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**This Document is intended to stimulate and guide the discussions during the Dialogue
The views expressed in it are not forcefully those of the Swiss and Mexican governments**

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Briefing Notes for the Geneva Dialogue on Climate Finance

Introduction and Suggested Discussion Questions

Finance is one of the key issues in the ongoing negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) and will be a critical issue at the sixteenth Conference of the Parties (COP 16) in Cancún, Mexico in December 2010. There is general agreement in the negotiations on the need to increase financing for climate change mitigation and adaptation. However, divergent views remain concerning many of the key issues, including a new climate fund, oversight and coordination of public financing, and the role of the private sector.

Role of the New Climate Fund

Parties to the UNFCCC generally agree that a new climate fund is needed, but many issues require further negotiation in order to reach agreement. Outstanding issues include: sources of funds; governance, including board and trustee modalities; funding windows; access to funds; and the need for priority assistance.

1. How should the new climate fund be financed? How prominent a role should be given to innovative financing options?
2. What should be the relationship between existing funds and any new funds? What role should existing multilateral institutions play in a new climate fund?
3. Are specialised funding windows needed? Can these funding windows be designed to be sufficiently flexible to respond to changing needs and circumstances?
4. Should there be differentiation in access to funding? Should priority be given to particularly vulnerable countries, such as least developed countries?
5. Should non-Annex I countries have direct access to funds? How would that be governed to ensure adequate accountability?

Improving Oversight and Coordination of Public Financing for Climate Change

The need for a better system of overseeing and coordinating climate financing is important in the international climate negotiations and is a prerequisite to build trust, ensure accountability, and foster efficiency and effectiveness. Efforts are underway to improve coordination and coherence, and to identify new sources of funds and track finance pledges from countries; but countries have yet to agree on institutional arrangements and an overall framework to oversee and coordinate finance for climate change.

1. What are priority considerations for an improved oversight system for finance? What information is needed to take informed decisions?
2. What are the priority issues to be addressed by an overarching governance body? What structure would best allow the overarching body to address these priority issues?
3. Are thematic bodies on mitigation, adaptation, technology and capacity building needed? Should these bodies function in an advisory or technical role?

4. Should new guidelines for financial support reporting be developed? If so, how can this effort be successfully launched at COP 16?
5. Should the UNFCCC rely on existing (and improved) systems for compiling and accessing information on public finance, or should a complementary system be implemented under control of the UNFCCC?

The Role of the Private Sector in Long-term Climate Financing

The private sector will be a significant source of the needed investment for mitigation and adaptation. Governments will need to explore ways to overcome barriers that hold back private sector participation, and consider means to leverage increased investment through coordinated international action and national initiatives. This could include policy certainty regarding the post-2012 regime, private sector participation in the climate change policy process, using public funds to leverage private investment, and scaling up the carbon market.

1. What is the role of the private sector in long-term financing, and what might it encompass?
2. How would (and should) the oversight of private financing differ from that of public financing?
3. How to account for the profit factor in the discussions of private sector financing for climate change?
4. Is there a role for public finance to link with and leverage private investment?
5. What instruments and incentive frameworks to increase private investments and financial flows to non-Annex I countries could be established at the international level?

Briefing Note 1

Finance Negotiations under the UNFCCC and Climate Change Finance

Finance is one of the key issues in the ongoing negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). Parties to the Convention have agreed that countries with more resources will provide financial assistance to those less well off and more vulnerable. The UNFCCC states that Annex II Parties shall provide financial resources to assist non-Annex I Parties in implementing the UNFCCC.¹ There is general agreement in the negotiations on the need to increase financing for climate change mitigation and adaptation. However, divergent views remain concerning many of the key issues, including a new climate fund, oversight and coordination of public financing, and the role of the private sector.

Addressing climate change will require a significant shift in global investment and financial flow paradigms. The United Nations Development Programme estimates that an additional US\$86 billion per year will be needed by 2015 for adaptation. The UNFCCC Secretariat's *Investment and Financial Flows to Address Climate Change* puts the total additional funding required to return greenhouse gas (GHG) emissions to 2005 levels between US\$200 and US\$210 billion in 2030. At least half of that amount will be needed in non-Annex I countries.

While a major share of the current GHG concentrations in the atmosphere originate from Annex I countries' emissions since the industrial revolution, an increasing share of emissions come from non-Annex I countries. On a global contribution level, non-Annex I countries have huge populations and rising GHG emissions (and many have large wealth); but on a per capita basis their incomes and emissions remain in most cases far below those of Annex I countries. International Energy Agency (IEA) data indicated that in 2007, per capita gross domestic product (GDP) in Annex I countries averaged US\$23,043 compared to US\$4,300 in non-Annex I countries. In 2007, per capita carbon dioxide emissions from fuel combustion in Annex I countries averaged 11.1 tons compared to 2.7 tons in non-Annex I countries. This points to a central dynamic in the financing negotiations going forward: rapidly increasing GHG emissions in developing countries, while developed countries have greater historic responsibility for and greater capacity to address climate change.

This briefing note reviews the current situation with regard to climate finance, and provides an overview of the current status of finance negotiations under the UNFCCC.

Current status of climate change finance

Funding for climate change comes from both public and private sources. Funding for non-Annex I countries under the UNFCCC is provided through the Global Environment Facility (GEF), including under the Special Climate Change Fund and the Least Developed Country Fund; and the Adaptation Fund of the Kyoto Protocol. The largest multilateral funding sources for climate change in non-Annex I countries outside the UNFCCC are the World Bank's Climate Investment Funds. Funding for reducing emissions from

¹ Annex I Parties are the industrialized countries that were members of the OECD in 1992, plus countries with economies in transition (the EIT parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States. Annex II Parties consist of the OECD members of Annex I, but not the EIT Parties. Non-Annex I Parties are mostly developing countries.

deforestation and forest degradation in developing countries (REDD) is provided, *inter alia*, through UN-REDD and the World Bank's Forest Carbon Partnership Facility. Official development assistance (ODA) and bilateral initiatives also play a significant role in combating and adapting to climate change in non-Annex I countries. In recent years, various donor countries have launched funding initiatives targeting climate change mitigation and adaptation. (Additional information about multilateral and bilateral funding initiatives is included in Annex I.)

