NEWS HIGHLIGHTS

Renewable Energy

January – June 2025



Renewable Energy Progress in First Half of 2025





Step up Renewable Energy (RE) Adoption

Renewable energy adoption has surged over the past years to meet the electricity demand and broaden access, which is also reinforced by the large potential of renewable energy in the region.



Growing Green Demand, Growing Green Investment

The green digitalisation trends improved the sustainability of energy systems and raised renewable energy investment across ASEAN Member States.



Aligning Higher RE Targets with Green Transformation Agenda

Countries across ASEAN show eagerness through the launch of new Renewable Energy policies and initiatives to ensure direction towards green energy transition and sustainable future.



Scaling Up Cross-Border Power Trade in Renewable Energy

Summary of energy cooperation in renewables signed in the first half of 2025 and putting a highlight on strengthening cross-border power interconnection with renewable energy.

Step up Renewable Energy Adoption



The first half of 2025 showed ASEAN's **increased use of renewable energy**—particularly solar—as a solution to meet the electricity demand and broaden access. The trend also indicates a rising reliance on renewables due to the growing demand from digitalisation efforts in the region. It displayed the enormous <u>potential of renewables</u> for ASEAN to utilise.

Highlighting Intentions to Solar Energy



Cambodia's energy transition measures enhanced its energy distribution, increasing the rural electrification rate to 99.2%. <u>Solar-powered system</u> was used to reach households that cannot be connected to the national grid.



Myanmar people are moving to <u>solar power</u> due to the rising fuel prices and decreasing power generation across the country, including those in rural areas.



In **Malaysia**, the Kuala Terengganu Drawbridge has made history as the first bridge in the world to operate with 98% solar energy, setting a new benchmark in sustainable infrastructure.



The Philippines government announced the launch of a massive solar project to meet growing demand. Once operational in 2027, this renewable energy plant will provide electricity to over 2 million Filipino households.



Thailand will initiate a <u>solar rooftop program</u> designed to empower local communities by boosting solar energy installations on residential and commercial buildings.

Accelerating Green Data Centre



Malaysia's current 18 data centres require 800 MW of combined electricity demand. To meet the demand from the energy-intensive industry, the government is targeting a gradual transition to 40% green electricity composition by 2035, in which the number of operational data centres is expected to jump to 81.

This target is supported by the Corporate Renewable Energy Supply Scheme (CRESS) that allows private entities to directly source renewable energy from generators. Several companies have already inked an agreement under this program, such as **Malaysia's** biggest utility company, which signed an agreement of <u>500 MW of renewable energy</u> with a Singapore-based data centre.



Indonesia will build a new data centre with over 40 MW power capacity, <u>powered by solar</u> and featured with a 120 MW battery energy storage system (BESS).



Thailand aimed to lower electricity cost by increasing solar power, as part of strategy to turns Bangkok into global data centre hub using low carbon energy.

Growing Green Demand, Growing Green Investment



Growing Green Demand, Growing Green Investment

The increasing energy demand due to ASEAN's digitalisation is driving renewable investment across the region



ASEAN countries' renewable energy potential is reported to be an attractive point for <u>data centre investment</u>, as access to renewable sources are integral to the company's net zero emissions commitment.



Singapore's businesses show interest in <u>renewable energy investment</u>, with over half of them (57%) looking to invest in solar projects, tapping into self-funding or co-funding options with tenants. However, challenges persist, including high cost of renewable investments, required technology upgrades, and limited renewable sources in Singapore.



The Philippines' Green Energy Auction (GEA-3) attracted <u>7,500 MW of renewable energy projects</u>, particularly in Pumped Storage Hydropower, which attracted 6,950 MW in project bids. The number indicated a strong investor interest in hydropower to complement intermittent renewable sources on solar and wind.

Mobilising Investment for Green Energy

Several ASEAN Member States displayed its commitment to push renewable investment in Mid-2025



A **Vietnam's** province approved <u>USD 509 million of investment for five wind power projects</u> with a total capacity of 344 MW. The projects fall under the category of land lease through a bidding process in selecting an investor.



