



# Renewables in the post- COVID-19 recovery package of the Philippines



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AUTHORS

TEJAS SHINDE & ANNA SKOWRON

CONTRIBUTORS

ANNA LEIDREITER, NAEMIE DUBBELS & RICCARDO SCHRECK

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THIS ANALYSIS IS PART OF A [COMPILATION OF RECOVERY PACKAGE ANALYSES](#) AND AIMS AT EXPLORING THE ROLE OF RENEWABLES IN POST-COVID19 RECOVERY SCHEMES. AS A SERIES, THIS RESEARCH IS CONDUCTED CONTINUOUSLY AND WILL BE ADDED TO, ONCE INFORMATION IS AVAILABLE.

## Introduction

Like most other countries, the Philippines economy took a hit and tumbled when the coronavirus spread. As a consequence, the Philippine economy faces its first recession in 29 years<sup>1</sup>. The Philippines relies heavily on coal and as a consequence of supply chain disruptions and lockdown measures, introduced to contain the spread, the generation of coal fell significantly between March and April 2020.<sup>2</sup> As a result, the coal prices skyrocketed, putting an additional burden on already constraint households. What is more, the lockdown led to a significant drop in power demand, which altogether decreased by 17%<sup>3</sup> in the first three months of the lockdown. It is interesting to note, that the demand for renewables decreased only slightly, while the demand from coal-fired plants dropped by a whopping 19%.<sup>4</sup> Maybe this simply illustrates preferential treatment given to renewable energy when it comes to steady financial operability.

Urged by the Climate Change Commission (CCC) of the Philippines in August 2020, headed by the President, climate resilience and sustainability strategies should be integrated as strategic principles to build back better in the post-pandemic era<sup>5</sup>: to “seize the opportunity to transform how we understand, plan, finance, and respond to risks” and to “integrate climate resilience into decisions at all levels of government and by businesses, communities, and households.”<sup>6</sup>

Promotion of low-carbon technologies, eco-friendly construction and designs, education, employment as well as investments into R&D are some of the areas where recovery plans can be strategically centered around sustainability, according to the CCC. In addition, natural capital investment to strengthen ecosystem resilience and regeneration can be promoted to address the immediate unemployment crisis, induced by the pandemic.<sup>7</sup>

Despite these encouraging words from the CCC, a climate-friendly future will have a harder start in the Philippines: the latest Philippines Energy Plan (PEP) for instance, proposes a significant share of

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<sup>1</sup> CNA, Asia, “Philippines’ Duterte signs US\$3.4 billion COVID-19 pandemic stimulus package into law” <https://www.channelnewsasia.com/news/asia/covid-19-stimulus-package-philippines-duterte-13104128> published on 12 Sept 2020.

<sup>2</sup> Majah-Leah V. Ravago and James A. Roumasset, “Working Paper- COVID-19, Coal, and the Energy Transition in the Philippines”, <http://ateneo.edu/sites/default/files/downloadable-files/ADMU%20WP%202020-09.pdf> published on 23 June 2020.

<sup>3</sup> Daniel Pruce, Philstar Global, “The opportunities for clean energy in the future Philippines” <https://www.philstar.com/opinion/2020/09/24/2044671/opportunities-clean-energy-future-philippines> published on 24 Sept 2020.

<sup>4</sup> Ibid.

<sup>5</sup> Jonathan L. Mayuga, Business Mirror, “Climate body calls for adoption of green Covid-19 recovery plans” <https://businessmirror.com.ph/2020/08/31/climate-body-calls-for-adoption-of-green-covid-19-recovery-plans/> published on 31 Aug 2020.

<sup>6</sup> Ibid.

<sup>7</sup> Jonathan L. Mayuga, Business Mirror, “Climate body calls for adoption of green Covid-19 recovery plans” <https://businessmirror.com.ph/2020/08/31/climate-body-calls-for-adoption-of-green-covid-19-recovery-plans/> published on 31 Aug 2020.

coal and oil in the energy mix – 58.9 percent by 2030 and 55.6 percent by 2040 respectively<sup>8</sup>. Along similar lines, the share of renewables has dropped from 23% in 2018 to 21 % in 2019<sup>9</sup>. Under the current plan, it is slated to reach 31.9% by 2030 and 35% by 2040. Current deployment rates however would lead to only 26.9% by 2040<sup>10</sup>.

