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Climate Change Law and Policy After Copenhagen

Rónán Kennedy

This article deals with recent developments in climate change law and policy. It examines the likely future developments in international negotiations for a successor to the Kyoto Protocol; briefly summarises climate change legislation before the US Congress; mentions recent European legislation on the topic; and summarises proposals for climate change legislation in Ireland, including the recent Framework for the Climate Change Bill. It concludes that future development in this area will be slow, difficult and uncertain, with international efforts likely to splinter in the coming months but that Europe will remain a dominant force in climate change policy globally and that comprehensive legislation in Ireland is likely in the near future, along with related changes in other areas of law.

Context

As climate change law develops into a distinctive sub-discipline of environmental law, a number of thematic issues are a strong influence on its future evolution: an increasing awareness of the need to embed broader “sustainability” issues in climate change-focused regulation in order to avoid unintended consequences; the general economic recession focusing attention on cost-saving and improving measures rather than replacement and investment in new infrastructure; and a shift to agreements between groups of states rather than comprehensive global treaties. The practical impacts of these challenges include delays with large-scale renewable energy projects, a complex web of implementation issues for local government, and greater interest in carbon capture and storage (CCS).

While climate change became a significant public and political issue in recent years, the focus of attention has shifted over time. The so-called “Climategate” controversy, in which emails from University of East Anglia’s Climatic Research Unit were leaked through the internet and seemed to show collusion and suppression of unwelcome findings and data by climate change scientists is part of an overall pattern of increasing media scrutiny and hostile public comment on measures to reduce greenhouse gas emissions and deal with global warming.

This means that progress is slow and unpredictable; nonetheless, both the EU and the Irish Government intend to introduce more and more binding legal obligations on carbon emitters and to embed an awareness of climate change mitigation and adaption into many areas of law.
United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC) is the principal international agreement dealing with climate change, although (as will be seen below) others are beginning to emerge. By itself, it does not impose very strong emission reduction obligations, but the Kyoto Protocol (KP), negotiated under the auspices of the UNFCCC, requires that the parties listed in Annex I must reduce their overall emissions of greenhouse gases (GHGs) by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012. Annex I parties are developed countries; the Protocol does not impose any obligations on developing country parties.

The protocol does not simply require a reduction in national emissions but also allows the use of what are known as “flexible mechanisms” as a source of offsets. The most important of these is emissions trading. This is modeled on the successful sulphur dioxide emissions trading pioneered in the United States under the Clean Air Act. The other two flexible mechanisms are aimed at technology transfer and capacity building in developing countries: Joint Implementation (JI), which allows developed countries to collaborate on projects to reduce overall emissions, either through cleaner technology or developing new carbon sinks; and the Clean Development Mechanism (CDM), whereby a developed country can fund a project in a developing country which will achieve reduced emissions in the latter. However, these do not seem to have led to any significant overall reduction in GHG emissions.4

COP-15 in Copenhagen

Preliminary work for Copenhagen Conference

It is clear that the KP will not be sufficient to reduce global GHG emissions by enough to halt the progress of global warming, particularly to keep overall temperature increases below 2°C, a figure which scientists regard as a significant threshold beyond which changes in climate may become runaway. There are therefore ongoing negotiations under the UNFCCC to strengthen the international regime. These operate on two tracks, one for “Long-Term Cooperative Action” and one for expanding commitments under the Kyoto Protocol. These take place in so-called “Ad-Hoc Working Groups”, known by the acronyms AWG-LCA and AWG-KP respectively. This two-pronged approach, known as the “Bali Roadmap”, separates discussion of obligations under the Convention and the Protocol from each other, avoiding difficulties of lack of political support for mitigation by the US and developing countries.5

However, the first produced a very complex and contested document, 200 pages long, full of bracketed items and not a suitable basis for discussions at Copenhagen,6 and the second made little real headway.7 Stumbling blocks included the level of mitigation required of state parties, particularly developing countries; reducing emissions from deforestation and forest degradation.
and adaptation, including technology and capacity building and finance.\(^8\)

**Hopenhagen or Nopehagen?**

Each Conference of the Parties (COP) to the UNFCCC seems to attract more attention than the last. Negotiations in Montreal, Bali and Poznań took place in the full glare of the media spotlight; the level of interest in COP-15, which took place in Copenhagen from December 7–19, 2009 was unprecedented and led to unrealistic expectations. However, even an objective observer would have to agree that the final result of the hard work involved fell short of what might have, and should have, been achieved.\(^9\) After disagreement over the “Danish text” produced by the conference chair and a dramatic last-minute agreement between large states,\(^10\) the final result was the “Copenhagen Accord”, which was “noted” by the COP, is not legally binding\(^11\) (particularly with Cuba opposing it, meaning that it is not a consensus decision\(^12\) but can be “supported” by individual states.\(^13\) Both the AWG-LCA and AWG-KP will continue their work into the future, but it is clear that they have much to do.

