

Long WORKSHOP REPORT FORM

Number and title of workshop: Getting carbon market governance right from day one

Coordinators: Dr. Gernot Wagner, Environmental Defense Fund

Date and time: 12 Nov 2010, 17:30

Moderator: Dr. Gernot Wagner, Environmental Defense Fund

Rapporteur: Farzana Nawaz, Transparency International Secretariat

Panellists (Name, institution, title)

Aarthi S. Anand, Climate Change Attorney

- Professor Donald A. Brown, Penn State University, Ethicist

- Dr. Barbara Buchner, The Climate Policy Initiative, Director

- Michael Wara, Stanford Law School, Assistant Professor

Summary

Moderated by Gernot Wagner of the Environmental Defense Fund, this session brought together some of the leading thinkers in the field to discuss governance pitfalls and remedies for an emerging global carbon market. Barbara Buchner shared experiences and lessons learned from the largest cap and trade mechanism currently in operation, the European Union Emissions Trading System (EU ETS). The EU ETS helped establish a tangible price for carbon and showed that carbon markets can be successfully implemented. The system has benefited from continuous learning and refinement through its many stages and can serve as a model for future global cap and trade regimes.

Panellists Michael Wara and Aarthi Anand then discussed the pros and cons of a particular offset mechanism: the UN Clean Development Mechanism (CDM). Dr. Wara pointed out that the CDM approach places enormous demands on regulators and is more difficult to implement than a market-based mechanism due to high costs and persistent information problems. He stressed the need for due process and accountability measures for all stakeholders, including the CDM Executive Board and independent auditors.

Panellist Aarthi Anand also stressed the role of third-party verifiers and the need for transparency as two fundamental areas of improvement in the current CDM mechanism. She pointed out that availability of standardised legal instruments can help mitigate risks in these projects and lower barriers to financing.

Donald Brown focused on the many ethical implications of mitigation policies in general and market-based system in particular. He stressed the need to look at ethics in carbon markets in the broader context of climate change and to compare the relative scales of ethical implications. He detailed how ethical issues can plague every step of the process, from setting mitigation targets to allocating carbon credits, to implementing projects and measuring and verifying emissions reductions. He urged that special attention should be paid to ensure that revenues of carbon markets ultimately benefit the worst affected by climate change.

The presentations were followed by a lengthy discussion period with participation from the



attendants. Most questions focused on ethical considerations within carbon markets. Some other participants pointed out the ethical pitfalls of carbon markets in general and insisted that alternative mechanisms should be considered in conjunction. The need to strengthen the ability of civil society to monitor market mechanisms was also stressed by all participants.

Summary of presentations

Dr. Barabara Buchner, Director of the Climate Policy Initiative, shared experiences and lessons learned from the EU Emissions Trading System (EU ETS), which is currently the largest multinational market in the world for trading greenhouse gases. The EU ETS is a mandatory system that was agreed upon by the European council, member states and the European parliament through an extensive participatory process. (Separate from the international process and it relates to it through a linking directive). It has been in place since 2005 and currently covers close to half of the EU's emissions of CO2 and 40% of its total greenhouse gas emissions. Under this system, over 11,000 installations in the EU face emissions caps and energy intensive industries are especially targeted.

Dr. Buchner described some of the characteristics that enabled the success of the EU ETS process – it followed a first broad and then deep strategy with continuing efforts to differentiate and come up with more accurate caps. It also has a highly decentralised implementation where the MRV process (Monitoring, Reporting and Verification) is performed and enforced by the member states. However, central coordination is provided by a highly uniform infrastructure for emissions registries. An important lesson from phases 1 and 2 is the need for greater harmonisation in the EU ETS process. Towards that end, the next phase of the EU ETS will move from country caps to EU wide caps and from national allocation plans towards EU-wide auctioning and harmonised benchmarks. Efficiency is expected to be enhanced by implementing a longer trading period, a robust and annually declining emissions cap and substantial increase in the amount of auctioning.

