



COOL PLANET TECHNOLOGIES LIMITED

AWARDED €4.5 MM FUNDING IN A NEW EU HORIZON PROJECT

Cool Planet Technologies Limited (“Cool Planet”) is pleased to announce that it has signed Consortium and Grant Agreements for a €4.5 million award from the EU Horizon Programme. The award is part of the ICO₂NIQ (Innovative Electrochemical CO₂ Conversion to Versatile Feedstock) project, which launches in January 2025 and is a €14 million project within the Process4Plant partnership of the Horizon programme. As part of the project Cool Planet will deploy a 10,000 tonnes per year capacity CO₂ capture plant employing its advanced membrane technology to TUPRAS’ Izmit refinery in Turkey. From January 2027 this plant will deliver CO₂ to a group of companies that will jointly deploy their innovative technologies to convert the captured CO₂ into valuable commercial feedstock for a variety of uses.

This project will see the first deployment of Cool Planet’s 4th Generation membrane module. The 4th Generation modules will be optimised for automated mass production and will have twice the capture capacity of the current 3rd Generation modules, making the already compact technology even smaller whilst further reducing costs. The new modules will be utilised for Cool Planet’s upcoming projects up to mega-tonne per annum scale and will use membrane manufactured by Cool Planet in a new production facility.

Acknowledgements

The ICO₂NIC project has received funding from the European Commission under the Horizon Europe programme Ref: 101177459.

Andrew Corner, the Managing Director of Cool Planet, commented:

“We are delighted to have been selected to participate in this significant and highly important CO₂ capture and utilisation project. We greatly look forward to working with our new partners on delivering a full chain valorisation of the CO₂ that Cool Planet’s advanced membrane technology will capture. The utilisation of Cool Planet’s capture technology at an oil refinery will add a new industry alongside cement, steel and coal fired power generation where the technology has already been successfully demonstrated. This project also illustrates Cool Planet’s continued commitment to ongoing research and development and the further enhancement of our existing highly efficient capture process.”

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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, 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 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 decade, including a highly successful test at Holcim's, the world largest cement manufacture, Höver cement plant in 2022.

Cool Planet will undertake a demonstration at scale of the advance membrane capture technology in 1Q 2025. This will be followed by Cool Planet operating the technology industrially at a scale of 10,000 tonnes of captured carbon dioxide per annum later in 2025 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

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About the ICO₂NIC Consortium

The ICO₂NIC consortium will be led by SINTEF and will establish a comprehensive value chain, from the CO₂ emitter, a Turkish refinery (TUPRAS), CO₂ extraction and purification process (Cool Planet Technologies), electrochemical conversion (Avantium), downstream processing (b.fab and NoPalm Ingredients), scaling up the fermentation process (BBEPP) resulting in products to the end consumers (TUPRAS and Procter & Gamble). This industrial model could provide a viable economic framework for all stakeholders, even without external financial support, and will be validated through the project's implementation.

By integrating renewable energy systems with digital monitoring and control technologies (Idener), leading Research and Technology Organisations will validate the concept's cost-effectiveness, environmental performance, and scalability through the development of a strong Technical and Economic Assessment and process design (SINTEF) and Life Cycle Assessment (TNO). The communication and dissemination of ICO₂NIC will be led by the European association CO₂ Value Europe, ensuring that the project's findings reach a wide audience and contribute to global efforts in sustainable industrial innovation.