**The “Copenhagen Accord”**

The Accord\(^14\) is an imperfect political compromise. It aims that global temperature increases can be kept below 2\(^\circ\) and that GHG emissions will peak “as soon as possible” (para.2), something to be achieved through emission reductions by Annex I countries for the period 2010–20 (para.4) and mitigation actions by Non-Annex I countries (para.5), supported by “adequate, predictable and sustainable financial resources, technology and capacity-building” (para.3), “[n]ationally appropriate mitigation actions seeking international support”, which are subject to international measurement, reporting and verification (para.5) and a focus on reducing emissions from deforestation and forest degradation (REDD-plus) (para.6). Developed countries are to provide up to $30 billion in 2010–2012 and to “mobilise” $100 billion from both public and private sources “to address the needs of developing countries” by 2020 (para.8), most of which is to go through the “Copenhagen Green Climate Fund”, which is “an operating entity of the financial mechanism of the Convention” (para.10). It also establishes a technology mechanism for development and transfer of know-how to developing countries (para.11). The implementation of the Accord is to be assessed by 2015. From a legal perspective, it is lacking specifics, particularly as regards timescales: it does not provide specific emission reduction targets for individual countries, specific arrangements for the flow of finance from rich to poor or agreement on monitoring, reporting and verifying (MRV).\(^15\)

**What next?**

The Copenhagen Accord embodies a shift from the top-down, “targets-and-timetables” approach of the Kyoto Protocol to a system of voluntary pledges of
emission reduction, something which favours the developed countries who are responsible for the majority of global GHG emissions. Negotiations are dominated by two superpowers, one from the old order (the US) and one emerging from the developing countries (China). The pragmatic conclusions that are likely to emerge from this bilateral relationship do not favour the more comprehensive outcomes sought by the EU. US domestic politics are well-known to be hostile to climate change regulation, while China is reluctant to see any slowing of its economic growth.

Although Copenhagen did not yield the results desired, it might lay the foundation for success at COP-16, which will be held in Cancún, Mexico from November 29 to December 10, 2010. What can we expect to be achieved in the meantime and at the meeting? The recently concluded talks in Bonn might give us some indication. There, it seems, the mood was good but many difficulties remain: what to do with the Copenhagen Accord (which some states would prefer to forget), the extent of co-operation between the two negotiating tracks and the side-lining of the UNFCCC process in favour of other fora and smaller-scale agreements.

The road ahead will not be easy. There are significant procedural and substantive challenges in the negotiation process: unwieldy procedures, north/south suspicions, ideological grandstanding, and the need for consensus. Because climate change is a delayed harm, vested interests, the human tendencies to discount future costs and adjust to the status quo and the practical difficulties involved in drawing a clear connection between environmental regulation and averted harms are likely to lead to public and political resistance to climate change regulation. Public support for climate change regulation is not also to be taken for granted. Many know little or nothing about it, and may not accept that it is an issue or something to be taken seriously. Public opinion may be changing to doubt that climate change is occurring or that it may have major consequences. All of this makes progress slow and difficult, particularly as the German Government may be losing interest in taking a lead on the issue, and the European Commission are now indicating that they do not anticipate significant progress to be made until COP-17 in South Africa in 2011.

Developments in the United States of America

As the world’s largest economy, with a sophisticated legal regime for pollution control, changes in climate law and policy in the United States of America are watched with interest in the rest of the world.

