THERMAX

STAKEHOLDER VALUE CREATION

Government Authorities

The Government of India plays a pivotal role in shaping the nation's energy landscape and is keenly driving the transformation towards a sustainable future. Thermax actively engages with various government ministries and agencies to contribute to the collective vision of energy transition.

KPIs

Rs. 415 crore
Taxes Paid

Rs. 26.2 crore
Investment by Government in Our R&D Projects

Ministry of Coal (MoC)

In FY 2022-23, we established the pilot plant for our coal-to-methanol project under the NITI Aayog initiative, supported by the Department of Science & Technology and in partnership with IIT Delhi. The plant has repeatedly demonstrated targeted methanol production using high ash Indian coal. We have rigorously tested many varieties of Indian coal as a feed and have successfully converted it to syngas and methanol.

On the research front, we have collaborated with IIT Delhi and NCL Pune for coal gasification and specific application development for resins. During the Coal Ministry's visit to our 6 TPD coal-to-methanol plant in Pune, we demonstrated our capabilities in the conversion of high-ash Indian coal to methanol – a first-of-its-kind initiative to convert 50% of ash coal into value-added chemicals. The plant is designed in a way that it is carbon capture ready. Further, we are working with customers in relevant industries to create multiple new solutions in waste-to-energy.

Ministry of Steel

The ministry is facilitating setting up of coal gasification projects suitable for syngas based ironmaking as a key step in green steel manufacturing. Several other initiatives such as using renewable hydrogen in DRI processes are also planned with the aim of decorbansing steel manufacturing. Thermax is engaging with the ministry in the consultative process, exploring benchmarking of capital costs, proposing a cluster-based off-take model for syngas, and participating as a potential supplier for gasification solutions.

Ministry of New and Renewable Energy (MNRE)

The MNRE has defined green hydrogen standards with a threshold for greenhouse gas emissions (non-biogenic) at 2 kg CO_2 equivalent per kg H_2. It is currently in advanced stages of specifying a certification scheme called the Green Hydrogen Certification Scheme of India (GHCI). The GHCI will establish Guarantees of Origin (GO) ensuring transparency and authenticity in the green hydrogen production process.

As a committed and potential producer of green hydrogen, Thermax engaged in the stakeholder consultative process. Some of the key proposals included allowing green tariffs and RE procured through trading platforms (G-TAM, G-DAM) as proof of GOs, reduction in lifecycle carbon footprint in case of biomass to GH_2 conversion and highlighting merits of new low carbon technologies like Solid Oxide Electrolysis Cell (SOEC).

We are also engaging in highlighting key issues in solar energy, wind energy and the bio-fuels programme of the ministry.

Central Transmission Utility of India Limited (CTUIL) and Central Electricity Authority (CEA)

CTUIL is the designated central nodal agency for power evacuation approvals in case of inter-state flow of power. First Energy Private Limited (FEPL) engaged extensively with CTUIL and secured 300 MW of evacuation in inter-state transmission system (ISTS), for supply to industrial customers in renewable energy (RE) lagging states with high demand of green power. Going ahead, we anticipate stronger engagement as CTUIL and CEA work towards achieving India's goal of 500 GW of RE by 2030, including facilitating ISTS based RE power supply for green hydrogen projects.

Bureau of Energy Efficiency

Ministry of Power notified the Carbon Credit Trading Scheme (CCTS) on June 28, 2023, as a step towards achievement of India's enhanced Nationally Determined Contributions (NDCs). As a key nodal agency, the Bureau of Energy Efficiency (BEE) has notified the draft carbon market compliance framework. Under CCTS, obligated entities will be mandated to reduce energy intensities and will participate in carbon compliance markets, whereas non-obligated entities can participate in voluntary markets. Thermax is actively participating in the stakeholder consultative process to contribute in the final policy and regulatory framework.