HI EAST 10 (Less-advanced)

H2 Interconnection Slovakia- Austria

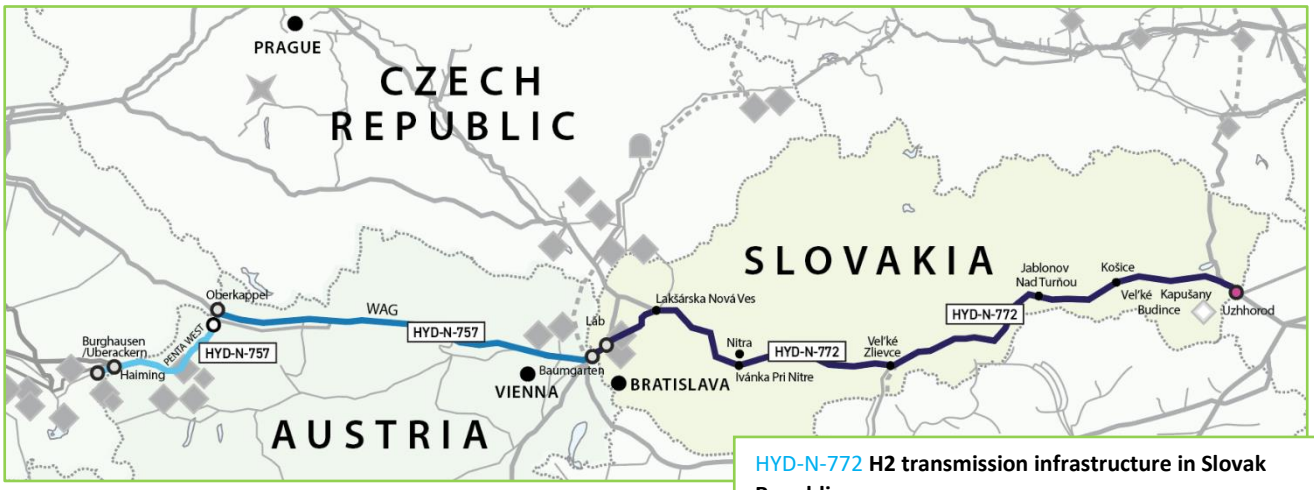
Reasons for grouping [ENTSOG]

The project group aims at interconnecting future hydrogen infrastructure between Slovakia and Austria by partially repurposing existing natural gas infrastructure.

The group includes investments in Slovakia (HYD-N-772) and Austria (HYD-N-757).

Objective of the group [Promoter]

Group is part of broader pan-European corridor. Objective of the projects is to support the evolution to a hydrogen network in Austria and Slovakia and contributing to achieving the objectives of the REPowerEU plan as well as the European Green Deal. The projects contribute to an enhanced level of security of supply for the region and the future hydrogen industrial offtake centers and domestic consumption. The projects connect potential hydrogen remote sources with hydrogen demand centers in Central Europe. In the context of route diversification, the projects have the potential to establish future hydrogen supply for the region from north-/northwestern European sources. The projects contribute to an enhanced level of security of supply for the region and the future hydrogen industrial offtake centers and domestic consumption.



HYD-N-772 **H2 transmission infrastructure in Slovak Republic**

Comm. Year **2029**

HYD-N-757 **H2 Backbone WAG + Penta West**

Comm. Year **2030**

A. Project group technical information [Promoter/ ENTSOG]

Project technical information [Promoter]

Hydrogen Transmission

TYNDP Project code	Section name	New / Repurposing	Nominal Diameter [mm]	Section Length [km]	Compressor power [MW]
HYD-N-772	SK section	Repurposing	900 1200	45 415	80
HYD-N-757	H2 Backbone WAG + Penta West	Repurposing	1200	140	
HYD-N-757	H2 Backbone WAG + Penta West	New	From 800 to 1200	200	16

Capacity increment [ENTSOG]

TYNDP Project code	Point name	Operator	From system	To system	Capacity increment [GWh/d]	Comm. year
HYD-N-772	H2_IP_SK-AT	eustream, a.s.	Transmission Slovakia (SK Hydrogen)	Transmission Austria (AT Hydrogen)	144	2029
HYD-N-772	H2_IP_SK-AT	eustream, a.s.	Transmission Austria (AT Hydrogen)	Transmission Slovakia (SK Hydrogen)	144	2029
HYD-N-757	H2_IP_SK-AT	GAS CONNECT AUSTRIA GmbH	Transmission Slovakia (SK Hydrogen)	Transmission Austria (AT Hydrogen)	144	2030
HYD-N-757	H2_IP_SK-AT	GAS CONNECT AUSTRIA GmbH	Transmission Austria (AT Hydrogen)	Transmission Slovakia (SK Hydrogen)	144	2030

B. Project Cost Information

During the TYNDP 2022 Project Data Collection, promoters were asked to indicate whether their costs were confidential or not. The following tables display the non-confidential costs provided by the promoters (as of December 2022, end of PCI project collection). The amounts provided can differ from the figures used by the project promoters in other contexts, where costs can be updated and/or evaluated using different methodologies or assumptions.

[ENTSOG]

TYNDP Project code	CAPEX [M€]	CAPEX range [%]	OPEX [M€]	OPEX range [%]
HYD-N-772	700	30%	90	30%
HYD-N-757	1035	25%	41	50%

Description of the cost and range [Promoter]

SK part – reassessment of the CAPEX and OPEX indicated by the time of project submission. Updated **CAPEX – 315 M€, OPEX 50 M€,** due to decreased initial capacity and decreased number of compressor stations (from 2 to 1). New indicated CAPEX and OPEX are considered for the capacity 144 GWh/d and one compressor station.

Repurposing of one transmission line for 100% H2 ready line in Slovakia consists of 2 projects. The first one is the project „Infrastructure repurpose for H2 transmission in Slovakia" connecting a non-EU point Veľké Kapušany with IP Baumgarten. The second one is „CEHC (SK part)" connecting a non-EU point Veľké Kapušany with IP Lanžhot. Both projects complement each other and cannot exist without each other. It means that the projects are technically interconnected but they are administered separately.

It is necessary to note that both projects share CAPEX and OPEX in significant portion (the section from the UA border to the split point in western part of Slovakia).

