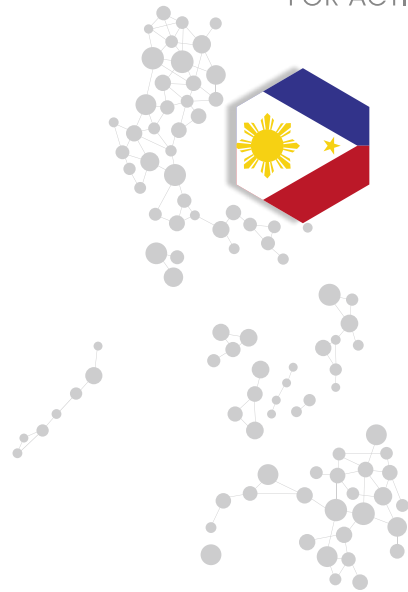


Scaling Up Renewable Energy Investment in the Philippines



As a hub of economic activity and urban growth in Southeast Asia, the Philippines has the opportunity to take the lead in the region's transition to a renewables-based energy system. The country holds several advantages in the development of renewables, including excellent resource potential and a strong financing environment, with public and private sector interest in renewables investment.

The case for renewables in the Philippines is undeniable. In addition to the urgent environmental case for the energy transition, scaling up renewable energy deployment can deliver significant socio-economic benefits and increase the country's energy access, energy security and self-sufficiency, while also improving climate resilience.


As of the end of 2020, the Philippines had an installed capacity of 3 779 megawatts (MW) of hydropower, 1928 MW of geothermal power, 1019 MW of solar power, 443 MW of wind power, and 483 MW biomass. Renewable energy only makes up about a fifth of the country's power generation mix, with the remaining being accounted for by coal and natural gas. Renewable energy growth has stagnated in recent years, and a dramatic acceleration of renewable energy deployment is needed to reduce reliance on imported commodities like coal and oil.

The Philippine Energy Plan (PEP) 2020-2040, last revised in 2021, sets a target, under the Clean Energy Scenario, for renewable energy to provide 35% of the power generation mix by 2030 and 50% by 2040. Given the evolving demand for renewable electricity from industry and from heating and cooling, residential, and transport sectors, the PEP's Clean Energy Scenario could be even more ambitious.

To achieve the PEP's 2040 Clean Energy Scenario Target, an additional 73 868 MW of renewable energy capacity will be needed over the next two decades, as well as pre-development investments (infrastructure, resource assessment, etc.) of more than USD 485 million (PhP 25.3 billion). Progress in deploying this volume of renewables will also be crucial to supporting the Philippines' nationally determined contribution under the Paris Agreement, which commits to a 75% reduction in greenhouse gas emissions from 2020 to 2030, compared with a business-as-usual scenario.

Delivering the PEP, the nationally determined contribution and the Philippines' wider energy security goals will require a robust policy framework and enhanced access to finance, including climate finance. These factors can, in turn, unlock a wave of private sector investment in the country's energy transition and sustainable economic growth. Policy mechanisms like the Renewable Portfolio Standards (RPS) and the near-finalised Green Energy Auction Program (GEAP), as well as the recent moratorium on new coal power plants,¹ will be important mechanisms for promoting public and private investment. Enabling policies and regulatory frameworks for renewables will also be critical to deploying projects at pace in order to meet the country's fast-growing electricity demand.

¹ *New coal projects will no longer receive permits from the Department of Energy.*



The IRENA Coalition for Action's Business and Investors Group, which brings together leading renewable energy players, sees tremendous potential for investments in the Philippines. The group represents a sizeable portfolio of renewable energy assets worldwide and is planning to contribute substantial additional investments for a green and resilient economic recovery post-COVID-19 and to reach global climate objectives. From an industry point of view and based on its engagement in the Philippines, the Business and Investors Group has put together the following key recommendations that the government may wish to consider to reach higher shares of renewable energy.

1. Strengthen the political commitment and ambition for renewable energy in the PEP through higher capacity targets and comprehensive assessments of the techno-economic potential of renewable energy.

The PEP includes two scenarios: the Reference Scenario and the Clean Energy Scenario. In both scenarios, additional capacity targets for most renewable technologies remain conservative compared with technical resource potential and investor interest. For instance, while the Clean Energy Scenario sets an additional power capacity of 18.6 gigawatts (GW) for solar energy by 2030 compared with 2020, only 0.77 GW of additional wind power capacity is indicated for 2030 (443 MW installed today), together with 1.99 GW of hydropower, 0.4 GW of geothermal power, 0.22 GW of biomass energy, and no reference target for ocean energy. In addition, the Philippines remains the only member of the Association of Southeast Asian Nations (ASEAN) not to have committed to achieving net-zero emissions by 2050.

