

## **Introduction**

- 1 Climate change is one of the greatest challenges of our time. It poses a clear danger requiring an extraordinary global response that should respect the priority of economic and social development of developing countries. Indeed, moving to a low-carbon economy is an opportunity to promote continued economic growth and sustainable development, while the need for and deployment of transformational clean energy technologies at lowest possible cost are urgent. The response to climate change must involve balanced attention to mitigation and adaptation.
- 2 The transition to a low-carbon, climate-resilient global economy has several implications that fall within the domain of finance ministries. Climate financing issues are cross-sectoral and have budgetary implications across ministries in both contributing and recipient countries. Given the need for structural adjustments to shift to a lower-carbon, climate-resilient path of economic development, all countries will need to pursue domestic economic policies that ensure as smooth a transition as possible. The costs of actions will vary according to how efficiently and when they are undertaken. Finally, existing and possibly new international financial institutions and arrangements will need to play a role in addressing the problem. For these reasons, it is important that finance ministries are fully engaged with the issues around climate change finance.
- 3 With these issues in mind, leaders at the Major Economies Forum asked G20 finance ministers to take up the issue of climate finance and report back to them in Pittsburgh. These efforts, by both the MEF and the G20, must support the objectives, provisions, and principles of the UNFCCC, as well as the achievement of agreement in Copenhagen, and do not constitute separate negotiating tracks. This paper summarizes the technical work of the G20 expert group on climate finance.

## **Addressing the scale of the problem**

- 4 Recognizing the scientific view that the increase in global average temperature above pre-industrial levels ought not to exceed 2 degrees Celsius, financial resources for mitigation and adaptation will need to be scaled up urgently and substantially and should mobilize resources to support developing countries in taking action starting in the near term with an expectation of continued and substantial growth in the future. Developed countries should take the lead and pursue deep cuts in their emissions, but the emissions of developing countries will also have to deviate significantly from 'business as usual' (BAU) if the risk of exceeding 2 degrees is to be reduced, and they will need new and additional financial support to do so. The extent of this deviation will vary depending on the precise environmental goal. In addition, developing countries will face the costs of adaptation to the climate change that is already inevitable. Many of those countries which are most vulnerable to climate change are also least able to finance adaptation without support. Given the need to finance these actions, many observers have referred to a major financing "gap" between projected needs and current sources of funding.
- 5 Estimates of the magnitude of the financing need for climate change in developing countries are wide-ranging. For instance, the 2010 draft World Bank World

Development Report (WDR) cites a number of sources giving a range of estimates for adaptation and mitigation finance that vary by a factor of six depending on the analysis, the ultimate emissions reduction (i.e. mitigation) goal, and many other assumptions – but all estimates exceed US\$100 billion per year by 2030. This will require a substantial scaling up of resources, using a combination of international public finance, international private finance, and domestic public and private finance.

### **Leveraging private sector and carbon markets**

- 6 Given this assessment, it will be important to leverage private investment. Particularly for mitigation, private financial flows will need to help bridge the overall finance gap. Private finance can be stimulated through the creation of an appropriate policy environment including subsidy reform; institutional arrangements (such as secure property rights); public investment in capacity building, market readiness and research; and the development and demonstration of technologies that are not yet commercially viable.
- 7 International carbon markets have the potential to catalyze mutually beneficial flows of private finance to developing countries, helping the world economy reduce emissions at least cost. International offsets for developed country programs help to promote efficiency in controlling carbon emissions. However, such offsets could also reduce net emissions globally if they are the key to more ambitious targets in developed countries and leverage domestic actions in developing countries. As we pursue the benefits of international carbon markets, it will also be important to pursue the appropriate market structure, oversight, transparency, and regulation to both safeguard potential participants and encourage participation.
- 8 The financial flows to developing countries from offsets can be substantial. Primary CDM transactions were valued at an estimated US\$6.5 billion in 2008, as the total value of carbon market transactions doubled from 2007 to 2008. Future markets have even more potential, with more than US\$10 billion in primary transactions possible in 2012 under a U.S. program alone, based on analyses of the bill recently passed by the U.S. House of Representatives. Estimates by the Australian Treasury suggest that the value of private sector flows of carbon finance from developed to developing countries could be on the order of \$100 billion by 2020.
- 9 Expanding the coverage of the Clean Development Mechanism (CDM) under the Kyoto Protocol and improving its governance and institutional arrangements could significantly increase the flow of credits from the CDM. Reforms are needed to balance encouraging broad participation with preserving environmental integrity and market credibility.
- 10 New mechanisms, such as sectoral approaches to credit quantifiable mitigation actions, have the potential to further increase the scope of the global carbon market in providing support and incentives for mitigation commitments and actions in developing countries far beyond levels currently possible using the CDM.
- 11 Another possible market mechanism which some countries have suggested is NAMA (“nationally appropriate mitigation action”) crediting that would provide support for the implementation of NAMAs. A NAMA crediting mechanism could operate either by

directly crediting quantified emission reductions resulting from the implementation of policies and measures, or as a sectoral crediting mechanism if credits were issued at the sectoral level to support the underlying NAMAs. The effectiveness of this form of crediting would depend on whether the emissions reductions resulting from the implementation of the policy or measure concerned could be directly and robustly quantified, as is the case for sectoral approaches.

