

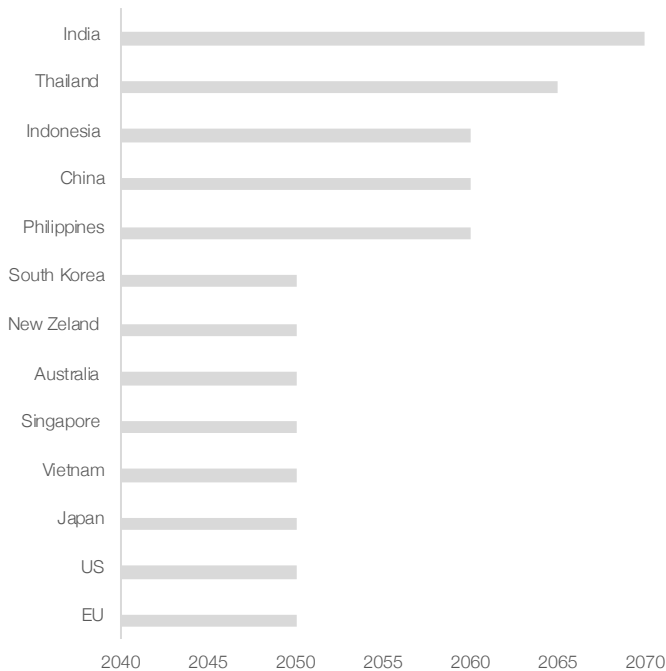
# Asia insights

## The path to net zero in Asia - market update

According to Our World in Data, the world emits around 50 billion tonnes of greenhouse gases each year, which is equal to the amount of emissions generated by driving a car around the world more than 10 billion times. The emissions today are far above pre-industrial levels, causing earth average temperature to rise and placing ecosystems in a vulnerable position. Guided by the Paris Agreement, countries across the globe set targets to reduce the CO<sub>2</sub> emissions ultimately achieving net-zero and keeping climate warming below 1.5°C.

Asia is home to 4.7 billion people—more than 60% of the world’s population—offering enormous potential in combatting climate change and driving the transition towards a more sustainable, low-emissions future. Most nations in Asia have set net-zero targets and adopted proactive measures to reduce their CO<sub>2</sub> emissions.

### Net zero targets in Asia



Source: Climate Action Tracker

### The impact of net zero targets on the real estate industry <sup>(1)</sup>

According to CBRE, buildings are responsible for approximately 37% of global GHG emissions. As part of the World Green Building Council’s (WorldGBC) initiative, existing buildings are required to reduce their energy consumption by 2030, while new buildings must be designed for high efficiency and powered by renewable energy. Additionally, WorldGBC advocates for reducing emissions in the building and construction sector by 50% by 2030 and achieving full decarbonization by 2050. To fulfill the aforementioned goals, companies in the real estate sector must introduce sustainable building solutions, comply with all reporting and regulatory requirements, and develop comprehensive long-term sustainability strategies. Compliance with the ESG requirements is important not only from the regulatory perspective but also for tenants and building owners who increasingly place meeting environmental, social, and governance standards as a key criteria in determining the choice of a building.

As 2030 approaches—a critical milestone for the real estate industry to achieve its intermediate sustainability goals—existing buildings have the opportunity to mitigate policy risks and enhance their competitiveness through green building upgrades. At the same time, new buildings can capitalize on the chance to implement energy- and cost-efficient construction methods.

### Singapore <sup>(2)</sup>

Singapore is the leader and pioneer in the green building sector in Asia. With 55% of the buildings classified as green as of the end of 2022 according to the Building and Construction Authority (BCA) of Singapore, the country is on the right track to achieve its 2050 net zero emissions target.

The Singapore Green Building Council together with BCA outlined the so called “Singapore Green Building Masterplan” which sets the “80-80-80 in 2030” strategy as one of the main targets. The idea of this strategy is to ensure 80% improvement in energy efficiency for buildings by 2030, guarantee that 80% of the total

Source: (1) World Green Building Council; (2) Building and Construction Authority of Singapore.

building stock is “greened” by 2030, and 80% of new buildings are certified as super low energy starting from 2030. In order to achieve these goals, Singapore is engaging all stakeholders from architects, developers, construction companies, building owners, to tenants. Their role is to implement sustainable building practices, ensure sustainable operations of buildings throughout their entire life cycle, and promote sustainable behavior to reduce energy consumption.

Furthermore, the Building and Construction Authority, introduced the Green Mark certification scheme - a hallmark of Singapore’s sustainability efforts in the real estate sector. This scheme encourages the adoption of energy-efficient designs, water-saving measures, and sustainable building materials.

**Indonesia <sup>(1)</sup>**

Indonesia aims to reach net zero emissions latest by 2060, as part of its goal to become an advanced economy by 2045. Enforcing green building standards and leveraging renewable energy sources for clean energy are critical areas where Indonesia is focusing its efforts.