Actions

- » **Increase the overall renewable energy targets for 2030 and 2040**, as well as for all renewable energy technologies, to reflect the high resource potential of the Philippines and account for electrification of end uses.
- » **Commit to targets across a 10-year time horizon**, at least, accompanied by short- and medium-term targets, to take into consideration future energy demand in power and end-use sectors and provide industry with the necessary time to anticipate large-scale investment.
- » **Create a schedule of continual and regular capacity procurement** for all types of large-scale projects to attract sustainable investment, encourage local value chains and support socio-economic development; in addition, introduce policy instruments in support of decentralised renewable energy solutions (e.g. capital subsidies, net metering).
- » **Design resource-specific programmes for the highest potential renewables** and promote renewable hybrids to enable their market readiness.
- » **Commission updated feasibility studies, measurement campaigns and ground validation**, using the latest technology, to reflect clean energy technical resource potential. This information is required to critically assess the resources needed to realise renewables projects, including appropriate policy schemes, investment, human capital, and related infrastructure. Such studies should also cover new renewable energy technologies in the Philippines, such as floating offshore wind technical resources.
- » **Strengthen the evidence-based socio-economic and environmental benefits** of renewable energy, including job creation, increased energy security due to reduction of imported fossil fuels, and local industry development, to increase the demand and appetite for renewables.



2. Promote renewable energy technologies over non-renewables.

The Philippines' technology-neutral stance has resulted in renewable energy technologies not being promoted and fossil fuel technologies, such as coal-fired plants, not being discouraged. This has led to an increase in coal-fired plants, thus jeopardising efforts to boost renewable energy deployment and ensure energy security.

Actions

- » **Increase political commitment** to the renewable energy sector by creating ambitious policies, an enabling regulatory framework, and incentives that favour the development of renewables.
- » **Eliminate all government support for coal and non-renewables, and restrict the development of new fossil fuel projects** to reduce uncertainty for renewable energy investors and redirect existing investments towards renewables.
- » **Develop an exit strategy for non-renewable capacity** to avoid stranding assets, and commercialise decommissioning activities.

3. Implement annual increments for the minimum RPS requirements to meet 2030 and 2040 renewable energy targets in the power generation mix, and to promote planning and procurement.

Since coming into force at the beginning of 2020, the RPS has emerged as an important driver of renewable energy procurement. The RPS requires more than 140 distribution utilities to source or produce a share of electricity from eligible renewable energy resources through 2030. Following public consultation, the Department of Energy (DOE) has expressed support for expanding the annual minimum increase in the share of renewables-based electricity from 1% to 2.52% from 2023 onward.

Actions

- » **Ensure implementation of an annual increase in the share of renewables-based electricity** in order to meet the PEP target of renewable energy supplying 35% of the country's electricity by 2030.
- » **Continue to engage in public consultation** between the DOE, distribution utilities and developers of renewable energy projects to ensure the RPS scheme is complied with and effective in securing power supply agreements.

4. Provide greater transparency in GEAP design and implementation.

The first GEAP auction for 2 000 MW was delayed in 2021, while the rules were being finalised. Given the stagnant growth of renewables in the Philippines in recent years, it will be important for the auction to offer enough volume to generate developer interest and to effectively award projects that can be developed on schedule.

Actions

- » **Clearly define the “pre-determined exclusive demand bands”** to foster development of specific renewable energy technologies. Demand should be based on different criteria (technology, size, location and other factors) to determine the most appropriate source of energy.
- » **Commit to systematic rounds of auctions** under the GEAP on a transparent schedule, such as on an annual basis.
- » **Ensure that qualification requirements** are rigorous to attract a large number of high-quality bidders who can establish a track record of project execution.
- » **Integrate non-financial selection criteria** – including socio-economic benefits, location (e.g. remote or underserved areas), developer experience, and technical and financial conditions – alongside assessment of lowest bids.
- » **Appoint a well-resourced institution to manage the GEAP**, including oversight of price-setting, contract settlement and conduct of auctions, to minimise administrative bottlenecks and red tape.

5. Upgrade grid distribution and transmission infrastructure.

Countries seeking to accelerate renewable energy deployment frequently face challenges in grid and transmission infrastructure. Transmission upgrades should be developed at a pace that can accommodate greater and more diversified generation resulting from the RPS and the GEAP. Authorities should also introduce flexibility into the grid to make optimal use of the potential complementarity of different renewable energy technologies and match load profiles where possible.

Actions

- » **Prioritise grid augmentation and construction** of additional transmission and substation infrastructure in advance of the scheduled buildout of renewable energy projects under the GEAP.
- » **Study technical feasibility** of forecasting and smart distribution systems on the national power grid to support balancing with larger shares of renewable energy.
- » In the draft PEP, **address energy storage systems**, such as utility-scale battery systems and heat storage, for use by the DOE, considering the rapidly declining costs of batteries and their role in creating a flexible and reliable clean energy supply.
- » **Consider decentralised renewable energy infrastructure** to improve access to electricity in remote areas and islands.



6. Streamline permitting and planning requirements for renewable energy projects under the Energy Virtual One-Stop Shop (EVOSS) programme.

To kickstart renewable energy deployment, it will be imperative to streamline permitting and licensing processes for projects awarded under the GEAP. The convening of a task group to oversee the implementation of EVOSS is a positive step to ensure the programme can be effectively operationalised and supported by various government agencies.