A fundamental issue in the financing negotiations is the requirement for “new and additional” resources, or insuring that new funding for climate change is additional to ODA and existing contributions. Recipients of funds are adamant that additionality of funding be proven so that donors cannot simply shift ODA funds from an existing directive to climate change. Funds related to ODA (see Annex I) are scrutinized to ensure that they are new pledges and not simply reappportionments. A cost-effective and efficient means of determining financial additionality is needed; one that does not result in too many resources being used to address additionality issues at the expense of implementing activities.

In addition to publically-funded multilateral and bilateral initiatives, the private sector constitutes an important source for climate-related investment in non-Annex I countries. The United Nations Environment Programme (UNEP) states that global investment in sustainable energy—including wind, solar, biofuels, biomass, and waste—climbed to US\$155 billion (annually) in 2008. The majority of private financing is concentrated in a limited number of countries, indicating that development of clean energy systems is not happening on a global basis. In addition, there is a paucity of private finance for adaptation for a variety of reasons including perceived risky investments and a lack of underlying structural investments.

Private finance can flow through the carbon market and through investment activities in non-Annex I countries. The Clean Development Mechanism (CDM), a market-based mechanism established under the Kyoto Protocol, provides access to the carbon market for non-Annex I countries. Certified Emission Reductions (CERs) from CDM projects in non-Annex I countries can be used by Annex I countries to count toward their Kyoto commitment.² The World Bank reports that CDM transactions were valued at US\$2,678 million in 2009, down considerably from US\$6,511 million in 2008. Large non-Annex I countries have attracted the majority of CDM investment; as of August 2010, over 70 percent of total CERs expected by 2010 will be generated by projects located in China and India.

Non-Annex I countries are making significant investments in climate-related activities (adaptation and mitigation) themselves. The reporting systems for such investments are inadequate and there is no credible tracking of these investments.

Status of finance negotiations under the UNFCCC

Finance is one of the building blocks of the Bali Action Plan, which was adopted by the thirteenth Conference of the Parties (COP 13) in 2007. The plan sets out the mandate for the ongoing negotiations on long-term cooperative action under the UNFCCC, and states that negotiations are to consider “enhanced action on the

² A CER is a Kyoto Protocol unit equal to one metric tonne of carbon dioxide equivalent. A CER is a credit for GHG emission reductions achieved by a CDM project. The credit is registered by the UNFCCC and can be used by Annex I Parties to count toward their Kyoto commitments.

provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation.”

Finance issues listed in the Bali Action Plan for further consideration include improved access to and the provision of new and additional resources; providing support for mitigation and adaptation; mobilizing public- and private-sector funding and investment; and identifying innovative ways to assist particularly vulnerable countries. These issues have been considered by the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) since its first session in March-April 2008. The original deadline for completing these negotiations was COP 15 in Copenhagen, Denmark in December 2009. However, during COP 15 countries decided to extend the mandate of the AWG-LCA until COP 16 in Cancún, Mexico in November-December 2010.

The Copenhagen Accord that was negotiated at the UN Climate Change Conference in December 2009 included political agreement on some issues relating to finance. However, the Accord was not formally adopted in Copenhagen; the COP agreed to “take note” of the Accord. It was also agreed that Parties to the UNFCCC could indicate their willingness to associate with the Accord; and 137 countries have communicated their support for the Accord as of August 2010.

The main points of the Copenhagen Accord related to financing are:

- Agreement that “scaled up, new and additional, predictable and adequate funding as well as improved access shall be provided to developing countries” to enable enhanced action on mitigation (including REDD-plus), adaptation, technology development and transfer, and capacity building.

- Annex II country commitment to provide new and additional resources for non-Annex I countries approaching US\$30 billion for the period 2010-2012 with balanced allocation between adaptation and mitigation.
- Annex II country commitment to a goal of mobilizing jointly US\$100 billion dollars a year by 2020 to address the needs of non-Annex I countries. Such funding would come from “a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance.”
- Agreement on the Copenhagen Green Climate Fund as an operating entity of the Convention’s financial mechanism and on a governance structure “providing for equal representation of developed and developing countries.”
- Agreement to establish a High Level Panel under the COP to study the contribution of potential sources of funding.

The role of the Copenhagen Accord in the UNFCCC negotiations has been subject to debate. Many countries have stressed that this political guidance from world leaders should be reflected in further negotiations; while others have opposed this on the grounds that the Accord was not adopted by the COP. The Copenhagen Accord’s main impact on finance negotiations has perhaps been reaching a political commitment on the scale of contributions, and the mobilization of a considerable and rapid upscale of climate financing in the years

2010-2012. The Accord also indicates general agreement on the establishment of a new fund under the UNFCCC, and this has been reflected in the formal negotiating process amongst Parties.

Three negotiating sessions have been held under the UNFCCC since Copenhagen. The latest round took place in August 2010 in Bonn, Germany. The August version of the AWG-LCA's negotiating text on finance contains four pages mainly focusing on institutional and governance issues. There has been progress towards general agreement that a new fund is needed, and discussions continue on architecture and institutions. While progress has been achieved, divergent opinions on these latter topics raise concerns about the ability of Parties to reach agreement on text that could be the basis of a decision at COP 16.

Briefing Note 2

Role of the New Climate Fund

Countries in the UNFCCC negotiations have moved toward general agreement on the establishment of a new climate fund to support mitigation and adaptation actions in non-Annex I countries. The Copenhagen Accord included a Green Climate Fund, and several countries have put forward proposals for a new fund. Many issues related to a new climate fund remain outstanding in the UNFCCC negotiations and are discussed in this briefing note, including sources of funds; governance, including board and trustee modalities; funding windows; access to funds; and need for priority assistance.