The most valuable achievement of the EU ETS is the fact that carbon now has a real price which was refined through 2 periods of trading in a liquid commodity market. Prices were falling steeply in April 2007 during the first trial phase due to oversupply of allowances. However, even while trial-phase prices fell, compliance-phase prices held steady. This episode showed the importance of policy certainty and the possibility of "banking"—saving—allowances over time. Emissions are now lower than historical levels, despite robust economic growth and adverse energy price developments. Carbon prices have had limited impact on industrial competitiveness, and little evidence of market share loss.

The experience of the EU ETS has shown that allocation of credits can be very controversial. Dr. Buchner pointed out the following as vital in ensuring the success of an emissions trading mechanism:

- a simple and transparent system
- a good decision process with a central coordinating mechanism
- A robust, binding cap
- Predictability / certainty
- low transaction costs
- good data availability
- varying marginal abatement costs for different actors
- flexibility and linkages to international offsets
- effective monitoring, reporting and verification to ensure integrity of the system

According to Dr. Buchner, the most important gain from the EU ETS thus far has been the change in the mindset – emissions are no longer free. It has shown that a transition from a command and control system to a market-based mechanism can be successful. It also



demonstrates that a balance of common interests is required for a multinational emissions trading system to be successful.

Dr. Michael Wara, Assistant Professor at Stanford Law school, presented on the UNFCC Clean Development Mechanism (CDM) and provided some suggestions for market governance based on the lessons learned from CDM. The CDM mechanism allows a country with a commitment under the Kyoto Protocol to implement an emissions-reduction project in developing countries. Under CDM, the certified emission reductions (CERs) are issued by the CDM executive board. HFC-23 and N_2 O make up about 75 percent of the CERs issued. The system is dominated by a small group of players such as India and China. Effectiveness is seriously hampered due to the lack of U.S. participation. EU companies act as the only purchasers.

Dr. Wara argued that the CDM mechanism illustrates some of the limitations of a regulatory approach. The CDM system places enormous demands on regulators. It is difficult to determine that the emission reductions claimed are in fact real and the system is plagued with scandals. There is a common perception that offsets have not thus far delivered, leading to frustration on the side of both regulators and businesses. All of this has resulted in a falling issuance rate of CERs.

Dr. Wara argued that a market-based cap-and-trade approach has many benefits over the current CDM. These include lower costs and ease of implementation. One key problem of command-and-control approaches is inadequate information. Regulated firms have incentives to mislead. On the other hand, markets are social institutions that efficiently aggregate information, therefore it is much easier to determine the cost of emission reductions which in turn create strong incentives for compliance.

Given the structural constraints of the CDM mechanism, Dr. Wara suggested some reforms which can make the current system function better. These include:

- Due process and accountability for parties who review and comment on projects. Currently there are no obligations on regulators to respond and an objective process needs to be put in place for this.
- Clear standards need to be established for Designated Operational Entities (DOEs), independent auditors accredited by the CDM Executive Board to validate project proposals or verify whether implemented projects have achieved planned greenhouse gas emission reductions.
- Professionalization of the CDM executive board.
- A policy shift is needed in the CDM from a large number of small projects to a small number of large scale projects which would enhance efficiency and effectiveness.

Given the limitations of the CDM mechanism, there is currently a need to consider alternatives to project-based offsets. Dr. Wara gave the example of sectoral crediting and trading with hard caps set for sectors in country, which can alleviate some of the problems of information disclosure by regulated entities. Sub-national cap-and-trade is another promising approach that could increase the volume of emissions reductions and financial transfers.

Dr. Wara finished his presentation by reiterating that a market-based cap-and-trade system is superior to what currently exists in the CDM mechanism. Looking ahead at new emission reduction programmes such as REDD, it is crucial that the lessons learned from CDM are considered carefully since the problems in the new mechanisms might be worse than those we have experienced so far.