Against this backdrop, the Southeast Asian country has published a COVID19 recovery package which is based on four pillars. Two of which aim to address the urgent needs of the vulnerable sectors as well as the medical industry, while the second pair of pillars will provide an enabling environment to support the funding needs of emergent initiatives and economic recovery.<sup>11</sup>

## The Philippines' recovery package

On 12<sup>th</sup> September, the Philippines signed its 165 billion pesos (US\$ 3.4 billion) strong emergency package into law. The package aims to strengthen the healthcare sector and support businesses' recovery and is primarily aimed at facilitating a quick response to the pandemic.<sup>12</sup> Among others, the government is to inject around 40 billion pesos (US\$ 831 million) into state-owned banks in order to ensure liquidity in the market and reduce the burden on affected industries.

Further, to ensure that energy security and sustainability are addressed, multiple additional measures have been stipulated. These may not be termed stimulus package, but are nevertheless focusing on encouraging the renewable energy sector in particular to be a response to the pandemic. Some of the measures are listed below:

Access to Sustainable Energy Program The European Union (EU) has allotted additional 6 million Euros (336 million pesos) for various measures. These additional funds are to be spent until December 2022. Most of which (4.5 million EURO) are to be allocated to the electrification programme of Mindanao Island. The remaining funds are to be spent for research and assessments, such as the social and environmental impact assessment study of the rehabilitation of the Agos-Pulangy Hydropower Project on Mindanao.<sup>13</sup> The EU-funds are topping up the Access to Sustainable Energy Program (ASEP) which has seen a total investment of 55 million Euro (PHP 3.7 billion) since

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<sup>8</sup> Anand Gupta, EQ Magazine, "Massive redraft of the Philippines energy plan" <https://www.eqmagpro.com/massive-redraft-of-the-philippines-energy-plan/> published on 03 Oct 2020.

<sup>9</sup> Daniel Pruce, Philstar Global, "The opportunities for clean energy in the future Philippines" <https://www.philstar.com/opinion/2020/09/24/2044671/opportunities-clean-energy-future-philippines> published on 24 Sept 2020.

<sup>10</sup> Anand Gupta, EQ Magazine, "Massive redraft of the Philippines energy plan" <https://www.eqmagpro.com/massive-redraft-of-the-philippines-energy-plan/> published on 03 Oct 2020.

<sup>11</sup> Press Release, BIS, "Benjamin E Diokno: Opportunities for banks in pursuing a green, sustainable economy in the current pandemic" <https://www.bis.org/review/r200807m.htm> published on 07 Aug 2020.

<sup>12</sup> CNA, Asia, "Philippines' Duterte signs US\$3.4 billion COVID-19 pandemic stimulus package into law" <https://www.channelnewsasia.com/news/asia/covid-19-stimulus-package-philippines-duterte-13104128> published on 12 Sept 2020.

<sup>13</sup> Kris Crismundo, Philippines News Agency, "PH gets P336-M from EU for sustainable energy projects", Philippine News Agency (pna.gov.ph) published on 18 June 2020.

2015. The programme has contributed to the electrification of about 40,500 rural households via solar home system deployment and pre-paid metering systems.<sup>14</sup>

### *Sustainable Finance Framework*

Prior to the statement made by the CCC in August 2020, the Central Bank of the Philippines issued a Sustainable Finance Framework that offers support for a renewable energy transition.<sup>15</sup> Being aware of their role in pursuing sustainable and resilient growth, the bank aims to foster “environmentally and socially responsible business decisions consistent with the aspirations set out for Filipinos under the Philippines Development Plan.”<sup>16</sup>

Hence, under the Sustainable Finance Framework, the Central Bank expects financial organizations to adopt sustainability principles into their corporate governance framework, including those covering environmental and social risk areas, risk management systems and strategic objectives consistent with their size, risk profile and complexity of the operation.<sup>17</sup>

It is expected that this will create an enabling environment for investors looking for environmentally friendly, socially just investment opportunities. The Asian Infrastructure Investment Bank for instance promised to end coal-financing<sup>18</sup> and others are expected to follow suit.

### *Green Energy Auctions*

The Green Energy Auction scheme has been in the planning since early 2020 and was finally launched in July 2020 by the Department of Energy (DOE). It is said to be a program of utmost priority for the Philippines government<sup>19</sup>. The draft lays out two main components for the scheme, namely, green energy tariffs and green energy auctions. The tariff will provide an important price signal about the commercial value of electricity generated from renewables and provides the basis for benchmarking a rate for renewable energy.<sup>20</sup>

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<sup>14</sup> Ibid.

<sup>15</sup> Saur News Bureau, Saur Energy International, “Philippines Central Bank Offers Support for Energy Transition and Renewables: IEEFA” <https://www.saurenergy.com/solar-energy-news/philippines-central-bank-support-energy-transition-renewables-ieefa> published on 11 May 2020.