AT part - At the time of the data collection for TYNDP 2022 the costs for HYD-N-757 were still under development on national level in the national development plan. Therefore, the above indicated costs for HYD-N-757 were calculated based on the unit prices of the EHB study. The National Development Plan 2022 (approved 05/2023) includes the updated figures as follows: CAPEX 921 MEUR, OPEX 37 MEUR

C. Project Benefits [ENTSOG]

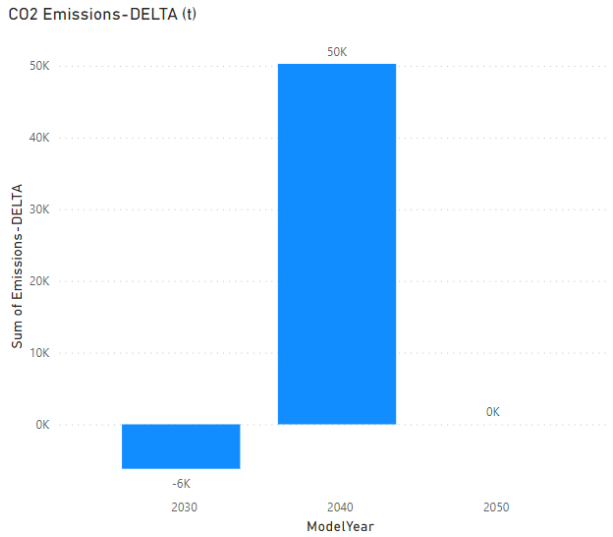
C.1 Summary of benefits

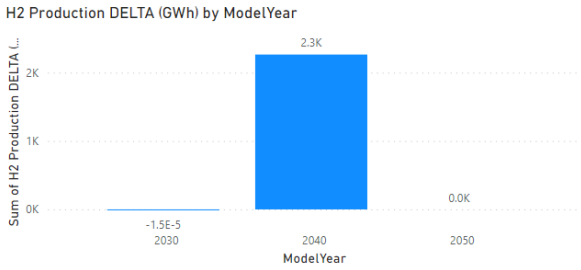
This section provides a summarised analysis by ENTSOG of the main benefits stemming from the realisation of the overall group. More details on the indicators are available in Annex D of TYNDP 2022[1].

Distributed Energy

Sustainability benefits

In the reference case, which analyses yearly demand in two periods (average winter and average summer), the project group will contribute to sustainability by reducing overall CO2 emissions by 6 kt in 2030. The project increases cooperation between countries and as all green hydrogen supply sources (both locally produced and imported) are already used at their maximum capacity, an increase in blue hydrogen (i.e. SMR) is needed to satisfy the hydrogen demand in 2040 and reduce demand curtailment.

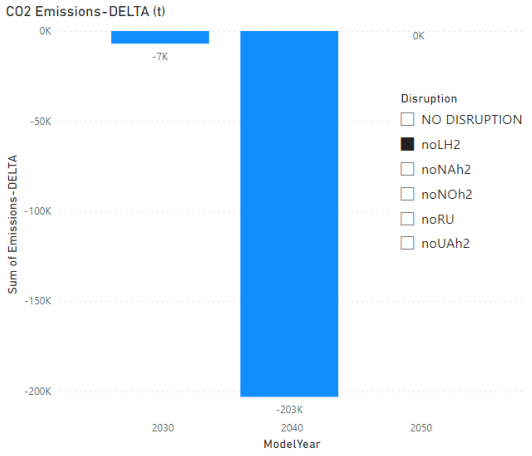


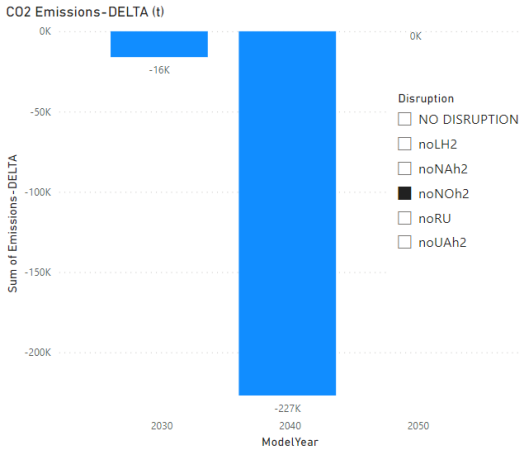


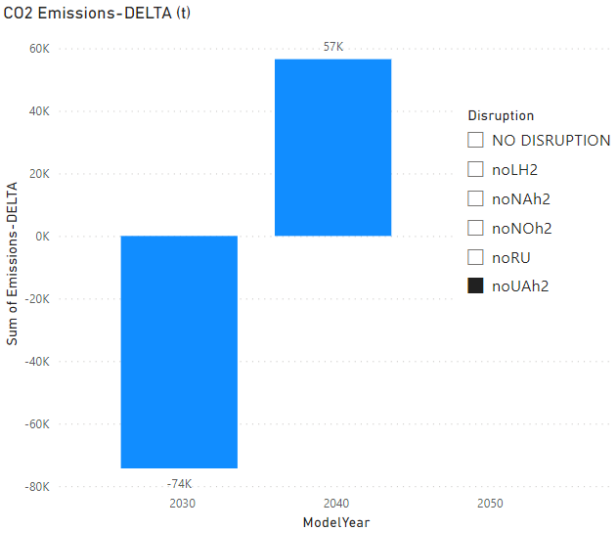
Increased benefits are expected under disruption cases in 2030. In 2040, in case of supply disruptions, besides of Ukraine disruption, the project group can mitigate Co2emissions in a high amount.

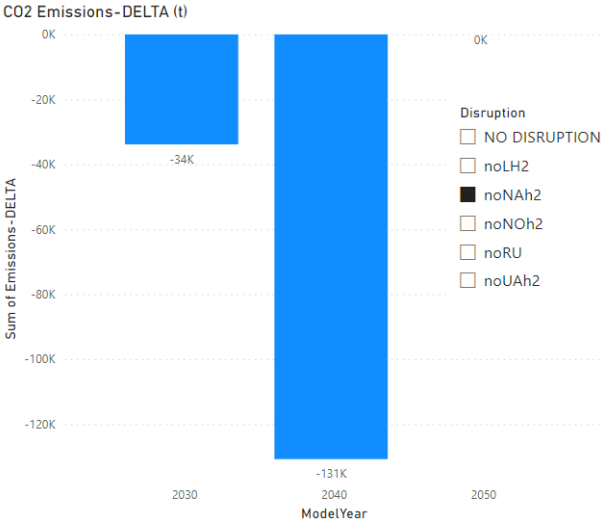
1 noLH2 : LH2 disruption / 2 noNOh2 : Norway disruption / 3 noUAh2 : Ukraine disruption/ 4 noNAh2 : North Africa disruption

[1] https://www.entsog.eu/sites/default/files/2023-04/ENTSOG_TYNDP_2022_Annex_D_Methodology_230411.pdf









