World Business Council for Sustainable Development

WORLD ECONOMIC FORUM
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Catalyzing Private Investment through the Clean Energy Investment Framework

Draft private sector recommendations prepared in cooperation with the World Bank, European Bank for Reconstruction and Development, Asian Development Bank, Inter-American Development Bank and African Development Bank

Discussion draft: Gleneagles Action Plan Ministerial Meeting, Berlin, Germany, September 9-11, 2007

Preface

The G8+5 Gleneagles Dialogue on Climate Change, Clean Energy and Sustainable Development (the Dialogue) emerged from climate change-related discussions among G8 leaders at the 2005 Gleneagles Summit in Scotland, UK. The World Economic Forum (the Forum) was invited in February 2006 to convene a number of its Industry Partner companies across various industry sectors to engage in the Dialogue process in order to provide the Dialogue with a business voice. To ensure a coordinated business input, the Forum asked the World Business Council for Sustainable Development (WBCSD) to collaborate.

The Forum and WBCSD are developing three workstreams of input into the Dialogue:

- A policy framework paper, which will be a message to G8+5 leaders from key leaders of the international business community regarding the recommended building blocks of a long-term policy framework to manage climate change.
- An action plan setting out the nature and scale of no-regrets energy efficiency measures that can be taken to significantly reduce C02e emissions in the short- to medium-term across the G8 economies, with an invitation to G8 governments to partner with their business communities in this respect.
- A partnership with the World Bank and regional development banks to explore how to stimulate greater private sector investment through the Clean Energy Investment Framework (CEIF).

Each of these workstreams will deliver output to G8 and +5 leaders in time for the Japanese Government hosted Hokkaido summit, July 2008.

This paper relates to the third of the three workstreams listed above. It is a discussion draft prepared for the Berlin Gleneagles Dialogue Ministerial Meeting as a contribution the discussion on scaling up financing planned for the afternoon of Monday 10th September, 2007. Following feedback from the meeting and further review, a second draft of the paper will be presented at the Annual Meetings of the World Bank, 20th October 2007.

Executive Summary

Background

Following the 2006 World Bank Annual Meetings in Singapore, UK Chancellor of the Exchequer Gordon Brown announced a partnership between the International Finance Institutions (IFIs), the World Economic Forum (the Forum) and the WBCSD to explore how best to stimulate private sector investment through the Clean Energy Investment Framework (CEIF). The partnership was supported by the President of the World Bank and the leaders of four leading regional development banks (Asian Development Bank [ADB], African Development Bank [AfDB], Intra American Development Bank [IADB] and European Bank for Reconstruction and Development [EBRD]).

In March 2007 a two day conference hosted by EBRD was held in London to launch this partnership. The Presidents of the ADB, IADB, EBRD and World Bank, together with senior climate change, energy and finance representatives from their institutions as well as from AfDB and the European Investment Bank (EIB) met with 47 international private sector representatives from the financial, oil and gas, power, engineering, technology, metals and chemicals sectors. Senior Government representatives from the UK, Germany and Japan were also present. Representatives from global civil society groups participated as observers. Speakers and participants agreed that engagement from the private sector is essential to help address the clean energy challenge at the scale required. Subsequently, participants split into focused public-private working groups. The aim was for each group to create recommendations over the coming months, under the auspices of a co-chair for each group drawn from both the IFI and the business communities.[1]

Outcome

Four of the five groups have subsequently provided specific recommendations and processes, whereby the effectiveness of IFI interventions to accelerate and scale up clean energy investments can be improved and the role of the private sector as partners in the process can be enhanced.[2] The groups focussed on issues such as policy and regulatory frameworks, sector investment approaches and financing innovations. Their detailed output can be found in a series of Working Group papers annexed to this report.

Proposals from across the four groups include “strategic” recommendations of relevance for the wider investment community (both public and private) as well as “tactical”, practical recommendations that IFIs, governments and the business community can each implement as part of their own activities, or via partnerships. The recommendations from each of these four papers have been collated together and form the basis (together with relevant contextual information) of this consolidated paper.

As a result of both the unique public-private process the working groups have followed, and the specific and detailed proposals which they have delivered, the aim is that these recommendations can provide key content for the Clean Energy Investment Framework of the Gleneagles Action Plan.

Overview of Recommendations

The summary finding is that if the private sector is to play a role in channelling greater resources to cleaner energy investments, actions need to be taken that: (a) improve the predictability of the regulatory frameworks governing such investments; (b) buy-down incremental investment costs of clean energy technologies; and (c) improve the financial returns of such projects, so that they can effectively compete with conventional sources.

As there is a relatively short time window (10 to 15 years) in which to rapidly scale up clean technology deployment in order to avoid being “locked” into existing energy technologies, a key focus of the working group recommendations has been to devise public-private finance instruments and IFI-business partnership strategies that can stimulate a wide range of clean energy investment projects in emerging, transitioning and developing economies. At the outset, demonstration projects are required in order to accelerate investments to scale in coal (ultra-supercritical, Integrated Gasification Combined Cycle [IGCC] and Carbon

[1] The Working Groups looked at Financial Instruments, New Technologies for Clean Energy, Renewables, Energy Efficiency and Adaptation. A list of the companies and IFI representatives who were engaged in each of these working groups is presented as an annex to the draft Discussion paper available at the meeting.

[2] The Working Group on Adaptation did not sustain its discussions.

