



DRAFT GUIDELINES FOR PROJECT INCLUSION (GPI)

TEN-YEAR NETWORK
DEVELOPMENT PLAN (TYNDP)
2024



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1 Introduction

The present document provides guidance to the project promoters on the procedural steps as well as administrative and technical requirements that the project promoters need to comply with to have their projects included in the Union-wide ten-year network development plan ("TYNDP") 2024. ENTSOG shall adopt the TYNDP every two years pursuant to Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 (hereafter "Regulation 715/2009").1

In line with current Regulation (EC) No 869/2022 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013 (hereafter "Regulation 869/2022" or "TEN-E Regulation")², the present document is addressed to all project promoters which are planning to develop projects of European relevance.

The TYNDP 2024 will provide a dual assessment of interlinked methane and hydrogen systems in continuity of the TYNDP 2022, together with a hydrogen-electricity assessment in order to capture the interactions between the hydrogen and electricity sectors as stated in ENTSOG draft CBA methodology for hydrogen infrastructure³.

Project promoters can submit projects of the following project categories:

- Natural Gas
- Hydrogen
- Smart Gas Grid
- Other

Each category contains subcategories such as transmission, liquified gas terminals, storages, production equipment etc.

The TYNDP 2024 is designed to offer a view of the future gas and hydrogen infrastructure evolution. The aim of the TYNDP 2024 is to depict projects that bring benefits to the European society beyond an exclusive eligibility assessment of projects for the status of a project of common interest (hereafter "PCI") or project of mutual interest (hereafter "PMI"). For this reason, promoters can submit to the TYNDP, on a voluntarily basis, also production facilities

06/Draft%20ENTSOG%20CBA%20Methodology June%202023.pdf

¹ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009R0715&from=EN

² https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R0869&qid=1692694273815

³ https://www.entsog.eu/sites/default/files/2023-



(such as electrolysers), as well as natural gas projects needed to ensure security of supply and reduce dependence of Russian gas.

However, these submissions to ENTSOG's TYNDP do not automatically mean that they are eligible to apply to the European Commission for a PCI or PMI status. Due to Annex III.2(4) of the TEN-E Regulation, from 1 January 2024 hydrogen projects of the categories listed in Annex II(3) of the TEN-E Regulation with the intention to apply for the PCI/PMI selection process must be part of the latest available TYNDP. Therefore, promoters that are intending their projects to be eligible for the next PCI/PMI selection round must submit their project for ENTSOG's TYNDP 2024. The TEN-E Regulation does not require electrolyser projects and smart gas grid projects to be part of the TYNDP in order to be eligible for PCI or PMI status. As part of its TYNDP, ENTSOG ensures project-specific cost benefit analyses (hereafter "PS-CBA") only for projects applying for the PCI or PMI status as summarized in the figure below. It is only valid for projects falling under Annex II(3) of the TEN-E Regulation. A PS-CBA may also be performed for other project categories like electrolysers depending on the concrete development of the PCI/PMI process. Therefore, electrolyser project promoters are advised to also submit their projects.

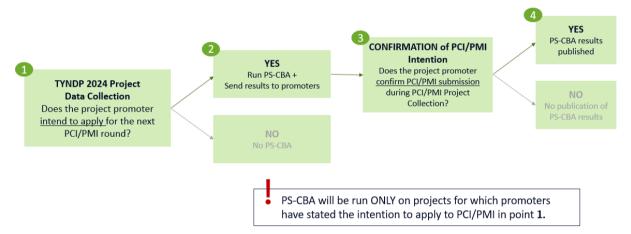


Figure 1: Flow-diagram summarizing interactions between TYNDP, PS-CBA, and PCI/PMI interactions.

The Guidelines for Project Inclusion document for the TYNDP 2024 (hereafter "GPI") represents the "updated guidelines for inclusion of projects" stipulated in Annex III.2(5) of the TEN-E Regulation. Previously, the GPI⁴ was based on the legally non-binding "Commission Recommendation on Guidelines on equal treatment and transparency criteria to be applied by ENTSO-E and ENTSOG when developing their TYNDPs as set out in Annex III.2(5) of Regulation (EU) No 347/2013" adopted by the European Commission (EC) on 24 July 2018.⁵ In

⁴ Document for ENTSOG's TYNDP 2022 for information: https://www.entsog.eu/sites/default/files/2021-09/TYNDP0075-21 TYNDP 2022 PID FINAL.pdf

⁵ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0727(01)



the revised TEN-E Regulation, no such EC guidelines are foreseen. Instead, the draft GPI shall be consulted with ACER and the EC and their recommendations taken due account of before the publication of the final GPI. However, this GPI's structure is still based on the mentioned Commission Recommendation from 24 July 2018 in a way that is compliant with the revised TEN-E Regulation. Project promoters are advised to read the GPI so that they understand the:

- Type of applicant the project promoter is;
- Administrative and technical criteria the promoters and their projects will be required to meet;
- Documents and information they will be required to submit to fulfil the criteria;
- Use and circulation of the information submitted, and;
- Other use of information regarding their application, including useful contact details.

The GPI thereby fulfils the requirement of subparagraph 1 of Annex III.2(5) of the TEN-E Regulation to ensure equal treatment and transparency of the TYNDP project inclusion process.

The draft TYNDP 2024 GPI undergoes a stakeholder consultation process until 29 September, and this consultation includes dedicated stakeholders' webinars on 12 September and 19 September 2023. These webinars aim to introduce the draft GPI and to allow for stakeholders' feedback to finalise the document by beginning of October 2023. A similar and parallel process allows for EC and ACER feedback during September 2023. The EC and ACER were provided with the draft GPI and requested to provide comments within three weeks. ENTSOG's due consideration of EC's and ACER's inputs, is satisfying the legal requirement of subparagraph 2 of Annex III.2(5) of the TEN-E Regulation.

Due to sentence 2 of subparagraph 1 of Annex III.2(5) of the TEN-E Regulation, the GPI shall furthermore establish a simplified process of inclusion in the TYNDP for all projects on the Union list in force at the time. This simplification shall take into account the documentation and data already submitted during the previous TYNDP process, provided that the documentation and data already submitted remains valid. The Union list is the joint list of PCIs and PMIs (see Recital (20) and Art. 3(5) of the TEN-E Regulation). For the TYNDP 2024, the consultation of such simplification as part of the draft GPI is not possible, since the GPI is established before the anticipated date of the adoption of the delegated act establishing the Union list. Instead, all projects that were part of ENTSOG's previous TYNDP will benefit from certain simplifications described in the next section.

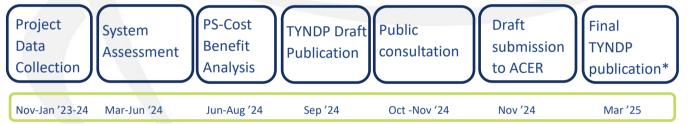


2 TYNDP process

In order to ensure greater transparency regarding the development of the hydrogen and natural gas sectors in the EU, ENTSOG shall draw up, publish and regularly update a non-binding TYNDP.

