Ideas for the use of CO₂ honored with prizes

Concrete from carbon dioxide

- Companies from Canada, Norway and Germany awarded
- Covestro sponsors innovation award from research institute

Concrete, fuel or chemicals from CO₂ – three companies from Canada, Norway and Germany have been awarded a new innovation prize for these groundbreaking ideas. They accepted the award from the renowned nova-Institut on Wednesday at a conference on CO₂ use that hosted about 200 participants in Cologne. The prize is sponsored by the materials manufacturer Covestro, itself working intensively and successfully on the research and practical use of carbon dioxide as a raw material.

In the run-up there had been 20 submissions for the "Best CO₂ Utilisation 2019" prize, which the nova-Institut is awarding for the first time. The recycling of carbon dioxide plays a central role here. Every idea has the claim of being able to be implemented industrially in the long term. This shows how important the topic has become in the meantime and how active numerous companies have already become in this field, according to Michael Carus, CEO of the nova-Institut.

Looking at CO₂ from different angles

"CO₂ is increasingly seen from different angles, namely as a valuable raw material," emphasized Covestro CEO Dr. Markus Steilemann, who chose the three winners. "This will enable the chemical industry to make its production more sustainable, to replace fossil resources such as crude oil and to drive forward the circular-flow economy."

Five nominated companies presented their solutions during the conference in short presentations and the winners were chosen by the audience. First prize
went to Canadian company Carbicrete, which developed a technology to produce cement-free concrete. Cement is replaced with ground steel slag and the concrete is cured with CO₂ instead of heat and steam. The new product is more cost-efficient, has better properties and is more sustainable than cement-based concrete.

Nordic Blue Crude, a company from Norway, was in second place. It succeeded in producing synthetic crude from CO₂ as well as renewable power and water. The crude is usable as diesel or kerosene and can be refined to gasoline. In third place was b.fab from Germany, which was honored for a process technology to efficiently convert CO₂, water and renewable energy into value-added chemicals such as lactic acid.

Covestro has itself developed a technology with scientific partners to use CO₂ in plastics production. The company already produces chemical components (polyols) for foam and binders used in mattresses and sports floors. Numerous other applications are under development.

About Covestro:
With 2018 sales of EUR 14.6 billion, Covestro is among the world’s largest polymer companies. Business activities are focused on the manufacture of high-tech polymer materials and the development of innovative solutions for products used in many areas of daily life. The main segments served are the automotive, construction, wood processing and furniture, and electrical and electronics industries. Other sectors include sports and leisure, cosmetics, health and the chemical industry itself. Covestro has 30 production sites worldwide and employs approximately 16,800 people (calculated as full-time equivalents) at the end of 2018.

About nova-Institute:
nova-Institute is a private and independent research institute, founded in 1994; nova offers research and consultancy with a focus on bio-based and CO₂-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 EUR 3 million.

This press release is available for download from the Covestro press server at www.covestro.com. A photo is available there for download as well. Please acknowledge the source of any pictures used.

Find more information at www.covestro.com. Follow us on Twitter: https://twitter.com/covestro
Forward-looking statements
This news release may contain forward-looking statements based on current assumptions and forecasts made by Covestro AG. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Covestro’s public reports which are available at www.covestro.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.