Climate change attorney **Arthi Anand** also focused her presentation on the integrity lessons learned from the CDM. She pointed out the large scale of the global carbon market which was worth 121 billion in 2010 and growing at a steady pace (up thirty-three percent from 2009). Most countries in the world have either signed or ratified the Kyoto protocol and



regional/domestic markets are also growing.

Ms. Anand offered three main takeaways from the CDM experience so far. First, independent third parties have an enormously important role to play throughout the carbon credit transfer and trading process - in the initial verification stage, in validating project documents, in monitoring projects and in the final verification and certification. Second, there needs to be concrete ways to verify CO2 reductions. Third, standardised legal forms are essential in order to provide the basis for a secure mechanism to participate in carbon trading.

Lack of transparency, access to information and standardised legal instruments are some of the main challenges to the CDM mechanism. Lack of transparency and uncertainty in the project registration and CO2 verification process can cause banks to refuse financing to CDM projects. Inadequate access to information by third parties can lead to this information being misused by regulators. All of this restricts liquidity in the market and chills trading.

In order to mitigate these problems, Ms. Anand offered the following suggestions: adequate information, including clarity on project registration and CO2 verification procedures should be provided to third parties, such as banks and auditors. Standardised risk clauses should be included in contracts to mitigate risks of project financiers. Availability and inclusion of standardised legal instruments would also increase fungibility of carbon assets across national and international markets.

Professor **Don Brown** of Penn State University focused his presentation on the myriad ethical considerations that can undermine climate mitigation in general and carbon markets in particular. He started his presentation by stressing the importance of looking at the cap-and-trade mechanisms within the broader context of climate change in order to appreciate the ethical challenges. There is general agreement about the fact that, historically speaking, a large part of the responsibility for climate change lies with countries in the developed world. However, the effects of climate change will be most keenly felt by people in developing countries, sometimes with catastrophic consequences. Under these circumstances, issues of distributive justice, especially allocation of responsibilities and costs, are of paramount importance. Dr. Brown pointed out that we should be mindful of the effects of climate mitigation on developing country economies.

The staggering complexity of climate change and mitigation mechanisms can give rise to ethical problems. Issues such as scientific uncertainties about the climate change process and level of greenhouse gases and atmospheric stabilisation levels that can be deemed acceptable are not just technical concerns but also have profound ethical implications.

Implementation of mitigation efforts can also be problematic. Examples of this include permanence in carbon sequestration projects, verification of emission reductions and long-term enforcement and monitoring, leakage which can lead to carbon reduced from one project being leaked into other locations or the activity stopped or avoided by mitigation efforts can be resumed elsewhere.

Market-based mechanisms themselves raise a host of ethical challenges, such as, allocation of global common resources as property rights to private interests, decisions of which sources of pollution to include in the cap-and-trade system and which ones to leave out, the level of cap that is deemed to be acceptable, etc. Efficiency often stands in direct conflict with some of these ethical implications. For example, cap and trade allows large polluters to not modify their behaviour and instead offset their emissions elsewhere. This increases overall efficiency of the system—the atmosphere does not care where a ton of emissions is being abated—but it also creates disincentive to investments in industrialized countries. Professor Brown also pointed out that lack of technical ability of parties, especially from the developing world, to participate in cap and trade can give rise to important issues of procedural justice.



Problems of additionality arise when carbon credits are allocated to a project that would have happened anyway. Parties also have strong incentives to cheat in reporting the amount of emissions reduced or captured. Checks and balances need to be put in place to protect against such possible loopholes. Professor Brown suggested that third party verifiers might provide at least a partial solution to problems of verification and monitoring.

While many of these ethical issues are theoretically solvable, politically the solutions can be problematic to implement. For example, interests of corrupt governments often do not coincide with those harmed by greenhouse gas emissions since they would want to benefit from funds allocated to climate mitigation. On the other hand, governments face pressure from the private sector, which has an interest in maintaining the status quo. Desire to keeping transaction costs low can undermine verification and monitoring efforts in cap-and-trade regimes. Under a market-based mechanism, where emission rights are commodified, the government's ability to regulate private entities are more limited than in a system where the environment is treated as a public trust. Last but not least, Professor Brown cautioned that all ethical precautions and integrity measures will fail if we do not ensure that the revenues generated from a market-based mechanism are allocated to the people most adversely affected by climate change.

