



Submission to the Environmental Audit Committee inquiry into the role of carbon markets in preventing dangerous climate change

Summary

- We have been tracking the development of the EU ETS in detail and emissions trading policy more generally. We have developed a set of recommendations for how schemes should operate to ensure they are delivering for the environment and for civil society:
 - Caps need to be ambitious - it has proven far too easy for the exaggerated fears of incumbent industries to water down the effectiveness of schemes, weakening prices and delaying investment.
 - In the absence of global agreements it is sensible to begin with sectors not directly exposed to international competition, rather than to water down the ambition of the scheme to accommodate concerns over competitiveness.
 - Auctioning is the best method of allocation and should be adopted from the beginning to avoid rent seeking behaviour being rewarded with over allocations.
 - The use of 'offsets' must be handled carefully with quantitative and qualitative limits being applied - cost minimisation for industry has to be balanced against the risk of investment and jobs flowing overseas.
 - Provisions must be in place to 'true-up' or account for fundamental changes in starting assumptions i.e. economic growth going into reverse or firm level output being below the allocation estimate. This should include changes to banking rules to prevent carryover of 'hot air'. Caps were set politically taking into consideration impacts on industry - not according to a scientific formula based on environmental carrying capacity. As long as this is the case they can and should be adjusted downwards if economic circumstances change.
 - Caps undermine civil society's ability to generate additional reductions through their own actions. There must therefore be provision for civil society to cause additional effort to be undertaken i.e. caps should be reduced to reflect voluntary actions by civil society that go beyond regulatory requirements. This is an important issue which has received considerable attention in the US and Australia but has thus far been largely ignored in Europe.
- In relation to the EU ETS specifically we have undertaken analysis comparing 2007 emissions levels with allocations in 2008-12 and uncovered that for the

most part industrial participants have been given generous growth targets (on occasion greater than 100%) that provide no incentive for the uncovering of emissions reductions. Power sector participants have been substantially capped, however, leading to a transfer of money from electricity consumers to heavy industry. We will repeat this analysis in 2009 using 2008 emissions data for the whole of the EU 27 which will give a very clear picture of how the scheme is operating on the ground. We expect this analysis to be complete in summer 2009.

- In relation to the development of international emissions trading schemes we believe the successor to the Kyoto Protocol should facilitate the introduction of global sectoral carbon budgets - beginning with the power and aviation sectors. The UN should provide the infrastructure necessary for countries to meet targets under the global budget through participation in a sectoral trading scheme.
- In relation to the inter-operability of regional trading schemes we have been tracking developments in the US and Australia and anticipate significantly different approaches will be adopted in these countries. The UN should introduce guidelines to facilitate standardisation between schemes. The EU should be open to making changes to its own scheme to increase harmonisation and ease linking.

Our submission

Overview

1. It is clear that placing regulated caps on emissions and allowing trading as a means of compliance has huge potential to drive action to combat climate change. Emissions trading regulation creates a fixed volume allowance of emissions over time and can be used to put the global emissions trajectory on a steeply declining path while allowing the flexibility for participants to comply with the caps at least cost to them and society as a whole.
2. Two challenges need to be overcome if it is to deliver this outcome, however. Firstly the volume of emissions under caps needs to be rapidly expanded: to give greater control over emissions levels, level out competitiveness concerns (though these are often inflated) and to ensure least cost abatement options can be uncovered.
3. Secondly, increased political will to impose challenging targets on participants in the scheme will need to be found to ensure the trajectory created by emissions caps is consistent with precautionary analysis of the latest science. We believe this means global emissions peaking and declining well within a decade and continuing on a trajectory towards no net additional emissions to the atmosphere by mid-century. We believe the EU ETS cap needs to be set consistent with at least a 40% reduction below 1990 levels by 2020.
4. Emissions trading is a form of regulation. Caps are enforced and in the case of the EU ETS participants out of compliance face stiff penalties. Governments should withstand calls to abandon the policy and work instead to ensure it is implemented correctly.

5. Additional policies are being used to supplement the effect of trading and caps were, in theory at least, adjusted to take into account the effect of downstream policies that would increase the rate of reduction in emissions in capped sectors. This practice should continue to achieve effective 'choice editing' and to reduce the cost of mitigation options that are currently too expensive, commercially unproven or perceived as risky to for the carbon market price alone to secure investment. Regulation may also more appropriate to remove certain actions from the 'offset' market to maintain a healthy market price (i.e. HFCs).

