

[Annex to Opinion No 17/2026 on the natural gas and hydrogen national network development plans](#)

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Part A: National practices in gas and hydrogen NDPs

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Table 1: Certified gas TSOs and designated or certified HNOs

	Number of certified gas TSOs ¹	Number of designated and/or certified HNOs
Austria	2	0 Both gas transmission operators (TSOs) perform hydrogen infrastructure development functions and/or act as representatives in ENNOH.
Belgium	2	1 The hydrogen network operator (HNO) was designated and certified according to the Belgian hydrogen law. It is currently undergoing reassessment in light of the Hydrogen and Decarbonised Gas Market Package.
Bulgaria	2	0 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.
Croatia	1	0 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.
Cyprus	0 Gas TSO was licensed by CERA in 2021, but it has not been certified with regards to independence from the national gas company.	0
Czech Republic	1	0
Denmark	1	1 There is an officially designated HNO (subsidiary of the certified power and gas TSO), but it has not yet been certified. It has applied for certification.
Estonia	1	0 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.
Finland	1	0
France	2	0
Germany	15	0 There are multiple potential future HNOs, but none have yet been certified or officially designated. Several are already involved in the preparation of the NDP through a coordination service.

¹ All TSOs are legally obliged to prepare an NDP, except one TSO in each Belgium and Bulgaria (because these are interconnectors) and the TSOs in Finland and Sweden, because there is currently no such legal requirement. In Finland, proposed changes to the relevant legislation that is currently under consultation include an obligation to prepare an NDP. In Sweden, the EU Hydrogen and Decarbonised Gas Market Package has not yet been transposed into the national law.

	Number of certified gas TSOs ¹	Number of designated and/or certified HNOs
Greece	1	0
Hungary	1	1 There is an officially designated HNO (gas TSO), but it has not yet been certified. It was designated for the purpose of the nomination to ENNOH.
Ireland	1	0
Italy	3	0
Latvia	1	0 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.
Lithuania	1	0 There is currently no acting HNO. The Gas TSO is expected to assume this role once the relevant hydrogen legal framework is in place and the necessary certification and designation procedures have been completed.
Luxembourg	1	1 Creos Luxembourg Hydrogen was officially designated in 2025 with an entry into operation on 1 December 2025.
the Netherlands	1	0 There is no officially designated or certified HNO. Hynetwork Services has been tasked with a Service of General Economic Interest to develop and operate the national hydrogen network.
Poland	1	1 The gas TSO became the only HNO in Poland on 17 June 2025 for the period until 4 August 2026, extended by law until 4 August 2036. It has been certified by the NRA on 9 June 2026 after The European Commission and ACER had issued respective opinions pursuant to Article 14 of Regulation (EU) 2024/1789 and Article 71 of Directive (EU) 2024/1788. The HNO has been granted an exemption from the horizontal unbundling requirements under Article 69 of Directive (EU) 2024/1788.
Portugal	1	0
Romania	1	0 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.
Slovakia	1	0
Slovenia	1	0 Slovenian government has appointed the gas TSO as an associated partner in the ENNOH. The HNO has not yet been officially appointed, as the relevant legislation has not yet been adopted.

	Number of certified gas TSOs ¹	Number of designated and/or certified HNOs
Spain	3	1 (provisionally designated) The Ministry provisionally designated Enagás Infraestructuras de Hidrógeno, S.L.U. as the HNO and the Spanish representative in ENNOH. The Royal Decree-Law 8/2023 requires the provisional HNO to present a non-binding proposal for a hydrogen backbone NDP in 2024, which is under the Ministry's analysis. Enagás Infraestructuras de Hidrógeno, S.L.U. may deploy the network hydrogen PCIs on an unbundling regime until its definitive designation as HNO. The NRA issued its first assessment of the legal unbundling requirements .
Sweden	1	0 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH. However, the government has announced that the electricity TSO should prepare for certification.

