ENTSOG Publication:

[001]- Comments on the Project in the context of the current publication. :

General Information:

[002]- Is the project an enabler for groups? : No

[003]- Project(System) Code: 497

[004]- ENTSOG Project Code: UGS-N-497

[005]- Was the project item part of the last TYNDP? : No

[006]- Project Name: Example UGS Project

[007]- Infrastructure Type: UGS

[008]- Is the project a virtual submission of more projects : No

[009]- Project Description: Construction of a new gas storage facility in a depleted gas field. Underground storage in Country A consists in the increase of working capacity up to 600MCM/cycle, resulting in a capacity increment on of 450 Mcm/cycle and enhanced withdraw capacity up to 4.5 million cm/day. The project consists two compressor modules, one dehydration unit and 60 km of connecting pipes.

[010]- Project Host Country : Austria

[011]- Project Status: Planned

[013]- Promoter Legal Personality: UGS Company

[014]- Project Promoter Type. : Third Party Promoter

[016]- Which Company will be the commercial operator once your project is completed. : Gasgrid Finland Oy

[017]- Will there be any other commercial operator(s) once your project is completed? If yes, please mention it/them. : No

[018]- Has your project taken the FID? : No

[020]- Is your project only a Capacity Modification, which does not require actual investment or construction works?: No

[021]- Estimated CAPEX (in million €): 135

[022]- Are these CAPEX costs considered confidential? : No

[024]- Amount of already incurred CAPEX (in million EUR] at the time of project submission : $\bf 0$

[026]- Amount of contracted but not yet incurred CAPEX (in million EUR]: 0

[028]- CAPEX Range (in %): 15

[029]- Estimated OPEX (in million € per year): 9

[030]- Are these OPEX costs considered confidential? : No

[032]- OPEX Range (in %): 15

[033]- Name of your representative in charge of the Project submission: Maria Schneider

[034]- E-mail address of your representative in charge of the Project submission : email@companyname.com

[035]- Phone number of your representative in charge of the Project submission: +48256987

[036]- Project Website:

[037]- General Remarks:

Administrative Criteria:

[039]- Please select the category of the project promoter you are: B.2 Company which is a licensed SSO but not Member, Observer or Associated Partner of ENTSOG (including certified DSOs).

[042]- Company Existance (Pass-Fail Criteria): Yes

[043]- Company Financial Strength (Pass-Fail Criteria): Yes

[044]- Company Technical Expertise (Pass-Fail Criteria): Yes

[045]- Please indicate if your project has completed the (Pre-) Feasiblity study : No

[048]- Please select one of the following options:

- (Pre-) Feasibility study [please attach relevant documents below]

[049]- Please provide any additional comments :

<u>Inclusion in NDP:</u>

[054]- Is your project part of a National Development Plan (NDP)?: No

[058]- If is not part of NDP, please give a reason: (3) the operators are not required to prepare and publish a NDP

Enabler/Enhancer Projects:

[061]- Is this project an internal enabler? : No

[065]- Is this project an enhancer?: No

Project Shareholders:

[069]- Project Section	[070]- Shareholder Name	[071]- Shareholder Share
Test UGS Project	UGS Company	100

Technical Information:

[072]- Indicate if your project is part of: LNG terminals and connecting pipe

[073]- Choose PRJ: PRJ-G-004 [Krk LNG terminal with connecting and evacuation pipelines towards Hungary and beyond]

[074]- Is this a multi-phase project? : No

[075]- Please specify if your project is suited to transport increasing percentages of hydrogen (possibly up to 100 %): Yes

[077]- Please specify if your project contributes to coal to gas switch : No

<u>Type Specific Information - Storage :</u>

Name of Project	Increment of Working Volume	Increment of Withdrawal Capacity	[106]- Increment of Injection Capacity (mcm/d)	Load	[108]-	[109]- Commissioning vear	[110]- Modelling Commissioning Year	[111]- GS
Example UGS Project		3	0	70		2026	2026	

[100]- Name of the Storage facility: Neustadt Speicher

[101]- Type of the storage facility: Depleted Field

[102]- Is this a multiple-cycle facility?: No

<u>Project of Common Interest(PCI) Label:</u>

[136]- Is your project in the current legal PCI list?: No

[138]- Do you intend to apply for PCI label in the next PCI round? : No

<u>Variant for Modelling:</u>

[156]- Variant Name	[157]- Variant Description	[158]- Considered for Modelling
Default	Default	Yes