Application of Clean Air Act

Massachusetts v EPA

The Clean Air Act (CAA) empowers the American Environmental Protection Agency (EPA) regulate air pollutants. During the George W. Bush
administration, the EPA was reluctant to decide whether carbon dioxide and other GHGs constituted a pollutant, but a coalition of states sued it and the US Supreme Court decided that states had standing to bring such a claim and the EPA must deal with the issue one way or another. In December 2009, after public consultation, the EPA issued a finding of “endangerment” (meaning that they threaten public health and welfare) under the CAA, which is a pre-requisite for further action and could lead to GHGs being subject to the Prevention of Significant Deterioration (PSD) program.

National Fuel Efficiency Policy

California had sought a waiver from federal vehicle standards in order to set its own, more stringent, GHG emission limits. This was countered by legal action from car manufacturers, but the Obama administration helped to negotiate a compromise in May 2009 whereby California accepted national standards until 2016 while the industry dropped its challenges to GHG emissions, leading to a new “National Fuel Efficiency Policy”. Rules for GHG emissions from cars and light trucks were finalised in March 2010.

Other developments

However, further applications of the CAA to GHG emissions are likely to prove complicated and expensive, because the legislation is not suitable to the large volumes of carbon dioxide produced by industrial plants and will therefore require a Tailoring Rule, which the EPA is currently preparing but is not expected until 2011. In addition, the EPA has introduced a Mandatory Reporting of Greenhouse Gases Rule which covers certain large industrial facilities, and is expanding its voluntary emissions trading system, Climate Leaders.

There are also regional voluntary cap-and-trade systems, one operational (the Regional Greenhouse Gas Initiative) and two in development (the Western Climate Initiative (WCI) and the Midwestern Greenhouse Gas Reduction Accord), with a further scheme in its early stages in California. The WCI involves seven US states and four Canadian provinces, and although it covers more sectors than the RGGI or the ETS, it is likely that compliance will be difficult as there is no central enforcement agency and the legality of an inter-state-and-province agreement is questionable.

Legislative Proposals

There were two separate bills under consideration by the American Congress, one in the House of Representatives (the American Clean Energy and Security Bill) and one in the Senate (the Clean Energy Jobs and American Power Bill), colloquially known respectively as Waxman-Markey and Kerry-Boxer after their legislative sponsors. Both would have imposed a cap-and-trade system on large emitters of GHGs, with “grandfathering” (largely free initial allocation of
permits) for incumbent operators.\textsuperscript{40} Waxman-Markey\textsuperscript{41} also dealt with standards for renewable electricity, promoting carbon capture and storage, and a National Climate Change Adaptation Strategy,\textsuperscript{42} while Kerry-Boxer promoted nuclear power and grants for recycling and renewable energy projects.\textsuperscript{43}

Senators Kerry, Lieberman and Graham were expected to introduce new legislation which also involves cap-and-trade, although on a more limited basis, perhaps indicating that this approach is losing ground in the recession.\textsuperscript{44} However, this fragile coalition foundered, with Senator Graham dropping out, and the Kerry-Graham bill is unlikely to be enacted.\textsuperscript{45}

**European developments**

Europe has been making generally steady progress in climate change policy, particularly since the United States has not been taking a leadership role. However, there is not complete consensus between European Union Member States on how policy should develop. Some countries, particularly Poland (which relies heavily on coal as a source of energy and income) are not as enthusiastic as others. Nonetheless, European change policy leads internationally and is a dominant influence on Irish law and policy.

The Commission has recently issued a Communication on “International climate policy post-Copenhagen: Acting now to reinvigorate global action on climate change”,\textsuperscript{46} which calls for increased international outreach, support for the Copenhagen Accord, transparency on MRV, mobilising “fast-start funding” and securing long-term finance. It also calls for co-ordination of emissions trading systems globally.

**European Union Emissions Trading Scheme**

The European Union Emission Trading Scheme (EU ETS) is the largest such scheme in the world. It applies to carbon dioxide emissions from a number of high energy industries, including the production and processing of ferrous metals, the mineral industry and pulp and paper plants. It will be expanded to include perfluorocarbons and nitrous oxide, and the activities covered will include the production of aluminium, non-ferrous metals and various types of chemicals.\textsuperscript{47} Most of the allowances are distributed free of charge to operators in these industries, something which has been controversial. On April 30 of each year, an operator must surrender sufficient allowances to cover the verified emissions it has produced or pay a penalty, which is now €100 per tonne. Auctioning is the preferred method of allocation of allowances, with the percentage allocated free of charge to be gradually reduced with a view to reaching no free allocation in 2027 and at least 50 per cent of the proceeds from auctioning to be used for climate change-related policies.
Problems with the ETS

