

UACES 44th Annual Conference

Cork, 1-3 September 2014

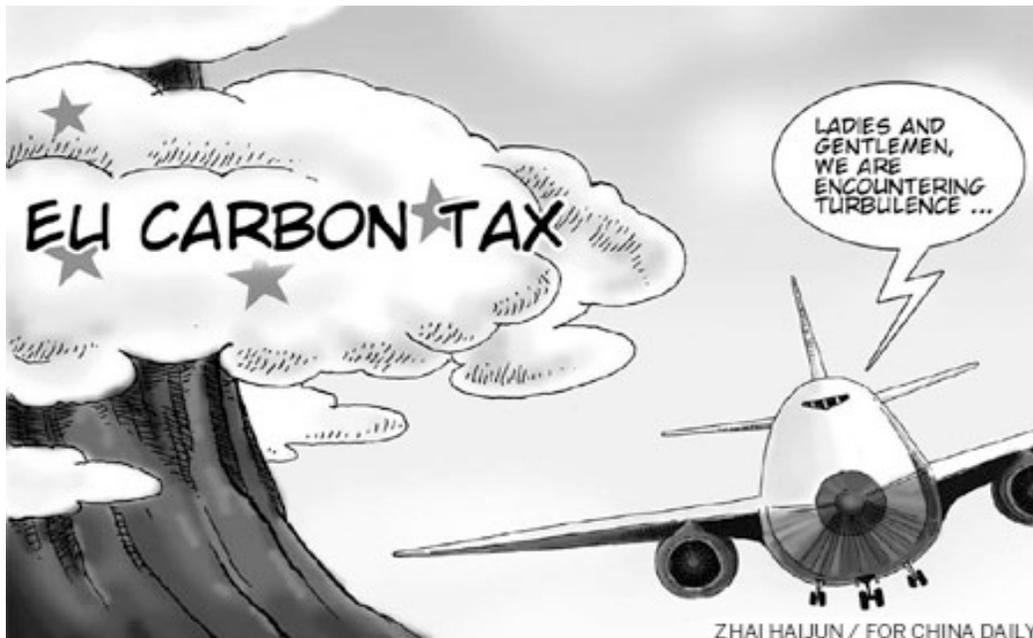
Conference papers are works-in-progress - they should not be cited without the author's permission. The views and opinions expressed in this paper are those of the author(s).

www.uaces.org

Paper for UACES 44th Annual Conference 1-3rd September 2014, University College Cork.
Panel 403: 'Sustainability: Energy, the Environment, Aviation, Water and Fisheries'
Tuesday 2 September from 10:50 to 12:20.

DRAFT ONLY-Please do not quote/cite without author's permission.

'Does Punctuated Unilateralism Pay? Explaining the EU's Aviation Emission Trading Policy in the Face of International Opposition'



(Image from: china.org.cn/business/2012-03/19/content_24929709.htm)

Dr. Brendan Flynn
School of Political Science & Sociology,
National University of Ireland, Galway.
E: Brendan.flynn@nuigalway.ie



Abstract

In October 2013 the ICAO (International Civil Aviation Organisation) promised to introduce a global market based mechanism to address the climate change emissions of international civil aviation. This deal marks a new twist in the attempt by the EU since 2008, to implement a mandatory Aviation Emission Trading Scheme (AETS) permit requirements for all flights, to and from EU airspace. Opposition to the EU's AETS, had been led by Chinese, Indian, and American airlines or governments, through legal actions and threatened 'trade wars'. Has the EU's unilateralism now paid off and should we celebrate the EU as a soft-power climate-change champion? This paper argues for a more cautious and critical view. Firstly, the EU has substantially backtracked by agreeing to postpone the requirement for carbon permits for international flights until a new 2016 deadline. Secondly, the victory of achieving some sort of watered down globalised emissions trading regime for aviation may be Pyrrhic. The ICAO has only promised a global aviation emissions-trading system to be in place by 2020. This is a full seven years after the EU had wanted the AETS in place for EU-international flights. In any event, there are growing doubts about the effectiveness of carbon trading instruments, their amenability to market failure, manipulation and fraud. Rather than reveal the EU's green credentials, the story of the EU AETS for aviation is a rather classic example of bureaucratic policy entrepreneurship, chiefly located within the Commission. Moreover, it raises questions about the effectiveness of a EU strategy of what can be termed 'punctuated unilateralism'. (249 words)

I. Introduction

In April 2014, the European Parliament (EP), voted to exempt international flights from the requirement to have carbon credits, at least until 2016. In layman's terms, the EP voted to let international flights simply off the hook of emission trading! By way of comparison, all domestic intra-EU flights (including those for the EEA), are required to fully participate in the EU's Aviation Emission Trading Scheme (AETS hereafter). These flights must have carbon allowances or permits to cover their carbon emissions.

Connie Hedegaard the Commissioner for Climate Change, addressed the MEPs, explaining the unhappy situation the EU now found itself in:

"the Commission made a proposal, immediately after the 2013 ICAO Assembly, to provide for a further temporary exemption from the EU ETS based on the coverage of emissions within European regional airspace. Regrettably the Council did not support the Commission proposal and, as a consequence, Parliament and the Council came during to an informal agreement during trilogue discussions which limits the coverage of the EU ETS to flights within Europe for the period from 2013 to 2016. And the scope of the EU ETS from 2017 onwards should be decided in response to the outcome of the ICAO Assembly. Without doubt, the Commission would – of course – have preferred – and have fought for – a higher level of ambition. It would have been better for Europe's self-respect and reputation and even more important, it would have been better for the climate. But we are where we are. The compromise achieved provides a basis for continued European regulatory action to reduce greenhouse gas emissions from aviation and will provide much needed legal certainty for all stakeholders before the compliance deadline. In return, we expect our international partners to recognise the flexibility and constructive attitude the EU is showing and now focus all attention on making progress and delivering a credible global deal on international aviation emissions by 2016. In that regard, it is worth emphasising that, in our contacts with third-country representatives, they too have already reacted positively to the informal compromise." (EP, 2014)

The Commission had proposed in October 2013, a supposed compromise that would have required international flights to still have permits for that (small) percentage of their flight they traveled over EU/EEA airspace. In fact this idea attracted continued international opposition (Lewis, 2013, AirportWatch, 2014d)). It was little surprise then, that the text adopted by the EP in April 2014, just gave a blanket derogation from the AETS for all international¹ flights, even though the EP's own Environment Committee had in early 2014, narrowly voted to keep the requirement for permits for international flights (Airport Watch, 2014a, 2014c). Clearly, this latest twist in the aviation AETS hereafter was very controversial.

This rather obviously unfair² situation, has arisen because the EU had little choice other than to back down in the face of intense international pressure.

As Reuter's crisply reported:

"The vote marks the end of three years of wrangling, during which China and the United States had threatened retaliation if the EU forged ahead with plans to regulate flights originating in their countries in a bid to curb the aviation sector's rising output of heat-trapping gases blamed for climate change." (Reuters, 2014).

Of course, admitting policy defeat or climb-down was not the 'narrative' of the Commission, nor the majority in the EP plenary who had gone further than the Commission wanted, and exempted *all* international flights from the AETS until 2016. One academic commentator has also tried to portray the situation as much less of a disaster, and instead a 'crossroads' (Wettestad, 2014, p.64). Yet the only concession to the EU's sense of dignity, in what was otherwise a total rout of EU policy since 2008, is a promise by the ICAO to agree a global aviation emissions trading regime (GAETS) by 2016 (but which will only come into effect by 2020).