The International Energy Agency and Indonesia’s Ministry of Energy and Mineral Resources have developed “An Energy Sector Roadmap to Net Zero Emissions in Indonesia,” which outlines immediate and long-term actions needed to achieve the target of net zero emissions by 2060. The roadmap emphasizes the importance of energy efficiency, renewable electricity, and transport electrification. These measures are expected to drive 80% of the necessary emissions reductions from the energy sector by 2030.

In addition, Indonesia has formulated renewable energy targets and regulatory frameworks that prioritize curtailing the development of coal power plants. Furthermore, the country has significant potential in solar, hydro, geothermal, and wind energy sources that can be utilized to enhance its renewable energy capacity.

A significant part of the roadmap to net zero emissions by 2060 involves the real estate sector. The introduction of green building standards, including Greenship developed by the Green Building Council Indonesia, encourages developers and landlords to adopt eco-friendly practices.

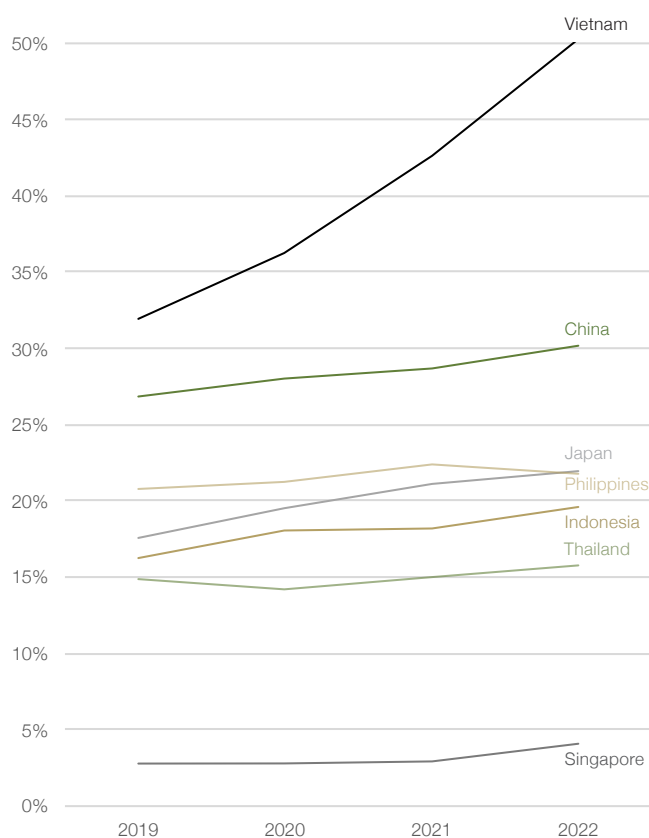
Source: (1) Bisnis Indonesia, International Energy Agency; (2) UN;

**Vietnam <sup>(2)</sup>**

Vietnam has set the target to achieve net zero emissions by 2050, and aims to reduce greenhouse gas emissions by 9% before 2030. The country’s commitment is supported by international partnerships and investments in renewable energy projects. The real estate industry in Vietnam is gradually shifting towards sustainability, driven by government policies and international green building standards. Sustainability certifications are gaining popularity, encouraging developers to adopt energy-efficient practices.

Renewable energy, particularly solar power, is expanding rapidly, providing cleaner energy sources for the building and construction industry. According to Our World in Data the share of electricity production from renewable sources such as solar, wind, biomass, or geothermal between 2019 and 2022 was the highest in the region.

**Share of electricity production from renewables**

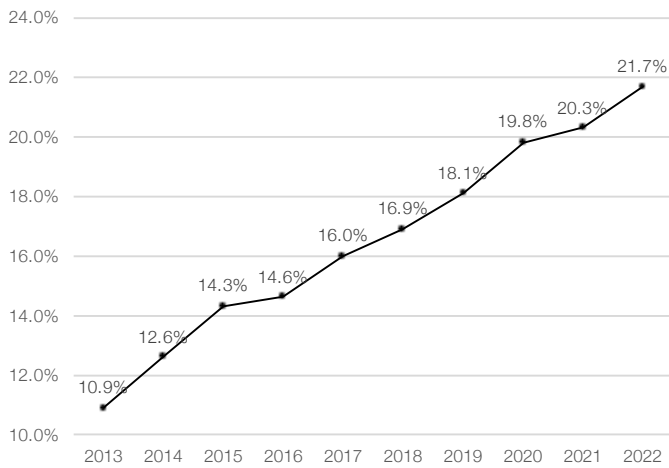


Source: Our World in Data

**Japan <sup>(1)</sup>**

Japan has pledged to reach net zero emissions by 2050. To achieve the net zero goal, the Ministry of Economy, Trade and Industry has formulated the so-called: “Green Growth Strategy Through Achieving Carbon Neutrality in 2050.” Its main component is the decarbonization of the electric power sector. According to Statista, the share of renewable energy in electricity production in Japan has been growing in the last years and accounted for 21.7% of overall electricity production in 2022.

