

CONCEPT PAPER

GREENHOUSE GAS EMISSIONS, TRADE AND DEVELOPING COUNTRIES, EU AND US PROPOSED APPROACHES

SUMMARY

International trade and global climate change are closely linked. Yet, multilateral efforts to liberalize trade and to prevent global warming have been developed over the years in different contexts. Increasingly, however, these parallel regimes—one defined by the Agreement Establishing the World Trade Organization (WTO) and its annexes, the other by the U.N. Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol (not yet in force)—are likely to come into closer contact as climate policies lead to significant economic effects. The problem today is that trade and climate change negotiations both appear to be delaying making decisions and asking the other to go first.

Given the uncertainty surrounding a future international climate agreement, the United States and other countries are contemplating “corrective” provisions in their national legislation to cap GHG emissions such as the allocation of free allowances, special exemptions from new controls, and border measures.

This paper summarizes the various policy options debated in national legislation. It gives particular emphasis to how GHG control policies in effect or under consideration in the European Union (EU) and the US and offers a brief set of initial observations (what are the risks associated with the unclear legal situation surrounding the effects of some of the national measures on climate change, what can be done to ensure the interests of least developing countries are taken into consideration in future climate change negotiations etc..)

1. POLICY OPTIONS DISCUSSED IN NATIONAL LEGISLATIONS

Different initiatives have been taken by industrialised countries in response to competitiveness and leakage concerns. These initiatives are also driven by uncertainty surrounding a future international agreement and seen as a safeguard against a breakdown on international negotiations or a scenario in which a climate treaty fails to include actions by major developing countries. Trade measures currently proposed in the U.S (and to a lesser extent in Europe) are aimed at encouraging broader participation in a post-2012 climate treaty.

Competitiveness and leakage concerns arise when climate change policy mitigation produces a cost for some but not others within the same sector, or when environmental measures differ between countries. This leads to different costs and risks to producers, leading to concerns that production of goods will relocate to other countries.

There are three basic approaches to address competitiveness and leakage concerns:

- 1) Assist domestic greenhouse-gas-intensive industries and trade-exposed industries by giving them GHG allowances for free;
- 2) Penalize foreign competitors by introducing Border Carbon Adjustments; and

3) Develop global sectoral approaches¹

These categories are not mutually exclusive; they can be used, either in combination for a given industry, or separately as appropriate to a given industry's characteristics and needs.

Our purpose here is not to examine the details of these approaches but to outline the main elements of the revised US and EU national schemes and their implications for both climate change negotiations and poorer developing countries.

Most domestic climate policies aimed at reducing GHG emissions have been introduced relatively recently and it is expected that these will increase in the near future.

Both the EU which has already defined its climate policy through to 2020, and the U.S-Administration, which is aiming to pass legislation in 2010, may begin to increase their efforts to reduce their emissions before a comprehensive post 2012 international climate treaty is in force.

Policy options well advanced in US and EU legislation entail both overt subsidies in the form of free allowances and quasi-subsidies in the form of exemptions. These are designed to address competitiveness and carbon leakage concerns, both for exports and imports.

The United States and other countries are contemplating "corrective" provisions in their national legislation to cap GHG emissions such as the allocation of free allowances, border measures and other options. Explicitly listed in the US proposal and considered to be one of the options for redress in the EU scheme, is the possibility of imposing some form of BCA on imports from countries not covered by the ETS (see section II).

1) Border measures in US Climate legislation

BCAs are not yet in place; however they are already included in US draft climate bill, the American Clean Energy Security Act (ACESA also known as "the Waxman-Markey bill"), and passed by the US House of Representatives in June 2009. Similar legislation is currently being debated in the US Senate.

ACESA establishes a cap-and trade program aimed at reducing GHGs economy-wide by 20 percent by 2020 and by 83 percent by 2050, both targets by reference to 2005 levels.² ACESA also contains provisions that authorize, under certain circumstances, the US Government to use trade measures.

2) Border measures in EU Climate legislation

In Europe, the use of trade measures (or border Carbon adjustments) as part of domestic climate policy has gained some traction as well. First conceived as a response to U.S. rejection of the Kyoto Protocol, trade measures are now seen by some as a means of preventing emissions leakage and a loss of competitiveness.