<sup>16</sup> Circular no. 1085, Central Bank of Philippines, “Sustainable Finance Framework” <https://drive.google.com/file/d/1gXIU1PAbvFWHTzhMaLqpxghptWN4Nk4r/view> published Sept 2020.

<sup>17</sup> Ibid.

<sup>18</sup> Chloe Farand, Climate Home News, “Asian multilateral bank promises to end coal-related financing” <https://www.climatechangenews.com/2020/09/11/asian-multilateral-bank-promises-end-coal-related-financing/> published on 11 Sept 2020.

<sup>19</sup> Jordeene B. Lagare, The Manila Times, “DoE finalizing green energy auction rules” <https://www.manilatimes.net/2020/04/10/business/business-top/doe-finalizing-green-energy-auction-rules/711888/> published on 10 April 2020.

<sup>20</sup> Danessa Rivera, The Philippine Star, “Green energy tariff program policy out” <https://www.philstar.com/business/2020/07/26/2030554/green-energy-tariff-program-policy-out> published on 26 July 2020.

Together with the Renewable Portfolio Standard (RPS), the Green Energy Auction seeks to establish a framework for the compliance of distribution of renewables. The National Renewable Energy Board (NREB) of Manila is set to auction a capacity of 2000 MW in July 2021. Further, the DoE plans to further boost the program.<sup>21</sup>

To guide investments, the DoE has published a report highlighting geographic areas that are particularly well suited for RE development. The report is to be updated annually to assist in future decision-making.<sup>22</sup>

### *Renewable Energy Program for the Agriculture and Fishery Sector (REP-AFS)<sup>23</sup>*

In August, the Department of Agriculture (DoA) and the Department of Energy (DoE) came together to forge a 10-year partnership that will focus on the nexus between renewable energy, agriculture and the fisheries sector. The aim is to promote cost-effective solutions for agriculture and fisheries through the use of renewable energy sources, to promote food security, environmental protection and to strengthen sustainable development.

#### *FLOATING SOLAR AND SOLAR POWERED IRRIGATION*

As a kind of extension to the REP-AFS program, the National Irrigation Administration (NIA) will install floating solar PV systems at selected dam locations across the country. This move is intended to improve the water and power supply in the corresponding areas. Floating solar technology is particularly useful, as it:

- Has a less adverse impact on the environment compared to land-based power plants
- Does not subduct arable land
- Avoids evaporation of water
- Supports the underwater ecosystems, if space between panels allows ample sunlight to reach the water

In the wake of the coronavirus spread, the NIA prioritized solar irrigation pumping, as a more reliable way to guarantee water supply for isolated farmlands. The first solar-powered pumps under the P3.557 million Isumbo Pump Irrigation Project (Isumbo PIP) were installed in Barangay Isumbo, Sofronio Española, Palawan.<sup>24</sup>

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<sup>21</sup> Danessa Rivera, The Philippine Star, “Green energy tariff program policy out” <https://www.philstar.com/business/2020/07/26/2030554/green-energy-tariff-program-policy-out> published on 26 July 2020.

<sup>22</sup> Ibid.

<sup>23</sup> Anand Gupta, EQ Magazine, “Philippines looking at renewable energy program for agriculture and fishery sector” published on 11 Aug 2020.

<sup>24</sup> Press Release, National Irrigation Administration, “NIA installs 3.557M solar-powered irrigation project in Palawan” <https://pia.gov.ph/news/articles/1046993> published on 08 July 2020.

This pilot with a 5 hp motor is capable of irrigating 13 hectares of land benefiting 13 farmers in the region for 3 crop cycles a year<sup>25</sup>. By replacing diesel pumps with solar pumps, the farmers are further able to reduce operational costs.

### *GW Scale Solar Power Projects*

Aiming to increase the share of renewables in its energy mix, the Philippines plans the installation of seven GW of solar power. In total, 27 projects have received approval to conduct grid-impact studies from the DoE.

The Business Monitor newspaper<sup>26</sup> provided the following details about the selected projects: the Cardona Solar Power Plant and Naga Solar Power Plant of Solar Philippines South Luzon Corp.; Kananga-Ormoc Solar Power Project of Solar Philippines Visayas Corp.; Maragondon 1 Solar Power Project of Solar Philippines Tanauan Corp.; Sta. Rosa Nueva Ecija 3 Solar Power Project and General Santos Solar Power Project of Solar Philippines Commercial Rooftop Projects Inc.; and Padre Garcia Solar Power Project of Solar Philippines Batangas Corp.

Solar Philippines Commercial Rooftop Projects Inc.'s 5-MW SM City Tuguegarao solar power project was also issued a GIS permit by the DoE.