The TYNDP is a biennial plan built upon national and regional development plans as well as planned developments at a European scale. It aims at developing a European supply adequacy outlook and assessment of the resilience of the hydrogen and natural gas systems, including identification of the infrastructure gaps by identifying where missing infrastructure prevents achieving the fulfilment of the Union's 2030 climate and energy targets and its 2050 climate neutrality objective. Furthermore, the TYNDP assesses how the submitted projects contribute to the improvement of the European hydrogen and natural gas systems, mitigating the identified infrastructure gaps.

The TYNDP process is represented in a schematic way in Figure 2 below. The TYNDP 2024 indicative timeline was valid at the date the GPI was uploaded on ENTSOG website.



^{*} Draft and final publication will also depend on the engagement with external stakeholders.

Figure 2: Phases and expected timeline of the TYNDP 2024 development.

Project promoters will have to submit their project applications within a particular data collection window of minimum 4 weeks which will be advertised/communicated by ENTSOG in due time. ENTSOG will consider these applications and their compliance with the criteria set out in section 3 below.

The submission of projects will be done by promoters through an online tool operated by ENTSOG, when the data collection window is open. For accessing the data collection portal, each promoter needs to have valid credentials provided by ENTSOG on request. New project promoters should request the credentials from ENTSOG. Project promoters are recommended



to ask for new credentials well in advance and not later than one week before the opening of the TYNDP 2024 Project Data Collection Process⁶.

The TYNDP 2024 Project Data Collection Process is supported by an information package which will be made available to the project promoters in due time. As part of this information package, ENTSOG will make available to project promoters the updated Data Portal Handbook and supporting documents.

Promoters of projects already included in the previous TYNDP and having the intention to be part of the TYNDP under preparation shall officially make a new re-submission for inclusion in the new TYNDP. However, the inclusion of such a project will benefit from a simplified application process for the current TYNDP in the form of a pre-filled questionnaire with the latest available data, where applicable.

The validation window follows the data collection window and takes approximately 4 weeks. During this window, the ENTSOG staff will check the submitted projects, and where necessary will contact the relevant project promoters for clarifications.

Within 3 months after the close of the validation phase, ENTSOG will make public on its website the list of projects accepted for inclusion in the TYNDP. In advance of the TYNDP project list's publication, ENTSOG informs and justifies to the relevant promoters about any rejection of their project(s) from inclusion in the TYNDP.

⁶ Details regarding data collection submission process and contacts will be published as part of the Annex 3 to this document (ENTSOG TYNDP Project Submission Handbook). In addition, for any questions or clarifications regarding TYNDP 2024 GPI please refer to the contact details included in Annex 2 of this document.



3 Criteria to be fulfilled to allow a project to be part of the TYNDP 2024

This chapter includes the administrative and technical criteria that each candidate project of European relevance shall fulfil in order to be included in the TYNDP 2024.

Failure to provide the necessary information to meet the administrative and technical criteria within the TYNDP 2024 Project Data Collection phase, will result in the project not being included in the TYNDP 2024. The administrative and technical criteria below are grouped based on the type of the promoter, the type of the project and the maturity of the project.

A TYNDP project promoter of natural gas, hydrogen or smart gas grid infrastructure projects can fall under the following categories:

- **A.** Company which is a Member, Observer or Associated Partner of ENTSOG or an entity being a partner of the company in the same project⁷ or having a shareholding relation with this company⁸.
- **B.** Company which is a licensed SSO, LSO, DSO but not Member, Observer or Associated Partner of ENTSOG or TSO, which is certified or exempted from unbundling⁹ but not Member, Observer or Associated Partner of ENTSOG.
- **C.** Any other company (including Governmental Bodies at national level).

3.1. Head categories

TYNDP projects are divided into four head categories: natural gas, pure hydrogen¹⁰, other renewable gases, and others. Each head category is divided into different sub-categories. The number of subcategories varies depending on the specific needs of the infrastructure type.

3.1.1 Natural Gas

The natural gas category is composed of three sub-categories:

- Gas transmission pipelines (TRA)
- Underground storage facilities (UGS)
- Reception and storage and regasification or decompression facilities for liquefied natural gas (LNG)

⁷ For the purpose of this document, a partner is the entity that formally associated with the company which is Member, Observer or Associated Partner of ENTSOG in developing the project submitted for TYNDP 2022.

⁸ For the purpose of this document, a shareholding relation means that the company which is Member, Observer or Associated Partner of ENTSOG has shares in an entity or the other way round, OR the company and the entity belong to the same corporate group.

⁹ In line with the Directive 2009/73/EC and Regulation (EC) No 715/2009

¹⁰ "Pure hydrogen" also covers "high-purity hydrogen" for the purpose of this document.



Projects of the natural gas category are not eligible for PCI or PMI status under revised TEN-E. All project types of the natural gas category can have an impact on the TYNDP assessments.

3.1.2 Hydrogen

The hydrogen category is composed of six sub-categories:

- Hydrogen transmission pipelines (H2T)
- Hydrogen storage facilities (H2S)
- Hydrogen reception facilities (H2L)
- Hydrogen export facilities (H2X)
- Hydrogen in the transport sector for mobility (H2M)
- Electrolysers for hydrogen production (H2E)
- Hydrogen production from natural gas (H2P)

Projects falling under the sub-categories H2T, H2S, H2L, and H2M are defined in the TEN-E Regulation as potential PCI candidates that are covered by ENTSOG's CBA methodology and must be part of the TYNDP. Regarding PMI candidates, this is also true for the H2T sub-category. Projects falling under the sub-category H2E are potential PCI candidates that are not covered by ENTSOG's CBA methodology.

Projects falling under the sub-categories H2X and H2P are not eligible for PCI or PMI status.

All project types of the hydrogen category can have an impact on the TYNDP assessments.

3.1.3 Smart Gas Grid

The smart gas grid category is composed of three sub-categories:

- Projects for retrofitting infrastructure to further integrate hydrogen (RET)
- Biomethane development projects (BIO)
- Synthetic methane projects (SYN)

Smart Gas Grid projects are defined in the TEN-E Regulation as potential PCI candidates that are not covered by ENTSOG's CBA methodology.

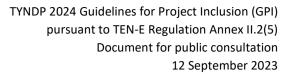
3.1.4 Others

This category is composed of two sub-categories:

- Repurposing of natural gas infrastructure for CO2 transport and/or storage (CO2)
- Other infrastructure related projects (OTH)

While CO2 infrastructure is a potential PCI category in the TEN-E Regulation, the respective PCI selection process is not related to the ENTSOG's TYNDP 2024. OTH projects do not affect the TYNDP modelling.

3.2. Administrative Criteria





See below the administrative criteria a project needs to fulfil for the inclusion in TYNDP 2024.

The following table shows the list of administrative pass-fail criteria. All criteria must be fulfilled.

No	Criteria	Promoter A + B + C
1	Company existence (all)	The project promoter shall be a registered undertaking or a subsidiary of a registered undertaking. The company has to be in existence for at least 1 year before the date of submission (except for projects "Under consideration" 11).
2	Financial strength	The assets of the undertaking or its shareholders shall amount to at least 1 million
	(all)	EUR.
3	Technical expertise (all)	The project promoter has the technical expertise to realize the project by its own or by using subcontractors.

There are administrative criteria applicable for all projects while some specific criteria are applicable only for projects "under consideration" (UC).