The European ETS directive (adopted in December 2008) does not provide the European Commission with the powers to actually implement trade measures, but only to propose them. As part of the revision of the EU's ETS, the Commission was required to compile a list

¹ A number of researchers have suggested that sectoral approaches may provide an appropriate framework for post-Kyoto agreements. Under such a system, specified targets could be set, starting with particular sectors or industries that are particularly important, politically easier to address, globally homogeneous or relatively insulated from competition with other sectors. Such agreements could take various forms, such as using standards, emission targets or a direct tax. Although less economically efficient than economy-wide programs in achieving emission reductions, they could be an interesting alternative as they may be politically more feasible.

² A 2020 binding target for covered entities is a 17 percent cut below 2005 levels.

of sectors and sub-sectors that are deemed to be at risk of carbon leakage, that is, relocation to third countries without or with insufficient carbon constraints. On Jan. 5th, 2010 the European Commission published a list of sectors potentially exposed to the risk of carbon leakage and competitive pressure.

By June 2010, the Commission will make proposals for changes to the ETS directive to the Council and Parliament on how to deal with the situation of these energy intensive industries. The proposal could include border measures.

3) Reaction of developing countries

The explicit appearance of BCAs in U.S. draft national climate legislation was followed by a strong opposition of developing countries. In the run-up to the Copenhagen conference, developing country Parties have called for an explicit clarification in draft negotiating text that unilateral trade measures cannot be used on climate grounds. In a draft declaration released by India, China, Brazil and South Africa on November 28, 2009, the four countries qualify “the use of climate change as a trade barrier” as non-negotiable.

The developing country text seeks to prevent developed countries from using “any form of unilateral measures, including countervailing border measures, against goods and services imported from developing countries on grounds of protection and stabilization of the climate.” They underline the potential infringement of UNFCCC Articles 3 and 4, which stress the principles of common but differentiated responsibilities, address the linkages between international trade and climate change and the responsibility to support mitigation actions in developing countries with financing and technology.

Other countries have criticized the measures proposed in the US climate legislation as a new form of protectionism, suggesting that trade sticks could undermine international cooperation in the Copenhagen talks. Backlash talk suggests that trade measures could trigger retaliatory action and that they stand a fair chance of being challenged within the WTO.

Yet while developing countries are seeking ways to prevent countries from using border measures against them, the US Congress and the European Commission are seeking ways to address competitiveness and leakage concerns and incorporate them into the post-Kyoto treaty.

What is sure is that the longer it takes to reach a climate agreement, the more national legislations in the US, the EU and other OECD countries will advance. Eventually, we will reach a stage where it will be difficult to reach an international agreement that does not take into account domestic countries’ responses to climate change.

Poor developing countries should be concerned about this for the following reasons:

- Industrialized countries are setting up GHG emission caps and considering using border measures in order to level the playing field between domestic products and products that come from countries which are not submitted to similar carbon constraints. Even if LDCs are exempted for the moment, they will be affected and have to comply with those standards or GHG caps in the future
- OECD countries by defining how and what kind of measures can be taken to reduce GHG emissions are in reality defining the “contours” of the future international trading system as far as trade and climate change are concerned. By making their position known in those national schemes, developing countries have a better chance to influence the future international system.

2. ALLOCATION OF GREENHOUSE GAS (GHG) ALLOWANCES UNDER A CAP AND TRADE PROGRAM

Under a cap-and-trade system, a limit is placed on the overall emissions from covered sources and such sources must hold “allowances” for any greenhouse gas (GHG) emitted. An allowance

is typically defined as a permit to emit one ton of greenhouse gases (denominated in CO₂ equivalent). One of the most controversial issues in the design of a cap-and-trade program is the question of how the emission allowances will be distributed.

Because a cap-and-trade program in essence creates a valuable new commodity (by some estimates potentially worth many billions of dollars) decisions about the allocation of allowances represent a large distributional equity issue and will result in competing claims.

The basic allocation decisions involve whether to freely allocate emissions allowances—and, if so, to whom; whether to auction the allowances—and, if so, how; or whether to use some combination of free allocation and auctioning.

While there are various options for distributing greenhouse gas emissions allowances under a cap-and-trade program, we will focus on free allocation of allowances as this tool is already in use in the European emission trading scheme (ETS) and form the basis for compensating potentially-affected industry under the US’s proposed Waxman-Markey Bill and several other proposed domestic climate regimes (e.g., Canada, Australia).

1) Free allocation of GHG allowances:

Countries granting allowances for free assume that GHG Policies and measures impose costs on producers that erode their competitiveness, and that free allowances will, by compensating producers for financial losses, allow them to stay competitive.

