Climate Investment Funds

CTF/TFC.8/CRP.2 November 4, 2011

Meeting of the CTF Trust Fund Committee Washington, D.C. November 4, 2011

COMMENTS RECEIVED FROM SMITA NAKHOODA, CSO OBSERVER ON CTF INVESTMENT PLAN FOR INDIA

October 2011 India Investment Plan¹ Overview The India investment plan is grounded in India's aspirations of 8% growth and intention to double per capita GDP **Baseline** and over 10 years as expressed in its 11th 5 year plan and associated Integrated Energy Plan which anticipates a need to objectives increase primary energy supply four - five fold, and electricity generation capacity five to six times. The largest share of GHG emissions in India is likely to continue to be from the power sector. These needs are all the more urgent in light of current energy supply deficits of 9%. Domestic coal reserves are constrained and dependence on imports is likely to increase. This will require and order of magnitude increase in RE, and success in DSM + EE programs. Hydropower development has fallen short of targets and only 40% of 5 year plan target likely to be met. It also notes that rapid urbanization is underway which creates new pressures on transport sector which is a growing source of GHG emissions. The plan is set in the context of India's pre-Copenhagen commitment to reduce GHG intensity of GDP by 20 -25% by 2020 compared to 2005. The 12th National 5 year plan likely to include a low emission growth strategy to achieve voluntary mitigation goals. Many of the proposed programs build on the 8 National Missions identified in India's 2008 National Action Plan on Climate Change (NACCP). **Priorities of** Himachal Pradesh Development Policy Loan on Environmental Sustainability and Climate Change (\$100 Clean million from the CTF through the IBRD - \$100 million in co-financing. GoI to contribute\$5500 million+ Technology 5900million and private sector to mobilize \$14400million) A development policy loan that would support environmental and social management capacity, and policy and **Investment Plans** regulatory reforms to facilitate more private sector investment in hydropower. Unclear whether CTF money can and should be directed to large hydropower programs, and whether this is even allowed by the CTF public sector investment criteria. Will also support monitoring of hydropower facilities. Support for the National Mission for Enhanced Energy Efficiency (\$100 million of CTF money through the IBRD—no co-financing specified but \$1,930 in private co-financing anticipated) Will support the Super Efficient Equipment Program targeting consumers to facilitate the purchase of more efficient electric fans which has significant energy savings impact. Will also support the Perform Achieve Trade (PAT) energy efficiency trading scheme. Note the detailed annex on the PAT program approach is missing from the publicly disclosed CTF investment plan. Partial Risk Guarantee for Energy Efficiency Technologies (\$25 million of CTF money through IFC—\$50 million co-financing + GEF 20million and GoIndia \$20 million; private sources: 1,885 million) Help extend private sector financing and reduce risk/ cost of debt. Will complement an ongoing GEF and World Bank co-financed project. Support to the Jawaharlal Nehru National Solar Mission (\$550 CTF money + 200 ADB + 125 IBRD; \$580m from carbon finance; \$700m Government of India; \$9470million project sponsors / other lenders) Proposed focus on capacity building to facilitate the establishment of utility scale solar power plants through solar parks, and support an enabling environment to drive down cost reductions in solar technology. Estimated cost of \$3million per MW of installed capacity + additional investment in transmission systems. The plan identifies a number of projects for which financing would be sought in a subsequent phase including (representing at least 1 billion in additional requests for financing) Implementation support for the national mission on energy efficiency and PAT (IBRD project; \$50+\$150 million North Eastern Region Power System improvement project: investments in transmission and distribution capacity Implementation readiness (IBRD project; \$100 million CTF) Rajasthan Urban Transformation through improved energy efficiency in waste water management, methane recovery from sewage treatment plants, and energy recovery from solid waste management systems (ADB project CTF \$100 million) Net energy positive waste water technologies for Ganga river clean up: pilot new technologies for waste water treatment including centrifugal and anaerobic waste digester technology that can also use waste for energy production through innovative financing and implementation models (IBRD project; \$100 million CTF) IBRD Eastern Dedicated Freight Corridor project to reduce costs and energy consumption of cargo transport. Will connect ports and coal mining areas to facilitate more efficient coal transportation. CTF financing requirements indicated at \$500 million. Private financial sector intermediation: crowd in and mainstream RE/EE project finance by working with FIs based on ADB experience in Thailand, PRC, prior projects in India (ADB project; \$75 million CTF) Private sector EE and RE guarantee facility (ADB project; \$200 million CTF) Scaling up RE and EE investments in the private sector (IFC project CTF \$100 million) CTF: \$750 million (there is a lack of clarity on exactly how the CTF money will be spent (the plan requests 750 **Public Financing** million but the individual requests for financing for phase 1 as presented in table X page 45 add up to 775 and the levels of co-financing for the Solar Power component as presented in annex I.4 are ambiguous)

Detailed Analysis of Electricity Sector Interventions

Detailed break down of financing by project proposed in the plan is presented above

¹ Prepared by Smita Nakhooda (s.nakhooda@odi.org.uk) as an input in to the November 4th meeting of the Clean Technology Fund.

