



METCCUS Seminar on Metrology Support for Carbon Capture, Utilisation and Storage achieves high-level of engagement and participation.

Press release – for immediate release

On Thursday October 26th, 2023, the online public METCCUS Seminar on Metrology Support for Carbon Capture, Utilisation and Storage was completed with great success, attracting more than 100 participants. The event brought together experts from metrology and industry to discuss and present their solutions for the measurement challenges faced by the CCUS industry. The invited speakers addressed key measurement needs related to CO₂ flow metering, emissions monitoring, chemical composition and physical properties.

Following opening remarks from GERG and VSL, the project coordinator, Iris de Krom (VSL), gave an overview of the MetCCUS project, which has now been running for more than one year, followed by Annarita Baldan, chair of Euramet European Metrology Network (EMN) for Energy Gases, who explained the role of this network, covering topics such as hydrogen, biomethane and CCUS. Anastasios Perimenis, Secretary General of CO₂ Value Europe, gave a broad overview of CCU in Europe and its contribution to net zero (referencing the CO₂ Value Europe [CCU projects database](#)). Filip Neele, from TNO/ZEP, talked about the requirements for CO₂ flow measurement accuracy, highlighting a clear need for metering of CO₂ flows in gas, liquid and dense phase.

During the second session, speakers addressed other CO₂ metering and measurement challenges and opportunities. Alberto Giuliano Albo, from INRIM, presented how the exploitation of speed of sound measurements can help monitoring CCUS processes such as phase identification and storage monitoring. Salvatore Pitti, from Emerson, presented the capabilities and opportunities of CO₂ metering, particularly Coriolis flow meters, which are fit for purpose in H₂ and CO₂ applications. Then, Aurélie Moll, Head of Industry Group Energy & CCUS from SICK, addressed the CO₂ measurement needs along the CCUS value chain.

Rod Robinson, Principal Scientist at NPL, opened the third session of the workshop with a comprehensive presentation on emissions measurements from CCUS. Within the MetCCUS project, he is studying, among other topics, suitable leak detection methods to monitor CCUS processes. Roland Span, Sub-Project Leader CO₂ Transport EERA JP CCS and Chair of Thermodynamics at Ruhr-University Bochum, talked about CO₂ specifications for transport as well as thermodynamic properties. Last but not least, Martine Carré, Scientific Director Analytical Science and Lucie Chaubet, Pole Manager Low Carbon Hydrogen from Air Liquide (industrial MetCCUS project participants), presented the CCUS process and metrological challenges from an industry perspective, with the example of their innovation campuses in Paris and Frankfurt.

The fourth and last session of the seminar opened with Christopher Meyer, Physicist at the National Institute of Standards and Technology (NIST) in the United States. He explained the importance of removing H₂O from humid CO₂ and dew-point measurements for water in compressed CO₂. The stage was then given to Karine Arrhenius from RISE for her presentation on sampling of CO₂ for purity assessment: methods and challenges. She expanded about some of the tests that have already been performed in the MetCCUS project, using different types of vessels for sampling. You can already access some public reports on MetCCUS website: [MetCCUS publications](#).

The session concluded with the closing remarks from GERG and VSL. The project coordinator shared the results from the survey ran during the workshop, which allowed the audience to see the diverse attendance from many countries inside and outside Europe, as well as the biggest measurement challenges that the participants are facing in their CCUS processes. Many of these measurement needs are being addressed in MetCCUS, which confirms the importance of the project.

Speakers' presentations and the recording of the seminar are available [here](#).

For more information about the project and MetCCUS events, visit the MetCCUS [website](#) and follow [MetCCUS on LinkedIn](#).

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METCCUS Press Release ends.

For further information about METCCUS and interviews please contact Iris de Krom (email: idekrom@vsl.nl)