Free allocations of allowances to greenhouse gas-intensive, trade-exposed industry is the most popular means of assistance for countries under the Kyoto Protocol. “The attraction of using free allowances is clear: inter alia, they do not have a direct link to trade and thus largely avoid discussions around WTO legality and possible trade disputes; they do not require detailed measurement of the embodied carbon content of goods; they are administratively relatively simple; and they are popular with affected industry”³.

Industries which receive free allowances can choose either to continue emitting and thus use the emission allowances, or to make investment in cleaner technology and thus reduce their emissions and sell the emission allowances to firms with higher abatement costs.

Implementation of emissions trading schemes (ETSs) currently causes the most concern. ETSs give rise to cost differences between countries covered by them and those which are not. The European Union’s ETS is currently the largest market for carbon emission allowances in the world; the Waxman-Markey Bill, currently before the US Senate, would create a large US market if enacted. Both schemes currently grant for free (in the EU), or propose to grant for free (in the US), the majority of allowances needed by producers in industries considered at risk of competitiveness and leakage impacts to meet current production levels. The relatively small share of allowances not provided for free to individual plants would need to be purchased, either through auction or directly from the carbon market.

³ In OECD Roundtable on sustainable development “Border Carbon Adjustment and Free Allowances : responding to competitiveness and leakage concerns”, Peter Wooders, Aaron Cosby and John Stephenson

2) EU Emission Trading System (ETS)

The EU ETS is a major pillar of EU climate policy. Introduced in 2005, the EU ETS covers more than 10,000 installations in the energy and industrial sectors which are collectively responsible for close to half of the EU's carbon dioxide emissions and 40 per cent of its greenhouse gas emissions.

“The EU ETS was designed to be phased in gradually, allowing “learning by doing” and ensuring that there would be no major disruptions to the EU's internal market. For the first two phases of the EU ETS (2005-07 and 2008-12 respectively), it was decided that the vast majority of allowances should be allocated for free, with caps calculated on the basis of historical emissions”.

Unfortunately, because limited data required reliance on estimates of historical emissions levels and projections, the total amount of allowances initially allocated by the EU authorities placed no significant overall constraint on emissions levels. This led to a collapse in the market price of the allowances when the full measure of the cap became evident.

The EU experience has led policymakers in the EU and many other countries to return to the idea of auctions as an allocation tool for allowances for greenhouse gas emissions. But auctioning is much more difficult politically and makes the potential competitiveness issues all the more real. If firms must pay for the right to emit greenhouse gases or use energy whose production created such emissions, then their competitive disadvantage relative to unregulated firms becomes stark.

As the EU debated the introduction of auctioning, the competitiveness/leakage issue came to the forefront, and various proposals – including the adoption of border measures – were actively considered. Ultimately, however, the EU chose a different path to address the competitiveness issue.

In January 2008, the European Commission published its proposals for the third phase (2013–2020) of the EU ETS, in the form of a series of revisions to the current scheme. The January 2008 proposals (European Commission, 2008a) included a major revision of several elements of the scheme, including a greater role for auctioning.

As part of the new EU ETS, selected industries determined to be of particular risk of carbon leakage (due to their carbon/ energy intensity and trade exposure) would be granted free allowances, rather than being required to buy them at auction.

The Commission was required to take a two step approach:

- 1) First identify the energy and carbon intensive sectors and subsectors and their level of exposure to international competition
On Jan. 5th, 2010 the European Commission published a list of sectors and sub-sectors potentially exposed to the risk of “carbon leakage” that is, relocation or loss of market share to third countries with fewer carbon constraints. Those energy intensive sectors would incur extra costs and would be unable to pass these costs to consumers. This list will be revised regularly. The criteria proposed include quantitative (energy-intensiveness, non-EU trade exposure, etc) as well as qualitative (emission reduction potential, structure of relevant product and geographic markets, concentration, competition, profit margins, value chain characteristics etc)

The European Commission has identified no less than 164 sectors or sub sectors⁴ – in other words, three-quarters of manufacturing emissions under the EU Emissions Trading Scheme (ETS) – that are at risk of carbon leakage in case of a CO₂ emission price of 30 euros per tonne. In an attempt to minimise the amount of leakage, the European Commission is set to allocate a certain amount of free allowances to these sectors from 2013. The list includes energy-intensive industries, but also other industries such as manufacturing of man-made fibres and textiles, two sectors that are renowned for their appetite for protection.