Source of funds

The source of funds includes consideration of the specific level of funding for a new climate fund, and how to provide some certainty that these funds will be available over time. Determination of how public financial support will be provided is also required, such as in the form of grants or loans; and consideration regarding the mix of dedicated climate change funding, official development assistance (ODA), revenues from innovative new sources of funds, and whether countries will have flexibility to raise funds using different sources. In this regard, the roles of the public and private sector will need to be clarified.

Many non-Annex I countries emphasize the need for new, additional, adequate, and predictable public financing for climate change and support the idea of assessed contributions by Annex II countries (such as a percentage of their GDP). Annex II countries generally stress the importance of mobilizing the private sector, arguing that the public sector will not be able to deliver the amount of financing needed to address climate change. The carbon market and the possible establishment of new market-based mechanisms are ways to increase private sector participation in climate financing, but some non-Annex I countries are opposed to the use of markets.

In this context, it is useful to note that the UN Secretary-General established a High Level Advisory Group on Climate Change Financing in February 2010. This group is not a negotiating forum but is intended to provide valuable input for the financing negotiations. The Group's objective is to study potential sources of revenue for climate change financing and develop practical proposals on how to significantly scale-up long-term financing from various public as well as private sources. The Group is co-chaired by the Prime Ministers of Norway and Ethiopia and includes three Heads of State, several ministers, and representatives of development banks and academia. The Group will submit its report in November 2010, aiming to contribute to an appropriate decision at COP 16 in Cancún. Many Annex I countries have stressed the importance of considering the High-level Advisory

Group's report; while some non-Annex I countries question the relevance of the Group's work to the UNFCCC process.

Parties have proposed several options for generating additional funds, which can be divided into three broad categories:

- National budgetary allocations – Annex II countries provide public funding to the climate change fund. Some non-Annex I countries have called for mandated commitments, such as a certain percentage of Annex II countries' GDP, or the development of a scale for assessed contributions.
- National market-based levies – levies that would be generated independent of national budgetary processes, but the revenues would be collected by national governments. One option is to set aside and monetize a percentage of Assigned Amount Units (AAUs) for auction in Annex II countries.
- International market-based levies – collection of levies at the international level. Options include a levy on international air travel; a levy on emissions from international aviation and maritime transport; a share of proceeds on flexibility mechanisms, such as the two percent levy on CDM projects to raise funds for the Adaptation Fund; and auctioning of AAUs at the international level.

Governance of the fund

Governance of the new climate fund is a controversial topic in the negotiations. Key issues include the new climate fund board, trustee of the fund, thematic bodies, specialized funding windows, access to funds, and priority assistance.

New climate fund board

Most Parties view any new climate funds as operating entities of the financial mechanism of the UNFCCC, but the composition of and criteria for the board of a new climate fund is an issue of discussion. Non-Annex I countries generally see any new funds as under the supervision of a new oversight body, the proposed new Finance Board. Many have called for a new climate fund board that has equitable and balanced representation of Annex I and non-Annex I countries. A proposal from a non-Annex I country suggested 19 members, with three from each UN regional grouping, two from small island developing states, and two from least developed countries (LDCs).

Annex II countries, in general, want to build a new climate fund that is complementary to other funds under the Convention. They prefer to use and strengthen existing institutions such as the World Bank and the Global Environment Facility (GEF), and to foster synergies between and better coordinate the use of existing institutions. Many Annex II countries envisage the new climate fund board under the guidance of COP, with a secretariat serving as an independent dedicated fund manager reporting to the board. Some Annex II countries have expressed preference for a membership that is balanced between net contributors and net recipients. This opens another discussion point, in that a contributor to the fund may at some point in time become a recipient, and vice versa. There may need to be some metric of determination, or some type of rotating membership.

Trustee of a new climate fund

Annex II countries generally prefer that the World Bank serve as the trustee of a new climate fund, maintaining that the bank is the only institution with the fiduciary standards, safeguards, and experience to serve as trustee for the fund. There is no consensus among non-Annex I countries on the trustee of the new fund. Some non-Annex I countries prefer an open bidding process for selecting the trustee, while others are of the view that the World Bank should become the trustee.

Establishment of specific funding windows

Many non-Annex I countries support the establishment of specialized funding windows—or a series of specific funds for adaptation, mitigation, REDD+, technology transfer, and capacity building—as a means for effectively channelling funds. While some non-Annex I countries are particularly keen on technology and capacity building windows; others are of the view that two main windows for adaptation and mitigation might be preferable, with technology and capacity building maintained as cross-cutting themes. Some countries have questioned the need for a new adaptation window, maintaining that it would duplicate work of the existing Adaptation Fund. Generally non-Annex I countries would like to see the COP adopt a decision on the specialized windows; whereas some countries would prefer that the climate fund board decide on the need for specific windows.

Access to funds (e.g. direct or simplified access)

Many non-Annex I countries have indicated that they want simplified, improved, and effective access to financial resources in a timely manner, including “direct access.” The concept of direct access under the climate change regime is not well established, and some Annex II countries have asked for clarity. In regard to the Adaptation Fund, non-Annex I countries can go through implementing agencies, such as the World Bank, GEF, UNDP or UNEP; or they can establish national implementing entities, which can then be used to access funds “directly” (i.e., they do not have to go through the traditional international implementing entities). The next step in direct access would be the use of national funding entities, which would not only carry the fiduciary risk, but would also take the funding decisions. Non-Annex I countries maintain that Annex II countries are committed under the UNFCCC to provide financial resources, and therefore these funds are not subject to the usual donor-recipient arrangements of ODA.

The concept of direct access is an outstanding issue because Annex II countries want some control over how resources are spent, as well as ensuring that financial and environmental standards are upheld. Annex II countries want the system to have provisions of control that ensure the money is well invested in those countries that really need it. Lack of such control could limit Annex II countries’ willingness to provide funds.