Table 2: Organisation and frequency of gas and hydrogen NDPs

	Frequency of NDP(s) preparation			
	Annual	Biennial	Other	-
Integrated gas and hydrogen NDP by the TSO and HNO	HU	DK	-	-
Separate gas and hydrogen NDP by the TSO and HNO		BE, LU, PL	ES ²	-
Gas TSO(s) NDP including hydrogen plans and/or development studies pending the establishment of a hydrogen planning framework	BG, CZ ³ , FR, SI	AT, HR, DE ⁴ , IT, LV, LT ⁵ , NL ⁶ , RO	-	-

² The NRA explains that the last NDP in Spain was approved in May 2008 and it has not been updated yet. The NDP was done with a perspective of sector integration (electricity and gas coordinated network development). Hydrogen planning framework has been partially developed and the relevant Ministry is still working on the transposition of Directive (EU) 2024/1788. The provisional HNO provided a non-binding proposal for an NDP which is being analysed by the Ministry.

Gas and hydrogen NDPs will be separate deliverables.

³ If an exemption from the horizontal unbundling requirement is granted to an HNO in the Czech Republic, the HNO and TSO would prepare the integrated gas and hydrogen NDP or separate plans for gas and hydrogen.

⁴ In Germany, multiple possible future HNOs are already involved in the preparation of the gas NDPs through a coordination office for gas and hydrogen network development planning.

⁵ In Lithuania, a joint electricity-gas-hydrogen NDP is prepared.

⁶ In the Netherlands, there is no framework for hydrogen network planning in the national legislation yet and hydrogen developments are mentioned in the gas TSO's NDP. Hydrogen infrastructure is currently not regulated, however, there is a framework for hydrogen network planning as part of the conditions set to the subsidy provided to Hynetwork Services that is tasked to develop and operate a hydrogen network. This is overseen by the Ministry of Economic Affairs and Climate.

	Frequency of NDP(s) preparation			
	Annual	Biennial	Other	-
No hydrogen network planning framework and no inclusion of hydrogen infrastructure in gas TSO's NDP ⁷	EE, IE	PT		-
No gas and no hydrogen NDPs	-	-	-	CY ⁸ , FI ⁹ , SE

Table 3: Status of hydrogen strategies and hydrogen regulatory frameworks

	National hydrogen strategy	Information on regulatory framework for hydrogen
Austria	yes	Regulatory framework for hydrogen is being established through the ongoing transposition of the Hydrogen and Decarbonised Gas Market Package into the national law. E-Control is the competent authority for hydrogen regulation and the underlying legislation is pending.
Belgium	yes	Regulatory framework exists, but according to the national hydrogen law that is being re-examined in light of the EU Hydrogen and Decarbonised Gas Market Package.
Bulgaria	yes	under development
Croatia	yes	Changes to regulatory framework related to transposition of Directive (EU) 2024/1788 are expected to be complete until August 2026.
Cyprus¹⁰		Transposition of the Directive (EU) 2024/1788, is under the responsibility of the Ministry of Energy, Commerce and Industry of the RoC has not been completed yet. After the transposition, the NRA will modify the gas regulatory framework or/and establish the relevant hydrogen regulatory framework.
Czech Republic	yes, the latest update in July 2024	under development
Denmark	yes	yes

⁷ For this category, reported frequencies of publications apply for gas NDPs.

⁸ The TSO in Cyprus is yet to submit its first NDP.

⁹ In Finland, the gas TSO has currently no legal obligation to publish an NDP. However, proposed legislative amendments which are currently publicly consulted would introduce an obligation to prepare NDP biennially. In March 2026, the gas and electricity TSOs prepared an energy system study assessing the electricity and hydrogen infrastructure investments required to support the development of an industrial hydrogen economy between 2027 and 2023.

¹⁰ The Cypriot NRA has no information available on inclusion of hydrogen in NDPs, because the first has not yet been submitted to the NRA. PCI project Eastmed has increasingly been discussed in connection to hydrogen, because the EU's decarbonisation strategy encourages existing and new gas infrastructure to become hydrogen-ready.

