Mobilizing International Climate Finance

What can the World Bank offer?

World Bank Carbon Finance – Host Country Committee Meeting Meeting
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Johannes Heister, Climate and Carbon Finance Coordinator, East Asia and Pacific Region, The World Bank
Strategy
Climate change “is a development, economic, and investment challenge. It offers an opportunity for economic and social transformation that can lead to an inclusive and sustainable globalization. That is why addressing climate change is a critical pillar of the development agenda.”

World Bank Group President Robert B. Zoellick

BALI, INDONESIA, December 12, 2007
Strategic Framework on Development and Climate Change

• Make effective climate action – mitigation and adaptation - part of core development efforts

  ➔ “mainstreaming”

• Step-up policy research in both adaptation and low carbon growth
• Support acceleration of new technology
• Pioneer innovative market mechanisms
• Create an enabling environment to tap private sector resources
• Address the resource gap through existing and new instruments for concessional finance
Stepping up

• Full integration of climate and carbon finance into World Bank lending and other operations (“mainstreaming”)

• Support client countries to make full use of carbon markets and other sources of climate finance (“capacity creation”) for their sustainable, low carbon development.
Climate Finance: Additional Costs and Catalytic Impacts

Total climate finance for developing countries over 2010-20: US$ 180 bln to US$ 250 bln p.a.* or 0.5 % of OECD GDP

Additional investment needs over 2010-20 (US$ bln p.a.)

<table>
<thead>
<tr>
<th>Category</th>
<th>550 ppm</th>
<th>450 ppm</th>
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</thead>
<tbody>
<tr>
<td>Global</td>
<td>~270</td>
<td>~460</td>
</tr>
<tr>
<td>Developing countries</td>
<td>~150</td>
<td>~220</td>
</tr>
<tr>
<td>Adaptation</td>
<td>~30</td>
<td>~30</td>
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Climate finance covers additional costs and serves as a catalyst...

US$ 250 bln p.a.

Private Sector Investments


National Development Budgets

International Development Assistance

* to leverage development investments

* UNFCCC, IEA, McKinsey
Carbon markets can reduce the financing gap significantly – yet need to be complemented by other instruments, particularly for a 450 ppm trajectory

- Adaptation, capacity building, new technology R&D and transfer, and market barriers require a portfolio of tools

**Specific Financial Proposals Under Discussion Include:**

- 0.5-1% GDP contribution by developed countries – US$ 150-300 bln (G-77 / China)

- Contribution by all countries based on GDP, GHG and population – US$ 10 bln initially, with potential scale-up (Mexico)

- International tax on aviation and/or shipping – up to US$ 40 bln (Various)

- Levy on GHG emissions over 1.5 ton/capita – US$ 18 bln in net transfer to developing countries, mainly for adaptation (Switzerland)

- Tax on international financial transactions – US$ 15-20 bln. (Tobin tax)
GHG investment potential significant

2030
Cost of abatement
EUR/tCO₂e

~27 GtCO₂e below 40 EUR/ton (-46% vs. BAU)
~7 Gtton of negative and zero cost opportunities
Fragmentation of opportunities

Instruments

- other than carbon finance -
The WBG is committed to increase its funding for energy efficiency and renewable energy investments by 30% per annum.

In FY08, the WBG approved renewable energy and energy efficiency projects worth $2.7bn, exceeding the 30% commitment.

The bulk of funding comes from the Bank’s own resources (~2.4bn in FY08).

Climate change-related trust funds (GEF, Carbon Finance, CIF) increasingly contribute (~0.3bn in FY08 from GEF and carbon finance).

These funds leverage significant public and private investments.

All funding sources have their own specific objectives and selection criteria.

Achieving a maximum mitigation impact requires creating synergies through bundling of different financial sources.
Global Environment Facility (GEF)

- GEF allocated $2.4bn to climate change (1991-2008).
- GEF-4 replenishment: $1bn for climate change over 4 years.

**Objective:**
- Reduce GHG emissions through transforming markets.

**Mitigation target:**
- GHG emissions equivalent to 400m tCO₂.

**GEF-4 strategic programs** for financing of mitigation:
2. Energy efficiency in industrial sector.
3. Market approaches for renewable energy.
4. Sustainable energy from biomass.
5. Sustainable, innovative urban transport systems.
6. Management of land use, land use change, and forestry (LULUCF) to protect carbon stocks and reduce emissions.
**Clean Technology Fund**

- Finance scaled-up demonstration, deployment and transfer of low carbon technologies

**Strategic Climate Fund**

- Targeted programs with dedicated funding to pilot new approaches with potential for scaling up

**Country Investment Plans**

- Supports countries development strategies
- Leverages financial products of International Financial Institutions
- Stimulates private sector engagement