Need for priority assistance

Least Developed Countries and other poorer countries lack technology and infrastructure for climate change actions, as they already struggle to provide basic services including food security, health, education, and poverty reduction. This raises the issue of the need for priority assistance, or treating countries differently under a new climate fund depending on level of development. Some Annex I countries have suggested that access to climate change funds be differentiated with poorest countries the main focus for funding.

Issues for consideration by Ministers

6. How should the new climate fund be financed? How prominent a role should be given to innovative financing options?

7. What should be the relationship between existing funds and any new funds? What role should existing multilateral institutions play in a new climate fund?
8. Are specialised funding windows needed? Can these funding windows be designed to be sufficiently flexible to respond to changing needs and circumstances?
9. Should there be differentiation in access to funding? Should priority be given to particularly vulnerable countries, such as least developed countries?
10. Should non-Annex I countries have direct access to funds? How would that be governed to ensure adequate accountability?

Briefing Note 3

Improving Oversight and Coordination of Public Financing for Climate Change

The need for a better system of overseeing and coordinating climate financing, including provision of support as well as delivery and utilization, is important in the international climate negotiations and a prerequisite to build trust, ensure accountability, and foster efficiency and effectiveness.³ This briefing note discusses two aspects of oversight and coordination of public funding. The first is an oversight body for climate financing. The second is the monitoring, reporting and review of public financing for climate change.

Oversight and coordination of the financial mechanism

The overall coordination of the financial mechanism is an issue of discussion in the negotiations of the United Nations Convention on Climate Change (UNFCCC). Currently, operation of the financial mechanism of the convention is assigned to the Global Environment Facility (GEF) on an on-going basis, and is subject to review every four years. The financial mechanism is accountable to the Conference of the Parties (COP), which decides on the mechanism's climate change policies, programme priorities, and eligibility criteria for funding.

Some countries have called for a new overarching body to oversee the financial mechanism, while others prefer that existing institutions take on this coordination and oversight role. The need for thematic bodies and the relationship of these bodies to any oversight entity is also a topic of discussion.

Oversight body

In general, non-Annex I countries have called for an equitable governance regime with a financial mechanism under the guidance and authority of the COP that provides direct and easy access to resources. Non-Annex I countries support a new body, a "Finance Board", to perform oversight and coordination functions for the financial mechanism as a whole. Most non-Annex I countries see the Finance Board as looking at the "big picture;" although some have suggested more specific tasks, such as a performance review function. Suggested functions of the Finance Board include assessing sources of finance, measuring and verifying the flows of international finance, and assessing the contributions of Annex II countries. Some non-Annex I countries have suggested that the Finance Board determine the allocation and disbursement of funds, while others prefer that disbursement decisions remain the purview of the separate funds. Many non-Annex I countries prefer a new body because they want to avoid problems they have encountered with the current financial mechanism under the GEF, particularly concerns regarding the project approval process and slow disbursement of funds.

Many Annex II countries have suggested that an overall body is not necessary as it would add another layer of bureaucracy, and it is not consistent with a country-level approach. Some Annex II countries have proposed the establishment of a "forum of entities" that would report to the COP. The forum would provide coordination and coherency in financing by serving as a platform where operating entities and other delivery channels would exchange information and coordinate efforts. Annex II countries prefer to use and strengthen

³ This paper focused on oversight and coordination of public financing; it does not review private financing.

existing institutions such as the World Bank and the GEF, and to foster synergies between and better coordinate the use of existing institutions.

Relationship between the financial mechanism and proposed new thematic bodies

A second outstanding issue is the relationship between the financial mechanism and the proposed institutional arrangements for mitigation, adaptation, technology, and capacity building. Some countries support the formation of four thematic bodies on these issues to assist the oversight body of the financial mechanism by analyzing funding proposals or providing technical recommendations. Some countries prefer that the thematic bodies focus on what to fund; while financial entities focus on how to fund. Some non-Annex I countries support that the thematic bodies conduct technical appraisals of project proposals. Not all Annex II countries are convinced that thematic bodies are needed; and some Annex II countries prefer that the role of the thematic bodies be limited to an advisory function for the fund. In general, Annex II countries prefer that the thematic bodies provide general guidance on national implementation, rather than providing technical guidance to the oversight body.

Monitoring, reporting and review of public financing

Oversight of current financing is hampered by inconsistent data, antiquated reporting guidelines for Annex I countries, limited review mechanisms, and fragmented efforts to coordinate the allocation and disbursement of funds. Only limited information is available about what funds are used for and which countries are benefiting. Since reporting of financing is not done in a comprehensive manner, it is not possible to undertake an across-the-board review of financing for climate change from all sources. Efforts are underway to identify new sources of funds, to track pledges from countries on fast start finance, and to improve coherence; but countries have yet to agree on institutional arrangements and an overall framework to oversee and coordinate finance for climate change.

How is information on public financing for climate change (bilateral and multilateral) currently reported, reviewed, and considered?

Annex II countries currently report on public funding for climate change through various channels. They report to the UNFCCC on financing for mitigation and adaptation in non-Annex I countries; detailing financing contributions through bilateral and regional mechanisms to specific countries, and to multilateral institutions such as the World Bank Group and the United Nations Programmes. Annex II countries also report to OECD's Development Assistance Committee which collects and monitors bilateral official development assistance (ODA). The Multilateral Development Banks (MDBs) also have financial data systems that are designed to support their specific mandates and operations.

These reporting systems use a variety of indicators to classify projects and to track the performance of projects, but none of them have the same design features. They have no comparable software comparable that enables a user to track contributions from donors to specific funds, technologies, countries, or other purposes. Current reporting of public sector financing for climate change projects by bilateral and multilateral institutions lacks transparency, completeness, consistency, and accuracy. The lack of common guidelines and formats for reporting, storing, and accessing information is a significant barrier to integration of information and hence any effort to provide oversight.

