

Cambridge Centre for Climate Change Mitigation Research¹
response to

EUROPEAN UNION COMMITTEE
Sub-Committee D (Environment and Agriculture)
CALL FOR EVIDENCE
from 22 May 2008

THE REVISION OF THE EU'S EMISSIONS TRADING SYSTEM

Level of Emissions Reductions

1. The proposed level of emissions reductions and the automatic change from 20% to 30% should an international agreement be reached.

The concept is a good one and supports the EU's target of a 20% reduction in greenhouse gas emissions (GHG) below 1990 for 2020 for all sectors. The indication that the EU cap will continue to decrease by 1.74% per year after 2020 gives a clear signal to all trading sectors about the continuation of the EU ETS and increased predictability and transparency of the whole scheme.

However, there are three reasons why the level of reductions is too low. The first reason for the target to be more ambitious is that the scientific evidence presented in the IPCC's Fourth Assessment report (IPCC AR4)² shows that the level of ambition is insufficient to limit global temperature rises to 2°C above the preindustrial level, with more recent scientific research suggesting that even the limit of 2°C risks serious damages in the very long term³. The second reason is that the electricity sector, which is the largest broad sector affected by the European emission trading scheme (ETS), has some of the lowest cost options for reducing emissions, since coal-fired plant can be replaced by gas-fired plant in many Member States. This suggests that the ETS should have a more stringent target than the rest of the economy. The third reason for more ambitious action is that as a member of the Annex 1 group of countries, that have taken on additional responsibilities for action under the Kyoto Protocol, the EU should be setting more ambitious targets compared to the global reductions required to limit temperature rise.

The target should be more like a reduction of 30% to 40% by GHG by 2020. Moreover additional GHG mitigation measures are needed for the non-ETS sectors, preferably at equal rates with those in the ETS (currently the proposal is only for a 10% reduction). Such additional measures may prove unnecessary if oil and gas prices remain above \$105/bbl equivalent, but this is not guaranteed, and some form of "ratchet" on the EU's

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² IPCC's Fourth Assessment report (2007) <http://www.ipcc.ch/ipccreports/assessments-reports.htm>

³ Hansen et al (2008) Target Atmospheric CO₂: Where Should Humanity Aim?
http://www.columbia.edu/~jeh1/2008/TargetCO2_20080407.pdf

additional energy taxes should be considered so that real carbon prices in the non-energy sectors do not fall substantially below \$105/bbl in real terms by 2020.

The automatic change to a more stringent target if an international agreement is reached demonstrates the EU community's good will to continue to be the world's leading region in combating climate change and should be welcomed.

Scope and Operation

2. The sectors and gases that the Commission proposes to include and exclude. We would be particularly interested in views on the inclusion of Land Use, Land Use Change and Forestry (LULUCF) sectors, including agriculture⁴.

EC has proposed to include CO₂ emissions from aviation (likely to be included from 2012) petrochemicals, ammonia, aluminum production and N₂O emissions from the production of nitric, adipic and glyoxalic acid production and perfluorocarbons emissions from the aluminum sector from 2013. All listed emissions can be measured and verified. Therefore these emissions can and should be included in the scheme to increase the efficiency of the EU ETS.

The Commission has decided to exclude LULUCF. Including LULUCF requires well-developed monitoring, reporting and verification measures that are currently not available. Moreover there are problems of additionality, so it seems wiser to keep LULUCF out of the ETS.

The EC has also decided to allow opt-outs for small entities if equivalent measures are in place. This is necessary to avoid high administrative costs (both for companies and the governments).

3. The practical application and enforceability of the scheme.

Phases 1 and 2 have proved that the scheme is functional and can establish a carbon price. Monitoring, verification and compliance measures are in place, but more harmonised rules are needed to avoid distortions between Member States. If the proposal becomes law then member states do not have to submit National Allocation Plans. Despite the proposed more centralised and harmonised emissions trading scheme, the European Commission should continue working with Member-State governments to ensure that all relevant installations are covered and comply, and to avoid over/under allocations of allowances.