**Pilot Program for Climate Resilience**

Mainstream climate resilience into core development planning

**Forest Investment Program**

Reduce emissions from deforestation and forest degradation

**Scaling Up Renewable Energy in Low Income Countries**

Transformational change to use of renewable energy

- $5 billion
- $1 billion

(under design)
Clean Technology Fund (CTF) Criteria

- **Promote scaled-up financing for demonstration, deployment, and transfer of low carbon technologies with significant potential for long-term GHG emission reduction**
- Based on country strategies and programs
- Eligible programs/projects:
  - **Power sector**: renewable energy, highly efficient technologies to reduce carbon intensity
  - **Transport sector**: efficiency and modal shifts
  - **Energy efficiency**: buildings, industry, agriculture
- Country access: ODA-eligibility with active MDB country program
- Financing: IDA-like terms to be co-financed with MDBs
- Combination of climate financing instruments (GEF, CF, CTF possible for larger impact)
Pilot Program on Climate Resilience (PPCR)

• Help most vulnerable countries explore practical ways to mainstream climate resilience into core development planning and budgeting, building on National Adaptation Programs of Action (NAPAs)
• Grants as the main instrument with an option to augment by IDA-like resources
• 11 pilots (9 countries, 2 regions) based on: transparent vulnerability criteria; preparedness and ability to move towards climate resilient development plans; distribution across regions and types of hazards
• Expert group established to provide advice on country selection
• Countries invited to date: Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Zambia (MNA country tbd)
• 2 regional programs in Caribbean and South Pacific
Forest Investment Program (FIP)

• Increased funding for investments to reduce deforestation and forest degradation, and promote improved sustainable forest management, leading to emission reductions and the protection of carbon reservoirs.

• The FIP will take into account country-led priority strategies for the containment of deforestation and degradation and build upon complementarities between existing forest initiatives.
Synergies
Synergies in Policy Implementation

Incentive Payments for REDD

- FCPF Carbon Fund
  *Inter alia*

- Forest Investment Fund
  *Inter alia, once operational*

- FCFP Readiness Fund
  *Inter alia*

Reforms & Investments for REDD

REDD Readiness
Synergies in Project Finance

Grant: subsidy for public good

Cashflow: payment for climate service

Concessional investment finance
Synergies in Transforming Markets

Adoption of Low-Carbon Innovation

- Early Entry-Phase I
- Market Take-off- Phase II
- Market Saturation or Maturity-Phase III
- GEF
- CF
- CTF
Multiple instruments towards strategic objective … - a geothermal program in Indonesia -

**Policy & Transactions, Capacity Building**

- **Geothermal Power Generation Development Project**
  - Enhance policy framework incl. pricing and risk issues
  - Transactions to develop brownfield and greenfield projects for private financing
  - Long-term domestic capacity building

- **Lahendong II Geothermal CDM Transaction**
  - Purchase CER from PLN for 20 MW project

- **CDM Framework for Geothermal Development**
  - Develop framework for providing streamlined access to carbon financing beyond 2012, to enhance viability of geothermal projects.

**Carbon Finance and CDM**

**Investment Lending and Institutional Building**

- **Geothermal Investment Project**
  - Financing support to scale-up geothermal, with SOEs (IBRD) and private developers (IFC)
  - Mobilization of funds for project preparation, cost sharing risks and institutional strengthening through capacity building

**Multiple instruments towards strategic objective …**

- **GEF**
- **PCF**
- **CPF**
- **IBRD**
- **IFC?**
- **CTF?**
- **CTF?**
- **Dutch TF ASTAE**
... towards climate friendly development

• Synergies between climate financial instruments can be exploited either in simultaneous or sequential programming.
  – Requires forethought and understanding.
  – Improves both efficiency and impact of financing.

• There are also synergies between financing climate projects and funding for other public goods:
  – GHG emissions (“Kyoto”) and ozone depleting substances (Montreal Protocol)
  – REDD (UNFCCC) and protection of species (Biodiversity Convention)
  – Energy efficiency (climate change) and better air quality (smog)

• Climate protection is a long-term commitment. The efficient and effective use of climate finance instruments requires:
  – A strategy for bundling and processing of financial flows from different sources.
  – Consideration of, and funding for, public co-benefits from climate projects.
  – Integration of climate finance with development planning and policy making.
  – Recognition of the potential role of climate finance in World Bank strategy documents, e.g. Country Assistance Strategies.
Mainstreaming
Instrument Integration

World Bank Lending and Technical Assistance for Development

WB Env & Sustainable Development Operations
“Mainstreaming”: multiple objectives & clients

- Global Public Goods
- Climate Change DPLs
- World Bank Carbon Market Operations
- Adaptation
- Other externalities ("co-benefits")
- Program approach
- “One-stop shop”

Traditional World Bank country client operations

ENV New issues and pilot instruments
• **Scaling up of mitigation action** through:
  – Investment programs that transform the carbon intensity of economic growth.
  – Promotion of renewable energy and energy efficiency.
  – Mainstreaming climate change into development dialogue and operations.

