

A high-angle photograph of terraced rice fields in a mountainous region of Vietnam. The terraces are carved into the hillsides, showing a mix of green and golden-yellow rice. A dirt road winds through the landscape, and a small stream is visible in the lower right. The background shows more distant, hazy mountains.

# **CLEAN TECHNOLOGY FUND INVESTMENT PLAN FOR VIETNAM**

**Updated June 2011**

- **Objective.** Update Vietnam Country Investment Plan (CIP), and propose allocation of the overall US\$250 million funding endorsed by the CTF Committee
- **Rationale and Impact:** Priority sectors and activities identified in the CIP for investments in low carbon technologies and measures:
  - To reduce energy consumption
  - To improve energy efficiency
  - To scale-up renewable generation

- *Sustained increase in energy consumption driven by:*

- rapid urbanization and expansion in personal transportation use
- the success of the electricity access program
- improvements in living standards
- increasing industrialization.

- *Policy framework is being enhanced by:*

- Energy Efficiency and Conservation Law (enacted in 2010)
- In partnership with donors, the government Support Program to Respond to Climate Change (SP-RCC) for the National Target Program to Respond to Climate Change (NTP-RCC)



# Proposed Allocations

- Since the re-prioritization of the CIP in the supplemental note that reallocated ADB CTF funding from electricity transmission to urban transport, the following allocations to projects are proposed:

# 1. IBRD SMART GRID TECHNOLOGIES IN TRANSMISSION AND DISTRIBUTION:

- **Proposed project:** The IBRD \$30 million CTF is proposed for smart grid in distribution rather than in transmission.
- **Description:** The proposed IBRD distribution project will include an innovative component (IBRD and CTF co-finance) that demonstrates benefits of investing in smart distribution grid, targeting three of the five Power Corporations (PCs).
- **Rationale:** Power distribution sub-sector offers a larger replicability potential, enables impact in electricity consumption reduction and addresses barriers to integration of small renewables to be connected to the distribution network.

## 2. ADB URBAN TRANSPORT ENHANCEMENT:

- **Proposed project:** Of the US\$100 million allocated in the CIP supplemental note, ADB proposes to allocate US\$50 million to urban transport enhancement project in Hanoi.
- The other US\$50 million has already been endorsed by CTF Committee for Ho Chi Minh City (HCMC) rail project.

# Update: Energy Efficiency

## ADB INDUSTRIAL ENERGY EFFICIENCY PROJECT:

- **Description:** ADB identified a potential market for improving energy efficiency (EE) at heavy industries comprises, to be co-financed with CTF. CTF support of US\$50 million is proposed
- **Progress:** Details of structuring financial intermediation mechanisms are being discussed by ADB, MOIT, Vietnamese financial institutions, and the target industrial enterprises. Project due diligence is expected to be completed in the third quarter of 2011, with ADB Board approval in late 2011 or early 2012.

# Update: Energy Efficiency, cont.

## IFC ENERGY EFFICIENCY PROJECT:

- **Description:** Proposed US\$30 million allocation was approved by CTF Committee: US\$28 million to co-finance with IFC EE credit lines with 3-4 commercial banks; US\$1.5 million for advisory services for the participating banks and market development activities; US\$0.5 million earmarked for supervision and monitoring.
- **Progress:** IFC has conducted appraisals with two banks (tentatively US\$57 million of credit lines, of which CTF portion is ~ US\$12-13 million). Final negotiations are delayed to wait for the results of the stabilization program of the GOV, but negotiations expected to resume by the end of 2011. Two more banks are being identified for the next round of appraisals.



# Update: Power Sector

## **IBRD DISTRIBUTION SMART GRID PROJECT:**

**Description:** Focusing in smart grid technologies for power distribution in 3 PCs, the proposed project will enable integration of small renewables, two-way advanced metering to promote efficient use of electricity by end consumers, and enhance the efficient operation of the distribution network to reduce losses.

**Rationale:** PCs large investment needs to rehabilitate low voltage network and reduce losses in rural areas. The CTF financing will :

- enable to demonstrate the benefits of investments in smart distribution grid technologies, through sub-projects in three PCs.
- contribute to GHG reductions via loss reduction by modernizing the operation of key substations, integration of small renewable energy connected directly to PC networks, reduction in electricity consumption through incorporating large consumers into the operation of the system and introduction of demand -response programs.

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# Update: Power Sector

## IBRD DISTRIBUTION SMART GRID PROJECT: cont.

### Rationale:

- By targeting the distribution sub-sector, and initially only key substations and the largest electricity consumers of three PCs, there is large potential for replication and scalability.
- The expected impacts are consistent with the CIP.
- **Progress:** Under preparation. World Bank Executive Board approval is expected in September 2012.

# Update: Power Sector, cont.

## IFC RENEWABLE ENERGY PROJECT:

- **Progress:** IFC is working on several projects, including hydro and biomass projects, to catalyze private investment. The scope is under discussion to take into consideration developments in renewable support policies.

# Update: Transport Sector

## ADB HCMC URBAN RAIL PROJECT:

- **Progress:** ADB Loan for the HCMC Urban Mass Rapid Transit (MRT) Line 2 Investment Program for US\$540 million was approved by ADB Board December 14, 2010.
- The CTF funded project is explicitly indicated in the approved ADB loan, with specific covenants that it must be implemented or the core MRT loan funds would be suspended. The stand alone HCMC CTF project will be prepared in 2011-2012 with grant support from CTF (request to be submitted in June 2011). ADB Board approval is expected in May 2012.

# Update: Transport Sector, cont.

## ADB HANOI TRANSPORT PROJECT:

- **Progress:** Similar to HCMC project, the proposed CTF-funded component will be a stand-alone project. The ADB loan for the Hanoi Metro Rail System Project for US\$297 million was approved on March 29, 2011.
- The CTF funded project is explicitly indicated in the approved ADB loan with covenants that it must be implemented or the core Metro loan funds would be suspended. The ADB Hanoi CTF project will be prepared in 2011-2012 with grant support from CTF (request to be submitted in June 2011). ADB Board approval is expected in March 2012.



# Updated Project Financing Plan

Update in June 2011 (indicative, US\$ million)

Financing Source	Proposed Programs and Projects				
	Industrial Energy Efficiency (ADB)	Urban Transport Enhancement (ADB)	Smart Grid Technology (IBRD)	Clean Energy Financing Facility (IFC)	Total
<b>MDBs</b>	40	833	<b>300</b>	200	1,373
<b>GOV</b>	25	547	<b>105</b>	0	677
<b>CTF</b>	<i>50</i>	<i>100</i>	<i>30</i>	<i>70</i>	<i>250</i>
<b>GEF</b>	0	0	0	0	0
<b>Carbon Finance</b>	10	0	0	0	10
<b>Other Co-financing</b>	40	1,071	0	0	1,111
<b>Private Sector</b>	100	0	0	900	1,000
<b>TOTAL</b>	<b>265</b>	<b>2,451</b>	<b>435</b>	<b>1,170</b>	<b>4,321</b>



**THANK YOU  
FOR YOUR KIND ATTENTION**