The status "under consideration" has been created for the purposes of this document and therefore shall be interpreted as different compared to the project status described in the CBA Methodology and used in the TYNDP to derive the so-called Infrastructure Levels. Please refer to section 5 for the definition of the project status.

The following table shows a list of alternative administrative criteria. **At least one criterion must be fulfilled**.

In case more than one criterion applies to a given project, promoters shall indicate this information in their project submission.

No	Criteria	Promoter A + B + C
4	PCI/PMI (all)	The project is a PCI/PMI on the latest available Union list in force or adopted as a delegated act.
5	FID (all)	The final investment decision (hereafter "FID") has been taken for the project.
6	National plan (all)	Inclusion in the latest available national Network Development Plan (hereafter "NDP") or national/governmental strategy or national law.

¹¹ Promoters of projects "under consideration" may be recently established companies. Therefore, in order to allow also such projects to be submitted to the TYNDP, the promoters can be in existence for less than 1 year. This applies to all types of projects.

¹² For the purpose of this document, a project "under consideration" is a project at an early stage and which has not completed the phase of a (pre)-feasibility study.



7	IPCEI (all)	The project is included in the Important Projects of Common
		European Interest (hereafter "IPCEI") list approved by the EC. ¹³
8	Market test (all)	The project has completed a market consultation process.
9	(Pre-)Feasibility study (all)	Completed (pre-)feasibility study for the project.
10	Agreement with the Member State	Project shall have a signed agreement with the competent
	(MS) / National Regulatory	ministries or regulators or a letter of support from
	Authority (NRA) (UC)	the competent ministries or national regulatory authorities.
11	TSO agreement (TSO) (UC)	Signed Agreement with the concerned TSO(s) regarding the
		development of the submitted project.

¹³ In case the decision for inclusion of the project on the IPCEI list has not been taken at the moment of the project submission for TYNDP, the promoter shall inform ENTSOG about this aspect and ENTSOG will decide if the mere application for such a label is sufficient to meet the IPCEI criterion.



3.3. Technical Criteria

The following table shows the list of technical pass-fail criteria. All must be fulfilled by the submission deadline. All information must be provided in English language. The project promoter must provide all required information through the specific on-line tool (hereafter "ENTSOG Data Portal").

3.1.5 Natural Gas

3.3.1.1. Gas transmission pipelines (TRA)

No	Criteria	Promoter A + B + C	Required information:
1	Technical description	The project shall be a gas transmission pipeline with the purpose to transmit gas to/from an interconnection point ¹⁴ or be an enabler ¹⁵ or enhancer ¹⁶ of a pipeline with the purpose to transmit gas, to/from an interconnection point; This category includes also any equipment or installation essential for the development of above mentioned infrastructure and for the system to operate safely, securely and efficiently or to enable bidirectional capacity including compressor stations.	A brief technical description of the project Identification of the main investment item(s) Identification of the additional investment item(s)

¹⁴ For the purpose of this document, the interconnection point can be physical or virtual. As per the Regulation 2017/459 'Interconnection point' (IP) means a physical or virtual point connecting adjacent entry-exit systems or connecting an entry-exit system with an interconnector, in so far as these points are subject to booking procedures by network users; In addition to IPs as defined in Regulation 2017/459 ENTSOG, for the purpose of TYNDP simulations, ENTSOG can also consider the creation of IPs which are not subject to booking procedures by network users but serve only for simulation purposes. Such IPs are created only upon request of all concerned promoters.

¹⁵ Enabler is a project which is indispensable for the realisation of the main project in order for the later to start operating and show any benefit. The enabler itself might or not bring any direct capacity increment at any IP.

¹⁶ Enhancer is a project that would allow the main project to operate at a higher rate than when main project operates on its own basis, increasing the benefits stemming from the realisation of the main investment. An enhancer, unlike an enabler, is not strictly required for the realisation of the main project.



2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP or countries hosting gas "supply chain" projects bringing additional gas sources to EU border. ¹⁷	Location of the project on the ENTSOG map
3	Project data	Estimated technical capacity increase at an interconnection point or at any point within the national transmission system generated by the project, as well as the main technical parameters, expected commissioning date(s), project schedule, and costs of the main and additional investments conforming the project shall be provided. In addition, the capacity increment of the project shall not be 0 after the application of the lesser-of rule ¹⁸ . ENTSOG shall make sure that all operators affected are informed and can confirm the capacity increment at the point to apply the lesser-of rule. Projects proposing a capacity increment at a certain IP are usually promoted by the owner Operator ¹⁹ , the adjacent Operator ²⁰ at the IP which has been indicated by the owner TSO in the Point Creation Request Form, or a subsidiary of these Operators. In case a potential promoter does not belong to one of the aforementioned categories, this particular promoter must have the written consent ²¹ of the owner Operator and the adjacent Operator in order to submit the project for TYNDP.	 Minimum required project information: Nominal pipeline diameter (mm) Maximum operating pressure (bar) Pipeline length (km) Compressor power (MW) Additional technical capacity per IP and year (GWh/d) Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline Relationship with other project(s) (enabler, enhancer, or competing)

¹⁷ This covers the EU-27 countries as well as the United Kingdom, Switzerland, Bosnia and Herzegovina, Serbia, Republic of North Macedonia, Ukraine, Norway, Turkey, and North Africa.

¹⁸ Example of the lesser-of rule: If at an IP between country A and country B the exit capacity from country A does not match the entry capacity into country B, the smaller of both capacity values is applied to the exit capacity from country A and the entry capacity into country B at this IP.

¹⁹ For the purpose of this document, owner TSO is the entity that requested the creation of the IP in the ENTSOG IT System.

²⁰ Adjacent TSO is the operator with which the interconnection point is connected. The adjacent TSO is indicated by the owner TSO in the Point Creation Request Form.

²¹ Informal consents (such as e-mails) are also accepted.



			Costs of the different investment item(s) of the project (CAPEX ²² and OPEX ²³) The detail of this data submission is included in the TYNDP 2024 Project data collection handbook (Annex 3). ²⁴
4	Relevant authority non- binding consent	A project which is not included in the latest NDP shall have the consent of the relevant authority ²⁵ . In case the project is built on several countries (e.g., an interconnection project), the project shall have the consent of at least one of the relevant authorities.	Signed agreement with the competent ministries or regulators or a letter of support from at least one of the competent ministries or national regulatory authorities (hereafter "NRA").

²² Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the natural gas infrastructure. This should consider the costs of both off-shore and on-shore infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

²³ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

²⁴ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.

²⁵ This condition applies only to promoters with a legal obligation to submit projects to a national competent authority.



