

How Europe embraced the CDM

The role of researchers and interest groups in changing minds

Axel Michaelowa¹

Published in: in: Asia-Europe Foundation (ed.): Reinforcing Asia-Europe Cooperation on Climate Change, Singapore, 2004, p. 31-41

Abstract:

The principle of cross-boundary greenhouse gas offsets initially got a very reserved reception in Europe. From the negotiation of the UNFCCC to the Marrakech Accords, EU policymakers tried to put as many spokes into the wheel of the Clean Development Mechanism as possible. The EU Commission's turnaround in 2000 to becoming a staunch supporter of domestic emissions trading was the decisive step towards a more positive view of the CDM. This was further supported by an increasing awareness that domestic emission reductions are hard to achieve and mounting pressure from companies covered by the EU emissions trading scheme to freely access the world market for emission reductions. Together with the internal shift, EU governments have started to support host country capacity, especially in Asia.

Introduction

When I started to work on transboundary market mechanisms for climate policy exactly a decade ago, this topic was seen as an esoteric pastime without any relevance for the real economy. Most people in the industrialised countries saw these mechanisms as strange toys. The few that took them seriously saw them as a menace that would turn the attention away from domestic emission reductions. Developing country representatives fought actively against the notion of transfers of greenhouse gas emission credits fearing that industrialised countries would take the "low hanging fruit" in the South at rock bottom prices. Some even saw the spectre of neocolonialism. Ten years later, financial newspapers are publishing long articles about the international greenhouse gas market and a thriving community of consultants and project developers has specialised in the arcane details of the Clean Development Mechanism (CDM), Joint Implementation and emissions trading. Even more surprisingly, the European Union has taken the lead in implementing these market mechanisms, even to the extent that it will unilaterally use them if the Kyoto Protocol does not enter into force. Many developing countries are eager to set up CDM institutions and develop project pipelines.

In this article, I will look into the reasons for this shift in attitudes and discuss how European researchers and interest groups managed to convince policymakers and partners in developing countries that an international market for greenhouse gas reduction credits benefits all.

¹ Programme International Climate Policy, Hamburg Institute of International Economics, Neuer Jungfernstieg 21, 20347 Hamburg, Germany, Phone +49 40 42834 309, Fax +49 40 42834 451, a-michaelowa@hwwa.de, www.hwwa.de/climate.htm and Perspectives Climate Change, www.perspectives.cc.

I thank the German Technical Cooperation GTZ for many opportunities to work in Asian countries that not only built capacity in those countries but also enhanced my capacity.

The CDM – an unwanted founding

In the first years of international climate policy, the US was the herald of efficiency and markets while the EU was supporting an approach of harmonised policies and measures. Already in the negotiations of the UN Framework Convention on Climate Change (UNFCCC) these attitudes clashed. The clash continued for the next decade. While in the UNFCCC the principle of “Joint Implementation” allowed countries to collaborate in reaching their emission targets, strong opposition by EU negotiators, developing countries and NGOs arose to its implementation in the form of projects that reduce emissions and then generate emissions credits. A lukewarm compromise at the first Conference of Parties in 1995 defined a pilot phase for projects called “Activities Implemented Jointly” but these projects could not generate emission credits. Astonishingly, more than 150 projects were announced during the next six years but most of them were business-as-usual or not implemented.

In the run-up to the 1997 Kyoto conference with its increasingly heated negotiations about legally binding emission targets for industrialised countries, EU negotiators stressed that they would not accept emission credits from countries that did not have a target. The EU was completely caught off-guard when Brazil and the US launched the idea of the Clean Development Mechanism (CDM) that essentially was a repackaging of the old concept of “Joint Implementation”. Pure chance allowed the CDM to pass in the infamous final night in Kyoto. The EU negotiators had retreated to internal consultations when Article 12 on the CDM was called and gavelled through by chairman Estrada. When the EU came back to the plenary and realised that the CDM had been accepted they announced their opposition and tried to reopen the debate – however in vain.

In the following five years the EU embarked on an attrition course concerning the CDM. It first wanted to limit the use of the Kyoto Mechanisms to guarantee a certain amount of “domestic action”. This “supplementarity issue” generated complex formulae but was not finding any support besides in the environmental NGO community. Another area of conflict was the issue of carbon sinks. The EU wanted to exclude sinks fully from the CDM.

How EU governments learned to love the CDM

The first wake-up call for EU negotiators was the failure of the 6th Conference of the Parties in The Hague in late 2000. It was generally ascribed to a stubbornness on behalf of the environment ministers of France and Germany that scuppered a deal with the UK brokered by the UK. The second wake-up call was US president Bush’s rejection of the Kyoto Protocol. Thus the EU realised that without accepting market mechanisms, the Protocol would never enter into force. The agreements of Bonn and Marrakech made in 2001 are relatively liberal and allow full fungibility of credits under the different Kyoto Mechanisms. But still the EU did not “love” the mechanisms.