Capture and Storage [CCS]), proven renewables technologies for power and fuel and on removing the barriers to adopting energy efficient technologies.

Specific recommendations have been grouped into four categories: financial instruments, new technologies for clean energy, renewables and energy efficiency.

- **Financial Instruments:** A finance facility with a number of related windows should be created to develop a significant pipeline of clean energy projects by buying down the incremental investment costs of clean energy technologies through grants and concessional loans as well as increasing the creditworthiness of the future flows from carbon credits through partial guarantees. Innovative ways are presented for generating the initial capital for this facility from both public and private sources.

  Preliminary analysis suggests that the upper end of support from such a multiple-window facility over an initial five to eight year period could reach $10 billion in concessional loans (blends with grants) and $10 billion in partial guarantees that leverage $40 billion in private investment. For a combined donor commitment over this period of $14 billion to US$ 16 billion ($4 billion to $6 billion in additional funds and $10 billion in contingent liabilities), the Facility would likely deliver around $50 billion of financing. This would represent a significant proportion (approximately 30%) of the estimated incremental cost of ensuring that the total energy investment needs of developing countries (an estimated $160 billion per year) are filled by clean technologies during this period.

  Depending on the evolution of global and national climate policy regimes, the mitigation projects financed by the Facility could generate carbon credits that could be monetized and thereby yield a rate of return for the Facility's funders. In this scenario, the Facility itself could be in a position to raise capital from private investors, rendering it an even more potent mechanism for deploying limited amounts of donor government contributions to catalyze much larger private flows. Indeed, by the end of this initial period in which the Facility's institutional capacity and developing countries' absorptive capacity ramp up, annual investment flows of $15 billion to $20 billion could be envisaged, especially if the transition to a deeper market for carbon credits is underway. This would represent between 50% and 65% of the annual incremental cost of applying clean technology to energy investment activity in developing countries, provided the $80 billion underlying investment gap is being met at the time (a higher proportion if it is not being met). By this time -- and under the CEIF assumptions regarding the strengthening of post 2012 regulatory regime -- most of the financing, under the CEIF assumptions, would come from private financial markets.

- **New Technologies for Clean Energy**: Recommendations are made for a series of IFI-business partnerships to significantly increase and accelerate the research, development and deployment of cleaner energy technology for power generation (including but not limited to IGCC and CCS).

- **Renewable Energy:** Recommendations are made to help change the financial viability of renewables, which currently keeps them from being the least-cost option. These include IFI-business partnerships to look at:
  - The removal of subsidies or other market distortions contained within wider policy & regulatory environments that prevent the take up of renewable applications that are already economic;
  - The development of incentives to encourage wider uptake of renewables such as purchase power agreements, mandatory targets, removal of import duties, development of common standards and green certificates;
  - How to resolve Intellectual Property Rights (IPR) issues;
  - The improvement of planning methods to fully account for and internalize benefits of renewables in economic decision making.

  Some specific IFI-business partnership innovations for renewables are also considered, such as project aggregation and project start up costs being absorbed by IFIs (to finance project development, absorb transaction costs, enable technology scale up and cost reductions) then the selling on of the renewable energy portfolios to commercial banks. Other IFI activities are recommended, such as undertaking a series of coordinated country studies via the CEIF to illustrate to the private sector the market potential for renewables. One overarching recommendation to encourage more widespread private sector investment in renewables is for the full convertibility for renewable power emissions as part of potential future carbon trading regimes.

- **Energy Efficiency (EE):** Recommendations are made to improve energy efficiency in specific energy intensive sectors such as utilities, mining, petrochemicals, metals and cement sectors. Some specific IFI-business partnership are suggested to
    - accelerate the use of higher energy efficiency equipment and services (national and sector based energy audits;
    - develop common energy efficient standards;
    - create national energy efficiency organisations like the UK Carbon Trust);
    - define possible energy efficiency approaches to be driven by power utilities with a focus on the housing and industrial sectors.

Importantly, each working group also identified the creation of a **stable, global and long term framework defining the price of carbon** as a crucial element to provide the economic framework needed to spur clean energy investment at the scale required.

The discussion paper *Section 3* available at the Berlin Ministerial meeting presents these recommendations in much more detail

Timetable and Next Steps

This IFI-private sector workstream in respect of the CEIF will be discussed at key Gleneagles Dialogue and IFI-related events during 2007 and 2008, including:

- **Gleneagles Ministerial Meeting in Germany, 10-11th September**: presentation of a **draft document** for discussion and reference during the session on scaling up climate friendly investment, 15.00 -17.30, September 10th 2007,
- **World Bank-IMF Annual Meeting in Washington DC, October 20th:** presentation of second draft for discussion in a side event cosponsored by the World Bank and perhaps in the official meetings.
- **Late November 2007, London (date and location TBA).** A public-private discussion event on the discussion paper, for participants who have been involved in the working group process
- **COP 13 in Bali, December 2007:** Potential presentation in conjunction with the UNFCCC's study estimating developing country investment requirements in a side event cosponsored by UNFCCC.
- **World Economic Forum Annual Meeting, Davos**, January: Potential discussion of draft recommendations by CEOs and IFI Presidents.
- Final draft prepared by end February 2008 for input into the World Bank-IMF Spring meetings.
- **Japan hosted Gleneagles-related Ministerial Meeting March 2008 (date TBD).**
- **G8 Leaders summit in Hokkaido**, Japan in July.