



Investment Opportunities for Sustainable Energy in the Philippines

About Verne Energy Solutions

Headquartered in Metro Manila, Verne operates and implements projects all over the Philippines. We specialize in all forms of sustainable energy, from renewables to energy efficiency.

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Introduction

*In the wake of the economic downturn and turmoil as a result of the COVID-19 pandemic, **the future is beginning to turn its gaze upwards to the sun.*** Renewable energy has weathered the virus, remaining resilient and continuing on its trajectory towards a sustainable energy transition globally. Developed nations are beginning to fully commit to a sustainable energy scenario as they begin to reopen their markets [1].

The Philippines has not fared as well in managing the pandemic, but the onset of widespread vaccination may soon turn the economy around.

The Department of Energy has also set its eyes on a sustainable energy transition [2], encouraging both local and foreign investors to enter the energy industry.

This document outlines some of the **key investment opportunities in the Philippines.** Given the current status of the country's energy infrastructure and markets, we foresee highly favorable investment conditions that promise good returns, although some risks remain. We have delineated these opportunities into two main pillars: **renewable energy** and **energy efficiency.**



“

By 2040, we envision that the Philippines would have a reliable and sustainable energy supply that will foster a balance between economic growth and the protection of the environment. Investments would be key to transforming this vision into a reality.”

**Sec. Alfonso G. Cusi,
Department of Energy**

Renewable Energy

The Philippines' renewable energy (RE) potential remains **high and relatively untapped**. Wind and solar combine for only 0.3% of the country's Total Primary Energy Supply (TPES) [3], however, studies have shown the techno-economic feasibility of solutions such as solar power of as high as 30% [4] without any issues in energy balance.

Recent regulatory support and momentum will also provide major tailwinds, with the country's **National Renewable Energy Program (NREP)** set

to be published this year, outlining sectoral roadmaps for the **BiGSHOW (Biomass, Geothermal, Solar, Hydropower, Ocean, and Wind)** [5].

The country aims to have 35% RE share by 2030, and 50% by 2050. The DOE aims to reach these targets through heavy investments from both local and foreign investors, creating a stable and safe environment for new entrants to the market.

KEY MECHANISMS

RE Market

The Renewable Energy (RE) Market allows for the trading of **Renewable Energy Certificates** or “RECs”, equivalent to an amount of power generated from renewable energy resources. While initially set to roll out in June 2020, due to the pandemic, this has been delayed to **June 2021**. With the Renewable Portfolio Standards (RPS) targets struggling to be met, **the RE Market offers a large opportunity for RE developers to trade RECs.**

Green Energy Auction Program (GEAP)

Rolling out in **June 2021**, the GEAP is a competitive process for the procurement of RE supply. **An initial 2,000 MW of renewable energy capacity will be up for auction**, with the DOE prepared to increase capacity if necessary. Similar auction programs have proven to be excellent investment opportunities for larger players. International bidders to the auction may have an advantage in cheap technology prices and high technical capacity.

Qualified Third Party (QTP) Service Areas

The Department of Energy **declared 69 remote, underserved, and unserved areas as open for the private sector to enter as a QTP** [6]. Participation as a QTP is open to any party which demonstrates the capability and willingness to comply with relevant technical, financial, and other requirements through a **Competitive Bidding process**. While RE project sizes may be small to medium in size, RE prices are competitive enough to attract demand, offering decent returns.

Investors should note however, that **community and social development may be an important precursor to successful projects in QTP areas**. Impact investors are likely to realize extremely high social and environmental returns for projects in these areas.

100% Foreign Investment Ownership for Geothermal

Foreign companies may participate in large-scale geothermal exploration, development, and utilization activities, **under the third Open and Competitive Selection Process (OCSP3)** in the awarding of RE Service Contracts. **While the Philippines has had long-standing geothermal capacity, additional capacity has been at a relative standstill for the past two decades.** This is at odds with the high geothermal potential of the country, which may be promising for foreign entrants.

The two primary conditions for foreign investors entering the geothermal space are:

- 1) Projects should be **large-scale**, with a minimum investment cost of about US\$50 million, and
- 2) Projects should be under **Financial and Technical Assistance Agreement (FTAA)** as provided under the Constitution.

