

## Press release

nova-Institut GmbH ([www.nova-institute.eu](http://www.nova-institute.eu))  
Hürth, 27 March 2018



## **CO<sub>2</sub> use is slowly picking up speed: First semi-commercial facilities, technical advances, but political support still unclear**

**6<sup>th</sup> Conference on Carbon Dioxides as Feedstock for Fuels, Chemistry and Polymers in Cologne, 15-16 March, showed state of the art technologies, current levels of investment as well as stimulated discussions on the right implementation strategy**

With almost 170 participants, the conference in Cologne has established itself as one of the world's most important annual meeting places for the new CCU industry (Carbon Capture and Utilisation). Nearly 30 leading companies and universities presented and discussed their latest activities in this dynamic industry.

What are the most important news and topics that affect the industry? According to Nordic Blue Crude (Norway) and sunfire (Germany), the first semi-commercial plants for the production of kerosene from CO<sub>2</sub> and hydropower are to be built in Norway. There are also big and concrete plans in the province of Quebec in Canada, as "CO<sub>2</sub> solutions" reported. Again, large hydroelectric power plants with their low-cost renewable electricity are the main drivers of this development. In addition to many other applications, the focus here is on methanol and feed proteins. Mainly as a protein source for aquaculture, the latter will also be produced soon by a VTT spin-off in Finland, using CO<sub>2</sub> and renewable electricity.

There is similarly a lot of activity in Germany. In addition to the largest CCU research programs in the world, ambitious projects are under preparation, especially in North Rhine-Westphalia (NRW). This interest is reflected in the patronage of the conference by the North Rhine-Westphalian Ministry of Economics and Innovation and the premium partnership with the Energy.Agency NRW. For the state with its strong energy, chemical and steel industry, the use of CO<sub>2</sub> is particularly attractive. ThyssenKrupp and Fraunhofer UMSICHT are preparing a major project on the use of emissions from the steel industry. Silver sponsor of the conference, Covestro, also headquartered in NRW, is the global pioneer for the use of CO<sub>2</sub> in chemistry and plastics. Their CO<sub>2</sub>-based foams are already on the market and further products such as CO<sub>2</sub>-based TPU fibres have been announced. Gold sponsor Phytonix (USA), who is globally active in converting steel industry emissions into butanol with the help of bacteria, is also a frequent visitor to the Ruhr region.

There is still an ongoing political debate at the European level as to whether and how CCU should be supported under the Renewable Energy Directive II and the Emission Trading System (ETS). At the conference, participants were able to obtain comprehensive information on the latest state of this discussion and exchange views with the experts: Should the use of fossil CO<sub>2</sub>

emissions be made politically attractive, or only the use of biogenic or atmospheric CO<sub>2</sub>? Should the use of CCU fuels for cars and trucks be promoted, or only the use as kerosene and fuel for container ships, where CO<sub>2</sub> fuels generate the greatest benefit? And how can CCU be considered sensibly in the ETS?

The almost 170 participants from 20 countries seemed highly pleased with the conference, in particular the quality of the presentations and the opportunities for intensive networking, which is crucial for young industries, received positive feedback.

The presentations of the conference will soon be available at [www.bio-based.eu/proceedings](http://www.bio-based.eu/proceedings). They are free of charge for all participants and will be available for 150 € for those who could not attend.

The conference will take place in Cologne again next year, please save the date:

7<sup>th</sup> Conference on Carbon Dioxide as Feedstock for Fuels, Chemistry and Polymers, 20 - 21 March 2019, Cologne (Germany) [www.co2-chemistry.eu](http://www.co2-chemistry.eu)

**Responsible for the content under German press law (V.i.S.d.P.):**

Dipl.-Phys. Michael Carus (Managing Director)  
nova-Institut GmbH, Chemiepark Knapsack, Industriestraße 300, DE-50354 Hürth (Germany)

Internet: [www.nova-institute.eu](http://www.nova-institute.eu) – all services and studies at [www.bio-based.eu](http://www.bio-based.eu)

Email: [contact@nova-institut.de](mailto:contact@nova-institut.de)

Phone: +49 (0) 22 33-48 14 40

nova-Institute is a private and independent research institute, founded in 1994; nova offers research and consultancy with a focus on bio-based and CO<sub>2</sub>-based economy in the fields of food and feedstock, techno-economic evaluation, markets, sustainability, dissemination, B2B communication and policy. Every year, nova organises several large conferences on these topics; nova-Institute has 30 employees and an annual turnover of more than 2.5 million €.