A decisive catalyst in EU climate policy that led to a change in attitudes was the development of an emissions trading scheme for EU companies. The Commission had got wary of the fiscal approach to greenhouse gas reduction as since 1992, all attempts to introduce a carbon tax had failed due to consistent opposition from the UK. Thus in early 2000, it published a greenbook on emissions trading and from then on consistently worked on implementation of a trading scheme for large emitters. The Commission’s call for inputs led to a strong response

from emitters, a lesser one from NGOs. Very soon the Commission supplemented the ongoing consultation process in the Green Paper with a multi-stakeholder working group in the European Climate Change Programme. This group met 10 times between July 2000 and May 2001 and concluded its work with the clear recommendation that European trading in GHG permits should be established “as soon as practicable”. Astonishingly, the group – bringing together diverse interests with about 30 representatives from some Member States, industry, and environmental pressure groups – achieved a high degree of consensus (Zapfel and Vainio 2002). In October 2001 the European Commission advanced the debate to a new level by adopting a proposal for a directive on EU-wide trading in GHG permits. The proposal’s main points survived all further debates:

- mandatory introduction of trading in GHG permits in all EU Member States as of 2005
- coverage of power and heat generation, iron and steel, oil refining, pulp and paper, cement and other building materials
- coverage of CO₂ emissions only.

From 2001 onwards, emitters were thus getting the impression that they would face a carbon-constrained future even if they still had the hope that the initial allocation of permits would leave them on the safe side. The unsophisticated attempts of German industry to block the scheme failed and in late 2002 the Council of ministers gave its position. After an astonishingly quick resolution of differences with the EU Parliament, the directive was published in July 2003 and became law in October. From a laggard in the use of market mechanisms, the EU thus became a world leader in just three years.

Initially, the Commission had remained sceptical concerning the integration of the Kyoto Mechanisms into the trading scheme. It had stated that the priority should be on implementing trading domestically. Due to pressure from emitters, the initial Commission proposal of October 2001 included the wording that the “Commission believes that the eventual inclusion of credits is desirable”. However, it made very clear that it feared lax international rules on CDM and JI. A separate directive would be developed.

The Council position already became clearer and stated that “credits will be recognised subject to modalities”. The final text of the emissions trading directive became very positive: “Project-based mechanisms are important to ... increasing the cost-effective functioning of the Community scheme. ... The use of the mechanisms should be supplemental to domestic action”. Art 30,3 refers to “provisions adopted by EP and Council which should apply in parallel with the Community scheme from 2005”, thus making the timetable clear. Thereafter the Commission embarked on drafting the “linking directive” in a rarely seen speed. Its first unofficial draft leaked in June 2003 and contained the following features:

- Import of CERs (and ERUs) would be capped at 6% of allocated EU emissions permits (EU allowances)
- No CERs would be accepted before 2008
- No sinks CERs would be allowed
- Hydro would be only allowed if consistent with World Commission on Dams criteria

The environment directorate in the Commission thus continued in the spirit of seeing the CDM as a dangerous instrument. This is surely also due to the fact that the person drafting the directive came from a NGO background and had been fighting market mechanisms for many years.

But already within the Commission voices arose that saw the CDM much more positively. Thus the official draft published in July 2003 looked very different

- Discuss an import cap of 8% once imports surpass 6% of allocated EU allowances

- Hydro projects should take account of environmental and social impacts

The Council position published in January 2004 strengthened the CDM even further. It deleted the reference to entry into force of Kyoto Protocol, thus making the CDM independent of the fate of the Protocol. This is a step of high significance.

Moreover, CERs should be accepted from 2005 and converted into EU allowances at 100%. Import restrictions and also acceptance of sinks would be in the competence of member states.

Who generated this shift in attitudes? A major reason was the increasing realisation that reaching the Kyoto targets would not be easy for a considerable number of member states. Only the UK and Germany have consistently stayed near the target path and this is reflected in their relatively lacklustre CDM policies. From 1998 to 2002, the Netherlands had been alone in admitting that they would need to buy CERs to cover 50% of their emissions gap. They started their procurement programme already in the late 1990s and were decisive in shaping the fledgling CDM market. The CER Procurement Tender CERUPT started in early 2001 (Asuka 2003) motivated many project developers and host countries started to set up the necessary institutions. The Dutch funds flowing into the carbon finance activities of the World Bank were crucial in generating a critical mass of activities. From 2002 onwards, the Dutch were joined by the governments of Finland, Sweden, Denmark and Austria in setting up dedicated CDM programmes, albeit of a smaller scale. 2003 marked the breakthrough with the publication of an Austrian tender programme, an announcement of a considerable budget for Danish CER acquisition and the setup of an Italian carbon fund at the World Bank. In 2004, the Belgian government joined the queue of those aiming for public CER purchases. Besides governments, companies covered by the EU trading scheme made it very clear that they would be extremely stubborn concerning initial allocation of EU allowances unless they could get access to the CDM. This was reflected in public statements of Eurelectric and national industry associations.

