Financing low-carbon investment in developing countries

Public-private partnerships for implementation of Nationally Appropriate Mitigation Actions
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Discussion paper

1. What are NAMAs and why does the private sector matter?

Nationally Appropriate Mitigation Actions (NAMAs) were first introduced into the international negotiations through the Bali Action Plan of 2007. They refer to voluntary actions by developing countries to cut greenhouse gas (GHG) emissions. It was also agreed that such actions would be supported and enabled by technology, financing and capacity-building.

While negotiations still continue on the definition and structure of NAMAs and the mechanisms for their support, more than 40 developing countries have already submitted their proposed or planned mitigation actions for inclusion in the Appendixes of the Copenhagen Accord. Most of these submissions pledge either a reduction in the carbon intensity of the economy or a reduction in the growth rate of GHG emissions below business-as-usual. Others pledge an absolute reduction in emissions below their current level or some other baseline year, or identify a set of concrete mitigation actions in various sectors of the economy (see examples in Table 1). Many of these pledges are conditional upon receiving external support.

So far in the political debate, NAMAs have been seen mostly as the business of governments, representing a commitment or pledge to reach certain GHG reduction. The issue of how to support the implementation of NAMAs is centred on the provision and distribution of international public finance, technology and capacity building. Some finance is already being made available to this end from the fast start finance pledge made in Copenhagen to provide US$30 billion of financial support to mitigation and adaptation over the next three years.

At the same time very little attention in this debate is being devoted to determining what is required to direct private investment to low-carbon options in developing countries nor to how to mobilize private capital to meet governments’ goals in relation to NAMAs. These are the central issues that need to be addressed, especially because the private sector is responsible for the main part of the investment related to climate change mitigation. As the details of the international policy framework for incentivizing mitigation action in developing countries evolve, it is vital to ensure that the NAMAs framework has a clear place for the private sector, both in terms of mobilizing finance and implementing emission reductions.

This paper discusses potential models to mobilize private capital and incentivize investment within the framework of NAMAs through public private partnerships (PPPs) and creditable NAMAs. It is not KPMG’s intention to offer solutions to the questions raised, but rather to stimulate debate on potential mechanisms that can bring the private sector into the NAMA framework.
Table 1: Examples of mitigation actions announced by developing countries in their submissions to the Copenhagen Accord

<table>
<thead>
<tr>
<th>Country</th>
<th>NAMA by 2020</th>
<th>Baseline</th>
<th>Specific actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>36.1 – 38.9 percent reduction in emissions below BAU</td>
<td>BAU2</td>
<td>- Reduction in Amazon and Cerrado deforestation and restoration of grazing land</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Increased use of biofuels, hydro power and alternative energy; no till farming;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>energy efficiency</td>
</tr>
<tr>
<td>China</td>
<td>40 – 45 percent reduction in carbon intensity of GDP</td>
<td>2005</td>
<td>- Increase the share of non-fossil fuels in primary energy consumption to around 15 percent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Increase forest coverage by 40 million hectares and forest stock volume by 1.3 billion cubic meters; all by 2020</td>
</tr>
<tr>
<td>India</td>
<td>25 – 30 percent reduction in carbon intensity of GDP</td>
<td>2005</td>
<td>- Actions are voluntary in nature and will not have a legally binding character</td>
</tr>
<tr>
<td>Indonesia</td>
<td>26 percent emission reduction</td>
<td>Not specified</td>
<td>Focus areas: peat land, forestry, agriculture, industry, waste, energy and transportation</td>
</tr>
<tr>
<td>Mexico</td>
<td>30 percent reduction in emissions below BAU</td>
<td>BAU</td>
<td>Total annual reduction of 51 million tons of CO2e by 2012</td>
</tr>
<tr>
<td>South Africa</td>
<td>34 percent reduction in emissions below BAU</td>
<td>BAU</td>
<td>- 42 percent reduction below BAU by 2025</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Implementation will depend upon the provision of financial and technological support and capacity building by developed countries.</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>30 percent reduction in emissions below BAU</td>
<td>BAU</td>
<td></td>
</tr>
<tr>
<td>Maldives</td>
<td>Achieve carbon neutrality as a country by 2020</td>
<td>n/a</td>
<td>- The Government is undertaking detailed work on the implementation of this action</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- The submission of the present mitigation action is voluntary and unconditional.</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Implement long-term economy-wide transformational efforts to achieve carbon neutrality</td>
<td>BAU</td>
<td>Significant deviation by 2021</td>
</tr>
<tr>
<td>Ghana</td>
<td>Range of actions in various sectors with no numerical reference to emission reduction</td>
<td>n/a</td>
<td>Range of measures identified in electricity, transport, residential and industrial sectors, as well as related to liquid and gaseous fuels, metal production, crop production, forestry, solid waste disposal and waste handling.</td>
</tr>
</tbody>
</table>

