



**Title:** Philippines Construction Financing Facility to Support Private Sector Participation in Renewable Energy Development

**Sponsoring Country:** The Philippines

**Sponsoring Agencies:** Department of Energy, Climate Change Commission

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## **Introduction**

Despite vast, untapped renewable energy resources, roughly 10 percent of the Filipino population does not have access to energy, and the country remains heavily reliant on imports – primarily from fossil fuels - to meet its growing energy demand. Currently, half of the country’s power generation is derived from coal alone, and 67% is generated from fossil fuels. The power sector accounts for 22% of the Philippines’ total GHG emissions (energy accounts for 50%), and high rates of population growth and economic development are projected to increase power-related emissions by 400% between 2007 and 2030, from 26 to 140 MMT CO<sub>2</sub>-eq, in a BAU scenario. To improve energy security, expand access to power, and shift the energy sector onto a low-carbon trajectory, the archipelago is seeking to intensify development of its indigenous, renewable resources through a series of robust regulations and incentives, most notably of which are a set of feed-in-tariffs (FITs) for emerging renewable technologies.

## **Current Policy Framework**

To accelerate renewable energy deployment, the Philippines has set long-term capacity targets as well as approved and implemented a range of fiscal and non-fiscal incentives. The National Renewable Energy Program calls for increasing renewable energy capacity from 5,400 MW in 2011 to 15,400 MW by 2030, and nearly doubling the share of renewable energy in the electricity matrix to 50 percent.

The Renewable Energy Act of 2008 (RA 9513) provides the following incentives for developing wind, solar, ocean, biomass, biogas and run-of-river hydropower resources:

1. Fiscal incentives: Several tax incentives for renewable energy projects including a seven-year income tax holiday and 10 percent corporate tax rate thereafter, duty-free and VAT-free importation, tax rebate for renewable energy components of equipment, and a tax credit on domestic capital equipment and services, among other provisions.

2. Non-fiscal incentives: renewable portfolio standards, net metering for end users, priority dispatch, and feed-in-tariffs on emerging technologies.

### **GHG and sustainable development benefits**

This NAMA has the potential for significant GHG emission reductions given the scale of emissions from this sector, and the projection for accelerated energy demand that to a great degree will continue to be derived from fossil fuels if renewable energy deployment is not catalyzed. Technical assistance from donor countries will be critical in developing an accurate emission reduction estimate, and for developing the monitoring systems that will track the effectiveness of this NAMA as it is implemented.

This NAMA will also contribute to other Philippines priorities including:

- Enhancing sustainable development by improving energy security through reduced fuel imports;
- Expanding access to energy, especially for the poor;
- Improving health conditions by reducing respiratory illnesses and other diseases associated with fossil fuel combustion and indoor air pollution from burning traditional biomass; and
- Increasing economic growth and social well being by providing the energy needed to fuel schools, hospitals and businesses that improve quality of life.

## **2. NAMA Description**

This NAMA aims to increase deployment of grid-connected renewable energy by combining an innovative financial mechanism to overcome local financial barriers with the implementation of the FIT. This would be accomplished by the creation of a revolving construction finance facility.

### **FIT structure and barrier to private sector participation**

The government recently established a feed-in-tariff program for four renewable technologies in July 2012, with a fifth expected to be released at a later date. The FITs are guaranteed for a period of 20-years from the Commercial Operation Date, and are substantially higher than the spot market rate of Php 5.39 (\$0.13)/kWh. The implementing guidelines for the FIT are under development. The

Department of Energy has also determined technology-specific installation targets for a total of 760 MW in the first phase of activities, conducted over three years (2012-2015) or until the target capacity is achieved. Subsequent phases are expected although not yet planned. To hasten the deployment of renewable energy at the initial stages, and assuming the cost of technologies declines over time, the FIT rates will digress annually. The rate of digression, although not finalized, is currently recommended at 6%. The approved tariffs and capacity targets are shown in Table 1.

**Table 1: Phase I feed-in-tariff and capacity targets**

<b>Technology</b>	<b>Approved FIT (per kWh)</b>	<b>Capacity Targets</b>
Run-of River Hydro	PHP 5.90 (\$0.13)	250 MW
Biomass & Biogas	PHP 6.63 (\$0.16)	250 MW
Wind	PHP 8.53 (\$0.21)	200 MW
Solar	PHP 9.68 (\$0.24)	50 MW
Ocean	TBD	10 MW

The FIT is designed on a “first come, first serve” basis. Independent power projects must be certified by the Department of Energy (DOE) as commercially operational *before* applying for the FIT. The Filipino FIT model takes a results-based approach to avoid designating support for FIT projects that ultimately may not be constructed or do not begin commercial operation by a specified date. Under this model, however, project sponsors can obtain a FIT contract for the sale of energy after project completion and commissioning.

This results-based approach creates a gap in the financing process for renewable energy projects as local banks are reluctant to provide construction finance for projects without a certified source of long-term payment that would come from the FIT contract. To facilitate access to financing without a guaranteed tariff, the government has asked private lenders to provide construction financing based on a firm's equity rather than cash flow. Very few project developers have sufficient capital to obtain construction financing based on their balance sheet. Approximately 114 firms are potentially FIT-eligible projects, yet only 56 of these have applied for the declaration of commerciality under the FIT system. This is in part due to the difficulties of securing construction financing.

### **Financial Mechanism: Construction Financing Facility**

This NAMA proposes to develop a revolving fund that will provide construction financing to qualified developers and projects that cannot access construction financing. The expected construction loan repayment period is estimated at one year, which would enable donor-provided seed funding to revolve over a short period of time and continue support for projects indefinitely. The fund would require project sponsors to provide a 5% bond to create incentives for project completion, commissioning and FIT certification.

1. After a firm receives the necessary approvals and permits to begin construction, it will secure a take-out commitment from a private lender contingent on executing a FIT agreement.
2. With a take-out commitment in hand, the Construction Finance Facility will provide well designed qualified projects with a construction loan. The revolving fund will be managed by experts in construction finance and have personnel on site to ensure construction proceeds as planned, with funding disbursed in progress payments as project activities are completed.
3. When the project has commenced commercial operation, the sponsor will seek to execute a FIT agreement. Once the FIT agreement 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.

Through a revolving Construction Financing Facility, NAMA funds fill the FIT financing gap that the private sector has been unable to provide. The short repayment period and revolving nature of the facility will ensure long-term sustainability of the program, as well as replication across the country.

To pilot the facility, the NAMA proposes providing financing to eligible firms that have been approved to develop power plants in "Eco-towns". Eco-towns are municipalities identified by the Climate Change Commission (CCC) that are located in biologically important areas and have strong political will to implement policies that promote sustainability and alternative livelihood development. The CCC, with support from USAID, has conducted in depth pre-feasibility studies in 10 Eco-towns to assess the potential for various renewable energy options. The CCC has identified the most viable technologies for several of these municipalities, and is hosting an investor's forum in June 2013 to attract private sector interest in developing the power plants. The Construction Financing Facility would thus support independent power producers investing in select Eco-towns.

### **3. Support Requested**

The Government of the Philippines is requesting \$10 million to implement and capitalize the Construction Financing Facility.