Construction Financing Facility to Support Private Sector Participation in Renewable Energy Development

Atty. Patrick Aquino

Director III, Department of Energy

Government of the Philippines

Global NAMA Financing Summit Copenhagen, Denmark | May 15-16, 2013

NAMA Highlights



Goal

To intensify development of indigenous, renewable resources through a series of regulations and incentives, most notably of which are a set of feed-in-tariffs (FITs)

Objectives

- Expand access to electricity in a sustainable manner that reduces dependency on energy imports (mostly fossil fuels)
- Significantly reduces emissions from the country's most significant GHG emitting sector
 - Given the nation's growth trajectory for power-related emissions, RE is critical to ambitious emission reductions
- Eliminate the financing barrier for qualified firms to secure construction financing
- Familiarize private lenders with construction financing models to catalyze private financing

Barriers

- Under the FIT System selection process, eligibilities and issuance of "Certificate of Compliance" are not signed until facilities are constructed and commissioned.
- This creates a barrier to finance as banks are concerned about construction risk.
- Based on discussions with local banks, financing is available once FITs are executed.
- This NAMA provides financing for construction where the private sector is unwilling to lend.

Background

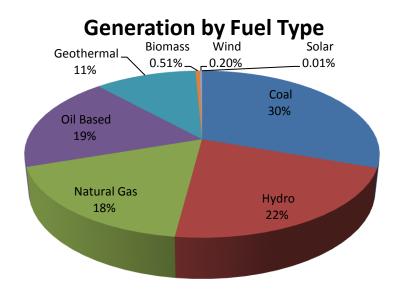


Emission profile:

- Power sector accounts for 22% of the Philippines' total GHG emissions (energy sector accounts for 50%)
- High rates of population growth and economic development are projected to increase power-related emissions by 400% between 2007 and 2030.

More than **10%** of the population does not have access to power

Robust policy framework to incentive RE development – the NAMA is critical to overcoming financial barriers



- 67% of generation is from fossil fuels
- Heavily reliant on imports, primarily from fossil fuels, to meet growing energy demand

Current Policy Context



Policy Framework

- National Renewable Energy Program
 - Capacity targets: Triple the current installed capacity of renewable energy by 2030 and increase its share in the electricity matrix to 50%
- The Renewable Energy Act of 2008 (RA 9513): geothermal, wind, solar, ocean, biomass, and hydropower
 - Fiscal incentives: Several tax incentives for renewable energy projects including a 7-year income tax holiday and 10% corporate tax rate thereafter, etc.
 - Non-fiscal incentives: renewable portfolio standards, net metering for end users, priority dispatch, and feed-in-tariffs on emerging technologies

Barriers

Key barrier to implementation is access to construction financing

Feed-in Tariff



- "First come, first serve" basis: IPPs must be certified by the DOE as commercially operational before qualifying under the FIT system
- Results-based approach avoids designating support for FIT projects that ultimately may not be constructed or do not begin commercial operation by a specified date
- Private lenders to provide construction financing based on a firm's equity rather than cash flow

Technology	Approved FIT (per kWh)	Capacity Targets
Run-of River Hydro	PHP 5.90 (\$.13)	250 MW
Biomass & Biogas	PHP 6.63 (\$.16)	250 MW
Wind	PHP 8.53 (\$.21)	200 MW
Solar	PHP 9.68 (\$.24)	50 MW
Ocean	TBD	10 MW

