2015 CO₂ Capture Technology Meeting

The 2015 CO₂ Capture Technology Meeting was held in Pittsburgh, Pennsylvania, on June 23–26, 2015, hosted by the U.S. Department of Energy (DOE) National Energy Technology Laboratory (NETL). A total of 175 attendees from 75 companies, 15 universities, and 5 national laboratories and government agencies attended the meeting.

The NETL Director for the Strategic Center for Coal, Sean Plasynski, provided the opening remarks on behalf of NETL Director Dr. Grace M. Bochenek, noting the importance of all stakeholders working together to provide global leadership in CO₂ capture technologies through more demonstration projects, increased testing in real environments, development of transformational materials and processes, and implementation of tools that enable faster maturation of CO₂ capture technologies.

David Mohler, Deputy Assistant Secretary for Clean Coal and Carbon Management, initiated the presentations with an overview of the DOE Office of Fossil Energy's perspective on the critical role CO₂ capture plays in achieving the U.S. Department of Energy's "All of the Above" carbon management strategy.

Researchers representing over 45 of the active projects in the Carbon Capture project portfolio gave presentations covering their R&D work in advanced solvent, sorbents, and membranes for post-combustion and pre-combustion projects that range from bench-scale to pilot-scale applications. Transformational technologies were also well represented on two panels devoted to such projects. Project sessions on oxy-combustion and chemical looping provided attendees with updates on five projects funded by NETL in these key technology areas.

A panel on the subject of Systems Studies and Modeling provided attendees with guidance on systems analysis of projects, the accomplishments and opportunities associated with the Carbon Capture Simulation Initiative, and an update of new technology options in the Integrated Environmental Control Model power plant simulation model developed for DOE/NETL.

Poster presentations included 13 posters, mainly on active R&D projects for which oral presentations had not been made. This open forum provides a less formal environment and encourages and facilitates discussion amongst the presenters and attendees.

The wide range of topics of the course of the 3-day meeting facilitated lively, interactive discussions about these technology areas and gave participants an opportunity to explore new ideas to inform the future direction of the NETL R&D portfolio. All presentations and poster abstracts may be found on the NETL website.