

nova-Institut GmbH (www.nova-institut.eu)

PRESS RELEASE

Towards Advanced CO₂ Utilisation and a Defossilisation of The Chemical Industry

Leading experts will be meeting at world's hybrid key event in Carbon Capture and Utilisation (CCU) from 17-18 April 2024 in Cologne, Germany. The preliminary programme of the "CO₂-based Fuels and Chemicals Conference 2024" is available now.

Hürth, 14 December 2023: From 17-18 April 2024, CCU leading players and stakeholders will demonstrate novel and improved applications focusing on CO₂ as feedstock and discuss developments in the field of CCU at the "**CO₂-based Fuels and Chemicals Conference 2024**" in Cologne (www.co2-chemistry.eu). The preliminary programme with 20 speakers from 8 countries is now available online.

The technologies, research and projects presented at the conference are pivotal to avoid emissions, establish a renewable circular economy and thus contribute to mitigate climate change. This year's presentations will cover the entire CCU (Power-to-X) supply and value chain which includes the capture and use of renewable carbon for a variety of fuels and products. Dedicated sessions will also address the political framework and future innovations and strategies. Those will focus on current hot topics such as Biogenic CO₂ sources and advanced science in CCU.

In their presentations, companies such as thyssenkrupp Steel Europe (DE), CBL Carbon Beyond Limits (DE), Landwärme (DE), CM Fluids (DE), Again (DK), Econic Technologies (UK) and Sulzer Chemtech (CH) will provide insights into their current advances in Carbon Capture and Utilisation. Additionally, research institutes like PtX Lab Lausitz (DE) and DECHEMA (DE), VITO (BE), GIZ (MA), SINTEF (NO), DTI (DK) and the Curtin University (AU) will highlight current research on carbon capture, electrochemistry and e-fuel production. By evaluating the sectors' developments in Europe and the US, the organiser nova-Institute, as well as supporters CO₂ Value Europe and the Global CO₂ Initiative will introduce a comprehensive state of the art and draft future perspectives on CCU strategies and policies. The draft programme is available at www.co2-chemistry.eu/program.

One of the event's highlights will be the nominee presentations of the innovation award competition "Best CO₂ Utilisation 2024", co-organised by the nova-Institute and CO₂ Value Europe and sponsored by Yncoris. Applications are open until the **4th of February 2024**.

A comprehensive perspective on CCU – The Preliminary Program of the “Conference on CO₂-based Fuels and Chemicals 2024”

Innovation, Strategy and Policy

- Michael Carus, nova-Institute (DE): *The Importance of CCU in a Renewable Carbon Economy – Making the Case for CCU*
- Célia Sapart, CO₂ Value Europe (BE): *The Contribution of CCU towards Net-Zero in EU*
- Nicolas Hark and Matthias Stratmann, nova-Institute (DE): *Policy and Sustainability in CCU – A Status Quo*
- Volker Sick, Global CO₂ Initiative (US): *Policy Support for CO₂ Capture and Conversion in the USA*

Biogenic CO₂ sources

- Caroline Braun, Landwärme (DE): *A Value Chain for Biogenic CO₂*
- Lena Friedmann, CM Fluids (DE): *Renewable CO₂ – Biogas Sector’s Perspective*
- Esther Hegel, DECHEMA (DE): *CO₂ from Biogas Plants: A Future Feedstock for Biotechnology?*

Carbon Capture and Green Hydrogen

- Mehdi Hssein, GIZ Morocco (MA): *Carbon Sources and Capture in Morocco: Challenges and Opportunities*
- Ulrich Dietz and Ralf Gesthuisen, CBL-Carbon Beyond Limits (DE): *Amino-acid Based Carbon Capture – A Novel, Efficient and Wide Range Applicable Carbon Capture Process Technology*
- Marleen Rambouts and Ben Sutens, Vlemish Institut of Technology VITO (BE): *CO₂ Capture Using Porous Structured Absorbents*

Power-to-X

- Florian Haakmann, thyssenkrupp Steel Europe (DE): *Carbon₂Chem® – CO₂ Emissions from Point Sources*
- Lorenzo Cremonese, PtX Lab Lausitz (ZUG) (DE): *Resource Demand of a GHG-neutral Aviation Sector in Europe: A Study on e-Kerosene*