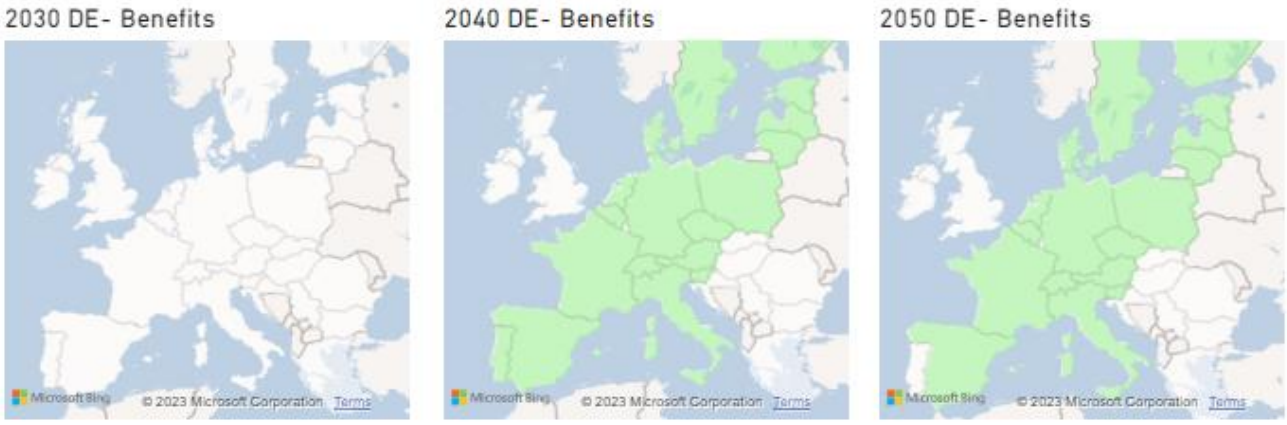
Security of Supply:[2]

> Reference case:

The conversion of the existing natural gas infrastructure doesn't impact the methane demand and will bring positive security of supply benefits for many European countries from 2040 on.

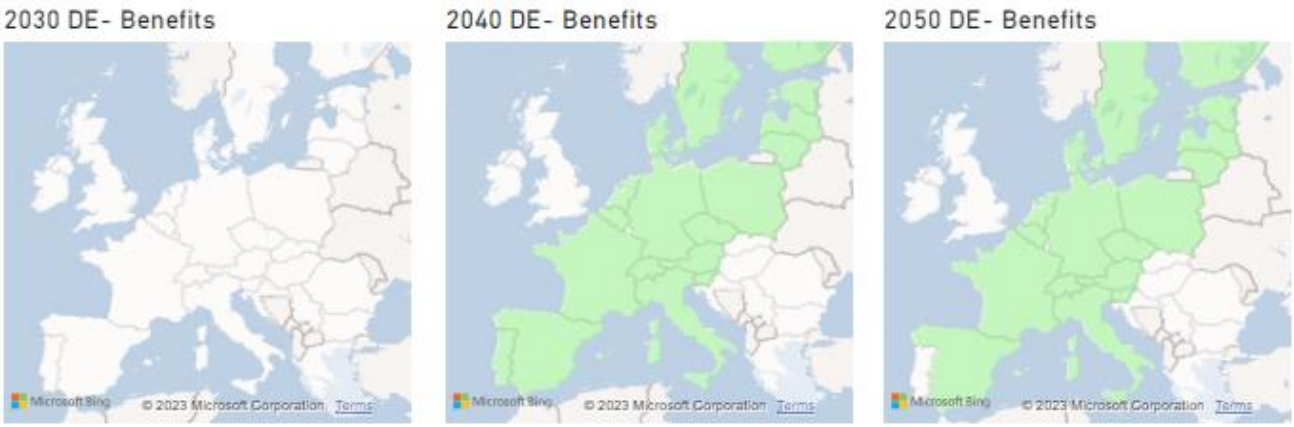
The project group mitigates the risk of hydrogen demand curtailment in many European countries in 2040 in average winter by 1-2% and by 2-3% in 2050.

[2] *As for the hydrogen system there is no existing infrastructure level available yet, ENTSOG has identified a possible hydrogen network according to the information provided by promoters in their project submission for the TYNDP/PCI process (i.e., H2 Infrastructure level). Therefore, the System Assessment shows the results that could be reached (for different timestamps) under the hypothesis of a full commissioning of the H2 infrastructure projects that were submitted by project promoters but that are not yet in place. Therefore, even in configurations where no demand curtailment is identified (e.g., average winter in 2030) these results should not be read as an absence of H2 infrastructure needs for the given scenario. On the contrary, the full availability of the planned infrastructures composing the H2 infrastructure level is assumed to avoid the potential demand curtailment.*



> Climatic stress cases:

Under 2 -week and 2-week dunkelflaute climatic stress case, as well as under peak day climatic case the project group increases mitigation of risk of hydrogen demand curtailment in respective European countries from 2040 by 3 - 5%.

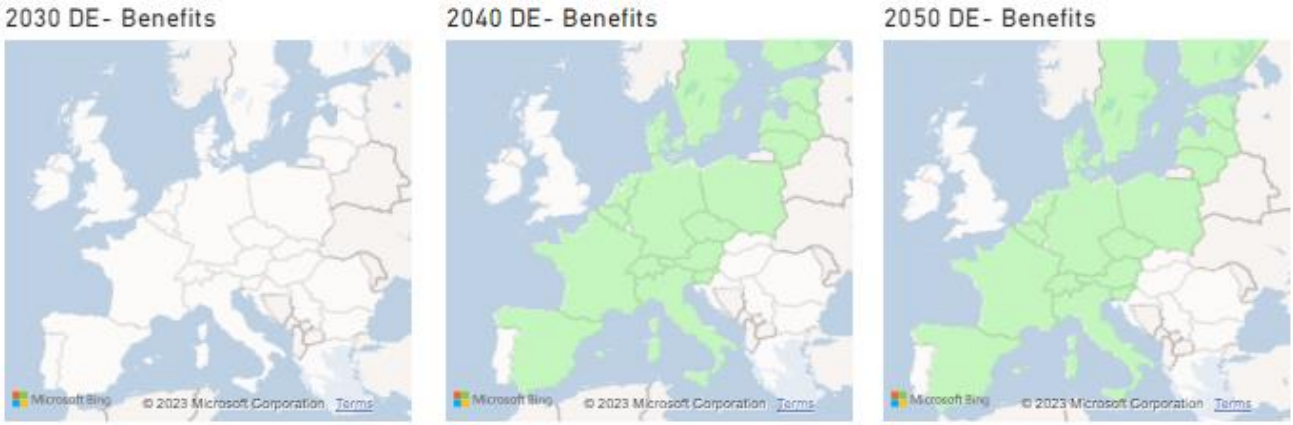


> Disruption cases (S-1):

