POLICY WATCH:

Taking charge of mitigation

Developing countries can reduce their greenhouse-gas emissions through voluntary actions, but they need the full support of developed nations, says **Sonja van Renssen**.

The message came through loud and clear in Durban: "We are doing what we should be doing," China's lead negotiator Xie Zhenhua angrily told the final plenary. "We are taking actions. We want to see your actions." Developing countries across the board are challenging developed countries' reluctance to adopt tougher mitigation targets, as they devise ambitious plans of their own — in China's case to nearly halve carbon dioxide emissions per unit of gross domestic product by 2020 relative to 2005.

From China and Mexico to Papua New Guinea and Sierra Leone, developing countries have started submitting proposals for nationally appropriate mitigation actions (NAMAs) to the United Nations Framework Convention on Climate Change (UNFCCC). The concept was introduced at the 2007 UN climate talks in Bali and elaborated in the Cancún Agreements. There it was agreed that developing countries would undertake NAMAs "in the context of sustainable development, supported and enabled by technology, financing and capacity-building [to cut] emissions relative to business-as-usual in 2020".

The deal for developing countries is that they undertake voluntary actions to cut their emissions in return for assistance from the developed world. NAMAs are the policy vehicle to frame action and make it eligible for support. But the UNFCCC has not yet defined what could be in a NAMA, what support there is, and exactly how the two will be matched up. Instead, a groundswell of action from the developing world is helping shape the international policy framework for NAMAs. Already by mid-2011 some 50 countries had submitted NAMAs to the UNFCCC for review[1].

They are a hodge-podge of targets, strategies, policies, programmes and individual projects, from a target for carbon neutrality by 2020 for the Maldives, to an e-mobility plan for Chile, to a sustainable biowaste treatment project in Tunisia. What developed countries will be looking to support however, are concrete actions, says Frauke Röser from research consultancy Ecofys in Germany. "Targets are targets and NAMAs are actions," she says. "There should be targets behind NAMAs." Tomas Wyns from the Center for Clean Air Policy Europe in Brussels agrees: "NAMAs must be low-carbon actions within a broader development strategy."

This is one of the first challenges to developing NAMAs: they are as much about sustainable development as mitigation. This is also likely to prove their biggest difference with the international carbon market — created by the Kyoto Protocol's Clean Development Mechanism (CDM). This lets developed countries and their companies pay for emission reductions in developing countries to 'offset' their own emissions back home. In theory, the CDM should also promote sustainable development, but in practice it has delivered almost exclusively on mitigation.

The big difference between the CDM and NAMAs is that, whereas the CDM was conceived as a way to help developed countries meet their emission-reduction pledges under the Kyoto Protocol, NAMAs have been conceived as a way for developing countries to make progress in reducing their own emissions. Scientists say that developing countries need to reduce their emissions by 15–30% below business-as-usual by 2020 to help avoid dangerous climate change[2].

NAMAs are intended to go beyond the project-by-project approach of the CDM and deliver more fundamental changes, often on a larger scale and in the longer term, and to the primary benefit of developing not developed countries. In practice, they are appearing in sectors and countries where there has been little CDM activity, such as transport and buildings, and Latin America and Africa[3].

In terms of mitigation, the NAMAs proposed so far foresee emission reductions that actually go well beyond what has been achieved by the CDM. Timon Wehnert from the Wuppertal Institute in Germany points out that South Africa's NAMA to promote concentrated solar power should alone deliver one-third of the roughly 650 million tonnes of carbon dioxide reduced by the entire CDM so far[4]. But the mitigation potential of other NAMAs will be harder to measure. Some may seek to guide urban planning, for example, by planning for 'denser' urban areas to increase the potential for public transport systems such as an underground metro. Yet such NAMAs would benefit the climate indirectly and in the long term, making them difficult to quantify in terms of emission reductions.

"Most developing countries are not interested in mitigation," points out Röser in any case. Air pollution, limits to transport capacity, and pressure on energy and other resources are driving developing countries' pursuit of NAMAs. For them to contribute to sustainable development as intended however, "there needs to be clear-cut sustainability indicators," warns Wehnert.

These sustainability indicators could be developed at international level by the UNFCCC, he suggests, using the CDM's 'gold standard' as a starting point. Projects under this premium label have to satisfy additional rules to demonstrate their

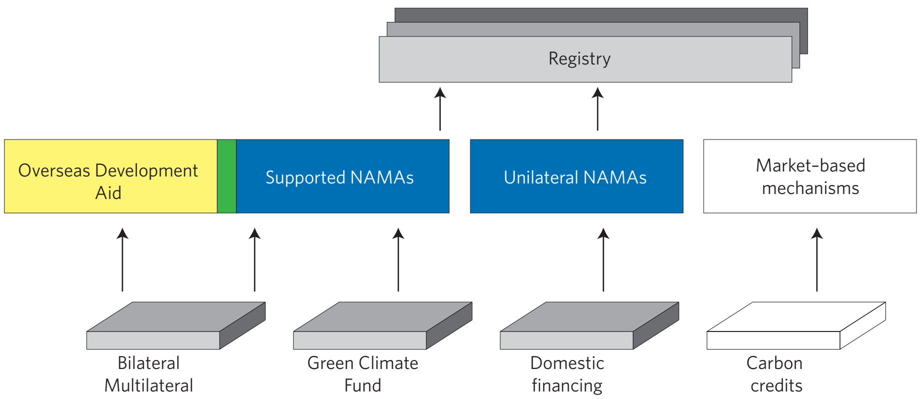

Figure 1 | Schematic overview of the emerging financing landscape for NAMAs. Figure reproduced with permission from ref. 3, © 2011 Ecofys.