The EU ETS

6. Unfortunately the record of Phase II of the EU ETS, thus far, is once again poor. The recent price slump reflects the fact that, once again, supply of permits outstrips demand. This has been exacerbated by the recent economic downturn but judging from our initial analysis comparing the emissions data from 2007 with allocations in 2008-12 many industrial sectors received far more permits, under BAU allocations, than would appear justified. This combined with the availability of CDM permits would have meant that prices would likely be low even without a recession. The only reason there is a positive price at all at the moment is due to the banking rules which allow for unlimited carry-over of spare permits into the next phase.

7. Because caps were set politically using economic modelling that referred to 'technological potential' and the potential price impacts on industry, and not according to a scientific methodology, now that the underlying economic assumptions have changed an ex-post 'true up' should be introduced to remove 'hot air' from the system.

8. The prospects for Phase III, as they currently stand, do not appear much better. The current target of a 20% reduction by 2020 and the proposed reduction rate of 1.74% per annum are far too lacking in ambition and need to be at least doubled if a healthy market is to be created, irrespective of whether a global deal is reached.

9. If a recession is sustained across the trading period there is considerable potential for a large volume of spare credits or 'hot air' to be banked into this phase making caps easier to meet. There is also the potential that all of the EU's supplementary policies supporting increased renewable energy deployment and improved efficiency will be delivered making the meeting of the cap in the power sector akin to 'Business As Usual'. Finally, continued access to overseas credits will further dampen prices and reduce investment incentives in low carbon solutions in Europe, while explicitly driving investment and jobs outside of the UK.

10. The current configuration of the EU ETS is really only driving investment into overseas projects via the CDM. The price could induce some fuel switching at the margin, for instance between brown and black coal, and coal/oil and gas. However, these are effectively short term behavioural changes more than investments in long lived infrastructure projects that will be needed to achieve deep cuts in the future.

11. The impact of the current economic recession on the EU ETS cannot be ignored. The Commission estimated that Phase II would deliver around a 6% reduction in the cap in Phase II compared to the cap in Phase I (2005-07). However, the first phase

cap was considerably over-allocated and a sustained recession in which the economy is declining by around 1.5%-2% per year more than wipes out this anticipated shortfall in allocations in the current phase. Since the reductions arise from no conscious action to decarbonise they must be treated as 'hot air' which dilutes the intended effect of the scheme. The effect of this has already been to reduce the price in this phase. If banking rules are not changed in response to this unexpected event then they will also deflate prices in the next phase and continue to delay investment.

12. The curious fact about this configuration of emissions trading is that the caps also act as a floor. Firms are free to cash in on their ability to pollute up to a given level, i.e. can monetise any and all shortfall compared to their allocation, irrespective of the contributing reasons for having a shortfall. This means that in practice many UK firms who were allocated BAU allocations at a time when they were claiming this involved growth in output will benefit from the sale of potentially large volumes of spare credits.

13. In 2008 we undertook analysis comparing 2007 actual emissions levels with allocations for 2008-12. Though this comparison was made complex due to rule changes which occurred between the two phases, nevertheless, it revealed a picture in which all industrial sectors apart from the power sector had been given growth targets relative to recent emissions. Certain sectors and companies received particularly generous treatment thanks to a Government decision to award 'Business As Usual' allocations which assumed very generous growth estimates¹.

14. In studying the baseline data used to calculate allocations we also uncovered many examples of methodological adjustments that created higher baselines for certain companies and sectors and a spreadsheet detailing this is available on request. We will be able to repeat the comparison exercise with a higher degree of accuracy in summer 2009 using 2008 emissions data.

15. The only sector which faces a serious short fall in this phase – the power sector - can access cheap EUAs arising from over allocation to industry, and they will therefore need to do less (or nothing) to abate themselves and be less reliant on CDM. Essentially the scheme has now become a cross subsidy from the purses of those paying for electricity to the pockets of heavy industry. In future all sectors must face a cap and mechanisms should be put in place to allow for Government intervention in the face of abrupt changes in underlying economic assumptions at either the economy, industry or firm level.

