



## Sectoral approach waits in the wings

*The often troubled development of the clean development mechanism (CDM) and joint implementation (JI) projects has provided plenty of lessons that need to be incorporated into any new post-2012 climate change treaty*

Sectoral crediting has been tipped as the most likely successor to the clean development mechanism (CDM) after 2012. The European Commission wants it to provide the foundations for an efficient global mechanism (see box).

But market participants stress that the successes and pitfalls of the CDM — borne out of years of regulatory, legal and political effort — must be built into any new mechanism. "We cannot let all that work and knowledge go to waste. We must learn and build on it, so that post-2012 is considerably better and not just a simple extension of pre-2012," a UK-based trader says.

Discontent over the CDM's bureaucratic and inefficient approvals, registration, verification and monitoring processes, which have led to relatively low certified emission reduction (CER) yields, highlight the importance of ensuring streamlined infrastructures in any new mechanism. The project delays caused, for example, by inaccurate project design documents (PDDs) signify the need for new mechanisms to uphold regional, national and global standard practices.

But the CDM's successes provide equally important lessons. The mechanism has proven how successful emission reduction relations between developed and developing countries can become. The CDM has bolstered sustainable operations in China, India and Latin America, with Africa and the Middle East benefiting as well, while achieving significant emission reductions. More than 1,800 CDM projects have been registered, generating over 350mn t CO<sub>2</sub> equivalent (CO<sub>2</sub>e) of CERs.

*The CDM approvals bottleneck has been a serious impediment*

And the CDM has provided nations, including the US, with a template from which they can learn when setting up their emissions mitigation strategies.

Defenders of the CDM say that its development was inevitably going to be difficult, given that it was an entirely new concept created from nothing. The CDM called for a totally new infrastructure that had no real precedents from which to learn valuable lessons.

A key problem for the CDM since its inception has been a lack of financing at the "business end" of the approvals process — the CDM executive board (EB). Staffed from the beginning by part-time members, the CDM EB has faced an almost impossible workload. Not only does it have to approve every single CDM project, it also has to approve the validating firms that produce the PDDs and monitor each project's emissions.

The sheer weight of this task led the CDM in turn to an overly narrow focus on what project developers said were small details in the approvals process. The original plan for the CDM approvals system assumed that approval of a set of basic CDM project methodologies would help streamline the overall approvals rate. But the subtle differences between CDM projects led to a welter of different project-specific methodologies, all of which added time to the approvals process.

The CDM project approvals bottleneck has been a serious impediment to the CDM sector, creating such serious cash-flow problems for many CDM project developers that some have been threatened with going out of business. → p8

### The sectoral approach

One way of applying emissions mitigation action that crosses national boundaries is to apply it to an entire global sector. A strong argument in favour of a sectoral approach is that it eliminates potential competitive distortions in a particular industry if all firms operate with the same emissions restraints. The European Commission wants emissions caps set for sectors such as power, steel, cement and aluminium in emerging economies. The commission says that the approach would be less cumbersome administratively and be a more economically viable option than the clean development mechanism. But the International Emissions Trading Association says the ambiguity surrounding the sectoral approach could deter private-sector investors.

Top CDM CER issuances		mn t CO <sub>2</sub> e
Country	Approved projects	Issued CERs
China	670	168.9
India	469	72.6
South Korea	34	46.0
Brazil	165	36.1
Mexico	119	6.1
Vietnam	12	4.5
Chile	35	4.0
Egypt	4	3.9
Argentina	16	2.3
Pakistan	3	1.7
South Africa	17	1.1
Bolivia	3	0.9
Guatemala	10	0.9

— UNFCCC



"The CDM was a very useful first step in engaging developing countries in the carbon market and creating price signals," the assistant to the European Commission's deputy director-general of the environment, Peter Zapfel, says. "We see sectoral crediting as a natural stepping stone from the CDM, with it ideally coming in at the start of 2013."

A sectoral crediting approach is a step closer to cap-and-trade. Different sectors in emerging economies are set baselines and any emission reductions achieved below these are awarded with credits. The sectoral crediting regulatory and legal rules should near completion by the end of next year.

