

Please direct all enquiries to:

Kristian Peters-Lach,
Press Spokesperson /
Communications Team Lead
T +49 201 3642-12622
kristian.peters-lach@oge.net

Press Release

Krummhörn/Essen, 25 July 2024

KRUH2 – The hydrogen future starts in Krummhörn Completion and commissioning ceremony with Minister Olaf Lies

The KRUH2 project at the compressor station site of gas transmission system operator OGE is a practical demonstration of hydrogen use. And it is an impressive example of how sector coupling, i.e. the interconnection of electricity, heat and gas networks as well as mobility, can work for the supply of energy across Germany. Together with Olaf Lies, Lower Saxony's Minister for Economic Affairs, Transport, Building and Digitization, and Hilke Looden, mayor of the municipality of Krummhörn, as well as other prominent guests from politics, society and business, OGE is celebrating the completion and commissioning of the project, for which the state of Lower Saxony has provided some 2.8 million euros of funding earmarked for pilot and demonstration projects.

Funded pilot project with model character

The idea for KRUH2 was born in 2019. The Krummhörn region has an abundance of renewable energy, particularly from onshore and offshore wind, which is ideal for producing green hydrogen, establishing a closed hydrogen cycle and then using this to supplement OGE's energy needs on site. "KRUH2 is a real-life project with a model character. Here in Krummhörn, where wind in particular offers great potential for renewable energy, it demonstrates how sector coupling can work – in this case, specifically to supply our technical operations with heat and meet mobility demands," said Dr Thomas Hübener, OGE's CEO, describing the hydrogen project.

Economics Minister Olaf Lies was impressed: "With this project, OGE is demonstrating the future of our energy supply, and it is no coincidence that such projects are being developed here in Lower Saxony. Just last week, we announced the funding of ten large-scale hydrogen projects in Berlin together with Federal Economics Minister Robert Habeck, for which the federal and state governments are investing 1.3 billion euros. Lower Saxony has the chance to become one of the most important hydrogen producers in Europe, and this is precisely where KRUH2 is a project that will make an important contribution to the energy transition and to achieving Germany's climate targets, both now and in the future. This is because OGE is demonstrating solutions to one of the most important questions: how to use excess wind power."

The heart of the plant is the 1-megawatt electrolyzer. "It can produce approx. 210 Nm³/h of hydrogen, which is 18 to 19 kg of hydrogen per hour, enough to fill three cars," said project manager Harald Beek, who is responsible for delivering the innovative KRUH2 idea together with his team. The hydrogen produced is



temporarily stored and used at the compressor station. Two pressure tanks, each with a usable volume of 1,000 Nm³, are available for storage.

KRUH2 also has a “digital twin” to permanently optimize the hydrogen value chain. Real-time data from the technical plant combined with electricity market data and trends allow production planning with improved production costs, and this leads to a significant reduction in the production costs for hydrogen. On this basis, OGE also uses hydrogen for mobility in addition to heat supply. The company’s own filling station supplies three hydrogen vehicles that are available for use by the operations team.

“KRUH2 is not just a project that makes the energy transition tangible here on site. Above all, it is the result of the innovative and farsighted thinking of our employees. The team here in Krummhörn recognised the opportunities and developed KRUH2 with expertise and great commitment,” commented Dr Thomas Hübener.

About OGE

OGE gets gaseous molecules flowing. We create and maintain a modern, safe and efficient infrastructure for natural gas, hydrogen and CO₂. Our pipeline network with a length of more than 12,000 kilometres is fundamental to Germany’s energy supply and ensures the prosperity of our society. As the market-leading gas transmission system operator, we are a pioneer, driver and enabler of the energy transition and climate neutrality. We see ourselves as transformation consultants and service providers for industry, power plants, distribution system operators and our partners from production and politics. The OGE Group is also a future-proof, modern workplace for more than 2,000 people. In the interests of our employees and shareholders, we continually adapt our business model to ensure lastingly profitable development. For more information on the company, go to www.oge.net.