Towards industrial decarbonization in India: Key enablers and opportunities

17 February 2022 (Thursday) | Time: 10:00 – 11:30 am (IST)

Background:

With rapid urbanization and economic growth India’s energy demand and the associated greenhouse gases emissions are anticipated to increase in the coming years. In line with the Prime Minister’s announcements at COP-26, it is evident that India needs to accelerate its efforts on key developmental transitions to fulfill its climate goals. One such transition is to decarbonize the industrial sector. Industrial decarbonization is critical in mitigating climate change and will form the core of the clean economy that India aspires for. Incorporating technological innovations, well designed and strategic policies will help to incentivize the adoption of low carbon technologies. However, as the world has hit economic slowdown due to the pandemic, financing the transition has becomes more challenging. Thus, a related looming question is whether India can become a global leader in the innovation and manufacturing of deep decarbonization technologies. Emerging technologies such as hydrogen, carbon capture and storage (CCS) and renewables require high upfront costs and R&D investments for their economic benefits to materialize by mid-century. Some of the key barriers impeding the pathways towards industrial decarbonization are:

- Mismatch in the opportunity profile between capital supply and demand
- Limited pipeline of bankable opportunities
- Policy and regulatory uncertainty
- Limited data and clarity on pathways
- Limited capacity building initiatives
- Technology – high upfront cost, lack of technology cooperation needs

At the TERI’s flagship World Sustainable Development Summit (WSDS – 2022), we are organizing a dialogue supported by The World Bank Group to engage experts from government, industry, and academia to deliberate on the aspects of opportunities the need for integrated efforts to maximize in transforming the industrial sector towards decarbonization pathways.
Key discussion points include:

- Barriers impeding the implementation of low carbon technology (LCT) options, primarily the financial and policy.
- Strategizing the long term vision action plan for industrial decarbonization focusing on:
  - Emerging technologies (e.g. CCS, hydrogen, etc);
  - Carbon pricing and carbon markets;
  - Capacity building.