



CEH₂C



Central European Hydrogen Corridor

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Regulatory and legal framework

Document	Main provisions
Regulation of the European Parliament and the Council (EU) 2022/869 of 30.05.2022 on guidelines for trans-European energy infrastructure	hydrogen connections in Central-Eastern and South-Eastern Europe are defined by the priority directions of hydrogen corridors
REPowerEU Plan , approved by the EC on 18.05.2022	development of three priority corridors for the import of hydrogen by 2030 , including the corridor to Ukraine
Memorandum between Ukraine and the EU as of 02.02.2023 on partnership in the sphere of biomethane, hydrogen and synthetic gases	intention to develop a Ukraine-EU hydrogen corridor by 2030
Energy strategy of Ukraine until 2050, approved by the Cabinet of Ministers of Ukraine in April of 2023	start hydrogen production in 2032 with a total expected production volume of 1.65 million tons per year by 2050 (mostly for export)
The draft of the Hydrogen Strategy of Ukraine until 2050, developed by the Ministry of Energy	joint development of the hydrogen corridor between Ukraine and the EU (CEHC) by 2030

Central European Hydrogen Corridor



1,35 thousand km
the length of
the corridor

1,5 millions ton
per year
design capacity

Project goal

Ensure profitable imports of H₂ from Ukraine
to demand centers along the corridor

Commissioning: 2030

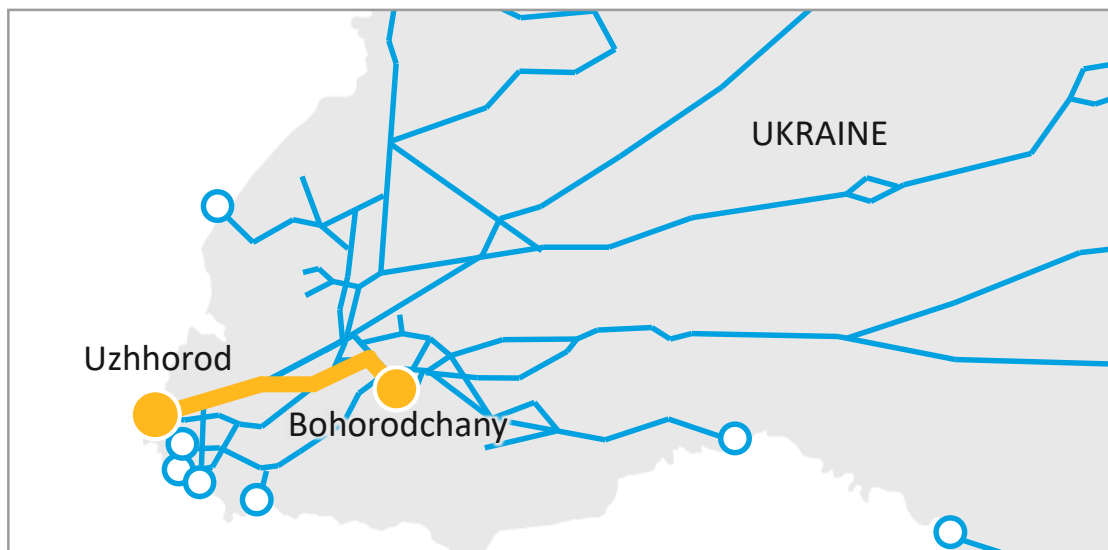
1,15 billions EUR
investments in
EU part
± 28%

362 millions EUR
investments* in
Ukrainian part
± 25%



*excluding net book value of assets for repurposing

From gas to hydrogen: business case*



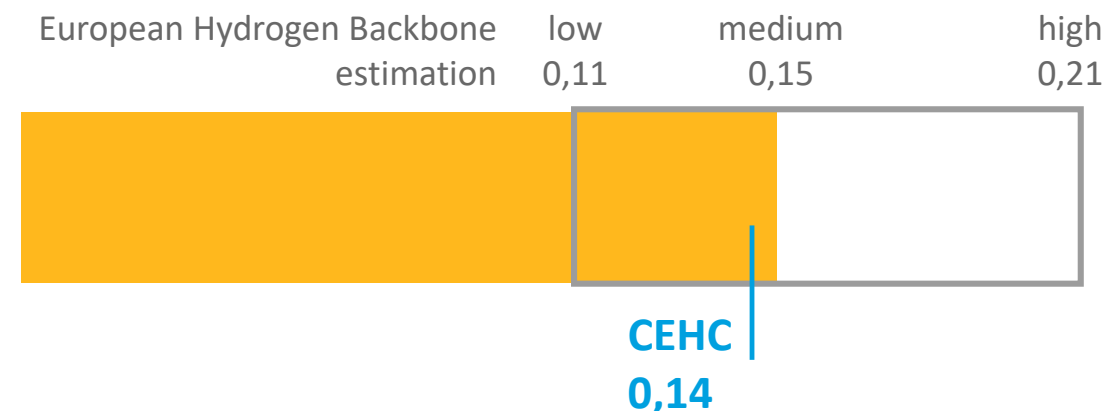
Inputs for UA part

Object	Activity	Quantity	CAPEX, millions EUR
Pipeline PROGRES	repurposing	221,5 km	235
Compressor capacity	new built	(25+12,5) MW	127

Levelized costs of transmission (LCOT)

EUR/kg per 1 000km

Due to repurposing of pipelines Investment costs for CEHC significantly lower than the cost of building a new hydrogen infrastructure



Total LCOT is expected to be in the range of 0,10 – 0,15 EUR/kg per 1 000 km*, which is in the lower range of the cost estimated by EHB

Prerequisites to the success



Legislation

- (1) Adoption of the **Hydrogen strategy of Ukraine**
- (2) Development of **new regulations and laws for the hydrogen industry, fully aligned with EU framework**
- (3) Development of **EU and national technical standards**
- (3) Participation in **ENNOH** to in line with EU practice



Production

Achievement of the production of **low-carbon hydrogen in volumes of at least 0,9 million tons till 2035** and at least 1,65 million tons till 2050 to ensure the economic justification of the project.



Funds

Governmental support and grants are vital at the initial stage of development hydrogen industry.

- 1 Completion of the **pre-feasibility study of CEHC - done**
- 2 **Technical study** of gas pipelines regarding the feasibility of hydrogen transportation (supported by the European Commission)
- 3 **Feasibility study and engineering design** on repurposing GTS infrastructure for the CEHC
- 4 Start activity of creating **Ukraine National Hydrogen Pipeline System** to ensure collecting hydrogen within Ukraine and filling the CEHC