	National hydrogen strategy	Information on regulatory framework for hydrogen
Estonia	no	No regulatory framework yet exists, but it is planned.
Finland	yes	Proposal for the new hydrogen market act was publicly consulted from May to August 2026.
France	yes	No regulatory framework is yet in force.
Germany	yes	Currently transitional provisions are integrated in the national law, but will be detailed out according to the Gas Market Package.
Greece	under development	no
Hungary	yes	Unbundling of hydrogen transmission system operators was introduced by Act XL and entered into force on 10 June 2025. Changes to regulatory framework are planned.
Ireland	yes	under development
Italy	yes	no
Latvia	no	No regulatory framework for hydrogen exists and no dedicated national hydrogen strategy was adopted in Latvia. The Latvian NRA emphasizes Latvia's strong interest in hydrogen potential and solutions. It considers the production of hydrogen and its derivatives as a way to strengthen Latvia's energy self-sufficiency and as an opportunity to export green hydrogen. Hydrogen and renewable fuels of non-biological origin (RFNBOs) are recognised in both the updated National Energy and Climate Plan (NECP) 2021-2030 and the National Energy Strategy 2050 as important contributors to decarbonisation, energy security and the long-term transformation of the energy system.
Lithuania	yes	Hydrogen development has been incorporated into Lithuania's strategic energy policy framework through the following key policy and legal documents: • The Guidelines for Hydrogen Development in Lithuania 2024-2050, approved by the Protocol of the Meeting of the Government of the Republic of Lithuania on 26 April 2024. • The Action Plan for the Implementation of the Guidelines for Hydrogen Development in Lithuania for 2025-2027, approved by Government Resolution No. 1070 of 11 December 2024. • The National Energy Independence Strategy, approved by a Resolution of the Seimas of the Republic of Lithuania on 27 June 2024. • The National Energy and Climate Action Plan (NECP) 2021-2030, approved on 2 October 2024.
Luxembourg	yes	There is a regulatory framework for hydrogen.
the Netherlands	yes	under development
Poland	yes and changes planned	Changes related to the regulatory framework are expected in Q4 of 2026, but the exact scope is yet unknown.

	National hydrogen strategy	Information on regulatory framework for hydrogen
Portugal	yes	An order from the Energy and Environment Minister, Despacho n.º 6750-C/2025, of 23 June 2025, designated REN Gas ¹¹ , on a transitional basis and pending the transposition of Directive (EU) 2024/1788, as the entity responsible for the planning, development, and management of hydrogen network infrastructure. ERSE was formally designated as the regulator for the renewable gas, natural gas, and hydrogen markets in Portugal by Decree-Law No. 79/2025 of 21 May 2025. The decree entered into force on 22 May 2025.
Romania		under development
Slovakia		
Slovenia	no	planned
Spain	yes	The Ministry of Ecological Transition and Demographic Challenge is still working on the transposition of Directive (EU) 2024/1788. Some provisions have been developed on hydrogen infrastructure, but a full regulatory framework is not in place.
Sweden	no	A new national law is planned to transpose Directive (EU) 2024/1788.

Table 4: Status, date and links to the most recent NDPs and to the relevant NRA scrutiny

	Status and date of the latest NDP(s) and publication link(s)
Austria	Gas (including hydrogen infrastructure): draft, rejected by the NRA in October 2025 latest final was approved in May 2023 (NDP in German , NDP in English , NRA decision)
Belgium	Gas: September 2025 Hydrogen: December 2025 https://www.fluxys.com/en/about-us/fluxys-belgium/publications/infrastructure-development-plans
Bulgaria	Gas (including hydrogen): final, August 2026 (NDP in English , NRA decision)
Croatia	Gas (including hydrogen): final, December 2025 (NDP in Croatian , NRA decision)
Cyprus	The first gas NDP has not yet been submitted to the NRA for approval. There has been delay by the TSO in the conclusion of the designated procedure needed to specify the expected gas demand and development of the gas network backbone.
Czech Republic	Gas (including hydrogen): final, December 2025 (NDP in Czech , NRA decision) Settlement of comments from the public consultation process
Denmark	Gas and hydrogen: final, 2024 (NDP in Danish)
Estonia	Gas: final, spring 2026 (NDP in Estonian , NRA opinion)
Finland	-

¹¹ This company belongs to the same holding of the Gas TSO (REN Gasodutos).

