

## elementarhy wins German Innovation Award 2026!

### Hamburg-based deep-tech startup convinces jury with membrane technology for more affordable green hydrogen

Munich / Hamburg, April 16, 2026 — elementarhy GmbH was awarded the German Innovation Award 2026 this evening in Munich in the Startup category. CEO Gustav Sievers and advisory board member Dr. Gunter Erfurt accepted the award.

The company, spun out in 2024 from the Leibniz Institute for Plasma Science and Technology, has developed a novel membrane for PEM electrolyzers — the core component in which water is split into hydrogen and oxygen using green energy. “The membrane-electrode-assembly is like the chip in a computer,” says Dr. Sievers.



Conventional membranes consist of a large quantity of iridium particles dissolved in suspension — an extremely rare and expensive precious metal. elementarhy replaces this suspension with a thin metallic layer. “This allows us to save a significant amount of iridium while substantially increasing the stability of hydrogen production,” Sievers explains.

The economic impact: instead of costing more than seven euros per kilogram, green hydrogen could potentially be produced for around four euros — making it only slightly more expensive than fossil-based hydrogen from natural gas (two to four euros per

kilogram). In doing so, elementarhy directly addresses the key challenge of the hydrogen economy: competitiveness with fossil alternatives.

“This award is a strong validation — for our team, our technology, and for Germany as an industrial location, which must remain a leader in key energy transition technologies,” said Dr. Sievers in Munich.

Advisory board member and business angel Dr. Gunter Erfurt also emphasized the industrial relevance: “elementarhy addresses, with an impressively elegant solution, exactly the bottleneck that has so far hindered the scaling of PEM electrolysis. The intelligent use and stability of iridium is the limiting factor — whoever masters it will determine the future of an entire industry.”

elementarhy is already supplying initial industrial customers in Korea and the United States and is currently preparing its financing as well as the construction of its first megawatt-scale projects.

## About elementarhy

elementarhy GmbH, based in Hamburg and Greifswald, develops and produces membrane electrode assemblies (MEAs) for PEM electrolysis, reducing iridium content by up to 95 percent compared to the current state of the art. Founded in 2024, the company is led by Gustav Sievers (CEO), Martin Rohloff (CTO), and Zahra Nasri (CSO).



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