Universal Power Solutions Inc., a subsidiary of SMC Global Power Holdings Corp., is putting up 11 integrated renewable power facility hubs (R-HUB), 10 of which have a capacity of 40 MW each while the 11th R-HUB's capacity is 20 MW.

The DoE also issued permits to the PowerSource First Bulacan Solar Inc. for its 61.87-MW San Miguel Solar Power Plant Project; Cell Power Energy Corp.'s 20-MW Lumban Energy Storage System and 20-MW Toril Energy Storage System; 3 Barracuda Energy Corp.'s 50-MW Currimao Energy Storage Plant and 50-MW Tinampa-an Energy Storage Project; JBD Management and Consulting Services Inc.'s Pakil Pumped Storage Hydroelectric Power Plant; Hydrocore Corp.'s 4.5-MW Ibulao Hydroelectric Power Plant; and Ingrid2 Power Corp.'s 300-MW diesel/gas turbine power plant project.

### *Moratorium on Coal Plants*

In a bold move, the Philippines' Department of Energy has announced it will issue a moratorium on coal power plants which forbids the construction of new coal-fired power plants. The announcement came at the Singapore International Energy Week (October 2020) by Energy Secretary Alphonso Cusi, stating "the decision aimed to build a more flexible power supply mix that could be resilient in

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<sup>25</sup> Ibid.

<sup>26</sup> Lenie Lectura, Business Mirror, "27 power projects cleared for grid impact study-DOE" <https://businessmirror.com.ph/2020/09/03/27-power-projects-cleared-for-grid-impact-study-doe/> published on 3 Sept 2020.

the face of structural changes in demand and accommodate the entry of new cleaner and indigenous technological innovations”<sup>27</sup>.

The move came amidst strong voices from climate stakeholders for the Philippines to revise its energy strategy. If proving true, this could mean the cancellation of over 13.79 GW coal-fired power plants. It is argued that no new plants have been built since 2017, whereas there are 28 coal-fired power plants with an aggregate capacity of 9.88 GW currently active and 22 proposed plants that have already been approved are to come online. This move alone could reduce the country’s coal energy share to 53% by 2030.

Organisations like Greenpeace lauded the moratorium but stressed that it needs to be a permanent one, and in tandem with accelerating renewable energy adoption in the country.<sup>28</sup>

## Role of Renewables

The Sustainable Finance Framework announced by the Philippines makes for an overarching ambitious framework that directs the decision-makers in the country to rebuild better. “Modular domestic and localized renewable energy and grid investments can ensure energy access and reduce overall system costs while improving domestic energy security and resilience by reducing exposure to international volatility and supply chain risk. Efficient use of power and renewable energy brings cost-competitiveness and has been an important job creator,” notes a report by IEFFA.<sup>29</sup> According to IEFFA, the Philippines could save up to 13.5 billion pesos annually, alone by shifting off-grid areas from diesel power to renewables.<sup>30</sup> This shows that, in the wake of the pandemic, the country needs to urgently realign its priorities, if it wants to strive economically.

Further, renewables have shown the potential of creating more jobs than conventional energy. In a paper published by Lachlan Cameron and Bob van der Zwaan in 2015, they estimate that renewable energy sources create between 1.7 to 14.7 times more jobs than natural gas-based power generation plants in South Asia. In addition to up to 4 times more jobs than coal-fired power plants.<sup>31</sup>

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<sup>27</sup> Climate Home News, “Philippines declares moratorium on new coal power plants”, <https://www.climatechangenews.com/2020/10/28/philippines-declares-moratorium-new-coal-power-plants/> published 28 October 2020.

<sup>28</sup> Ellalyn De Vera-Ruiz, Manila Bulletin, “Greenpeace welcomes PH moratorium on new coal plants, urges transition to renewable energy” <https://mb.com.ph/2020/10/28/greenpeace-welcomes-ph-moratorium-on-new-coal-plants-urges-transition-to-renewable-energy/> published on 28 Oct 2020.

<sup>29</sup> Sarah Jane Ahmed, IEFFA, “Philippines Central Bank’s Sustainable Finance Framework Offers New Support for Energy Transition and Renewables” [https://ieefa.org/wp-content/uploads/2020/05/Philippines-Central-Bank-Sustainable-Finance-Framework\\_May-2020.pdf](https://ieefa.org/wp-content/uploads/2020/05/Philippines-Central-Bank-Sustainable-Finance-Framework_May-2020.pdf) published May 2020.