Status and date of the latest NDP(s) and publication link(s)	
France	Gas (including hydrogen plans): final, 2024 (NDPs in French: Naturan NDP , Terega NDP) CRE analysis).
Germany	Gas and hydrogen: draft , March 2026 Scenarios report for NDP 2025
Hungary	Gas and hydrogen: final, February 2026 (NDP in Hungarian)
Ireland	Gas: final, September 2025 (NDP in English , NRA approval)
Italy	Gs: 202 (NDP in Italian , NRA decision)
Latvia	Gas (including hydrogen): final, October 2025 (NDP in Latvian , NRA decision)
Lithuania	Electricity, gas, hydrogen: draft, July 2026 (NDP in Lithuanian) Joint scenarios for NDP 2026 , NERC comments on scenarios (both in Lithuanian)
the Netherlands	Gas (including description of hydrogen developments): final, April, 2026 (NDP in Dutch , NRA assessment) Joint scenario report 2026 There is no official hydrogen NDP. There is a draft " Roll-out plan " that requires approval by the Minister of Economic affairs and climate.
Poland	Gas: final, October 2025 (NDP in Polish) Hydrogen: final, June 2026 (NDP in Polish)
Portugal	Gas: draft, March 2025 (NDP in Portuguese)
Romania	Gas (including hydrogen): draft, (NDP in Romanian)
Slovenia	Gas (including hydrogen): final, April 2026 (NDP in Slovene)
Spain	Electricity and gas coordinated network development: final, May 2008 (NDP in Spanish) Hydrogen: draft, April 2024 (not published)
Sweden	-

Table 5: Legal effect of NDPs

	Gas NDP ¹²
Binding for all projects	CY: The TSO is obliged to build the projects in the NDP and the NRA is obliged to include the costs in tariffs upon their commissioning.

¹² With regards to the legal effect of hydrogen NDPs, the NRAs provided the following information:

- AT: Because there is currently no legal framework for hydrogen-network development, the NRA cannot approve any hydrogen implementation project at this stage. Consequently, all hydrogen projects are approved as planning projects.
- BE: All projects in the hydrogen NDP are indicative, given the existing uncertainty and the need for Opean Season results before FID. However, there are provision to give the investments for the first 4 years a "commitment nature" from the side of the HNO.

	Gas NDP ¹²
	GR
	DE: The TSO is obliged to build the NDP projects
Binding in the short term (e.g. projects commissioned in the next few years) and indicative in the long term	CZ: Projects within a horizon of up to three years are binding.
	LT: Investments planned for three years are binding and other indicative. After the NDP alignment, there is a separate alignment for each project.
	NL: Investments are approved for a three-year period, while potential future investments are identified over a 15-year planning horizon. If the TSO subsequently determines that a planned investment is no longer necessary or justified, it may explain and revise this assessment in the subsequent NDP.
	SI: Investments included in the first three years of the development plan are binding, whereas projects planned for later years are indicative. Once the NRA has approved the three-year investment plan and the TSO's supervisory board has taken the final investment decision, the TSO is required to proceed with project implementation.
	FR: The national gas NDP is binding on TSOs for the first three years for projects validated by CRE. Projects beyond that horizon are indicative.
Indicative and binding, depending on projects	AT: Planning projects are indicative and implementation projects are binding. For binding projects, TSOs have an obligation to build and the NRA has an obligation to recognise the costs. The cost review takes place after the investment has been made. For planning projects, however, additional steps, such as deciding on the technical concept or the appropriate capacity level or selecting between competing alternatives, must be completed before (approval as implementation project and) a FID can be made.
	CZ: Projects that are necessary to fulfil system needs are binding.
	HR: Projects with the final investment decisions are binding and the rest indicative. TSO is obliged to complete the binding projects. Planned costs are incorporated into the RAB according to the expected commissioning year during the gas transmission tariffs setting process for new regulatory period. At the end of the regulatory period, the NRA reviews the implementation status, and non-commissioned projects are excluded from RAB.
	ES: Legal nature is indicative, except for what relates to the basic gas network (high pressure pipelines), secondary transmission network (16-60 bar), underground storages or total regasification capacity.