3.3.1.2. Underground storage facilities (UGS)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall be a new natural gas storage facility or an upgrade of an existing natural gas storage used for storing natural gas in underground reservoirs (depleted gas fields, salt caverns or aquifer) under pressure, to be connected to a natural gas transmission pipeline as defined in section 3.3.1.1.	A brief technical description of the project including storage type. Identification of the main investment item(s) Identification of the additional investment item(s)
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data	Estimated technical injection and withdrawal capacity increment at the interconnection point of the storage with the national transmission system, the main technical parameter(s), expected commissioning date(s), project schedule, and costs of the main and additional investments conforming the project shall be provided. The detail of this data is included in the TYNDP Project data collection handbook. In addition, the capacity increment of the project at an interconnection point, or at any point within the national transmission system, shall not be 0 after the application of the lesser-of rule. ENTSOG shall make sure that all Operators affected are informed and can confirm the capacity increment at the point to apply the lesser-of rule. Projects proposing a capacity increment at a certain IP are usually promoted by the owner Operator ²⁶ , the adjacent Operator ²⁷ at the IP which has been indicated by the owner TSO in the Point Creation Request Form, or a subsidiary of these Operators. In case a potential promoter does not belong to one of the aforementioned categories, this	 Minimum required project information: Maximum injection rate (GWh/d) Maximum withdrawal rate (GWh/d) Compressor power (MW) Working gas volume (GWh) Geometrical volume (m³) Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline

²⁶ For the purpose of this document, owner TSO is the entity who requested the creation of the interconnection point in the ENTSOG IT System.

²⁷ Adjacent TSO is the operator with which the interconnection point is connected. The adjacent TSO is indicated by the owner TSO in the Point Creation Request Form.



		particular promoter must have the written consent ²⁸ of the Owner Operator and the adjacent Operator in order to submit the project for TYNDP.	 Costs of the different investment item(s) of the project (CAPEX²⁹ and OPEX³⁰) The details of this data submission are included in the TYNDP 2024 Project data collection handbook (Annex 3). ³¹
4	Relevant authority non-binding consent	A project which is not included in the latest NDP shall have the consent of the relevant authority ³² . In case the project is built in several countries (e.g., an interconnection project), the project shall have the consent of at least one of the relevant authorities.	Signed agreement with the competent ministry(ies) or regulator(s) or a letter of support from at least one of the competent ministries or national regulatory authorities.

²⁸ Informal consents (such as e-mails) are also accepted.

²⁹ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the natural gas infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

³⁰ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

³¹ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.

³² This condition applies only to promoters with a legal obligation to submit projects to a national competent authority.



3.3.1.3. Reception and storage and regasification facilities for liquefied natural gas (LNG)

No	Criteria	Promoter A + B + C	Required information:
1	Technical description (all)	The project shall be a new LNG terminal or an upgrade of an existing terminal and be connected to a gas transmission pipeline as defined in section 3.3.1.1 .	A brief technical description of the project Identification of the main investment item(s) Identification of the additional investment item(s)
2	Location (all)	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	Estimated technical capacity increase at the interconnection point of the LNG terminal with the national transmission system, the main technical parameters, expected commissioning date(s) and costs of the main and additional investments conforming the project shall be provided. The details of this data submission are included in the TYNDP Project data collection handbook. In addition, the capacity increment of the project at an interconnection point, or at any point within the national transmission system, shall not be 0 after the application of the lesser-of rule. ENTSOG shall make sure that all Operators affected are informed and can confirm the capacity increment at the point to apply the lesser-of rule. Projects proposing a capacity increment at a certain IP are usually promoted by the owner Operator ³³ , the adjacent Operator ³⁴ at the IP which has been indicated by the owner TSO in the Point Creation Request Form, or a subsidiary of these Operators. In case a potential promoter does not belong to one of the aforementioned categories,	 Minimum required project information: LNG import capacity (GWh/d) Injection capacity into the transmission network (GWh/d) Storage capacity (m³ LNG) Date of commissioning and status of the different investment item(s) of the project and justification of timeline

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³³ For the purpose of this document, owner TSO is the entity who requested the creation of the interconnection point in the ENTSOG IT System.

³⁴ Adjacent TSO is the operator with which the interconnection point is connected. The adjacent TSO is indicated by the owner TSO in the Point Creation Request Form.



		this particular promoter must have the written consent ³⁵ of the Owner Operator and the adjacent Operator in order to submit the project for TYNDP.	 Costs of the different investment item(s) of the project (CAPEX³⁶ and OPEX³⁷) The details of this data submission are included in the TYNDP 2024 Project data collection handbook³⁸.
4	Relevant authority non- binding consent	A project which is not included in the latest NDP shall have the consent of the relevant authority ³⁹ . In case the project is built in several countries, the project shall have the consent of at least one of the relevant authorities.	Signed agreement with the competent ministry(ies) or regulator(s) or a letter of support from at least one of the competent ministries or national regulatory authorities.

³⁵ Informal consents (such as e-mails) are also accepted.

³⁶ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the liquified natural gas infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

³⁷ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

³⁸ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.

³⁹ This condition applies only to promoters with a legal obligation to submit projects to a national competent authority.



3.1.6 Hydrogen

3.3.1.4. Hydrogen transmission pipelines (H2T)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall represent one or a combination of the following cases:	A brief technical description of the project (including type of hydrogen pipeline new/repurposed/combination of new and repurposed)
		 The repurposing of existing natural gas pipelines for hydrogen use; The construction of on- or offshore pipelines to enable the transport of pure hydrogen; Any equipment or installation essential for the hydrogen system to operate safely, securely and efficiently or to enable bi-directional capacity, including compressor stations, related to hydrogen transmission pipelines; 	Identification of the main investment item(s) Identification of the additional investment item(s)
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	Promoters shall provide estimated technical capacity changes at interconnection point(s) generated by the project in the hydrogen system. Regarding hydrogen transmission pipelines repurposed from natural gas infrastructure, the expected capacity decrease in the natural gas network shall also be provided, including the identification of the relevant natural gas interconnection point(s) with expected capacity decrease.	 Minimum required project information: Nominal pipeline diameter (mm) Maximum operating pressure (bar) Pipeline length (km) Compressor power (MW)



In addition, the main technical parameters, expected commissioning date(s) and costs of the main and additional investments conforming the project must be provided.

The detail of this data is included in the TYNDP Project data collection handbook.

Note: In case the subcategory defined above enables transport of hydrogen production or supply of demand (restricted to scenario values at country level), this shall be indicated in the project description and related data shall also be provided. In case several operators make use of this option in one country, an alignment may be necessary during the data check phase. Relevant data includes:

- Estimated technical capacity per IP and year (GWh/d), including connections to enabled hydrogen production and/or demand and relevant data
- Relationship with other project(s) (enabler⁴⁰, enhancer⁴¹, or competing)
- Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline
- Costs of the different investment item(s) of the project (CAPEX⁴² and OPEX⁴³)

The details of this data submission are included in the TYNDP 2024 Project data collection handbook⁴⁴.

⁴⁰ Enabler is a project which is indispensable for the realisation of the main project in order for the later to start operating and show any benefit. The enabler itself might or not bring any direct capacity increment at any IP.

⁴¹ Enhancer is a project that would allow the main project to operate at a higher rate than when main project operates on its own basis, increasing the benefits stemming from the realisation of the main investment. An enhancer, unlike an enabler, is not strictly required for the realisation of the main project.

⁴² Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the hydrogen infrastructure. This should consider the costs of both off-shore and on-shore infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

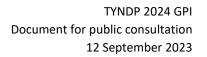
⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁴³ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

⁴⁴ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.



- Identification of IPs
- Entry and exit capacities (e.g. from a production node to a consumption node)
 Type and size of directly connected production (fixed at TYNDP scenario values at country level)
 Grey hydrogen
 Blue hydrogen
 Electrolysis with electricity from dedicated renewables
 Electrolysis with electricity from the electricity grid. In this case indication of the relevant electricity bidding zone.
- Type and size of directly connected demand (fixed at TYNDP scenario values at country level)
 If it contains hydrogen demand for the production of electricity, the relevant electricity bidding zone must be identified.