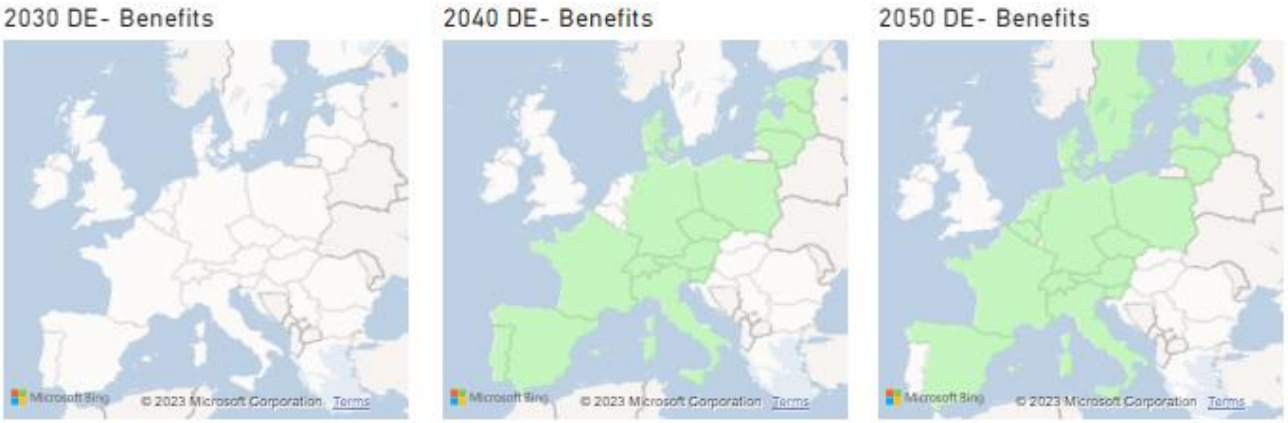
Similarly, under supply disruption cases besides Ukraine disruption, the project group shows improved benefits for mitigating the risk of demand curtailment by 2-3% from 2040. In case of Ukraine disruption countries in central southeast Europe are already showing mitigated risk of demand curtailment from by from 22-27% in 2030 and 2040. In 2050 the risk of H2 curtailment is reduced by 7% in respective countries. In case of North Africa disruption Austria is mitigating the risk of demand curtailment in all three time stamps with a maximum of 11% in 2050.

Maps for specifics disruptions: 1 noLH2 : LH2 disruption / 2 noNOh2 : Norway disruption / 3 noUAh2 : Ukraine disruption/ 4 noNAh2 : North Africa disruption

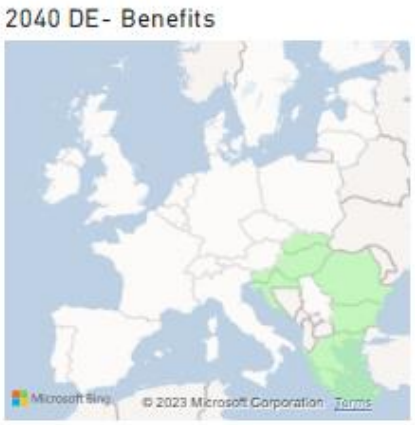
1 noLH2: LH2 disruption

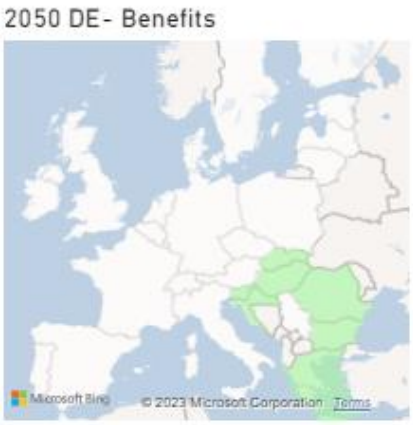


2 noNOh2: Norway disruption

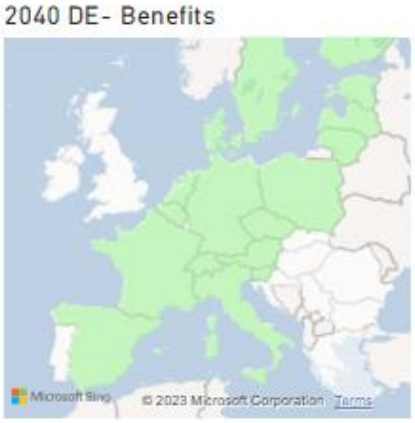


3 noUAh2: Ukraine disruption



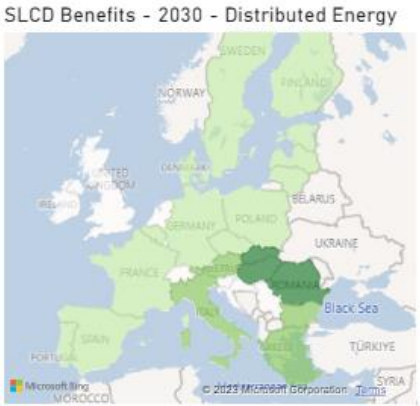


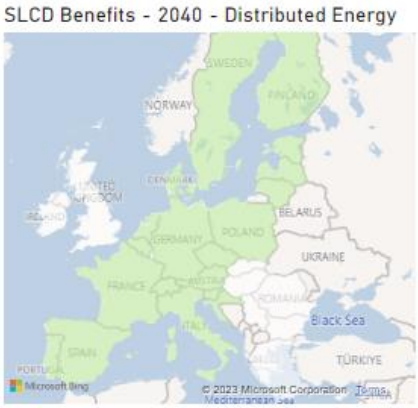
4 noNAh2: North Africa disruption

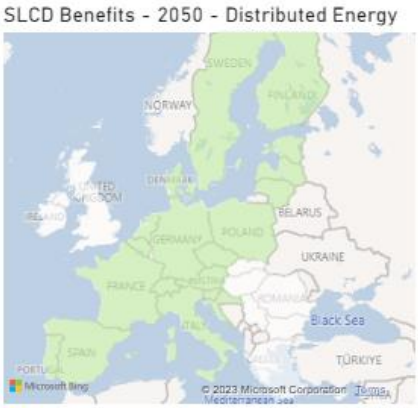


> Single largest capacity disruption (SLCD):

In case of SLCD almost all European countries benefitting from this project group by mitigating the risk of demand curtailment from 2030 onwards. Countries receiving green hydrogen from Ukraine or Northern Africa are benefitting the most under SLCD as the interconnection between Slovakia and Austria is creating cooperation between these regions. In 2030 the highest benefits are recorded, including 29-30% for Slovakia, Hungary and Romania and around 10-18% for Italy, Austria, Bulgaria and Greece.



