





## Industry-Academia-Government Consultative Meeting to address the Challenges of Energy Sector (Conventional & Non-conventional) and Energy Devices

17 October 2022 (Virtual)

Jointly Organized by

Council of Scientific & Industrial Research (CSIR) and Department of Scientific and Industrial Research, Ministry of Science & Technology, Government of India *and* Asian and Pacific Centre for Transfer of Technology (APCTT) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

## BACKGROUND

The energy sector is key to combat the future energy crisis, reduce emissions and mitigate climate change impacts. These challenges can be addressed by scaling up and adoption of green, clean, efficient and innovative technologies in the energy and power sector. Emerging technologies such as artificial intelligence, the Internet of Things, digital twins, robotics and Big Data, offer many innovative applications in the energy sector in terms of improvement of efficiency, reduction of emissions, enhancement of reliability and optimization of costs. Examples include AI-enabled smart meters, 5G-based smart grids, smart solar energy systems, intelligent DC motors, use of biofuels, and using Big Data to locate harmful emissions. These technologies can be key enablers of sustainability and environmental resilience - offering important opportunities to help assess, mitigate and adapt to climate change.

With many emerging technologies already available, particularly in the Asia-Pacific, there are challenges and opportunities for their transfer at industrial scale and adoption in the region. It is therefore important for countries to explore cross-border collaboration between industry, academia and Government to accelerate innovation, scaling up and adoption of emerging energy technologies. The triple helix relationship between Industry-Academia-Government enables the diffusion of ideas, innovations, skills and people with the aim of creating mutual value over time across the region. Enabling policy and strategy options, regulatory mechanisms, and good practices are necessary to facilitate cross-border transfer,

adoption and diffusion of emerging technologies for improving efficiency and reducing emissions from the energy sector. Recognizing the needs and priorities of the region, this Industry-Academia-Government Consultative Meeting is being organized to deliberate on the strategies for addressing the challenges of energy sector (both conventional & nonconventional) and energy devices.

The regional consultation aims to provide a platform for member States to share knowledge on emerging energy technologies, identify opportunities of collaboration, and deliberate on the priorities and actions required through Industry-Academia-Government collaboration to accelerate transfer and adoption of emerging technologies in the energy sector.

## OBJECTIVES

- To understand the needs, and share information about existing technologies and innovations for addressing the challenges of energy sector
- To deliberate and explore opportunities and strategies for transfer of energy related technologies through Industry-Academia-Government collaborative model between member States
- To strengthen regional technology cooperation among participating member States to jointly combat the future energy crisis

## PARTICIPANTS

National focal points of APCTT; representatives from Government, academia, industries and other agencies/institutions; and experts from energy associations and relevant stakeholders from participating member States of the Asia-Pacific region