3.3.1.5. Hydrogen storage facilities (H2S)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall represent one or a combination of the following cases:	A brief technical description of the project (including type of hydrogen storage)
		- The repurposing of existing natural gas storage(s) to enable the storage of pure hydrogen;	Identification of the main investment item(s) Identification of the additional investment item(s)
		- The construction of storages to enable the storage of pure hydrogen;	
		- Any equipment or installation essential for the hydrogen system to operate safely, securely and efficiently or to enable bi-directional capacity, including compressor stations, related to hydrogen storage facilities;	
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	Promoters shall provide estimated technical injection and withdrawal capacity increases at the interconnection point(s) of the storage with the hydrogen transmission system. Regarding hydrogen storages repurposed from natural gas infrastructure, the expected capacity decrease (if any) in the natural gas network shall also be provided, including the identification of the relevant natural gas interconnection point(s) with expected capacity decrease.	 Minimum required project information: IP of connection with the hydrogen grid Maximum injection rate into the storage (GWh/d) Maximum withdrawal rate from the storage (GWh/d) Compressor power (MW) Working gas volume (GWh) Geometrical volume (m³) Date of commissioning and status of the different investment item(s) of the project and justification of timeline



	In addition, the main technical parameters, expected commissioning date(s), and costs of the main and additional investments conforming the project must be provided.	- Costs of the different investment item(s) of the project (CAPEX and)
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3.3.1.6. Hydrogen reception facilities (H2L)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall be one or a combination of the following cases: - The repurposing of an existing LNG terminal into a liquefied hydrogen terminal including hydrogen embedded in other chemical substances with the objective of injecting the hydrogen into the grid ⁴⁸ ;	A brief technical description of the project (including terminal type) Identification of the main investment item(s) Identification of the additional investment item(s)

⁴⁵ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the hydrogen infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁴⁶ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

⁴⁷ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.

⁴⁸ Examples: Ammonia import terminals with crackers; liquefied hydrogen import terminals with regasification; compressed hydrogen import terminals with decompression; LOHC import terminals with hydrogen unloading.



		 New liquefied hydrogen terminal incl. hydrogen embedded in other chemical substances with the objective of injecting the hydrogen into the grid⁴⁹; Any equipment or installation essential for the hydrogen system to operate safely, securely and efficiently or to enable bi-directional capacity, including compressor stations, related to hydrogen reception facilities. 	
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	Promoters shall provide technical capacity increases at the interconnection point of the terminal with the hydrogen transmission system. Regarding hydrogen reception terminals repurposed from natural gas infrastructure, the expected capacity decrease (if any) in the natural gas network shall also be provided, including the identification of the relevant natural gas interconnection point(s) with expected capacity decrease. In addition, the main technical parameters, expected commissioning date(s) and costs of the main and additional investments conforming the project must be provided.	 Minimum required project information: IP of connection with the hydrogen grid Hydrogen import capacity (GWh/d) Average efficiency of producing gaseous hydrogen from the imported energy carrier and injecting it into the hydrogen transmission system (%) Injection capacity into the hydrogen transmission system (GWh/d), if applicable (i) along the year and (ii) during high demand situations Storage capacity (GWh) Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline

⁴⁹ Examples: Ammonia import terminals with crackers; liquefied hydrogen import terminals with regasification; compressed hydrogen import terminals with decompression; LOHC import terminals with hydrogen unloading.



	 Costs of the different investment item(s) of the project (CAPEX⁵⁰ and OPEX⁵¹)
	The details of this data submission are included in the TYNDP 2024 Project data collection handbook ⁵² .

3.3.1.7. Hydrogen export facilities (H2X)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall be a terminal dedicated hydrogen export terminal ⁵³ that is meant to export hydrogen to a European hydrogen reception facility.	, , , , , , , , , , , , , , , , , , , ,
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map

⁵⁰ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the hydrogen infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁵¹ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

⁵² The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.

⁵³ Examples: Ammonia production and export terminals; hydrogen liquefaction and export terminals; hydrogen compression and export terminals; LOHC loading and export terminals.



Project data (all) Promoters shall provide technical capacity increases interconnection point of the terminal with the hy transmission system. In addition, the main technical para expected commissioning date(s) and costs of the main additional investments conforming the project might provided.	ydrogen ameters, ain and

Minimum required project information:

- IP of connection with the hydrogen grid or hydrogen production facility
- Exit capacity from the hydrogen transmission system into the terminal (GWh/d), if applicable
- Average efficiency of producing the exported energy carrier (%)
- Production and export capacity of the exported energy carrier (GWh/d)
- Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline
- Costs of the different investment item(s) of the project (CAPEX⁵⁴ and OPEX⁵⁵)

The details of this data submission are included in the TYNDP 2024 Project data collection handbook ⁵⁶.

⁵⁴ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the hydrogen infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁵⁵ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

⁵⁶ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.





3.3.1.8. Hydrogen in the transport sector for mobility (H2M)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall represent one or a combination of the following cases: - New infrastructure to enable the use of hydrogen for the mobility in the transport sector (incl. road, railway, aviation, and maritime transport); - Any equipment or installation essential for the hydrogen system to operate safely, securely and efficiently, related to hydrogen in the transport sector for mobility;	A brief technical description of the project Identification of the main investment item(s) Identification of the additional investment item(s)
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	Promoters shall provide the estimated capacities of the project and the relevant interconnection point(s) with the hydrogen system. Regarding hydrogen mobility infrastructure repurposed from natural gas infrastructure, the expected capacity decrease (if any) in the natural gas network shall also be provided, including the identification of the relevant natural gas interconnection point(s) with expected capacity decrease. In addition, the main technical parameters, expected commissioning date(s), estimated project schedule and costs of the main and additional investments conforming the project must be provided.	 Minimum required project data: IP of connection with the hydrogen grid Exit capacity from hydrogen grid (GWh/d) Expected hydrogen demand (GWh/d) and sub-sectorial identification of demand (aviation, maritime transportation, rail transportation, road transportation heavy/light) Storage capacity (GWh), if applicable Replaced fuel assumptions (fuel(s) and corresponding composition share (%)) Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline



	 Costs of the different investment item(s) of the project (CAPEX⁵⁷ and OPEX⁵⁸)
	The details of this data submission are included in the TYNDP 2024 Project data collection handbook ⁵⁹ .

3.3.1.9. Electrolysers for hydrogen production (H2E)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall be an electrolyser aiming to produce hydrogen from electricity from dedicated renewable electricity production or from electricity from the electricity grid.	A brief technical description of the project Identification of the main investment item(s) Identification of the additional investment item(s)
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map

⁵⁷ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the hydrogen infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁵⁸ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

⁵⁹ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.