Increments in Entry/Exit Capacity (If you do not complete this section, your project cannot be modelled):

[159]- Transportable/storable gas	[160]- Share of selected gas/ total capacity [%]

Natural gas: 100

Hydrogen:

Synthetic methane:

Biomethane:

Ξ

[161]- Operator	[162]- Point	FIOW	[164]- Status	[165]- Variant	[166]- Commissioning Year	Modelling Commissioning	[168]- Increment (GWh/d)	[169]- Peak Increment (GWh/d)	[170]- Comment
Trans- Adriatic Pipeline AG	Kipoi	entry	Operational	Default	2026	2026	18	22	
Trans- Adriatic Pipeline AG	Kipoi	exit	Operational	Default	2026	2026	28	32	

Cross Border Cost Allocation and Financial Assistance:

- [171]- Does your project have a CBCA decision by NRAs or ACER ? Select one or more :
- No, we have not submitted an investment request yet, and we do not plan to submit it
- [172]- (if option 1, 2 or 3) When the investment request was submitted/or you plan to submit it?:
- [173]- If option 1), when was the decision taken? :
- [174]- If option 1), please provide CBCA Decision Website :
- [175]- If option 1), please list the countries identified from the CBCA decision as net benefiting countries:
- [176]- If option 1), please list the countries identified from the CBCA decision as net cost bearers:
- [177]- Please provide any additional comments:
- [178]- Have you already applied for financial support from the Connecting Europe Facility (CEF):
- (3) No, we have not applied for CEF
- [179]- [If options 1) or 2) in above box list] Did your project request EU financial assistance in the form of grants for studies? : No
- [180]- Did you receive any grants for studies following your request? : Not applicable
- [181]- If yes, please indicate the amount [mil EUR]:
- [182]- If options 1) or 2) Did your project request EU financial assistance in the form of grants for works? : No
- [183]- Did you receive any grants for works following your request? : Not applicable
- [184]- If yes, please indicate the amount [mil EUR]:
- [185]- If option 3), Do you intend to apply for financial support from the Connecting Europe Facility? :

- Yes, for work only

[186]- Have you received any financial support from funding programmes other than CEF at European, regional or national level? : No

[187]- Please Provide details:

[188]- Do you plan to apply for any other type of financial assistance?: No

[190]- Please Provide any further relevant details :

Project Schedule:

[192]- Pre-Feasibility: No pre-feasibility study

[193]- Feasibility Start date: 01/10/2019

[193]- Feasibility End date: 30/09/2020

[194]- FEED Start date: 01/10/2020

[194]- FEED End date: 30/09/2021

[195]- Permitting Phase Start date: 01/10/2021

[195]- Permitting Phase End date: 31/12/2022

[196]- Supply Contracts: Not info available yet.

[197]- Expected FID date : 15/11/2021

[198]- Construction Start date: 01/07/2022

[198]- Construction End date: 30/06/2025

[199]- Project Advancement : In Progress

[200]- Comments about Project Advancement :

[202]- Date of grant obtention for studies/for works :

[203]- Comments about the schedule, including Realisation Conditions: The schedule can possibly changes depending on permitting phase and market evolution.

[204]- Compared to previous TYNDP indicate if your project is : -- Select--

[205]- Delay Explanation: :

Project Expected Impact:

[206]- Main Project Driver(s):

- Regulation SoS
- Others

[209]- Comments on the Main Project Driver: The project aims at supplying directly or indirectly at least two member states. For the reaching competition and resilience of the gas supply during winter in these countries the project is highly needed and requested.

- [210]- In line with the definition of Gasification provided in the Handbook, does your project contribute to the gasification of a country or the gasification of a specific area not reached yet by gas?: No
- [212]- Please provide your project expected benefits: Its main benefits are: Increase the flexibility of storage systems in the region competition and better market prices
- **[213]- Impacted countries and relevant information.** : Host country A. In the future it may be used to facilitating possible gas exports to Country B,
- [214]- Please indicate the number of new jobs created associated to the project, the impacted countries and provide relevant information : Around 20
- [215]- Please describe and quantify any possible positive impact of the project on climate change : N/A
- [216]- Please describe and quantify any possible negative impact of the project on climate change : $\mbox{N/A}$
- [222]- Does your Project include new digital solutions? : No
- [224]- Does your project enable the integration with the electricity, heating, water or telecommunication network? : No
- [229]- Does your project contribute to any of the following specific criteria? :
- market functioning and customer services