In fact, the ICAO has repeatedly agreed in principle, that such a global scheme would be a good idea, but has never managed to get consensus to actually get such in place. Indeed, it was this lack of historic action by the ICAO on aviation emissions and climate change issues, which formed at least one reason why the EU forged ahead with its own AETS in the first place. It is unclear why we should now expect the ICAO to deliver in 2016 what they have failed to do since the Kyoto agreement in 1992? It is quite possible that vote could be lost or fudged yet again. This fear was expressed by environmentalists, such as the World Wildlife Fund (WWF) commenting on the ICAO new-found resolve (AirportWatch, 2014e). Indeed, as one set of commentators have noted:

"It is important to note that the ICAO Assembly did not make a binding commitment to develop a global scheme. Instead, it confirmed that the

proposed scheme would be voted on by the ICAO Assembly at its meeting in 2016" (Rock, et al, 2014).

Moreover, while the ICAO has promised to design a global emissions scheme by 2016, there is no promise as to what its content might be. This matters. The detailed design features of any emissions trading regime can make it either very stringent (and therefore effective), or else very lax and more or less worthless (Meckling, 2014, Vespermann and Wald, 2011). Equally some details can impose huge costs on airlines or conversely, gift them free permits and 'windfall profits' from trading these. The design details of any AETS also matter as regards systematic corruption in the trading of carbon permits, which is a huge problem (Walters and Martin, 2012, Nield and Pereira, 2011).

Unquestionably, this outcome is a significant reversal for the EU's policy on AETS. Firstly the EU has had to backtrack from its relatively audacious plan that *all* flights into and out of the EU would be required to have carbon permits to cover their *entire* emissions (Duval, 2009, p.187). The ICAO General Assembly also refused to accept a compromise move whereby the AETS would be transitionally accepted as applicable to international flights for the period up until 2016, when the ICAO general Assembly, (which meets in a triennial cycle), will once again consider the issue. There was no willingness to grant the EU any face-saving formula.

Moreover, the vote to exclude international flight massively reduces the scope of the EU's remaining 'domestic' AETS and any environmental effects it might have: a roughly 75 per cent reduction in emissions covered will be the result (AirportWatch, 2014b). Global airlines, especially those who make a lot of money from international flights to and from Europe, have been gifted an enormous regulatory reprieve of up to 7 years. Originally, they were supposed to engage in emissions trading and comply with the EU AETS by January 2013, but the Commission fudged this under huge international

pressure, and postponed their participation for one year. Chris Davies, a British Liberal MEP was quick to challenge the EP consensus that a derogation for international flights was the best option, suggesting the MEP's vote was:

"a deal which betrays Europe, which is simply the response to threats from China and some others and leaves us looking weak. We have been told that Airbus will be threatened even though Airbus has more than five thousand planes on its order books. We have an emissions trading scheme which has been introduced by the Commission which works, which can demonstrate leadership and which we should be supporting. We have been told, of course, that ICAO – of course we want a global deal – has been talking of having a market-based mechanism since 2001, and what is the betting it will actually have one in 2020? It is about as much chance as we will start seeing fairies at the bottom of the garden, I suspect. This deal is weak, weak, weak! The Council has completely let us down." (EP, 2014)

The only sting in the tail the EP insisted on, is the threat that should the ICAO fail to develop a global AETS by 2016, then the EU reserves the right to revert, unilaterally, to its original AETS scheme and re-apply those rules to all international flights (Reuters, 2014).

Thus what we see here is a policy of what can be best described as 'punctuated unilateralism'. The EU has successively alternated between threatening, and then pausing the imposition of it's own AETS policy on other countries and flights, to now a policy of returning to work with the ICAO to develop a global AETS. In some ways the EU is back where it was on this issue during the early 'noughties' (specifically 2007) when they were trying to prod the ICAO to adopt a global AETS approach.

This paper does not recount the wider policy history of the EU's AETS (Wittestand, 2014, Skjærseth, 2010), nor consider the legal complexities of the issue. Other literature has examined how the AETS was subsequently challenge before the ECJ by an alliance of American airlines, and later how threats of a trade-war, resulted in the 2013 suspension of the essential

requirement for international flights to comply with the AETS directive (Bogojevic, 2012, pp.350-354, Fahey, 2012). This paper does however, reflect in some detail on the precise period in 2007 when the Commission and the ICAO fell-out over the issue of emissions trading. This is done to explain the EU's unilateralism on AETS. The paper draws here on a small sample of original interviews, which the author conducted in Brussels in 2009, just after the passing of the AETS Directive in November 2008.

Instead, what is in question in this paper, is firstly an attempt to *explain* why this EU strategy of unilateralism emerged, and secondly to evaluate it. Does punctuated unilateralism pay? Has the EU actually succeeded, in crab like manner, to push the ICAO into doing what it wanted as far back as 2004? Or has the EU's failed miserably in it's effort to 'bandwagon' other countries by its unilateral move to an AETS?

The argument advanced here is that in explaining why the EU adopted a high-risk unilateral approach to the AETS directive in 2008, we should look to the internal bureaucratic politics of the Commission, and the wider EU policy process. Especially critical was the EU's internal legislative cycle. Imposing the AETS solution was an attractive global policy 'coup' for Commission policy advocates. It offered to increase their prestige and power, and it was they most of all who pushed for 'unilateralism', along with some elements of the European Parliament.

Also important was the internal political dynamics of the ICAO, which at its crucial general assembly in 2007, refused to move to implement a global emission-trading scheme. The American delegation in particular, in part a product of Bush-era politics, refused to co-operate with an EU delegation that was eager for a policy victory. EU unilateralism was in part then a response to uncooperative partners within the ICAO, at that time. Yet rational calculations of the riskiness of this course of action seem to have

countered for little, given the bounded rationality of the key actors (Simon, 1991, 2000, Ackrill, et al., 2013).

In terms of evaluation, the key observation here is that the EU has by default ended up pursuing a policy of punctuated unilateralism; it threatens imposition of common EU rules on emissions trading on all flights to and from EU airspace, but then backs down from this when faced with an international coalition of states who simply refuse to work with the AETS and threaten trade sanctions. In return, all the EU's has won are relatively weak promises by the ICAO, to re-examine the idea of a global AETS, which in a best-case scenario will only be operating from 2020.

It is submitted that this strategy has been rather ineffective. A simpler approach of continuing to engage with the ICAO may have yielded much the same outcome as we have today. Indeed the risk is now that the EU's global leadership on aviation emissions trading is in question. The issue has returned for substantive decision back to the ICAO, their arcane working groups, and the odd triennial policy 'jamboree' General Assembly in Montreal. On aviation emissions trading, the EU is now firmly on the defensive, and cannot be said to offer credible global leadership. Moreover, the entire saga of the EU AETS raises interesting questions about whether we should so readily accept the portrayal of the EU as an international environmental champion. Punctuated unilateralism, begins to seem a lot like climate change grandstanding, rather than substantive or effective leadership.

II. The EU as an international environmental policy entrepreneur: time for a critical reappraisal?

It has become commonplace to assert that the EU is a significant player as regards global environmental diplomacy and otherwise a 'green giant' (Vig and Faure, 2004, Kelemen, 2010, Skjærseth, 2010). There can be no question

but that the EU has been heavily involved in the complex world of international environmental treaties and associated regimes. Moreover, the EU itself often takes this role very seriously, at least at the level of rhetoric.