2. Types of actions

The United Nations negotiations on the definition and nature of NAMAs and on the rules for their measurement, reporting and verification (MRV) have not yet concluded. These issues and that of NAMA support mechanisms are at the core of the future international framework and carry very strong political weight.

Broadly, a distinction is being made between three types of actions:

- **Unilateral NAMAs:** Autonomous actions undertaken by developing countries to achieve emissions reductions without outside support or financing;

- **Supported NAMAs:** Mitigation actions in developing countries, supported by finance, technology and capacity building from developed countries; and

- **Creditable NAMAs:** Mitigation actions in developing countries, which by exceeding an agreed-upon baseline generate emission credits or offsets that can be sold in the global carbon market.

According to the Copenhagen Accord, developing countries will implement nationally appropriate mitigation actions. Unilateral mitigation actions by developing countries will be subject to domestic MRV procedures and reported every two years on the basis of guidelines to be adopted by the Conference of the Parties (COP) through the national communications to the United Nations Framework Convention on Climate Change (UNFCCC); internationally supported NAMAs will be subject to the international MRV procedures. The Copenhagen Accord does not mention creditable NAMAs, but its language does not preclude them either.

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1 For full list of submissions and submissions by individual countries see UNFCCC website at http://unfccc.int/home/items/5265.php
2 Business as usual
3. Main components of a NAMA framework

The successful implementation of NAMAs by developing countries and their ability to reach emission reductions depend on several inter-related key elements that need to be put in place.

First, clear and effective domestic policy frameworks for achieving the overall NAMA policy goal are required, which create policy incentives or requirements to promote change in business’ behaviours. The policy instruments available in the toolkit for countries include, for example:

- Carbon taxes
- Emission targets/allowances
- Renewable energy or energy efficiency targets
- Technology R&D support incentives; and
- Standards

Putting a price on carbon emission, (through a national or sectoral cap-and-trade program or another policy instrument) goes a long way to improving the attractiveness of low-carbon investment options for investors. Some developing countries have already gone down this path. India is launching tradable programs in renewable energy and energy efficiency certificates to meet its national goals in these areas. Other countries are exploring the idea of domestic emission trading programs (e.g. the Republic of Korea, China and others).

To ensure that NAMAs are integrated into the long-term strategic economic priorities and plans (i.e. up to 2050) and support achieving these priorities, countries would need to develop National Low-Carbon Development Plans. Such plans would provide an overall national contextual framework for the NAMAs.

To meet the defined NAMA policy goals significant additional investment will be required. It is undoubtedly true that most of this will have to come from the private sector. Some investment may be stimulated through the carbon market under the cap-and-trade program but not nearly enough. The experience with the Clean Development Mechanism (CDM) to date shows that the expected carbon revenue normally provides up to 20 percent of the total project cost, while the remaining 80 percent needs to be raised from other sources, i.e. from debt or equity providers or from the project owner’s own capital base. In this case, carbon finance is enhancing the overall risk-return profile and financial attractiveness of the project, but is not fully substituting the conventional financing mechanisms. Moreover development of carbon market mechanisms in developing countries beyond CDM will take some time, so there is a clear need to bridge the finance gap in the meanwhile.