CO₂-to-Chemicals and Minerals

- Pauline Ruiz and Pia Skoczinski, nova-Institute (DE): *Status and Outlook for CO₂-based Products*
- Torbjørn Ølshøj Jensen, Again (LuaBio ApS) (DK): *Again – We Ferment Emissions to Unpickle the Planet*
- Cecilia Mondelli, Sulzer (CH): *CO₂-based Inorganic and Organic Carbonates to Green Up Construction and Transport Sectors*
- Thomas Mairegger, Net Zero Emission Labs (DE): *CO₂ Capture and Utilization Pave the Way Towards a Climate Neutral Cement Production*

CO₂-to-Polymers and Materials

- Rob Marrow, Eonic Technologies (UK): *Effective Life Cycle Assessments in Emerging CO₂-Utilisation Technologies*
- Simon Frølich, Danish Technology Institute (DTI) (DK): *From CO₂ to Polymers*

Parallel Session: Advanced Research in CCU

- Francesca Di Bartolomeo, SINTEF AS (NO): *The PYROCO₂ Project. Advancing Carbon Capture and Utilisation for Climate-Positive Acetone Production in Europe*

- Nadia Leinecker and Sufia Hena, Curtin University (AU): *Scale-Up of Photo-Bioreactors for CO₂ Capture / Microalgae from CO₂ Sequestration to Renewable Bioenergy*
- Pegah Shakeri, Coatema Coating Machinery (DE): *Innovative Approaches for Industrial Electrode Production: A WaterProof EU Horizon Initiative*

Innovation award “Best CO₂-Utilisation 2024”

The innovation award for the “Best CO₂-Utilisation 2024” will showcase innovators and pioneering technologies in the field of CCU and is granted at the “CO₂-based Fuels and Chemicals Conference”, taking place from the 17–18 April 2024 in Cologne, Germany. The event is a well-established meeting point for companies working in the field of CO₂-based technologies, fuels and chemicals. Being a hybrid event, the conference combines an in-person event with “virtual” online components and a broad stage for the award nominees. Online-application can be submitted at www.co2-chemistry.eu/award-application.

Poster presentation

Posters for the poster exhibition can be submitted until the **1st of March 2024** at www.co2-chemistry.eu/call-for-posters.

Sponsoring

nova-Institute would like to thank YNCORIS for sponsoring the innovation award “Best CO₂ utilisation 2024” and CO₂ Value Europe for the co-organisation.

Entities interested in supporting the conference are invited to visit www.co2-chemistry.eu/sponsoring.

Find all nova press releases, images and more free-for-press material at www.nova-institute.eu/press

nova-Institut GmbH has been working in the field of sustainability since the mid-1990s and focuses today primarily on the topic of renewable carbon cycles (recycling, bioeconomy and CO₂ utilization/CCU).

As an independent research institute, **nova** supports in particular customers in chemical, plastics and materials industries with the transformation from fossil to renewable carbon from biomass, direct CO₂ utilization and recycling.

Both in the accompanying research of international innovation projects and in individual, scientifically based management consulting, a multidisciplinary team of scientists at **nova** deals with the entire range of topics from renewable raw materials, technologies and markets, economics, political framework conditions, life cycle assessments and sustainability to communication, target groups and strategy development.

50 experts from various disciplines are working together on the defossilization of the industry and for a climate neutral future. More information at: nova-institute.eu – renewable-carbon.eu

Get the latest news from nova. Subscribe to <https://renewable-carbon.eu/newsletters>

CO₂ Value Europe (CVE) is an international non-profit association representing the Carbon Capture and Utilisation (CCU) community in Europe and beyond with a mission to promote the development of a circular carbon economy based on CO₂ to reduce greenhouse gas emissions and to move away from fossil.

The Association brings together over 90 organisations worldwide from **diverse sectors** (including industries, start-ups, universities, research and technology organisations, and regional clusters), and develops a **large network** of many more organisations and individuals who share the belief that CCU technologies are necessary to help the EU reach climate targets.

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