

NATIONALLY APPROPRIATE MITIGATION ACTIONS (NAMAs) AND THE CLEAN DEVELOPMENT MECHANISM (CDM)

An Overview

As developing countries develop Nationally Appropriate Mitigation Action (NAMA) proposals for financing during the fast-start phase, questions arise about the relationship to the Clean Development Mechanism (CDM) and on how NAMAs can support participation by the private sector. In an effort to answer these questions, this paper explains key differences between these divergent approaches to encouraging emissions reductions in developing countries, and describes their best uses going forward in supporting private-sector engagement in creating a lower carbon economy.

DIFFERENT RATIONALES FOR NAMAS AND CDM

Whereas the CDM provides a way for developed countries to help meet emissions limits committed under the Kyoto Protocol through purchase of additional project-based emissions reductions from developing countries, NAMAs were primarily conceived as a way for developing countries—with financial and technological support from the international community—to make progress in reducing their own domestic greenhouse gas emissions from one or more emitting sectors. Going beyond the CDM’s project-by-project focus that often highlighted reductions achieved from “good actors” (while overlooking emissions increases from other sources in the sector), NAMAs are expected to support an enhanced scale of activity from a wider set of participants. One reason for the genesis of NAMAs is to ensure that developing countries are able to reap benefits from the low-cost emission reductions that are still available in their countries. Another reason is to provide a pathway for all nations to contribute to solving the climate challenge, as it would be impossible for developed countries alone to make sufficient emissions reductions unilaterally. If emissions reductions occurring in developing countries as supported NAMAs were sold as offsets, the reductions could no longer be counted towards their own climate goals, as these reductions would simply be netting out emissions not reduced in developed countries.

The different fundamental purposes of CDM credits and NAMAs will also be reflected in different baseline and accounting methodologies. In the case of the CDM where emissions reductions are sold in allowance markets and used to help meet Kyoto targets, it is critical to develop a careful estimate of business-as-usual emissions, which informs the project baseline against which emissions reductions are measured. Under CDM, companies in developed countries pay for all emissions reductions that go beyond the project baseline. However, in the case of supported NAMAs where bilateral or multi-lateral financing is not linked to emissions reductions on a one-to-one basis, a key objective is to support broad-based actions in one or more industry sectors that promise to contribute significantly to achieving developing country emission reduction targets. In this case, while estimating the baseline is still important to understand the overall effectiveness of the chosen mitigation actions, the same level of precision is not needed (and also would probably not be possible).

Because of the primary objective to achieve reductions in the developing country, it is envisioned that NAMAs may only be sold for credit (credit generating NAMAs) once a crediting baseline is achieved. In most cases, it is anticipated that some NAMAs will occur unilaterally, without support from the international community (unilateral NAMAs), while

others will require bilateral or multi-lateral financing to overcome barriers and leverage domestic investments (supported NAMAs). Financing for supported NAMAs will likely be awarded to the more effective programs and policies and will pay up to – but not in excess of – the incremental costs of the policy or action. NAMA credits (credit generating NAMAs) could only be earned and sold to international markets once a developing country exceeds a negotiated sector-based or national emission target. In other words, such credits can only be earned once significant actions have already been taken, and as a result, it is expected that the marginal abatement cost (MAC) of credit generating NAMAs will be higher than the MAC of reductions achieved through traditional CDM projects.

The NAMA framework offers a more sustainable and long-term strategy for curbing global GHG emissions than project-based CDM. The NAMA framework should also be designed to facilitate comprehensive and sustainable GHG-abatement strategies and associated financing strategies economy wide. This framework would offer incentives for developing countries to address carbon emissions in a variety of sectors – including transportation, agriculture and REDD – that are either not eligible under the current CDM or have not had much investment under the CDM policy framework.

DIFFERENCES BETWEEN NAMAS AND PROGRAMMATIC CDM

Programmatic CDM (called “program of activities” or PoAs”) is closer to the NAMA concept in its scale (since it covers policies and measures rather than individual projects). However, it is still fundamentally different from the NAMA philosophy. Whereas programmatic CDM generates credits for emissions reductions from a baseline that represents emissions that would occur absent the policies and measures that comprise the program of activities, NAMAs seek to create explicit developing-country contributions to global GHG mitigation. In theory, the NAMA framework could shift the programmatic CDM baseline against which credits are generated from the business-as-usual trajectory to a much more ambitious level.

