

# 17th Carbon Dioxide Utilisation Summit

27-28 October 2021 // Brussels Belgium

Setting Up Industrial Clusters to Further Develop CO2 Reuse

## Key Topics

- Featuring On-going & Future European CO2 Utilisation Projects
- Industrial & Companies Clusters: Challenges & Opportunities
- Life Cycle Assessment – Best Practices
- Supporting the Industry through Policy & Regulation
- Latest Technologies Development
- CO2 to Chemicals
- CO2 to E-fuels
- CO2 Mineralisation
- Exploring Other End-Markets Potential

## Site Visit



During the Tuesday 26th October afternoon, prior to the conference, a limited number of attendees will receive the unique opportunity to visit ArcelorMittal's Steelanol plant. Please register your attendance for the site visit when booking for the conference.

## Event Sponsors

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For Commercial Opportunities,  
Please Contact Karol Lewicki on  
+48 61 646 70 38 or [karol@acieu.net](mailto:karol@acieu.net)

For More Info & Registration,  
Please Contact Rohan Baryah on  
+48 61 646 7022, [rbaryah@acieu.net](mailto:rbaryah@acieu.net)

Following the success of its previous editions, ACI's **17<sup>th</sup> Carbon Dioxide Utilisation Summit** will take place in **Brussels** on the **27<sup>th</sup> & 28<sup>th</sup> October 2021**.

During this new European edition of the event, the conference will explore the **on-going & future CO<sub>2</sub> utilisation projects**, the importance of **creating partnership through industrial clusters, best practices of LCAs**, as well as the **policy & regulations** that can help strengthen the industry and the **latest technology developments**.

The two day event will also focus on the diverse uses of **CO<sub>2</sub> – chemicals, e-fuels, mineralisation and other market potential**, through **case studies**. The conference participants will be able to take advantage of the different **panel discussions and Q&A** to gain a deeper understanding of the projects presented and interact both with the speakers and their fellow attendees.

Join us in Brussels this October for a **highly interactive & informative conference**, whilst

### Agenda Committee

For this new edition of this event, we have gathered some key industry players to form an advisory committee and help us build the conference agenda, on top of our research.

- Christoph Guertler, Head of Catalysis and Technology Incubation, **Covestro**
- Diego Santamaria Razo, Director Innovation Centre for Sustainable Construction, **CRH**
- Matthijs Ruitenbeek, R&D Manager (Hydrocarbon R&D), **Dow**
- Gunnar Holen, CEO, **Nordic Blue Crude**
- Massimiliano Sala, Syngas & fertilizers Product Lead **SAIPEM**
- Riitta Silvennoinen, Director Future Energy Business, Renewable Energy, **St1**
- Oskar Meijerink, Business Development Manager, **SkyNRG**
- David Nevicato, Research Program Manager- CO<sub>2</sub>/CCUS, **Total**

### Opportunities to Meet your Target Audience

For information on available commercial & exhibition opportunities, please contact:

**Karol Lewicki** +48 61 646 7038 /

[karol@acieu.net](mailto:karol@acieu.net)

### Speaking Opportunities

If you would like to be considered as a speaker at the event, for a 20-30mins presentation, please submit an abstract for consideration to:

**Will Burden** +44 20 3141 0617 / [wburden@acieu.net](mailto:wburden@acieu.net)

### **EXCLUSIVE SITE VISIT:**

#### **ArcelorMittal's Steelanol Plant**

**Ghent, Belgium - Tuesday 26<sup>th</sup> October 2021**



ArcelorMittal is constructing at its site in Ghent, Belgium, a pioneering new installation which will convert carbon-containing gas from its blast furnaces into bioethanol. If proved successful, the new concept has the potential to revolutionise blast furnace carbon emissions capture and support the decarbonisation of the transport sector. The Steelanol plant is the first installation of its kind on an industrial scale in Europe and once complete, annual production of bioethanol at Ghent is expected to reach around 80 million litres, which will yield an annual CO<sub>2</sub> saving equivalent to putting 100,000 electrical cars on the road. The new installation will create up to 500 construction jobs over the next two years and 20 to 30 new permanent direct jobs. Commissioning and first production is expected by mid-2021. The application of this microbial gas conversion system significantly advances ArcelorMittal's carbon capture and storage (CCS) and carbon capture and utilisation (CCU) capabilities and enhances steel's role in the circular economy. ArcelorMittal's long-term aspiration is to become a zero-waste business, with all materials used or generated during steel production recuperated, treated and reused in the production chain or becoming the raw materials for other industries.

There is **no extra charge** to attend the site visit, but spaces are limited and allocated on a **first come first served basis**. Please register your attendance for the site visit when booking for the conference.