- DE: Possible future HNO has an obligation to build the NDP. Where a project has not progressed sufficiently since the previous NDP, it is reassessed in the subsequent NDP to determine whether it remains necessary.
- HU: Hydrogen projects are not approved as part of the NDP as the NRA has no competence as regards hydrogen. Hydrogen projects are subject to further assessments.
- PL: Legal effect of hydrogen NDPs is the same as for gas NDPs.
- SI: Some hydrogen projects are part of the gas NDP. The current NDP hydrogen projects are included in the ten-year NDP and not in the three-year investment plan.
- BG, HR, CY, CZ, EE, ES, FI, IE, LV, LT, PL, SE: not applicable

	Gas NDP ¹²
	HU: Some national priority projects (UA, RO interconnector developments and pipeline connections to planned CCGTs) are binding and some projects are indicative. Binding projects are followed closely by the NRA. RO: Some projects are considered more important. TSO is obliged to build these. SK
Indicative, for all projects	BE, BG, EE, IE, IT, LU, LV, PL, PT DK: Individual investments need to be approved by the Ministry before the final investment decision.
Not applicable	FI, SE

Table 6: Challenges experienced by NRAs related to NDPs in the past two years

	Member States
Longer than expected preparation of the plan by the TSO or HNO	CY: The TSO experienced delays in completing the procedure required to determine future gas demand and define the development of the gas network backbone. It is expected that experience gained from preparing the first NDP will contribute to a more efficient preparation process for future NDPs. IE FR: It took TSOs longer than expected to elaborate their NDPs
Longer than expected approval process of the plan	IE: The main challenges relate to resourcing constraints and high workload that contribute to delays in approval processes. LV: The approval process was longer than expected due to requests for additional information and clarifications. SI: The TSO was required to present one gas infrastructure project in more detail, which also entailed conducting a survey of gas users on future gas demand and performing a complex analysis of gas system loops.
Delay for other reasons	AT: The NRA can only approve the entire plan, not individual projects. Because the TSO has not supplied the required evidence e.g. on the need and costs for each project, the NRA rejected the NDP. PL: During the preparation of the gas NDP, challenges were encountered in planning measures to address new risks, including the transition from low-methane to high-methane gas due to the depletion of gas deposits. Further, the draft hydrogen NDP has only recently been submitted and, given the early stage of market development, remains high-level. Work is ongoing to further specify the planned activities.
No major complexity	BE, HR, CZ, IT, LT, NL, PT, RO

Table 7: Regulatory oversight over gas NDPs

	Member States
Approval of the TSO's draft	CY, CZ, DE, HU, RO
NRA can amend the TSO's proposal.	

		Member States
NDP by the NRA	NRA cannot amend the TSO's proposal.	AT ¹³ , BG, GR ¹⁴ , HR ¹⁵ , LV, PL ¹⁶ , SI ¹⁷
Approval of the TSO's draft NDP by Ministries with the NRA being consulted		ES ¹⁸
Formal non-binding scrutiny (e.g. opinion) of the TSO's draft NDP by the NRA		BE ¹⁹ , DK ²⁰ , EE, PT FR: The NRA launches a public consultation on the NDP's content, verifies that the TSOs cover the investment needs, checks the consistency with the TYNDP and can ask TSOs to modify the NDP. Process wise, the NRA cannot amend the NDP directly but can request amendments from TSOs. IE
Other		IT: Draft NDP developed by TSO(s), evaluated by the NRA. The NRA can requests amendments to the TSO. LT ²¹ : Draft NDP is developed by the TSO and accessed by the NRA. NRA can amend the TSO's proposal. LU: The TSO develops an NDP and notifies the Ministry, copying the NRA. NL: The NRA can reject and oblige TSO to amend its draft NDP, but not amend it by itself (binding guidelines). ²²

¹³ In Austria, the NRA may indirectly amend the NDP, i.e., enforce changes, but the latest proceeding made clear that such amendments could be applied only with the TSO's consent.

