

The Philippine Electricity Sector: Greening the Supply and Curbing the Demand

The Philippines

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Wind Power Plant in the Philippines

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Greening the Supply

In 2008, the Philippine government ratified the Renewable Energy Act (Republic Act 9513). The law aims to accelerate the exploration and development of renewable energy such as biomass, solar hydro, wind, geothermal, and ocean energy sources. In addition, its intent is to increase the utilization of renewable energy (RE) by institutionalizing the development of national and local capabilities. Furthermore, it aims to promote renewable energy's efficient and cost effective commercial applications through the endorsement of fiscal and non-fiscal incentives. The following list enumerates policy mechanisms connected to the Renewable Energy Act:

- a.) Establishment of a Renewable Portfolio Standards (RPS) to oblige electricity power industry participants to source or produce a portion of their electricity from eligible RE resources.
- b.) Formulation of a feed-in-tariff scheme that provides a guaranteed fixed price for RE generation for a given period of time.
- c.) Creation of a Green Energy Option Program that will enable end-users/consumers to choose RE sources as their source of energy.

Quick facts

Zone	National territory
Topic	Renewable Energy
Time Frame	2008 to date
Framework	Renewable Energy Act
Website	http://www.doe.gov.ph/



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d.) Implementation of “Net Metering”- electric power generated by end-users from eligible on-site RE facility could be delivered to the local distribution grid. This would offset the electric energy provided by the DU to the end-user.

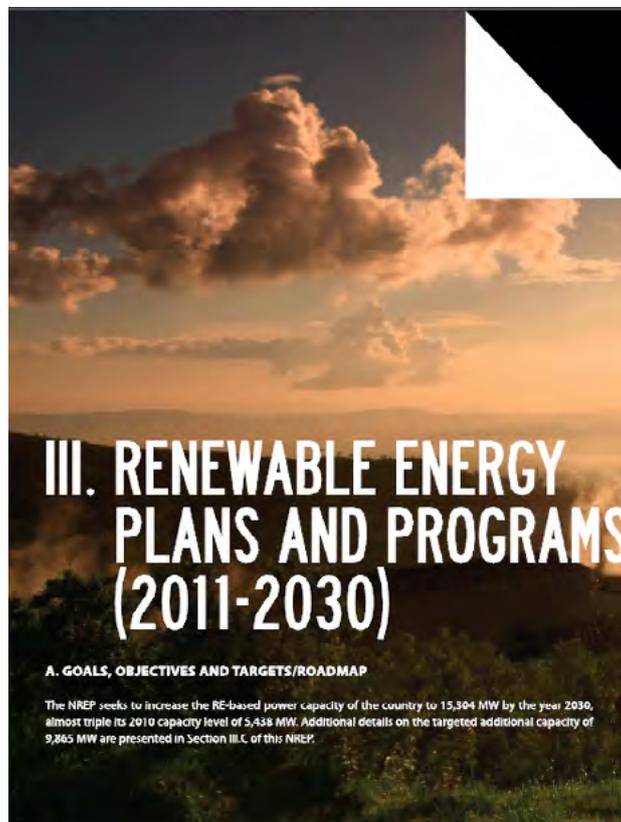
In terms of fiscal incentives, the law specifies that RE-related projects and activities be entitled to (i) an income tax holiday, (ii) exemption from duties for RE machinery, equipment, and materials, (iii) special realty tax rates on equipment and machinery, (iv) net operating loss carry-over, (v) corporate tax rates, (vi) accelerated depreciation, (vii) zero percent value-added tax rate, (viii) tax exemption of carbon credits, (ix) tax credit on domestic capital equipment and services related to the installation of equipment and machinery.

The drought of 2010 setback the government’s RE program, as the preference for RE sources subsided given the need for an immediate source of power. The drought greatly affected the country’s Mindanao region due to its heavy reliance on Hydroelectric Power (HEP). Furthermore, 2010 was also a critical period for the Visayas region sub-grid due to the development of urban areas within the region, particularly in the Cebu province. As the Government relies on market preferences, almost all of the generating companies that were coming in to fill the demand gap came from coal-fired power plants due to its cheap cost.

The delay in the formulation of the policy mechanisms listed in the Renewable Energy Act of 2008 resulted in RE investors being hesitant as they considered said policy mechanisms as insurance for their investments. Currently, no policy mechanisms have been enacted by the government. In addition, there are sectors in the country that are fully opposed to the implementation of aforementioned policy mechanism given that implementation of the later will increase electricity rates. This is primarily due

to the feed-in-tariff that will be implemented. As of 2010, the country’s primary energy mix has a self sufficiency level of 57.5%, with 46.3% comprised from green energy or 38.9% consist with RE. Recently, the government, through the Department of Energy (DOE), launched a National Renewable Energy Program (NREP), which plans to increase the RE based power capacity of the country to 15 304 MW by the year 2030, almost triple its 2010 capacity. Additional initiatives include the following:

- Increase geothermal capacity by 75 percent;
- Increase hydropower capacity by 160 percent;
- Deliver additional 277 biomass power capacities;
- Attain wind power parity with the commissioning 2,345 MW additional capacity;
- Mainstream an additional 284 MW solar power capacities and pursue the achievement of the 1,528 MW aspirational target; and
- Develop the 1st ocean energy facility for the country



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Curbing the Demand

The government recognizes the importance of curbing the electricity demand. This can be done through application of energy efficient technologies and changing the behavior of end-users. Among the banner programs of the government implemented through DOE is the Philippine Energy Efficient Program (PEEP), which has the following components:

- a.) Efficient Lighting Initiatives
 - Government Building Retrofit
 - Nationwide Residential Lighting Program
 - Public Lighting Program
 - Energy Efficiency Testing and Lamp Waste Management
- b.) Efficiency Initiatives in Building and Industries
 - Super ESCO
 - Efficient Building Initiative

- c.) Communication and Social Mobilization
 - Communication for Efficient Lighting
 - Promotion of Efficiency for Everyday Life

The government and other related stakeholders are also currently formulating a proposed Energy Conservation Bill that will greatly help the government's policy toward energy conservation. With the Energy Efficiency and Conservation Action Plan for 2010- 2030, the government aims to achieve annual energy savings equivalent to 10% from the final energy demand outlook from 2010-2030.

References:

http://www.lawphil.net/statutes/repacts/ra2008/ra_9513_2008.html
<http://www.doe.gov.ph/>