• **In EAP:**
  – Screening of investment portfolio: mitigation opportunities and risks.
  – Development of new low-carbon investment and lending opportunities – in particular in middle income countries.
  – Structured finance for mitigation, including blending of instruments (“wholesale finance”, “one-stop-shop”).
  – AAA and capacity building. Low carbon growth studies, climate change county strategies.
Mainstreaming climate finance

- Support World Bank carbon finance and climate finance instruments (CPF, CTF, ...) and capacity building.
- Blend Bank and third party carbon market operations with lending and other financing sources.
- Develop CDM programs of activities (PoA) to support low carbon investments.
- Power Sector Investments
- Eco2: Ecological Cities as Economic Cities
- Rural poverty and land use, REDD
- Adaptation, disaster preparedness
ECA
Opportunities for Leveraging Carbon Finance

• Strategic development through
  – CAS and CPS (Serbia: one of three pillars is climate change; ESW and AAA)

• Resource mobilization and financing
  – Investment lending
    • CF overlays of individual projects
    • APL – Turkey EE/RE APL
  – CTF: Link to the EE/RE APL w/ CF conditionality
    • Turkey: IBRD Loan + CTF + GoT + CF (under discussions)
    • UA and KZ similar cofinancing plans
ECA - Leveraging CF and Partnerships

- GEF/IFAD – KR Tian Shian Biodiversity Project
- USAID – Georgia Small Hydro Project
- Alternative Mobilization Mechanism – WB Treasury
  - “green bonds”: Slovenia Energy Efficiency investment sourced from the Pension Alliance
- Future -- Adaptation and Vulnerability
  - Integrating CC into adaptation investment needs in the agriculture, water, and energy sectors with CF revenues as one of the CBA parameters
AFR – Implementing Carbon Finance

- **Portfolio delivery**: strong project supervision to ensure registration, financial closure, and monitoring
- **FCPF supervision**: 14 countries in AFR involved in the readiness process with regional integration approaches
- **CPF business portfolio development**: especially in SA (EE), Botswana (Coal Bed Methane), Nigeria (gas flaring), and potentially in Ivory Coast (cogeneration)
- **Efficient lighting scale-up and energy efficiency development**: especially in West Africa; with CFLs, eventually refrigerators and air conditioners, interest for public buildings, and water utilities (strategy under development with Chris, Julie, and ESMAP); other potential for CPF
- **Advisory services**: in particular regarding access to the voluntary market
LAC - Integration of financial tools

• LAC supports:
  – low carbon economic growth, in particular for the energy and transport sectors and promote avoidance of deforestation
  – process of adaptation, focused on key vulnerabilities as identified under the national communications process to the UNFCCC
  – linkages between knowledge and capacity building and decision making.

• Climate Change Development Policy Loan for Mexico:
  – US$500 million.
  – Support efforts under National Climate Change Strategy (NCCS) to mainstream climate change considerations in public policy.
  – Budget support in recognition of significant contribution that NCCS will make to Mexico’s development agenda.
  – Strategy establishes the framework to confront the challenges of climate change in a comprehensive and integrated fashion.
LAC - Integration of financial tools

• Clean Technology Fund Investment Plan for Mexico:
  – CTF, IBRD, CF (existing funds + CPF)
  – Lighting and Appliances Efficiency project
  – Urban Transport Project

• Sustainable Rural Development project in Mexico:
  – IBRD, CF (existing funds + CPF), GEF

• Landfill gas capture project in Brazil (CAIXA)
  – IBRD, CF (existing funds + CPF)
... But Huge Challenges Remain

- **Policy frameworks** (e.g. pricing and tax policies) do not yet encourage shift to low carbon growth.
- World Bank is small source of financing for, e.g., energy investments.
- GEF helps pilot renewable energy and new technologies, but **scaling-up** and speed of response are a challenge.
- **Carbon finance** has attracted new private and government funding and open some new frontiers and innovative financing, but is still a marginal funding source for most countries.
- Investments in **adaptation** projects, e.g. flood control, is equally important, but little funding is available so far.
- The need is still significant for building practical and institutional **capacity**, better information and **awareness**, as well as mechanisms to the protect vulnerable populations, in particular in the land-use and forestry sector.
Collaboration
Decisions needed from climate negotiations

Targets and actions

- Emissions targets for developed countries
- Criteria for recognizing and crediting mitigation action by developing countries

Finance

- CDM reform
- Expanded coverage and scale of offset markets
  Sector crediting, REDD, agriculture
- Stable and predictable additional resources
  Financing for adaptation must be provided as priority
- Technology transfer and collaborative R&D

Governance

- Arrangements for transfer and monitoring of funds, verification of results, evaluation of effectiveness

Take Away Messages
What the World Bank Group can Offer

- Economy-wide support to governments for **sustainable development and policy reforms** (e.g. energy pricing)
- Major lender to **renewable energy and energy efficiency**
- **Climate risk management** in water, agriculture and disaster risk reduction programs...
- **Extensive partnerships**: UN agencies, other MDBs, private sector, NGOs, research community

**Take Away Messages**

- **Expertise in leveraging climate finance**
  - Leveraging **GEF resources**
  - Spearheading **the carbon market** and developing robust **Carbon Finance** business
  - **Climate Investment Funds (CIF)**
  - **Financial innovations** on the capital markets
Thank you!

jheister@worldbank.org
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