



Clean Technology Fund

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Climate Investment Funds

- Multistakeholder design meetings '08
 - March 4 – 5 Paris
 - April 14-15 Washington D.C.
 - May 21-22 Potsdam
- Approved by the Board on July 1, 2008
- September 26, 2008 pledging meeting

Pledges Received US\$ equivalent millions	
Australia	127
Canada	82
France	300
Germany	813
Japan	1,200
Netherlands	50
Norway	50
Spain	118
Sweden	92
Switzerland	20
United Kingdom	1,488
United States	2,000
Total	US\$6.3 billion

*exchange rates as of Sept 26th, 2008



Climate Investment Funds

www.worldbank.org/cif

Clean Technology Fund

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

Investment Plans

US\$5 billion pledged (+/-)

Strategic Climate Fund

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

**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

US\$1 billion pledged (+/-)



Climate Investment Funds

Governance

Partnership Forum

broad based meeting of stakeholders including: donor and eligible recipient countries, MDBs, UN and UN agencies, GEF, UNFCCC, the Adaptation Fund, bilateral development agencies, NGOs, private sector entities, scientific and technical experts

Clean Technology Fund

Trust Fund Committee

Australia, Brazil, China, Egypt, France, Germany, India, Japan, Mexico, Morocco, South Africa, Spain, Sweden, Turkey, UK, US

Co-Chairs: US & S. Africa

Active Observers

UNDP, GEF, UNEP, UNFCCC
4 civil society; 2 private sector

Strategic Climate Fund

Trust Fund Committee

Algeria, Australia, Bangladesh, Canada, Costa Rica, Germany, Indonesia, Japan, Kenya, Netherlands, Norway, Switzerland, Thailand, UK, Yemen

Co-Chairs: tbd

Active Observers

UNDP, GEF, UNEP, UNFCCC
4 civil society; 2 Indigenous Peoples; 2 private sector



Climate Investment Funds

Clean Technology Fund

- Supports Programs involving renewable energy and energy efficiency of energy supply and demand, and improved transport sector efficiency and modal shifts
- Accessing CTF
 - Country must be ODA eligible with active MDB country program
 - Country request of joint mission of WBG and RDB
 - Investment plan embedded in national development plan
 - Investment Criteria
 - Potential for GHG Emissions Savings; Cost-effectiveness; Demonstration Potential at Scale; Development Impact; Implementation Potential; Additional Costs and Risk Premium; Local Benefits
- Grants and highly concessional lending to be blended with MDB lending
- 15 – 20 investment plans



CTF: Operational Features

- Joint MDB investment plan (IBRD, IFC, ADB)
- Can be used together with other funding sources
- Host country executed programs/projects
- Concessional finance
- Risk mitigation instruments (guarantees)



Procedures for CTF Financing

- Country requests joint MDB mission
- MDB Committee approves funding for joint mission to support preparation of country Investment Plan
- Investment Plan is agreed among, and owned by, the country and MDBs
- Trust Fund Committee reviews IP, endorses preparation of projects in pipeline, and approves CTF funds for projects and programs at pre-appraisal stage
- All CTF operations in Investment Plan follow the operational policies and procedures of the co-financing MDB



Clean Technology Fund Investment Plans

- “When a country expresses interest in accessing CTF financing, the MDBs concerned will conduct a joint mission, involving other relevant development partners, to discuss with the government, private industry and other stakeholders how the CTF may help finance scaled-up low carbon activities. The outcome of the joint exercise will be an investment plan...”



Clean Technology Fund Investment Plans

- To assist a country in implementing national development strategies with low carbon objectives.
- First Investment Plans for Egypt, Mexico, and Turkey endorsed by CTF Trust Fund Committee in January 2009.



CTF Investment Plans

Content

- Country and Sector Context
- Priority Sectors for GHG Abatement (based on existing national strategies/programs)
- Rationale for Selected Sectors for CTF Co-Financing
- Enabling Policy and Regulatory Environment
- Implementation Potential (risk assessment)
- Financing Plan
- Annex with project pipeline



CTF Investment Plans

Financing

	Est. CTF (\$ million)	Est. Co- financing (\$ million)	Est. Total Investments (\$ million)
Egypt	300	1,560	1,860
Mexico	500	5,700	6,200
Turkey	250	1,850	2,100
TOTAL	1,050	9,110	10,160



CTF Investment Plans

Egypt

➤ Wind

- Scale up wind power from 1000 MW to 2500 MW
- Supports national goal of 12% of electricity from wind by 2020 (7500 MW)

➤ Urban Transport

- 6 Bus Rapid Transit corridors
- 5 new Light Rail links
- Replacement of old mini-buses with large-capacity, efficient buses
- Part of \$17 billion Greater Cairo Urban Transport Master Plan



CTF Investment Plans

Mexico

- **Urban Transport**
 - 20 Bus Rapid Transit corridors with low carbon bus technologies
 - Part of national BRT program to achieve ridership share of 30% and reduce transport carbon footprint by 20% by 2030
- **Lighting and Appliances Efficiency**
 - Replacement of 1 million mercury vapor lamps with high-pressure sodium vapor lamps in municipal street lighting
 - Improvements in 6 million lighting devices in commercial and public buildings
 - Substitution of 72 million incandescent bulbs with fluorescent lamps in low income households
 - Replacement of 1.6 million refrigerators and 250,000 air-conditioners older than 10 years
 - Lighting and appliances representing 15-30% of Mexican market share.