However, the ETS has had its problems: in the first phase, an over-allocation of allowances (because national authorities over-estimated emissions) led to a collapse in their price to almost zero. Amongst the distinctive features of the ETS had been its initially decentralised allocation of the overall emissions cap, with each Member State preparing its own figures, and the gradual decrease of the cap. Allowances will now be determined on a Community-wide basis, not nationally, for greater coherence. However, the recession has meant that the ETS caps for 2009 will not be reached in many sectors of the economy, particularly those connected with construction, leading to a dramatic fall in the price of carbon allowances.

Because the ETS is unique as a large-scale, transnational and legally binding emissions trading scheme, it is vulnerable to “carbon leakage”, where polluting industrial activity moves to a location not subject to GHG reductions obligations. This is particularly likely with energy-intensive sectors such as steel, aluminium and chemicals, but the problem may not be significant in reality.

On a practical level, the ETS has been hit with security problems recently as fraudsters have used “phishing” techniques to get access to business accounts on the German Emissions Trading Authority, leading to a suspension of permit trading in some European countries.

A more fundamental issue is that emissions trading is not a panacea or an ideal solution. Analysis of the reduction it leads to indicates that it is not always an effective policy tool, and it may not drive technological innovation as expected, leading to significant criticism from environmentalists.

The Future of the ETS

Through the European Linking Directive, the ETS is linked to the Kyoto flexible mechanisms. The ETS has been recently extended to include aviation, and may apply to further sectors in the future. There has been litigation involving the ETS: Arcelor, a steel company, sought to challenge the application of the ETS to its activities but failed for lack of standing; the expansion to include aviation is under challenge in the UK High Court and is likely to end up in the European courts.

It is theoretically possible to connect emissions trading systems on a global scale, and this is a policy goal of the EU, particularly the UK Government. Although a bottom-up style of development is probably the only way to achieve global emissions trading, the ETS itself is not comprehensive in its coverage of GHGs and the cost of allowances for indigenous industry is likely to deter developing countries from joining in, meaning that what is practical may also be limited in extent and impact. However, it may become the leading such system in the world, with the price of European Union allowances being quoted as the dominant indicator of the price of global carbon emissions.
Other new EU Climate Change legislation

Modern Biofuels policy in Europe was founded on Directive 30/2003 (the “Biofuels Directive”) which set a target of 5.75 per cent of transportation coming from biofuels by 2010. As it became clear that biofuel cultivation could have negative impacts on the environment and food production, the Parliament called on the Commission to revise its policies, and the outcome is Directive 2009/28 “on the promotion of the use of energy from renewable sources”, which will repeal Directives 77/2003 and 30/2003 from January 1, 2012, includes environmental and social sustainability criteria and requires Member States to establish national action plans to meet renewable energy use targets by 2020 in transport, electricity production and heating.

Regulation 443/2009 setting emission performance standards for new passenger cars as part of the Community’s integrated approach to reduce CO2 emissions from light-duty vehicles sets a new fleet average of 130 grams of carbon dioxide per kilometre, phased in between 2012 and 2015, with penalties for excess and a long-term target of 95g/km by 2020.

Directive 2009/31/EC on carbon capture and storage (CCS) creates a legal regime to manage the environmental risks involved (including placing post-closure obligations on operators and licensing authorities) and to remove legal barriers to the use of CCS. The directive also requires long-term monitoring of CCS sites. It entered into force on June 25, 2009 and must be implemented by Member States by June 25, 2011.

The European Union has also agreed to amend the Fuel Quality Directive to require a reduction in GHGs across the entire fuel production chain by 10 per cent by 2020 and Directive 2002/91 (the Energy Performance of Buildings Directive) is likely to be revised soon.