Notwithstanding this historic image of the EU as a global environmental leader, it is timely for a more critical and less rose-eyed perspective of the EU's international environmental leadership. Recent literature has begun to admit the EU's leadership role is somewhat faltering, especially as regards climate change (Groen, et al., 2012, Bäckstrand and Elgström, 2013).

One obvious reason must be the EU's recent failure to lead the way at the Climate Change Conference in Copenhagen in 2009 (Dimitrov, 2010, Christoff, 2010, Bäckstrand and Elgström, 2013). Here, the EU led by the Commission, pushed a strong line for tough action. What actually happened is now well known; American, Chinese and other non-European state's diplomats first ignored, and then later isolated EU negotiators, culminating in a deal which sidelined the Europeans and meant that Copenhagen ended in a failure to agree tough binding reductions in CO₂ levels. Copenhagen marks a decisive reality check on the limits of EU environmental leadership, given new global realities, foremost of which are the rise of the BRICS allied with the EU's existential woes with the Euro, and a host of related economic issues which have undercut the global climate change agenda.

III. Understanding Actors, Unilateralism and Environmental Negotiations (but without much game theory!)

It is worth saying a few things about unilateralism. It can be best defined by what it isn't! Namely, negotiations with other parties to agree a mutually acceptable compromise position, often over a long period of time, which although this may be weaker than what some parties wanted, has the virtue that it will be agreed upon and implemented by all. Unilateral action is the

opposite of this. One party (or coalition) tries to force the others to accept a policy they do not like, and do so in a manner, which is often abrupt and confrontational. Moreover, the unilateral party in spite of protests, simply goes ahead and takes (usually legal) measures to force the implementation of the policy.

This is pretty much what the EU originally did with the AETS, as it was originally passed as a Directive in 2008. One peculiarity of the EU AETS was that it applied strictly speaking in an extra-territorial sense. International flights were expected to have emissions covered for the entire length of their flight, including beyond EU airspace!

Unilateral negotiation behaviour would seem high risk, and certainly a strategy that will generate conflict. One obvious outcome might be to create alliances against the unilateral party, although obviously the unilateralist is hoping for a converse 'bandwagon' effect (Walt, 2000, Jinnah, 2011). This would occur if the EU's bold action swung other states into a fait accompli that accept their style of emissions trading.

Indeed the EU AETS Directive explicitly built in an incentive for "bandwagoning" by allowing the Commission the power to waive the requirement to have carbon permits for extra-EU originating flights, as long as such flights were from countries which adopted equivalent climate change abatement policies. In practice, this probably meant if they introduced their own emissions trading regime or joined the EU AETS. While, the exact wording was slippery here in the Directive³, and moreover the decision was left to a nebulous Comitology committee populated by Commission and Member State experts, provisions within the directive clearly allowed the EU to 'reward' states that 'defected' to the EU's way of thinking on aviation emissions.

Australia is a good example here of a state that by moving towards its own ETS won 'brownie points' from the EU. An agreement in August 2012 was made, while the Labour/Gillard government was still in power in Canberra (with crucial Green party parliamentary support). The substance of this deal was that Australian firms, including airlines, were from 2015 to be able to buy European permits and eventually carbon trading would be vice-versa. In fact, the new Liberal-conservative Abbot government has explicitly set on dismantling the former government's climate change policy (Morton, 2014). The complicated linkage between a carbon price (tax), and Australian emissions trading, now seems in doubt. This means quite a bit of uncertainty for Australian airlines flying into the EU, although the derogation granted by the EP generously helps them by parking the issue until 2016, if not 2020⁴. So much for bandwagoning!

While there was also some speculation in the USA that an American Aviation Emission trading scheme might be established (America was after-all, the 'home' of emissions trading experiments), in fact American political and industrial support has failed to get behind such a move. On the contrary, antipathy towards EU unilateralism dramatically grew, and by 2011 the US Congress had passed the EU ETS Prohibition Act. This was signed into law by President Obama, shortly after the EU Commissioner Hedegaard had caved-in for the first time, and agreed to postpone the requirement for foreign airlines to have permits for one year (Beary, 2012). Once again, one has to say here: so much for bandwagoning!

Clearly unilateralism is risky negotiation behaviour, as likely to fail as it might succeed. It therefore requires some explanation. The study of unilateral behaviour in international relations is well known and is a furrow heavily ploughed by the rational choice literature (Brenton, 1994, Ward, 1996). States may be plausibly assumed to engage in unilateral actions whenever the stakes are really high: classic military existential-risk stuff. Another variant

might be that unilateralism abounds where preferences held by actors are intense, ideological and strongly-held, such as religious or ideological beliefs. In these cases, such actors may be rash and unilateralist: the Nazi's were never good at negotiation!

Such conditions do not obviously apply to environmental negotiations, which are widely agreed by most commentators to be considered of much lower salience for most decision-makers. While environmental negotiations can invoke moralistic rhetoric, they do not usually involve intense ideological/religious beliefs⁵, unless perhaps Whales are involved! We should therefore, from the outset expect much less unilateralism in environmental negotiations.

However, we do find clear cases of unilateralism. The refusal of the US Senate to ratify the Kyoto Convention is the most widely cited example, although the US was not the only non-signatory (Lisowski, 2002). Moreover, the US Senate has a historical culture that has stressed hostility towards treaties which bind the US. Equally, the US as supreme global hegemon, can perhaps simply 'afford' to act unilaterally. This all might explain why we would expect a fair dose of unilateralism from US environmental negotiators (especially glancing over their shoulder at the fearsome US Senate!). However, these considerations do *not* explain why the EU has become an environmental regime that pushes unilateral policies that apply extra-territorially. There is the usual added complexity here that the EU is not a conventional state, but a complex polity that combines some federal, confederal and unique features. America is Mars, and the EU is not even Venus, more like a cocky Pluto⁶!

We expect unilateralism from Mars, the 'God of War'....but from the EU? Could it be perhaps that because the EU is so weak it can perversely afford to be plucky and unilateralist (on the logic of: nothing to lose, may as well go

for broke?). The trouble with that thought is that it stands in sharp contrast to all those assertions about how important, successful, and influential the EU has been in international environmental negotiations. Indeed given that the EU's day-to-day politics requires compromise and multi-actor deal-making, one would expect the EU to be a poor candidate for unilateralism.

In fact, the EU is increasingly acknowledged in academic literature as a 'serial' unilateral actor, especially in environmental and climate change negotiations (Bernauer, et al., 2014, Kulovesi, 2011). For example Scott and Rajamani (2012, p.472) explicitly argue on the case of the AETS:

"EU climate unilateralism is contingent rather than absolute. The geographical extension, or the externalization, of the ETS can be avoided if the goods or services are subject to adequate climate change regulation, internationally or on the part of other states. The EU may be thought to be acting as a 'norm entrepreneur'".

Rational Choice theories posit that unilateral actions by state negotiators may also be generally explained by the gains to be made for states as a matter of logical calculation. The problem is that when there are multiple actors (the norm in most environmental negotiations), then the scope for estimating the gains of unilateral action may be curbed by complexity and uncertainty.

In a Mexican stand-off with three shooters, there is actually no incentive to unilaterally shoot first⁷! When the number of shooters (states) rises above a dozen or more, then the pristine assumptions of game theory are muddied, often to the point of making the entire approach irrelevant as an explanation of actual unilateral moves. What matters more is obviously the deeply 'bounded rationality' of the negotiators, and what this means in practice is usually their elite diplomatic culture; emotion; statecraft; tradition; experience; and the momentum of events. In short: politics.