**Share of renewable energy in electricity production in Japan**



Source: Statista

The “Green Growth Strategy Through Achieving Carbon Neutrality in 2050” distinguishes 14 growth sectors divided into three categories: energy related industries, transport and manufacturing industries, and home and office related industries. Housing and building regulations will be gradually tightened in terms of energy-efficiency standards. In case of existing buildings, measures such as promoting investments in projects that improve the energy efficiency of the property will be introduced. In addition, investments in renewable energy such as solar power generation will reduce utility costs for tenants and building owners and optimize energy management.

According to Reuters, in May 2022, Japan’s Prime Minister Fumio Kishida announced a plan to issue “green transition” bonds worth around JPY 20 trillion (CHF 115 billion) to help finance investments aimed at achieving a carbon-neutral society. In December 2022, the local government in Tokyo introduced a law requiring

Source: (1) Ministry of Economy, Trade and Industry of Japan, Reuters; (2) National Development and Reform Commission People’s Republic of China; (3) IEA, The National Bureau of Asian Research.

a percentage of newly built homes and buildings in Tokyo to be equipped with solar panels starting in April 2025. These measures will not only support Japan on its way towards reaching the net-zero goals, but also amplify the innovation and the implementation of green building technologies in Japan’s metropolises.

**China <sup>(2)</sup>**

In line with the Paris Agreement, China set the target to reach carbon neutrality before 2060. This commitment, announced by President Xi Jinping in 2020, is a cornerstone of China’s broader environmental strategy. Although the country is one of the largest CO<sub>2</sub> emitters, it is also the world’s leader in wind and solar energy manufacturing gear. Currently most of the key building blocks for solar panel production produced in China are destined for export. However, according to the “Action Plan for Carbon Dioxide Peaking Before 2030” developed by the National Development and Reform Commission of the People’s Republic of China, by 2025, renewable resources will account for 8% of the alternative to conventional energy used in buildings, and the country will strive to reach 50% photovoltaic coverage on the roofs of newly constructed public buildings and factories. In addition, the action plan states that by 2025 all newly constructed buildings in urban areas are to meet green building standards, which indicates a huge potential for green transition in the real estate market in China in the coming years.

**Thailand <sup>(3)</sup>**

According to the Organisation for Economic Co-operation and Development, Thailand aims to reach net zero greenhouse gas emissions by 2065. As an interim target, the country committed to reduce GHG emissions by 30% to 40% before 2030.

In order to achieve the net zero greenhouse gas emissions objective, the Thai government has formulated the “National Energy Plan”, which outlines the development of the Thai power system and directs its decarbonisation efforts. The plan aligns with the global vision of decarbonising the power sector in the first stage, and in the second stage leveraging low-carbon electricity to reduce emissions in buildings and transportation. One of its targets includes aiming for 50% of new power generation capacity to be renewable by 2050. In addition, decarbonizing the transportation industry will be prioritized, including a promotion of electric vehicles, the development of public fast-charging networks, and the installation of hydrogen fueling stations.

## Philippines <sup>(1)</sup>

The Philippines has committed to reducing its greenhouse gas emissions by 75% before 2030, with a long-term goal of achieving net zero emissions by 2060.

The Department of Energy of the Republic of the Philippines has initiated the “National Renewable Energy Program”. This program focuses on developing the country’s renewable energy resources, including geothermal, hydropower, biomass, wind, and solar. According to Statista, the total capacity of geothermal energy sources in the Philippines amounted to around 1’952 megawatts in 2023. As one of the countries with the largest geothermal energy capacities in the world, the Philippines has the potential to significantly leverage this resource in the coming years.

### Key takeaways

Asia’s journey towards net zero emissions is marked by diverse approaches and varying levels of progress across different countries.

- Singapore, a global leader in green building, aims to achieve net zero emissions by 2050 with its “80-80-80 in 2030” strategy, targeting significant energy efficiency improvements and widespread adoption of sustainable building practices, supported by the Green Mark certification scheme.
- Indonesia aims to achieve its 2060 net zero emissions objective through introduction of green building policy frameworks and substantial investment in renewable energy.
- Vietnam aims to achieve net zero emissions by 2050, supported by a commitment to reduce greenhouse gas emissions by 9% by 2030 and a strong focus on expanding the country’s renewable energy capacity.
- Japan is committed to achieving net zero emissions by 2050, focusing on decarbonizing the electric power sector, increasing renewable energy usage, tightening energy-efficiency standards in buildings, and financing green initiatives through substantial investments in “green transition” bonds.
- China is committed to achieving carbon neutrality before 2060. As a global leader in solar panel production, the country has significant potential to leverage its renewable energy capacity

in the coming years.

- Thailand’s path towards net zero by 2065 is marked by the “National Energy Plan” which focuses on the decarbonization of the power sector.
- The Philippines’ strategy for achieving net zero by 2060 emphasizes renewable energy, with a focus on expanding the country’s geothermal, hydropower, biomass, wind, and solar capacities.

The path to net zero in Asia is multidimensional, reflecting the region’s economic diversity and environmental challenges. While significant progress has been made, achieving net zero will require continued innovation, investment, and collaboration across all industries. Asia will play a crucial role in the global fight against climate change in the coming years.

Source: (1) The Department of Energy of the Republic of the Philippines.

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