¹⁴ In Greece, the NRA has 2 months from the TSO's submission of the draft NDP to request modification. These concern the inclusion or removal of a project from the draft NDP or fulfilment of specific conditions for a project's inclusion. Following NRA's request, the TSO prepares the final draft and submits it to the NRA for approval. The NRA subsequently conducts a public consultation of the draft NDP before approving it.

¹⁵ In Croatia, hydrogen infrastructure is currently planned by the gas TSO through the gas NDP which is approved by the NRA.

¹⁶ In Poland, the draft NDP is developed by the TSO (including a 21-day public consultation period) and scrutinised by the NRA. The NRA may request corrections to the document. The NRA, acting in consultation with the Minister of Energy, agrees or rejects the NDP. The procedure is the same for the electricity, gas and hydrogen NDP's.

¹⁷ In Slovenia, the NDP process for hydrogen has not yet been officially defined, but it is expected to be the same as for the gas NDP.

¹⁸ In Spain, the NRA's opinion is non-binding.

¹⁹ In Belgium, the TSO's draft NDP is subject to the non-binding scrutiny by the NRA and the Ministry. The described governance and process is valid up to now but is under revision to a more formal process incl. approval process.

²⁰ The Danish Utility Regulator may issue an opinion but has otherwise no formal role in the NDP. There is no legal requirement for the TSO or ministry to take the opinion into account and the Danish Utility Regulator has so far not issued any opinions.

²¹ The Gas and Hydrogen Network Development Plan is not subject to formal approval by the NRA. The TSO submits the draft plan to the NRA for evaluation. The NRA ensures consultation with market participants and interested stakeholders, provides comments on the draft plan, and verifies whether and how the TSO has revised the NDP in response to those comments.

²² In the Netherlands, the Ministry checks if the NDP is consistent with the national policies and has the same scrutiny powers as the NRA.

	Member States
	SK: The TSO prepares an NDP including a plan for the development of connections for the next 10 years and submit it to the Ministry and the Office by November each year.
	SE: The TSO's plan is not yet submitted to the NRA.

Table 8: Results of the latest NRA scrutiny over NDPs

	Member States
Rejection of the draft NDP or NDP projects by the NRA	AT: The NRA decision of 30 October 2025 rejects the entire CNDP 2024, because for numerous projects the cost-increase calculations are not verifiable, the technical necessity and economic viability are not demonstrated and the requirements for climate-neutrality by 2040 are violated. However, other projects listed in the CNDP24 would in general be deemed approvable. The previously approved CNDP2022 remains the basis for setting system-use charges. DE: During the process for the last approved gas NDP (NEP Gas 2022-2032), the NRA rejected some projects of the TSOs draft and issued a formal request for amendment in December 2023 (link). HU: The NRA has not approved hydrogen infrastructure development projects in the NDP, as it still does not have competence in hydrogen issues. FR: No NDP has been rejected. CRE approves TSOs' annual investment plans; some projects have been rejected in the past on an annual basis. IT: During the process for the last approved gas NDP, the NRA rejected some projects of the TSOs.
No opposition to the draft NDP by the NRA	BE, BG, HR, CZ, EE, IE, LT, LV, NL, PL, RO, SI
Other	DK: Danish Utility Regulator (DUR) may issue an opinion but has otherwise no formal role in the NDP. No legal requirement for TSO or ministry to take NRA opinion into account. DUR has no information on the involvement of the ministry in the creation of the NDP. PT: The last NDP proposal has not been approved yet.
Not applicable	CY: The first draft NDP has not yet been submitted to the NRA. FI and SE: There are currently no NDPs.