At the same time availability of financing in the form of equity or debt for low-carbon projects in developing
countries remains a challenge. In many cases such investments are considered by financiers as high risk ones and therefore commanding high interest rates. For traditional equity investors the expected returns on low-carbon projects are often not thought high enough to cover the risks involved. Moreover, there are general barriers to investment in many developing countries due to perceptions of instability, concerns over governance, exchange rate risks and other related factors.

In this context the second critical component for the implementation of NAMAs is the creation of the means to finance low-carbon investment. This can be done through a variety of instruments aimed at improving the risk-return ratio of green investment in developing countries. Priorities should include:

- Removing domestic investment barriers (such as opaque ownership laws, lack of domestic financial capital, low capacity of project owners to prepare credible business plans for investors, high investment risks, etc.);
- Enhancing return on investment, this may be accomplished by:
  - lower debt cost through public guarantee mechanisms, feed-in tariffs, etc.;
  - allowing GHG emission reductions achieved under NAMAs to be traded in the carbon market leading to higher return on investment (i.e. under creditable NAMAs), and
- Lowering the risks for investors (i.e. providing public seed capital or guarantees). Furthermore, improved transparency may also raise the appetite of companies to invest in particular jurisdictions.

Finally, the last critical component is clear guidelines and systems for MRV of emissions and emission reduction, including the creation of a national registry for recording national and sectoral emission reduction goals or targets and the actual emission reductions achieved.

One of the key challenges in this context in a number of countries will be strengthening of national legal and financial governance arrangements and institutions to help prevent fraud, ensure efficient tax regimes and to ensure return on capital investment.

In the following section we propose a model for financing low-carbon investment which can be created at the national level in developing countries within the overall NAMA framework with the help of international seed funding and external private capital.

### 4. Creating access to low-carbon finance through a PPP financing vehicle

Addressing the challenges to the availability of low-carbon finance in developing countries outlined above will require public sector intervention. However, the amount of public finance available internationally for supporting mitigation is not near the scale needed to be invested in developing countries. Therefore, a mechanism is required to deploy limited public funds in an efficient manner which mobilizes private low-carbon capital at scale.

We propose a model based on PPP finance as one approach. It utilizes a number of public finance instruments that can help remove barriers to private investment. Such instruments include loan guarantees, which allow lower interest rates for borrowers as the lender is protected against default; mixed equity funds, which lower the risks for private equity investors by subordinating the public capital in the fund, thus giving private investors their returns first and again protecting against the risk of project default or lower than expected financial performance; and other similar instruments.

The international finance pledged by the developed countries through the Copenhagen Accord, namely US$30 billion 2010-2012 and up to US$100 billion to be mobilized annually by 2020, should provide seed capital for the model giving access to low-carbon finance in developing countries and leveraging additional private finance at scale. Furthermore the model suggested ensures continuity of finance, as it would operate on a revolving basis both at the national and international level.

#### 4.1. Arrangements at the international level

Part of the international public finance provided for mitigation is committed to an international fund, which acts as the Fund of Funds and is authorized to provide grant finance, debt and equity for country-level PPP financial vehicles linked to concrete policy goals within the NAMA framework. This Fund of Funds can either be the Green Fund, which is being discussed in the international negotiations, or a separate international NAMA mitigation facility to be created under the Green Fund.

The Fund of Funds would be managed by an independent entity, guided by the COP. Its guidelines would specify rules for how it can invest and what criteria domestic PPP vehicles need to meet in order to obtain financing. The fund will provide a mix of financing options such as providing some grant financing for technical assistance, in particular to less developed countries, for developing national policy
frameworks or building capacity to prepare business plans; as well as equity and debt financing for domestic PPP vehicles.