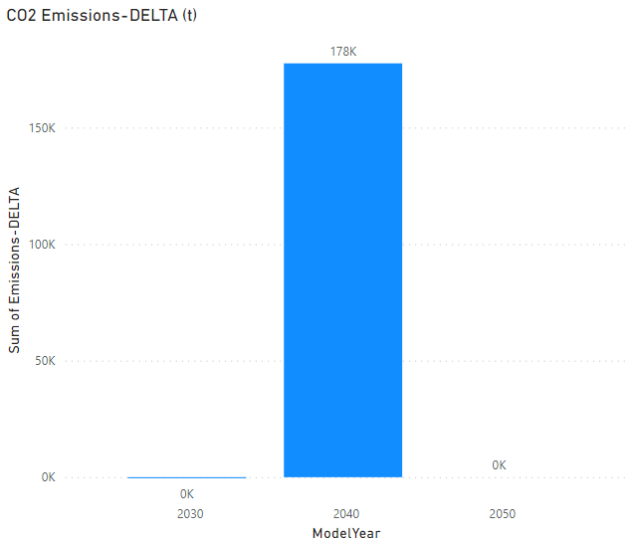


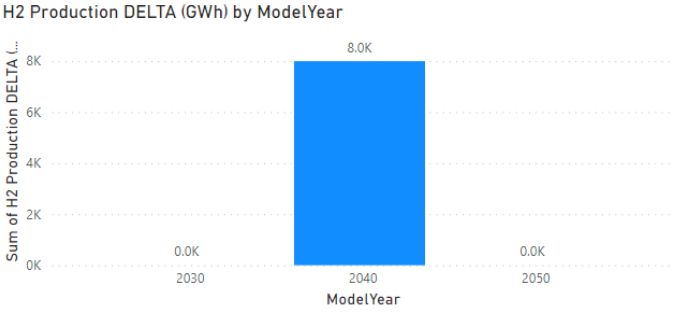


Global Ambition

Sustainability benefits

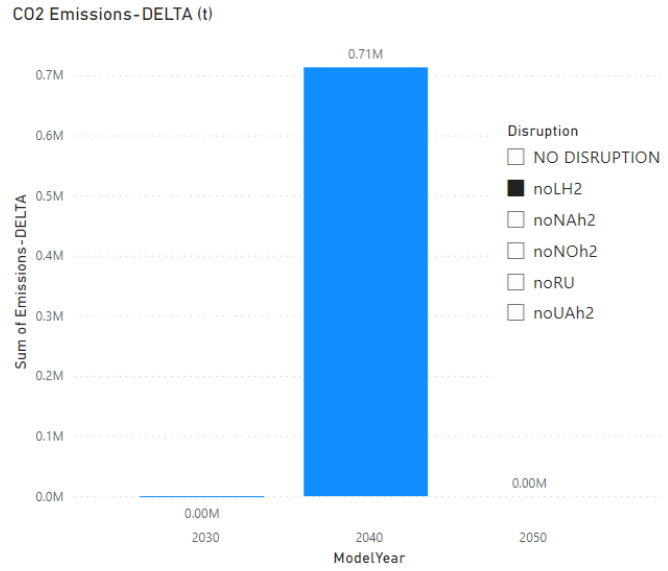
In the reference case, which analyses yearly demand in two periods (average winter and average summer), the project group is increasing cooperation between countries and as all green hydrogen supply sources (both locally produced and imported) are already used at their maximum capacity, an increase in blue hydrogen (i.e. SMR) is needed to satisfy the hydrogen demand in 2040 and reduce demand curtailment.

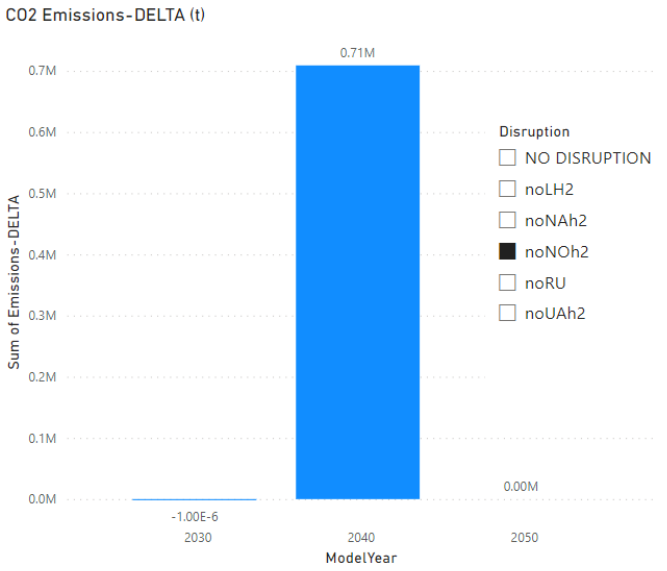


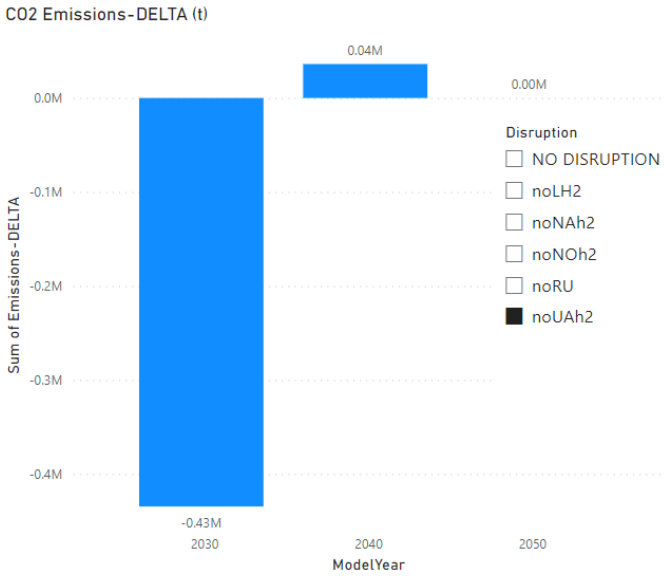


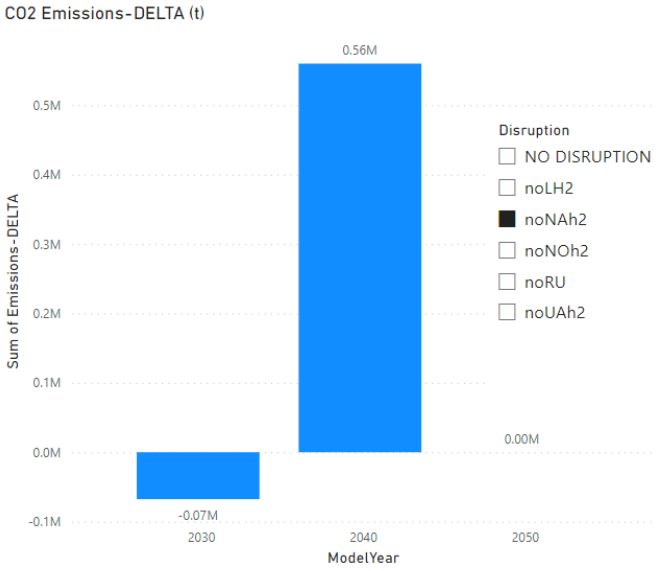
In case of LH2 and Norway disruption CO2 the project groups shows similar benefits. In case Ukraine disruption the project contributes to sustainability by reducing CO2 emissions by 430 kt in 2030 by replacing hydrogen produced by SRM by Norwegian imports.

