NEUMAN & ESSER and Graforce to Present Integrated Low-Carbon Hydrogen Plant Solution at PRC Europe 2026 in Amsterdam

AMSTERDAM, Netherlands, May 18, 2026 — NEUMAN & ESSER and Graforce today announced that they will present a fully integrated plant solution for low-carbon hydrogen production at **PRC Europe 2026**, taking place May 18–19 in Amsterdam.

The joint solution combines Graforce's methane pyrolysis technology with NEUMAN & ESSER's industrial expertise in hydrogen compression, carbon processing, gas treatment and plant integration. The system is designed to convert methane-containing gas streams — including natural gas, flare gas, landfill gas or biogas — into hydrogen, solid carbon and usable industrial heat or syngas.

"Combining our plasma-pyrolysis technology (plasmalysis) with NEUMAN & ESSER's process and machinery expertise creates a scalable industrial platform for low-carbon hydrogen," said **Dr. Jens Hanke, CEO of Graforce**. "The adoption of the EU Delegated Act for Low-Carbon Hydrogen and the growing relevance of carbon removal frameworks open new opportunities for turquoise hydrogen and solid carbon utilization."

Methane plasma-pyrolysis splits methane into hydrogen and solid carbon without forming CO_2 in the reactor. The process can achieve methane conversion rates of up to 98% and specific energy consumption of approximately 10–15 kWh per kilogram of hydrogen. The produced hydrogen can be compressed and purified for industrial applications, while the solid carbon can be processed for use in soil or materials such as asphalt, concrete, metallurgy, batteries, pigments or long-term carbon storage pathways.

The integrated system is particularly relevant for operators seeking to reduce emissions from flare gas, landfill gas or other methane-containing streams. Instead of flaring or emitting methane, customers can convert these gases into valuable hydrogen and solid carbon while avoiding downstream CO_2 capture infrastructure.

The plant concept is modular, with standard units starting at 0.5 MW and scalable to multi-MW industrial systems. A 20 MW configuration can produce approximately two tonnes of hydrogen per hour and will be available from 2028.

The companies will present the solution at **PRC Europe 2026 in Amsterdam**, where industry leaders from refining, petrochemicals, energy and industrial decarbonization will discuss pathways for reducing emissions across existing infrastructure.

About NEUMAN & ESSER

NEUMAN & ESSER is a German family-owned company and global provider of compressor systems, hydrogen technologies and integrated solutions for process industries, energy and industrial gases.

About Graforce

Graforce is a Berlin-based technology company developing plasma-based systems for the production of hydrogen, solid carbon and synthesis gas from methane-containing gases, biogas and industrial residues.

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