16. It is extremely difficult to see how the scheme could be damaging business competitiveness at the moment. As a recent Carbon Trust report identified, a carbon price is likely to play a very insignificant role in determining the competitiveness of a business compared to much more fundamental economic differences such as currency exchange rates, cost of labour and taxation policy.

¹ More information supporting our analysis, including the spreadsheets used for the comparison, are available on request.

17. More specifically, at the moment, since many businesses with allocations are carrying a surplus they are, in fact, benefiting by receiving income from the scheme, therefore temporarily enhancing their competitiveness – albeit marginally.

18. Longer term a global carbon market with sectoral level agreements for those few sectors that are competing in global markets would provide a long term insurance policy against this potential source of competitive distortion.

19. We support the expansion of emissions trading to cover more sectors – particularly those which serve largely captive markets such as surface and air transport. It is appropriate that even though sectors may lack low cost abatement options in their sector that they should be required to internalise the cost of their pollution. It is appropriate that in doing so they should pay for the decarbonisation of other sectors which are likely to deliver technology which will in the long term assist all sectors to decarbonise. For example, it is appropriate that transport pays for reductions in the power sector as we should expect this sector to expand to assist in the decarbonisation of transport through electrification and for it to develop CCS which longer term will usher in the possibility of a hydrogen based economy. Aviation should be given a challenging cap well below current emissions and be introduced on the basis of 100% auction of allowances; any grandfathering at current levels is highly likely to create ‘hot air’.

20. We fully support the use of auctioning as the most efficient allocation methodology. We regret that auctioning was not more widely used in this phase. We also regret that auctioning provisions in Phase III were watered down. Revenues from auctions can be used to fund many aspects of public spending such as defraying any social or competitiveness impacts arising from the internalisation of a carbon price. They can also be used to fund adaptation measures and to support R&D into clean technology. They could also be used to provide capacity building in other countries to speed the expansion of the market.

Development of a global carbon market

21. The Kyoto Protocol created an international carbon market with countries as participants. It proved to be ineffective in curbing global emissions thanks to the non-participation of the US and the exclusion of rapidly developing countries, most notably China. In a recent paper we advocate the introduction of a global sectoral carbon market focusing on the global power sector².

22. It is clear that the US is seeking to introduce cap and trade legislation. They are the original inventors of emissions trading at both a domestic and international scale and already have an operating state level scheme in the form of the Regional Greenhouse Gas Initiative (RGGI). RGGI differs from the EU ETS in some important respects: it applies to the power sector only, it uses quarterly auctions to allocate all allowances, it has a three rather than five year compliance period, it contains price responsive triggers (at \$7 and \$10 per tonne) which grant more flexible access to offset credits. And, importantly, it allows for the cancellation of permits in response to

² Our paper ‘Bending the Curve with a global power sector carbon budget’ is available on request.

the voluntary purchase of renewable electricity - making it possible for citizens to tighten the cap in response to their voluntary actions.

23. Whilst the design may be good, however, the overall level of effort is weak - the first period of operation (2009-14) merely requires emissions to stabilise at 2007 levels, the cap then reduces by 2.5% per annum from 2015 - 2018 leading to a 10% reduction overall from 2009 levels. The EU ETS in general creates tougher caps on its power sector (in the UK, Germany and Spain allocations in 2008 were in the region of 30% below 2007 emissions levels) but then waters down the effectiveness of this by granting generous allowances to industry.

24. Stakeholders in the US will have been watching how the EU ETS has been faring and it is vital that they do not make the same mistakes we made in Europe. At a Federal level they will hopefully follow RGGI more closely than the EU ETS and introduce auctioning from the outset for all power and fuel providers, though they will have concerns about protecting exposed industrial sectors. They may choose either to leave industrial sectors out of the scheme at the start while they seek to agree global sectoral agreements or they may introduce border tax adjustments to protect domestic industry. It would be a shame if they followed Europe's example and watered down the effort in the scheme by protecting industry with overly generous grandfathered allocations.

25. Australia has released a White Paper on their Carbon Pollution Reduction Scheme, and draft legislation is expected March 10 2009. Subject to ensuring appropriate safeguards around scheme design linking appears desirable. One point of note is that, as currently proposed, the Australian CPRS will allow unrestricted access to CDM credits, which would conflict with the EU ETS. As both Schemes will be linked via the CDM market there will likely be a degree of price convergence.

