



Virtual RE Congress and Exhibit Concept Note

"RE-building better: Strengthening the Role of Renewable Energy in Recovery and Development" 18 December 2020

Background

The Philippines has experienced robust economic growth in the past years but its vulnerability to natural disasters remains a significant threat. On average, 20 tropical cyclones are recorded every year and the frequency of earthquakes and volcanic activity is rising in recent years. Between 2011 to 2018, 390 billion pesos worth of damages were incurred due to disasters including in the power sector (transmission and distribution lines), causing power interruption in the affected areas. The average annual loss due to natural disasters is around 0.6% of the GDP, with the majority caused by typhoons (OECD, 2018). Nevertheless, projection in 2019 indicated that GDP would grow with a decade starting anew.

Unfortunately, the anticipated decade comes with a pandemic that affects lives and the economy across the world. Many nations including the Philippines are now suffering from economic slump because of the quick spread of COVID-19 virus. Several prominent international companies have already filed for bankruptcy, while small and medium enterprises started to close. Limited mobility and physical interactions, and other lockdown restrictions are impeding global and domestic economic activities. A new normal has emerged as things will never be the same as they were before, at least for the next 2 years according to some experts.

Sadly, while many Southeast Asian neighbors have now declining COVID cases, the Philippines is battling with the spike in the rates of COVID infection and deaths – this despite the imposition of longest lockdown in the world. The country has the second highest number of positive cases and first in terms of mortality rate per million in Southeast Asia (CSIS, 2020). The World Bank estimated that the country's GDP would shrink by 1.9 percent this year compared to a 6 percent growth in 2019. The energy sector has also been affected by the pandemic. The power demand in Luzon-Visayas dropped by 30 percent during the 3-month quarantine period as almost all companies had ceased to operate temporarily. Coal power generation reduced its share in the energy mix to 48 percent from 56 percent in favor of natural gas. Renewable energy generations stayed almost the same, with a slight increase in solar and biomass (Ravago and Roumasset, 2020). The RE share in 2019 reduced to 21 percent from 25.6 percent in 2014 – almost 90 percent of which come from geothermal and hydropower. Solar and wind only account for about 2% of the total power generation mix. Meanwhile, electricity rates have remained high (the highest in Southeast Asia and 2nd highest in Asia), adding economic strain to electricity consumers.

The utilization of renewable energy is one of the favored solutions in addressing some key national issues, particularly energy poverty/access, energy security, and climate change. At present, there are still areas with no access to electricity due to technical and economic viability concerns, especially in remote areas. With the use of renewable energy, it is possible to supply power to areas especially those not connected to the primary grid, at a competitive cost. Also, geopolitical uncertainty, volatile international fuel prices, and evolving energy market cause energy security concerns in every country. Many countries are therefore inclining to renewable energy as part of their national energy plan and even city-scale targets due to energy security reasons. A number of credible energy and intergovernmental agencies have also recommended the integration of RE in the COVID recovery plans.

As new normal takes place, the opportunity for growth of renewable energy plants increases as the supply of coal and natural gas has been erratic and experiencing price fluctuation. This widens the window for the country to get closer to its international commitment in RE generation. The Philippine Department of Energy, through its National Renewable Energy Plan, aims to achieve 15.3 GW of renewable energy capacity in 2030 as part of its sustainable energy plan. However, RE capacity only increased by 1.8 GW from 2009 to 2017, due to the lack of or delayed policy























mechanisms and incentives implementation that will perhaps increase the appetite of investors to invest in RE technologies.

However, on October 27, DOE Secretary Alfonso Cusi declared moratorium on endorsements of new coal power plants as the country needs to shift to more flexible supply mix. This puts uncertainty to several indicative coal power plants that are still on the process of acquiring permits and financial closure, as well as endorsement from DOE. With this, the DOE and several groups expected that it will lead to more renewable energy projects.

Renewable energy plays an important role in ensuring access to energy or the Sustainable Development Goal 7: Access to affordable, reliable, sustainable and modern energy for all. Access to energy remains a big problem especially in Mindanao. While the energization level in Luzon is already at more than 90 percent, Mindanao is mostly in the dark in this modern age. Mindanao, the second largest island in the Philippines, is believed to be a significant piece in achieving sustainable and inclusive growth in the country (World Bank, 2017). Currently, the island is suffering from a high poverty rate, where about 50 percent of the population live below poverty line. Also, armed hostilities cause population displacement, negative economic growth and slow infrastructure development in affected areas in the island (MinDA, 2012). Bombings of transmission lines also disrupted power delivery. In 2015, a total of 16 towers were bombed, aggravating the already low power supply in Mindanao (NGCP, 2016).

Getting the Renewable Energy (Getting theRE)

With the present trend, the Philippines is still not on track in meeting its international and national targets. There needs to be cooperation/cohesion between policies, technologies, practices to be adopted, and possible institutional arrangements in the energy sector to accommodate RE technologies. As the cumulative greenhouse gas emissions keep on increasing and breaking records each year, the window of opportunity to address climate change becomes narrower.

Starting this new decade, the Center for Empowerment, iNnovation, and Training on Renewable Energy (CentRE) and Friedrich Ebert Stiftung, in partnership with the Mindanao Renewable Energy Research and Development Center (MREC), Mindanao Development Authority (MinDA), and New Energy Nexus aim to gather once again stakeholders from local government units, electric cooperatives, energy industry players, academe, workers, youth in the Philippines and abroad to address the continuing challenges in the energy sector particularly in renewable energy, and likewise overcoming these barriers to help synergize appropriate RE initiatives across the Philippines.