20 years

 Guaranteed FIT period from Commercial Operation Date

Php 5.39 (\$.12) kWh

Spot Market Rate

760 MW

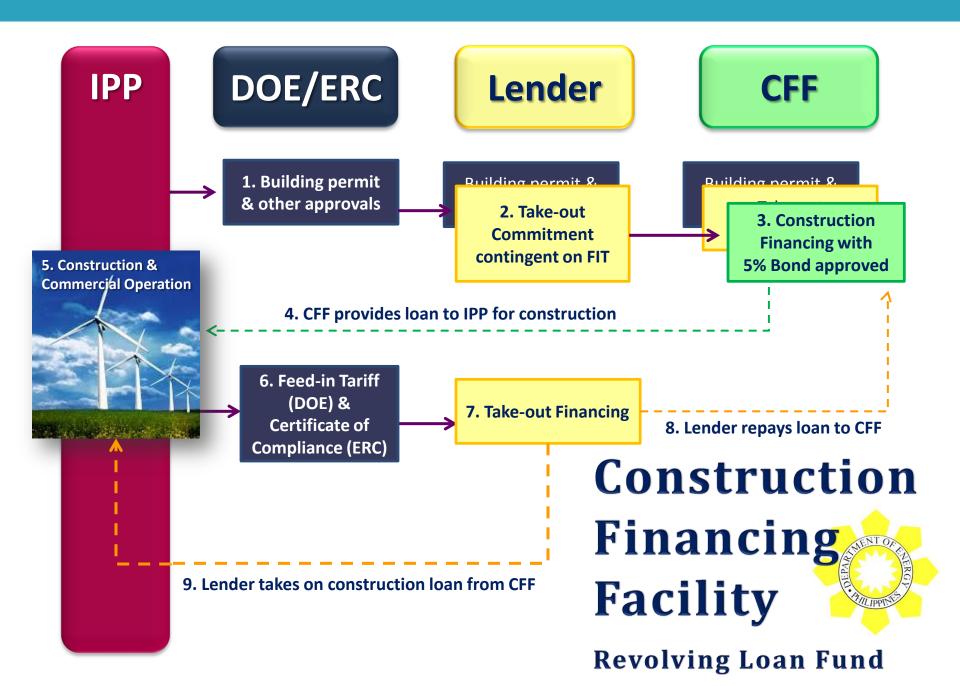
 Capacity target in Phase 1 (2012-2015 or until reached)

6% (solar); 0.5% (others)

• Rate of digression

Key Barriers:

- Local banks reluctant to provide construction finance for projects without a certified source of long-term payment (FIT)
- Very few project developers have sufficient capital to obtain construction financed based on their balance sheet



Mitigating Risk



The Construction Finance Facility would take the following risk mitigation measures:

- Limit construction financing to projects with qualified EPC firms under contract
- Retain the authority to withdraw support and funding for projects that fail to start construction by a specified date
- Carefully review all applications and not approve projects that present unique construction issues or unsolved implementation issues
- Periodically review DOE/ERC FIT approval and funding decisions and continue to approve construction funding requests as appropriate
- Consider funding up to a pre-determined share of the total MW to be supported in the first round of FIT
- Have on-site manager and make periodic payments based on certified progress reports

Pilot: Eco-town Initiative



To test the facility, financing will be provided to eligible firms that have been approved to develop power plants in "Eco-towns"

- Eco-towns are municipalities in biologically-rich areas with strong political will to promote sustainability and alternative livelihood development.
- Renewable energy assessments completed in several eco-towns to identify the potential for various renewable energy options, and the most viable appropriate technologies
- Investor's forum in June 2013 to attract private sector



"Eco-town" Del Carmen has excellent potential for energy from biomass.

Expected Outcomes



Transformational Impact

- Enables current policies and FIT System to drive private RE deployment
- Catalyzes long-term private sector financing and investment by overcoming financing barriers (mitigating construction risk)
- Short repayment period (typically one year) provides for rapid revolving nature of initial NAMA investment in the facility, leading to sustainability and replicability
- NAMA funds fill the FIT financing gap that the private sector has been unable to provide, rather than competing with it

Comprehensive - GHG reductions and sustainable development outcomes

- Improve energy security through reduced fuel imports
- Expand access to energy, especially for the poor
- Improve health by reducing respiratory illnesses from fossil fuel combustion and indoor air pollution
- Accelerate economic growth and social well being by providing energy for social infrastructure

Support Requested



- Implementation budget to be determined
- Technical assistance for developing the guidelines and architecture of the Construction Financing Facility, as well as MRV systems for monitoring GHG reductions
- \$10 million to implement and capitalize the Construction Financing Facility

Contact Information



Patrick Aquino

Director III, Department of Energy

e-mail: ptaquino@doe.gov.ph

Mario C. Marasigan

Director, Renewable Energy Management Bureau

Department of Energy

e-mail: mcmarasigan@doe.gov.ph

Construction Financing Facility

Description

- Revolving fund provides construction financing to qualified developers and projects that cannot access construction financing
- Project sponsors provide a 5% bond to create incentives for project completion, commissioning and FIT certification

Process for securing Financing

- 1. Firm receives the necessary approvals and permits to begin construction
- 2. Secures a "take-out" commitment from a private lender to provide longterm financing contingent on executing a FIT agreement
- Construction Finance Facility provides construction loan to qualified projects
- 4. Project commences commercial operation and developer seeks FITeligibility with DOE, as well as endorsement to the Energy Regulatory Commission (ERC) for the issuance of "Certificate of Compliance (COC)" under the FIT System
- 5. Once the FIT COC is approved, local banks will provide "take-out" financing and the proceeds from this financing will be used to repay the construction loan to the revolving fund