

Dragoman Digest

Singapore begins importing green energy from Laos for the first time

Laos is in the unusual position among its neighbours of having surplus renewable energy to export

In a step toward reaching its net zero goals, on June 23 **Singapore** began purchasing hydropower generated in **Laos** transmitted through **Thailand** and **Malaysia**. Last September, Singapore's state-owned Keppel Electric and Laos' state-owned Électricité du Laos agreed to create the Lao PDR-Thailand-Malaysia-Singapore power integration project (LTMS-PIP). A two year pilot phase will see the construction of up to 100 megawatts (MW) of renewable energy capacity, with larger commercial operations to follow. This is equivalent to approximately 1.5 percent of Singapore's peak electricity demand in 2020.

Singapore intends to achieve net-zero emissions by approximately 2050. Imports of renewable energy will be crucial given Singapore's size and lack of natural resources. Singapore currently relies on natural gas for 95 percent of its electricity, with renewables only accounting for 3.2 percent of supply. Several attempts to import renewable energy have failed largely because of neighbouring countries giving priority to their own renewable energy targets.

For example, Malaysia's YTL PowerSeraya plan to start a trial project to export 100MW of electricity to Singapore have been postponed. **Portuguese** solar company EDPR Sunseap's plans to build an offshore solar farm in Indonesia's Riau Islands have stalled due to difficulties gaining approval from **Jakarta**. The farm was positioned to supply power to Singapore and Indonesia. The US\$21 billion **Australian** Sun Cable project could supply 15 percent of Singapore's electricity needs by 2027 – though doubts remain over the feasibility of this timeline. Singapore will require a deft mix of capital, technical prowess, and diplomatic skill to reach its ambitious net-zero goals.

China makes record investments in renewable energy as economy slows

Latest intellectual property ranking in renewable energy technologies are indicative of China's high global standing

Green investment in **China** is holding up well, despite its broader economic struggles. Beijing recorded a GDP growth rate of just 0.4 percent in Q2 2022. Nevertheless, financing for wind projects grew 16 percent yearly to US\$84 billion in the first half of the year. Investment in solar projects grew 33 percent over the same period to US\$120 billion. Subsequently, China is well on track to meet its goal of 1,200 GW wind and solar capacity by 2030. By the end of last year, it had already reached a capacity of 635 GW. China alone accounted for over 40 percent of the global record of US\$226 billion invested in renewable energy across H1 2022.

There are signs that Beijing's renewables dominance is becoming entrenched in intellectual property (IP). China is ranked first in IP competitiveness in offshore wind power and next-generation solar technology, ahead of Japan which ranks second. China's position is further strengthened by its global lead in the processing of key minerals mined for renewable technology. For example, it has a 40 percent global market share in the processing of copper, 35 percent for nickel, and 87 percent for rare earths.

While countries such as the **US** are trying to develop their own renewable energy supply chains – as most recently demonstrated through the energy components of the Inflation Reduction Act – developing cost-competitive supply chains completely independent of China will be no easy feat.

Vietnam moves up the value chain with Apple and semiconductor investment

Vietnam jumping from being a destination for low-skilled assembly to growing its own more sophisticated manufacturing capabilities

Vietnam is emerging as a beneficiary of countries adopting a '**China Plus One**' strategy – whereby companies continue to invest in China, but diversify their businesses to alternative destinations, often in Southeast Asia. While Vietnam is already the most important production hub for several companies outside of China, recent reports indicate it is increasingly attracting more sophisticated investments.

For the first time, Apple suppliers Foxconn and Luxshare Precision industry have started the test production of Apple watches and Macbooks in Vietnam. Vietnam already produces a variety of Apple products including Ipad and Airpods – with the US company steadily increasing its presence in Vietnam since the start of the Sino-US trade war in 2018. In 2018 there were 14 Apple suppliers, compared to 22 this year. Until now, Apple's manufacturing facilities in Vietnam have excluded its more sophisticated products. **South Korea's Samsung** will also begin making semiconductor parts in Vietnam in July 2023. Whether Vietnam currently has the skills base to sustain further evolution up the value chain remains to be seen.

India moves to curb China's cheap smartphone dominance

India risks undermining its own digital economy success story

To bolster its own domestic industry, **India** is reportedly moving to restrict **Chinese** smartphone makers from selling their less expensive devices on the Indian market. New Delhi is targeting Chinese smartphones sold for less than US\$150. Chinese firms have an estimated 75-80 percent share in sub US\$150 market segment in India, contributing 31 percent to the overall smartphone market. The restriction is not expected to affect Apple or Samsung's market share – as their prices are higher. Officials are hoping that the ban will pave the way for domestic companies such as Micromax, Lava, and Karbonn to boost their market share. A ban on the smartphones would hurt China's Xiaomi and its peers, many of whom have extensive manufacturing capacity in India. For Xiaomi – the ban may mean it loses the sale of 20-25 million devices per year.

The uptake of cheap mobile phones in India has fuelled a rapid adoption of digital services such as electronic payment, identity, and tax systems. This in turn has boosted India's start-up sector, making it the world's third largest following the **US** and **China**. There are concerns that boosting the sale of Indian smartphones by restricting the sale of Chinese phones could backfire. It is not clear if Indian companies will be able to fill the gap left by Chinese players or manufacture the devices at such a competitive price. India risks inadvertently curbing the growth of its digital economy – one of the most successful elements of its recent economic dynamism.

Rising number of Chinese companies set up shop in Mexico to avoid US tariffs

The USMCA agreement provides a lucrative loophole for Chinese companies to use Mexico as a manufacturing base to reach the US market

To circumvent restrictive tariffs imposed during the **US-China** trade war, companies are increasingly turning to **Mexico** to access the US market. Mexico provides an appealing alternative for Chinese companies namely because of the US-Mexico-**Canada** Agreement (USMCA) which took effect in 2020. The deal allows businesses in Mexico to export goods to the US tariff free if they meet certain conditions – such as requiring a particular percentage of parts to be made in North America. Lower labour costs are an additional pull factor. Mexico's

minimum wage is approximately US\$8.55 per *day* – while the US federal minimum wage is US\$7.25 per *hour*.

This lucrative tariff-free environment has spurred major investment from Chinese-based companies, which invested US\$606 million in Mexico during 2021 – up 76 percent from the year before. This was largely concentrated in the northern regions of Mexico, near the US border. In 2021, 18 deals were announced in Nuevo Leon compared to seven in 2020. Some of the proposed investments are in higher value-added industries and not lost cost consumer goods. In July, Chinese manufacturing giant CATL was reported to be planning to build a US\$5 billion electric vehicle battery plant in Mexico to supply US based automakers. Mexico is fast joining countries like **Vietnam** as a primary beneficiary of the US-China trade war.