Future Directions for EU Climate Change Law and Policy

The EU is committed to reducing its overall emissions to at least 20 per cent below 1990 levels by 2020 and is ready to increase this reduction to as much as 30 per cent under a new global climate change agreement when other developed countries make comparable efforts. It has also set itself the target of increasing the share of renewables in energy use to 20 per cent by 2020. Collectively, these targets are known as “20/20/20”. In April 2009, the Parliament and Council agreed a Decision, 406/2009, on Effort Sharing between Member States on greenhouse gas emission reductions. This deals with sectors not covered by the ETS, land use, land use change and forests (LULUCF), international shipping, and aviation. All six GHGs covered by the Kyoto Protocol are subject to emission reduction targets for the period 2013–2020; the target for Member States ranges from -20 per cent for the richest to +20 per cent for the poorer from a benchmark figure of 2005 levels. Ireland’s target is a -20 per cent reduction. While the framework is flexible, it is legally binding.
Developments in Ireland

Carbon Budget 2010

The Minister for the Environment presents a report on progress with the National Climate Change Strategy as a “Carbon Budget” at the same time as the financial budget in December of each year. The Carbon Budget for 2010 was put before the Dáil on December 11, 2009.66 Amongst the items mentioned are investment in public transport, progress towards meeting our Kyoto targets in 2008 (helped by the recession but slowed by cold weather) and construction standards in public housing. It is worth noting that a new National Climate Change Strategy, for 2011 to 2015, will be developed during 2010. From a legal perspective, the significant items mentioned were the “Carbon Levy” and the Framework for the Climate Change Bill.67

Carbon levy

The first is an emissions tax, something recommended by the Irish Commission on Taxation in its 2009 Report, of €15 per tonne of CO2, implemented in the Finance Act 2010, which applies to petrol and diesel from December 9, 2009 and to other fossil fuels from May 1, 2010. Some of the resulting revenue is allocated to retrofit households in energy poverty.

Framework for the Climate Change Bill

The second is a proposal to introduce new legislation setting out principles for dealing with climate change in the future.

Proposals for legislation

Climate Change Bill (Government)

The Heads of the Climate Change Bill is to be published shortly for public consultation by the Minister for the Environment, Heritage and Local Government. It will make addressing climate change a core national priority and an objective for all Ministers for take account of. It will deal with the following matters:

Targets: Ireland will reduce net emissions by an average of 3 per cent per year until 2020 with a final target of at least 80 per cent by 2050 (subject to recommendations from the Climate Change Committee).

National Climate Change Strategy: The National Climate Change Strategy will be put on a statutory footing, operating on a five-year cycle. The first 2 strategies will run from 2011–15 and 2016–20.
**Carbon Budget:** The Carbon Budget will also be put on a statutory footing and will include the carbon levy process. The financial budget will be “carbon-proofed”.

**Climate Change Committee:** The legislation will create a statutory national committee of high level experts with appropriate scientific, economic and technical expertise to monitor and assess progress in addressing climate change and to provide ongoing advice to the Government, supported by a new Office of Climate Change within the Environmental Protection Agency.

**Climate Change Adaptation:** A National Climate Change Adaptation Framework will be published at the same time as the Heads of the Climate Change Bill in Quarter 1 of 2010 and will be put on a statutory footing on an eight-year cycle.

**Domestic Carbon Offsetting or Trading Schemes:** The Minister will have power to introduce carbon offsetting or trading schemes covering specific economic sectors or types of emissions.

**Monitoring, Reporting and Statutory Obligations:** There may be monitoring and reporting obligations on net GHG emissions for public bodies. Large limited companies may have obligations to assess and report on climate change-related aspects of their activities. State Agencies will have climate change mitigation and adaptation goals.

**Climate Change Bill (Joint Committee)**

The Oireachtas Joint Committee on Climate Change and Energy Security has reviewed climate change legislation in a number of developed countries and prepared a report recommending the introduction of a Climate Change Act in Ireland. Its main elements are:

**Targets:** An overall target of 20 per cent reduction of emissions from a 2005 baseline by 2020, or 30 per cent if there is a global successor to the Kyoto Protocol.

**Office of Climate Change and Renewable Energy (OCC):** As part of the Department of the Taoiseach, the legislation would create an office staffed primarily by personnel from the EPA and Sustainable Energy Ireland with responsibility for policy formulation and implementation.

**National Climate Change Strategy (NCCS):** A strategy would be reviewed by the Oireachtas annually with reference to the Annual Climate Change Statement, supported by a Carbon Budget, to be made by the Taoiseach.

