



VIETNAM

Vietnam's energy landscape is characterized by rapid economic growth driving energy demand, rich natural resources supporting diversified energy supply mix, and strong commitment to achieving net zero by 2050. Ranked No. 56 in the 2023 World Energy Trilemma Index, Vietnam scored relatively moderate on Energy Security (61.9 – B) and Energy Equity (70.5 – C), but needed further improvements on Environmental Sustainability where its score was only 57.7 – D.

Together with its economic success in the past two decades, Vietnam has made significant efforts in enhancing energy security, with a focus on diversifying energy mix and ensuring sufficient power supply development to support economic growth. In May 2023, the Government of Vietnam announced the latest National Power Development Plan No. 8 (“PDP 8”), with an ambitious target to increase total installed capacity from approximately 80 GW in 2023 to approximately 150 GW by 2030. Further, the country aims to achieve a balanced energy supply mix by 2030, with renewable energy (solar, wind, hydro) accounts for approximately half of total installed capacity, followed by coal (approximately 20%), and gas (approximately 20%). This will ensure Vietnam's energy supply to remain largely self-sufficient and thus independent from imports.

In addressing energy equity, Vietnam has made significant progress in expanding access to electricity, especially in rural and remote areas. government has implemented programs that promote affordable energy access, such as the Rural Electrification Program, which helped over 99% of rural households connect to electricity. Additionally, subsidies for low-income households help to keep energy costs manageable. Despite these advancements, challenges persist, particularly concerning the rising costs associated with the transition to renewable energy as well as imported LNG. Ensuring that energy remains affordable for all, particularly during this transition, will be crucial for Vietnam's sustainable economic development.

Vietnam's commitment to environmental sustainability is reflected in its Nationally Determined Contributions (NDCs) under the Paris Agreement, where the country aims to achieve net zero greenhouse gas emissions by 2050. Recent initiatives include favorable Feed-in-Tariffs for renewable energy to attract private investments, resulting in over 22 GW of wind and solar capacity being developed by 2024, as well as increasing public investments in transmission capacity (such as the 500kV Circuit 3 transmission line) to evacuate power from new renewable sources. Despite current success in renewable energy development, Vietnam is still heavily dependent on fossil fuels, including both coal and gas, to support rapidly growing demand. Further efforts are needed to ensure the country is ready for net zero emissions by 2050, such as incentive policies for development and adoption of new energy technologies like energy storage, green hydrogen/ammonia, and carbon capture/storage.