Reporting and data storage is only one element of a climate change financing oversight system. Improved reporting would need to be complemented by a process to review and consider reports on financial support, including its disbursement and utilization. A new climate finance review mechanism could take into account the experience of the current review mechanisms for greenhouse gas inventories and national communications. Review teams, composed of technical experts from both Annex I and non-Annex I countries, develop reports to facilitate the assessment of financial support by Annex II countries and its disbursement and utilization in non-Annex I countries. These reports allow easier comparison of information between countries. Verification by review teams of financing from one country or from an MDB to a country could be enhanced if the recipient country maintains a separate “set of books.” In addition, civil society could also play a valuable role in cross-checking climate finance data if given a mandate and guidance from the COP.

What should be the objectives of any system to improve oversight?

While countries have yet to agree on an oversight and coordination system for public finance, consideration could be given to the following objectives:

- To assist countries to gain a comprehensive understanding of the level of financing from all countries and in so doing build trust among countries.⁴
- To enable Annex II countries to demonstrate that they are meeting their financing commitments under the UNFCCC.
- To facilitate a process of review of public finance information, including how financing is being distributed and used, and whether changes are warranted in how funds are allocated.
- To provide transparency.

What options could build trust in Cancún?

Connecting “fast track financing” to a revised oversight system for long-term financing

A number of systems (such as web portals) are available to track the short-term pledges of Annex II countries, but they are hampered by inconsistent formats and incomplete information. Annex II countries will be disbursing fast-start financing up to 2012. While it is problematic to develop consistent reporting guidelines for the short time horizon, the climate change community could learn from existing experiences and guidelines to shape an improved oversight process. One option for enhancing the UNFCCC negotiating process would be for Annex II countries to voluntarily offer to have their fast track programmes reviewed. Fast track reviews could aim to identify institutional issues relating to collecting and synthesizing data in Annex II countries, differences arising from various terms such as “budgeted, appropriated, approved or expended” funds, and the practical problems likely to be encountered in conducting reviews in the long term. Insights would also be gained about which countries received funds and what types of projects were funded.

⁴ Comprehensiveness is a function of whether such a system would ultimately include: private sector finance, internally generated funds in non-Annex I countries, and funds provided by non-Annex I countries for projects in other non-Annex I countries.

Structuring a system for improved reporting, compiling, and accessing of public financial information in the long-term

Option 1: Use existing data reporting and collection systems

Existing reporting systems have significant limitations when it comes to comparability, completeness, and transparency. However, depending on the questions of interest to countries, a partial picture of trends in some sectors could be developed. The most important advantage of using existing systems is that procedures exist for coding, collecting, and storing data; and nothing new needs to be invented. A centralized institution already doing this work would be more efficient and coherent than an environment with multiple processes doing similar work. The biggest disadvantages are that: i) operation of such systems is entirely dependent on other institutions which may or may not be responsive to requests on behalf of the UNFCCC; ii) incomplete and inconsistent data will limit any financial oversight by countries (this also applies to Option 2 below); and iii) governance of existing systems is limited in some cases to Annex II countries. However, consideration could be given to asking either the OECD-DAC or one of the MDBs, in consultation with non-Annex I country experts, to develop options for improving climate change finance data reporting, storage, and access to serve the interests of all countries.

Option 2: Complement the existing reporting and data collection systems with a new one under the UNFCCC based on aggregated data reported by countries

Countries could consider using the financial reporting systems of the OECD-DAC and MDBs to collect data while building a new system of reporting under the UNFCCC. For such a new system, countries would need to agree on which policy questions they would like to be able to answer in the future and the level of aggregated data to be reported. The advantage of this option is that a system based on clear guidelines enhances transparency, comprehensiveness, consistency, and comparability and would provide the means to monitor and evaluate financing trends. However, a new system would require new UNFCCC guidelines, and a framework that both donors and recipients agree upon. This could create substantial additional reporting burdens; and reporting formats and software would need to be designed, tested, and maintained.

Jump starting an improved oversight system

The improvement of existing systems or the development of a complementary system for finance reporting—such as for the US\$100 billion per year target for 2020—will take time to design and implement. Without prejudging agreement on all aspects of an improved oversight system, key steps to develop a new system would be the adoption of decisions at COP 16 in Cancún that:

- Request the UNFCCC secretariat under the guidance of the Subsidiary Body on Scientific and Technological Advice (SBSTA) to cooperate with the MDBs, OECD-DAC, and experts from Annex II and non-Annex I countries to formulate draft guidelines on reporting of financial information for consideration by COP 17 in South Africa; and

- Request the SBSTA to prepare draft guidelines on the technical review and consideration of climate change finance information for COP 17.⁵

Issues for consideration by Ministers

6. What are priority considerations for an improved oversight system for finance? What information is needed to take informed decisions?
7. What are the priority issues to be addressed by an overarching governance body? What structure would best allow the overarching body to address these priority issues?
8. Are thematic bodies on mitigation, adaptation, technology and capacity building needed? Should they function in an advisory or technical role?
9. Should new guidelines for financial support reporting be developed? If so, how can this effort be successfully launched at COP 16?
10. Should the UNFCCC rely on existing (and improved) systems for compiling and accessing information on public finance, or should a complementary system be implemented under control of the UNFCCC?

⁵ The SBSTA is the body mandated by the COP to develop methodologies and guidelines for reporting and the review submitted by Parties. Some countries have suggested that a forum under the proposed new climate fund could be given a mandate to recommend modalities to measure, report, and verify the support provided to non-Annex I countries.

Briefing Note 4

The Role of the Private Sector in Long-term Climate Financing

The financing, technical, and management expertise of the private sector will be critical to meet ambitious greenhouse gas (GHG) emissions reduction targets. The International Energy Agency (IEA), in its 2009 World Energy Outlook, estimated that additional energy-related investment needed to meet such targets is US\$10.5 trillion from 2010 to 2030. However, the economic crisis of 2008 and continued uncertainty regarding an eventual post-2012 climate regime have combined to dampen enthusiasm of private investment in low-carbon technologies.

