

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 :** 499

**[004]- ENTSOG Project Code :** OTH-N-499

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

**[006]- Project Name :** Example OTH Conversion for Transport and Storage of Co2

**[007]- Infrastructure Type :** OTH

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

**[009]- Project Description :** Development of an open CO2 backbone and offshore (permanent) CO2 storage with total storage capacity of ca. 37 MT (Conversion of existing infra) in the western part of the area. Closely located to City ABC. The CO2 comes from a big industry cluster which is located on the border of country A and B.

**[010]- Project Host Country :** Lithuania

**[011]- Project Status :** Planned

**[013]- Promoter Legal Personality :** Company name abc

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

**[016]- Which Company will be the commercial operator once your project is completed. :** GRTgaz

**[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 €) :** 450

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

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

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

**[028]- CAPEX Range (in %) :** 30

**[029]- Estimated OPEX (in million € per year) :** 18

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

**[032]- OPEX Range (in %) :** 30

**[033]- Name of your representative in charge of the Project submission :** Martha Yabrej

**[034]- E-mail address of your representative in charge of the Project submission :**

project@company-name.com

**[035]- Phone number of your representative in charge of the Project submission :** +32 78956324

**[036]- Project Website :**

**[037]- General Remarks :**

Administrative Criteria :

**[041]- Please select the category of the project promoter you are :** G.2 Project promoter which is a certified/exempted TSO or licensed SSO/LSO but not Member, Observer or Associated Partner of ENTSOG (including certified DSOs).

**[042]- Company Existence (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-) Feasibility study :** Yes

**[052]- Please select one of the following options :**

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

**[053]- Please provide any additional comments :**

Inclusion in NDP :

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

**[058]- If is not part of NDP, please give a reason :** (2) no NDP exists in the country

Enabler/Enhancer Projects :

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

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

Project Shareholders :

<b>[069]- Project Section</b>	<b>[070]- Shareholder Name</b>	<b>[071]- Shareholder Share</b>
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Technical Information :

**[072]- Indicate if your project is part of :** Other functional related project groups

**[073]- Choose PRJ :** PRJ-G-136 [Carbon Connect Delta]

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

Type Specific Information - Other infrastructure related projects :

**[113]- Please indicate the sub-category of project :** The conversion of natural gas network for CO2 transport or storage;

**[115]- If others, please comment :**

**[122]- Please describe the sources of CO2.** : CO2 is captured CO2 from a CCUS cluster of heavy industry (oil refinery) and two gas fired CCGTs.

**[123]- Please describe the planned usage or storage of the transported CO2.** : CO2 will be transport via an CO2 backbone and stored permanent.

Type Specific Information - Production facilities :

**[126]- Please indicate the expected efficiency and the average daily consumption of the production facility.** :

**[127]- Please indicate the expected operating mode** : --Select--

**[128]- Please indicate the grid-connection capacity to/from the production facility on hourly and daily basis.** :

**[129]- Please indicate the expected CO2 emissions (tons/MWh of the conversion)** :

Entry :

Exit :

**[131]- Please indicate the expected load factor of your project (when completed) on yearly basis** :  
0

**[132]- Please indicate the expected load factor of your project (when completed) under peak situation** : 0

Project of Common Interest(PCI) Label :

**[136]- Is your project in the current legal PCI list ?** : Yes

**[137]- PCI Name** :

**[138]- Do you intend to apply for PCI label in the next PCI round?** : Yes

**[147]- Was your project part of any other PCI Lists? If yes, please select the latest PCI list the project was part of** : --Select--

**[148]- Which criteria are fulfilled by your project ?** :

- Is located on the territory of one Member State and has a significant cross-border impact as set out in Annex IV.1

**[150]- Please justify your answer.** : Is the development of a CO2 Backbone for CO2 from Country A B.

**[152]- Which specific criteria are fulfilled by your project ?** :

- Sustainability, inter alia through reducing emissions, supporting intermittent renewable generation and enhancing deployment of renewable gas

**[154]- Please justify your answer.** : This project is aiming to reduce CO2 emissions from hard to abate sectors and so reducing greenhaus gas emissions.

**[155]- Is the project also part of the latest Energy Community PECE or PMI list?** : No

Variant for Modelling :

[156]- Variant Name	[157]- Variant Description	[158]- Considered for Modelling
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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 [%]
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Natural gas : 0

Hydrogen : 0

Synthetic methane : 0

Biomethane : 0

[161]- Operator	[162]- Point	[163]- Flow Direction	[164]- Status	[165]- Variant	[166]- Commissioning Year	[167]- Modelling Commissioning Year	[168]- Increment (GWh/d)	[169]- Peak Increment (GWh/d)	[170]- Comment
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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 have not yet decided whether we will submit or not

[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? :

[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 Start date : 01/02/2021

[192]- Pre-Feasibility End date : 15/09/2021

[193]- Feasibility Start date : 01/10/2021

[193]- Feasibility End date : 15/02/2022

[194]- FEED : Depending on feasibility study

[195]- Permitting Phase : Depending on feasibility study

[196]- Supply Contracts : Depending on feasibility study

[197]- Expected FID date : Depending on feasibility study

[198]- Construction : Depending on feasibility study

[199]- Project Advancement : In Progress

[200]- Comments about Project Advancement :

: 2026

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

[203]- Comments about the schedule, including Realisation Conditions : Currently the feasibility study is running. Depending on the results it could be possible that the commissioning year needs to be adjusted..

