

On the occasion of the Visit of German Chancellor HE Mr Olaf Scholz to India "Fraunhofer is Technology Partner to Department of Science and Technology Govt of India for Hydrogen Technologies and Clean Energy"

Date: February 25, 2023

The Department of Science and Technology (<u>DST</u>), Government of India and Fraunhofer Institute for Solar Energy Systems, Germany (<u>Fraunhofer ISE</u>) have signed a Letter of Intent for a long-term collaboration focusing on hydrogen technologies, with Fraunhofer as a Technology Partner. This collaboration will pave the way to forge active engagements and collaboration based on mutual needs and strength to further research and technological capabilities in the hydrogen and clean energy sector.

India and Germany share the goal of decarbonizing their economies and are committed to collaborate jointly in the pursuit of energy security and climate protection. Both countries have committed to developing a national green hydrogen economy to facilitate the achievement of the Paris Agreement targets.

Germany is a pioneer in the Energy Transition Agenda with cutting edge technologies in the field of Renewable Energy while India is in a position to produce low-cost green hydrogen to gradually decarbonize its economy, and also export it to meet global demand. It is well understood that the energy sovereignty, affordability, and climate and environmental protection will only be possible with hydrogen as an energy carrier in the mix of renewable energies. While both Governments have initiated and funded large programmes, it is now an economic and environmental imperative to engage multiple stakeholders such as Industry, research, academia and start-ups in a value based global framework to develop and deploy technologies as a key to sustainable Hydrogen strategy and also accelerate the path from research to market.

The Lol will trigger development of higher Technology Readiness Level (TRL) for hydrogen energy clusters being set up by DST and identify existing technologies and potential interventions from Fraunhofer in green hydrogen, integrate them with indigenous technologies, and deploy /calibrate them for Indian conditions.

DST will provide the enabling framework for cooperation in the hydrogen valley cluster projects, support activities, and facilitate the resources needed wherever applicable and possible. Meanwhile Fraunhofer acts as a technology partner for the hydrogen valley /cluster, provides information and access to technologies of TRL 5 - 8, scientific and technical experts, collaboration in preparing technology roadmaps and guidelines for innovation ecosystem/cluster.

The Lol was signed on the occasion of the visit of German Chancellor H E Mr. Olaf Scholz to India, on February 25, 2023 by Dr. Anita Gupta, Scientist G and Head - Energy Technologies Cell, DST and Prof. Dr. Christopher Hebling, Director, Division Hydrogen Technologies, Fraunhofer ISE, Germany in the presence of Secretary – DST, Dr. S. Chandrasekhar, Ms. Anandi Iyer, Director Fraunhofer India and Mr. R. Madhan, Director, Indo-German Science & Technology Centre (IGSTC). The event was also attended officials representing both the sides.



Image 1.: (L-R) Dr. Anita Gupta, Scientist G and Head - Energy Technologies Cell, DST and Prof. Dr. Christopher Hebling, Director, Division Hydrogen Technologies - Fraunhofer ISE, Dr. S. Chandrasekhar, Secretary - DST and Ms. Anandi Iyer, Director Fraunhofer India





Image 2.: (L-R) German Chancellor H E Mr. Olaf Scholz, Prof. Dr. Christopher Hebling, Director, Division Hydrogen Technologies - Fraunhofer ISE

About Fraunhofer-Gesellschaft:

Fraunhofer headquartered in Germany, is the world's leading applied research organization. With its focus on developing key technologies that are vital for the future and enabling the commercial exploitation of this work by business and industry, Fraunhofer plays a central role in the innovation process. As a pioneer and catalyst for ground-breaking developments and scientific excellence, Fraunhofer helps shape society now and in the future. Its research activities are conducted by 76 Institutes and Research units across locations in Germany. The Fraunhofer employs a staff of 30,000; who are qualified scientists and engineers working with an annual outlay more than 2.9 billion Euros. Of this sum, 2.5 billion euros is generated through contract research. Our global footprint is very strong with offices and research centres in the USA, Europe and Asia. Some of our renowned innovations are the MP3 format, the white LED, the smallest of cameras. In the field of renewable, Fraunhofer holds the world record in solar cell efficiency, battery storage, and cover the entire spectrum of energy (Grid, Renewables, Storage, etc) across the value chain from materials to testing and certification. Fraunhofer has been active in India since the past several years, bringing innovative technologies and research competence to India. Fraunhofer in India is the chosen R&D and innovation technology partner of some of the major players in the field of Energy, Environment, Automotive, Electro-mobility, Materials, Production Technology and Smart Cities working with Industry, Government and Public Sector.