

DST Promotes Research on Carbon Capture, Utilization and Storage

August 25, 2020

The Department of Science & Technology (DST) has invited proposals from Indian researchers in the area of Capture, Utilisation, and Storage (CCUS) under **Accelerating CCUS Technologies (ACT) in collaboration with other ACT member countries**. This is an initiative to facilitate the emergence of CO₂ CCUS via translational funding of projects aimed at accelerating and maturing CCUS technology through targeted innovation and research activities.

Research on CCUS

CCUS technologies involve the **capture of CO₂ from fuel combustion or industrial processes, the transport of this CO₂ via ship or pipeline, and either its use as a resource to create valuable products or services or its permanent storage deep underground in geological formations**. CCUS technologies also provide the foundation for carbon removal or negative emissions when the CO₂ comes from bio-based processes or directly from the atmosphere.

Sixteen countries, regions, and provinces are working together in ACT with the ambition to fund world-class R&D innovation that can lead to safe and cost-effective CCUS technology. Researchers interested in translational research on CCUS now have a major opportunity to accelerate and **mature their technology and research activities as solutions to the growing problem of global climate change**.

CCUS is one of the identified innovation challenges in the **Mission Innovation (MI) Programme, a global initiative of 24 countries and the European Union to accelerate the global**

clean energy innovation in which DST is an active partner. The DST has already funded 19 R&D projects in the area of CCUS under the MI umbrella, partnering with 13 MI countries. ACT is seeking innovative projects that range from **smaller research projects to new or already existing pilot and demonstration facility sites**. ACT will address the technological, environmental, social, and economic challenges required to accelerate CCUS.

New pilot and demonstration facilities should have potential for upscaling to industrial size either in a demo phase or early commercial phase. **Each project proposal has to be submitted by a project consortium consisting of at least three eligible applicants funded by at least three countries/regions** participating in the ACT call. Each project's consortium must have the required expertise to undertake research and development within the specified themes. **All funds will be allocated from national and regional budgets** that support research and development as well as pilot and demonstration projects.