This fund will be linked to an international NAMA registry. The registry will record the financing received from contributors and disbursed to each national PPP vehicle in the context of a particular NAMA or component thereof.

Countries wishing to obtain finance from the fund and to set up a national level PPP financing vehicles would need to qualify under the international eligibility rules, i.e.

obtain an international ‘NAMA eligibility certification’, which would be a similar concept to getting eligibility under the JI Track 1 procedure (see Box 1). This would require provision of evidence that the basic elements of the national infrastructure for NAMA are in place, including national GHG inventory and the MRV system.

Box 1: International certification for NAMA by Joint Implementation analogy

Joint Implementation (JI) is a market-based mechanism under the Kyoto Protocol, which allows a country with an emissions reduction or limitation commitment under the Protocol (otherwise known as an ‘Annex B Party’) to earn emissions reduction units from a project in another Annex B Party.

Track 1 procedure (otherwise referred to as party-verified projects) - reflects a simplified JI procedure which is only applicable to a host Party that has fulfilled all eligibility requirements. This allows the host Party to verify emissions reductions or enhancements of removals from a JI project as being additional to any that would otherwise occur. Upon successful verification, the host Party may issue the appropriate quantity of carbon credits. The eligibility requirements for Track 1 are:

1. It is a Party to the Kyoto Protocol;
2. Its assigned amount has been calculated and recorded according to the guidelines;
3. It has in place a national system for estimating GHG emissions and removals;
4. It has in place a national registry for emissions;
5. It must submit annually the most recent required inventory; must record and track the creation and movement of carbon reduction units and must annually report this information to the secretariat; and
6. It submits supplementary information on assigned amounts.

If a host country does not meet all the eligibility requirements as above, but its assigned amount has been calculated and it has a national registry, it can follow Track 2 JI procedure. Approval of individual projects under Track 2 procedure must be undertaken through the international procedure under the Joint Implementation Supervisory Committee (JISC). However, a host party which meets the requirements of a Track 1 JI may at any time elect to use the verification procedure under the JISC.

Similar arrangements can be put in place for NAMAs, where countries that meet the minimum eligibility requirements, i.e. have national inventory of GHG emissions and removals in place; have a national registry for emissions; have determined national policy goals for the NAMA and quantified corresponding expected reduction in emissions, would be eligible to draw on international finance from the Fund of Funds through setting up a national PPP financing vehicle. After that, domestic low-carbon projects in need of financing can be approved at the national level according to the national procedure and get financing directly from the PPP vehicle.

Developing countries that would not meet the eligibility requirements would need to go through an international procedure for accessing finance, with priority given to the support for building the national system for NAMA implementation. Individual private sector projects from such countries might still be able to get access to the finance, but a separate approval procedure at the international level would need to be established for such cases. For example, a special NAMA-readiness sub-fund under the Fund of Funds, may be established specifically to support projects in the countries where the national system is not yet developed.
4.2. Arrangements at the national level

A developing country intending to implement a NAMA and wishing to receive finance through the international investment facility or the international Fund of Funds will need to follow several steps (see Diagram 1). The sequence of the steps need not be set in stone as countries will implement the steps in parallel. However, it is suggested that the main elements outlined in each step below would assist the development and implementation of NAMAs.

**Step 1:** The country must determine its overall policy goal.

Ideally this goal would be economy-wide, but some countries may first choose to set up goals for specific carbon-intensive sectors depending on their national circumstances. As noted earlier more than 40 developing countries have already identified their overall national goals and communicated them in their submissions to the Copenhagen Accord.

**Step 2:** The essential domestic elements of the NAMA infrastructure are put in place. In particular, the country needs to ensure that it has an inventory of GHG emissions and removal; that the institutional arrangements necessary for setting up policy goals, monitoring and enforcing implementation are established; and that the national procedures for MRV of emissions and their reductions and for the approval of projects that seek financing are in place. At this stage the country may choose to undergo international eligibility certification for NAMA, giving it eligibility to obtain financing from the Fund of Funds and consequently operate under the domestic approval procedure for projects (as outlined in Box 1).

