



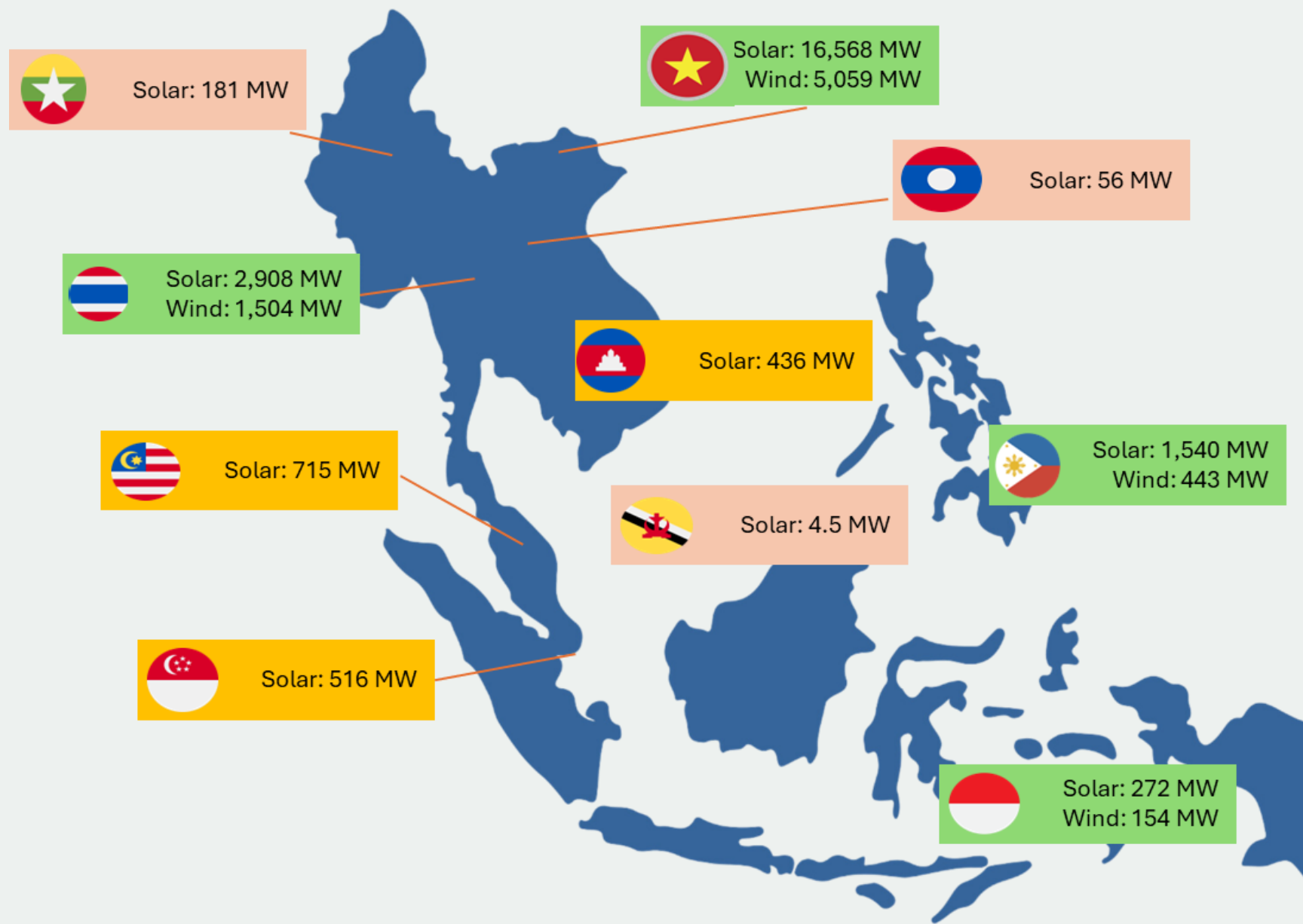
NEWS HIGHLIGHTS

Renewable Energy

January - April 2024



Renewables Takeaways in Early 2024



A significant growth renewable energy capacity across ASEAN countries, with the increase primarily driven by solar and wind capacity
 Source: ASEAN country data in 2022

