ACI

25th - 26 October - Hamburg

The European CARBON DIOXIDE UTILISATION SUMMIT

Key Topics

- Legislation and regulation - an overview and outlook
- Financial state and investment in CCU deployment
- Niche and novel CCU applications
- CO2 Utilisation in the construction industry
- Scalability of CCU deployment
- Alternative fuels; CCU and E-Fuels
- Creating and sustaining CCU infrastructure across Europe
- Carbon capture developments

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European Carbon Dioxide Utilisation Summit 2023

Hamburg, Germany

25th—26th October 2023

Following the success of its previous editions, ACI's **European Carbon Capture and Utilisation Summit** will be taking place in Hamburg, Germany, on the 25th and 26th October 2023.

With ever increasing focus on sustainability and decarbonisation, many industries are looking for ways to use CO2 to both remove harmful emissions, and find value from this perceived "waste" material. This event will focus on new CO2 utilisation developments and technologies in the oil and gas, chemicals, energy, building and E-Fuels industries, as well as other-end markets.

The two day event will bring together industry leaders from across the CCU industry—with speakers from leading consultancies, concrete makers, investors, E-Fuels companies, and more.

Agenda Committee

Jan Mertens, Chief Science Officer, **Engie**

Jessica Elwell, Chief Operating Officer, **Oxeon Energy**

Oskar Meijerink, Head of Future Fuels, **SkyNRG**

Tudy Bernier, Senior Policy Manager, **CO2 Value Europe**

Jan Skocek, R&D Program Manager Carbonation, **HeidelbergCement**

Christoph Guertler, **Covestro**

Who Will Attend?

- Policy, Regulation & Environmental Associations.
- Chemical product manufacturers.
- Building and construction companies.
- Venture capital firms and funding organisations.
- Petrochemical, oil and gas consulting firms.
- Oil, gas, energy and chemical companies with alternative energy departments.
- Biofuel, liquid fuel and E-Fuel companies.

Registration Is Simple

If you would like to register for this event or wish to find out more information, you can contact **Rohan Baryah** using any of the following methods:

Tel: +48 (0) 61 646 7022

Email: rbaryah@acieu.net

Online: http://www.acieu.net

Conference Fees

Conference (Includes Documentation Packet) 25th & 26th October 2023	£1,895 (Excl. VAT)
Documentation Packet Only	£495

Members and customers of all supporting organisations are entitled to a discount off their conference package.

Discounts are available for multiple/group bookings.

Opportunities to Meet Your Target Audience:

For information on available commercial opportunities, please contact:

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European Carbon Dioxide Utilisation 2023

Hamburg, Germany

25th – 26th **October** 2023

DAY 1

Wednesday 25th October 2023

08:00 **REGISTRATION & COFFEE**

09:00 **CHAIR'S OPENING REMARKS**

Pim van Keep
Sales Director BeNeLux
Aker Carbon Capture

09:15 **CONFERENCE PRESENTATION**

CCU in the EU: New Legislations, Remaining Challenges, Future Policy

Tudy Bernier
Senior Policy manager
CO2 Value Europe

- To scale up CCU projects, we need long term policy visibility & legal certainty, as well as transposing EU objectives into national law, and adapt to a fast-changing international environment to deliver on climate goals
- With EU elections coming in 2024, new priorities will be set at EU level: EU 2040 climate objectives, ETS system post 2030, definition of low carbon fuels, etc. In order to reach ambitious climate goals, the EU must deliver on its carbon management strategy and include CCU as one of its levers to decrease CO2 emissions

10:00 **CONFERENCE PRESENTATION**

A value chain for biogenic CO2 - a path to climate neutrality and negative emissions

Caroline Braun
Team Lead Business Development
Landwärme

- Production of biogenic CO2 in the course of biogas upgrading
- Usage and storage of biogenic CO2
- Regulatory framework and next steps

10:45 **MORNING REFREshments**

11:30 **SESSION ONE**

Niche and Novel CCU Applications

- Overview of recent new technologies and projects in the field
- Sustainability challenges with bio CCU
- Discussing available technologies and their applications for CO2 Utilisation

Electrify the chemical industry by utilizing eCOs™ technology to convert CO2 to CO

Søren Mikkelsen
Business Development Manager Power-to-X
TOPSOE

- eCOs™ stands for "electrolytic Carbon Monoxide solution"
- The main component of TOPSOE's eCOs™ technology is a solid oxide electrolysis cell (SOEC)
- At elevated temperatures, this cell efficiently reduces CO2 to CO through the electrochemical process of electrolysis

Costs & Energy Optimised Integrated Solutions for Smarter CCUS Projects

Massimo Pardocchi
Global Development Directa
Bilfinger

- Bilfinger plays a leading role in energy transition, supporting our clients to switch from fossil fuels to low carbon, renewable energy sources
- We support all stages of the asset lifecycle from concept and feed design through to EPC, and maintenance,
- We work with our clients to achieve their Net Zero ambitions by integrating green technologies, such as solar and wind, into their onsite energy generation portfolio

12:20 **LUNCH**

13:50 **PANEL DISCUSSION**

Financial State and Investment in CCU Deployment

- The ETS and its effect on trade and
- What the current investment climate means for future growth
- The importance of public funding infrastructure that is needed to get the industry going.