Lessons learned in the programmatic CDM process, especially those related to setting boundaries and applying methodologies for GHG-reduction estimates from programmatic activities, would be useful in designing the NAMA framework. Programmatic CDM could also be reformed to harmonize with the NAMA concept. Institutional and operational rules and procedures designed for programmatic CDM could be reviewed with the goal of adjusting them to the NAMA framework.

The CDM Executive Board adopted procedures regarding the registration of a program of activities and issuance of CERs. The Board has also approved CDM Program of Activities Design Document forms, making programmatic CDM procedures operational. As of April 2011, eight PoAs have been registered and nearly 60 more are in the pipeline. It is conceivable that the current CDM structure could be reformed to allow the CDM Executive Board to play the role of regulator of credit-generating NAMAs. However, negotiators seem to be in agreement that decisions on sector-wide crediting baselines need to be made through a process that has a higher level of involvement by the Conference of Parties and sector experts.

MOVING FROM CDM TO NAMAS: CREATING THE RIGHT INCENTIVES

The new NAMAs architecture is likely to collide with the existing system of project-specific activities under the CDM. Individual CDM projects undertaken in a policy area or sector where new supported NAMAs are to be implemented create the potential for developed countries to effectively pay twice for the same emissions-reduction efforts – once for certified emissions

reductions (CERs) from the individual CDM project and again through the up-front financial assistance provided by developed nations to help achieve the broader NAMA policy. A key challenge for the design of the new NAMA architecture is to create the right set of incentives to make it attractive for developing countries and firms within those countries to move away from CDM projects and toward supported (and later, credit-generating) NAMAs.

If project-specific CDM continues to be allowed broadly or in specific policy areas after 2012, it will likely be more attractive in economic terms to private sector firms in developing countries and to international investors than up-front financing for supported NAMAs. Receiving payments for CERs based on the global carbon market price likely offers more certainty and greater funding and immediacy of economic return than up-front financing of some portion of the incremental costs of a proposed NAMA, which may go to a host government rather than to the private sector. Project-based CDM is also likely to be more attractive economically than supported or credit generating NAMAs because of its simplicity.

Developing country governments, however, have different incentives. As noted earlier, developing-country governments are increasingly interested in ensuring that low-cost mitigation options are used to meet their own domestic mitigation commitments rather than selling such reductions to assist developed country compliance. In addition, supported NAMAs (and possibly credit-generating NAMAs) will produce financing (and in the case of credit-generating NAMAs, credits) that would be given to developing country governments. Such governments may choose to pass on all or a portion of that finance to firms. This financing/revenue could be sufficient incentive for those governments to resist the political pressure for continued project-based CDM from firms within those countries and from international investors.

Capacity building should be offered to developing countries to assist them in transitioning to the NAMA framework. In addition, technology and know-how transfer should be more prominent in the NAMA framework than it has been under the CDM. This factor would be an important incentive for developing countries to transition to the NAMA architecture.

AVOIDING DOUBLE COUNTING

At first glance, the solution to the potential problem of governments paying twice via individual CDM projects and then in support of NAMAs seems straightforward: simply “wall off” individual CDM projects from the calculation of compliance with the supported NAMA. For example, suppose a developing country proposes to implement a new renewable portfolio standard under which 10% of all electricity generation in the country shall come from renewable energy by 2020. Also suppose there are currently two approved CDM projects involving wind farms in that developing country. These two wind farms could be separated out from the proposed NAMA, barred from receiving any up-front assistance, and not counted toward compliance with the 10% goal.

This, however, begs the question of how to handle future renewable energy projects in that country in terms of CDM eligibility. Again, the simple solution is to declare that no individual CDM projects can be proposed in a policy area covered by a NAMA policy, but this will create political pressure in developing countries to not propose NAMAs in sectors where a number of CDM project opportunities are developing.¹ As noted earlier, however, if up-front public finance

¹ We have already seen this dynamic in the early years of the CDM where proposing new policies in a developing country made the baseline more stringent and discouraged such policy actions. The CDM Executive Board finessed this problem through a permissive policy on baselines, but the problem will be more acute here in that a key goal for

is substantial, governments will likely withstand such pressure. Alternatively, the Copenhagen agreement could explicitly end project-based CDM in key sectors for selected countries, but it is difficult to see such an approach receiving consensus support in the negotiations. A more likely alternative path to achieving this outcome would be for major potential offset-buying countries, such as the EU countries, to adopt rules in their own trading systems barring the purchase of project-based CERs in key sectors post-2012. Offset purchase rules could also specify groups of countries that could continue participating in the CDM and others (those with large emissions-reduction potential and relatively greater wealth) that should move to the supported NAMA framework.