A number of subsidiary conditions are attached to allocation. Of key importance is the requirement for “the Commission to define fully harmonised rules for free allocation of CO₂ allowances, which should be based – to the extent feasible – on ex-ante benchmarks”. The EU ETS would allocate allowances based on a benchmark that is pegged to the performance of the 10 percent most efficient facilities in the sector.

Sectors that receive free allocations would still have to make a considerable efforts to reduce emissions due to the environmental benchmarks and because the overall EU cap is reduced every year.

2) Secondly, analyse and decide on specific measures applicable for those sectors

The European Commission is required to prepare a report by June 2010, analysing the situation of energy-intensive industries that have been determined to be exposed to significant risk of carbon leakage. Based on this report, the Commission will make proposals, to the council and the Parliament for changes to the directive which could include border adjustment mechanisms. In particular, the directive states that the Commission can propose “equalization measures” that would impose requirements upon importers of energy intensive goods. The directive specifies that these mechanisms must be designed to be more stringent than the requirements put on domestic manufacturers, and should be designed to be consistent with commitments made under the UNFCCC and WTO⁵.

⁴ See Annex 1

⁵ The relevant article is 10b (1): “1. By 30 June 2010, the Commission shall, in the light of the outcome of the international negotiations and the extent to which these lead to global greenhouse gas emission reductions, and after consulting with all relevant social partners, submit to the European Parliament and to the Council an analytical report assessing the situation with regard to energy-intensive sectors or sub-sectors that have been determined to be exposed to significant risks of carbon leakage. This shall be accompanied by any appropriate proposals, which may include: (a) adjustment of the proportion of allowances received free of charge by those sectors or sub-sectors under Article 10a; (b) inclusion in the Community scheme of importers of products which are produced by the sectors or sub-sectors determined in accordance with Article 10a; [...]. Any binding sectoral agreements which lead to global greenhouse gas emissions reductions of the magnitude required to effectively address climate change, and which are monitorable, verifiable and subject to mandatory enforcement arrangements shall also be taken into account when considering what measures are appropriate.” Recital 25 of the legislative resolution specifies: “Energy-intensive industries which are determined to be exposed to a significant risk of carbon leakage could receive a higher amount of free allocation or an effective carbon equalisation system could be introduced with a view to putting installations from the Community which are at significant risk of carbon leakage and those from third countries on a comparable footing. Such a system could apply requirements to importers that would be no less favourable than those applicable to installations within the Community, for example by requiring the surrender of allowances. Any action taken would need to be in conformity with the principles of the UNFCCC, in particular the principle of common but differentiated responsibilities and respective capabilities, taking into account the particular situation of Least Developed Countries (LDCs). It would also need to be in conformity with the international obligations of the Community, including the obligations under the WTO agreement.”

The following measures for energy intensive industries have been assessed⁶:

Global sectoral agreements would greatly help overall emissions reduction because other (developing) countries would be included. However they could conflict with the UNFCCC principle of common but differentiated responsibilities.

Free allocation of ETS allowances (instead of auctioning) is seen as a very powerful way to offset adverse effects on energy intensive industries. The EC has proposed to use 100% free allocation as the default rule. The distribution method for the free allocation of emission allowances in the EU ETS post 2012 will be developed by the end of 2010 by expert panels within the Commission. The rules will be determined by benchmarks based on the most efficient techniques and processes. The text states that the Commission will consult relevant stakeholders in defining the criteria, but the default position will be the average performance of the top 10% most-efficient EU installations in any given sector between 2007 and 2008.

Inclusion of importers into the EU ETS would require companies to present emission certificates for the embedded carbon of imported goods from countries without emissions constraints. Because it puts a burden on imports, it is in effect a border tax adjustment on carbon intensive products. Such import allowance requirements could have potential trade consequences for developing countries requiring imports from these countries to buy emissions allowances.

What mix of measures will be implemented in which sectors is still under discussion, although border carbon adjustments (BCAs) are not being strongly pushed by most member states and it is more likely that the EU will revert to free allocation of ETS allowances to certain sectors. It will depend greatly on the progress of the international climate change negotiations – i.e the future role of CDM, possible sectoral agreements, role of major developing countries, etc...