Apart from asserting that we cannot satisfactorily explain EU environmental unilateralism through an abstract game theory account, which downplays the historical context, the institutional stage upon which negotiations take place, nor the peculiar culture of the actors as negotiators, this paper offers a second insight in explaining EU unilateralism.

This is the well worn, but still valid, 'domestic sources of foreign policy' tradition (DeSombre, 2000, Hatch, 2007). By looking for internal or domestic institutional motives, we might be able to explain why actors such as the EU Commission, act unilaterally at international negotiations.

What do they gain by such moves, not just for the immediate negotiations in question, but more generally in relation to their own standing back home, within EU politics? Seen this way, even when unilateralism fails, as one might suspect it often will, the Commission might still gain legitimacy and a mandate for further actions within the EU.

Constructing a bogeyman 'other', to justify unilateral or drastic action, is an old trick in politics and does not require an understanding of post-modern French philosophy. The Commission found it very useful to repeatedly sell a narrative of the ICAO as the 'bad guys' who were refusing to agree a global AETS, therefore making it vital for Europe to lead the way, but also introduce her own scheme first. The fact that this was partly true, because the ICAO co-operated with this narrative by refusing to be more ambitious on aviation emissions over the period 2001-2007, does not necessarily justify unilateral EU action in 2008, with the passing of the AETS directive. In many international environmental negotiations the EU is stuck with partners who are less willing, or openly obstructive.

IV. It takes 'two to tango' even for a solo run: how the EU and ICAO fell out over emissions trading.

To understand why EU actors choose to push for a unilateral AETS we need to engage in some time-travel. The key negotiations within the ICAO on the issue occurred during the era of the second Bush presidency (2004-2008), and before the denouement of the EU at the Copenhagen climate change summit (2009).

According to Jos Dings, of the well-known Brussels Transport & Environment lobby group, the ICAO was to blame for consistently failing to adopt a mandatory approach and for weak ambition. This reflects the mainstream EU-centric narrative of how and why we ended up with a unilateral EU AETSs. In fact, this lack of policy action by the ICAO stemmed from a more structural conflict; developing nations were insisting on their right to a much expanded aviation sector (T&E/Dings, 2010, p.3). Such a conflict is a deep and fundamental one in all climate politics, and is unlikely to be quickly resolved. Indeed it was one of the sticking points, which arguably destroyed the Copenhagen summit.

Nonetheless, Dings described the ICAO's record at 2010 as one of a 'lost decade' and compared the organisation unfavourably with the International Maritime Organisation (IMO) (T&E/Dings, Ibid.). However, this overstates the environmental progress of the IMO. Like the ICAO, it has been mired in deep internal divisions over the principle of mandatory versus voluntary action, and over specific instruments such as emissions trading. Market instruments have been studied since 2006, and what is in place now is a common methodology for measuring and reporting emissions, but not much more than this.

In fact there is as of yet no more agreement within the IMO on a global emissions scheme for shipping, than there is one for aviation⁸, although perhaps the number of states in favour of some sort of eventual emissions trading is greater: notably Australia and the USA have endorsed some variant of the approach within the IMO (Euractiv, 2012, Cullinane and Cullinane, 2013, p.389-390). Moreover, as Hermelin (et al, 2014) point out, the unwinding of the EU's unilateral approach to AETS has been noticed by the parties to the debate on a global emissions trading system for shipping, suggesting a need for great caution towards any EU rush to a similar unilateral imposition of emissions trading in the shipping sector, on legal and economic grounds.

The Commission's fascination with Emissions trading was both more longstanding and always more intense than an organisation such as the ICAO. The Commission had pulled off a major 'policy coup' in getting agreement between the EP and the Council for one of the world's most ambitious CO₂ trading regimes, the EU ETS as agreed in 2003. They were thus 'in love' with emissions trading. The Commission was also attracted to emissions trading because the most obvious alternative, fiscal charges or taxes, were matters that either required unanimity at the EU level, or else were clearly national prerogatives. Numerous bilateral aviation treaties had also been signed under the Chicago Convention, which specified no taxation on aviation fuels. This meant that politically and legally, especially for the Commission, taxes and charges were deeply unattractive as a policy solution to aviation emissions.

According to one Commission official, who was heavily involved with the aviation emissions portfolio in the critical years of 2004-2008, the critical year for the issue becoming 'alive' was 2004. That year coincided with one of the triennial ICAO General Assemblies. Moreover, some British airlines had been lobbying the Commission to take leadership on the issue, in part to

deflect and insure them from national political pressure for increasing airport charges, departure taxes and other such measures, as various nation states were experimenting with. Tellingly, these British airlines advised against imposing an AETS on international flights, on grounds of legal and economic complexity⁹.

The ICAO's historic position on emissions trading was relatively confused, for example its primary working group, the Committee on Aviation Environmental Protection (CAEP), issued a negative advice on any global emissions trading scheme in February 2004. However, the 2004 General Assembly ignored this, and backed a vague formula of words that nonetheless left the door open to an international AETS of some kind (Truxal, 2011, p.220).

Rather than seeking a separate global AETS, the strategy adopted by the majority of states in the ICAO was simpler: let countries who wanted to allow their airlines join the EU ETS, or indeed any other national ETS, do so and build from that a global patchwork (T&E/Dings, 2010, p.4). As a negotiating and political solution this had much to commend it, although it was for sure a laxer environmental solution, precisely because it was voluntary.

It is worth pointing out however, putting airlines into general emissions trading schemes is not unsound, although originally many environmentalists wanted an entirely 'closed', aviation sector only, AETS which would be perhaps more effective because of tighter supply of permits and higher prices. Notwithstanding this concern, airlines operating domestic flights within the existing EU AETS are allowed to buy carbon permits from the general pool of ETS credits beyond the aviation sector (but they are not allowed sell any carbon credits they get allocated, back into the general ETS marketplace, Ellerman, 2014, p.7).

In any event, mainstream thinking among the aviation policy elite at the ICAO level was that some type of AETS would emerge, if only because industry and the ICAO Chicago Convention legal regime was hostile to taxes, and only grudgingly accepting of charges. As one Brussels based environmental lobbyist pointed out:

"there was a moratorium (by the ICAO) on such measures (charges) agreed...(between 2004-2007) to prepare for ETS....ICAO was supposed to go for ETS...(but) the Bush presidency stopped that....."¹⁰

While an environmental affairs manager for Lufthansa explained:

"Some type of emissions trading was foreseen or deemed allowable.....possibly (a) voluntary global scheme to begin with and it could evolve to become mandatory..."

The gap between the EU and the ICAO was therefore never really over the instrument of emissions trading, but rather the classic questions of *who* would join such, *when* and under *what* conditions? Even American opposition was more nuanced in part because they were interested in upstream emissions trading, and feared that the EU AETS would lock them into downstream emissions¹¹ trading as the international norm.

In fact the real sticking point in ICAO-EU negotiations during the critical period of 2004-2007 was over the principle of 'mutual recognition'. As Dings recounts the issue, this was the major point of disagreement:

"At CAEP 7 (the ICAO special working group committee) in February 2007 there was broad agreement on the document except for one critical point; the ability of a contracting state to include any carrier, regardless of its nationality, in an emissions trading scheme. Some States, including the US, insisted that foreign carriers could only be included by mutual agreement – a provision, which, if agreed, would necessitate forging new bilateral agreements with all states involved in each and every scheme. The

alternative, favoured by the EU, was to allow the state to mandate participation of foreign carriers in the absence of mutual agreement." (T&E/Dings, 2010, p.14).

