### **Energy Insight** No. 5 / 2020





# COVID-19 vs ASEAN Energy Sector: Renewables

The concerning uncertainty of RE supply chain, and incorporating energy transition in pandemic recovery plan

Iglima Fugoha and Rika Safrina

This edition is part of the related analysis on the impact of Covid-19 on energy in ASEAN. Further detail, please access: https://accept.aseanenergy.org/covid-19/.

As renewable energy (RE) is a fast-growing market in the region owing to its declining trend of generation cost in recent years, ASEAN is aiming to achieve the 23% renewable target in total primary energy supply in the next 5 years. In 2017, renewables shared 26% of power capacity mix, or approximately 61 GW (ASEAN Energy Database System), yet 166 GW of capacity needs to be run by 2025 to prevail the regional target (The 5th ASEAN Energy Outlook, 2017).

Today, the world struggles to contain the spread of the coronavirus disease (COVID-19) through massive lockdown and movement restrictions. The COVID-19 crisis brings multiple implications in energy supply and demand as well as efforts in combating climate change. The plunge of overall energy demand because of behavioural changes such as working from home could lessen carbon emissions. In energy supply, the pandemic has immensely hit the market dynamics for renewables, impacting all stakeholders along the value chain. The disruption in supply value chain placed projects in the development pipeline under risk, moreover with the downturn global economy.

To give the readers an overview of how big the COVID-19 pandemic hits the ASEAN energy sector, ASEAN Centre for Energy (ACE) releases several energy insights that highlighting the impact of COVID-19 in the ASEAN Energy Sector from our archived news. In this insight, we highlight the impact of COVID-19 in the ASEAN Renewable Energy sector.

#### Supply chain disruption and the postponed **RE projects**

Notwithstanding solar becomes the fastest-growing renewables in the region recently, ASEAN still heavily reliant on equipment manufacturers and raw materials from China where the emergence of the outbreak. Given with plants halting operations by end of January, the market, including ASEAN, experiences supply

shortages of materials and equipment. Philippines' utility suffers the delay of commissioning 135 MW solar project as the country sources most of the solar PV modules from China.

Malaysia is known as the second-largest exporter of palm kernel shells (PKS) and wood pellets in Asia after Indonesia. As the country imposed a nationwide lockdown since mid-March, the palm oil plants shutdown undermines biomass supply. With the current supplies of PKS that is already tight caused by lower production, the country needs to secure its domestic supply while also satisfy foreign demand of PKS and wood pellets, such as Japan and South Korea.

In the Mekong area, many ongoing hydropower projects are at risk spurred by the economic turmoil. Laos government suspended all hydropower construction throughout the country, similarly, Cambodia already postponed two potential hydro projects earlier in March. Meanwhile, as the electricity importing country, Thailand's Ministry of Energy is urged to sign a moratorium on Power Purchase Agreements of new power projects in neighbouring countries. The government intends to hinder oversupplied electricity because of a sharp decline of domestic demand impacted by the pandemic.

"Renewable energy sector is also inevitably hit by this pandemic, remarkably under the disrupted supply chain and logistic which cause inevitable postponed projects. This pandemic creates both, opportunities and thread to RE as target and priorities of government are still on the fence. However, there is an optimism that this pandemic could shine a silver lining on how to progress with the energy transition and shape the RE industries once the economy bounces back."

## Keeping the hopes of renewables alive amid dark times

A foreseen inevitable global recession as a result of the preventive containment policies and extremely low oil prices at present could discourage the clean energy transition agenda due to less competitiveness of RE.

To date, as coal and gas are still the major fuels in the power sector across the region, the ASEAN governments may rethink of shifting to RE and seek the cheapest electricity, triggered by current lower gas and coal prices. Else, some countries like Philippines and Indonesia may also reconsider their nuclear energy plans. Such potential disincentive of RE, for instance, reduction in RE investments, could also risk the long-term initiatives on climate change mitigation.