The presentations from the panellists were followed by a period of spirited **discussion** with questions from the audience. Some questions focused on the REDD mechanism and accountability measures in that system. An audience member commented that carbon credits allocated to REDD only provide a temporary solution since the carbon can be released again into the atmosphere. Others also pointed out the need to invest funds generated through the EU ETS into REDD.

Another audience member gave an example of the problem of additionality in windmill projects in China. He commented that these projects would have happened anyway, however, the CDM process was used to allocate carbon credits to them. Establishing additionality is currently a very large grey area and can undermine climate policy and public confidence. The need for concrete methodologies to establish baseline credits for windmills was also mentioned.

Responding to an audience question on key messages regarding corruption and climate change, the panellists said that there are quite a number of issues in climate change ethics that can be categorised as corruption, for example, allocating more allowances to favoured parties, loopholes in the auctioning mechanism, creation of artificial commodities which can divert funds to illegitimate parties and state capture in the design stage. One audience member pointed out that under the EU ETS auction rights will be distributed to the poorer countries of the EU. In some sectors this might be a good way to deal with the problem of distribution of credits.

The panel reiterated that tremendous ambiguity in the carbon market mechanism can facilitate incentives of parties to be corrupt and to mislead. This is very dangerous since it not only does not reduce emissions in the short term but also undermines necessary behavioural change in the long term. Allowances allocated for free within the EU ETS help reinforce current distributional inequities by in effect subsidizing utilities. On the other hand, this may be the price to pay to establish the framework of EU ETS in the first place and achieve the implementation of a price on carbon.

Some audience members called into question the very premise of the carbon market, which creates and distributes a large amount of property rights to polluters and thus raises issues of distributive justice. Moreover, the system is vulnerable to corrupt elites from developing countries. They stressed the need to consider alternative systems of emission reduction such as a carbon tax or auctioning which channels revenues back to the public. The panel responded that while a tax system might be superior from an ethical point of view, in practice



they have not been found to be politically feasible. The EU, for example, tried and failed to implement carbon tax systems for years before it settled on a firm carbon cap in form of EU ETS. Political economy considerations point toward the efficacy of cap and trade vis-à-vis taxes. However, while cap and trade is a politically expedient way to generate a price for carbon, carbon trading may not be appropriate for all regions and all sectors. Europe has demonstrated that it works for power and large industrial sectors. Still, we should always consider a mix of policies, including carbon taxes and other more direct approaches.

Finally, the need for increasing the capacity of civil society organisations (CSOs) to monitor carbon markets was discussed by the audience and the panellists. It was pointed out that it is also extremely important to give CSOs a role in the design stage. However, the complexity of carbon markets and the lack of capacity in CSOs pose a big challenge. The UNFCCC's approach to engaging the CSOs was cited as a good example in this area. The relevant information is provided on the UNFCCC website and all objections are documented and accessible to the public. However, other participants at the workshop pointed out that in spite of the transparency measures, the UNFCC process is not as open and inclusive as it seems. For example, the CDM board is not obliged to respond to objections raised. It was commented that meaningful avenues of participation should provided for local stakeholders and the CDM board needs to be made more accountable. Another participant pointed out that CSO participation and consultation in the EU ETS process has worked reasonably well and can also act as a source of best practices.



	High	lights	and	quotes
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"The	e most important	lesson from the	e EU ETS is	s that 'emi	issions are n	o longer	free'" –	Dr.
Rark	nara Ruchner							

"A market-based cap-and-trade system is superior to what currently exists under the CDM" – Dr. Michael Wara

"Lack of availability and misuse of information by regulators increases uncertainty in carbon markets and chills trading." – Aarthi Anand

"We might not agree about what ethics require but we can agree about the global injustice caused by climate change." - Professor Don Brown

Signed and date submitted		
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