The matter came to a head at the ICAO General Assembly meeting, and the result was a dramatic row, with a majority backing a US led faction who favoured 'mutual recognition' (or country by country joining of any EU AETS). A minority, led by the EU (but including Norway, Switzerland and Turkey) staged a walk-out, and entered a formal reservation to the effect that they would ignore the 'mutual recognition' clause (Truxal, 2011, p.221).

How much this specific issue was really to blame for the EU's unilateral stance is unclear. One Commission official, spoke of the walk-out as being 'a bit staged', and while 'the Americans were 'unreasonable... regardless of Montreal... we (EU) were going to go ahead (with the AETS)'¹². A second Commission official from DG TREN revealed that:

"at no time (did) we feel under threat...that we would have to withdraw the (AETS) proposal...no matter how bad Montreal went...we were confident of our (legal) position.....Montreal was the final proof of ICAO inability."¹³

The overall Commission framing of the Montreal negotiations is perhaps best described by a third Commission interviewee:

"The end of the Bush administration was in sight...the strategy at Montreal was to keep 2010 (next ICAO General Assembly after 2007) in mind, as possibly a date when the ICAO would approve a roll out of the ETS for Europe with others to follow...in return the EU might concede a few things...but not the basic legislation...nor the principle of mutual consent...we entered a reserve on that...and there was a debate about whether they should enter a reserve on the whole issue....remember there was an actual walk-out..... the background to Montreal was fascinating.... DG Tren got the member states to pre-commit that they would not accept (anything other than an AETS) ...the (legal) reservations were in place...(the) EU would not accept the mutual consent and would keep the directive.....(the) Americans (negotiating) were in (the) FAA (Federal Aviation Administration) (and) were Bush appointees...the way the meeting was chaired was very aggressive...with

the Americans trying to sideline the Europeans..(it)...backfired...."¹⁴

What these interviewees confirm is the importance of a strong Commission preference for an AETS scheme as soon as possible, regardless of whether it was global or EU 'regional'. The Commission simply wanted an AETS above all costs. Secondly, they reveal that America was a hostile negotiation partner. This would have made EU unilateralism more understandable as a reciprocal move, except for the fact that the Bush administration was near its natural end. While nobody knew then that Senator Obama would be elected President in November 2008, it was plausible that some key personnel in the relevant US administration dealing with emissions trading would shortly change. However, there were other 'domestic-EU sided' contextual features that surely explain the particular focal point of EU unilateralism, insisting on an AETS that would apply automatically to all international flights.

The first of these was timing regarding the EU's own policy cycle and the second was arguably EU airline industry lobbying. As regards the first, a critical issue for the Commission was the fact that a general review of Emissions Trading was scheduled for late 2008, and there was a fear on their part, that if progress could not be shown on emissions trading generally, then elements of the EP and Council might unwind key features of the EU ETS. Related to this, in November 2007, the AETS directive was scheduled for a first reading stage in the EP. This actually failed to reach an agreement on the AETS in November 2007. However, a strong motive for the Commission at Montreal, was to be in a position to come back to Brussels (and Strasbourg) after the 'battle of Montreal', uniting diverse EU actors around a common EU position. The unilateral decision to go ahead with an AETS could thus be presented as a type of victory and standing firm, on the part of the Commission. As one Environmental Lobbyist noted:

"the Portuguese (presidency of the Council) would provide the image on unified leadership before the Montreal ICAO meeting 2007...in July 2007 they got the heads of agreement...but not the whole deal....the general revision of the ETS was here looming and coming in as a constraint....The ICAO meeting (in 2007) was important...the EU was clear they would agree nothing that would compromise their plan...and (therefore) it did unify the Council...because Transport ministers had to buy into (it) and defend (it) ..so they got ownership...."

A key environmental affairs manager for Lufthansa explained their approach at this time:

"we were terrified that the EU would agree an intra-EU only ETS...which would have hit us badly....As regards Montreal and ICAO...he stressed it was not just the Americans who had a problem (with the EU AETS)....(the ICAO is not worthy of blame...it is nothing more than national transport ministries and their civil aviation delegations.... Lufthansa were shocked by the speed of the (EU AETS) proposal and were afraid what they would end up would be a domestic only ETS; (we) relaxed a little when it became clear it would be imposed on all flights. The hope was it might be delayed by an ICAO legal challenge, but (we) realized the EP were going ahead (with the AETS directive). The risks were that it was better to salvage a flawed deal than an unknown one under the general revision of the ETS.....(so we) were happy enough with a final text that reduced auctioning and non-CO2 effects...."

A lobbyist for the association of charter airlines (IACA) also explained why they put pressure on the Commission, to make sure the AETS directive applied to international flights, and not just domestic ones:

"We were very worried about the geographical scope...we did not want an EU only scheme...(there was the) example of Greece and Turkey....it...would have had major impacts for charter airlines.....(Turkey would have been considered international for flights)

Finally a German official serving in the Council secretariat confirmed the importance of timing in pushing the AETS agenda along.

"(a) Major issue was timing...various member states were not ready to sign up to a deal in 2007 when an attempt was made to get a first reading agreement....that failed... but...when the general review of ETS was impending.... states realized they had better get a deal closed off on aviation

before the EP moved...nobody wanted it in the general ETS...the Slovenians (Presidency of the Council) moved it to the second reading (and did a good job but (were) heavily dependent on Commission...."

V. Conclusion: Tunnel vision and the (globalized) politics of environmental policy instrument choice?

From the set-piece 'battle of Montreal' over 'mutual recognition' in 2007 onwards, it was but a short distance to the EU's unilateral adoption of the AETS Directive in November 2008. Ironically, by the time of the ICAO's 2010 general assembly meeting, some concessions were offered at the ICAO level. According to Truxal the principle of mutual recognition, which had proved such a sticking point in 2007 was effectively sidelined (2012, p.221).

It would appear there was, at that time in 2010, a brief window of opportunity for the EU AETS and the ICAO to have brokered some kind of compromise via a grand bargain. However, by that stage litigation was in motion before the British higher courts, and later referred to the ECJ, who subsequently backed the legality of the AETS directive, including its controversial right to levy emission credits on flights outside EU airspace.

However, having won the legal battle under EU law did little to save the AETS when faced with huge political and economic pressures, such as China's decision to suspend €4bn worth of orders for Airbus aircraft (Bogojevic, 2012, p.346). This should be a salutary lesson for those scholars who exaggerate the scope of law and legal activism to further the EU's environmental reach and influence. The EU today lives in a very different world order, from the time period of the 1970s and 1980s, when legal activism was so important for EU environmental policy.

The Commission's high-risk strategy of a unilateral AETS has arguably resulted in a failure for the planet, and for European citizens. There is no global AETS, but the promise of one by 2020 to be agreed at the ICAO

General Assembly in Montreal 2016. Given the ICAO's lackluster track record on Aviation emissions, it is not fanciful to speculate that a global AETS may be delayed further, or so watered down as to be 'Greenwash'. One MEP (Bas Eickhout, Verts/ALDE), in the plenary debate of April 2014, summed up the situation astutely:

"So when we say that we were so successful in getting ICAO moving, then why are we giving up all the pressure through this deal, because now there is four years of nothing? Brazil has already not attended the next ICAO working group meeting, the pressure is off and we know Europe has lost." (EP, 2014).