26. The problems with the ensuring additionality in the CDM are well known and, fundamentally, the stringency of caps that would be required to achieve meaningful reductions in the developing world and the decarbonisation of the developed world are too high to be likely to ever be introduced.

27. We therefore support the expansion of the carbon market to cover global sectors beginning with the power sector. This would effectively reduce the scope of 'offsetting' by removing those sectors from the CDM. The CDM could remain as a source of project credits in the least developed countries but rather than be allowable against the cap they could be funded from trading levies and auction revenues.

28. There has been considerable discussion recently about the need to address and reduce deforestation with some stakeholders advocating links to the carbon market. We have reservations about such an approach and indeed about the linking of land use change credits in general. We support instead a separate 'Sinks Protocol' with policies and measures dedicated to the complex task of better understanding, monitoring and managing biospheric sinks. We see the need to decarbonise energy and reduce the rate of emissions of man-made greenhouse gases as a separate issue requiring its own parallel policy to address it.

UK carbon budgets

29. To account for the fact that ~50% of emissions of CO₂ are covered by the EU ETS Government has chosen to count traded effort towards the meeting of carbon budgets (as opposed to counting actual emissions).

30. This is supported by the argument that emissions reductions are valid contributions to countering global climate change irrespective of where they occur and that trading helps to minimise cost by uncovering least cost abatement. It does, however, mean a relinquishing of control with regard to whether investment will occur in the UK or overseas. Without specific incentives it is likely that investment and skills development will be conducted overseas.

31. It is the initial allocation of permits that therefore contributes towards the budget. That is to say purchased permits/credits (CERs, ERUs, EUAs) can be used to counteract or 'offset' any emission occurring above the initial allocation. Similarly any under emission resulting in sold or banked permits cannot be counted towards the budget (since they result in emissions occurring somewhere else). The budget for 50% of UK emissions in this phase of trading is therefore pre-determined.

32. The UK will only decarbonise its actual emissions in so far as the EU ETS price signal changes behaviour and supplementary policies exist and deliver emissions reductions. This decarbonisation process will need to be separately measured and reported on since the budgeting process will not necessarily require this.

39. If the UK wishes to it may make use of trading as a means of compliance it can:

- Buy permits to cover emissions outside of the budget in the non-capped sectors
- Withhold allowances from the capped sector by cancelling rather than auctioning allowances set aside in the New Entrants Reserve/Auction.
- Incentivise the voluntary cancellation of permits by civil society with offset policies and incentives³.

Additional points

40. Thus far the EU ETS is not widely understood by the civil society. For meaningful rapid carbon reduction this needs to change. While one element is public education, of greater importance is ensuring that civil society involvement is encouraged.

41. One perverse element of a cap and trade system is that emission targets form both a cap and a floor from which emissions can not deviate (with the minor exception of voluntary permit retirement). While potentially an abstract concept this has significant real world implications. For example, any 'Green New Deal' or environmentally focused policy (insulation, renewable energy etc) conceived and

³ We are currently working on a submission to Treasury proposing a tax break to incentivise voluntary cancellation and can make a copy available on request.

implemented after caps have been set, will have no net impact on overall EU wide emissions. Instead a reduction in emission demand in one element of society will reduce the overall demand in the market and lead to a 'freeing up' of permits for heavier polluters who would have otherwise commenced abatement activities. This will also lead to a reduced market price, and furthermore decreased auction revenues.

42. At the individual household level this means that any action taken will not reduce UK or EU emissions. So reducing electricity use in the UK could inadvertently prevent a large coal fired power plant in Germany from reducing their emissions. Clearly this is disempowering for society.

43. This issue has been documented in the use in respect of the RGGI, where emissions credits equal to voluntary purchases of renewable energy on green tariffs are taken out of the cap (i.e. the cap reduces), and has been recently debated in Australia in terms of voluntary activities across the community (including uncovered businesses and local Governments)⁴.

43. We are working with other groups internationally on a number of policy ideas to combat this issue, and support a 'cap and slice' mechanism where caps are reduced to acknowledge measurable voluntary action undertaken over and above that which would be a reasonable response to the carbon price signal. This policy would enable citizens to act to reduce the level of emission credits in the market.

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⁴ Our submission to the Australian Governments National Carbon Offset Standard discussion paper is available on request.