<sup>30</sup> Sarah Jane Ahmed, IEFFA, “IEEFA Philippines: NPC-SPUG shift can drive savings to P13.5 billion per year” <https://ieefa.org/ieefa-philippines-npc-spug-shift-can-drive-savings-to-p13-5-billion-per-year/> published on 03 Dec 2020.

<sup>31</sup> Lachlan Cameron, Bob van der Zwaan, IDEAS, “Employment factors for wind and solar energy technologies: A literature review” <https://ideas.repec.org/a/eee/rensus/v45y2015icp160-172.html> published in 2015.

The Philippines is an archipelago of about 7000 large and small islands. Connecting these islands to the mainland grid is not a viable option. Stand-alone renewable sources that do not depend on further supply chains after installation are one of the most viable options to provide stable energy access and build long-term resilience.

## Evaluation of RE Policies

In these challenging times, the Sustainable Finance Framework, the Green Energy Tariff and the Green Energy Auction scheme seek to help build back greener. In addition, the support from international organizations like UNEP or the EU has come at a very timely moment to support the Philippines economy to bounce back. Some important steps towards a greener and more resilient approach to growth have been taken already.

The moratorium on coal has been widely welcomed, as reducing the country's dependency on coal and decreasing air pollution. On the downside though, the Department of Energy has exempted the state-run Philippine National Oil Company-Exploration Corporation (PNOC-EC) from the moratorium.<sup>32</sup> A move criticised, especially since PNOC-EC is currently pursuing several coal projects in Zamboanga Sibugay in Mindanao; as well as Isabela province in Northern Luzon<sup>33</sup>. Energy Secretary Alfonso G. Cusi justified the exemption by citing the immediate energy needs of the country.<sup>34</sup>

The green energy tariffs and auctions are expected to be favorable for RE deployment. Especially when coupled with a higher renewables target under the Renewable Portfolio Standard (RPS). Noting that the RPS is currently being reassessed by the government<sup>35</sup>, which might prove to give a good outlook for renewables in the Southeast Asian country.<sup>36</sup> However, there is no information available yet, as to whether the RPS targets will be strengthened or weakened.

The policies listed in the previous sections are not addressing the transportation sector. As of 2018, the sector accounts for 38.4% of the energy consumption<sup>37</sup>. According to the newspaper Philstar, at least 10% of transportation needs to be electrified, while bioethanol and biodiesel need to rise by

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<sup>32</sup> Myrna Velasco, Manila Bulletin, "DOE exempts PNOC-EC coal projects in moratorium" <https://mb.com.ph/2020/11/23/doe-exempts-pnoc-ec-coal-projects-in-moratorium/> published on 23 Nov 2020.

<sup>33</sup> Ibid.

<sup>34</sup> Ibid.

<sup>35</sup> Myrna M. Velasco, Manila Bulletin, "DOE to adjust volume for renewable energy auction" <https://mb.com.ph/2020/08/10/doe-to-adjust-volume-for-renewable-energy-auction/> published on 10 Aug 2020.

<sup>36</sup> Danessa Rivera, Philstar, "Renewable energy more viable following pandemic", <https://www.philstar.com/business/2020/06/15/2020866/renewable-energy-more-viable-following-pandemic> published on 15 June 2020.

<sup>37</sup> Philstar, "Green energy seen at brink of return as top power source in 2040" <https://www.philstar.com/business/2020/11/27/2059854/green-energy-seen-brink-return-top-power-source-2040> published on 27 Nov 2020.

5.4% and 4.6% respectively every year in order to meet the country's commitments under the Paris Agreement.<sup>38</sup>

Based on the success of pilots combining energy needs with agriculture, such as in Tawi Tawi, which aims to ensure stable energy access in isolated regions while improving agricultural output, the government should scale up such projects. Further, such solar irrigation solutions are less expensive than diesel operated pumps and can bring down operational costs and increase the self-reliance of farmers.

Lastly, since multiple programmes are being implemented by different divisions, a central point for information on the country's green recovery and climate resilience measures would be beneficial. This would strengthen messaging and potentially support in attracting further investments.

On that point, last month, the government launched its international promotion "make it work<sup>39</sup>". The promotional slogan centers around the Philippines' ESG based approach and might further attract additional investments.

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<sup>38</sup> Ibid.

<sup>39</sup> Philippines Board of Investments Press Release, CISION, "Philippines Launches New International Investment Promotion Brand Highlighting Its "Make It Work" Potential" [Philippines Launches New International Investment Promotion Brand Highlighting Its "Make It Work" Potential \(prnewswire.com\)](https://www.prnewswire.com/news-releases/philippines-launches-new-international-investment-promotion-brand-highlighting-its-make-it-work-potential-301888888.html) published on 24 Nov 2020.