Climate Investment Funds

CTF/TFC.5/CRP.1
March 15, 2010

Meeting of the CTF Trust Fund Committee
Manila, Philippines
March 15, 2010

Comments from WRI on Investment Plans Colombia, Indonesia and Kazakhstan

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March 2010 CTF INVESTMENT PLANS			
	Colombia	**Indonesia**	**Kazakhstan**
Baseline and Objectives	Framed by Colombia's National Climate Change Planning Policy and mitigation analyses completed by the Energy Mining and Planning Unit. While Colombia's energy mix is relatively low carbon due to the role of hydropower, additional demand is met by fossil fuels – an increase in coal use of 150% is predicted. Transport represents 12% of emissions source of emissions growth. Plan seeks to reduce national electricity consumption by 5,000 GWh, and displace 1.6 Mton$C0_2$e per year. It will expand the reach of the Bogota integrated transport system, and expand strategic transport programs to 7 cities in Colombia, with an expected reduction of 2.8 Mt$C0_2$e per year.	Energy, industry, and land use change cause Indonesia's significant global GHG contribution. Energy use is the second largest source of emissions, and growing fastest. Plan framed by Presidential decree on National Energy Management which sets RE targets, and Indonesia's pledges to reduce emissions by 26% by 2020. Proposes to double installed geothermal capacity which will reduce emissions by 5.1 million tons per year, and scale up EE and RE to deliver. Future phases may explore low carbon transport and other RE options.	Kazakhstan is the largest emitter in Central Asia with an energy intensive economy and a net oil exporter and an energy sector dominated by low priced fossil fuels. Plan framed by its 2007 GHG inventory and 2nd national communication to the UNFCCC which shows that energy activities account for 80% of emissions. Plan identifies opportunities to save emissions in sectors including oil and gas production, transport, steel, cement, residential but finds that 71.2% of mitigation potential is in the energy sector (electricity + heat). Plan does not specify the scale of expected emission reductions from the proposed interventions.
Priorities of Clean Technology Investment Plans	**Sustainable transport**: support policy and regulatory measures to: accelerate sustainable transport programs in 7 Colombian cities; support travel demand management; optimize links between public, bicycle, rail transport options and public space in Bogota; factor low carbon technologies (e.g. buses into all programs); consolidation of a scrapping policy to eliminate old buses; **Energy Efficiency**: address knowledge, financial and regulatory barriers to efficiency by working with 2-3 biggest banks to develop EE financing; educating end users and scaling up demand for equipment upgrades in industrial, residential and commercial sectors.	**Geothermal Power**: large-scale Investments led by the public sector: upto 260 MW by Pertamina; up to 250 MW by PT PLN; 300 MW with private participation through risk mitigation with the prospects also for some private sector investments **Energy Efficiency and Renewables Financing:** risk sharing and mezzanine financing with state and private banks to increase financing for SMEs; direct lending to large end users for EE/RE; technical advisory services to local banks to support investments in EE/RE. Promotion of RE will focus in particular on biomass energy options.	**Renewable Energy Development** (i) 200 MW new / restored small hydro (upto 25 MW units); (ii) 100 MW wind +solar power; (iii) strengthening distribution through the Kazakhstan Sustainable Energy Financing Facility **Associated Gas Utilization/Fuel Switch/Flaring Reduction**: electricity generation from associated gas from oil pipelines to avoid flaring. ***Consistency with CTF criteria for natural gas switching projects is not discussed, and the objectives / impact of proposed program is not clear.*** **District Heating System Modernization** through equipment /management upgrades and consumer engagement in partnership with municipalities. **Energy Efficiency**: support local financial institutions by providing funding; sharing risk; building capacity to assess EE finance risk
Financing	**CTF:** $150 million = $100m Urban Transport, $50m EE **MDBs:** $725.8 million = IDB: $535.8m = $400m Transport, $135.8m EE WB-IBRD: $100m Transport IFC: $90m EE **Domestic:** $1,820million = GoC: $380m = $340m Transport, $40m EE Bogotá DC: $150m Transport Municipalities: $240m Transport Private Sector: $1,060m = $960m Urban Transport, $290m EE	**CTF**: $400 million= 125m geothermal (ADB) $125m geothermal (IBRD); $50m IFC/ADB geothermal advisory; $50m IFC EE/RE; $50m ADB EE/ RE. **MDBs:** 1,575million ADB: $500m geothermal; $250m EE/RE IFC:250m EE/RE IFC/ADB joint advisory: $75m *Given the proliferation of donor activities focused in the areas identified, special efforts may need to be made to avoid duplication.*	**CTF:** $200 million = $73m RE, $56m APG/Fuel Switch, $50m District Heating, $21m EE **MDBs:** $534 million = $166m RE, $197m APG/Fuel Switch, $121m District Heating, $50m EE **Others:** $535 million = $102m RE, $70m APG/Fuel Switch, $334m District Heating, $30m EE
Electricity Sector Interventions			
Energy	Notes that studies on mitigation abatement potential have been	Includes a comprehensive overview of relevant laws and initiatives in the country,	Program for energy development 2030 includes energy self-sufficiency targets,