Another approach would be to adjust the baseline for existing CDM project in sectors covered by supported NAMAs, allowing supported NAMAs and new CDM projects to coexist in the same sector. In other words, implementation of NAMA activity would be considered as part of the business-as-usual baseline for the existing CDM projects in this sector. For example, assume that a proposed new CDM project in the power sector aims at improving a specific plant's efficiency by 30%. Assume at the same time that the government is proposing an energy-efficiency program for the whole power sector that would improve energy efficiency of average plant performance in the sector by 20%. In this case, the baseline for the CDM project would have to be set at a 20% efficiency improvement starting from the year when the NAMA program is launched. So while in previous years this CDM project could earn credits for the full 30% efficiency improvement, now it could only receive credits for the 10% extra improvement above the 20% baseline. What if sub-sector NAMA crediting is proposed in the sector while CDM activities take place in another sub-sector? For example, a sub-sectoral crediting NAMA could be proposed to increase power sector efficiency by 20%. At the same time, there are CDM projects that replace conventional-fuel electricity generation with renewable energy. Can these renewable-energy CDM projects continue alongside a NAMA crediting program on plant combustion efficiency? Since both programs reduce carbon emissions, accounting adjustments would have to be made for how much GHG emissions are replaced by renewable energy. Assuming that energy will be produced more efficiently as a result of the NAMA program, renewable-energy CDM projects would replace fewer GHG emissions since less fuel would be used to produce the same volume of electricity.

Credit-generating NAMAs will generate offsets for developed countries just as today's project-based and programmatic CDM efforts do. However, they will differ in that sector-wide NAMAs will likely be more comprehensive, have more stringent baselines and be larger scale. To receive credits from NAMAs, developing countries would need to set ambitious crediting baselines for a sector, a subsector, or a combination of sectors reflecting a significant deviation from BAU levels. Thus, the marginal abatement cost of credit-generating NAMAs will be higher than that of CDM projects. In addition, the scale of emissions reductions will be bigger than under individual CDM projects, and transaction costs should be smaller per ton of reduction.

Some critics have raised questions about the ability of NAMA crediting for a given sector to create sufficient incentives for private investors because of concerns that one company's potential return from emissions-reduction activities may be dependent on the performance of its competitors in the same sector. This can be addressed by establishing a domestic mandate at the level of the NAMA crediting baseline, either through cap-and-trade, or through a tradable intensity standard. In the latter scenario, a firm with lower intensity than the baseline receives an international credit from the government for each ton by which it beats the baseline. Firms that exceed the intensity baseline need to buy credits from other domestic firms or from the

many countries in the Copenhagen discussions is to encourage policies that reduce emissions in developing countries as their contribution to protection of the atmosphere and not as offsets.

international market to meet their compliance obligations to the developing country government. The developing country government also receives the net credits earned by the sector from an international credit issuing body (but is not penalized if the sector fails to meet the standard). Adding those credits to the credits received for compliance from domestic firms, the developing country government would have just enough credits to reward the winning firms for each ton by which they beat the baseline. Participating firms would benefit from assured incentives to over-comply, and from not having to purchase allowances for each unit of emission, as in cap-and-trade.

ENGAGING THE PRIVATE SECTOR THROUGH SUPPORTED NAMAS

Whereas CDM projects, CDM PoAs and credit-generating NAMAs all offer credits to the private sector for projects that exceed the respective baselines, supported NAMAs also offer strong near-term incentives for private sector investments. Too often, negotiators think of private sector involvement as simply participation in the carbon markets, either through development of projects that will earn credits for sale, or through the purchase of credits for compliance. In fact, private sector direct investment in projects like wind turbines, infrastructure, etc. are much larger than the CDM's 6 billion annually. The power of supported NAMAs is to write down the cost of the more cutting edge investment, without carbon credits. Often that private sector investment will come from investors in the host country and not necessarily from outside.

Depending on how the supported NAMA is structured, financing could flow to the private sector, either directly or indirectly, to support higher economic returns for projects that previously might not have met investment objectives. Examples could include financing for feed-in tariffs to support renewable energy projects, or funds to support the incremental costs of purchasing efficient technologies or efficient technology deployment (e.g., through private sector energy services companies). Developed country financing could also be used to support market and regulatory reforms that prevent implementation of clean and efficient development activities. Private sector companies that benefit from the manufacture and deployment of emission reduction opportunities should be energized by the prospects for NAMA development and engaged in developing national proposals.

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