This briefing note summarizes the role that the private sector is playing and will be expected to play in the future and explores what governments can do to mobilize increased sustained private sector investment. One of the key findings in the UNFCCC study, *Investment and Financial Flows to Address Climate Change*, was the important role of private sector investments as they constitute 86 percent of financial flows. With many of the world's leading economists and scientists in agreement that the private sector will be a significant source of the needed clean investment, this briefing note explores possible ways to overcome some barriers that hold back private sector participation, and considers means to leverage increased investment through coordinated international action and national initiatives.

Underlying factors influencing investment decisions

Basic underlying factors influence private sector investment decisions. First, the private sector makes investment decisions with the goal of ensuring a reasonable return and a profit for their shareholders. Profits can be increased by generating higher revenue by capitalizing on emerging opportunities and capturing more market share. In the case of climate financing, this could include making investments in low-carbon technologies in the energy sector or by making investments designed to improve production in the land-use sectors. Similarly, profits may be increased by lowering costs such as is the case in making energy efficiency improvements, or anticipating and adapting to risks to operations that may be posed by climate change.

Second, to deliver on the ultimate objective of the UNFCCC—the stabilization of GHG concentrations at levels that would prevent dangerous human interference with the climate system—low carbon technologies will need to be developed, commercialized, and deployed worldwide. In addition to new technologies, barriers to the deployment of existing low-carbon technologies need to be reduced, with a profit motive in mind. Governments play a key role at the early stages of technology development and in setting the policy and regulatory framework to guide their deployment. But in a global economy based on market economics, technology deployment on the

scale required to address climate change will only occur if the owners of the technology, namely the private sector, can make a profit and stay in business.

Third, the past two years of upheaval on the world's financial markets have eroded public confidence in markets in general, which has spill-over to carbon markets. 2009 saw a significant pullback in venture capital

and private equity markets, although significant resources remain for initiatives that hold the promise of delivering a reasonable return at a reasonable risk.

Finally, and perhaps most importantly, the largest single source of risk to the private sector's participation in climate change investment is the lack of an international post-2012 climate agreement. Carbon markets are jittery about what will happen after 2012. Will the Kyoto mechanisms be continued and under what rules? What form of commitments will be adopted by the non-Annex I Parties? Will there be a level playing field? All are questions on which governments must provide guidance to help the private sector make informed investment decisions.

Areas of involvement of the private sector

Clean technology investments

The desire to invest in clean technology is countered by the world's overall desire for reliable, cheap energy. Although the IEA reported a growth rate of 22 percent for investments in renewable energy during the past five years, in 2009 that investment dropped to US\$ 70 billion from the high of over US\$80 billion in 2008. The reasons for the 2009 decline have more to do with broader global economic factors; however, in comparison to investment in conventional oil and gas, the investment in renewable energy continues to lag considerably. While investment in clean energy is likely to expand, up to now it has done so in response to localized subsidies and regulation rather than any systematic, coordinated, and more efficient approach at the international level.

A wide variety of clean technologies in all sectors of the economy is currently available or will be ready for deployment by 2030. (A table outlining these technologies is provided in Annex I). Yet, many currently available technologies remain on the shelf, not because of their technical ability to reduce GHGs, but because existing price and policy signals do not support their profitable deployment.

To illustrate, take the case of high efficiency waste-to-energy conversion technologies. Plasma technology exists today that will convert unsorted waste to clean synthetic gas which can then be used to create electricity or other high value fuels for the transportation sector. The technology helps solve problems associated with landfills and operates with minimal emissions to the atmosphere. Such a waste-to-energy project can create revenue from three sources: i) avoidance of the fees associated with putting the waste in a landfill, ii) the sale of electricity or the fuel, and iii) the sale of carbon credits. Yet, despite the technology being available, the economics are often not great because policies and prices that would support its deployment may not be in place. For example, some countries charge little or nothing to dump waste in a landfill, electricity or fuel prices may be low because of competition from cheaper or subsidized sources, and the value of carbon credits may be low or uncertain due to lack of clarity on rules or overall level of ambition of countries to reduce greenhouse gases.

When looking at clean technologies, governments are often tempted to make investments in new technology development. Such government investment is needed at the early stages but if maintained for too long, may result in the introduction of *de facto* subsidies as the technology moves forward to commercialization. In considering the role of the private sector in development and deployment of clean technologies governments might opt for policies that send the right price signals to the private sector. Domestically, these may include

establishing regulatory programs to govern GHG emissions, imposing carbon taxes, and removing subsidies to polluting sources. At the international level, agreement on the overall structure and design of the global carbon market and clear trade rules are important contributions to sending the right signals for technology deployment.

Carbon markets

Perhaps the most visible evidence of private sector participation in climate financing is in carbon markets. In 2009 investment in the world's carbon markets represented a total volume of 8.7 billion tonnes of carbon dioxide equivalent with a value of US\$144 billion. The European Union Emissions Trading Scheme (EU ETS) remained the key driver of the carbon market in 2009.⁶

Although the total value of the carbon market was up by 6 percent from 2008, investment in project-based activities (Clean Development Mechanism or CDM and Joint Implementation or JI) dropped by 54 percent in 2009. The global economic crisis negatively impacted both the demand and supply sides of the carbon market. As industrial output dropped, the demand for carbon assets fell. On the supply side, the financial crisis spurred financial institutions and private investors to move away from risky investments toward safer assets and markets, and capital inflow to non-Annex I countries fell dramatically. As a result, many project developers found it impossible to attract finance and project origination effectively ground to a halt. Structural issues plagued the CDM market as well. The complexity and changing nature of regulations, inefficiencies in the regulatory chain, and capacity bottlenecks caused delays and negatively impacted project finance. It now takes over three years for the average CDM project to make its way through the regulatory process and issue its first carbon credit. China remained the largest CDM seller in 2009, although Africa and Central Asia increased their share as buyers sought diversification. International emissions trading deals increased in 2009 as the health of the project-based market declined, with the Czech Republic and Ukraine as the major sellers.⁷

Clear policy and regulatory signals are needed if a stronger global carbon market is to emerge and private sector investment is to return.