[231]- Gas Sourcing:

Algeria: No

Caspia/Azerbaijan: No

Libya: No

Norway: Yes

Russia: No

Israel: No

Turkey: Yes

LNG: No

LNG Country:

:

Electrolysis: No

SMR: No

Pyrolysis: No

Biogas: No

Others:

[232]- Please provide the background for the gas sources the project will be supplied with. : Currently we are working on long term contracts

[233]- Measures / Actions to reduce methane emissions :

- [234]- Does the design and construction of the project minimize the number of connections and components that commonly leak? : Yes
- [235]- Does the design and construction include measures for recapture/reuse of gas when possible (compressors, analysis equipment...)? : Yes
- [236]- Does the design and construction avoid or minimize the installation of vents (TRA and UGS only)? : Yes
- [237]- Comment. :
- [238]- Does the design and construction prioritize the use of electric, mechanical and compressed air equipment (pneumatic controllers, compressor starters)? : No
- [239]- In case that devices powered by natural gas are the best option, will lower emissions devices be used (instead of highbleed controllers)? : No
- [240]- Comment. :
- [241]- Does the design and construction foresee to install dry disconnect couplings in the LNG truck loading facilities (LNG only)? : Not applicable
- [242]- Does the design and construction consider to implement BOG recovery units to recover, compress and send the BOG to the recondenser to be converted to LNG (LNG only)? : No
- [243]- Is it planned to install automated air/fuel ratio controls? : No
- [244]- Please provide an estimation of the expected methane emissions [in kg CH4/y] once the facility has been commissioned and describe how these emissions were calculated. If not applicable, please justify. :
- [245]- Are periodic leak detection and repair (LDAR) programs for fugitive emissions planned during the start-up phase? : No
- [246]- Comment. :
- [247]- Are steps planned to reduce venting from routine maintenance repairs when pipelines and or large vessels need to be depressurized during operation? : No
- [248]- Does the operator plan to minimize the volume that has to be depressurized during venting? : Under consideration
- [249]- Does the operator plan to use pumpdowns for depressurizing pipelines and large vessels during maintenance? : Under consideration
- [250]- Does the operator plan the usage of hot-taps to make connections to pipelines? : Yes
- [251]- Is it planned to use portable compressors to avoid vents during start-up and operation? : No
- [252]- In case that venting can not be avoided will vented gases flared? : Yes

[253]- Will LNG truck loading nitro injection or dry coupling used to avoid venting (LNG only)? : Not Applicable

[254]- Are LNG terminals BOG compressors used under normal operation conditions(LNG only)? : Not Applicable

[255]- Does the operator aspires increasing the combustion efficiency of natural-gas powered engines? : Not Applicable

[256]- Does the operator aspire to minimize number of start-ups (engines, turbines and fired heaters)? : Yes

[257]- It is mandatory to keep an accurate inventory of flaring activities during start-up and operation (UGS, LNG only)? : Yes

[258]- Please list technical evidence to support the implementation of the selected mitigation measures (during engineering design, construction and start-up stages of the project)..:

[259]- Additional Mitigation measures (not included above):. :

[260]- Did Promoter(s) join/intend to join the OGMP 2.0 Reporting Framework? : Yes

[261]- if intended in the near future please give an approx. Date/Year . :

<u>Intergovernmental Agreement:</u>

[270]- Agreement Name	[271]- Signed	[272]- Date	[273]- Description	[274]- Other comments

Barriers in Implementation:

[275]- Regulatory Framework:

- Low rate of return

[277]- Permit granting:

[278]- Financing:

- Amortization rates
- Other please specify

[279]- Other Financing Barriers, please explain: Due to the characteristics to the storage business, financial institutions are not interested to support such projects.

[280]- Political: Frequent changes in legislation

[281]- Market:

- Lack of market support

[282]- Project acceptability by the local community. : Overall mood for new gas projects have turned negative in the last years. Many local demonstrations in the last months.

[283]- Technical/Technological. :

[285]- Value chain:

[286]- Other Barriers, please explain:

[287]- Which incentives would support your project implementation : Specific country incentives

[288]- Have you received additional regulatory incentives for your project :

Please upload a map of your project :