#### **Site Visit Itinerary**

12:30 Start of the site visit registration at the conference venue/centre of Brussels

13:00 Departure from conference venue to ArcelorMittal's Steelanol Plant

14:30 Arrival at ArcelorMittal's Steelanol Plant

14:40 Welcome address & presentation of the plant

15:40 Tour of the plant

16:10 End of tour for the last group, Q&A and networking refreshments

16:40 Departure from the plant to the conference venue

### **Registration is Simple**

If you would like to register for this event or wish to find out more information, please contact:

**Rohan Baryah** +48 61 646 7022 /

[rbaryah@acieu.net](mailto:rbaryah@acieu.net)

## DAY 1

Wednesday 27<sup>th</sup> October 2021

08:00 **REGISTRATION & COFFEE**

08:45 **CHAIRMAN'S OPENING REMARKS**

09:00 **SESSION ONE**

### Featuring On-going & Future European CO2 Utilisation Projects

- Nordic Blue Crude progresses towards becoming the first producer at commercial scale of Power to Liquids
- NBC progressing strongly towards successful construction of the first
- In search for best processes and most cost efficient production
- Solid Fast track construction
- E-Fuel looking to be an attractive market going forward



**Gunnar Holen**  
CEO  
**Nordic Blue Crude**



**Àngels Orduña Cao**  
Executive Director  
**A.SPIRE**



**Alba Soler**  
Science Associate - Low Carbon Pathways  
**Concawe**

- CCU – ZEP sink factor methodology



**Per-Olof Granström**  
EU Director  
**Zero Emissions Platform**

**Panel Q&A**

10:50 **MORNING REFRESHMENTS**

11:20 **SESSION TWO**

### Industrial & Companies Clusters: Challenges & Opportunities

- Creating partnerships between CO2 emitters & CO2 users
- Maximising logistics & market synergies by having industrial clusters gathering every aspect: emitter-capture plant – transport - utilisation plant
- Establishing a full circle project by recycling its own emissions & developing various end-products



**Wim Van der Stricht**  
CTO, Technology Strategy, CO2 & Circular Economy  
**ArcelorMittal**



**Dr Markus Oles**  
Head of Innovation Strategy & Projects  
**ThyssenKrupp AG**



**Anastasios Perimenis**  
Secretary General  
**CO2 Value Europe**

**Panel Q&A**

13:10 **LUNCH**

14:10 **SESSION THREE**

### Life Cycle Assessment: A Technical, Economic and Ecological Evaluation of CCU

- Exploring the technical developments needed to make CO2 utilisation feasible –
- The impact of CO2 tax on project economics – What would be a desired
- Examining renewable electricity & water supply – Status, developments, limitations
- How to efficiently produce chemicals & fuels through a net-negative life-cycle greenhouse gas emissions
- Reaching an industry consensus on LCA methodology & practice



**Barbara Olfe-Krautlein**  
Project Scientist  
**IASS Potsdam**

14:40

### Carbon Dioxide Utilisation for Power-to-Jet Fuel towards Future Sustainable Transport

- Craving for future renewable aviation determines the need for greenhouse gas abatement and subsequent renewable jet fuel
- The Power-to-Liquid option will be assessed towards volume potential, production costs and greenhouse gas
- Technical challenges as well as capacity scale-up obstacles must be identified and addressed
- Scientific consensus on techno economic assessment need industrial and political acceptance



**Dr. Ralph-Uwe Dietrich**  
Research Group Leader  
Techno-Economic Assessment  
**German Aerospace  
Center(DLR)**



**Amar Bhardwaj**  
Researcher  
**Columbia University**

#### Panel Q&A

14:05

### SESSION FOUR CO<sub>2</sub> to E-fuels

- Updates & potential of market possibilities – Passengers vehicles, industrial vehicles, aviation, maritime
- What type of guarantees do e-fuels producers have from OEMs?



**Tom Berg**  
Policy & Sustainability Manager  
**SkyNRG**

16:10

### AFTERNOON REFRESHMENTS

16:40

### PANEL DISCUSSION

#### Supporting the Industry through Policy & Regulation

- The need for the industry to have clear regulations both on national & EU levels
- Exploring the legislative aspects of CO<sub>2</sub> transport & storage
- Discussing the need for EU regulations for CCU (ETS and RED II)
- Gaining a better understanding on CO<sub>2</sub> tax & pricing



**Dr. Erin Schols**  
CEO & Senior Consultant  
**Linq Consulting &  
Management**



**Carmine Marzano**  
Research Programme Officer  
**European Commission  
DG Research and**



**Vikram Balachandar**  
Manager  
**Frontier Economics**



**Timo Huhfisaari**  
Director,  
Sustainability & Future Business  
**Sf1 Nordic Oy**

*Each panellist will briefly introduce themselves - approx. 5mins, before starting the discussion*

17:25

### SESSION FIVE

#### Latest Technologies Development

Case studies on the development & potential, amongst the following technologies:

- Direct air capture
- Inorganic technology
- Microalgae
- Artificial photosynthesis
- Electrochemical CO<sub>2</sub> reduction
- Biological routes for CO<sub>2</sub> conversion