Adaptation and the private sector

Most of the focus of the private sector has tended to be on mitigation activities, and investments in adaptation have been very low. Yet, issues related to climate vulnerability will begin to influence markets, and private sector investment in activities that respond to a changing climate will increase. Companies, when making long-term capital investment decisions, are now taking into account the potential direct climate change impacts on future operations. Financial products such as catastrophe reinsurance and weather derivatives are becoming more prevalent. The private sector also can be expected to invest in measures to reduce vulnerability and increase resilience to climate change, such as more efficient use of water, insurance products for flood prone areas, and construction practices that take into account climatic extremes. The private sector will target

⁶ The carbon market includes the EU-ETS, New South Wales, Chicago Climate Exchange, Regional Greenhouse Gas Initiative, project-based mechanisms under the Kyoto Protocol (CDM and JI), and the voluntary market.

⁷ The question arises of whether investments in CDM can be considered additional funding support to non-Annex I countries or not. If CERs are used to fulfill Kyoto requirements of a specific country than the Annex I country realizes a quantifiable national benefit in reaching its own mitigation target. This is not to say that the non-Annex I countries do not benefit from CDM, but that the nature of the benefit has to be considered.

investment where profits can be made, and adaptation investments are perceived as riskier than mitigation investments.

What is needed to mobilize increased sustained private sector investment?

1. Policy certainty regarding the post-2012 regime

The private sector responds to policy and market signals. It needs to see agreement on a clear, cohesive, and predictable post-2012 climate framework to stimulate investment in and deployment of technology on the scale that is needed to enable the transition to a low carbon economy. The agreement should avoid placing restrictions on technologies that are essential in securing a low-carbon pathway. It should be designed to strengthen multilateral trade and investment as well as to avoid potential competitive distortions in international trade. The agreement should ensure that adaptation to climate change is promoted and facilitated.

2. Participation in the process

The private sector will be more inclined to increase and sustain their investments in climate financing the more they feel their voice is being heard and the more they are involved in the policy-making process. While it is always the purview of governments to speak on behalf of all their constituents in international negotiations, it will be important to find ways to continue the dialogue between government and the private sector in the formulation of climate change policy.

3. Targeted use of public funding to leverage private investment

Public funding for climate should in part be aimed at supporting balanced risk taking on behalf of the private sector. Public-private partnerships are one means of determining the roles and level of commitment that could be made by both the public and private sector in relation to a range of low-carbon investment opportunities. In emerging markets, private sector investors in low-carbon endeavors face many of the traditional risks associated with investment—including those related to credit, project performance, foreign exchange, and sovereign risks—as well additional factors such as higher costs of commercializing alternative technologies in the face of distorted markets (as noted in the earlier example of high efficiency waste-to-energy conversion technologies), and risks associated with international and national climate policy uncertainty. Some portion of public funds could be directed towards minimizing these risks in the form of development of NAMAs and underwriting investments. Effective use of private (and public) investments requires strong enabling environments in recipient countries, and public funding can be used for capacity building in this regard, including tackling subsidies for fossil fuels, developing open markets for private investments, having clear policy and regulatory regimes, overcoming bureaucratic barriers, and enhancing institutional capacity. Public sector funds can also be used to leverage private sector investment. Some estimates are that for every US\$1 of public money spent, between US\$3 and US\$15 of private investment can be leveraged.

4. Scale up the carbon market

While there are divergent views in the negotiations on the use of markets, the private sector generally supports building on and improving existing flexible market mechanisms, and developing practical new mechanisms (such as sector crediting and linking Nationally Appropriate Mitigation Actions or NAMAs to market mechanisms). Such a market mechanism can leverage and work with existing markets to stimulate private

sector investments, and widen the scope for effective offset allowances with environmental integrity and net environmental benefits.

On a go-forward basis, in addition to addressing the regulatory uncertainty noted, the opportunity exists to scale up the global carbon market. Numerous proposals have been made as part of the UNFCCC negotiations. These include sector crediting and closer linking of NAMAs to market mechanisms. While establishing NAMA or sector market mechanisms represents only one step towards a more cost-effective international climate policy regime, scaling up the carbon market will result in significant new private sector investment in non-Annex I countries and corresponding real GHG emissions reductions against national targets. In addition to the decision of principle to establish new market-based instruments, a number of issues need to be resolved, including how to deal with specific sector characteristics in a given country; timing and transition to scale up mechanisms (including dealing with uncertainty about the CDM during such a transition); balancing supply and demand (what happens if a glut of new supply suddenly drives down prices, in turn reducing the incentives in investing countries to take action at home); and putting in place the necessary infrastructure for monitoring, reporting, and verifying progress. To date, progress on these issues has been limited at the international climate negotiations, in part due to the complexity (perceived or otherwise) of these approaches, and some basic ideological differences on the role of markets in general on the part of several countries. Some countries have highlighted a need to first address the vision of an ambitious goal with respect to financing and/or the role of off-setting mechanisms, and the need to clarify the relationship between public and private financing, before getting into more detailed debate on mechanisms.

Issues for consideration by Ministers

6. What is the role of the private sector in long-term financing, and what might it encompass?
7. How would (and should) the oversight of private financing differ from that of public financing?
8. How to account for the profit factor in the discussions of private sector financing for climate change?
9. Is there a role for public finance to link with and leverage private investment?
10. What instruments and incentive frameworks to increase private investments and financial flows to non-Annex I countries could be established at the international level?

