

PCC SE and Iceland's power company Landsvirkjun agree on new climate protection cooperation

The companies want to convert CO₂ emissions into green methanol to decarbonize shipping and other industries



The silicon metal plant of PCC BakkiSilicon hf. in Iceland is operated with 100% green electricity. ©PCC SE

Duisburg (Germany)/Reykjavík (Iceland), 23 March 2022. German investment holding company PCC SE and Landsvirkjun, the National Power Company of Iceland have agreed on a climate protection cooperation. The companies commit themselves in a Memorandum of Understanding to jointly explore the possibility of capturing and utilizing CO₂ emissions from PCC's silicon metal plant in northeast Iceland. These CO₂ emissions will be utilized to produce green methanol that can replace fossil fuel in ships and industry and thus contribute to their decarbonisation.

Green methanol will play a role in mitigating climate change

Methanol is not only a liquid chemical used in thousands of products of daily use, but green methanol is seen as a promising alternative energy carrier and has the potential to play a key role in decarbonizing shipping vessels. Conditions for production of green methanol in Iceland are excellent, because it requires, on one hand, a renewable carbon source, which is given by PCC's silicon metal plant in Iceland and, on the other hand, renewable power from Landsvirkjun's – primarily geothermal – power stations. The process of methanol synthesis requires the input of pure carbon dioxide and hydrogen from water electrolysis, with the only by-product being oxygen and water. Turning carbon dioxide from waste into a valuable resource by utilizing and producing fuel for industries will help mitigate climate change and the transition to a circular economy.

Silicon metals used in innovative solutions for energy transition

PCC SE aims for their silicon metal plant at Húsavík in the north-east of Iceland to become carbon neutral by replacing fossil carbon reductants in their production with renewable alternatives. The plant does only use power from renewable energy sources (geothermal energy) for the high energy-intensive production of silicon metal. Nevertheless, it emits about 150,000 tonnes of carbon dioxide annually due to the nature of the chemical reaction that reduces quartzite (SiO₂) with a carbon reductant to produce silicon metal. Catching and utilizing the emitted renewable carbon to produce green methanol would improve the carbon footprint of shipping and other industries utilizing such fuel and on top improve the carbon footprint of PCC's silicon metal plant beyond carbon neutrality. Furthermore, the nature of silicon metals is such that without it, the European Union would not

have seen the current stellar performance of solar power. And silicon metal also boosts the capacity of next generation battery anodes as key component of a climate-neutral economy.

Peter Wenzel, CEO PCC SE:

“We are ready to take the next step at PCC BakkiSilicon; capture CO₂ emissions from our production and utilise them for the energy transition. Our operations are already on track for carbon neutrality, but the production of green methanol, which can be used as maritime fuel, would be a milestone.”

Hörður Arnarson, CEO Landsvirkjun:

“We at Landsvirkjun welcome the opportunity to collaborate on a green solution with a good customer. The energy transition is urgent, especially in the fleet. If we can use our renewable electricity to produce green methanol at PCC BakkiSilicon, we are one step closer to a green future.”

Profile of PCC SE

Headquartered in Duisburg, Germany, PCC SE is the parent and investment holding company of the globally active PCC Group with its more than 3,300 employees. The Group companies of PCC SE have core competencies in the production of chemical feedstocks and specialties, with container logistics forming a further strong pillar in the investment portfolio. An investor committed to the longer term, PCC SE concentrates on continuously increasing the enterprise value of its portfolio companies through sustainable investments and the ongoing creation of new value. The largest chemical producers of the PCC Group are PCC Rokita SA, a major chlorine manufacturer and Eastern Europe’s leading producer of polyols, and PCC Exol SA, one of Europe’s most advanced surfactant manufacturers. In Iceland, the Group company PCC BakkiSilicon hf. operates one of the most modern and sustainable silicon metal plants in the world. PCC was founded in 1993 by Waldemar Preussner, sole shareholder of PCC SE, who today holds the position of Chairman of the Supervisory Board. The PCC Group generated consolidated sales of around €980 million and achieved an EBITDA of approximately €200 million in fiscal 2021, with its capital expenditures totaling some €110 million. For further information, go to: <https://www.pcc.eu>.

Media contact

Susanne Biskamp, Head of Marketing & Public Relations
PCC SE | Moerser Str. 149 | 47198 Duisburg | Germany
Phone: +49 (0)2066 20 19-35 | e-mail: susanne.biskamp@pcc.eu