Significant Rise in Renewables



Renewables rapidly increase by enacting green strategies and integrating clean technology

Solar Project Soar



Solar project soar, analysis reveals potential and challenges, progress made towards 2030 goals, and support for affordable solutions emerges

Sustainable Energy on Track



Significant developments in Southeast Asia on palm oil and green hydrogen

Trend in RE Investment and Trade



A growth in RE investment in ASEAN, with solar and biomass projects receiving significant funding

Significant Rise in Renewable Energy



23 GW Solar is recorded as the second highest renewable capacity in ASEAN after hydropower

Collaboration across ASEAN member states in the renewable energy sector is dominated by solar PV projects. In 2022, solar contributed 7.4% in total ASEAN installed capacity.



\$28B Foreign Direct Investment (FDI) increasingly in 2022, for RE in ASEAN

The market trend in RE is rapidly increasing due to many projects focusing on achieving RE target in their energy mix share

Revisiting the Ambitions of the Top 3 Countries in ASEAN with the Implementation of the Largest Solar Projects



Viet Nam aimed for renewables to constitute 15-20% of its power capacity by 2030, increasing to 65-70% by 2045 through smart and efficient power system based on the newly approved National Energy Development Strategy. Strategies are focused on energy security, efficiency, and emissions reduction.



Thailand's EGAT has launched a 24 MW hydro-solar hybrid project as part of its plans for 16 floating solar projects totaling 2,725 MW in capacity. This initiative integrates solar and hydropower with conservation efforts.



In early 2024, the Philippines implemented 2.4% solar and 3.1% wind in the power capacity share. By 2030, it aims to increase these figures to 5.6% for solar and 11.7% for wind, effectively doubling solar and tripling wind capacity over six years.

Solar Momentum Builds Across Southeast Asia

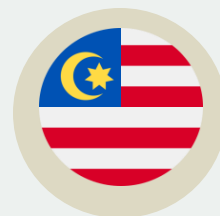
Solar projects soar, analysis reveals potential and challenges, progress made towards 2030 goals, and support for affordable solutions emerges.

Re-lookup the Goals for NZE

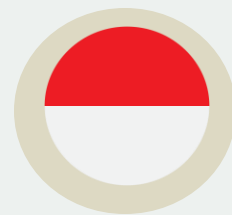


ASEAN aims to achieve net zero emissions (NZE) by 2060, **focusing on enhancing renewable energy capacities** and promoting sustainable development (ASEAN, 2021).

Solar Project Soar...



Solar projects surge in Malaysia, with various companies were awarded a total of 563 MW of solar capacity, the projects expected to be commissioned by the end of 2025. The demand for solar rooftop will increase as commercial and industrial companies seek to reduce electricity bills and carbon footprint.



The utilisation of **solar power accelerated in industries across Indonesia**. The cement company in the country is increasingly active in adopting solar energy as part of the company's sustainability strategy in reducing emissions.



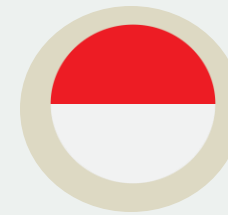
Singapore has surpassed halfway towards 2000 MW in 2030 solar power deployment goal, doubling its capacity since 2021. The government highlighted commitment to renewable energy.



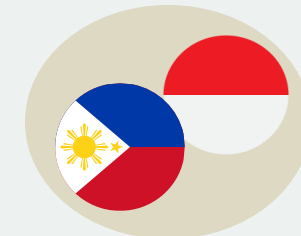
Partnership for Sustainability



Cambodian Prime Minister welcome the collaborative efforts with local companies to provide solar energy solutions in rural communities, aimed for well-being and sustainability.



