

## India announces launch of 'Innovation Roadmap of Mission Integrated Biorefineries'

By TIOL News Service

**NEW DELHI, SEP 24, 2022:** Dr

Jitendra Singh, who is leading a high-level Joint Indian Ministerial Delegation of Ministry of Power, New & Renewable Energy and Ministry of Science & Technology at Global Clean Energy Action Forum at Pittsburgh, Pennsylvania in the United States has announced the launch of the "Innovation Roadmap of the Mission Integrated Biorefineries" developed by co-leads and active inputs from Brazil, Canada, EC and the UK.

The Minister said, the Mission aims at greater international collaboration and the need for increased financing for Energy Research, Development, and Demonstration (RD&D) during the next five years to kickstart this objective and unleash a virtuous cycle of public and private investment.

Dr Jitendra Singh was speaking at the 1st Roundtable on "Sustainable Bioenergy and Bio-refineries" at the Global Clean Energy Action Forum - the joint convening of 7th Mission Innovation and 13th Clean Energy Ministerial -2022.

Dr Jitendra Singh said, "Innovation Roadmap of the Mission Integrated Biorefineries" aims to fill the void by identifying gaps and challenges in current biorefining value chains, prioritising Eight key actions to support the Mission, and guiding the Mission's overall path in achieving its goal. He said, it also provides policymakers with a strategy framework to establish a rising RD&D portfolio over the next five years, specific financing proposals across the entire spectrum of vital Biorefinery technologies, and rapid action suggestions.

Addressing the Ministers & CEOs, Senior representatives of (US DoE, Mission Innovation Steering Committee (MISC) and Mission Innovation Secretariat, Senior representatives from MI Member countries and partner organisations, Dr Jitendra Singh said, Clean Energy Meet offers India an opportunity to present Prime Minister Narendra Modi's climate and clean energy vision before the world. The Minister said, he is extremely happy to be present at this meet, where the global energy community has come together to share and collaborate towards a successful global green transition.

Dr Jitendra Singh informed the Delegates that India is continually working towards transforming the energy landscape of country with significant clean energy share and added that by 2030, India agreed to reach 500-Gigawatt non-fossil energy capacity, shift 50% of energy requirements to renewable energy, lower overall anticipated carbon emissions by one billion tons, reduce carbon intensity of the economy by 45% over 2005 levels, and achieve net zero emissions by 2070.

Dr Jitendra Singh shared with pride that a pilot plant of 10 Tons/day capacity plant with integrated enzyme production is being set up at Panipat Haryana, which will be commissioned by December 2022. This will be the 1st indigenous technology for on-site enzyme production. The Minister pointed out that Indian Oil Corporation Limited (IOCL) has also planned to supply this indigenous enzyme to commercial 2G ethanol plant of 100 KL/day expected to be commissioned by Q2 of 2024. Further, lignin valorization process is also being developed to produce value added products from waste lignin. He said, it's successful demonstration will give an indigenous technology to the nation and will contribute to Self-Reliant India and reduce carbon foot print from transport sector.

Dr Jitendra Singh underlined that sustainable biofuels play key role to reduce Green House Gas (GHG) emissions from the transport sector. He said, India, through the Department of Biotechnology, has been supporting R&D innovations in Advanced Biofuels and Waste to Energy technologies. He also shared with Delegates that India has established 5 Bioenergy Centers, where interdisciplinary team is working on advance sustainable biofuels using modern biotechnology tools.

The Minister concluded by saying that recently, when India hosted the MI Annual Gathering in New Delhi, the Mission Integrated Biorefineries was launched with co-leads from the Netherlands, uniting key members, international organisations, the corporate sector, academic institutions, and civil society to accelerate innovation for renewable fuels, chemicals, and materials for a low-carbon future.