline-emissions-plan-heats-up/
13. James Fontanella-Khari, "India warns EU over airline carbon tax," *Financial Times,* May 24, 2012, accessed, August 15, 2012, http://www.ft.com/intl/cms/s/0/aceffc00-a58d-11e1-a77b-00144feabdc0.html#axzz23i0BpTem
14. "Hedegaard stops clock on aviations emissions law," *Euractiv*, November 13, 2012, accessed December 19, 2012, http://www.euractiv.com/climate-environment/hedegaard-stops-clock-airlines-e-news-515994
15. Valerie Volcovici, "EU Airline Carbon Tax Plan Opponents Look to U.N. For Alternative," *Huffington Post,* August 2, 2012, accessed August 14, 2012, http://www.huffingtonpost.com/2012/08/02/eu-airline-carbon-tax_n_1732296.html
16. Charles F. Parker and Christer Karlsson, "Climate Change and the European Union's Leadership Moment: An Inconvenient Truth?"
17. Joseph Curtin, "The Copenhagen Conference," *Institute of International and European Affairs,* 2012, accessed September 20, 2012, http://www.iiea.com/publications/the-copengahen-conference-how-should-the-eu-respond
18. Bertel Kilian and Ole Elgström, "Still a green leader? The European Union's role in international climate negotiations" *Cooperation and Conflict* (45) 2010, accessed December 17, 2012, DOI: 10.1177/0010836710377392
19. Elisabeth Rosenthal, "Obama's Backing Raises Hopes for Climate Pact," *The New York Times,* February 28, 2009, accessed November 12, 2012, http://www.nytimes.com/2009/03/01/science/earth/01treaty.html?pagewanted=all
20. Alexander Ochs and Detlef F. Sprinz, "Europa Riding the Hegemon? Transatlantic Climate Policy Relations," *Matthew B. Ridgway Center, University of Pittsburgh,* December 12, 2005, accessed November 13, 2012, http://www.uni-potsdam.de/u/sprinz/doc/Ochs_Sprinz.2005.Europa.pdf
21. Ibid.
22. European Commission, "Impact Assessment of the inclusion of aviation activities in the scheme for greenhouse gas emission allowance trading within the Community," December 20, 2006, accessed September 25, 2012, http://ec.europa.eu/clima/policies/transport/aviation/docs/sec_2006_1684_en.pdf