3	Project data (all)	Promoters shall provide estimated capacity of the project and the relevant interconnection point(s) of the hydrogen system and the electricity system.	 Minimum required project data: IP of connection with the hydrogen grid Electrolyser capacity (MWel)
		For TYNDP modelling, the sum of electrolyser capacities within a country are fixed at the value established by the TYNDP scenario building process. In addition, the main technical parameters, expected commissioning date(s), project schedule and costs of the main and additional investments conforming the project must be provided.	 Entry capacity into the hydrogen grid (GWh/d) Connection to dedicated renewables or electricity grid If connected to the electricity grid: Connected electricity bidding zone

3.3.1.10. Hydrogen production from natural gas (H2P)

No Criteria Promoter A + B + C Required information

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⁶⁰ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the hydrogen infrastructure. This should consider the costs of both off-shore and on-shore infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁶¹ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc



9	Technical description	The project shall be a natural gas-based hydrogen production facility (e.g., through steam methane reforming (hereafter "SMR"), autothermal reforming (hereafter "ATR"), or natural gas decomposition (hereafter "NGD") technologies) and may be in combination with carbon capture and storage (CC(U)S).	A brief technical description of the project Identification of the main investment item(s) Identification of the additional investment item(s)
10	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
11	Project data (all)	Promoters shall provide the relevant capacity changes and interconnection point(s) in the natural gas system as well as in the hydrogen system. For TYNDP modelling, the sum of grey and blue hydrogen production capacities within a country are fixed at the value established by the TYNDP scenario building process. In addition, the main technical parameters, expected commissioning date(s), project schedule and costs of the main and additional investments conforming the project must be provided.	 Minimum required project data: IP of connection with the hydrogen grid Maximum exit capacity from the natural gas system (GWh/d) Average energy-related process efficiency (%) Maximum entry capacity into the hydrogen system (GWh/d) Average CO2 capturing rate (%) Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline



	 Costs of the different investment item(s) of the project (CAPEX⁶² and OPEX⁶³)
	The details of this data submission are included in the TYNDP 2024 Project data collection handbook ⁶⁴ .

3.1.7 Smart Gas Grid

3.1.7.1 Projects for retrofitting infrastructure to further integrate hydrogen (RET)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall aim at retrofitting an existing gas infrastructure to further integrate hydrogen such as: - Retrofitting of existing gas pipelines and other network-related assets for blending of (bio-) methane with hydrogen;	A brief technical description of the project Identification of the main investment item(s) Identification of the additional investment item(s)

⁶² Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the electrolyser. This should consider the costs of both the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁶³ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

⁶⁴ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.



		 Retrofitting of existing storages for hydrogen blending; Retrofitting of existing LNG terminals for hydrogen blending (storage and/or injection into the natural gas grid); 	
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	Promoters shall provide changes of technical capacity and relevant interconnection point(s) and expected maximum share of blending into the natural gas system. If applicable, promoters should also provide the expected capacity decrease in the natural gas network (if any), including the identification of the relevant natural interconnection point(s) with expected capacity decrease. In addition, the main technical parameters, expected commissioning date(s), project schedule and costs of the main and additional investments conforming the project must be provided.	Nominal diameter (mm)Pipeline length (km)

⁶⁵ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the smart gas grid infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁶⁶ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc



	The details of this data submission are included in the TYNDP 2024 Project data collection handbook ⁶⁷ .
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3.1.7.2 Biomethane development projects (BIO)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project shall aim at enabling an increasing share of biomethane such as: - Network development projects enabling biomethane production/injection into the natural gas grid; - Biomethane production facilities; - A project enabling the reverse flow of biomethane from the DSO level to the TSO level.	A brief technical description of the project Identification of the main investment item(s) Identification of the additional investment item(s)
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	Promoters shall provide expected biomethane production in case of production facilities or enabled biomethane production through injection into the natural gas transmission network.	Minimum required project information: • Enabled biomethane production/injection capacity (GWh/d) • For reverse flow D/T facilities the maximum technical capacity from DSO level to TSO level (GWh/d)

[.]

⁶⁷ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.



	In addition, the main technical parameters, expected commissioning date(s), project schedule and costs of the main and additional investments conforming the project must be provided.	•	Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline
		•	Costs of the different investment item(s) of the project (CAPEX ⁶⁸ and OPEX ⁶⁹)
			etails of this data submission are included in the TYNDP 2024 t data collection handbook 70.

3.1.7.3 Synthetic methane projects (SYN)

No	Criteria	Promoter A + B + C	Required information
1	Technical	A synthetic methane projects aiming at decarbonizing the natural	A brief technical description of the project
	description	gas grids.	Identification of the main investment item(s)
			Identification of the additional investment item(s)

⁶⁸ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the smart gas grid infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁶⁹ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

⁷⁰ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.



2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	All the project characteristics necessary for the assessment. The details of this data are included in the TYNDP Project data collection handbook.	 IP of connection with the hydrogen grid, if applicable Exit capacity from the hydrogen grid into the production facility, if applicable Maximum injection capacity of synthetic methane into the natural gas system (GWh/d) Date of commissioning, project schedule and status of the different investment item(s) of the project and justification of timeline Costs of the different investment item(s) of the project (CAPEX⁷¹ and OPEX⁷²) The details of this data submission are included in the TYNDP 2024 Project data collection handbook ⁷³.

⁷¹ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the smart gas grid infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁷² Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc

⁷³ The Project Data collection handbook (Annex 3) provides details regarding TYNDP 2024 Project submission process and provides guidance and clear indications for project promoters to submit projects to the TYNDP. It includes details on how to access the ENTSOG project portal, generate promoter credentials or submit a project, and indicates which fields from the project collection questionnaire are mandatory in order to successfully complete project submission.



3.3.2. Other

3.3.2.1. Repurposing of natural gas infrastructure for CO2 transport and/or storage (CO2)

No	Criteria	Promoter A + B + C	Required information
1	Technical description	The project can be one of the following cases: - The repurposing of natural gas infrastructure for CO2 transport; - The repurposing of natural gas infrastructure for CO2 storage;	A brief technical description of the project Identification of the main investment item(s) Identification of the additional investment item(s)
2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	All the project characteristics necessary for the assessment. The details of this data are included in the TYNDP Project data collection handbook.	Minimum required project information for projects repurposing natural gas infrastructure for CO2 transport: • Nominal diameter (mm) • CO2 state of transport (gaseous or liquid) • Pipeline length (km) • Compressor power (MW) • Estimated technical transmission capacity (kg of CO2/d) • Reduction of natural gas transmission capacity (if any) and affected IP(s) Minimum required project information for projects repurposing natural gas infrastructure for CO2 storage: • Compressor power (MW) • Estimated injection capacity (kg of CO2/d)



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 Reduction of natural gas storage capacity (GWh), if any Reduction of natural gas storage injection or withdrawal capacity (GWh/d), if any Minimum required project information for projects repurposing natural gas infrastructure for CO2 transport or storage: Date of commissioning, project schedule and status of the different investment item(s) of the project
• Costs of the different investment item(s) of the project (CAPEX ⁷⁴ and OPEX ⁷⁵)

3.3.2.2. Other infrastructure related projects (OTH)

No	Criteria	Promoter A + B + C	Required information
1	Technical	Any other infrastructure related project.	A brief technical description of the project
	description		Identification of the main investment item(s)
			Identification of the additional investment item(s)

⁷⁴ Capital expenditure costs (CAPEX) should include: Initial investment cost and replacement costs,

⁻ Initial investment cost that corresponds to the cost effectively incurred by the promoter to build and start operation of the CO2 transport and/or infrastructure. This should consider the costs of the infrastructure related to obtaining permits, feasibility studies, obtaining rights-of-way, groundwork, preparatory work, designing, dismantling, equipment purchase and installation.