**Robert Gresser**  
Innovation Consultant  
**I2V Innovation to Value**



**Dr. Seungwoo Kang**  
Bioenergy Analyst  
**The International  
Renewable Energy  
Agency (IRENA)**

#### Panel Q&A

18:40

### CLOSE OF DAY ONE

## DAY 2

Thursday 28<sup>th</sup> October 2021

08:30

### REGISTRATION & COFFEE

09:00

### CHAIRMAN'S OPENING REMARKS

09:05

### SESSION SIX

#### CO<sub>2</sub> to Chemicals

- Current & potential opportunities for CO<sub>2</sub> as a chemical feedstock
- Exploring the way to go from CO<sub>2</sub> to higher olefins
- The untapped potential of CO<sub>2</sub> in chemicals' circular economy



**Christoph Guertler**  
Head of Catalysis & Technology  
Incubation  
**Covestro**



**Jan Werry**  
Chief Technical Officer  
**Photanol**

## Carbon Dioxide: A Raw Material for the Textile Industry

- Exploring other market opportunities for
- Thermoplastic polyurethane
- Melt spinning, filament, textile



**Dr. Pavan Manvi**  
Research Scientist  
**RWTH Aachen University**

10:45 **Panel Q&A**

11:05 **MORNING REFRESHMENTS**

11:35 **CONFERENCE PRESENTATION**

- *Presentation title to be announced*



**Tore Sylvester Jeppesen**  
Business Development Director  
**Haldor Topsoe**

12:20 **CONFERENCE PRESENTATION**

### The circular economy of CO<sub>2</sub>



**Daniel Marenne**  
Industrial Energy Solution  
Architect  
**ENGIE**

13:05 **LUNCH**

14:05 **CONFERENCE PRESENTATION**

### What is Needed for the Industry to Succeed?



**Dr. Sophie Wilmet**  
Innovation Manager  
**Cefic**

15:05 **Panel Q&A**

15:20 **AFTERNOON REFRESHMENTS**

15:50 **CONFERENCE PRESENTATION**

### CO<sub>2</sub> Mineralisation

- Examining the technological side of CO<sub>2</sub> mineralisation
- Combining carbonation & recycling mineral waste to mitigate the cement industry's impact on the environment
- The gas players' perspective on



**Dr. Jan Skocek**  
R&D Program Manager  
Carbonation Technologies,  
Global R&D  
**HeidelbergCement**


16:35 **CHAIRMAN'S CLOSING REMARKS**

16:50 **END OF CONFERENCE**

Brussels, Belgium

## 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:

 +48 61 646 7022

 [rbaryah@acieu.net](mailto:rbaryah@acieu.net)

 <http://www.acieu.net>

 Postal Address:  
ACI Europe, 10 Gough Square, London, EC4A 3DE

## Registration is Simple

Conference (Includes Access to All Documentation)  
27<sup>th</sup> & 28<sup>th</sup> October 2021

£1,695  
(Excl. VAT)

Documentation Packet Only

£470.00

Please Note.

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

For more information please call Rohan on +48 61 646 7022

## Documentation Packet Available

We are selling 17<sup>th</sup> Carbon Dioxide Utilisation Summit papers at just £445 (+£25 P&P). Simply tick the box on the booking form, send it with payment and your copy will be on its way to you after the meeting. This important manual will be a source of invaluable reference for the future.

About ACI

ACI, a UK owned company, has been running successful conferences in the USA since 1999. Headquartered in Chicago with offices all around the States, ACI opened its European head office at the end of 2005 and has expanded rapidly, launching a series of events in key industries including maritime, energy, oil & gas, cosmetics, chemicals & media.

## Terms & Conditions

### Payment

Payment must be received within five business days of returning the signed contract. After receiving payment a VAT receipt will be issued. If you do not receive a letter outlining details two weeks prior to the event, please contact the Conference Coordinator at ACI Europe Ltd.

Discounts are available for multiple/group bookings. Please call **Rohan Baryah on +48 61 646 7022** for more information.

### Cancellations

Substitutions are welcome up to 24 hours prior to the event. Cancellations must be received in writing no less than 3 weeks prior to the start of the conference; a full credit voucher towards a future ACI conference will be issued. Any cancellation received less than 3 weeks prior to the start of the event shall be deemed to be a breach of this contract by client, and accordingly, no credits will be given. Cancellations must be received in writing by mail or fax three weeks before the conference. Thereafter the full conference fee is payable. If for any reason ACI Europe Ltd decides to amend, cancel or postpone this conference, the conference fee will not be refunded. Furthermore, ACI Europe Ltd will not be responsible for covering airfare, hotel or other costs incurred by registrants. In the event that ACI Europe Ltd cancel or postpone the event, ACI Europe Ltd reserves the right to transfer this booking to another conference to be held in the following twelve months, or to provide a credit of an equivalent amount to another conference within the following twelve months. The construction, validity and performance of this agreement shall be governed in all respects by the laws of England to the exclusive jurisdiction of whose courts the Parties hereby agree to submit.

### Accommodation

The cost of accommodation is not included in the event fee. Preferential rates will be arranged with or near the event venue, and all confirmed delegates will be given details of how to book accommodation at this rate in due course.