Actions

- » **Solicit and formalise regular industry input** to the EVOSS task group, which could provide ground-level perspectives of technical, operational and administrative barriers and avoid slowing down project development.
- » **Streamline licence and permit processes** and enforce a reasonable time by which they must be provided to shorten permitting time frames.
- » **Provide institutional support and training to renewable project developers** in their application process for permits.

7. Re-examine ownership rules for renewable energy projects.

The Philippines has currently set regulatory requirements on foreign ownership of renewable energy projects, by which foreign companies wishing to invest in the Philippines are subject to a foreign ownership cap (40% to 60%). While exemptions exist for technologies such as hydropower and geothermal energy, as they are not considered to be in their “natural state”, these exemptions do not apply to wind and solar power.

Actions

- » **Reconsider foreign ownership rules for all renewable energy** to help decrease risk for renewable energy projects, attract more foreign direct investment and boost competition.

8. Improve use of public finance to crowd-in private investment.

The Philippines has demonstrated a good track record in the use of public finance to promote the use of renewable energy, encourage energy efficiency and mitigate climate change. For instance, public funding and public-private partnerships have been widely used to finance green infrastructure in the Philippines, such as the Clean Energy Finance Investment Mobilisation Programme, together with other public finance measures such as green debt (e.g. green bonds), equity instruments (funds for green infrastructure) and credit enhancement mechanisms (e.g. credit guarantees). Nevertheless, additional public finance policies could further reduce risks in investing in renewables, remove the barriers to private finance and increase overall investor appetite.

Actions

- » **Increase the issuance of sovereign green bonds** to indicate the political commitment of the government to renewable energy deployment and attract more investment from the private sector.
- » **Provide incentives such as credit enhancement, grants, subsidies, and tax exemptions** to increase attractiveness for private investors.
- » **Provide risk mitigation measures** such as sovereign guarantees, political risk guarantees and foreign exchange products.

9. Strengthen dialogue between investors and the government.

Increased dialogue between industry and the government can help formulate more effective policies and ensure successful implementation of the Philippines' renewable energy targets and broader climate objectives.

The Business and Investors Group, and the wider IRENA Coalition for Action, stands ready to provide co-ordinated input and support to advance the Philippines' energy transition.

Actions

- » **Strengthen consultation processes** that feed into the PEP and the National Renewable Energy Program to allow for greater transparency and buy-in.
- » **Reinforce engagement with industry** when formulating new policies.



About the IRENA Coalition for Action

The IRENA Coalition for Action brings together leading renewable energy players from around the world. The Coalition facilitates global dialogues between public and private sectors to develop actions to increase the share of renewables in the global energy mix and accelerate the global energy transition. Within the Coalition, the Business and Investors Working Group is chaired by the Global Wind Energy Council and SolarPower Europe. The Group puts forward analysis and recommendations based on on-the-ground experiences of some of the leading private sector players in the renewable energy field. IRENA acts as the Secretariat of the Coalition. <https://coalition.irena.org>

Coalition for Action Business and Investors Group Members: Abo Wind, Abengoa Solar, ACCIONA, Alectris, Alliance for Rural Electrification (ARE), AMEA Power, Boston Consulting Group, Clean Energy Business Council MENA, Confederation of Indian Industry (CII), Dii Desert Energy, Dutch Marine Energy Centre (DMEC), Enel Green Power, Energy Watch Group, European Geothermal Energy Council (EGEC), Falck Renewables, Finergreen, First Solar, FTI Consulting, Global Solar Council (GSC), Global Wind Energy Council (GWEC), Graded, Iberdrola SA, Hitachi Energy, Integrated Development Association Kandy, International Council for Local Environmental Initiatives (ICLEI), International Geothermal Association (IGA), International Hydropower Association (IHA), International Network for Sustainable Energy (INFORSE), International Renewable Energy Agency (IRENA), kiloWattsol, Lekela Power, Lusophone Renewable Energy Association (ALER), Mainstream Renewable Power, MAKE/Wood Mackenzie, Masdar, Middle East Solar Industry Association (MESIA), National Solar Energy Federation of India (NSEFI), Netherlands Wind Energy Association, New Energy Nexus, Novozymes, Ocean Energy Europe, Ørsted, Phanes Group, QWAY energy, Rahimafrooz Renewable Energy, Renewable Energies Association of Colombia (SER Colombia), Renewable Energy and Energy Efficiency Partnership (REEEP), Renewables Grid Initiative (RGI), Res4Africa Foundation, Ryse Energy, Siemens Gamesa Renewable Energy, Schneider Electric, SkyPower, SolarCoin Foundation, SMA Solar Technology, SolarPower Europe, Syndicat des énergies renouvelables (SER), TCX Fund, TERI School of Advanced Studies, The Climate Group/RE100, The Nature Conservancy, Trina Solar, TVP Solar, Vestas Wind Systems, World Bioenergy Association (WBA), World Business Council for Sustainable Development (WBCSD), WPO, World Resources Institute (WRI), World Wind Energy Association (WWEA), World Wide Fund for Nature (WWF), Yellow Door Energy.

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