While the EU can threaten a second round of punctuated unilateralism after 2016, this plainly lacks credibility given the simple fact that the EU has retreated from its position several times already. Threats in international relations are only credible if they are effective and plausible, and that means they have to be carried out, at least some times. The EU's historical track record on AETS shows a repeated pattern of threatening unilateral rules on international flights, but then ultimately backing down.

Punctuated unilateralism is thus weaker than repeated and consistent unilateralism (of a type the US has demonstrated by refusing to ratify the Kyoto protocol, the law of the sea convention and the international criminal court, etc.). In fairness, one might argue it is not evident that punctuated unilateralism represents a weaker strategy than being a consistently consensual and co-operative negotiator, always patiently waiting for a global consensus, which seems elusive. However, punctuated unilateralism has not really delivered a predictable and clear-cut victory for the EU.

Of course, if an excellent global AETS emerges after 2016, it may well be seen to have been all worth it. However, this suggests the outcome remains very much all to play for and the hard work of forging the details on the ICAO brokered AETS remains to be done. For that, the Commission will

simply have to engage in detail with delegations from important states such as China, India, Australia and of course, the USA. The success or failure of the EU AETS thus remains contingent on the EU's negotiation abilities within the ICAO. In practical terms this means the EU is not far removed from where it was in 2007, when it was threatening a unilateral ETS if the ICAO did not budge. Another 'battle of Montreal' looms.

One objection to this paper might be: 'but what other option could the EU have had: they simply had to act unilaterally in 2008 to get the ICAO moving towards AETS?' In fact the EU, principally the Commission in 2007, had several options before resorting to the unilateralism that was chosen (and later abandoned).

They could have decided on a consensual low-conflict strategy, which would have seen the EU stay within the ICAO process and work for a global AETS, which remember is exactly "where we are" now, with the only change being the ICAO has agreed there will be a vote on a global AETS in 2016 (before 2008 this was only conceded as desirable). Continual pressure from within the ICAO during the period 2008-2012 could have created a consensus towards a flexible and phased global AETS, albeit probably with lots of exemptions. The principle of mutual recognition could have been fudged by the expedient of refusing to accept it in principle, while allowing the approach for 'a transitional period'. Winning over just one or two of the more influential states (notably America) via a bilateral deal on AETS would have been an effective way to have generated momentum for the ICAO general assembly of 2010. Of course, such compromises and waiting, would have played havoc with the Commission's credentials and timetable on emissions trading more generally, especially regarding an awkward European Parliament, that predictably would have decried such a 'climb-down'.

The EU could also have decided on a 'middle-way' strategy. This would have looked a lot like either introducing an AETS only for domestic flights (what we have now until 2016), or some variant of the Commission's failed compromise of October 2013, whereby international flights would only pay for their emissions over EU airspace. Assuming both these expediciencies were (and are) legally viable, they would have avoided perhaps the worst of international protest, or at least would have created an AETS leadership position for the EU. This could have been more attractive in winning over other states within the ICAO process who were skeptical about the very idea of AETS.

For now, it is also worth pointing out that emissions-trading continues to diffuse around the world, making it more likely that states within the ICAO will agree to include aviation within national emissions trading regimes. For example, South Korea has introduced a relatively modest national emissions trading scheme in 2014, but it will become more demanding by 2020, indicating Korean firms will probably want to buy carbon allowances in the future, and that means they are likely to want to participate in global emissions trading. Obama's proposed Climate plan of June 2014 for the USA, notably features the ability of individual US states to choose if they want to participate in emissions trading schemes. This builds on the reality that in North America emissions trading is emerging at the sub-national or state rather than federal level. In China emissions trading is proceeding in much the same way; it has started first in Guangdong province and later to Hubei and other regions. For an overview of this messy 'patchwork quilt' reality of emissions trading see ICAP (et al., 2014)

If we ask the question does punctuated unilateralism pay-off for various actors rather than the EU as whole, the answer is subtle and equivocal. For the Commission, there is no obvious political failure here although the current situation is embarrassing. For they remain central to the policy area

as a key player. They will continue to be vital actors in ongoing negotiations at the ICAO level. In the market for influence, their stock remains high even if the entire AETS policy remains in limbo.

Undoubtedly, the Commission, will argue that after a few years of living dangerously, unilateralism has eventually paid off after much 'necessary' conflict. In this 'narrative', the EU has successfully dragged China, India and America into a global Aviation ETS. This rather ignores the point that agreement in principle for such a global scheme, is very far removed from seeing what eventually emerges. Given the states involved, it is unlikely to take the guise of a very strict and ambitious type of emissions trading.

In any event, what has become forgotten is that emissions trading is increasingly revealed to be far from satisfactory. The EU agreed new rules in 2008 to supposedly eliminate fraud and oversupply, but these do not appear to be working. A new round of rebooting the EU ETS has been discussed and rowed over in 2014. As Wettstand explains: "*After several years with a volatile and rather low carbon price, it has become clear that the system is both considerably oversupplied and malfunctioning*" (2014, p.64).

Why then should we seriously entertain any argument that the Commission has successfully dragged the rest of the world towards dabbling in some variant of emissions trading for global aviation? Might it not have been better all along to stay within a broad menu of approaches and instruments, which the ICAO could have endorsed, each country or regime deciding for itself a range of instruments?

The obvious problem here is that sort of outcome would undermine the unique case for a distinctly European AETS. Fiscal charges on aviation remain mostly national prerogatives, and thus any EU dimension, especially the Commission's role, would fall back to a more marginal position of co-

ordination and supervision. The appalling vista for the EU, especially the Commission, might be a mixture of global and national aviation emissions policies which mix and match fiscal, emissions trading and other instruments, and thus bypass the need for a distinctly European policy solution. Such an outcome would have seemed fanciful in November 2008, when the EU unilaterally pushed ahead and passed its own AETS directive. Today, it cannot be ruled out.

In the end, perhaps it is this sense of uncertainty over aviation emissions trading which the current AETS impasse entails, which reveals most of all that punctuated unilateralism is not a successful strategy for any wider EU interest. One might be tempted to brand it a 'punctured unilateralism'!

Bibliography

Ackrill, Robert, Adrian Kay, and Nikolaos Zahariadis. "Ambiguity, multiple streams, and EU policy." *Journal of European Public Policy* 20, no. 6 (2013): 871-887.

AirportWatch (2014a) "European Parliament votes to continue with partial inclusion of aviation in weakened ETS – for intra-EU flights only till at least 2016, April 3, 2014. Available at:

AirportWatch (2014b) "Scope of coverage of aviation by EU Emissions Trading System now slashed by 75% until 2017", May 1, 2014. Available at:

AirportWatch (2014c) "EU Parliament ENVI committee narrowly votes against compromise of extending ETS "Stop the Clock" to 2016", March 19, 2014. Available at:

AirportWatch (2014d) 'India and the USA oppose EU plan to include flights within European airspace in ETS, October 23, 2013, Available at:

AirportWatch (2014de) "WWF: ICAO forgoes immediate emissions reductions for only promise of a future global plan" October 4, 2013. Available at:

Anger-Kraavi, Annela, and Jonathan Köhler. "Aviation and the EU Emissions Trading System." *Transport and Sustainability* 4 (2013): 109-130.

Bäckstrand, Karin, and Ole Elgström. "The EU's role in climate change negotiations: from leader to 'leaditor'." *Journal of European Public Policy* 20, no. 10 (2013): 1369-1386.