⁻ Replacement costs are the costs borne to ensure that the infrastructure remains operational by changing specific parts of it.

⁷⁵ Operational and maintenance expenditure (OPEX) corresponds to costs that are incurred after the commissioning of an asset and which are not of an investment nature, such as direct operating and maintenance costs, administrative and general expenditures, etc



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2	Location	The project to be at least partially located in one of the countries included in the geographical perimeter of the TYNDP.	Location of the project on the ENTSOG map
3	Project data (all)	All the project characteristics necessary for the assessment. The details of this data are included in the TYNDP Project data collection handbook.	Minimum required project information: • Project description



4 Data handling and access to the assessment

4.1. Access to and usage of the provided data and documentation

The documents provided by the project promoters during the submission phase to prove the fulfilment of the administrative and technical criteria will be solely used by ENTSOG to ensure compliance with the criteria defined in this document and will be treated as confidential by ENTSOG, in line with the internal rules, unless already public. However, upon request, ENTSOG will make available to the European Commission (EC) and the Agency for Cooperation of Energy Regulators (ACER) data and documentation provided by the promoters as part of the project submission phase. In this respect, EC and ACER will comply with the confidentiality provisions. Project promoters will be beforehand informed about the request and subsequent transmission of the data and documentation. In case of projects applying for PCI, all the technical data (including costs) will be made available to the EC and ACER upon their request. The documents provided by the project promoters are not intended to include any personal data. Should it however be the case, ENTSOG would in any case not process such data without the prior written consent of the concerned data subject. Any data (personal or not) will be processed by ENTSOG for the exclusive purposes described in these project inclusion guidelines. Without prejudice to previous paragraph, in any case, unless otherwise and expressly stated in this document, any personal data shall not be used for any other purposes, and, in particular, shall not be communicated to third parties for commercial use or direct marketing purposes. These data are handled in accordance with the Belgian Act of 8 December 1992 on the protection of privacy in relation to the processing of personal data and in accordance with the General Data Protection Regulation (hereafter "GDPR", the Regulation (EU) 2016/679)⁷⁶.

The technical input provided by the project promoters as part of the project data collection as well as the benefits of the projects assessed in accordance with the CBA methodology in force will be made public by ENTSOG within the TYNDP processes and TYNDP reports.

The cost data submitted by the project promoters for the projects to be included in the TYNDPs will be made public by ENTSOG unless the data is deemed confidential by the respective project promoters. Such confidentiality should be however duly justified. Failing to provide the full disclosure of CAPEX and OPEX for a project may trigger the non-inclusion of the project in the TYNDP following discussions of ENTSOG with the EC and ACER.

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⁷⁶ ENTSOG will in any case fulfil this privacy policy: https://entsog.eu/index.php/privacy-policy-and-terms-use.



At the same time, it is important that projects interested in applying for the PCI or PMI label ensure the highest possible level of transparency and level-playing field. On this basis, in case of projects having indicated their intention to participate in the PCI or PMI selection process, the project costs will be fully disclosed.

4.2. Correction of project input data

The project promoter is **fully responsible for the correctness and completeness of the information** that it provides in the TYNDP process.

In case of incomplete submission of information during the application period, ENTSOG will send a request to the project promoter to complete the missing information within a specific window of submission.

In case the missing information is not provided to ENTSOG, this specific project will be disregarded, and not included in the TYNDP.

With respect to the corrections of the project information, they shall be dealt with in the following manner:

- In case of incorrect information submitted within the data collection window the project promoter shall perform the correction of the data through the ENTSOG project portal, not later than by the end of the validation phase.
- Between the validation phase and the draft TYNDP public consultation, project promoters shall inform ENTSOG by e-mail of any incorrect information as long as it refers to elements that would not impact the TYNDP's assessments and TYNDP timeline. This correction will then be included in the respective TYNDP project sheet and be clearly labelled with the date of information submission.

4.3. Access to assessment results

Where relevant and in accordance with the CBA methodology in force and in line with the timeline described in section 2, ENTSOG will deliver to the project promoters at least one month in advance of the final TYNDP publication their projects' assessment results, if not differently specified in the latest available Annual Working Programme⁷⁷. If deemed necessary, a request can be made to ENTSOG for a bilateral meeting by sending a request to the contact details as set out in Annex 1 of this document. This request should include a brief description of the topics and issues that the project promoter may wish to discuss, including the project promoters' upcoming availability.

⁷⁷ The ENTSOG Annual Working Programme is a document detailing all the activities to be performed by ENTSOG within a calendar year, including an indicative calendar. The programme is prepared in accordance with the Regulation 715/2009 and is available on the ENTSOG website.



ENTSOG will be hosting public workshops at key stages in the development of the TYNDP to consult on the associated methodologies and results. Project promoters are strongly advised to contribute through these workshops to the ongoing development of the TYNDP. These workshops are advertised on ENTSOG's website.

4.4. Right to request a review

All information submitted in the ENTSOG project data collection template as part of the application process for the TYNDP shall be treated in line with section 4.1 above.

A promoter has the right to request a review by ENTSOG in two cases:

- In case of disagreement with the ENTSOG decision to reject its project from inclusion in the TYNDP.
- In case of a disagreement with ENTSOG's assessment of its project conducted in accordance with the CBA methodology in force.

In both cases, the concerned project promoter shall contest ENTSOG decision by email within two weeks from the notification of the project rejection (as per section 2) or, respectively from the receipt of the assessment results. ENTSOG may consult with the EC and ACER and if deemed necessary, it may also consult on an ad-hoc basis with the relevant stakeholders. ENTSOG will respond to a project promoter contestation after duly examining the project promoter's justifications and duly considering the views expressed by the consulted parties.

The following elements – considered as having been already consulted with stakeholders earlier in the process, agreed upon and finalised – are not to be open for discussion within the project assessment review phase: scenario assumptions and data, CBA methodologies, and project data submitted within the process.

5 Project status in TYNDP

Depending on their level of maturity projects are categorized along different status. Those status are a pre-requisite for the definition of the infrastructure levels to be used in the TYNDP assessment. Please see section 2.2.1. of ENTSOG's draft CBA methodology⁷⁸ for more details on the proposed hydrogen infrastructure level and section 2.2.2. for the proposed natural gas infrastructure levels, respectively.

Each project status is directly derived from the information provided by its promoter when submitted for inclusion in the TYNDP.

⁷⁸ https://www.entsog.eu/sites/default/files/2023-06/Draft%20ENTSOG%20CBA%20Methodology_June%202023.pdf



5.1. Hydrogen infrastructure projects

- The **FID status** is applied to projects that, based on the information submitted, have:
 - o taken the final investment decision ahead of the TYNDP project collection.
- The **Advanced status** is applied to projects that, based on the information submitted, have:
 - commissioning expected at the latest by 31 December of the year of the TYNDP project data collection + 6 (e.g., 2029 in case of TYNDP 2024, for which projects are collected in 2023)
 - o AND the project fulfils at least one of the following criteria:
 - Permitting phase has started ahead of the TYNDP project data collection
 - FEED has started
 - Project is included in the NDP(s) of the respective country(ies) or in the national law
 - Project has successfully consulted the market through a market test (including non-binding processes)
- All hydrogen projects which do not meet the criteria of being FID or Advanced are considered as having the **Less-Advanced status.**⁷⁹

Additionally, the **PCI/PMI status** is assigned to a project which is part of the latest approved Union list of Projects of common interest referred to in Article 3 of the TEN-E Regulation or approved by the EC as delegated act, irrespective of the above-mentioned project status.