Indonesia is collaborating with several companies to install a **264 kWp rooftop solar photovoltaic** system in Bekasi, which is expected to prevent 250 tonnes of carbon emissions.



The Presidents of the Philippines and Indonesia signed an MOU to **collaborate on renewable energy**, electric vehicles, and alternative fuels, addressing critical supply constraints.



Viet Nam collaborated with several partners **to boost the green hydrogen industry**, addressing market design challenges and emphasising the need for a comprehensive roadmap and technical and financial support through mechanisms like the Just Energy Transition Partnership (JETP).

ASEAN Member States Embarking Sustainable Energy



Significant developments in Southeast Asia: Plans a USD 2.16 billion wind farm, palm oil exports with 54% market share, and many projects embarks on a green hydrogen project.

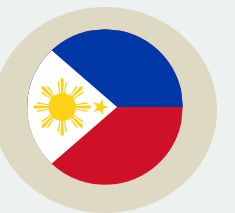
Challenges and Barriers



The Vietnamese government **should implement policies to support** clean hydrogen development, aiming for hydrogen output of up to 500,000 tonnes by 2030 and up to 20 million tonnes by 2050, as part of its national energy strategy for carbon neutrality by 2050.



Indonesia's revised regulation on rooftop solar panels aims to support greater industrial and commercial use by removing previous limitations and ensuring a transparent quota system, with a goal to increase installed solar capacity from 573.8 MW in 2023 to 770 MW in 2024 and 3.6 GW by 2025.

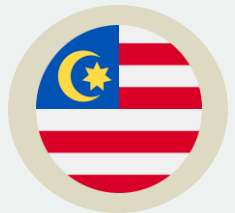


The Philippines renewable energy targets 35% by 2030 and 50% by 2040, driven by robust policies and private sector involvement, yet **faces challenges such as high financing costs**, complex permitting processes, and the need for enhanced energy storage and grid infrastructure to support intermittent renewables.

Future Prospect and Innovations



Lao PDR plans to build a USD2.16 billion wind power farm near Viet Nam's border, aiming to become Southeast Asia's "Battery." Most electricity will be sold to Viet Nam, with similar projects underway in Lao PDR and Viet Nam.



Malaysia embarking on first large-scale green hydrogen production project using floating photovoltaic power generation. Subsidiary from PowerChina with target 12% of the total volume by 2030



Indonesia dominates global palm oil exports, with 54% of the market share, in 2023, production reached 56 million tons. Palm oil acts as a catalyst for economic growth. Beyond exports, it is utilised in downstream sectors such as biodiesel production and **has been enhanced to B40**.



Trends in RE Investment & Market Trade in ASEAN



Renewable energy investment in ASEAN sees growth, with solar and biomass projects receiving significant funding. New initiatives introduced, including 2GW large-scale solar (LSS) programme in Malaysia

RE Investment Trend



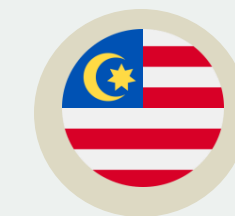
ASEAN Country (Thailand, Indonesia, and Viet Nam) striving renewable energy project and achieve USD 64 million from IFC. The financing will focus on solar and biomass installations, aiming to address the region's rising energy demands and combat climate change.

Dagohoy Solar Power Project in Bohol, Philippine built for energy security by PetroGreen Energy. The project aimed to reduce external power dependency, marking a milestone in expanding the country's renewable energy portfolio and fostering community development.

Highlight in RE Market Trade

Viet Nam leads ASEAN in solar and wind power output but lacks a long-term strategy for localising renewable energy production. Experts urge faster local investment and technology transfer to avoid overreliance on imports and foster sustainable growth in the sector.

Malaysia's fifth LSS programme reintroduces with a 2GW quota, allowing developers to bid up to 500 MW. It includes a new floating solar category and aims for transparency and competitive rates. Additional programmes promote low-carbon energy generation diversification.



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