

# Clean Development Mechanism (CDM)

— Perspectives from a Private Sector Energy Consultants

CDM Background and  
Status of Philippine  
CDM Projects



SEEDLinks



## SEEDLinks

Strategic Link for  
Socio-economic,  
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***Strategic Links for Socio-Economic, Environmental and Energy Development (SEEDlinks) is a newly established company that provides high-value technical consultancy services to national and regional players in the socio-economic, environmental, and energy development sectors.***



## **Full Advantage Co., Ltd.**

is a regional network of consultants, advisers and project developers in the field of :

- Energy and Environment, with particular focus on the following sub-sectors:
- Renewable energy and rural electrification
- Cogeneration and decentralized energy systemsMethane capture and energy recovery from wastewater, landfill and MSW
- Climate change and Clean Development Mechanism (CDM)Energy efficiencyBiofuels

## Clean Development Mechanism and the World Bank

20 July 1999 - the World Bank approved the establishment of the Prototype Carbon Fund (PCF)

One of the PCF's operational objectives is mitigating climate change

The PCF focuses on three main areas:

- **High-Quality Emission Reductions**
- **Knowledge**
- **Public-Private Partnership**

## Clean Development Mechanism and the Asian Development Bank (ADB)

December 2005, Carbon Market Initiative

The carbon market is expected to become a \$100 billion business in the medium term.

In the EU, penalties for not meeting the GHG emission reduction amount to as high as Euro 100 per tonne of carbon dioxide-equivalent during 2008-2012.

## Clean Development Mechanism and the Asian Development Bank (ADB)

ADB, December 2005 – Carbon Market Initiative

The financing gap in the current carbon market can be met through the establishment and management of a dedicated carbon co-financing fund supported by the institution, selected governments, and the social responsibility “accounts” and foundations of leading international corporations.

ADB is proposing a special initiative focusing on the carbon market. The initiative has three main components:

- Special carbon credit co-financing facility
- Carbon credit marketing support function
- Technical support to operational teams at country strategy programming and
- project processing levels

## CDM Registered Projects

- 401 registered projects (as of 9 November 2006)
- 6 Philippine CDM projects registered
- 18 Nov. 2004 – Brazil, first to be registered
- 10 Sep. 2006 – Philippines, 33 MW Wind Power



# Philippine CDM Potential

- abundant agricultural and renewable resources and access to local and global technology
- 85 million people
- about 50 percent living in rural areas
- presents a large trade and investment potential.
- still untapped indigenous resources can be harnessed for energy and other uses.



# CDM Registered Projects

## RENEWABLE ENERGY POTENTIAL

- wind
- hydro
- biomass



## Philippine Wind energy potential

A study confirmed some 76,600 MW of wind energy resource potential in the country, with some areas (Luzon's northwestern portion Ilocos Region)

There is a wind energy resource atlas of the Philippines in February 2001.



## Hydropower Potential

- Micro-hydro systems : 436 potential micro-hydro sites all over the country with a capacity to generate an estimated 28 MW.
- At present, there are 68 units of micro-hydro systems installed, which generate 233 kW and benefit about 6,000 households.



## Biomass Potential

agriculture, livestock, and forestry industries.

fuelwood, bagasse, coconut residues, rice hull, animal waste, and municipal solid waste.

This biomass supply potential was estimated in 1997 to be equivalent to 131 million barrels of fuel oil equivalent (MMBFOE). This was estimated to have reached 247.9 MMBFOE in 1999 and to grow to 301.5 MMBFOE in 2008.



## Forestry resources and fuelwood

The total land area in the Philippines is estimated at 30 million hectares (ha), with 14.1 million ha considered alienable and disposable and thus available for agriculture. Also, about 15.9 ha are designated as forest lands. The volume of timber available within commercial forests was estimated at 448 million cubic meters (m<sup>3</sup>) in 1993.



## Municipal Solid Wastes

- The Philippine Energy Plan projects that by 2004, municipal solid wastes will start to contribute about 0.44 MMBFOE to the energy mix and shall increase to 0.67 MMBFOE by 2008.



## Solar Energy

- The Philippines is located just above the equator. Its vast potential for solar energy, popular in off-grid barangays, can counter the prohibitive cost of extending power transmission and distribution lines and the difficulty of transporting fuel for diesel generators to remote areas. Solar photovoltaic (PV) technologies are well proven in the country. The challenge is to make these viable and sustainable in areas where they can be shown to be the least-cost energy solutions.





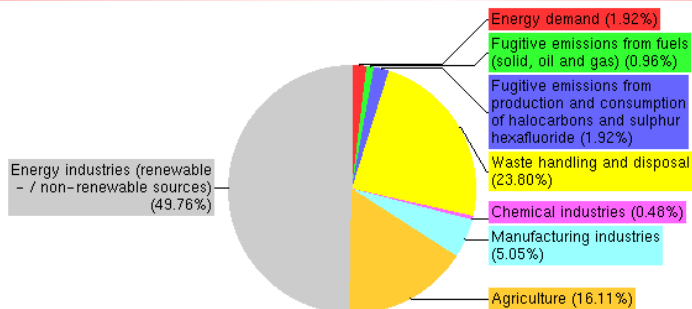
# Geothermal Energy

- The Philippines is a world leader in harnessing geothermal energy
- Recent studies indicate that the country has 2,047 MW of proven reserves and 4,790 MW of potential reserves.



# CDM Registered Projects by Scope

Distribution of registered project activities by scope



## CDM Bazaar

The UNFCCC Secretariat and the UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), will launch and manage a Web-based facility, the CDM Bazaar as a platform for exchange of information on CDM project opportunities

The key objective of the Bazaar is to facilitate the creation of an efficient global CDM market through sharing information related to project activities among stakeholders worldwide.

## CDM Bazaar (continued)

The Bazaar will:

Be a global 'virtual information exchange place' open to all interested parties

Be a facilitating initiative that will help to reduce transaction costs

Encourage increased information exchange and dialogue

Enhance the capacity of NAI members.

The initial interface will include four key information sections

- a) Sellers
- b) Buyers
- c) Service providers
- d) Events, research and other information

## 33 MW Northwind Bangui Bay Project



## 33 MW Northwind Bangui Bay Project

- 33 MW
- 56,778 t CO<sub>2</sub>e per year – CERs
- 7 years crediting period, renewable 2 times

## Websites:

Philippine DNA: [cdmdna.emb.gov.ph](http://cdmdna.emb.gov.ph)

Renewable energy: [www.ren21.net](http://www.ren21.net)

Global forum on Sustainable energy:  
[www.gfse.at](http://www.gfse.at)

[Seedlinks.megamanila.net](http://Seedlinks.megamanila.net)

[www.full-advantage.com](http://www.full-advantage.com)

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**Thank You!**

