

Press Release

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Initial analysis supports the feasibility of the Central European Hydrogen Corridor

- The pre-feasibility study indicates that it is technically feasible to transport 120 GWh of hydrogen per day or 1.3 million tonnes per year through Central Europe by 2030 – mainly based on existing infrastructure

In September 2021 four leading Central European [gas infrastructure companies](#) joined forces to develop a hydrogen “highway” through Central Europe. The focus of the joint initiative called the Central European Hydrogen Corridor (CEHC) is to transport hydrogen from promising future major hydrogen supply areas in Ukraine that offer excellent conditions for large-scale, green hydrogen production via Slovakia and the Czech Republic to large hydrogen demand areas in Germany and the EU. The hydrogen corridor will also enable transportation of hydrogen between hydrogen production facilities and hydrogen consumers in the Czech Republic and Slovakia. Participating companies include EUSTREAM (the Slovak gas TSO), GTSOU (Gas TSO of Ukraine), NET4GAS (the Czech gas TSO) and OGE (a leading German gas TSO). All participating companies are also actively involved in the European Hydrogen Backbone initiative.

After one year of research, the project promoters have finalized the pre-feasibility study. *“The results of the pre-feasibility study are very positive. The study clearly indicates that it is technically feasible to transport 120 GWh of hydrogen per day through Central Europe by 2030. However, there are still many uncertainties remaining, for example what impact the war in Ukraine will have on the project.”*, says Andreas Rau, NET4GAS’s Managing Director.



The REPowerEU Plan sets a target of 10 million tonnes of domestic renewable hydrogen production and a new target of 10 million tonnes of renewable hydrogen imports by 2030. The CEHC project could transport up to

1.3 million tonnes of renewable hydrogen imports by 2030, an equivalent of 13 % of the new renewable hydrogen import target.

In addition to the technical feasibility, the project promoters have also analysed the potential costs of repurposing specific natural gas pipelines for the transport of hydrogen, combined with targeted investments in new dedicated hydrogen infrastructure. Rastislav Ľukovič, EUSTREAM's General Director explains *"The initial analysis confirms that the most relevant natural gas pipelines for this project can be repurposed to carry 100% hydrogen. That significantly lowers the costs of the project as a whole"*. The 1225-kilometer part

Central European Hydrogen Corridor

Countries:	UA, SK, CZ, DE
Capacity:	120 GWh per day 1.3 million tonnes per year
Length:	1225 kilometres*
Investment:	1000 – 1500 million EUR*
Transport cost:	0.10 - 0.15 EUR/kg/1000 km
Implementation:	2030

* Investment cost of the part of CEHC from the Ukrainian/Slovak border to large hydrogen demand areas in Southern Germany (without residual value of repurposed assets)

of the Central European Hydrogen Corridor from the Ukrainian/Slovak border to large hydrogen demand areas in Southern Germany requires an estimated total investment of 1000 - 1500 million EUR. The relatively low investment cost estimate includes necessary upgrades of pipelines, cross-border stations, and selected compressor units, and is significantly lower than the cost of building a new hydrogen infrastructure. The investment costs of the Ukrainian part of the corridor will depend on the exact location of the hydrogen production sites in Ukraine. The total expected levelized cost of hydrogen transmission is estimated to be in the range of 0.10 - 0.15 EUR/kg per 1000 km, which is in the lower range of the cost estimated by the European Hydrogen Backbone initiative of 0.11 - 0.21 EUR/kg per 1000 km.

The current plan is to complete the project by 2030, with works starting already in 2024. However, turning this project into reality requires an appropriate legal and regulatory framework and the necessary investment conditions to be in place as the participating companies are fully regulated and unbundled transmission system operators. The project promoters are discussing the project with policy makers and have nominated the CEHC to the EU Ten-Year Network Development Plan. They are also considering applying for the status of Project of European Common Interest (PCI) to be eligible for EU funds. *"The Central European Hydrogen Corridor is important as it offers the possibility of delivering substantial amounts of hydrogen to industrial demand centres in Germany and Central Europe already by 2030"*, concludes Dr. Jörg Bergmann, OGE's CEO. He adds, *"In combination with the [H2ercules](#) project, this will speed up the process of developing a hydrogen market in the heart of Europe"*.

The war in Ukraine has not lowered the commitment for the project among the project promoters. *"We are still convinced of the importance of the Central European Hydrogen Corridor. The EU has significantly increased the targets for biomethane and hydrogen production in the new REPowerEU Plan to become independent from Russian fossil fuels and has identified Ukraine as*

Central

European

Hydrogen

Corridor

one of the key partners in the development of hydrogen energy. This corridor will contribute to the shift to renewable gases and energy security in Europe.” says Pawel Stanczak, Acting General Director of the Gas TSO of Ukraine.

Successful implementation of this venture requires the necessary conditions to be in place, the subject of upcoming discussions between the project promoters, OGE, NET4GAS, EUSTREAM, and the Gas TSO of Ukraine with policymakers.

For more information, please contact the partner companies or go to the project website at www.cehc.eu.

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About EUSTREAM

EUSTREAM, a.s. is a natural gas transmission system operator properly authorized to perform activities of natural gas transmission in Slovakia. EUSTREAM's transmission system provides an important energy link between the East and the West and will interconnect the North and the South in the near future. EUSTREAM pursues the objective of ensuring the safe, reliable and ecological transport of gas to European markets. For more information, go to www.eustream.sk/en/.

About the Gas TSO of Ukraine

Gas Transmission System Operator of Ukraine LCC is a natural monopoly that ensures natural gas transportation to Ukrainian consumers and transit to the countries of the European Union. The gas transportation system of Ukraine includes six interconnection points with operators of six neighbouring countries for which interconnection agreements were signed, 65 active industrial sites in all regions of Ukraine, more than 33,000 km of pipelines, 57 compressor stations, 33 gas metering stations and 1,389 gas distribution stations. For more information, go to tsoua.com/en/.

About NET4GAS

NET4GAS, s.r.o. is the gas transmission system operator in the Czech Republic, securing the international transit of natural gas, domestic transmission and associated commercial and technical services. NET4GAS transports around 45 billion m³ of natural gas per year and operates more than 3,800 km of pipelines, three border transfer stations, five compressor stations, and 100 transfer stations at the interface with the domestic gas distribution system. The company is a member of the Czech Gas Association, the international organisations ENTSO, GIE, EASEE-gas, and the IGU and Marcogaz working groups. For more information, go to www.net4gas.cz/en/.

About OGE

With a gas transmission system spanning 12,000 kilometres, OGE, seated in Essen, is among Europe's leading transmission system operators. Two thirds of natural gas consumed in Germany flows through OGE's pipeline system, comprising about 100 compressor units and about 1,100 exit points. All over Germany, OGE's approximately 1,450 staff ensure safe, environmentally friendly and customer-oriented gas transmission. OGE also offers the technical and commercial services to go with it, and it provides commercial, technical and IT services for other companies on the basis of third-party arrangements. Moreover, the company actively supports the European gas market and works together with the European distribution network operators to create the prerequisites for transnational gas transportation and trading. For more information, go to oge.net/en.