Penalties should be revisable and adjustable, not only to changes in inflation as is proposed currently, but also to the carbon price, especially if the carbon price exceeds the penalty (€100 per tonne of CO₂ in real terms).

⁴ According to the UN Framework Convention on Climate Change, the six land-use categories for the purposes of LULUCF are: forest land; cropland; grassland; wetlands; settlements; and other land.
http://unfccc.int/methods_and_science/lulucf/items/1084.php

4. The key strengths and weaknesses of the proposal.

Key strengths:

Longer trading period 8 years instead of 5 – increases predictability

Diminishing cap – required to show climate leadership

High levels of auctioning – reduces possible windfall profits

Harmonised allocation methodology – increases fairness

Increased intertemporal flexibility – installations can bank allowances and credits to the future

Key weaknesses:

Not stringent enough cap to stabilise global warming at 2°C level, to provide a strong enough signal to encourage action by other countries, or in relation to action for non-ETS sectors

Usage of domestic offsets – undermines transparency and responsibility for sectoral action

Not clearly defined usage of auctioning revenues

Unclear access to credits from CDM mechanisms and JI credits from outside the scope of the EU ETS – increases uncertainty

You may wish to consider in particular:

- *the extent to which the scheme as currently designed will encourage technological innovation;*

The effect on induced technological change (ITC) would be enhanced by some of the auction revenues being used to set up an EU-wide Carbon Trust and/or some mechanism to provide low-cost loans for investment in low-GHG technologies and funding for deployment of these new technologies. The proposal foresees using 20% of auctioning revenues on adaptation and mitigation of climate change (including expenditures on R&D). How much of this member states will earmark for R&D is unclear and will be decided by Member States. In addition to this, the level of technological innovation is related to the level of carbon price (and fuel prices) – the higher the price level (spot prices and future prices) the more are companies interested in adopting new technologies and willing to invest into R&D

- *whether it will result in the appropriate price signal being sent;*

The 20 to 30% target has not had the effect of increasing the carbon price in the ETS Phase 2 to the levels that the IPCC AR4 suggests that are necessary to achieve the 2°C target. This price depends on a tight cap, level of auctioning, usage of CDM/JI credits and intertemporal flexibility mechanisms (banking-borrowing). The ways in which auctioning will be undertaken by Member States also influence the carbon price. The price in the ETS market prevailing in early 2008 of €20 to 25 per tonne of CO₂ (/tCO₂) is too low to have a substantial effect on emissions and reflects the low level of ambition of the 20% to 30% target. The IPCC AR4 suggest that prices above €50/tCO₂ are necessary to make carbon capture and storage profitable, and prices rising to around €100/tCO₂ by 2020 would be necessary to achieve the 2°C target. Such levels of prices can be easily achieved by a tighter cap, e.g. the 30 to 40% suggested above, with a substantial proportion of the

allowances being reserved for management of the price, rather than being given away or auctioned. The Commission will adopt rules of auctioning by the end of 2010.

- *whether it will be efficient and/or equitable.*

Including new industries and GHGs and harmonising the inclusion of combustion installations will broaden the scope of the scheme and will help to enhance its efficiency. The proposed ETS is efficient in that it covers the EU-wide electricity system, although there are issues of competition in the market, being investigated by the EU Commission. There are problems with rising electricity prices for low-expenditure households. Recycling of a certain proportion of auctioning revenues towards improving quality of housing or using revenues to lower income tax and/or increasing personal allowances would help.

5. The potential application of the new Article 24a permitting allowances to be issued in respect of projects outside the scope of the Community scheme that reduce greenhouse gas emissions.

These so-called domestic offsetting projects in the non-ETS sectors reduce the effectiveness of the weak targets even further and reduce the responsibility of non-ETS sectors for their emissions. However there are currently no institutions or rules in place to assure the quality of this kind of offset project. Establishing rules and institutions would have high administrative costs. For these reasons domestic offsetting should be avoided.