Annex I: Table SPM3 from IPCC Fourth Assessment Report – Working Group III. Key mitigation technologies and practices by sector

Sector	Key mitigation technologies and practices currently commercially available	Key mitigation technologies and practices projected to be commercialized before 2030
Energy supply	Renewable heat and power (hydropower, solar, wind, geothermal and bioenergy); improved supply and distribution efficiency; fuel switching from coal to gas; nuclear power; combined heat and power; early applications of carbon capture and storage (CCS), such as storage of removed carbon dioxide from natural gas.	CCS for gas, biomass and coal-fired electricity generating facilities; advanced nuclear power; advanced renewable energy, including tidal and waves energy, concentrating solar, and solar photovoltaic (PV).
Transport	More fuel efficient vehicles; hybrid vehicles; cleaner diesel vehicles; biofuels; modal shifts from road transport to rail and public transport systems; non-motorised transport (cycling, walking); land-use and transport planning.	Second generation biofuels; higher efficiency aircraft; advanced electric and hybrid vehicles with more powerful and reliable batteries.
Buildings	Improved insulation; more efficient electrical appliances and heating and cooling devices; efficient lighting and day lighting; improved cook stoves; passive and active solar design for heating and cooling; alternative refrigeration fluids, recovery and recycle of fluorinated gases.	Integrated design of commercial buildings including technologies, such as intelligent meters that provide feedback and control; solar PV integrated in buildings.
Industry	More efficient end-use electrical equipment; heat and power recovery; material recycling and substitution; control of non-carbon dioxide gas emissions; and a wide array of process-specific technologies.	Advanced energy efficiency; CCS for cement, ammonia, and iron manufacture; inert electrodes for aluminum manufacture.
Agriculture	Improved crop and grazing land management to increase soil carbon storage; restoration of cultivated peaty soils and degraded lands; improved rice cultivation techniques and livestock and manure management to reduce methane emissions; improved nitrogen fertilizer application techniques to reduce nitrous oxide emissions; dedicated energy crops to replace fossil fuel use; improved energy efficiency.	Improvements of crop yields.
Forestry/forests	Reduced deforestation; afforestation; reforestation; forest management; harvested wood product management; use of forestry products for bioenergy to replace fossil fuel use.	Tree species improvement to increase biomass productivity and carbon sequestration. Improved remote sensing technologies for analysis of vegetation/ soil carbon sequestration potential and mapping land use change.
Waste management	Landfill methane recovery; waste incineration with energy recovery; composting of organic waste; controlled waste water treatment; recycling and waste minimization.	Biocovers and biofilters to optimize methane oxidation.

Glossary

Adaptation Fund

The Adaptation Fund finances adaptation projects in non-Annex I countries that are particularly vulnerable to the adverse effects of climate change. The fund is financed by a 2 percent levy on credits issued through CDM projects.

Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol

This group, agreed to at COP 11 in Montreal in 2005, is discussing future commitments for industrialized countries under the Kyoto Protocol. Membership includes all countries that have ratified or approved the Kyoto Protocol. Notably, the United States is not a member of this group.

Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA)

This group, formed under the Bali Action Plan, is undertaking a dialogue to analyze approaches for long-term cooperative action to address climate change, including mitigation, adaptation, technology, and financing and investment. Membership includes all nations that have signed the UNFCCC.

Annex I Parties

These are the industrialized countries that were members of the OECD in 1992, plus countries with economies in transition (the EIT parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States.

Annex II Parties

Parties consist of the OECD members of Annex I, but not the EIT Parties. They are required to provide financial resources to enable developing countries to undertake emissions reduction activities under the Convention and to help them adapt to adverse effects of climate change. In addition, they have to "take all practicable steps" to promote the development and transfer of environmentally friendly technologies to EIT Parties and developing countries.

Assigned Amount Unit (AAU)

Annex I Parties are issued AAUs up to the level of their assigned amount, corresponding to the quantity of GHGs they can release in accordance with the Kyoto Protocol during the first commitment period. One AAU is equal to one tonne of carbon dioxide equivalent.

Certified Emission Reduction (CER)

A credit for GHG emission reductions achieved by a CDM project. The credit is registered and can be used by developed countries to count toward their GHG emission reduction commitments.

Clean Development Mechanism (CDM)

A market-based mechanism under the Kyoto Protocol wherein a project or program of activities to mitigate climate change in a non-Annex I country can generate credits (CERs) that can be used by an Annex I Party to help meet its GHG emission reduction commitment.

European Union Emission Trading System (EU-ETS)

The EU-ETS is the largest multinational GHG emissions trading scheme in the world and a cornerstone of EU climate policy.

Global Environment Facility (GEF)

The GEF is the financial mechanism of the UNFCCC, with the COP providing regular guidance on policies, program priorities and eligibility criteria for funding. The GEF is the operating entity of the Special Climate Change Fund and the Least Developed Country Fund under the convention and provides secretariat services to the Adaptation Fund.

Greenhouse Gas (GHG)

Gases that accumulate in the earth's atmosphere and trap heat, contributing to the greenhouse effect. The six greenhouse gases covered under the Kyoto Protocol are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.

Intergovernmental Panel on Climate Change (IPCC)

A body made up of the world's leading climate experts, established in 1988 by the UNEP and the World Meteorological Organization, to assess the scientific research on climate change and its environmental and economic impacts. Most notably the IPCC publishes, at regular intervals, assessment reports on the latest knowledge on climate change.

International Emissions Trading

A market-based mechanism under the Kyoto Protocol that allows countries with targets to buy and sell parts of each country's allowed GHG emissions, which are divided into AAUs. This increases the allowable GHG emissions in the recipient country and reduces those of the seller country.

Joint Implementation (JI)

An international project, involving joint action by countries with Kyoto targets, that results in a real, measurable reductions in net GHG emissions in a host country.

Kyoto Protocol

The protocol is an international agreement linked to the UNFCCC that sets binding targets for 37 industrialized countries and the European Community for reducing GHG emissions. These targets total an average 5 percent reduction from 1990 levels over the five-year period from 2008 to 2012. The protocol was adopted in 1997 and entered into force in February 2005.

Non-Annex I Parties

These Parties are mostly developing countries. Certain groups of developing countries are recognized by the Convention as being especially vulnerable to the adverse impacts of climate change, including countries with low-lying coastal areas and those prone to desertification and drought. The 49 Parties classified as least developed countries (LDCs) by the United Nations are given special consideration under the Convention.

United Nations Framework Convention on Climate Change (UNFCCC)

The agreement signed by 192 countries at the Earth Summit in Rio in June 1992, under which climate change is monitored and addressed globally.