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Topic of Research: India's Energy Security: Problems and Prospects

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Findings

India's domestic energy scenario reveals that the country's energy output is not adequate to meet its ever-increasing need for energy and that the country's energy mix is mostly comprised of fossil fuels such as coal, oil, and natural gas. And at present coal is the largest and primary source of energy in India and India's dependence on this commodity is going to remain for the near future despite India's commitment to phase down coal and make India a net zero carbon nation by 2070.

India is highly dependent on imported oil and gas due to inadequate domestic production, this dependence makes India vulnerable to supply disruptions as the major portion of its importation comes from a specific region or limited states.

Analysis of contemporary India's Foreign policy and recent trends show that energy security has emerged as a key priority in India's foreign policy.

India is trying to diversify its energy sources in this direction, India has taken various positive steps and has invested in various energy-rich regions like Africa, Latin America, Caspian Sea Basin, etc.

The Indian government is focusing on alternative environment-friendly renewable resources, like solar energy, wind energy, green hydrogen energy, etc. in this regard formation of the International Solar Alliance by India and France is an example of India's efforts to bring the international community to address the challenge of energy security and climate change.

India is focusing on energy transition from fossil fuels to renewable environmentally sustainable energy resources. For that Indian government has initiated various measures through the energy conservation act of 2001. India's national energy policy (2016) also emphasized reducing carbon emissions and raising the share of renewables in India's energy mix.

Keeping in mind current international concerns about climate change and environmental sustainability, energy efficiency, and energy conservation are very essential for India to achieve energy security.