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## Low-carbon Energy Transition: Lessons from the Philippines

*By Margareth Sembiring*

### SYNOPSIS

*The Philippines presents an interesting case for renewable energy development. Defying cost concerns typically expressed by developing countries, the Philippines is making strides to expand its renewable energy capacity. With low-carbon energy transition on the horizon, finding the right balance between the interests of the private sector and the consumers will be the key to success.*

### COMMENTARY

Low-carbon energy transition is a major global agenda aimed at combatting climate change, but there is a notable variation across countries in terms of progress. Transition efforts are largely a domestic undertaking, and understanding the specificities is critical to facilitate effective regional and international cooperation on the issue, and ultimately, to its eventual success.

Developing countries generally find renewable energy costs challenging. The Philippine experience shows an interesting yet delicate dynamic between its renewable energy ambitions and cost considerations, with the overall direction looking increasingly promising.

### A Promising Start

Since the passage of the Renewable Energy (RE) Act in 2008, the Philippines has been making good progress in developing renewable energy. Within less than a decade, 92 new renewable energy plants totalling [1.4GW](#) of installed capacity were constructed. Wind power installed capacity had [doubled](#) and solar power's had grown ten times. At present, the Philippines' wind and solar installed capacities [rank](#) among the top 50 countries in the world.

Although renewable energy development is an essential step towards low-carbon energy transition, it does not amount to an energy transition until and unless fossil fuel share decreases and gets replaced by renewable energy sources.

In this regard, the Philippines has yet to begin its low-carbon energy transition. This is because coal use expanded significantly, from 34 per cent in 2010 to 55 per cent in 2019, alongside the impressive renewable energy growth. The simultaneous development of coal and renewable energy sources shows that the primary motivation to promote the latter was not necessarily the environment but meeting the country's increasing energy demands.

This is set to change. A string of initiatives to accelerate energy transition processes had been introduced following a moratorium on new coal power plants that was announced in late 2020.

### **Stronger Momentum Towards Low-carbon Energy Transition**

The Green Energy Option Programme (GEOP) is one of them. Launched in late 2021 by the Independent Electricity Market Operator of the Philippines, the [GEOP](#) is a mechanism mandated by the 2008 RE Act to give consumers the choice to source their electricity from licensed renewable energy suppliers. This is in contrast with having to consume whatever distribution utilities sell them.

The high probability of entering the low-carbon energy transition phase is further affirmed by President Ferdinand “Bongbong” Marcos Jr., who is sending strong [signals](#) of his preference for renewable energy including the nuclear source.

Significantly, to further boost renewable energy investments, the Department of Energy (DOE) has recently [removed](#) the restrictions on Filipino ownership of renewable energy projects and allowed 100 per cent foreign ownerships.

Renewable energy expansion received a stronger justification from global coal price hike brought about by the war in Ukraine given that [80](#) per cent of coal use in the Philippines came from imports. Not only are renewable energy sources becoming more cost competitive in comparison, but they are also increasingly seen as an indigenous solution to reduce reliance on imported energy sources. This is in line with the energy independence paradigm which is central to the Philippines' energy security discourse.

The continuing expansion of renewable energy is discernible from the additional [2,000 MW](#) projects awarded to 19 bidders under the Green Energy Auction Programme (GEAP) in mid-2022. Following its success, the DOE plans to have [another](#) round of GEAP auction later this year. The private sector's enthusiastic participation in the GEAP reflects confidence in the Philippine government's commitment to promote renewable energy.

### **Managing Consumer and Stakeholder Interests**

The Philippines is reliant on the private sector for power generation. Creating a

conducive environment for investors and developers is therefore vital for the country's energy provision.

The Feed-in Tariff (FiT) introduced in 2012 was a game changer. Private companies responded overwhelmingly to FiT-enabled wind and solar power projects, to the point of oversubscription. The Renewable Portfolio Standards (RPS) was subsequently implemented in 2020 to mandate electricity suppliers, particularly the distribution utilities, to source a fraction of their power supply from eligible renewable energy resources. Starting from 2023, the DOE has [raised](#) the RPS from one per cent to 2.52 per cent. The GEOP and the increased RPS have thus enlarged renewable energy market size.

While favourable treatments to the private sector play a pivotal role in the country's electricity provision, consumer feedback is vital to energy transition success. It is worth noting that consumers are shouldering parts of the costs. The [pass-through](#) arrangement, which is typically reflected in Power Purchase Agreements with coal power producers, automatically passes on to end-users any additional charges resulting from fluctuations in global coal prices. A [call](#) has been made to remove pass-through mechanism on the basis of protecting consumers from having to bear the high prices during volatile and low demand.

Similarly, to enable FiT for renewable energy developers, FiT-Allowance (FiT-All) are charged to end-users at a uniform rate. While this ongoing mechanism is largely accepted by the society, critics of FiT and FiT-All generally point to the lack of environmental benefits that the consumers are supposed to enjoy, given that emissions from expanding coal use continue to rise while they are paying for FiT-All. Former energy secretary Alfonso Cusi directly positioned FiT as an unjust [burden](#) to consumers.

Indeed, at about USD0.20 per kilowatt-hour (kWh) or [Php10](#) per kWh, the Philippines is long known to have the [highest](#) electricity rates in Southeast Asia. Different administrations have attempted to address this issue, but it remains unsolved. The possible reasons range wide: from heavy reliance on imported fossil fuels, to the absence of nuclear power to meet energy needs, to the [passage](#) of the 2001 Electric Power Industry Reform Act (EPIRA) that privatises the electricity sector. Low-carbon energy transition is perceived as a solution to slash consumers' electricity bills although it remains a difficult task to achieve.

To ensure that the overall direction in the energy sector will stand through leadership changes, a draft bill on Energy Transition is currently being [pushed](#). Among other things, the [proposed bill](#) envisions the elimination of fossil fuel power plants and internal combustion engine vehicles from the country. Should it turn into a law, fossil fuel interests will get constrained and low-carbon energy transition is very likely to gain speed and scale in the Philippines.

The Philippines is undoubtedly on track to advance its renewable energy development. However, with consumers contributing directly to financing this, the continuous balancing between the interests of the private sector and the consumers will be crucial to the Philippines' energy transition efforts.

Tasked to perform this difficult role, the Energy Regulatory Commission (ERC) has already made several [downward](#) adjustments to the FiT-All charges over the years. More recently, the ERC has made a decision to [suspend](#) FiT-All collection until August this year to [help](#) consumers cope with inflation-induced rising expenses.

The success of the Philippines' low carbon energy transition in the years to come will necessarily involve finding the right balance between consumer and stakeholder interests.

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