Planning	completed with an emphasis on efficiency. Focuses on the central challenge that distribution utilities have a disincentive to foster efficiency.	including the national action plan on climate change, but does not address the processes and frameworks by which PLN plans for and meets energy demand. Links / complementarity between proposed investments in RE and EE could be elaborated.	next exporter status, inclusion of renewables. Sustainability 2024 strategy aims to halve energy intensity by 2020. Little discussion of the framework / processes for energy planning or how energy efficiency and renewables would fit that framework.
Energy Efficiency (EE) Policy Regs.	2001 Law sets a framework for efficiency policies and regulations. UPME efficiency standard labeling and technical standards lay groundwork. A national energy efficiency commission has been established. Recognizes that past national programs have not coordinated to manage technical, informational and financial aspects. Proposes to use CTF resources to overcome these barriers, strengthen institutional frameworks, foster best practice in efficiency regulation, and examine options for aligning regulatory incentives with efficiency.	References the national energy policy, the energy law, the master plan on energy conservation. Acknowledges limited progress in implementing these frameworks. Processes for collaborating across ministries (esp the Ministries of Finance, Energy, and Industry) to provide comprehensive support for EE may support achievement of program objectives.	Energy efficiency law is under development; the need for such a law, supporting legislation, and an action plan for efficiency is noted although these are not yet included in proposed activities. District heating project may inform practice (and in turn regulations) in other states over time; the need to address split incentives for municipalities and utilities recognized.
Renewable Energy Policy + Regulations	N/A	Provides a comprehensive review of the many pieces of supporting legislation for geothermal and RE including the 2006 Energy Law, the Climate Change Road Map, the 2009 Electricity Law, and associated regulations on distributed and medium renewable energy products. Discusses the development of new mechanisms to drive investments including feed in tariffs.	Renewable energy law enacted in 2009. MDBs are supporting the development of implementing legislation including Feed in tariffs and grid access consistent with international best practice. Plan specifies maximum range for feed in tariff of 20KZT/kWh.
Pricing	Suggests that the electricity pricing and regulatory regime in Colombia is generally conducive to efficiency – notes that many actors have pursued opportunities, but to a limited degree. References the need for pricing and regulatory reform to support renewable energy programs, which could be a future CTF program.	Recognizes that pricing systems within Indonesia do not allow for full cost recovery. Notes that govt efforts to "rationalize" energy tariffs are underway, and that this is a high risk to the effectiveness of the program as a whole. Notes that the final-in tariff for geothermal energy is still being decided, and whether it attracts private investment remains to be seen.	Notes that energy prices are comparatively low, and this has impeded past projects. The recently announced increase of the heating tariff in Almaty and indicates that Kazakhstan's regulatory agency is willing to allow the heat supplier to cover the production costs through the tariffs. No discussion of process/ steps taken to move towards competitive structure.
Subsidies	Discussion of cross subsidies between industrial and low income consumers within Colombia wrt residential energy efficiency program components. No discussion of subsidies for fossil fuel energy within the Colombian economy.	Recognizes that energy markets are distorted by subsidies, and notes efforts that govt has already taken to begin to correct this situation e.g. the elimination of subsidies for oil for power generation. Does not yet address the underlying subsidies that underpin state owned coal and oil enterprises. A clear multi-stakeholder process to address these issues might be a helpful complement to proposed activities.	Limited discussion of existing subsidy structures or steps one might take to address and reconcile these.
Executive capacity	Acknowledges the need for better coordination across agencies. Proposes activities that will support the development of technical skills, and to address knowledge barriers.	Notes that while MoE has a mandate to promote labeling, standards for appliances, audits, training for energy managers and public awareness, capacity to implement programs efficiently is limited. Increasing the profile and visibility of these programs is important if programs are to succeed.	Limited discussion of the various roles and responsibilities of various government agencies, and where capacity may be strengthened. Plan notes a need to coordinate with other agencies in the sector given that Min of Environment is the point of contact;