Malaysia's biggest utility company doubled its <u>renewable energy investment to USD 9.8 billion</u>. This is also to support the company's two solar flagship projects under the National Energy Transition Roadmap (NETR).



Brunei Darussalam received USD 26.4 million of investment for a solar project. It is to be Brunei's largest solar facility upon completion, expected to generate 64.47 million kWh of renewable energy annually. The majority of the funding will be raised through bank financing.

Aligning Higher Renewable Energy Target with the Green Transformation Agenda



Mid-Year Green Milestone

Not only identifying potential in renewable energy (RE) sources and investment, ASEAN countries also achieved new renewable milestones



Singapore met its <u>1.5 GWp of solar target by early 2025</u>, estimated to cover 2% of electricity demand and power 260,000 households. Based on this, the country is on track to achieve the target of 2 GWp by 2030.



The Philippines achieved records in renewable energy capacity additions. The country added <u>794 MW of capacity</u> in <u>2024</u> alone—higher than the previous three years combined.

Identifying Renewables in New National Policies

In order to further support the green transformation targets, some countries are revising their renewable planning through key policy documents.



Indonesia's newly released <u>Power Development Plan (RUPTL)</u> includes more ambitious plan for renewable energy, with RE expected to contribute 34% of total electricity generation by 2034. The roadmap outlines an additional new and renewable power capacity of 42.6 GW between 2025-2034.



Vietnam released two key policies where renewable energy becomes a crucial part of the plans:

- <u>Global Coal-to-Clean Energy Transition Statement</u>, projecting up to 37.7% of RE share in the total energy mix by 2030 and 1,160 MW of developed clean energy by 2045.
- National Action Plan for Circular Economy, aiming to achieve 50% of RE in the total energy mix by 2045, mainly through biomass and waste.

Solar Acceleration Initiatives

The region's solar potential was put in the spotlight in the first six months of 2025 through new programs.



Malaysia improves RE adoption through a <u>Community</u> Renewable <u>Energy Aggregation Mechanism (CREAM)</u> programme, allowing homeowner to lease rooftop to third-party developers for solar installation.



To attract more investors, **Thailand** <u>eased regulations for</u> <u>solar rooftop installation</u> located outside of industrial estates, removing the requirement for companies and individuals to have a factory license.

Scaling Up Cross Border Power Trade in Renewables



In the first half of 2025, several cooperations were signed by the ASEAN Member States in renewable energy projects, mainly on **solar**, **wind**, **and battery energy storage**. Within Malaysia's ASEAN Chairmanship 2025, the region is focusing on accelerating the interconnection of renewable energy for the **ASEAN Power Grid**.

Marking New Cooperation



Cambodia will have a <u>150 MW wind power plant</u> built by a Hong Kong firm following the approval by the Cambodian government early this year, planned to be launched in 2026.



Thailand's wind power company secured a USD 92 million loan to support its development and operation, particularly for a 45 MW operational <u>wind power plant</u>.





Indonesia and Malaysia's companies will develop the first co-located <u>50 MW solar plant</u> and 14.2 MWh battery energy storage system (BESS) in Indonesia's new capital.



The Philippines signed a contract for <u>344.5 MW wind</u> <u>turbines</u>, currently the country's largest single wind power project and ASEAN's first cross-border wind project.

Strengthening Cross-Border Interconnection



Lao PDR and Vietnam were strengthening their cross-border power trade through a 600 MW monsoon wind power project, to export 300 MW of electricity from Lao PDR to Viet Nam, and another 1200 MW wind power plant that will be built.



Malaysia, Singapore and Vietnam teamed up to sign an agreement to explore a new electricity link powered by offshore wind, charging the ASEAN Power Grid initiative.



Malaysia - Brunei Darussalam power interconnection was on track, with Malaysia expected to export <u>30-50 MW of renewable energy</u> by <u>2030</u>.



Singapore and **Malaysia** will conduct a joint study to formulate a Renewable Energy Certificates (REC) framework associated with cross-border electricity trade. This follows an agreement to supply 50 MW of renewables to the city-state.

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