



**Demand assessment report
for submitted non-binding hydrogen capacity
demand referred to future exit and entry points
to FGSZ**

31 October 2023

This report is the FGSZ's assessment of the potential future hydrogen capacity demand conducted by

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A. Non-binding Demand indications

FGSZ has launched a non-binding market demand survey on hydrogen capacity demand for domestic network points and interconnection points. FGSZ Ltd. invited all the future Network Users to fill in the non-binding capacity survey, which was available on the FGSZ's website between 25th July and 15th September 2023. FGSZ have received the following non-binding demand indication for firm hydrogen transmission capacity at the envisaged domestic network points and interconnection points.

FGSZ's Non-Binding Firm Hydrogen Capacity Demand Survey result

GCV reference parameter 25°C/0°C

Indicated entry/exit point		2030	2040	2050
Aggregated domestic consumer exit demand	kWh/h/year	838 086	874 382	874 382
	TWh/year	7,342	7,659	7,659
Aggregated domestic producer entry demand	kWh/h/year	43 704	43 704	43 704
	TWh/year	0,336	0,336	0,336
Aggregated Balassagyarmat SK>HU entry total	kWh/h/year	659 182	695 478	695 478
	TWh/year	5,774	6,092	6,092
Aggregated Balassagyarmat HU>SK exit total	kWh/h/year	9 854	9 854	9 854
	TWh/year	0,086	0,086	0,086
Aggregated Beregdaróc UA>HU entry total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Beregdaróc HU>UA exit total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Csanádpalota RO>HU entry total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Csanádpalota HU>RO exit total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Drávaszerdahely HR>HU entry total	kWh/h/year	0	0	0
	TWh/year	0	0	0

Indicated entry/exit point		2030	2040	2050
Aggregated Drávaszerdahely HU>HR exit total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Kiskundorozsma RS>HU entry total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Kiskundorozsma HU>RS exit total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Mosonmagyaróvár AT>HU entry total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Mosonmagyaróvár HU>AT exit total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Tornyiszentmiklós SI>HU entry total	kWh/h/year	0	0	0
	TWh/year	0	0	0
Aggregated Tornyiszentmiklós HU>SI exit total	kWh/h/year	0	0	0
	TWh/year	0	0	0

B. Demand assessment

The Demand Assessment Phase commenced immediately after the non-binding market survey closed. The main goal of the survey was to get direct information of hydrogen demand from the future hydrogen network users. We have received demand indications from four future exit users and four prospective producers. The table above represents the summary of demand.

i. Historical usage pattern

None of the domestic network points and hydrogen interconnection point (IP) is an existing network point hence the historical usage pattern here is not available.

ii. Regulatory background of current market survey

Currently there is no regulation related to hydrogen demand survey.

iii. Relations to EU wide Ten Years Network Development Plan (TYNDP), National Development Plan (NDP)

FGSZ will elaborate and submit a suggested hydrogen system development plan to the NRA, which takes into consideration the submitted demand and NDP 2022's as well as TYNDP 2022's considerations. FGSZ has ongoing discussions with the neighbouring network operators about submitted cross-border demand and next steps.

iv. Expected amount, direction and duration of demand for exit and entry capacities.

The 2030-, 2040- and 2050-year demands are highlighted but some submitters would like to start the consumption and production as early as 2024/2025. According to aggregated domestic exit demand significant hydrogen import is forecasted.

Hungarian end users and producers submitted stable demand until 2050 after a transitional ramp-up period until 2030. However, based on different ENTSOG TYNDP 2022 and 2024 supply & demand scenarios, increasing hydrogen flows are expected inside Hungary and via the prospective hydrogen interconnection points between 2030 and 2050.

C. Provisional timeline

Project submission towards ENTSOG for TYNDP 2024 is expected from 20th of November till 17th of December 2023. The Hungarian NDP will be submitted to NRA in December 2023.

E. Contact information

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