**Step 3:** The overall goal should be further specified in terms of concrete actions or policies that will be implemented in the key sectors. For example, actions A through G presented in Diagram 1 may include energy efficiency goals for a particular sector or for the entire economy, renewable energy targets, and certain technology standards. Actions identified and the expected emission reductions should be recorded in the national and international registry.

At this stage the country should set out what instruments will be deployed to implement these actions (for example, feed-in tariff for renewable energy to facilitate meeting renewable energy targets) and the associated financial needs, some of the actions countries will be able to implement without any additional financing mechanism. This is where investment needs can be met through the available domestic public and private capital. For other actions or policies there will be the need to provide low-carbon finance to stimulate private sector investment for reaching the set policy goals. The country will have to clearly determine which policy priorities require such support. For example, it may determine that it needs to facilitate investment to support its national energy efficiency goal, i.e. improving industrial energy efficiency by 30 percent over the current level, and its national goal of growing wind generation capacity twofold over the next 5 years. Actions for which the country plans to draw on international finance, need to be clearly marked in the international NAMA registry, so they can be matched to financing from the international Fund of Funds.

**Step 4:** Once the policy priorities and actions that require financial support have been determined the country establishes a national green investment PPP vehicle, which provides equity and debt to individual projects falling within the defined policy goals. In the example above the individual projects aimed at improving industrial energy efficiency by 30 percent or more, or new investments in wind energy would be eligible to receive financing. The PPP may also provide some grant or concessional loan support to the government. i.e. for implementation of feed-in tariff to support generation of energy from wind farms or capacity building support for project owners on preparation of business plans for low-carbon investment.

Box 2 presents some ideas on how the financing for such a vehicle can be arranged through a combination of international public finance from the Fund of Funds, national public finance, income from issuance of green bonds4 and private sector finance. In order to obtain international public finance the national PPP vehicle would need to be accredited with the Fund of Funds, making sure that its procedures correspond to international fiduciary standards and that its financing priorities are in line with international guidelines for mitigation finance.

**Step 5:** Individual domestic projects, i.e. improvement of energy efficiency beyond 30 percent, can now undergo approval through domestic procedure and obtain financing through the PPP vehicle.

**Step 6:** Once financing either in the form of equity or debt or a combination thereof is obtained, the project gets implemented. In this process it undergoes MRV according to the internationally established standards and the resulting emission reductions get recorded in the national registry (Step 7).

At the end of the period for which the NAMA was designed, the emission reductions recorded in the national registry for each policy goal are consolidated and reported to the international NAMA registry.

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4 A bond is a financial instrument which can be used to raise capital as an alternative to taking out a traditional bank loan. The benefit of issuing a bond is that it attracts a wider market of investors. For example, financial institutions which would not lend to a PPP vehicle because loans are not part of their investment strategy may instead purchase bonds. For a detailed discussion of green bonds see ‘Meeting the Climate Challenge: Using Public Funds to Leverage Private Investment in Developing Countries: Section 2 – Raising finance’, by Marta Romani, LSE Grantham Research Institute in collaboration with Leila Pourarkin, DECC, LSE September 2009; and ‘Green Sectoral Bonds: Draft concept note for review & discussion’, IETA, May 2010.
Diagram 1: Framework for implementation and financing of NAMAs

1. Country sets the overall policy goal

2. National infrastructure is put in place, i.e. inventory, registry, approval and MRV procedures. A country undergoes international NAMA eligibility certification.

3. Set of actions in the key sectors that reduce emissions below BAU forming the NAMAs are identified.

4. PPP vehicle established

5. A project falling within one of the actions or policy goals in a specific sector under the NAMA framework applies for national approval and finance from the national PPP vehicle.

