

## Southeast Asia switches to green power for photovoltaic sites





## **Overview**

Is Southeast Asia ready for solar energy?

Positioned near the equator, Southeast Asia's solar irradiance levels was up 10 per cent in 2023, highlighting the region's potential for solar energy advancement. Southeast Asia's total solar and wind energy generation have surged from 4.2 terawatt-hours (TWh) in 2015 to over 50 TWh in 2022.

How effective are solar energy systems in Southeast Asia?

The effectiveness of these systems depends on solar irradiation levels which measure the intensity of sunlight. Positioned near the equator, Southeast Asia's solar irradiance levels was up 10 per cent in 2023, highlighting the region's potential for solar energy advancement.

How much solar power will Southeast Asia produce in 2022?

Southeast Asia's total solar and wind energy generation have surged from 4.2 terawatt-hours (TWh) in 2015 to over 50 TWh in 2022. To put this into perspective, just 1 TWh could power about 10 billion 100-watt lightbulbs simultaneously. Looking ahead, ASEAN leaders have set ambitious goals for the region's energy future.

Does Southeast Asia have a green power market?

Southeast Asia's PV market is growing steadily, despite weaker demand in some countries. Singapore, limited by geography, has turned to cross-border green power trade through the ASEAN's LTMS-PIP initiative since 2022 and plans to import 4 GW of green electricity by 2035.

How much solar & wind energy is in Southeast Asia?

New analysis by the International Energy Agency (IEA) indicates that the share of solar and wind energy in the power generation mix in Southeast Asian countries must reach approximately 23% by 2030 to align with the 2050 Net Zero Emission (NZE) scenario. Combined solar and wind generation in ASEAN



grew from 4.2 TWh to 50 TWh between 2015 and 2022.

Will Southeast Asia meet the combined wind and solar share target?

For this report, we calculate capacity additions required in Southeast Asia to meet the combined wind and solar share target of 23% by 2030, set out in the IEA NZE scenario. We estimate the required electricity generation by 2030, using ASEAN Centre for Energy (ACE) average annual electricity growth rate projection of 5.8%.



## Southeast Asia switches to green power for photovoltaic sites

## **Contact Us**

For catalog requests, pricing, or partnerships, please visit: https://legnano.eu