Peter Van Gelderen
Partner
ICOS Capital

Kash Burchett
Global Head of Carbon Removal Technologies
HSBC

Terje Hyldmo
Manager Commercial & Business Development
BioKraft

14:35 **CONFERENCE PRESENTATION**

Carbon2Chem - Reducing CO2 emissions in a cross-industrial network

Nina Kolbe
Project Manager
ThyssenKrupp

15:20 **AFTERNOON REFRESHMENTS**

16:00 **SESSION TWO**

CO2 Utilisation in the Construction Industry

- Using CO2 for the Mineralisation of
- Creating ethanol via the production of steel
- CO2 capture meets mineralization in the liquid phase for a sustainable construction industry

Case study in CCU to greenhouse in Sweden

Thomas Parker
Founder
WA3RM

CO2 Mineralization – CCU for Building Materials by Building Materials

Jan Skocek
R&D Program Manager
Carbonation Technologies
HeidelbergCement

- CO2 mineralization – unique opportunities for cost-competitive cement decarbonation
- Carbonation of old concrete enables recycling of CO2 emitted during cement production
- CO2 mineralized by fresh concrete lowers its emissions early in service life

CO2 capture meets mineralization in the liquid phase for a sustainable construction industry

Cecilia Mondelli
Head CCU & Biobased Technology Development
Sulzer

Making Large Scale Carbon Capture Happen Now

Pim van Keep
Sales Director BeNeLux
Aker Carbon Capture

- What is Post Combustion Carbon Capture
- Which industries are facing hard to abate CO2 emissions
- How can modularization accelerate the roll-out
- Where are projects actually being executed

17:40 **CHAIR'S CLOSING REMARKS**

17:45 **CLOSE OF DAY ONE & NETWORKING DRINKS**

DAY 2

Thursday 26th October 2023

08:30 **REGISTRATION & COFFEE**

09:00 **CHAIR'S OPENING REMARKS**

Stephen B. Harrison
Managing Director
sbh4 GmbH - Decarbonisation consulting

09:10 **CONFERENCE PRESENTATION**

Deployment of CCU at Scale: A Systematic Mindset

- Addressing the scale of CCU and commercial viability
- How potentials of scale affect adoption of CCU

Li Chen
Carbon Utilisation Technology Manager
Baker Hughes

09:55 **CONFERENCE PRESENTATION**

Creating and Sustaining CCU Infrastructure Across Europe

- Europe-wide P2X projects
- Considering projected infrastructure

Deepak Pant
Senior Scientist
VITO

10:40 **MORNING REFRESHMENTS**

11:20 **SESSION THREE**

Carbon Capture Developments

Post combustion CO2 capture technology of Mitsubishi Heavy Industries (KM-CDR processTM).

Michalis Agraniotis
Senior Business Development Manager
Mitsubishi Heavy Industries

Moving Towards the Next Generation of Circular Economy: Carbon2x

Tony Rehn
Program Director, Waste to Materials
Fortum

- Carbon2x increases the circu-lation of materials by comple-menting mechanical recycling.
- Carbon2x turns waste into valuable feedstock for new products.

Development of Chemical Looping Biomass/Coal Combustion Poly Generation Technology

Tomonao Saito
Deputy Manager
Japan Carbon Frontier Organization

- Chemical looping combustion can produce H2, CO2, and heat from biomass/coal with high efficiency.
- Three fluidized bed reactors and oxygen carrier circulation equipment are under development.

Fluor's capabilities in serving the CO2 value chain

Samiya Parvez
Process Engineer, Downstream Refining
Fluor Corporation

- Technical advancements in Fluor's pre- and post-combustion CO2 capture technologies
- CO2 compression, liquefaction, shipping and sequestration: Options and costs involved
- Case studies on the economics of CO2 utilisation to produce e-fuels / chemicals

13:10 **CONFERENCE PRESENTATION**

Turning CO2 into High-Performing & Biodegradable Plastic Materials

Mariana Paredinha Araujo
Scientist, Electrochemistry
Avantium

- Avantium has developed and proven technologies for the electrochemical conversion of CO2 to valuable chemicals.
- Avantium has developed a pathway for converting CO2 to glycolic acid, which is then polymerized to produce poly(lactic-co-glycolic acid), PLGA.
- PLGA is a fully biodegradable polymer with excellent water and gas barrier properties. It is made from 100% renewable feedstock and has a minimum content of 75% CO2.

13:30 **LUNCH**

15:00 **SESSION FOUR PART ONE**

Alternative fuels; CCU and E-Fuels

- Use of E-Fuels in aviation & maritime
- E-fuels have the potential to help private transport and the energy industry achieve 2050 targets.

Construction of one of the World's first e-fuels plants

Gunnar Holen
CEO
Nordic Electrofuel

The Self-Powered CO2 Converter

Ken Omersa
CEO
Omnagen

- It reacts CO2, methane and air to produce syngas, which can then be processed to SAF.
- The output from an anaerobic digester is the ideal input.
- This provides a sustainable route for converting waste organic matter to SAF.

Opportunities and challenges for electro-fuels in future aviation

Ralph-Uwe Dietrich
Research Area Manager Alternaitv e Fuels
DLR

16:50 **AFTERNOON REFRESHMENTS**

17:30 **SESSION FOUR PART TWO**

Alternative fuels; CCU and E-Fuels

The Self-Powered CO2 Converter

Karl Hauptmeier
CEO
Norsk e-Fuel

The Role of CO2 in the eSAF Industry

Eline Van Berlo
Analyst of Future Fuels
SkyNRG

- Requirements eSAF within refuel EU
- Market outlook for eSAF

18:45 **CHAIR'S CLOSING REMARKS**

18:50 **END OF CONFERENCE**