1 noLH2 : LH2 disruption / 2 noNOh2 : Norway disruption / 3 noUAh2 : Ukraine disruption/ 4 noNAh2 : North Africa disruption









Security of supply:

> Reference case

The conversion of the existing natural gas infrastructure doesn't impact the methane demand and will bring positive security of supply benefits for many European countries in 2040 and for Switzerland, Austria, Slovenia and Italy in 2050. The project group mitigates the risk of hydrogen demand curtailment in 2040 in average winter by 2-3% and by 2-4% for Switzerland, Austria, Slovenia and Italy in 2050.

> Climatic stress cases

Under 2 -week and 2-week dunkelflaute climatic stress case, as well as under peak day climatic case the project group already shows extended benefits in 2040 by mitigating the risk of hydrogen demand curtailment by 2-4% for many countries and in 2050 by 2-4% in Portugal, Spain, Switzerland, Austria, Slovenia and Italy.

> Disruption cases (S-1)

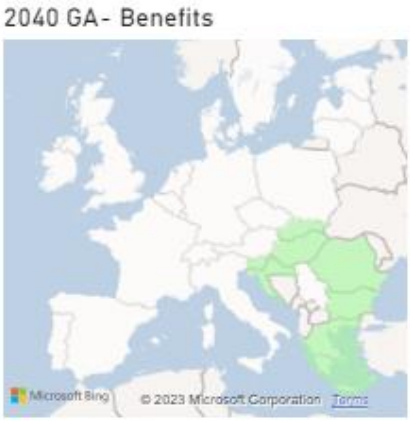
Similarly, under supply disruption cases besides Ukraine disruption, the project group shows improved benefits for mitigating the risk of demand curtailment by 2-3% and up to 13% for Austria in 2040 and by 1-2% in 2050. In case of Ukraine disruption countries in central southeast Europe are already benefitting in 2030 with a maximum of 24% for all respective countries in 2040.

Maps for specifics disruptions: 1 noLH2 : LH2 disruption / 2 noNOh2 : Norway disruption / 3 noUAh2 : Ukraine disruption/ 4 noNAh2 : North Africa disruption

1 noLH2: LH2 disruption

2 noNOh2: Norway disruption

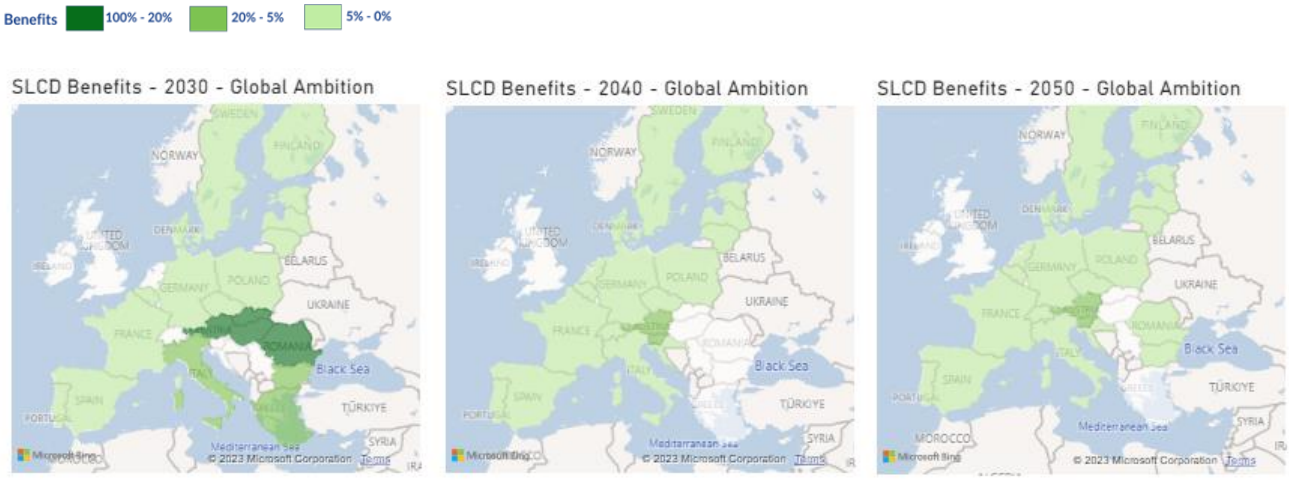
3 noUAh2: Ukraine disruption



4 noNAh2: North Africa disruption

> Single largest capacity disruption (SLCD):

In case of SLCD all European countries benefitting from this project group by mitigating the risk of demand curtailment. The highest benefits are recorded in 2030, including 23-30% for Austria, Slovakia, Hungary and Romania and around 5-11% for Italy, Bulgaria and Greece.



C.2 Quantitative benefits [ENTSOG]

The following tables display all the benefits quantified by ENTSOG through specific indicators and stemming from the realisation of the considered project group.

CO2 Emissions:

2030	NO DISRUPTION	DE	tonne	-6.201	538.677.299	538.683.500
2030	NO DISRUPTION	GA	tonne	-5	592.910.448	592.910.454
2030	noLH2	DE	tonne	-7.003	540.175.890	540.182.893
2030	noLH2	GA	tonne	-163	594.817.481	594.817.644
2030	noNAh2	DE	tonne	-33.858	539.785.356	539.819.214
2030	noNAh2	GA	tonne	-67.540	594.141.433	594.208.974
2030	noNOh2	DE	tonne	-16.069	538.877.198	538.893.267
2030	noNOh2	GA	tonne	0	593.310.994	593.310.994
2030	noUAh2	DE	tonne	-74.329	539.378.772	539.453.100
2030	noUAh2	GA	tonne	-434.504	593.627.618	594.062.122
2040	NO DISRUPTION	DE	tonne	50.279	392.077.044	392.026.765
2040	NO DISRUPTION	GA	tonne	177.551	396.523.252	396.345.700
2040	noLH2	DE	tonne	-203.315	392.213.883	392.417.198
2040	noLH2	GA	tonne	713.156	397.455.197	396.742.041
2040	noNAh2	DE	tonne	-130.789	392.188.098	392.318.886
2040	noNAh2	GA	tonne	559.936	397.301.977	396.742.041
2040	noNOh2	DE	tonne	-226.855	392.144.023	392.370.877
2040	noNOh2	GA	tonne	708.936	397.450.977	396.742.041
2040	noUAh2	DE	tonne	56.533	392.399.183	392.342.650
2040	noUAh2	GA	tonne	36.135	397.478.498	397.442.364
2050	NO DISRUPTION	DE	tonne	0	232.557.735	232.557.735
2050	NO DISRUPTION	GA	tonne	0	228.306.707	228.306.707
2050	noLH2	DE	tonne	0	232.557.735	232.557.735
2050	noLH2	GA	tonne	0	228.306.707	228.306.707
2050	noNAh2	DE	tonne	0	232.557.735	232.557.735
2050	noNAh2	GA	tonne	0	228.306.707	228.306.707
2050	noNOh2	DE	tonne	0	232.557.735	232.557.735
2050	noNOh2	GA	tonne	0	228.306.707	228.306.707
2050	noRU	DE	tonne	0	232.557.735	232.557.735
2050	noRU	GA	tonne	0	228.306.707	228.306.707
2050	noUAh2	DE	tonne	0	232.557.735	232.557.735
2050	noUAh2	GA	tonne	0	228.306.707	228.306.707

Curtailment Rate (SLCD):

Country	2030-DE-DELTA	2030-GA-DELTA	2040-DE-DELTA	2040-GA-DELTA	2050-DE-DELTA	2050-GA-DELTA
Czechia	-2%	-2%	-4%	-3%	-4%	-1%
Latvia	-2%	-2%	-4%	-2%	-3%	-1%
Lithuania	-2%	-2%	-4%	-2%	-3%	-1%
Poland	-2%	-2%	-4%	-2%	-3%	-1%
Portugal	-2%	-2%	-4%	-2%	-2%	-3%
Slovenia	0%	0%	-4%	-7%	-4%	-10%
France	-2%	-2%	-4%	-2%	-3%	-1%
Germany	-3%	-2%	-4%	-3%	-2%	-1%
Austria	-18%	-23%	-3%	-6%	-4%	-10%
Belgium	-2%	-2%	-3%	-2%	-2%	-1%
Denmark	-2%	-2%	-3%	-3%	-3%	-1%
Estonia	-2%	-2%	-3%	-2%	-3%	-1%
Finland	-2%	-2%	-3%	-2%	-3%	-1%
Italy	-10%	-11%	-3%	-2%	-3%	-3%
Spain	-2%	-2%	-3%	-2%	-3%	-2%
Sweden	-2%	-2%	-3%	-2%	-3%	-1%
Switzerland	0%	0%	-3%	-2%	-3%	-3%
The Netherlands	0%	0%	-3%	-3%	-3%	-1%
Croatia	0%	0%	-1%	-1%	-1%	-2%
Bulgaria	-15%	-6%	0%	0%	0%	-1%
Cyprus	0%	0%	0%	0%	0%	0%
Greece	-14%	-5%	0%	0%	0%	0%
Hungary	-29%	-30%	0%	0%	1%	0%
Romania	-29%	-30%	0%	0%	1%	-1%
Slovakia	-30%	-30%	0%	0%	1%	0%

Curtailment rate (Climatic Stress):

SimulationPeriod	Country	2030-DE-DELTA	2030-GA-DELTA	2040-DE-DELTA	2040-GA-DELTA	2050-DE-DELTA	2050-GA-DELTA
Average2W	Austria	0%	0%	-3%	-2%	-3%	-1%
Average2W	Belgium	0%	0%	-2%	-2%	-2%	0%
Average2W	Bulgaria	0%	0%	0%	0%	0%	0%
Average2W	Croatia	0%	0%	0%	0%	0%	0%
Average2W	Cyprus	0%	0%	0%	0%	0%	0%
Average2W	Czechia	0%	0%	-2%	-1%	-2%	0%
Average2W	Denmark	0%	0%	-2%	-2%	-2%	0%
Average2W	Estonia	0%	0%	-2%	-1%	-2%	0%
Average2W	Finland	0%	0%	-2%	-1%	-2%	0%
Average2W	France	0%	0%	-2%	-1%	-2%	0%
Average2W	Germany	0%	0%	-2%	-1%	-1%	0%
Average2W	Greece	0%	0%	0%	0%	0%	0%
Average2W	Hungary	0%	0%	0%	0%	0%	0%

Average2W	Ireland	0%	0%	0%	0%	0%	0%
Average2W	Italy	0%	0%	-2%	-1%	-1%	-1%
Average2W	Latvia	0%	0%	-2%	-1%	-1%	0%
Average2W	Lithuania	0%	0%	-2%	-1%	-2%	0%
Average2W	Luxembourg	0%	0%	0%	0%	0%	0%
Average2W	Malta	0%	0%	0%	0%	0%	0%
Average2W	Poland	0%	0%	-2%	-1%	-2%	0%
Average2W	Portugal	0%	0%	-2%	-2%	0%	-1%
Average2W	Romania	0%	0%	0%	0%	0%	0%
Average2W	Serbia	0%	0%	0%	0%	0%	0%
Average2W	Slovakia	0%	0%	0%	0%	0%	0%
Average2W	Slovenia	0%	0%	-2%	-2%	-2%	-1%
Average2W	Spain	0%	0%	-2%	-1%	-2%	-1%
Average2W	Sweden	0%	0%	-2%	-1%	-2%	0%
Average2W	Switzerland	0%	0%	-3%	-1%	-2%	-1%
Average2W	The Netherlands	0%	0%	-2%	-1%	-2%	0%
Average2W	United Kingdom	0%	0%	0%	0%	0%	0%
Average2WDF	Austria	0%	0%	-3%	-2%	-3%	-2%
Average2WDF	Belgium	0%	0%	-2%	-1%	-2%	0%
Average2WDF	Bulgaria	0%	0%	0%	0%	0%	0%
Average2WDF	Croatia	0%	0%	0%	0%	0%	0%
Average2WDF	Cyprus	0%	0%	0%	0%	0%	0%
Average2WDF	Czechia	0%	0%	-2%	-1%	-2%	0%
Average2WDF	Denmark	0%	0%	-2%	-1%	-2%	0%
Average2WDF	Estonia	0%	0%	-2%	-1%	-2%	0%
Average2WDF	Finland	0%	0%	-2%	-2%	-2%	0%
Average2WDF	France	0%	0%	-2%	-1%	-2%	0%
Average2WDF	Germany	0%	0%	-2%	-1%	-1%	0%
Average2WDF	Greece	0%	0%	0%	0%	0%	0%
Average2WDF	Hungary	0%	0%	0%	0%	0%	0%
Average2WDF	Ireland	0%	0%	0%	0%	0%	0%
Average2WDF	Italy	0%	0%	-2%	-1%	-1%	-1%
Average2WDF	Latvia	0%	0%	-2%	-1%	-1%	0%
Average2WDF	Lithuania	0%	0%	-2%	-1%	-2%	0%
Average2WDF	Luxembourg	0%	0%	0%	0%	0%	0%
Average2WDF	Malta	0%	0%	0%	0%	0%	0%
Average2WDF	Poland	0%	0%	-2%	-1%	-2%	0%
Average2WDF	Portugal	0%	0%	-2%	-2%	0%	-1%
Average2WDF	Romania	0%	0%	0%	0%	0%	0%
Average2WDF	Serbia	0%	0%	0%	0%	0%	0%
Average2WDF	Slovakia	0%	0%	0%	0%	0%	0%
Average2WDF	Slovenia	0%	0%	-2%	-1%	-2%	-2%
Average2WDF	Spain	0%	0%	-2%	-2%	-2%	-1%
Average2WDF	Sweden	0%	0%	-2%	-1%	-2%	0%
Average2WDF	Switzerland	0%	0%	-3%	-1%	-2%	-2%
Average2WDF	The Netherlands	0%	0%	-2%	-1%	-2%	0%

