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PRESS RELEASE

First natural gas storage facility in Germany to be completely converted to H-gas

Berlin/ Hanover, 8 April 2021. Together with the transmission system operator Gasunie Deutschland, Storengy Deutschland is converting its natural gas storage facility in Lesum (Bremen) to high-calorific gas (H-gas) as part of the market area conversion. The conversion of the Lesum natural gas storage facility to H-gas is an important contribution to the security of supply in Germany. Customers are able to inject commercial H-gas into the storage facility since 1 April.

Market area conversion in Germany

The reserves of low-calorific natural gas (L-gas) traditionally produced in the Netherlands and Germany are becoming increasingly scarce, which means that the German natural gas market, about a quarter of which is supplied with L-gas, will have to be converted to H-gas by 2030. H-gas contains a higher proportion of methane and therefore has a higher calorific value compared with L-gas. The Lesum natural gas storage facility is connected to Gasunie's natural gas network. The transmission system operator and the storage facility operator have closely collaborated in planning and coordinating the conversion.

Differences in the natural gas composition

	H-gas (high-calorific)	L-gas (low-calorific)
Methane fraction	approx. 90-99%	approx. 80-87%
Calorific value	approx. 10-13 kWh/Nm^3	approx. 8-11 kWh/Nm^3

Conversion taking place in four phases

In order to ensure an optimal transition for customers during the conversion process, the conversion to H-gas is being conducted in four phases. Until 31 March 2021, storage customers were able to inject and withdraw their working gas volume in the form of L-gas on a regular basis, with the provision that they have fully withdrawn their working gas volume by 1 April 2021.

- **Phase 1:** The commercial conversion to H-gas has started on 1 April 2021. Since then, a partial withdrawal of cushion gas (L-gas, below the usual minimum cavern pressure) has begun.
- **Phase 2:** The network section and surface facilities will switch over on 29 June 2021, whereby most of the necessary adjustments to process-related plant components will be made in

advance and the adjustments to combustion-related plant components will be made after the conversion, in each case during the ongoing operation.

- **Phase 3:** From July 2021, H-gas will be injected into the caverns up to a maximum filling level. The aim is to bring the newly injected H-gas into an appropriate ratio with the remaining portion of L-gas as cushion gas, so that the resulting gas mixture meets the specification requirements for H-gas that is customary in the market.
- **Phase 4:** From October 2021, the storage facility will be ready for withdrawal for the 2021/22 winter.

"In this major project for the German natural gas industry, we are attaching considerable importance to ensuring 100 per cent availability for our customers on both a commercial and technical level," says **Alexander Eichhorn, Asset Management Performance Engineer and Project Manager** at Storengy Germany. "Together with Gasunie Deutschland, we have already been working on this project for four years in very close coordination and according to the highest quality and safety standards to ensure security of supply."

Dennis Schulle, Technical Asset Management Officer and Project Manager at Gasunie Deutschland, is highly satisfied with the progress of the conversion: "As a transmission system operator, we take our responsibility in this technically highly complex project very seriously, and we are supporting our partners in all the necessary processes. Only through joint action and planning can the market area conversion succeed and deliver a long-term contribution to ensuring a secure and economic energy supply."

About the Lesum natural gas storage facility

The Lesum natural gas storage facility, which is located north of Bremen next to the River Lesum, was commissioned in the year 2000. The cavern storage facility has two caverns, situated approximately 1,250 to 1,800 metres below ground level within an Upper Permian salt dome. It has a working gas volume of around 143 million standard cubic metres as well as a maximum injection capacity of 105,000 standard cubic metres per hour and a withdrawal capacity of 220,000 standard cubic metres per hour. It was one of the few L-gas storage facilities in Germany.

About Storengy

Storengy Deutschland GmbH is one of the largest natural gas storage companies in Germany. It is a subsidiary of Storengy SAS, which bundles the ENGIE group's global gas storage activities. Storengy is the market leader for storage services in Europe. Its core business includes the planning, construction and operation of storage facilities and the marketing of gas storage capacities. Storengy Deutschland GmbH operates six gas storage facilities across Germany through its subsidiary, Storengy Deutschland Betrieb GmbH, and also successfully operates third-party facilities. A central control room in Hanover ensures the remote operation of technical facilities. The company's headquarters is based in Berlin. As an innovative partner for the zero carbon transition, Storengy provides its expertise to numerous

partners worldwide to develop geothermal projects (heat and power production) as well as energy storage and power-to-X solutions.

About Gasunie

Gasunie is one of Europe's leading gas infrastructure companies. It serves the public interest, providing integrated transport and infrastructure services. In doing so, Gasunie follows the highest safety and business standards. Around a quarter of Europe's gas demand is transported through Gasunie's pipelines. Gasunie's main activities cover two core areas: regulated transport services via the gas transport networks in the Netherlands and Germany as well as other infrastructure services in the energy sector, which are also jointly offered with other partners.

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