

Experts warn Net-Zero Industry Transition is an Overlooked Climate Challenge at Climate Week Event

New York City, 24 September 2019 – The Global CCS Institute hosted its first ever flagship event at Climate Week in New York City focusing on the net-zero industry transition. As one quarter of global emissions are produced by industry, the event addressed the importance of accelerating global efforts towards a clean energy transition and how carbon capture and storage (CCS) can support the decarbonization of the industrial sector. International leaders from business, climate, and government also highlighted the sector's pressing need to decarbonize its electricity production.

The Intergovernmental Panel on Climate Change's (IPCC) Special Report on Global Warming of 1.5 °C states that to limit global warming to 1.5 °C, the industrial sector must reduce its emissions by 75-90 per cent relative to 2010 by mid-century, before phasing out emissions completely.

Participating in the high-level event, Guloren Turan, General Manager for Advocacy and Communications at the Global CCS Institute, said: "Urbanization, economic prosperity, and population growth are set to drive increased demand for industrial products exacerbating the pressing need to address head on the challenge of abating industrial emissions. Little attention has been given to CCS as part of the portfolio of mitigation options that can play a key role in decarbonizing heavy industry. We need transformational change in the industry sector. This will require investment, collaboration, ambition and action."

In manufacturing sectors such as steel, and cement, which accounted for around 12 per cent of total direct CO₂ emissions in 2017, CCS remains a key technology to eliminate process emissions. Speaking at the event was also Mahendra Singhi, CEO of Dalmia Cement, which had just recently announced a collaboration with UK-based Carbon Clean Solutions to build the first large-scale carbon capture plant on cement in India as part of its strategy to become carbon negative by 2040.

CCS technology can also decarbonize hydrogen production, currently responsible for about 700 mtpa of CO₂ annually, according to the International Energy Agency (IEA). Hydrogen is seen as an important energy vector in a zero-emissions future to decarbonize a variety of sectors including industrial heat and transport.

The deployment of carbon capture and storage technologies in the industrial sector enjoys broad support, as a recent policy changes in the United States have shown. "CCUS is a major pathway for industrial decarbonization – one of the harder challenges of our energy system. Zero carbon liquid fuels are an important potential solution for this sector, and CCUS is one of the most affordable methods for making these types of fuel. In addition, some industries, like steel and cement, can't prevent the generation of CO₂ emissions, they can only be mitigated with CCUS," said Kurt Waltzer, Managing Director, Clean Air Task Force.

With the need for a convergence of industrial, energy, and transportation policy under the umbrella of comprehensive climate action, Ms. Turan emphasized the urgency for government-backed policy

confidence and public-private partnerships: “Innovative business models driven by a value on carbon, and policy confidence are key to the deployment of CCS in the industrial sector.”

Today, 17 of 19 operating large-scale CCS facilities globally are in the industrial sector capturing, and safely and permanently storing more than 30 mtpa of CO₂. Many industrial applications of CCS are low-cost, including natural gas processing, offering the opportunity for near-term deployment and a pathway for CCS commercialization.