Average2WDF	United Kingdom	0%	0%	0%	0%	0%	0%
DC	Austria	0%	0%	-2%	-2%	-2%	-1%
DC	Belgium	0%	0%	-2%	-1%	-1%	0%
DC	Bulgaria	0%	0%	0%	0%	0%	0%
DC	Croatia	0%	0%	0%	0%	0%	0%
DC	Cyprus	0%	0%	0%	0%	0%	0%
DC	Czechia	0%	0%	-1%	-1%	-2%	0%
DC	Denmark	0%	0%	-1%	-1%	-1%	0%
DC	Estonia	0%	0%	-2%	-1%	-2%	0%
DC	Finland	0%	0%	-1%	-1%	-1%	0%
DC	France	0%	0%	-2%	-1%	-1%	0%
DC	Germany	0%	0%	-2%	-1%	-1%	0%
DC	Greece	0%	0%	0%	0%	0%	0%
DC	Hungary	0%	0%	0%	0%	0%	0%
DC	Ireland	0%	0%	0%	0%	0%	0%
DC	Italy	0%	0%	-1%	-1%	-2%	0%
DC	Latvia	0%	0%	-2%	-1%	-1%	0%
DC	Lithuania	0%	0%	-2%	-1%	-1%	0%
DC	Luxembourg	0%	0%	0%	0%	0%	0%
DC	Malta	0%	0%	0%	0%	0%	0%
DC	Poland	0%	0%	-2%	-1%	-1%	0%
DC	Portugal	0%	0%	-2%	-1%	0%	0%
DC	Romania	0%	0%	0%	0%	0%	0%
DC	Serbia	0%	0%	0%	0%	0%	0%
DC	Slovakia	0%	0%	0%	0%	0%	0%
DC	Slovenia	0%	0%	-2%	-1%	-2%	0%
DC	Spain	0%	0%	-1%	-1%	-1%	0%
DC	Sweden	0%	0%	-2%	-1%	-2%	0%
DC	Switzerland	0%	0%	-2%	-1%	-2%	0%
DC	The Netherlands	0%	0%	-1%	-1%	-2%	0%
DC	United Kingdom	0%	0%	0%	0%	0%	0%

D. Environmental Impact [Promoter]

Any gas infrastructure has an impact on its surroundings. This impact is of particular relevance when crossing some environmentally sensitive areas. Mitigation measures are taken by the promoters to reduce this impact and comply with the EU and National regulations.

TYNDP Code	Type of infrastructure	Surface of impact	Environmentally sensitive area
HYD-N-757	Pipelines and compressor stations	To minimise the environmental impact, existing pipelines are used or, where new construction is necessary, laid in the same route as an existing pipeline system (parallel). Compressor stations are integrated into existing stations in order to use access routes and the existing infrastructure.	The project implementation will follow best practice, comply with EU and national regulations, and all necessary measures will be taken to mitigate potential impacts on land and environment. State-of-the-art technologies such as fibre sensing, EMAT pigging or laser detection measurements reflect the highest standard of environmentally friendly work management.
HYD-N-772	Hydrogen pipelines	Repurpose of existing above-ground objects	Neutral impact on land and protected areas

Potential impact	Mitigation measures	Related costs included in project CAPEX and OPEX	Additional expected costs
HYD-N-757 will not substantially and irreversibly affect the environment.	In order to ensure that environmental assessments are correct, environmental monitoring will be carried out before, during and after the construction of the infrastructure.	Related costs have been considered in CAPEX & OPEX estimations	
HYD-N-772	Please see “Environmental impact explained”	Detailed calculation not available yet	Detailed calculation not available yet

Environmental Impact explained [Promoter]

- SK Part: Basis of the project is repurpose of existing methane infrastructure to hydrogen with the neutral impact on the land and protected areas, as there will be no further demands resulting from routing of the project. Existing pipeline has been accepted by the nature, as the pipeline corridor has already existed there for more than 45 years. Mitigation measures in place prove positive impact on the environment.
- We expect positive impacts on the CO2 emissions, as project foresees one electricity powered compression unit on SK territory, which could replace methane powered installed compression power.

- AT part: Environmental impact assessments for the projects have not indicated any substantial and irreversible impacts on the environment. In order to ensure that environmental assessments are correct, environmental monitoring is carried out before, during and after the construction of the infrastructure.

E. Other benefits [Promoter]

Missing benefits are all benefits of a project which may be not captured by ENTSOG analysis.

As a necessary condition a missing benefit cannot have discrepancies with the benefits already covered by the assessment run by ENTSOG and this condition needs to be proved and justified.

Description of Other benefits [Promoter]

- Projects will give positive signals to the future hydrogen market development and could decrease uncertainty of other parts of hydrogen value chain to further invest into the hydrogen industrial technology or final customers' appliances.
- Connecting the projects to another production area reduces Europe´s dependence on a limited number of hydrogen producers with a positive impact on sustainability, hydrogen availability and affordability.

F. Useful links [Promoter]

Useful links:

Central European Hydrogen Corridor (cehc.eu)

European Hydrogen Backbone Maps | EHB European Hydrogen Backbone

www.sunshynecorridor.eu

SoutH2 - Home (south2corridor.net)

h2euplusstore

H2 Backbone WAG+PW (h2backbone-wag-pw.at)