India's Balancing Act on Energy Security on Display at the India Energy Week, 2024 in Goa

India's approach and successes will provide a ready template for the world to follow

India is the most populous country in the world, and has also held the mantle of the fastest growing large economy over the last few years. This combination has meant that the country is projected to be the fastest growing energy consumer in the world for the next two decades.

It's expected that a quarter of incremental global energy demand growth will come from India between now until 2045. Apart from being the third-largest <u>consumer</u> of energy, India is also the third-largest importer of crude, third-largest LPG consumer, fourth-largest LNG importer, and the fourth-largest refiner.

Even though the country has scaled up renewable capacity sharply over the last decade, and aims to generate 50% of power through non-fossil sources by 2030, fossil fuel remains India's energy mainstay.

The country's current position has placed it squarely before a triad of challenges: boost economic growth through higher imports of conventional but polluting fuel, ensure affordability of energy supply in the wildly fluctuating world of international oil and gas markets, and meet the climate change obligation.

In this backdrop, India will host the second edition of <u>India Energy Week</u> (IEW) in Goa, India from February 6th to 9th 2024.

Organized by the Federation of Indian Petroleum [FIPI] Industry under the aegis of the Ministry of Petroleum and Natural Gas, Government of India, India Energy Week serves as a catalyst for meaningful discussions, knowledge exchange, and collaboration among industry experts, policy makers, academia and entrepreneurs.

The event aims to foster partnerships, drive innovation, and explore solutions that will propel India's energy sector into a sustainable and vibrant future.

The global energy event, encompassing the entire spectrum of the sector, is expected to draw over 35,000+ attendees, 350+ exhibitors, 400+ speakers and 4,000+ delegates, from over 100 countries. India Energy Week will host an extensive array of exhibitors, spanning core oil field services to enrich the event's dynamic atmosphere.

During IEW 2024, Ministerial, Leadership and Technical sessions and Roundtables will explore varied themes like energy transition of the global south, building a future ready energy stack, chartering the roadmap of alternate fuels for energy optionality and impact of localization, regionalization and globalization on energy related industrialization and manufacturing processes.

Advancing Energy Security

India's dependence on oil, gas and coal for its ever-growing energy demand stems from the reliability of fossil fuels, which the renewable sources with their intermittency issues are yet to match.

However, the volatile crude prices can upend the need of 1.4 billion people for accessible and affordable energy as India relies heavily on imports for oil and gas. India imports about 78% of its crude oil and natural gas requirements.

The South Asian country cleared regulatory hurdles and now hopes to <u>raise</u> exploration acreage to 0.5 million square kilometers by 2025 and 1 million square kilometers by 2030.

India will continue to require more fossil fuel in the future as it strives to extend natural gas coverage to those without access to it. The government's Ujjwala (Bright) Scheme, which was rolled out in 2016, has since benefited over 100 million households with subsidized cooking gas connections.

It has also laid thousands of <u>kilometers</u> of gas pipelines through city gas distribution networks. The successful completion of the latest <u>bidding</u> round has increased potential coverage to about 98% population and 88% geographical area of the country.

India has unequivocally sought to raise its average per capita energy consumption which currently hovers at a third of the world's average.

Climate Committments

At the conclusion of the recent COP 28, the parties <u>agreed</u> to herald the "beginning of the end" of the fossil fuel era by laying the ground for a swift, just and equitable transition, underpinned by deep emissions cuts and scaled-up finance.

India's earlier commitment already holds it in a good stead against the new agreement. At <u>COP</u> <u>26</u>, India committed to reach 500 GW non-fossil energy capacity by 2030, and ensure that 50% of its energy requirements come from renewable energy by 2030.

It also announced that it will cut total projected carbon emissions by one billion tonnes from now to 2030, and prune the carbon intensity of the economy by 45% by 2030, over 2005 level. Finally, India aims to achieve the target of net zero emissions by 2070.

Decarbonisation Efforts

In attempting the daunting balancing act, India has unfurled a robust response that encompasses, but is not limited to, increasing domestic crude oil and natural gas exploration and production, rapidly raising ethanol blending in petrol to cut imports and keep prices affordable, and deploy large-scale renewable power generation capacity at a lower cost than thermal power.

The current non-fossil power generation capacity of the country is at 186 GW, accounting for nearly 44% of the total <u>installed</u> capacity. Majority of green energy capacity has been achieved over the last decade.

It also achieved 10% of ethanol blended petrol much ahead of schedule and now wants to increase it to 20% by 2026.

Furthermore, it has announced substantial investment in <u>developing</u> 5 million metric tonne (MMT) of green hydrogen every year by 2030, which could substitute imported fuel in many industrial applications.

India Energy Week 2024 will provide a unique opportunity for the global energy ecosystem to gain valuable insights and learnings from India's journey towards achieving energy security and decarbonisation of economy simultaneously.