3) Free allowances under US legislation

The development of the Waxman-Markey Bill as it has moved through its consultation phase has also seen a move towards granting free allowances as a response to competitiveness and leakage concerns. The approach taken in the Waxman-Markey legislation is sensible and pragmatic:

1. In the short term, output-based updating allocations of allowances are employed for a few energy-intensive, trade-sensitive sectors. From 2012, US producers in these “eligible sectors” would receive free emission allowances to address direct and indirect compliance costs.
2. In the long term (after 2020) the President is more or less forced to put in place (under specific, stringent conditions) import-allowance-requirements in selected cases (border measures).

In other words, as the Waxman-Markey Bill has progressed through the US House, options for responding to competitiveness and leakage have been strengthened. Vulnerable industry would now be compensated for 100% of their direct and indirect emission costs. Reflecting a preference for international agreement to address leakage, negotiating objectives have been introduced in the Bill. If the US cannot reach international agreement on how to address leakage, border measures will be introduced.

3. WTO LEGALITY OF THE VARIOUS POLICY OPTIONS

Since the adoption of the UNFCCC in 1992, there has been an intense debate on the WTO legality of various policy options debated in national legislation or the UNFCCC.

⁶ European Commission DG Ecofin 2008 (unpublished manuscript)

The various policy options being proposed or discussed in the US and the EU have a high potential of conflict with WTO rules.

1) Border measures

The United Nations Framework Convention on Climate Change (UNFCCC) and World Trade Organization (WTO) agreements share a set of common principles that discourage the use of unilateral trade measures that are arbitrary, unjustifiable, or disguised restrictions on trade. Article 3.57 of the UNFCCC was drawn from the GATT/WTO to ensure that trade measures taken by UNFCCC Parties are consistent with the GATT.

There is a wide range of literature which indicates how unilateral trade measures may violate current WTO rules on non-discrimination. While exemptions are possible - it may be possible to design trade measures that are sufficiently targeted and equitably applied to prevent emissions leakage to contribute to the UNFCCC's objective without violating WTO rules - such measures will be open to lengthy dispute actions taken by targeted countries. Only a WTO Dispute Settlement Panel ruling could determine whether a BCA is legal

So far there have not been extensive discussions within the UNFCCC or the WTO on the role of trade measures in addressing climate change and on how to limit the use of climate-related measures.

Neither the WTO nor the UNFCCC seem to be able to provide clear guidance on whether and how such trade measures should be applied. In the absence of more precise rules, it is difficult both for countries to design measures that are compatible with WTO rules, and for exporters to assess when does a unilateral measure violate WTO rules. Such a ruling could only be made on a case by case basis about a specific BCA, and then only when a challenge against it has been raised. This creates an uncertainty in trade policy making and international trade.

1) Are free allocations of emission allowances a subsidy?

There exists concern over the extent to which this scheme is compatible with WTO rules, in particular as to whether the free allocation of GHG units complies with the 1994 Agreement on Subsidies and Countervailing Duties (ASCM) and the extent to which other WTO members will be able to retaliate against recipients of such units under the ASCM.

Under the WTO ASCM Agreement, free allocation would be a subsidy if 1) there is a financial contribution by a government, (2) a benefit is thereby conferred, and (3) the subsidy is specific to an enterprise or industry, or group of industries.

To the extent that a free allowance scheme is adopted as a program to assist a few targeted industries within the context of a broader auctioning system, , there is a real risk that the free grant of allowances could be found to be an actionable subsidy under WTO rules.

Simply because a subsidy is actionable, however, does not mean that countervailing duties or trade retaliation is permitted against the subsidized goods. Under WTO rules, only prohibited subsidies (those conditioned on export performance or import substitution) or those that are found to cause adverse trade effects (e.g., injury to another WTO member's

⁷ Article 3.5 of the UNFCCC states: "The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade."

industry) can be acted against. Nevertheless, the potential for trade action does pose an increased threat to those industries receiving free allowances.

The risks of a WTO member challenging a free allowance scheme therefore exist. However, free allowances will probably not be challenged until domestic emission trading schemes are more advanced in more countries. “When this is the case, there is a strong possibility that challenges will be made and that adverse impacts will be proven. Although much of the legal attention to date has been focused on whether BCAs would be eligible under the WTO, this does not imply that free allowances are themselves eligible⁸”.

The potential for trade action does pose a threat to those industries receiving free allowances. This raises the question of whether — given the importance of encouraging countries to take action to address climate change — an understanding should be negotiated in the WTO to permit free allowances granted pursuant to legitimate cap and trade systems.