But some CDM experts are less confident about the sectoral approach. "To get sectoral off the ground will take several years and that would be with a fair bit of effort behind it," credit rating agency Standard and Poor's managing director of global carbon markets Michael Wilkins says.

The regulatory ambiguity is worrying, according to the head of carbon at Japanese investment bank Nomura and emissions market veteran, Laurent Segalen. "If you ask the top 10 experts to explain what sectoral is, you will get 10 different answers," he says. The crucial question about the sectoral approach is who will issue the credits. "Is it going to be China, India, Russia or an executive board? If it is national issuance, then you will have tonnes of them. If it is a board, you will have none, because there will always be problems," Segalen says.

Negotiators must define what sectoral crediting entails as

soon as possible to avoid repeating the infrastructure issues that plague the CDM. "The more there is a consensus on how sectoral crediting should be developed in the first place, the quicker the development of the architecture will progress," according to Zapfel.

Standardisation will be paramount to ensure easy application among the countries that increasingly support sectoral-based mechanisms. "China already knows what the key focus areas that it wants to work on are, and these factors will be worked into any sectoral or CDM schemes that come into place," project developer China Carbon Forum special adviser Henry Wang says.

The US seems equally keen. The US Senate clean energy bill contains provisions for "sector-based international offsets" that largely overlap with what the EU is trying to achieve with the sectoral crediting mechanism.

### By a nose

Many disagree with suggestions that expanding CDM operations should be explored, instead of sectoral crediting. "I think there are other options. At the moment sectoral is the best option. But, like a horse race, the winner is not certain until the horse has crossed the line," Wang says.

The CDM is expected to continue in Africa, where the commission plans to conduct capacity building programmes to help the continent realise its investment potential.

## Joint implementation tangles deter investors

The concept of joint implementation (JI) predates the Kyoto protocol. It was intended to allow developed Annex-1 nations to co-operate on projects to reduce greenhouse gas emissions — especially those former Soviet-bloc countries dubbed "economies in transition". But the JI mechanism has struggled to achieve any real success for investors or host countries.

The cumbersome nature of the approvals process meant that JI projects were designed to be approved under two basic tracks from the start. Track 1 was the national approvals path, provided the country was Kyoto protocol-compliant. Track 2 allowed approvals through the UN's JI supervisory committee (JISC), which began operations in 2006 (*AGE, December 2006, p19*).

The JISC has approved just nine track 2 JI projects, leading many traders to describe the potential JI emission reduction unit (ERU) market as effectively dead.

Track 1 project approvals have begun to increase in the past quarter, but ambiguity over the use of track 1 ERUs in the period after 2012 has in turn dampened investment.

Private-sector investors have shied away from the JI market. The "perceived risk of the sovereign and the lack of sovereign action" is compounding firms' disinterest, ratings agency Standard and Poor's managing director of global carbon markets Michael Wilkins says.

The contrast between the CDM and JI mechanisms is particularly stark. Project developers were reluctant initially to invest in China-based CDM projects, citing political and legislative concerns. But China embraced CDM investment and actively encouraged more firms to enter the market. This proactive welcome is where the JI host countries have failed conspicuously.

"China made it easy for us to invest there with CDM, but it has never been like that with JI anywhere," a market

participant says. The lack of ERUs demonstrates how pivotal co-operation and effort from host countries will be in kick-starting any post-2012 mechanism.

For now, many emissions markets experts say that the lack of focus on JI's post-2012 role means that the market is nearing an end. "If there is no cap-and-trade system post-2012, there will be no assigned amount units [AAUs] issued. If there are no AAUs issued, then they cannot be converted into ERUs. So, I think JI dies with Kyoto," consultancy Ceag chief executive Liz Bossley says.

The European Commission agrees that the need for JI projects could soon be redundant. "The reduction potential that could otherwise be tapped by JI will in fact be tapped by cap-and-trade. Hence, once there is a cap-and-trade system, there is a reduced scope and need for JI," the assistant to the European Commission's deputy director-general of the environment, Peter Zapfel, says.