Despite the black cloud hanging over the RE, several positive actions are observed in ASEAN during the COVID-19 crisis. From the beginning of April, Vietnam has successfully managed to launch its second Feed-in-Tariff (FiT) scheme for solar projects which was 10 months overdue. The FiTs program is a response to the new energy strategy, in the attempt to ensure national energy security in 2021 while achieving 20 percent of the nation's power source from RE by 2030. The new tariff comes with different rates based on the project's location and installation type that includes utility-scale, rooftop, and floating PV. Although some developers raised concerns with the slightly lower rates and a shorter period of time than previous policy, it did not stop attracting foreign investors to the country. An energy company from Thailand expressed its interest in joining Vietnam's solar FiT scheme, only if it can meet the project's deadline set by the government, which is 1 January 2021. The firm is also looking for other RE opportunities in Indonesia, especially as Indonesia plans to build the new capital in East Kalimantan with a smart and sustainable city.

Furthermore, Vietnam's FiT scheme for wind projects is also being considered by the policymakers to be extended for another two years until 2023 due to the current disrupted supply chain and uncertain investments. This reflects the government's commitment to reduce the impact of COVID-19 in the solar as well as the wind industry. Along with the extension proposal, through a solid wind energy roadmap, the government will ensure the industry to establish a stronger local supply chain to reduce dependency on imported materials.

While Vietnam pushed their RE strategy using the traditional topdown approach, a rural community in Malaysia constructed a solar-fuelled buggy and water pumps to survive during quarantine. This kind of civil society-led grassroots innovation has a potential role in increasing the development of sustainable energy in the country because it bridges the energy production and consumption. By co-creating a new energy system, the community energy can secure the self-provision of energy, transfer its tacit knowledge among the members, and at the same time benefit from its economic value added. Therefore, the ASEAN countries need to promote any social initiatives in the RE sector.

#### Shaping the post-pandemic RE industry

The policymakers should take the momentum to reset their policies to pursue energy transition agenda and climate goals. There are many reasons why the government should utilise RE when the pandemic is over. First, the RE sector is believed to be able to create the biggest job opportunities. With the economy falling and a lot of people are losing their business, providing sufficient jobs will speed up the nation's recovery and accelerate the GDP. Secondly, although there is no evidence yet that climate change took part in generating coronavirus into the world, the threat becomes worse for residents living in polluted areas, a study reported. Therefore, investing in the RE industry as one of climate mitigation efforts should be prioritised, before another climate-induced disease or global economic recession caused by climate change happens again. And finally, as the governments realised the volatile oil prices during the crisis, they should opt to more stable energy sources in the future, hence RE.

In order to boost RE development during post-pandemic, the governments can provide green stimulus packages for RE markets, such as renewing their investment, easing credit terms in financing RE projects, and reducing cost competitiveness with fossil fuels. Only a few countries have included the RE sector in their economic recovery response as of now. Malaysia, for instance, has planned to spend US\$2.9 billion towards the rooftop solar panels installation, and to invite investments for a 1400 MW solar power project. Furthermore, since ASEAN countries with the emerging economies are among the most vulnerable nations, regional cooperation would be necessary for fighting this global health crisis.

The coronavirus outbreak may slow down the development of renewables and derail the energy transition for now, but ASEAN countries should react aggressively to minimise further implications once the situation bounces back.



This edition is supported by the ASEAN Climate Change and Energy Project (ACCEPT).

Energy Insight is an inside analysis based on the collected news for certain period of time, through the ASEAN Energy News Clipping of the **ASEAN Energy Database System (AEDS)**. This edition covers the period of 1 January-30 April 2020.

ASEAN Centre for Energy Soemantri Brodjonegoro II Building, 6th fl., Directorate General of Electricity, Jl. HR. Rasuna Said Blok X-2, Kav. 07-08, Jakarta 12950, Indonesia

- +62 21 527 9332
- aseanenergy.org
- Secretariat@aseanenergy.org