Allocation and Auctioning

6. Whether decisions about the proportion of permits to be allocated for free rather than auctioned should be taken at the EU level or at the Member State level, and what the time-frame for such decisions should be.

In principle all permits should be auctioned and the decision should be taken at EU level, otherwise there could be a 'race to the bottom' between Member States supporting their own companies. These issues with 'state aid' were observed in phase I⁵. A harmonised allocation methodology at the EU level will also help to avoid industry-wide distortions in the EU community. Full auctioning also provides a fairer treatment for new entrants. Decisions about allocation methods should be taken for longest possible period (i.e. 8-10 years) to assure a predictable investment environment for companies.

7. Which sectors (if any) should continue to receive a proportion of their emissions permits allocated free-of-charge and for how long?

There will be free allocation (for sectors excluding electricity production) from 80% to 0% during phase 3. In addition to this, the proposal foresees up to 100% free allocation of allowances to the sectors identified as open to international competition. These sectors (likely to include cement, iron and steel) will be identified by 2010. This decision has to be based on an in-depth economic and social analysis. However, for transparency these sectors should have to buy all allowances through auctioning rather than getting a proportion for free; but the revenues should be largely returned in the form of subsidies

⁵ Johnston, A. – Free allocation of allowances under the EU emissions trading scheme: legal issues. Climate Policy 6 (2006), pp 115- 136

for re-structuring to low-GHG alternative products and processes. Avoiding free allocation will also help to avoid any possible windfall profits in these sectors. The amount of revenues returned to sensitive industries and the list of these industries should be revisable in every 3 years (as is proposed in the review).

8. Whether the redistributive element of the Commission's proposal (whereby poorer Member States are allocated more auctionable emissions permits, thereby increasing the revenues accruing to their Treasuries) is appropriate.

Allocating more allowances to the poorer Member States inside the EU bubble does appear to be more equitable and it recognises the principle of common but differentiated responsibilities. However the proposal does not foresee revision for extra allocations listed in Annex Iia of the proposal. Supporting some of the old Member States (Greece, Italy, Sweden, Spain, Portugal, Malta) is questionable as these countries are not in transition to market economy and their emissions are not well below 1990 (as they are in new Member States).

The international dimension

9. The extent to which EU operators should be allowed to meet obligations under the ETS by investing in projects to reduce emissions outside the EU through the Clean Development Mechanism (CDM).

In phase 2 it is possible to use credits from CDM and Joint Implementation (JI) up to about 13.4% (i.e. about 1.4 billion credits) of allocated emissions. Yearly average allocated CO₂ emissions are 6.5% below 2005 verified emissions. Therefore if installations are using the full amount of allowed credits from CDM and JI mechanisms (outside the community) then yearly emissions will rise by about 7%. This contradicts the linking directive that stresses the usage of CDM/JI credits to be supplementary to domestic efforts in GHG reduction. Unused credits from phase 2 are transferable on to phase 3. There will be an automatic change to allow additional usage of credits by 50% of the additional reduction effort if an international agreement is reached. If there will be no international agreement, then the proposed scheme is unfair on new entrants (including the industries (including aviation) entering in the phase 3) which cannot transfer the credits from phase 2 to phase 3.

It would be better if it were clearly specified how many credits from flexible mechanisms Member States/entities will be able to use in phase 3.

10. The likely feasibility of creating links between the ETS and other similar schemes around the world.

From January 2008 three countries (Norway, Lichtenstein, Iceland) outside the EU but in the European Economic Area have been linked to the EU ETS. Linking other countries' or areas' emissions trading schemes in the EU ETS will widen the scope and increase the efficiency of the scheme. However to avoid any distortions between economic areas and inside industries these schemes should be based exactly on the same rules. The fairest GHG emissions trading scheme would be a harmonized global emissions trading covering all emitting sources in developed as well as in developing countries.

If it is possible to sell spare emissions between economic areas, then this may increase the incentive for each area to avoid stringent emissions cuts in the first place.