### **Delivering significant levels of public finance**

- 12 Even with a robust private sector role, significant levels of public finance will be needed. Immediate priorities for public finance include help for developing countries to (1) develop national country-owned plans for mitigation and adaptation to ensure that finance is directed to where it is needed most; (2) build capacity to access markets; (3) address market failures; (4) ensure that adaptation assistance is prioritized for the most vulnerable; (5) build capacity for activities and investments that will Reduce Emissions from Degradation and Deforestation (REDD); (6) build technology cooperation; and (7) promote mitigation efforts beyond offsetting schemes.
- 13 There are many existing institutions and various funding mechanisms directed at the problem, but they are currently fragmented, insufficient in scale and scope, and do not adequately exploit programmatic approaches. Part of the solution may be country-owned plans that integrate low-carbon, climate-resilient efforts into existing national and international development efforts using new and additional resources above and beyond current ODA. While the potential for applying existing national and international development institutions to climate finance should be fully exploited first, taking into account their existing expertise and potential for reform, it still may be necessary to create a new institution and/or fund in a future international climate finance system.
- 14 There are four main questions around international public finance that will need to be addressed: What form might international public finance commitments take? What might be the sources of new funding for climate change? How can climate finance best be governed? And what are the options for matching funding with needs?
- 15 Regardless of the funding mechanism(s), countries will likely seek multilateral decisions about the level of contribution. One issue is who will contribute. Two basic options have been presented, though there may be more:
  - a. Only developed countries.
  - b. All countries except LDCs.

The second issue is the form of the commitment, for which three basic options have been proposed:

- a. Individual country pledges that result from periodic, multilateral negotiations over the overall budget and national contributions.
- b. Regular assessments based on a transparent formula and a periodic negotiation over the overall budget.

- c. A hybrid of (a) and (b), where countries are given the option of making their commitment based on a formulaic indicator or based on their own criteria (used by UNEP).

16 Related to the form of commitment is the question of from where funds will derive, with contributors particularly concerned about flexibility, control, and sovereignty, and all countries seeking predictability and stability. Options can be broadly grouped into two categories:

- a. National budget processes, a set-aside under a national cap-and-trade, or other nationally earmarked revenue, where funds are channeled through national governments to bilateral or multilateral mechanisms.
- b. Proposals for international revenue generation (e.g., taxes on international bunker or aviation fuels, the auctioning of international allowances, or taxes on offset origination, such as the Adaptation Fund model) where funds would go directly to an international institution.

While the proposals for international revenue generation would likely require broad agreement, nothing prevents different options from co-existing. Such flexibility could encourage increased funding by accommodating contributors' interests, but would need to address all countries' concerns over predictability and stability.

17 The governance of individual institutions relates to how decisions are taken, representation in decision-making bodies of the institutions, and their authority and oversight, and should draw upon best practices from development finance. This suggests principles of fairness, transparency, and efficiency. Current models of representation for consideration in climate finance institutions include:

- a. Representation of U.N. regional groups, LDCs, SIDs, other developing countries, and developed countries with simple majority voting (i.e. Adaptation Fund).
- b. Majority recipient countries with double majority voting of participants and total contributions (i.e. GEF).
- c. Equal representation of developed and developing countries (i.e. Climate Investment Funds) with consensus decision-making model.
- d. Mixture of developed and developing countries, as well as civil society and private sector representatives with 2/3 majorities needed of different groupings to render decisions (i.e. Global Fund to Fight AIDS, Tuberculosis, and Malaria).

All of these reflect a change in governance from the traditional donor-dominated model.

18 With multiple bilateral mechanisms and possibly multiple multilateral mechanisms, a key issue is how to maintain coherence and coordination among different channels of finance. At the national level, recipient countries will need to ensure that inflows from multiple channels are effectively targeted to country-identified priority actions.

Coordination at the international level will come from, at a minimum, providing a venue where contributors, recipients and other key actors can keep track of ongoing activities and where both funding needs and opportunities exist. This would involve (1) supporting / guiding recipients and financial mechanisms to find each other and (2) tracking and reporting information on finance activities. It might also include (3) overseeing measurement, reporting, and verification (MRV) and / or monitoring and evaluation (ME) of actions and support discussed below, (4) prioritization of finance, and/or (5) directly managing some portion of funding.

- 19 In the same way that mitigation commitments must be measured, reported and verified, public finance contributions must also be measured, reported and verified. Principles of sound financial management must be followed in order to give contributor countries the confidence to put finance into the system. Coupled with providing expeditious access to finance for country-owned actions, this will also give recipient countries the confidence to take action. Private finance flows coming through the carbon market could also be monitored, but treated separately from public finance commitments.

## **Summary and going forward**

- 20 Given the request by leaders for finance ministers to report on climate finance issues in Pittsburgh, it will be important to identify potential messages. Based on this work by experts, these messages could include principles, options, or recommendations for further work on the following topics:
  - a. The need for a substantial increase in financial resources.
  - b. The relationship between climate finance and planning, and development finance and planning.
  - c. The role of the public and private sector
  - d. The potential for improving and expanding private sector finance, in particular carbon markets and the structure, oversight, and regulation associated with those markets.
  - e. The potential for improving existing multilateral institutions and funds and/or needs for a new fund.
  - f. The form of international public finance commitments
  - g. The sources of funding for these commitments
  - h. The governance of any new international financial mechanisms
  - i. The matching of funds to needs and needs to funds
  - j. The measurement and counting of financing