2) Conclusion:

In the absence of an international consensus on the types of trade-related measures that may be applied as part of a domestic climate change regime, adversely affected countries may seek to challenge these measures under WTO dispute settlement provisions. Since neither the distribution of emission allowances nor border restrictions imposed as part of a domestic greenhouse gas-reduction program have yet come before WTO dispute settlement panels, WTO obligations and exceptions remain untested in this complex regulatory environment.

4. TRADE AND CLIMATE CHANGE: A TIME BOMB SET UNDER THE WTO SYSTEM⁹

Adapting the International Trade Regime to climate change issues, will be one of the major challenges the 21st century.

There’s a range of issues emerging from countries’ responses to climate change, and as yet, no international regime to address those issues - apart from high level guidance by the Kyoto Protocol. Until and unless a new international agreement on trade and climate change is reached (inside the WTO or outside of it), the imposition of climate related measures on trade activities will force actors to find a solution in the dispute settlement mechanism of the WTO.

The risk of WTO dispute arising over climate related measures is high and entails huge systemic risks for the WTO:

- 1) If the dispute settlement panel considers using these trade measures is a violation of WTO law, the country might be asked to dismantle part of its climate legislation. This would seriously jeopardize WTO’s credibility, in particular in OECD countries where the popular sensitivity to climate change issues is high and where the public opinion would not accept that WTO rules undermine environmental policies. This might trigger important demonstrations against the multilateral trading system.
- 2) If, in turn, the panel ruled in favour of these measures, WTO rules would appear as weakened by environmental considerations.

⁸ In OECD Roundtable on sustainable development “Border Carbon Adjustment and Free Allowances : responding to competitiveness and leakage concerns”, Peter Wooders, Aaron Cosbey and John Stephenson

⁹ Tim Groser in an article title “Adapting the International Trade Regime to New Challenges: Climate Change”: “I took the view that it (trade and climate change) was potentially a ‘time bomb set under the WTO system. Specifically, I had in mind unilaterally imposed border tax adjustments designed to stop what is called ‘carbon leakage’.

- 3) More importantly if such a case-by-case approach were to evolve; it would probably take a long time before clear and predictable guidelines become apparent. The Dispute settlement panel would actually be used to make rules rather than apply them. This would be against WTO principles where the rules are made by the members through negotiations and not through a judiciary process.

Moving the trade and climate change regimes and negotiations forward is therefore critical. The present crisis of the multilateral regimes is consolidating a picture of incapacity to negotiate common solutions for common problems.

5. WHAT DOES IT MEAN FOR LEAST DEVELOPED COUNTRIES?

1) Border measures

In current discussions of BCAs, it is often understood that such measures would target developed or large emerging economies, while excluding smaller or poorer developing countries. Under ACESA, products from least developed countries and countries responsible for less than 5% of U.S imports in the relevant sector would also be exempt from border adjustment.

Similarly under EU ETS it is understood that any action taken (including in the case of the introduction of a carbon equalization system) would need to be in conformity with the principles of the UNFCCC, in particular the principle of common but differentiated responsibilities and respective capabilities, taking into account the particular situation of LDCs. It would also need to be in conformity with the obligations under the WTO agreement

2) Free allocation of allowances

While products from LDCS will most probably be exempt from border carbon adjustments under the US and EU scheme, they may suffer from the free allocation of GHG allowances since these are not targeted to specific countries. Free allowances could affect the competitiveness of poor developing countries in the following ways:

- They could be a hidden subsidy if they are applied or designed in such way as to compensate the regulated industries beyond the costs of compliance with national climate GHG regulations
- The list of sectors potentially exposed to the risk of “carbon leakage” recently published by the EC includes protectionist criteria. Few economic sectors are likely to miss out on free allocation of CO₂ emissions allowances. It is therefore not abuse to fear protectionist subsidies to sunset industries
- By providing OECD countries with an incentive to gradually improve their technology, the gap between environmental friendly technologies used in OECD countries and poor countries will increase. In the long term, industries based in poor developing countries and belonging to one of the economic sectors identified by OECD countries as being exposed to carbon leakage will lose competitiveness on the global market.

Perhaps a compensation mechanism directly linked to the amount of free allowances distributed in OECD countries could help poor developing countries adapt to new technologies and shift to a more prosperous but lower-emissions development path. Such a mechanism would also attract their participation in the GHG abatement regime