



COOL PLANET TECHNOLOGIES LIMITED

GERMAN FEDERAL MINISTRY APPROVES FUNDING FOR CPT'S INNOVATIVE MEMBRANE CO₂ CAPTURE TECHNOLOGY

Cool Planet Technologies Limited ("CPT"), a company using advanced membrane capture technology for carbon capture, is delighted to announce that Holcim Germany has received funding approval from the German Federal Ministry for Economic Affairs and Climate Action ("BMWK") towards the construction of a carbon capture demonstration plant using CPT's membrane technology.

Last year, Holcim (Deutschland) GmbH ("Holcim") agreed with its partners CPT and the Helmholtz-Zentrum Hereon to cooperate on the decarbonisation of Holcim's Höver cement plant. At the heart of the cooperation is the construction of a 10,000 tons per annum CO₂ capture plant based on CPT's innovative membrane capture process.

The funding for the project - "Industrial research on membrane-based CO₂ capture for the decarbonisation of cement plants" - is aimed at the construction of the demonstration facility in early 2024 with a one-year active test phase, during which the innovative technology will be investigated in long-term commercial operation. If the long-term test phase is successful, the plant would be gradually expanded so that after the final expansion stage the plant can separate around 90 per cent of the CO₂ emissions from the Höver cement plant.

Holcim said *"At the Höver cement plant, a promising technology is being tested that can make an important contribution to the decarbonisation of the cement industry in Germany." BMWK's grant, which is part of the Decarbonisation of Industry funding programme, was made possible by the extraordinarily positive results of the preliminary test phase conducted in 2022."*

Holcim added *"The objective of the demonstration plant is to confirm performance, the economics and operational behaviour on a larger scale in order to check whether the membrane technology can be used technically and economically not only in Höver, but also in other cement works and in other industries. The end-of-pipe solution is downstream of the cement production process and therefore has no direct impact on it, which significantly simplifies the decarbonisation of the existing cement plants."*

Following a successful funding round in 2022, with investment from ENI next, Audacy Ventures and NEVA SGR, CPT is currently raising a second Series A funding round to support the demonstration and commercialisation of its membrane technology.

The press release from Holcim is reproduced below in its entirety.

Andrew Corner CPT's Managing Director said:

"We are delighted that Federal Ministry of Economic Affairs and Climate Action has approved the grant funding to Holcim for the Demonstration plant at Höver. Construction of the demonstration plant is about to start, and we look forward to continuing our work with Holcim and the team at Höver and helping them to meet their decarbonisation objectives and further proving up the commerciality of our membrane capture technology."

Thorsten Hahn, CEO of Holcim Germany said:

"The support of politicians shows that we have successfully ushered in the cement transition. The funding commitment supports our consistent path to climate neutrality and strengthens us as a driver of the transformation of our industry."



Stephan Hinrichs Holcim Höver plant manager said:

"The federal government's funding commitment is great news for Holcim and our partners. We are doing real pioneering work for the entire cement industry and look forward to the next step on our way to becoming a climate-neutral company."

- Ends-

Press Release from Holcim Germany:

Höver cement plant: Next milestone in decarbonisation reached

German Federal Ministry for Economic Affairs and Climate Action approves funding for innovative CO₂ capture technology.

Holcim Germany has received funding approval from the German Federal Ministry for Economic Affairs and Climate Action (BMWK) for the project "Industrial research on membrane-based CO₂ capture for the decarbonisation of cement plants" at the Höver plant. "The support of politicians shows that we have successfully ushered in the cement transition. The funding commitment supports our consistent path to climate neutrality and strengthens us as a driver of the transformation of our industry," says Thorsten Hahn, CEO of Holcim Germany. The funding is aimed at the construction of a larger test facility and a one-year active test phase, during which the innovative technology will be investigated in long-term operation. The grant notification is issued as part of the "Decarbonisation in Industry" funding programme.

The BMWK's commitment is accompanied by the early start of the project, which was made possible by the extraordinarily positive results of the preliminary test phase. Currently, the start of the test phase is planned for the beginning of 2024. "The funding commitment from the German government is great news for Holcim and our partners," says Plant Manager Stephan Hinrichs. "We are doing real pioneering work for the entire cement industry and are looking forward to the next step on our way to becoming a climate-neutral company."

At the Höver cement plant, a promising technology is being tested that can make an important contribution to the decarbonisation of the cement industry in Germany: Last year, Holcim (Deutschland) GmbH agreed with its partners Cool Planet Technologies Limited, a company in the field of sustainable technologies with a focus on CO₂ separation, and the Helmholtz-Zentrum Hereon to cooperate on the decarbonisation of the plant in Höver. At the heart of the cooperation is the construction of a CO₂ capture plant based on innovative membrane technology and designed as an end-of-pipe solution. This is therefore downstream of the actual cement production process and therefore has no direct impact on it, which significantly simplifies the decarbonisation of the existing cement plants from a technical point of view.

If the good results are confirmed in the long-term test phase that is now starting, the plant will be gradually expanded so that it can separate around 90 percent of CO₂ emissions after the final expansion stage and supply high-purity CO₂ in liquid form for further use in downstream value-added stages or sequestration. This, too, is to be examined in more detail in the approved funding project. The aim of the plant operation is to demonstrate performance, cost-effectiveness, and application behaviour on a larger scale in order to test whether the technology can be used technically and economically not only in Höver, but also in other cement plants and industries.



Company Contact

Mark Purdy

T: +44 (0)1483 230780

E: mark.purdy@coolplanettech.com

Media Enquiries

Tavistock Communications

T: +44 (0)207 920 3150

Nick Elwes

M: +44 (0)7831 851 855

E: nick.elwes@tavistock.co.uk

Charles Baister

M: +44 (0)7917 721 385

E: charles.baister@tavistock.co.uk

Notes to Editors

About Cool Planet Technologies Limited

Cool Planet Technologies (CPT) is a carbon capture company significantly reducing the cost of carbon capture using an advanced membrane-based technology in hard to abate sectors including cement, lime, steel, energy from waste and coal-fired power generation.

The chemical-free process uses significantly less energy than established carbon capture technologies and can be powered entirely from renewable electrical power making it an environmentally friendly technology choice. The compact, scalable, modular, and operationally flexibility process makes it ideal for retrofit and new-build applications.

CPT has the exclusive rights to commercialise the membrane technology, which was developed by Helmholtz Zentrum Hereon, part of Germany's largest research organisation. CPT and Hereon are collaborating on the development and commercialisation of the technology, which has been continuously improved and validated in multiple pilot tests over the last decade, including a highly successful test at Holcim's Höver cement plant in 2022. CPT will demonstrate the technology at a scale of 10,000 tons per annum in early 2024 at part of the project with Holcim to upscale the technology for the decarbonisation of their Höver plant.

For further information please visit: www.coolplanettech.com

Follow Cool Planet Technologies on LinkedIn: www.linkedin.com/company/cool-planet-technologies

About the Holcim Deutschland Group

Holcim Germany is one of the leading companies in Germany for innovative, sustainable and digital construction products and solutions. As pioneers in sustainable construction, Holcim's employees develop tailor-made solutions for building owners, construction companies, architects and engineers - combined with a clear focus on climate protection and the circular economy. Our mission: to build more with less material. Holcim embraces diversity: The Group employs around 1,800 people of 36 different nationalities at around 130 locations in Germany and the Netherlands. Holcim Germany is a subsidiary of Holcim Ltd., the world's leading building materials group.