sustainable-development benefits. Indicators for Overseas Development Aid offer another starting point. If sustainability could be as closely monitored as emissions, it could help render previously economically uninteresting projects viable for investment, one carbon-market insider suggests.

The relationship between NAMAs and the carbon market, and indeed between NAMAs and other mitigation policies being discussed in the UN climate talks — such as REDD+ (where REDD is Reducing Emissions from Deforestation and Forest Degradation) — still needs to be clarified. Most carbon-market players like the idea of 'credited' NAMAs, which would generate offset credits after a certain baseline target had been met. The NAMAs under discussion so far however, are 'unilateral' NAMAs, which developing countries undertake with their own resources, and 'supported' NAMAs, which depend on international support but do not generate carbon credits.

As long as the carbon market is not involved, monitoring, reporting and verification of NAMAs can afford to be less stringent say experts such as Röser and Wehnert. There needs to be a balance between measuring value for money to satisfy donors and leaving enough flexibility for developing countries to propose — and implement — really transformative actions. Tomasz Kotecki from the Mexican government explains that its sustainable housing programme is a NAMA not just because it is broader than any CDM category so far, but also because the monitoring, reporting and verification requirements are lighter.

In Durban, governments agreed fresh guidelines to monitor NAMAs and potential support. They also agreed to set up a prototype registry where developing countries can record their plans and request help. Exactly how much information will be entered remains to be seen, as some developing countries fear their NAMAs may confront them as mitigation targets further down the line. Yet, as Wyns says: "If you do not have clarity on demand, clarity on support will be difficult."

Exactly where that support will come from and what form it will take also remains to be seen. The Global Climate Fund, which was operationalized in Durban, is still empty. Until now, and for the immediate years to come, NAMA financing will continue to flow through bilateral agreements and multilateral development banks (Fig. 1).

"In the absence of a central framework, NAMAs will be donor driven," says Röser. But will donors fund what developing countries want? Axel Michaelowa from consultancy Perspectives in Germany recounts a push by Germany for its photovoltaic power and passive house technology — a move that he would question because of their high cost. Donor nations will also tend to seek out the most stable countries with the best general business environment. Overall, proving that climate aid is additional to Overseas Development Aid will become much more difficult as NAMAs consciously blur the boundary between mitigation and development.

Developing countries have not waited for a global climate deal to start proposing action on climate change. But their promises hinge very clearly on support. First and foremost is that this support materializes; second is that it goes to where it is needed. Putting sustainable development and mitigation into action hand-in-hand offers an opportunity not only to build on the results of Durban but for developed countries to learn from those they would support. The practical experiences of NAMAs will shape a framework and support system that define a new low-carbon development pathway. ❐

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MARKET WATCH:

Dirty money

For the first time, banks have been ranked by how much they facilitate global warming. **Anna Petherick** asks how this data should be used.

James Hansen, climatologist and for 30 years the director of NASA's Goddard Institute for Space Studies, believes that halting emissions from coal would solve four-fifths of the climate crisis. In 2010 he was arrested outside the White House[1] as he protested against mountaintop removal mining. He has also written[2] to an impressive roster of heads of state, pressing for a moratorium on the construction of new coal-fired power stations. Now Hansen has a fresh list of targets for his anti-coal mission that should keep him busy into his eighth decade: the banks that lend to those who burn and mine the stuff.

A report[3] released in December 2011 by BankTrack — a network of civil society organizations that investigates the banking industry — lays bare the worst offenders (Fig. 1). Surprisingly, maybe, it finds that banks' total investments in coal in 2010 were almost twice what they were before the financial crisis, in 2005, when the Kyoto Protocol came into effect.

It goes into some detail on a topic for which information is scant. This is because banks tend to foster secretive cultures, instinctually reluctant to discuss how much money they make and the pricing and design of financial products through which they make money[4]. But it is also because they have a limited understanding of their own businesses. "Initially when I began this, I wondered whether the bankers were lying when they said they didn't know what was in their [investment] portfolios, or occasionally they'd say something contrary to what was actually in their portfolios," says Heffa Schücking, the report's main author and director of urgewald, a German non-governmental organization. "But over the years I've come to the conclusion that they really don't know, sort of like subprime housing."

Most financing of coal comes under the broad umbrellas of big, general-purpose corporate loans and investment banking (the issuing of corporate bonds and shares) — and not, as with renewables projects, within much more clearly defined 'project financing'. So not even the banks' own IT systems hold