Bartels, Lorand. "The WTO Legality of the Application of the EU's Emission Trading System to Aviation." *European Journal of International Law* 23, no. 2 (2012): 429-467.

Beary, Brian (2012) 'Obama Signs "EU Emission Trading Prohibition Measure (11/29)', European Institute Blog, November, available at: <http://www.europeaninstitute.org/November-2012/obama-signs-qeu-emissions-trading-prohibitionq-measure-1129.html>

Bernauer, Thomas, Robert Gampfer, and Aya Kachi. "European unilateralism and involuntary burden-sharing in global climate politics: A public opinion perspective from the other side." *European Union Politics* 15, no. 1 (2014): 132-151.

Bogojevic, Sanja. "Legalising environmental leadership: a comment on the CJEU's ruling in C-366/10 on the inclusion of aviation in the EU emissions trading scheme." *Journal of environmental law* 24, no. 2 (2012): 345-356.

Böhler, Dirk. "The EU Emissions Trading Scheme-Fixing a Broken Promise." *Environmental Law Review*, Vol. 15, no. 2 (2013): 95-103.

Brenton, Tony. *The greening of Machiavelli: the evolution of international environmental politics*. Earthscan Publications Ltd, 1994.

Carminati, M., and Vittoria Giugi. "Clean air & stormy skies: the EU-ETS imposing carbon credit purchases on United States airlines." *Syracuse J. Int'l L. & Com.* 37 (2009): 127.

Christoff, Peter. "Cold climate in Copenhagen: China and the United States at COP15." *Environmental Politics* 19, no. 4 (2010): 637-656.

Cullinane, Kevin, and Sharon Cullinane. "Atmospheric emissions from shipping: The need for regulation and approaches to compliance." *Transport Reviews* 33, no. 4 (2013): 377-401.

DeSombre, Elizabeth R. *Domestic sources of international environmental policy: Industry, environmentalists, and US power*. Mit Press, 2000.

Dimitrov, Radoslav S. "Inside UN climate change negotiations: The Copenhagen conference." *Review of Policy Research* 27, no. 6 (2010): 795-821.

Dunbar, Rupert. "The 'case' for rethinking European courts' application of international law." (2011).

Duval, David T. (2009) 'Aeropolitics and Economics of Aviation Emissions Mitigation', p.179-191 in Gössling, Stefan and Paul Upham (eds.) *Climate Change and Aviation: Issues, Challenges and Solutions*. London: Earthscan.

EC/European Commission (2013) 'Proposal for a directive of the European Parliament and of the Council amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in view of the implementation by 2020 of an international agreement applying a single global market-based measure to international aviation emissions', Brussels, 16.10.2013 COM(2013) 722 final 2013/0344 (COD), available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013PC0722&from=EN>

Ellerman, A. Denny, Claudio Marcantonini, and Aleksandar Zaklan (2014) "The EU ETS: eight years and counting", EUI Working Papers, RSCAS 2014/04, Robert Schuman Centre for Advanced Studies Climate Policy Research Unit, available at: <http://cadmus.eui.eu/handle/1814/29517>

EP/European Parliament (2014) 'Plenary debate, Wednesday 2nd April, 2014, 25. Greenhouse gas emission trading (international aviation emissions) (debate),

PV 02/04/2014 - 25, available at: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+CRE+20140402+ITEM-025+DOC+XML+V0//EN&language=EN>

Euractiv (2012) 'IMO on collision course with EU over CO2 emissions', March 6th, 2012, available at: <http://www.euractiv.com/climate-environment/imo-collision-course-eu-co2-emis-news-511289>

Faber, Jasper, and Linda Brinke. *The Inclusion of Aviation in the EU Emissions Trading System*. Technical Report, ICTSD, 2011.

Fahey, Elaine. (2012) "EU Emissions Trading Scheme and the Court of Justice: The High Politics of Indirectly Promoting Global Standards", *The German Law Journal*, Vol.13, No.11, pp.1247-1268.

Groen, Lianne, Arne Niemann, and Sebastian Oberthür. (2012) "The EU as a global leader? The Copenhagen and Cancún UN climate change negotiations." *Journal of Contemporary European Research* 8, no. 2 (2012), pp. 173-191.

Haites, Erik. "Linking emissions trading schemes for international aviation and shipping emissions." *Climate Policy* 9, no. 4 (2009): 415-430.

Hardeman, Andreas. "A common approach to aviation emissions trading." *Air and Space Law* 32, no. 1 (2007): 3-18.

Hatch, Michael T. (2007) "The politics of climate change in Germany: domestic sources of environmental foreign policy." pp.41-62 in Harris, Paul G. (ed.). *Europe and global climate change: politics, foreign policy and regional cooperation*. Edward Elgar.

Hermeling, Claudia, Jan Henrik Klement, Simon Koesler, Jonathan Köhler, and Dorothee Klement. "Sailing into a Dilemma-An Economic and Legal Analysis of an EU Trading Scheme for Maritime Emissions." *ZEW-Centre for European Economic Research Discussion Paper* 14-021 (2014).

Hertogen, An. "Sovereignty as Decisional Independence over Domestic Affairs: The Dispute over Aviation in the EU Emissions Trading System." *Transnational Environmental Law* 1, no. 02 (2012): 281-301.

ICAP (International Carbon Action Partnership) Haug, Constanze, Michel Frerk, Aki Kachi, Camille Serre, and Kristian Wilkenning (eds.) (2014) *Emissions Trading Worldwide* International Carbon Action Partnership (ICAP) Status Report 2014. Available at: <https://icapcarbonaction.com/component/attach/?task=download&id=152>

Jinnah, Sikina. "Climate change bandwagoning: The impacts of strategic linkages on regime design, maintenance, and death." *Global Environmental Politics* 11, no. 3 (2011): 1-9.

Kelemen, R. Daniel. "Globalizing European Union environmental policy." *Journal of European Public Policy* 17, no. 3 (2010): 335-349.

Kulovesi, Kati. "'Make your own special song, even if nobody else sings along': International aviation emissions and the EU Emissions Trading Scheme." *Climate law* 2, no. 4 (2011): 535-558.

Lewis, Barbara (2013) 'European airspace carbon-fee plan set for bumpy ride', *Reuters*, October 1th, 2013, available at: <http://www.reuters.com/article/2013/10/16/us-eu-airlines-idUSBRE99F0A220131016>