Energy Planning	The India CTF Investment Plan is embedded in the 2006 Integrated Energy Policy, and the 11 th and 12 th 5 year plans of the Government of India as developed by the National Planning Commission.
Energy Efficiency (EE) Policy Regs.	The plan includes a dedicated review of the policy and regulatory framework for energy efficiency in India, noting the role of the Bureau of Energy Efficiency as a key agency in taking such initiatives forward.
Renewable Energy Policy + Regulations	The plan includes a dedicated review of the policy and regulatory framework for renewable energy in India, noting the supportive framework created by the National Electricity Act of 2003.
Pricing	Significant discussion of the efforts that have been put in place to create an attractive pricing regime for investment in renewable energy, and the effectiveness of efforts to drive down costs through competitive bidding including for technologies such as solar. Discusses the relevance of state electricity regulatory commissions and central electricity regulatory commissions. Limited discussion of the extent to which pricing structures and existing systems for funding demand side management including through tariff regulation in some states are related with the proposed interventions.
Subsidies	The costs and environmental impacts of subsidies for kerosene are noted in the context of justifying the need for investments in renewable energy for rural lighting applications. The need to reduce the costs of subsidies for renewable energy technologies through access to concessional financing is also addressed. However, the overarching subsidy framework for the electricity sector as a whole, or for fossil fuel technologies more generally, is not addressed in much depth in the plan, even though the need for overarching subsidy reform is noted in India's own National Action Plan on Climate Change, and has long been an area in which the World Bank has engaged the government of India. Some additional attention to this issue as project development proceeds might be useful.
Executive capacity	Significant attention paid to implementation capacity in the risk assessments of the various programs. Relatively less attention given to modalities of cooperation between target institutions and other actors in the electricity system. Significant emphasis on the need to build the capacity of partner institutions to deal with evolving challenges, but relatively less detail at this stage on the scope / focus of those interventions (as project development proceeds this will need to be a key area of focus.)
Regulatory Capacity	Some discussion of the role of regulatory agencies as actors in the Himachal Pradesh hydropower program, but relatively limited detail (seems aimed at streamlining the decision-making processes; strengthening the process might be a more appropriate focus). The capacity of the Bureau of Energy Efficiency is discussed in some detail, and options to strengthen it area identified. Some discussion of the role played by the Central Electricity Regulatory Comission. In general the role of electricity regulators which have been critical actors in creating an enabling environment for investment in clean technology in India, and are crucial actors in the context of many of the proposed interventions receives limited attention.
Transparency	Limited discussion of the role of transparency in the implementation of the program, although the Himachal Pradesh hydropower program does note that part of the objective of the National Hydropower Policy is to improve transparency and competition in bidding processes in order to improve cost effectiveness and efficiency, and the DPL will seek to bring Himachal Pradesh institutions into alignment with its requirements. The plan also notes the need for better information about the costs and viability of various solar energy technologies in order to achieve the objectives of the Jawaharlal Nehru Solar Mission.
Public + consumers	The project supporting the national mission for energy efficiency seeks directly targets household level energy consumers by seeking to enable them to purchase high efficiency fans and kick start a self sustaining market for the same. The issue of local resistance to hydropower development and difficulties with resettlement processes is noted as part of the rationale for the Himachal Pradesh Hydropower program concept. The existence of a strong civil society movement around dams in India is referenced (albeit very briefly) as important to the stated objectives of strengthening capacity to manage such programs. However the issue of civil society capacity to engage with energy policy in Himachal Pradesh and around dam development in particular will require much more attention if such a program is to be undertaken. It will be important to provide much more evidence of NGO and citizen participation in the design and implementation of this component of the program than has been made to date.
Utility capacity	The plan primarily targets private sector participants in the electricity sector and government / regulatory engagement with these actors rather than seeking to work directly with India's many state owned utilities. This may represent a pragmatic focus and is certainly well aligned with the CTF's stated priorities of leveraging private sector investment in clean technology; however there is no discussion of the many opportunities that certainly exist in theory to try and get state owned utilities to engage with clean technology, particularly by improving energy efficiency.
Local Technology Development	The need to drive down the costs of renewable energy technology, particularly solar energy through interventions in support of the National Solar Mission and by building up local manufacturing and development capacity is noted. Little discussion of domestic technology development support needs or measures in the plan as a whole, however.
	No discussion.