5.2. Natural gas or other infrastructure projects

- The **FID status** is applied to projects that, based on the information submitted, have:
 - o taken the final investment decision ahead of the TYNDP project collection.
- The Advanced status is applied to projects that, based on the information submitted, have:
 - commissioning expected at the latest by 31 December of the year of the TYNDP project data collection + 6 (e.g., 2029 in case of TYNDP 2024, for which projects are collected in 2023)
 - o AND the project fulfils at least one of the following criteria:
 - Permitting phase has started ahead of the TYNDP project data collection
 - FEED has been completed ahead of the TYNDP project data collection

6 Common guidelines for projects relevant for joint ENTSOG and ENTSO-E assessment

Since 2020, ENTSO-E and ENTSOG have joined forces to further test, verify and develop draft project screening and dual assessment methodologies based upon the outcome of the report

⁷⁹ Less advanced projects are considered as important input for the TYNDP assessments. One reason is that Annex III.2(1)(d) of the TEN-E Regulation in principle allows projects to become a PCI or PMI. Due to Annex III.2(4) of the TEN-E Regulation, being part of the latest ENTSOG TYNDP is thereby a requirement to become a PCI or PMI for hydrogen projects falling under the categories listed in Annex II(3) of the TEN-E Regulation. In order not to unduly restrict such less mature projects from receiving a PCI or PMI status, they must also be collected for the TYNDP.

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"Investigation on the interlinkage between gas and electricity scenario and infrastructure projects assessment". A Progress Report was then published in May 2021⁸⁰.

In the context of this investigation, ENTSOG and ENTSO-E have identified some projects that can have a direct impact on gas, hydrogen, and electricity. As stated in the Progress Report, these projects might have different characteristics and configurations. As described in ENTSOG's draft CBA methodology, all PS-CBAs will also involve an interlinked assessment that covers the electricity and hydrogen networks.

Project promoters developing these types of projects are encouraged to submit their project to ENTSOG's TYNDP as well as ENTSO-E's TYNDP. In case (some) information will be submitted to only one of the two ENTSO's TYNDP, the concerned ENTSO will share all the collected project information relevant for the joint assessment with the other ENTSO.

⁸⁰ https://www.entsog.eu/sites/default/files/2021-05/ILM%20Investigation%20Document.pdf



7 Annex 1: Required documentation to prove the fulfilment of administrative and technical criteria

All documents necessary to prove the fulfilment of administrative and technical criteria shall be provided **together with the submission of the project during the project data collection phase**. In case of documents provided in the promoter's national language, promoters should provide at the request of ENTSOG, a specific document (or part of it) in English language.

7.1. Administrative documentation

Information requested to fulfil the administrative pass-fail criteria:

No	Criteria	Promoter type		
		Α	В	C ⁸¹
1	Company existence (all)	Already available	Proof of certification/ exemption	The constitutive act/statutes of the registered undertaking.
2	Financial strength (all)	Already available	Proof of exemption	The latest available balance sheets submitted to the national tax office (shareholders' balance sheets are also accepted). For companies younger than 1 year this information is to be proven with the company existence documentation.
3	Technical expertise (all)	Already available	Proof of exemption	Information on the company and its technical expertise, including references from other relevant projects or existing infrastructure, organisational chart, CVs of key personnel. In case of subcontractors, a copy of the contract has to be provided. Anonymised and truncated documents are accepted if they are fit for the purpose.

Information requested to fulfil the administrative alternative criteria. **At least one criterion must be fulfilled.**

No	Criteria	Promoter A + B + C
4	PCI (all)	PCI number and definition as in the latest approved Union list published by the EC or in the EC's adopted delegated act.
5	FID (all)	FID status to be taken before of the project data collection and to be indicated as such in the project submission questionnaire as part of the project data collection.

⁸¹ In case the project promoter is a Governmental Body at national level, the document to be provided as a proof of fulfilling the Administrative criteria is the Legal basis for the establishment of the Governmental Body.



6	National Plan (all)	For the NDP, the promoter should provide the title of the NDP, the year of publication, the URL where the document can be accessed and the page number(s) where the project is mentioned as included in the plan and (when available) the reference code of the project in the latest available NDP ⁸² . For national/governmental strategy, the year of publication, the URL where the document can be accessed and the page number(s) where the project is mentioned. For national law, the URL where the law can be accessed and the relevant paragraphs.
7	IPCEI	Link to the Important Projects of Common European Interest list of projects or any other relevant document proofing that the project is included in the IPCEI list. If the original IPCEI list and related documents are not in the English language, the promoter must provide translations of the relevant part(s) mentioning the project.
8	Market test (all)	The promoter shall provide a summary of the information included in the market consultation including dates, infrastructure proposal (if applicable), and main outcome from the responses to the market consultation.
9	(Pre-)Feasibility study (all)	Completed (pre-)feasibility study ⁸³ performed for the project.
10	MS / NRA agreement (UC)	The signed agreement on the project between the TSO and the relevant MSs or NRAs of the impacted countries, and the recent amendments for it if any.
11	TSO agreement (UC)	The signed common agreement with the concerned TSO(s) regarding the development of the submitted project.

7.2. Technical documentation

Information requested to fulfil the technical pass-fail criteria:

No	Criteria	Promoter A.1+A.2+A.3
12	Technical description (all)	The technical description (and relevant documents when requested which demonstrates the compliance of the project with the criterion described in 3.3 shall be provided in the project Data Collection Portal during project submission.
13	Location (all)	Location of the project (using ENTSOG map layout)
14	Project data (all)	To be provided as part of the project data collection in line with ENTSOG handbook. Minimum project data requirements vary according to the type of category and subcategory (please refer to the relevant section 3.3)

⁸² Preferably the NDP should be the APPROVED version. However, in case of projects "under consideration" or other exceptional cases of projects, inclusion in a DRAFT NDP is also accepted.

⁸³ The feasibility or pre-feasibility study shall not be older than 4 years at the date of submitting the project.



		The resulting capacity increment of the project at an interconnection point after the application of the lesser-of rule can be checked by the promoter in
		the report "Capacities after lesser-of rule" available on the Project portal.
15	Relevant authority non-binding consent	Non-binding written consent of the relevant authority (applicable only for natural gas projects not included in the latest NDP). In case the project is built on several countries (e.g. an interconnection project), the project shall have the consent of at least one of the relevant authorities. If the non-binding consent cannot be provided during the project submission phase due to the duration of the procedure of issuing it, the consent can be provided also during the project correction phase.

8 Annex 2: ENTSOG contact details

ENTSOG can be contacted for this specific topic by using the following contact details:

- Email: projects@entsog.eu

- Phone: +32 2 894 51 42 or +32 2 894 51 03

- Address: Avenue de Cortenbergh 100, 1000, Brussels, Belgium

9 Annex 3: ENTSOG Data Portal Handbook

Document is provided via a separate link.

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