

## COOL PLANET TECHNOLOGIES DEMONSTRATES BREAKTHROUGH SUCCESS IN MEMBRANE MODULE TESTING

Cool Planet Technologies (“Cool Planet”) is pleased to announce the successful testing of its third-generation Carbon Capture membrane module, marking a transformative milestone in the industrial scaling of its carbon capture technology. The test validated the scalability and performance of Cool Planet’s proprietary membrane process at flow rates of up to 37,000 tonnes per annum (tpa) of CO<sub>2</sub> captured and recovery rates of 95% CO<sub>2</sub>. This was achieved under a range of conditions designed to represent industrial emissions from a wide range of sectors, including lime, cement, steel and waste to energy.

### Highlights

The membrane module test was designed to confirm that the scaled-up module retained the critical performance characteristics achieved in smaller pilots.

Key achievements include:

- **Performance at Scale:** Scaling of the technology at capture rates utilising a single compact module of up to 37,000 tpa CO<sub>2</sub> removing one of the most significant risks for large scale capture and demonstrating Cool Planet’s capability to deliver industrial-scale solutions.
- **Performance Correlation:** The module’s measured performance very closely matched Cool Planet’s simulation model, confirming the accuracy of Cool Planet’s predictive tools for designing large-scale plants.
- **Enhanced Understanding:** Valuable insights gained during testing will be incorporated into the next generation of high-performance capture modules currently being developed.

### Industry Demonstration Days

To showcase this achievement, Cool Planet hosted a series of demonstration days at its Grimsby facility in the UK. Over 20 leading companies from industries including the lime, cement, steel and waste to energy sectors attended live demonstrations of the Company’s carbon capture process.

Further specific tests were also conducted with a lime manufacturer in support of a specific project which will use Cool Planet’s technology to decarbonised one of their European lime kilns.

### Next Steps for the Module

The module will now be integrated into the Demonstration Project at Holcim’s Höver cement plant in Germany. This project will initially operate for twelve months, serving as a full-scale validation for Cool Planet’s carbon capture technology and advancing the technology to TRL8.

### Andrew Corner, CEO of Cool Planet, commented:

*“This achievement validates years of innovation and positions Cool Planet at the forefront of lower cost, scalable industrial carbon capture solutions. The UK tests not only confirmed the performance and robustness of our technology, but also significantly strengthened industry confidence in our ability to help them deliver on their global decarbonisation goals.”*

**Company Contact**

Mark Purdy

E: [mark.purdy@coolplanettech.com](mailto:mark.purdy@coolplanettech.com)**Media Enquiries**

Tavistock Communications

T: +44 (0)207 920 3150

Nick Elwes

E: [coolplanet@tavistock.co.uk](mailto:coolplanet@tavistock.co.uk)

Simon Hudson

Saskia Sizen

**Notes to Editors****About Cool Planet Technologies Limited**

Cool Planet Technologies is a carbon capture company significantly reducing the cost of carbon capture using advanced membrane-based technology in hard to abate sectors including cement, lime, steel, refining, waste to energy 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 highly compact, scalable, modular, and operationally flexible process makes it ideal for retrofit and new-build applications.

Cool Planet has the exclusive rights to commercialise the membrane technology, which was developed by Helmholtz Zentrum Hereon, part of Germany's largest research organisation. Cool Planet 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 two decades, including a highly successful test at Holcim's, the world largest cement manufacture, Höver cement plant in 2022.

Cool Planet will operate the technology industrially at a scale of 10,000 tonnes of captured carbon dioxide per annum in 2026 as 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](http://www.coolplanettech.com)

Follow Cool Planet Technologies on LinkedIn:

[www.linkedin.com/company/cool-planet-technologies](https://www.linkedin.com/company/cool-planet-technologies)