**Climate Change Commission (CCC):** The legislation would create a new independent body with an advisory mandate.

**Climate Change Dividend Fund:** The OCC would decide how to allocate revenue from the auctioning of ETS allowances and carbon taxes.
Reporting arrangements: Reports would cover Ireland’s distance to target, progress in introducing the measures set out in the NCCS, EU and international developments on climate change, new scientific evidence, and the purchasing strategy of Ireland’s Carbon Fund.

Offset schemes: Domestic offset and other schemes, including forest carbon offsets, would be introduced and administered by the OCC, as will grants and other programs.

Risk assessment: Every five years, the CCC, in consultation with other stakeholders and experts, would conduct an impact assessment of the risks for Ireland arising from climate change and what supporting measures should be introduced in light of this.

Climate change statements: All significant public authorities and bodies would adopt a climate change statement which would set out the actions they would take to achieve the annual targets set in the NCCS.

The Joint Committee has also recommended action to encourage the use of electric vehicles,69 and reforms to the market for electricity generation,70 which might lead to new legislation.

Other proposed Climate Change legislation

The Planning and Development (Amendment) Bill 2009, passed by the Oireachtas on July 14, 2010 but not yet in force, will add “the necessity of adaptation to climate change” as an item to include in a development plan, and adds climate change as an issue to consider for the purposes of flood risk assessment as a development plan objective.71 The Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010,72 which is to promote the use of biofuel in Ireland, was passed by the Oireachtas on June 9, 2010 and much of it entered into force on July 1, 2010 under S.I. No.322 of 2010.

There are also private members bills that deal with climate change, the Climate Protection Bill 2007 (sponsored by Senator Ivana Bacik)73 and the Climate Change Bill 2009 (sponsored by Deputy Eamon Gilmore).74 These are not likely to become law.

Conclusions

As we look to the future of climate change law and policy, it is clear that the measures used must be placed in broader contexts, taking into account the potential for undesirable spin-off effects, the need to keep costs to a level which the public will bear and the difficulties in getting consensus on how to move forward, whether locally, nationally or internationally. Developments will be slow in coming and will often be imperfect compromises between conflicting considerations. The global UN process seems to be giving way under the weight of its ambition, damaged by the divergent interests of the superpowers, the many coalitions of small states and the developed/developing country split. We may see more bilateral and small-scale multi-lateral treaties being concluded, with the
European Union taking the lead in a small field. Although the ETS is far from an ideal solution, it may become the foundation for a global patchwork of interconnected trading schemes. If it does not, and the UNFCCC process continues to falter, we may see the introduction of carbon tariffs at European borders in order to protect industry here from competition from countries that do not impose such costs on their manufacturers.

In Ireland, progress is also slow, even with a Minister for the Environment from the Green Party. The economic recession and other political issues may be distracting attention, but as international negotiations demonstrate, even with sustained effort, legislating for climate change policy is difficult. Proposals for climate change legislation are becoming more concrete, but we are clearly some months, if not years, from seeing these passed by the Oireachtas and coming into force. The road ahead is murky, twisty and full of dead ends. It is not clear that there is the political will, nationally or internationally, to take the hard decisions needed to resolve the questions involved. Nonetheless, climate change issues are leading to the enactment of new law, and it is clear that as time goes by, we will see these in areas other than energy policy. It is therefore important that lawyers and other professionals are aware of the breadth and scope of efforts to reduce GHG emissions and how these might impact on their practices.

1 Lecturer, School of Law, NUI Galway. This paper was first presented at the UCC Conference “Law and the Environment” on April 22, 2010.
6 See Kuolovesi and Gutiérrez, above, fn.5, at 232.
8 See Kuolovesi and Gutiérrez, above, fn.5, at 233–41.
9 See International Institute for Sustainable Development, above, fn.7, at 15.
10 See International Institute for Sustainable Development, above, fn.7, at 28.


“Climate change hotline’ to aid talks” Irish Times, May 1, 2010.


See Houlihan et al, above, fn.27, at 10252.


See Houlihan et al, above, fn.27, at 10253.

See Broder, above, fn.29.

See Houlihan et al, above, fn.27, at 10253–10254.

See Houlihan et al, above, fn.27, at 10254.


See Houlihan et al, above, fn.27, at 10251.


The Commission has made a decision, 2010/2, determining sectors and subsectors which it deems to be exposed to a significant risk of carbon leakage—see http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32010D0002:EN:NOT.


See Clifton, above, fn.54, at 17.


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