6. Projects get financed from PPP and implemented.

7. Sent to the international NAMA registry
Box 2: Financing sources for the national PPP vehicle

The national PPP vehicle will be based on the public private partnership model, in which public capital is deployed alongside private sector capital but with a different expectation of return in order to mitigate the risks for private sector investors or to lower the costs of debt being provided.

Part of financing for the vehicle will be provided by the international Fund of Funds, therefore representing international public finance. The contribution from the Fund of Funds may be a combination of:

- Grant finance, which can be allocated to the technical assistance tranche of the PPP;
- Equity investment by the Fund of Funds in the national PPP (where the Fund of Fund will own a share in the domestic vehicle and expect to receive some return on its investment with time. However the fund will be the last one to draw on its rights for return (subordinate equity), allowing other investors to receive their capital first; and
- Concessional long-term debt, i.e. with lower than commercial interest rate or a provision for deferral of interest rate payments in the first few years. The national PPP vehicle would be expected to pay back the finance it has received with interest at a future date.

The PPP may also be open to the Multilateral Development Banks (MDBs).

The second part of financing will be provided by the national government. It can be either a contribution from the national budget either as equity in the PPP vehicle or as a concessional loan to the vehicle (similar to the above). The government may also issue green bonds, linked to the policy goals that the PPP vehicle is supporting and offering guaranteed return to the investors. The income from the sale of bonds is to be invested in the PPP vehicle.

Finally the PPP vehicle would be open to private investors, i.e. local and international equity and debt providers. Public capital participating in the vehicle will be subordinate to the private, thereby improving attractiveness of this investment for private sector. The appropriate ratio would need to be determined in each particular case, i.e. in the infrastructure PPP funds the ration of public to private capital is often around a 30 to 70 split.
5. Creating access to low-carbon finance through creditable NAMAs

Another effective mechanism for removing some of the barriers to low-carbon investment in emerging economies can be carbon crediting for emission reductions achieved in a project. This approach has already been successfully tested under the CDM, under which the emission reductions from a project in a developing country can be used to meet emission reduction commitments in developed countries. The income from the sale of carbon credits on average constitutes around 20 percent of overall financing of the project.

However, under the CDM each individual project has to go through a lengthy international approval process. This often leads to delays with the implementation and high transaction costs, making it difficult for medium and small size projects to profit from the mechanism. While being a useful mechanism for promoting green investment in developing countries and for lowering costs of compliance with emission targets in developed countries, the CDM alone will not be able to deliver the scale of investment required to finance transition to low-carbon growth in developing countries.

In this context creditable NAMAs can offer an effective solution. As noted earlier, it has been proposed in the international negotiations that NAMAs could also generate carbon credits for sale in the carbon market. The key difference to the CDM in this case would be that provided a host country has set a clear quantifiable national policy goal for reducing GHG emissions and meets certain eligibility requirements, i.e. gets certified for NAMA eligibility (as discussed above), the country can approve issuance of carbon credits to domestic projects that meet or outperform the national goal and comply with the MRV requirements. These carbon credits can then be traded internationally.

The steps that a host country would need to go through would be similar to the ones outlined in the previous chapter. While in some cases creditable NAMAs may still use a PPP financing model described in the previous chapter, in other cases extra premium to return associated with the sale of carbon credits would be enough to mobilize financing for low-carbon projects. Diagram 2 presents the essential steps associated with the implementation of the proposed creditable NAMA framework.
Step 1: The country must **determine its overall policy goal**. Such goals may be specified for the whole economy or for specific carbon-intensive sectors depending on the national circumstances.

Step 2: As in the previous case, the essential **domestic elements of the NAMA infrastructure** are put in place. In particular, the country needs to ensure that it has an inventory of GHG emissions and removal; that the institutional arrangements necessary for setting up policy goals, monitoring and enforcing implementation are established; and that the procedures for MRV of emissions and their reductions and for the approval of projects that seek financing are in place and comply with the international MRV standards. At this stage the country may choose to undergo international eligibility certification for NAMA, giving it eligibility to approve projects that meet the national policy goals and to consequently issue carbon credits to such projects.