CTF Investment Plans

Turkey

- **Renewable energy and energy efficiency**
 - Promoting private sector development through credit lines to local development banks
 - Increasing investor confidence and developing new financing business models
 - Objective of doubling lending of financial institutions for RE and EE
- **Smart Grid:** Implementing “intelligent” grid management and control systems to support large-scale integration of wind energy resources into the grid as part of government goal of scaling up wind capacity to 20,000 MW by 2020



CTF Investment Plans

Turkey

Turkey has received the first ever clean technology fund financing for renewable energy and energy efficiency

The World Bank Board of Executive Directors has approved financing of US\$600 million for Turkey's Private Sector Renewable Energy and Energy Efficiency Project. The main objective of the project is to help increase privately owned and operated energy production from indigenous renewable sources within the market-based framework of the Turkish Electricity Market Law, thereby helping to enhance energy efficiency and curb greenhouse gas emissions as a result.



CTF Investment Plans Pipeline

- Preparations underway for Morocco, South Africa and Ukraine
- Discussions on potential joint MDB missions for Colombia, Philippines, Thailand, and Kazakhstan.
- Major initiative to scale up Concentrated Solar Power in the Middle East and North Africa region.



Why Should Thailand Bother?

- Minor contributor to GHG, a non-annex 1 country = No obligation for Thailand on mitigation measures;
- But - Opportunities to utilize new financing instrument;
- Future opportunities from the post Kyoto Protocol and the post-2012 climate regime;
- Possible vision for Thailand to assume Climate Change leadership role in key sectors in SE Asia;
- Development partners would assist with funding and help transfer global Knowledge for the realization of this vision;
- Business will embrace it because entrepreneurs will recognize new markets, new technologies, and new business models for Thailand's economic recovery and competitiveness.



Potential Projects in Thailand

Project Criteria

- Significant GHG emissions savings
- Cost-effectiveness
- Demonstration potential at scale
- Development impact
- Implementation readiness
- Additional cost/risk premium



Potential Transport Projects in Thailand

- **Mass Rapid Transit:** GoT high priority projects and included in Stimulus Package # 2. Potential for high development impact - urban transport policy/agenda
- **Bangkok Buses Replacement to NGV/ Hybrid/ Biodiesel:** Current plan USD 1,830 M for 4,000 Buses. High development impact and easy to calculate/demonstrate potential emission reductions
- **BRT:** Line 1 under construction: USD 64 M for 15 km. There is a master plan in place. High cost-effectiveness but difficult to implement?



Potential Energy Efficiency Projects in Thailand

- **Scale up EE Revolving Fund:** Current EE revolving fund outstanding of USD 170 M
- **Scale up ESCO Fund:** Initial capitalization of ESCO Fund is USD 15 M (THB 500 M)
- **Public EE Program – BMA/Government Buildings/Public Schools & Universities/Low-income Households**
- **EE Program for Public Spaces:** street lighting, public spaces, landscape, land use, etc.
- **Scale up EGAT's Thin CFL and other EE programs, e.g. a/c**



Potential Renewable Energy Projects in Thailand

Waste/ Biomass / Biogas

- Potential municipal solid waste estimated at 320 MW (existing 5 MW). Planned capacity utilization at 122 MW in 2015 Strong interest from BMA/municipalities to develop solid waste management program/Waste to Energy Plant
- Potential biomass estimated at 4,400 MW (existing 1,610 MW). Planned capacity utilization at 3,100 MW in 2015
- Cellulosic ethanol ??



Potential Renewable Energy Projects in Thailand

Wind

- Potential wind estimated at 1,600 MW (existing 5 MW). Planned capacity utilization at 325 MW in 2015

Solar

- Potential solar estimated at more than 50,000 MW (existing 32 MW). Planned capacity utilization at 87 MW in 2015

Upgrading the grid

- Currently under SP2, including transmission lines to Laos

Micro / Pico Hydro

- Potential micro hydro estimated at 700 MW (existing 56 MW). Planned capacity utilization at 273 MW in 2015



Thank You

For further information and suggestions on the future agenda, contact:

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