

India skyrocketed thermal power output, sharply reducing hydropower output

In the green transition journey to protect the Earth from greenhouse gases, India's increase in coal power generation and reduction in hydropower generation is going against the common global goal.

Because rainfall in India is currently erratic, hydropower output in this country has been decreasing rapidly over the past 38 years, specifically, the amount of water stored in hydropower reservoirs is currently the lowest in 5 consecutive years. As of 2018, India produced only 146 billion kWh/year. Insufficient water for hydroelectric power production forces India to rely more on coal - a form of fossil energy that emits a lot of greenhouse gases, causing negative impacts on the environment and the Earth.



According to data from the federal electricity regulator Grid, India, renewable energy accounts for only 11.7% of India's total electricity production. This number will decrease slightly compared to 2023, but compared to the global average, Hydropower output in India decreases faster. This is a worrying thing for the country that has the 6th largest hydropower output in the world.

India is the third largest emitter of greenhouse gases in the world. Meanwhile, per capita emissions here are lower than in developed countries. Therefore, the Indian government often uses this reason to justify the increasing use of coal in its country.

Mr. KJ Ramesh, Former Director of the India Meteorological Department, said that the period from April to June will be the hottest months in the country. The low amount of water in hydropower reservoirs leads to hydroelectric power output during this period remaining low and not enough to meet the increased electricity demand of the Indian people. It is estimated that it will take until the beginning of July every year for the arrival

of the monsoon to bring rain, at which time hydropower output can increase. However, for a country with erratic rainfall, India should not focus on hydropower.

Currently, the market share of hydropower in India has gradually decreased, while the market share of coal, solar and wind power generation has increased. In 2023 alone, electricity output from coal and lignite will increase by 13.9%, while electricity output from other renewable energies will only reach 9.7%. India currently relies too heavily on fossil fuels to produce electricity and has been slow to add renewable energy sources in the past 5 years.

Thermal power is a source of electricity converted from fossil energy such as coal, gas, biofuel, nuclear.

Fossil fuels are natural resources buried in the ground for millions of years. They are formed from anaerobic decomposition of biological remains. Fossil fuels contain high levels of hydrocarbons and carbon. They are divided into common types as follows: crude oil, gas, coal.

Producing electricity by burning fossil fuels will produce a lot of greenhouse gases. This is the reason why the Earth is getting warmer, leading to climate change, natural disasters and threatening the survival of species.

You finished reading the article "**India skyrocketed thermal power output, sharply reducing hydropower output**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.