The role of research in the transformation of the European attitude towards the CDM

European researchers have played a considerable role in the CDM debate, especially after 2001 when the subject became unfashionable in the U.S. The initial leadership of US institutions such as the Center of Clean Air Policy (CCAP 1998), the Tellus Institute (Lazarus et al. 1999) and the World Resources Institute on CDM (Goldemberg 1998) was over by 2000. Only the Lawrence Berkeley National Laboratory (Meyers et al. 2000, Sathaye et al. 2001) continued high-quality research on baselines. In Europe, CDM research focused on baselines and development aspects of CDM. From 2000 to 2002, the PROBASE project assessed options for standardisation of baselines (PROBASE 2003). It was coordinated by the Foundation Joint Implementation Network in Groningen (Netherlands) that had hosted the first conference on Joint Implementation in 1994 and been a leader in research on Activities Implemented Jointly. The partners Hamburg Institute, University of Surrey and University of Karlsruhe had also been active in CDM research. Most researchers stressed that CDM could play a vital role in the international climate policy architecture if its environmental credibility was retained and links with domestic climate policy instruments made.

Hamburg Institute had always argued that CDM should be linked to domestic climate policy instruments and that there should not be any artificial limitation (Michaelowa 2000). On the other hand, it stressed the need for strong rules for determination of investment additionality of CDM projects (Greiner and Michaelowa 2003). Otherwise, the NGOs were right in their criticism of the instrument. Moreover, Hamburg researchers analysed the role of interest

groups in designing CDM rules (Greiner 2000). They also estimated transaction costs of the CDM project cycle (Michaelowa et al. 2003) and developed ways to integrate them into estimates of the CDM market (Jotzo and Michaelowa 2002). University of Surrey concentrated on decision analysis and looked at the link between poverty alleviation and the CDM (Begg et al. 2003). They also assessed uncertainty of baseline and project emission parameters. University of Stuttgart coordinated a CDM capacity building project focusing on Sub-Saharan Africa. However, after finalising this project, the staff moved on to consultancies and the university did not continue its research on the CDM.

In Switzerland, the Federal Institute of Technology did pioneering research on weighting sustainability criteria for CDM projects and develop procedures for host country approval institutions to actually apply those criteria (Sutter 2003). The University of St. Gallen pioneered research into risk aspects of CDM (Janssen 2001) and looked specifically at risks of CDM projects in the industry sectors ASEAN (Janssen 2002).

Even concerning market intelligence what was undoubtedly a US domain dominated by companies like Natsource and Environmental Markets, a European company - Point Carbon from Norway – has managed to become world leader (see e.g. the demand side overview PointCarbon 2003). Their free daily newsletter attracts more than 5000 subscriptions and their fee-based information products are so successful that PointCarbon already has a staff of 14. The (still freely available) monthly CDM Monitor is one of the best sources on CDM.

European CDM outreach in Asia

The initial wave of CDM activities of the World Bank and the Netherlands focused on Latin America. When other governments started to join the fray, they put an emphasis on activities in Asia. The German Technical Cooperation (GTZ) had an early start with its support of the National Strategy Study in Indonesia in 2000. After the study was successfully completed in 18 months (State Ministry for Environment 2001), GTZ started a follow-up on supporting the setup of the Indonesian Designated National Authority. This activity is still ongoing and suffering from the fact that Indonesia has not yet ratified the Kyoto Protocol. In 2001, GTZ started a CDM strategy study in China in which it collaborates with Italy and Switzerland. The study is about to be completed. 2002 saw the start of a large-scale CDM programme in India and recently Thailand, Vietnam, Cambodia and Mongolia have requested German assistance. Germany's aim is a long-term support of host country capacities without any direct CER purchases.

Denmark started in 2002 with a programme supporting CDM institution building in Malaysia which was expanded to Thailand in 2003. The Danish programme is targeting CER generation for the Danish government. In Thailand, its tender for CDM project proposals led to 26 proposals of which 5 were selected for a subsidised Project Design Document development.

