

Coal-fired power: The power capacity structure will be changed in the direction of reducing the ratio of coal-fired power source from 27% in 2030 to 17-18% in 2045.

Gas-to-power: The ratio of gas-to-power source will be gradually increased from 21-22% in 2030 to 24-25% in 2045.

Hydropower: The ratio of hydropower will also be reduced (because currently, the potential for hydropower has nearly been exhausted).

Renewable power: Solar and wind sources will be substantially developed in the future, with the ratio of capacity reaching over 42% in 2045. The ratio of renewable energy sources (including large-scale hydropower) will reach 53% of the total capacity in 2045. With regard to the power generation mix/structure, the Draft PDP8 proposes as follows:

Coal-fired power: The ratio of coal-fired thermal power will gradually be decreased from 40% in 2030 to about 30% in 2045.

Gas-to-power: The ratio of gas-to-power will be gradually increased from 24-26% in 2030 to over 28-30% in 2045.

Renewable power: The ratio of renewable power sources (including large-scale hydropower) will ensure meeting the targets set out under the Politburo's Resolution No. 55-NQ/TW dated 11 February 2020 and the Vietnam renewable power development strategy (approved by Decision No. 2068/QD-TTg dated 25 November 2015).

In addition, the Draft PDP8 notes that the demand of coal import for power generation will increase from 47-52 million tons in 2030 to 75-96 million tons in 2045, subject to the base-load or high-load scenarios.

For LNG import, the demand of importing LNG for power generation will increase from 10-13 million m³ in 2030 to 32-42 million m³ in 2045.

3. Comparison of the Draft PDP8 and the amended PDP7

In comparison with the Amended PDP7, until 2030, the power source development program of the PDP8 will have the following key major changes:

- Developing solar and wind power sources in large scale (with the capacity of wind power sources will be tripled and the capacity of solar power will be doubled in comparison with the capacity under the amended PDP7);

- Only continuing to develop ongoing coal-fired thermal projects currently under construction and under investment promoted for operation during the 2021-2025 period; and

- Developing more gas-to-power sources utilizing LNG (combined cycle gas turbines) in the northern region and flexible sources (ICE) in both northern and southern regions.

The key differences between the amended PDP7 and the PDP8 for the period of until 2030 are as follows:

Renewable energy: The ratio of renewable energy (excluding hydropower) in the PDP8 has increased to almost 30% in 2030, while such ratio in the amended PDP7 was only at 16.3%. The major changes include: until 2030, onshore and near-shore wind power will develop an additional capacity of 9 GW, and offshore wind power will develop an additional capacity of 2-3 GW, solar power will develop an additional capacity of 7 GW, biomass power will be reduced by 0.5 GW, and small-scale hydropower will be reduced by 1.8 GW.

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