Step 3: The overall goal should be further specified in terms of **concrete actions or policies that will be implemented in the key sectors**. For example, actions A through E presented in Diagram 2 may include energy efficiency goals for a particular sector or for the entire economy or renewable energy targets, and certain technology standards. Actions identified and the expected emission reductions should be recorded in the national and international registry.

For example, as discussed above, the country may determine that it needs to facilitate investment to support its national energy efficiency goal, i.e. improving industrial energy efficiency by 30 percent over the current level.

Step 4: Individual domestic projects, i.e. improvement of energy efficiency beyond 30 percent, can now undergo **approval through domestic procedure to be eligible to generate carbon credits**.

Step 5: Once the project gets implemented it undergoes MRV according to the internationally established standards and the resulting emission reductions get **carbon credits issued and recorded in the national and international registry**.

Some proposals in the international negotiations suggest that only part of the emission reductions under NAMAs should be eligible to generate carbon credits. Essentially in this case the domestic policy goal for self-financed effort (i.e. 30 percent improvement in energy efficiency) serves as the baseline against which creditable emission reductions are calculated.

Carbon credits produced through this mechanism can either be sold to the international buyer (providing that there is a provision that after a country has gone through the international NAMA eligibility certification, it’s carbon credits will be recognized for compliance in other countries or to domestic companies that are failing to meet their minimum emission or energy efficiency improvement targets.

For this mechanism to work strong enforcement mechanisms at the national level will be required to ensure domestic compliance of companies with the mechanism. This will require strengthening of domestic institutions and transparent MRV mechanisms at the national level.
Diagram 2: Framework for creditable NAMAs

1. Country sets the overall policy goal

2. National infrastructure is put in place, i.e. inventory, registry, approval and MRV procedures. A country undergoes international NAMA eligibility certification.

3. Set of actions in the key sectors that reduce emissions below BAU forming the NAMAs are identified.

4. A project falling within one of the policy goals under the NAMA framework applies for national approval

5. Project gets implemented, MRVed and credits are issued

International NAMA registry
NAMA of country
Set of actions: A B C D E
Issued carbon credits

National Goal
Domestic procedures & processes
MRV system

Actions A-H

Tradable carbon credits

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6. Further thoughts

The ideas proposed in this paper set out the potential ways to address the barriers to low-carbon investment in developing countries and to mobilize significant additional private finance.

Placing the PPP vehicle at the national level allows for faster project approval and finance disbursement according to national priorities, while the international certification of the national procedures and accreditation of the vehicle with the Fund of Funds serves to ensure transparency and environmental and financial integrity. Similarly, placing approval of projects and of issuances of carbon credits at the national level under creditable NAMAs allows avoiding inefficiencies of the CDM process and scaling-up of investment to a greater level.

In this way quality control at the international level (at the level of the COP) is still being exercised, but not at the project level as in the case of CDM. Freeing control at country level through the certification of NAMA eligibility is similar to the way the performance of developed countries is controlled through their submitted inventories and in-country expert reviews.

Other issues, such as the development of technology networks (to change technology adoption behaviors) and an effective demonstration effect will also be critical to the success of NAMAs in the long-term. NAMAs may be used to stimulate innovation in Non Annex I, countries so they could be seen by investors as a means of unlocking technological innovation in these countries.

NAMAs offer a significant opportunity to rapidly deploy substantial capital into developing countries thus offering a whole range of development positive, climate friendly infrastructure and infrastructure-like projects. To seize this opportunity the public sector must embrace and encourage greater private sector capital participation. We have offered one model to achieve this – whether by this model or some other stimulation if climate mitigation and adaptation can be achieved.
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