

COUNTRY CASE STUDY

COUNTRY POPULATION VIETNAM

96.460.000

MITIGATION TARGET -9% IN 2030 COMPARED TO BAU SCENARIO

EMISSIONS IN 2018

257,860 MtCO,

Vietnam's solar boom

The first half of 2020 saw considerable growth in renewable capacity in Vietnam, despite the Covid-19 pandemic and the lockdown. This growth increased further in the second half of the year and skyrocketed in the month of December (figure). According to IRENA, a staggering 11 GW of solar capacity was added in the country in 2020, making it now rank 7th in the world for total capacity. From 97 MW of capacity addition in 2018, Vietnam jumped to nearly 5 GW in 2019, and 16.5 GW in 2020, making Vietnam the country with the biggest solar boom in 2020. Most of these capacity additions are from rooftop solar PV, installed on residential and commercial structures.

Market reforms and coal's loss of profitability drive the solar sector into a frenzy

The most immediate cause for the sharp increase at the end of 2020 was the deadline for installations to be eligible for the second iteration of feed-in tariffs (FiT) being set as the 31st of December. Other policies such as income tax and land-lease payment exemptions, along with more flexibility for utility-scale PV developers have also contributed to this increase.

The implementation of the high-FiT solar PV policy was done by EVN, the stateowned electricity utility, which ceded part of its power generation monopoly in order to reduce costs, and as part of a larger push for market reforms in Vietnam. Rushing to fill this space were several smaller private firms, and even owners of residential structures and agricultural structures with installed rooftop panels.

This was despite disrupted supply chains in 2020 due to Covid, which otherwise meant cheaply available solar cells and modules from China. Vietnam's solar panel market is currently dominated by Chinese firms, who have manufacturing units in the country. The low-cost panels are thus assembled locally - another advantage for solar in the country.

Simultaneous to the high FiTs has been the reducing profitability of coal, with several foreign banks refusing to finance coalfired power plant projects. Adding to this are protests from local leaders against the coal, due to concerns for air quality. Catching international attention were the protests against the Vung Ang coal-fired plants, which saw mobilisations right from local communities all the way to youth activists and NGOs around the world. Giants like the Mitsubishi Corp, Samsung and Kepco were criticised for their support of the Vung Ang 2 plant.

Distribution infrastructures lag behind the PV installation rush

While no concrete expansion of the FiT policy has been chalked out for 2021, the government has proposed a pilot Direct Power Purchase Agreement (DPPA) mechanism, which will allow businesses to be able to source 100% renewable energy directly from renewable energy developers.

The expansion of solar power in Vietnam has in fact been so rapid, that in many parts of the country, the infrastructure is lagging, with some regions having a surplus of energy and others receiving

CUMULATIVE ROOFTOP PV INSTALLATIONS SEPTEMBER 2019 - DECEMBER 2020

Source : EVPG & ENV, as cited in PV Tech



none for lack of efficient transmission. A revamping of the distribution grid, to ensure a more even distribution across regions might soon be needed moving ahead, to benefit from this boom in renewables. At the same time, Vietnam has set the precedent for the rest of the region, in a context where ASEAN member states have set a target to reach at least 23% renewables in their energy mix by 2025.