- Lisowski, Michael. "Playing the two-level game: US President Bush's decision to repudiate the Kyoto Protocol." *Environmental politics* 11, no. 4 (2002): 101-119.
- Meckling, Jonas. (2014) "The future of emissions trading." *Wiley Interdisciplinary Reviews: Climate Change*. *Wiley Interdisciplinary Reviews: Climate Change*, Volume 5, Issue 5, pages 569–576, September/October 2014
- Morton, Rick (2014) 'No going back on emissions trading scheme, says Greg Hunt', *The Australian*, July 4th, available at: <http://www.theaustralian.com.au/national-affairs/climate/no-going-back-on-emissions-trading-scheme-says-greg-hunt/story-e6frg6xf-1226977566094?nk=52b8fc0f5676febba08c779f8a2106e>
- Nield, Katherine, and Ricardo Pereira. "Fraud on the European Union emissions trading scheme: effects, vulnerabilities and regulatory reform." *European Energy and Environmental Law Review* 20, no. 6 (2011): 255-289.
- Pittel, Karen, and Dirk TG Rübhelke. "Transitions in the negotiations on climate change: from prisoner's dilemma to chicken and beyond." *International Environmental Agreements: Politics, Law and Economics* 12, no. 1 (2012): 23-39.
- Podliska, Bradley F. *Acting Alone: A Scientific Study of American Hegemony and Unilateral Use-of-Force Decision Making*. Lanham, MD: Lexington Books, 2010
- Preston, Holly, David S. Lee, and Paul D. Hooper. "The inclusion of the aviation sector within the European Union's Emissions Trading Scheme: What are the prospects for a more sustainable aviation industry?." *Environmental Development* 2 (2012): 48-56.
- Underdal, Arild, Jon Hovi, Steffen Kallbekken, and Tora Skodvin. "Can conditional commitments break the climate change negotiations deadlock?." *International Political Science Review* (2012): 0192512111432564.
- Reagan, Daniel B. "Putting international aviation into the European Union emissions trading scheme: Can Europe do it flying solo." *BC Envtl. Aff. L. Rev.* 35 (2008): 349.
- Reuters (2014) 'UPDATE 2-EU drops plan to extend CO2 rules to international flights', Thursday April 3, 2014, available at: <http://uk.reuters.com/article/2014/04/03/eu-carbon-aviation-idUKL5N0MV2KX20140403>
- Rock, Nicholas, Peter Zaman, Shariq Gilani and Alexandra Gordon (2014) 'European Union: Aviation Emissions: The ICAO Outcome And Its Impact On The EU Aviation Emissions Trading Scheme', 7 January 2014, available at <http://www.mondaq.com/x/284726/Aviation/Aviation+Emissions+The+ICAO+outcome+and+its+impact+on+the+EU+aviation+emissions+trading+scheme>
- Schwarze, Gisbert. "Including Aviation into the European Union's Emissions Trading Scheme." *European Energy and Environmental Law Review* 16, no. 1 (2007): 10-22.
- Scott, Joanne, and Lavanya Rajamani. "EU Climate Change Unilateralism." *European Journal of International Law* 23, no. 2 (2012): 469-494.
- Simon, Herbert A. "Bounded rationality and organizational learning." *Organization science* 2, no. 1 (1991): 125-134.

- Simon, Herbert A. "Bounded rationality in social science: Today and tomorrow." *Mind & Society* 1, no. 1 (2000): 25-39.
- Skjærseth, Jon Birger, and Jørgen Wettestad. "Making the EU emissions trading system: the European commission as an entrepreneurial epistemic leader." *Global Environmental Change* 20, no. 2 (2010): 314-321.
- Staniland, Martin. "Regulating aircraft emissions: leadership and market power." *Journal of European Public Policy* 19, no. 7 (2012): 1006-1025.
- T&E (Transport and Environment) and Dings, Jos (2010) *Grounded: How ICAO failed to tackle aviation and climate change and what should happen now. Published to coincide with the ICAO Triennial Assembly, Montreal September-October 2010*. Brussels: T&E. Available at: http://www.transportenvironment.org/sites/te/files/media/2010_09_icao_grounded.pdf
- Truxal, Steven. "The ICAO Assembly Resolutions on international aviation and climate change: Historic agreement, breakthrough deal and the Cancun effect." *Air & Space Law* 36, no. 3 (2011): 217-242.
- Vespermann, Jan, and Andreas Wald. "Much Ado about Nothing?—An analysis of economic impacts and ecologic effects of the EU-emission trading scheme in the aviation industry." *Transportation Research Part A: Policy and Practice* 45, no. 10 (2011): 1066-1076.
- Vig, Norman and Michael Faure (eds.) (2004) *Green Giants? Environmental Policies of the United States and the European Union*. MIT Press.
- Walt, Stephen M. "Alliances: balancing and bandwagoning." *International Politics: Enduring Concepts and Contemporary Issues* (2000): 96-103.
- Walters, Reece, and Peter Martin. (2012) "Cameron's hot air. Pollution, fraud and the politics of carbon emissions: Reece Walters and Peter Martin identify how the coalition's emissions policies have failed the British public and created new markets for corporate polluters and carbon fraudsters." *Criminal Justice Matters* 90, no. 1 (2012): 6-7.
- Ward, Hugh. "Game theory and the politics of global warming: The state of play and beyond." *Political Studies* 44, no. 5 (1996): 850-871.
- Wettestad, Jørgen. "Rescuing EU Emissions Trading: Mission Impossible?." *Global Environmental Politics* 14, no. 2 (2014): 64-81.

Notes

¹ The original Commission legislative proposal suggested an amendment of Article 28a of

² Reuters Report that Ryanair and Easyjet as part of the European Low Fares Airline Alliance have threatened legal action at this latest twist in the AETS, arguing with evident logic that it imposes a disproportionate financial burden on them because they operate no (or few) international flights. See Reuters (2014).

³ The new Article 25a of the ETS directive as amended by the AETS directive 2008/101/EC reads at point 18: "Where a third country adopts measures for reducing the climate change impact of flights departing from that country which land in the Community, the Commission, after consulting with that third country, and with Member States within the Committee referred to in Article 23(1), shall consider options available in order to provide for optimal interaction between the Community scheme and that country's measures. Where necessary, the Commission may adopt

amendments to provide for flights arriving from the third country concerned to be excluded from the aviation activities listed in Annex I or to provide for any other amendments to the aviation activities listed in Annex I which are required by an agreement pursuant to the fourth subparagraph."

⁴ As of August 2014 one of the main promoters of an Australian Emissions Trading systems was the minority opposition parliamentarian, and ex-Mining magnate, Clive Palmer. In contrast, the Abbot government favours a so called Direct Action Plan, which may allow Australian companies to buy international carbon permits and use these for compliance purposes. If so, this would just about allow Australia to participate in the EU AETS or any future global AETS administered by the ICAO (See: <http://www.pointcarbon.com/pages/common/searchresult.faces?text=Australia%20Emissions%20Trading>).

⁵ One can make the argument that climate change is an existential threat, but it is not an immediate and gripping one such as say military invasion. It is a complex and contested scientific phenomenon. These abound in environmental negotiations.

⁶ Whose status as a Planet has been cruelly downgraded of late!

⁷ In the Mexican stand-off 'game' the critical issue is timing-who shoots first. It might be objected that the game is not a great example because the issue is a simple zero sum exchange (shooting/killing; not shooting/being killed). Because most negotiations are not like this (i.e. not zero sum), one could say that it serves as a poor model. However, it just about works: Unilateral behaviour here is the act of shooting first. Co-operative behaviour might be to either agree that nobody shoots in such a situation, or two parties agree to shoot a third! Notice also that unilateralism in negotiations may have nothing to do with timing, what states goes first, or when a given measure is implemented, but rather with the nature of the policy content, what standards are used, etc.

⁸ See the Commission's relevant webpage:

http://ec.europa.eu/clima/policies/transport/shipping/index_en.htm

⁹ Interview with Commission Official A, DG TREN, Brussels, April 14th, 2009.

¹⁰ Interview with T&E Policy officer, Brussels, April 15th, 2009.

¹¹ Upstream Carbon emission trading would require the basic suppliers or importers of fuels to have permits to cover their emissions, whereas downstream systems demand that customers, or retailers of fuels must have these permits. In practice many emissions trading system end up working on midstream allocation-targeting retailers of goods or services which have a fuel content.

¹² Interview with Commission Official A DG TREN, Brussels, April 14th, 2009.

¹³ Interview with Commission Official B, DG TREN, Brussels, April 14th, 2009.

¹⁴ Interview with Commission official C, DG TREN, April 14th, 2009.