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

[205]- Delay Explanation: :

Project Expected Impact :

[206]- Main Project Driver(s) :

- Market Demand

- Sustainability

**[207]- Does the project contribute to any of the following :**

- Contribution to Greenhouse gas emission reductions in different end-use applications

**[209]- Comments on the Main Project Driver :** The market demand is mainly driven by big CO2 emitter like in our case by big industry clusters and the need to find solutions how to handle CO2 emissions is getting from year to year more urgent.

**[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 :** 1) The first CCUS project for this country to have a benefit in the reduction of greenhouse gas emission. 2) The possibility to import/export CO2 which can be used in different end use applications like the production of synthetic fuels.

**[213]- Impacted countries and relevant information. :** Country A and B (CO2 comes from Industry located in both countries)

**[214]- Please indicate the number of new jobs created associated to the project, the impacted countries and provide relevant information :** Currently no estimations available.

**[215]- Please describe and quantify any possible positive impact of the project on climate change :** Reduction of greenhouse gases to limit the damages caused by the global warming.

**[216]- Please describe and quantify any possible negative impact of the project on climate change :** No negative impact!

**[217]- Does your project contribute to the following: :**

- Avoid carbon dioxide emissions while maintaining security of energy supply

- Increase the resilience and security of carbon dioxide transport

- Efficient use of resources, by enabling the connection of multiple carbon dioxide sources and storage sites via common infrastructure and minimizing environmental burden and risks

**[218]- Avoid carbon dioxide emissions while maintaining security of energy supply.(Please justify).** : The security of energy supply is maintained because the two gas fired CCGTs can further produce energy in the future (in particular they are needed during Dunkelflaute times when the renewable energy production facilities in the country are not efficient) while the CO2 can not reach the atmosphere.

**[219]- Increase the resilience and security of carbon dioxide transport (Please justify).** : The project enables the import and export of CO2 which is important for the resilience as currently without the project it is difficult to import CO2 for country A. The planned infrastructure will have the highest standard and therefore the transport of CO2 is ensured and safe for the environment at any time.

**[220]- Efficient use of resources, by enabling the connection of multiple carbon dioxide sources and storage sites via common infrastructure and minimizing environmental burden and risks. (Please justify).** : CO2 comes from a big cluster so several emitter can benefit from the infrastructure. The planned infrastructure will have the highest standard and therefore the transport of CO2 is ensured and safe for the environment at any time. As we are planning to repurpose already

existing infrastructure the resources used and needed are less and the environment is not effect as heavy as when it would be a newly built infrastructure.

**[222]- Does your Project include new digital solutions? : Yes**

**[223]- Please provide details. :** Digital solution for a permanent storage and to detect even the smallest leakage..

**[224]- Does your project enable the integration with the electricity, heating, water or telecommunication network? : Yes**

**[225]- Please provide details. :** Integration to the electricity sector as the CO2 will also come from gas fired CCGTs.

**[229]- Does your project contribute to any of the following specific criteria? :**

- market functioning and customer services
- facilitating smart energy sector integration through the creation of links to other energy carriers and sectors and enabling demand response

**[231]- Gas Sourcing :**

**Algeria : No**

**Caspia/Azerbaijan : No**

**Libya : No**

**Norway : No**

**Russia : No**

**Israel : No**

**Turkey : No**

**LNG : No**

**LNG Country :**

**:**

**Electrolysis : No**

**SMR : No**

**Pyrolysis : No**

**Biogas : No**

**Others : CO2**

**[232]- Please provide the background for the gas sources the project will be supplied with. :** CO2 from Industry Cluster in Country A and B.

**Intergovernmental Agreement :**

<b>[270]- Agreement Name</b>	<b>[271]- Signed</b>	<b>[272]- Date</b>	<b>[273]- Description</b>	<b>[274]- Other comments</b>
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**Barriers in Implementation :**

**[275]- Regulatory Framework :**

- Lack of proper transposition of EU regulation
- Unclear role of TSO's on ownership and operation of intended project

**[277]- Permit granting :**

**[278]- Financing :**

**[280]- Political :**

**[281]- Market :**

**[282]- Project acceptability by the local community. :**

**[283]- Technical/Technological. :**

**[285]- Value chain :**

**[286]- Other Barriers, please explain :**

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

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

**Please upload a map of your project :**