The Department of Energy has also released several statements highlighting their support for foreign geothermal investments [2] [7], providing a beneficial regulatory tailwind.

Green Energy Option Program (GEOP)

The GEOP allows for end-users with an average monthly peak demand of at least 100 kW to procure their electricity from RE sources outside their premises at VAT-zero rated prices. End-users who avail of the GEOP do not need to put up dedicated lines to their facilities, but will utilize the existing distribution infrastructure present. This allows for **RE investors and developers to go directly to end-users**, ensuring demand neatly matches supply, allowing for **less risk in RE investments.** Given global prices of RE, end-users who can avail of the GEOP are highly incentivized to do so, increasing market capacity.

Renewable Portfolio Standards (RPS)

The RPS is a market-based policy mandating power distribution utilities (DUs), electric cooperatives, and retail electricity suppliers (RES) to **source an agreed upon portion of their energy supply from RE facilities.** While compliance with the year-on-year targets has been met with mixed success, the RPS still offers a potentially large and growing market for incoming RE developers and investors.

INCENTIVES

Income Tax Holiday (ITH)



0% VAT on Sales*



* of power generated from renewable energy sources

Decreased Corporate Tax Rate

10%

after ITH
(vs 20-30% normally)

0% VAT on Purchases*



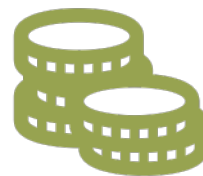
* related to development, construction, and installation for plant facilities

Duty Free Importation



for materials and equipment

Tax Exemption*



* on proceeds from sale of **Carbon Credits**

Energy Efficiency

McKinsey & Co argued in 2009 that energy efficiency offers a vast, low-cost energy resource. The amount of energy we produce and consume is much higher than it potentially needs to be— thus energy efficiency offers a cheap and scalable method of decarbonization.

The Harvard Business School Energy Project stated that **energy efficiency efforts might well reduce a nation's energy consumption by 30% to 40%**. The possible curtailment of such a significant portion of energy usage not only has **massive environmental benefits, but financial ones as well**, thus the common adage that energy efficiency may provide a “win-win” scenario for governments that make concerted efforts towards it.

The Philippines launched the **Energy Efficiency and Conservation Act** in 2010, institutionalizing energy efficiency and conservation through mandatory compliance, as well as incentivizing initiatives and projects that lead to further efficiency and conservation.

The Department of Energy will need to work hand in hand with the private sector to implement the Act, especially when it comes to the development of new technologies, proper application of existing technologies, and the use of best practices for energy management. **The investment landscape for energy efficiency looks highly promising, with strong regulatory support and excellent returns on EE projects due to a generally energy inefficient landscape.**

KEY MECHANISMS

Designated Establishments

Designated establishments are classified as either **Type 1** or **Type 2** depending on annual energy consumption (AEC).

Type	AEC (kWh)*
1	500,000 to 4,000,000
2	>4,000,000

** for the previous year*

Designated establishments are obligated to integrate energy management systems, set up energy conservation measures, undergo measurement and verification of data, conduct audits, submit annual energy reports to the DOE.

This provides a neat opportunity for technology providers of energy efficient technologies, energy management specialists, energy service companies (ESCOs), and even novel energy financing schemes. **Energy efficiency projects offer sizable returns for both designated establishments (through energy savings), and potential investors.**



INCENTIVES

Fiscal


Energy efficiency projects will be included in the Investment Priorities Plan of the BOI and will be entitled to the incentives of EO 226.


EO 226 Investment Priorities Plan:


- Activities included must be **economically, technically and financially sound.**



- Preferred areas to be determined by **long-run comparative advantage.**

-  Economic soundness determined economic internal rate of return

-  Extent of contribution of activity to a specific development goal

-  **"Measured Capacity"** : estimated additional volume of production or service deemed to be desirable in that area of investment.

Non-Fiscal



Awards



Technical Assistance from the Government

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VERNE
ENERGY SOLUTIONS

Muntinlupa City, Metro Manila, Philippines
(+63) 917-183-8855
Website: verne.solutions