Virtual RE Congress

As physical mass gatherings and travels will remain restricted or discouraged for the rest of the year due to continuing threat of COVID infection, the RE Congress and Exhibit will be conducted virtually.

The first RE Congress and Exhibit in 2018 held in Quezon City, and the next in 2019 in Cebu City, enabled participation by stakeholders including people's organizations, the academe, local government units and small industry players through accessible/affordable venue to learn from and exchange on RE technologies, practices and opened opportunities for matching or forging of commitment to pursue RE projects.

This December 2020, the CentRE and key partners will be organizing the first-ever Virtual RE Congress which aims to synergize research and development efforts on sustainable energy systems and appropriate technologies for the Philippines and Southeast Asia, with a particular focus on tackling the challenges and solutions in making energy sufficient, affordable, sustainable, resilient/adaptive, inclusive, and generally responsive to the call of the times -- amid the COVID-19 pandemic. The main event will take place in a plenary on December 18 and linked events – RE deep dive sessions and RE Exhibit - will run on 11 December and 14 December 2020.























Objectives

The event will be a venue to strengthen discussion on energy technology and policy trends, exchange studies and experiences on the ground, showcase solutions, and to build stronger collaboration towards full deployment of renewable energy as we endeavor to address energy poverty and climate change in a just and ecologically sustainable manner.

Specific Objectives:

- 1. Determine the much-needed role and cooperation among Southeast Asian members in Synergizing RE **Initiatives**
- 2. Tackle national trends/practices and policies to accelerate the deployment of RE technologies.
- 3. Facilitate collaboration of R&D, financing and local government initiatives on RE, especially in Mindanao, disaster-prone, off-grid, and other energy-poor communities.
- 4. Highlight the importance of accelerating RE in addressing climate change, and in achieving sustainable socioeconomic development and resilience
- 5. Continue to provide space for RE developers/ technology providers especially the smaller ones to showcase their projects and or services.
- 6. Discuss the short to long term impact of COVID-19 to the Philippine energy sector and how RE can help in addressing energy security in the middle of the pandemic and other calamities.

The following topics will be covered during the RE Congress and related events:

RE Situation in the Philippines

RECOVERY: The anticipated decade comes with a pandemic that affects lives and the economy across the world. Many nations including the Philippines are now suffering from economic slump because of the quick spread of the COVID-19 virus. Limited mobility and physical interactions, and other lockdown restrictions are impeding global and domestic economic activities. The power demand in Luzon-Visayas dropped by 30 percent during the 3-month quarantine period as almost all companies had ceased to operate temporarily. Coal power generation reduced its share in the energy mix to 48 percent from 56 percent in favor of natural gas. Renewable energy generations stayed almost the same, with a slight increase in solar and biomass. This is an opportunity for the Philippines to spark a transition in the energy sector in favor of renewable energy. According to UNDP, this is an opportunity for a reset, reform fossil fuel subsidies and reassess the option to hasten clean energy transition.

- 1. Impacts of Covid-19 pandemic in the Philippines
- 2. Recovery with Clean Energy Transition

RESILIENCE/ADAPTATION: As the pandemic continues, there are changes that take place in energy consumption. Much of the power delivered has shifted to residential from industrial and commercial. This causes changes in peak hours, peak demands, and other demand profiles, which may cause system instability. Secondly, supply chain disruption is a key issue during this time as countries have imposed lockdowns that limit global and domestic activities. However, the opportunity for growth of renewable energy plants increases as the supply of coal and natural gas has been erratic and experiencing price fluctuation. At the same time, Philippines vulnerability to natural disasters remains a significant threat. Billions of pesos worth of damages were incurred due to disasters including in the power sector (transmission and distribution lines), causing power interruption in the affected areas. The question is, how can RE help in providing energy resiliency?





















- 3. RE Resiliency/Adaptation: What we can learn during the pandemic?
- 4. Policies and instruments to accelerate Clean Energy Technologies
- 5. Cases of micro renewable energy projects in poor, typhoon-belt or off-grid areas

REINTEGRATION/INCLUSIVENESS: The utilization of renewable energy is one of the favored solutions in addressing some key national issues, particularly energy poverty/access, energy security, climate change, and now, post-pandemic recovery. Several studies already show that renewable energy is on par or even cheaper than conventional thermal plants. Integrating more RE can also fast track national, NDC, and other international targets. Apart from that, studies show that investing in clean energy transition would create more jobs and other social and economic benefits.

- 6. RE investment opportunities
- 7. Socio-economic impacts of RE

Expected Results/Outputs:

- Compilation of practices and recommendations to improve and accelerate RE deployment and access of consumers, amid the health, economic and climate crises.
- Integration of RE in COVID recovery / economic stimulus plan and disaster preparedness plan.
- Linkages/collaborations built towards actualizing RE projects in their respective localities
- Awareness-raising, capability-building and or policy discussion activities are scheduled at the local levels.

Target Participants:

- 1. LGUs / Policy-makers / Public employees
- 2. Electric Cooperatives
- 3. Academe / researchers / students (national/SEA/international)
- 4. Energy Practitioners (national/SEA/international)
- 5. Energy/Environment/Climate Advocates (national/SEA/international)

To register and get updates: visit http://recongress2020.thecentre.ph; http://thecentre.ph; http://thecentre.ph; http://thecentre.ph

Co-organizers:

- The CentRE
- FES Philippines
- CREATE-Ateneo de Davao University-Mindanao Renewable Energy R&D Center
- Mindanao Development Authority
- New Energy Nexus