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			steps to this end not yet outlined.
Regulatory Capacity	Acknowledges challenges of regulating distribution utilities to incentivize energy efficiency. The proposed program will enhance the regulator's understanding of international best practice in this area, and support efforts to put in place regulatory approaches that better support efficiency.	Notes the establishment of MEMR to support implementation of the Geothermal Law. Efforts to establish an independent regulator in Indonesia have stalled after rulings on privatization. The terms on which new generation is contracted, however, requires independent oversight and transparency, and some mediation between various policy and legal directives is needed. This would support a timely, high quality and cost effective completion of proposed new investments.	Notes the steps the regulator has taken in increasing heating tariffs. EBRD's legal and regulatory dialogue with Ministry of Energy and Mineral Resources (MEMR) on RE and EE mentioned. Limited discussion of the capacities / institutional context for the regulator though it seems to be playing a significant role.
Transpa-rency	Limited attention, though the plan recognizes the need to improve information sharing on energy efficiency options. The plan would be strengthened, however, by a discussion of how improvements in operational transparency of the distribution utilities (and of the regulator) and independent scrutiny of periodic reports on performance, for example, might support efficiency programs.	Recognizes the importance of transparent and competitive procurement; does not yet indicate how these issues will be operationalised though this will be central to program success. Useful to learn the lessons of the coal fast track program wrt need for good procurement practices and transparency about program implementation. Further, efforts to enhance transparency around pricing and subsidies may support objectives of addressing subsidies and rationalizing prices.	The lack of transparency in the business environment in Kazakhstan is recognized as a significant challenge. There is some attention to the need to share information about the impact of the district heating scheme to facilitate scale up, but in general there could be more attention to issues of transparency that could enhance program implementation such as the terms and procurement processes for contracting new infrastructure, prices, etc.
Public + consumers	Notes the need to educate end-users on EE, either by directly educating consumers or training technicians and industry groups who will in turn educate consumers. More careful attention to individual consumer needs will be important in the design of the residential EE program; public participation in program design may support more effective program design. Consumer protectios in extending credit to residential users to improve efficiency may need consideration.	Limited discussion of the role that citizens, consumers and the public in program design and implementation. There is scope for creative collaboration here to enhance governance conditions that will support program implementation. Engaging consumers in informed efforts to address pricing / subsidy related issues will be useful, including to help mitigate potential negative impacts for the poor. There is strong civil society interest in understanding the impact and progress made through the CTF.	Plan includes an annex on the result of consultations with NGO stakeholders on the development of the plan. The need to inform and engage consumers in energy efficiency programs (esp. the district heat program) is mentioned.
Utility capacity	Need to work with distribution utilities to address efficiency opportunities, particularly in the residential sector noted.	Partnership with PLN to develop geothermal resources and uptake of renewable energy has the potential to significantly enhance internal capacity. Internal incentives wrt energy efficiency	Discusses the need to build the capacity of district heating utilities on energy efficiency, role of other utilities including in RE programs not yet discussed.
Local Technology Centers	Discusses the need to build up local technical capacity and skills to identify and implement EE projects e.g. efficiency audits.	The need to build up local skills on energy auditing and efficiency noted; collaboration with ESCOs also noted though this industry not yet well developed.	The Kazakhstan Sustainable Energy Finance Facility will bring international (German, Russian) expertise on renewable energy development together with financing from local banks; less emphasis on local capacity on technology deployment.
GHG Managem-ent	Not discussed; corporate greenhouse gas accounting programs might usefully complement the industrial energy efficiency program proposed.	Not discussed	Not discussed.

This review is based on the Clean Technology Fund Investment Plans that have been publicly disclosed on the Climate Investment Fund website as of 10 March 2010. Dennis Tirpak, Senior Fellow in WRI's Climate and Energy Program collaborated in reviewing the Indonesia Plan. Please direct comments and corrections to Smita Nakhooda snakhooda@wri.org