## EU ETS market reflects uncertain prospects

Emissions trading market participants face another period of regulatory uncertainty, as hopes fade for the creation of a legally binding post-2012 agreement at the UN Framework Convention on Climate Change's 15th Conference of the Parties (Cop 15) in Copenhagen, Denmark, in December.

Utilities, industrial groups, financial institutions and clean development mechanism (CDM) project developers operating under the EU emissions trading scheme (ETS) have faced considerable ambiguity over the past couple of years, which has hit confidence in the markets.

EU firms have been pinning their hopes on success at Cop 15 for much of the year. But the past two months saw the world's political leaders apparently playing down expectations of the talks. Most EU ETS market participants had begun to accept that the bare bones of an agreement were all they could hope for from Copenhagen — until US president Barack Obama announced his intention to attend the Cop.

### Big effect

The kind of deal fleshed out in the months after Copenhagen will have strong ramifications for market participants operating in the EU ETS, as the EU has pledged to move from a 20pc to a 30pc emission reduction target from 1990 levels by 2020 if an international deal is achieved. EU utilities look to hedge their emissions exposure up to three years in advance, meaning that the EU's decision about which path to follow will have big implications for their hedging strategies.

But the US will again prove to be a major stumbling block, even if it passes a domestic climate change bill. "Considering that in the US Senate you need 67 votes to ratify an international agreement, the odds for a new agreement ratified by the US are pretty slim," Japanese bank Nomura managing director of commodities and environment Laurent Segalen says. Others say that the EU is unlikely to move to its tougher

reduction target. EU ETS participants "will not be holding their breath in terms of seeing more stringent emissions targets, as these in all likelihood will not emerge," UK-based CDM project developer EcoSecurities head of European regulatory affairs Miles Austin says.

Utilities operating in the EU ETS will have to manage their hedging strategies in the face of major regulatory uncertainty. But this will not deter them from trading on the emissions markets if the past few months are anything to go by.

A number of utilities have already begun buying post-2012 EU ETS allowances and 2013 EU ETS allowance trade has increased in the past few months. "Firms trade carbon on a three-year horizon and, with all the provisions made by the EU, we know pretty much where we are going for the next four to five years," a UK-based trader says.

### Heavy impact

Post-2012 negotiations could have a greater impact on Europe's heavy industrial firms than on utilities. Some market participants say that industrial firms are more likely than utilities to await the outcome of negotiations before selling surplus EU ETS allowances, in the hope that prices will be higher.

"A lot [of industrial firms] are waiting, because the US says they will take no decisions until after Copenhagen. Neither will Australia. The EU will not reach an agreement on the new caps for the eastern European states following the September court case until after the Copenhagen meeting," consultancy Ceag chief executive Liz Bossley says.

Other traders say that more firms are likely to bank their EU ETS phase 2 allowances into phase 3, which begins in 2013, as industrial firms are holding considerably longer allowance positions than they were previously expecting as a result of the recession. But this might not be enough to prevent surplus allowances from flooding the market.

### What the leaders say...

"Negotiators must deliver a final text which presents a strong, functioning architecture to kick-start rapid action in the developing world."

*UN Framework Convention on Climate Change executive secretary Yvo de Boer*

"The US target demonstrates a significant contribution to a problem that the US has neglected for too long."

*US president Barack Obama*

"We are not lowering our expectations,

we are not compromising our principles.

*UN secretary-general Ban Ki-moon*

"The president just called the world's bet and then raised it."

*US representative Ed Markey*

"It is crucial that our partners in the industrialised world and the big emerging economies live up to their responsibilities."

*EU environment commissioner Stavros Dimas*

"If there is no deal, then all these people who have invested will no longer believe that was right."

*European Commission director general of environment Karl Falkenberg.*

"No amount of lofty rhetoric or promises of future commitments can save Copenhagen."

*US senator James Inhofe.*

"We need numbers on the table."

*Danish prime minister Lars Rasmussen*