The Netherlands have been active in Indonesia and are negotiating a Memorandum of Understanding on purchase of 5 million CERs. Moreover, they have financed the largest CDM capacity building initiative to date - "Capacity Development for the CDM" (CD4CDM) - which is implemented by the UNEP Research Centre in Riso, Denmark and covers 12 countries. Vietnam, the Philippines and Cambodia are the Asian countries covered since late 2002 and it is no surprise that Cambodia is the LDC with the best CDM infrastructure.

Astonishingly, France and the UK are virtually absent in Asia with the exception of a small UK project in India. Also the Southern European countries with a large need for CERs are not represented. Spain naturally focuses on Latin America and Italy looks at the southern shores of the Mediterranean.

The European capacity building activities will increasingly have to interact with a growing Japanese CDM interest, especially in South East Asia. Donor coordination with Japan is not always easy, especially as Japanese organisations are not coordinating their activities. Moreover, large Japanese companies are pushing forward with CDM deals.

Conclusions

While initially most European governments and stakeholders saw the CDM as a “loophole” that would divert from domestic action, a more sober attitude has developed in the last three years. This is due to the fact that domestic reductions are more elusive than expected, emitters are pushing forcefully for access to the world greenhouse gas market and that international CDM rules have become more environmentally credible than feared.

References

Asuka, J (2003) Experiences of Netherlands' ERUPT/CERUPT and implication on the designing of Japan's system, Tohoku

Begg, K, Parkinson, S, van der Horst, D, Wilkinson, R, Theuri, D, Gitonga, S, Mathenge, M, Amissah-Arthur, H, Atugba, S, Ackon, S, Ageby, S, Meena, H, Mwakifwamba, S, Mwakasonde, S (2003) Encouraging CDM energy projects to aid poverty alleviation, Guildford

Center for Clean Air Policy (1998) Top-down baselines to simplify setting of project emission baselines for JI and the CDM, Washington.

Goldemberg, J (ed.) (1998) The Clean Development Mechanism: Issues and options. New York

Greiner, S (2000) Flexible instruments and stakeholder interests – a public choice analysis, in: Michaelowa, A; Dutschke, M. (eds.): Climate policy and development, Edward Elgar, Cheltenham, p. 45-58

Greiner, S, Michaelowa, A (2003) Defining Investment Additionality for CDM projects - practical approaches, in: Energy Policy, 31, p. 1007-1015

Janssen, J (2001) Risk management of investments in Joint Implementation and Clean Development Mechanism projects, Difo-Druck, Bamberg

Janssen, J (2002) Financing industrial CDM projects in ASEAN countries, UNIDO, Bangkok

Jotzo, F; Michaelowa, A (2002) Estimating the CDM market under the Marrakech Accords, in: Climate Policy, 2, p. 179-196

Lazarus, M, Kartha, S, Ruth, M, Bernow, S, Dunmire, C (1999) Evaluation of Benchmarking as an Approach for Establishing Clean Development Mechanism Baselines, Tellus Institute, Boston

Meyers, S, Marnay, C, Schumacher, K, Sathaye, J (2000) Estimating Carbon Emissions Avoided by Electricity Generation and Efficiency Projects: A Standardized Method (MAGPWR), Lawrence Berkeley National Laboratory, Berkeley

Michaelowa, A (2000) Project-based instruments: economic consequences of the Kyoto and Buenos Aires framework and options for future development, in: Brockmann, KL; Stronzik, M (eds): Flexible mechanisms for an efficient climate policy, Physica, Heidelberg, p. 39-62

Michaelowa, A, Stronzik, M, Eckermann, F, Hunt, A (2003) Transaction costs of the Kyoto Mechanisms, in: Climate Policy, 3, 3, p. 261-278

PointCarbon (2003) Annex I Parties' current and potential CER demand, Oslo

PROBASE (2003) Procedures for Accounting and Baselines for JI and CDM Projects, Final Report to EU Commission, Groningen, <http://www.northsea.nl/jiq/probase>

Sathaye, J, Price, L, Worrell, E, Ruth, M (2001) Multi-Project Baselines for Evaluation of Industrial Energy-Efficiency and Electric Power Projects, Lawrence Berkeley National Laboratory, Berkeley

State Ministry for Environment (ed.) (2001) National Strategy Study on the Clean Development Mechanism in Indonesia, Jakarta

Sutter, C (2003) Sustainability Check-Up for CDM Projects. How to assess the sustainability of international projects under the Kyoto Protocol, Wissenschaftlicher Verlag Berlin

Zapfel, P; Vainio, M (2002) Pathways to European Greenhouse Gas Emissions Trading History and Misconceptions. FEEM Working Paper 85.2002, Milan