Table 9: The transposition status of specific provisions of Directive (EU) 2024/1788²³

	The provision has been transposed.	The provision has not yet been transposed.	Activity is already performed (irrespective of the transposition).
NDP consultation by the NRA (Article 55(4))	HR (gas only); DE; LV (gas only); IT, LT (gas only); PT (gas only); RO (gas only)	AT; BE; CY; DK; FI; FR, LT (hydrogen only); HU	AT; CZ; IE (gas only); PL; SI; FR (gas only) LT (hydrogen only)
Examination by the NRA whether the NDP complies with the relevant paragraphs of Article 55 and if it covers all investment needs identified during consultation (Article 55(5))	HR (gas only); IT, LV (gas only); LT (gas only); PL; PT (gas only)	AT; BE; CY; DK; FI; FR, HU; LT (hydrogen only)	AT (gas only); CZ; DE; FR (gas only); IE (gas only); SI
Consistency check with the EU-wide simulation of disruption scenarios by ENTSO-G, with the regional and national risk assessments pursuant to Article 7 of Regulation (EU-) 2017/1938 and with gas, hydrogen and electricity EU TYNDPs (Article 55(5))	HR (gas only); IT, LV (gas only); LT (gas only); PT (gas only)	AT; CY; CZ; FI; DE; HU; LT (hydrogen only); SI; FR	AT (gas only); BE; FR (gas only); LT (hydrogen only); PL
Requirement of amendments of the NDP by the NRA (Article 55(5))	HR (gas only); DE; IT, LT (gas only), LV (gas only); PT (gas only),	AT; CY; DK; FI; FR; HU; LT (hydrogen only); SI	AT (gas only); BE; CZ; FR (gas only); LT (hydrogen only); PL
Examination by the competent national authority of the consistency of the NDP with the climate-neutrality objective, with NECP (national energy and climate plan) and its updates and with the integrated national energy and climate reports (Article 55(5))	DE; IT, LT (gas only), LV (gas only); PL; PT (gas only)	AT; BE; HR; CY; CZ; FI; FR; HU; LT (hydrogen only); SI	AT; FR (gas only); LT (gas only)
Monitoring and evaluation of the NDP implementation by the NRA (Article 55(6))	HR (gas only), DE, IT, LV (gas only), PT (gas only), RO (gas only)	AT, CY, DK, FI, FR, HU, LT (hydrogen only)	AT (gas only), BE, CZ, FR (gas only); LT (gas only), PL, SI;
Ensuring execution of investments by the NRA (Article 55(7))	HR (gas only), DE, IT, LV (gas only), LT (gas only), PT (gas only)	AT, CY, DK, FI, FR; HU, LT (hydrogen only), PL	AT (gas only), BE, CZ, FR (gas only); SI

²³ The Spanish NRA explains the transposition of Directive (EU) 2024/1788 is ongoing. Recently, a decree has assigned the NRA competence to temporarily develop tasks of Article 16 of Regulation (EU) 2022/869.

	The provision has been transposed.	The provision has not yet been transposed.	Activity is already performed (irrespective of the transposition).
Approval of joint scenarios for NDPs (Article 78(1)(b))	HR (gas only), DE, LV (gas only), IT, LT (gas only), PL, PT (gas only)	AT, BE, CY, CZ, DK, FI, FR; HU, LT (hydrogen only), SI	FR (gas only), LT
Approval and amendment of the NDP (Article 78(ee))	HR (gas only), DE, IT, LV (gas only: NRA can approve and ask for amendments); LT (gas only), PL	AT, BE, CY, DK, FI, FR; HU, LT (hydrogen only), PT, SI	AT (limited for hydrogen), CZ; FR (gas only)

Table 10: Cooperation of HNOs and TSOs with other system operators

Description of the cooperation by the NRA	
Austria	Cooperation with storage system operators, distribution system operators (DSOs) and the electricity TSO is organized by the Market and Distribution Area Manager (MADAM) that coordinates network development planning in the Austrian gas sector. The MADAM is expected to take on the same responsibility for the hydrogen sector in the future and is already preparing for that role. Regarding district heating no coordination is required so far. Most Austrian gas DSOs are integrated network operators that also serve as electricity DSOs, making coordination between the two functions intrinsic. The gas NDP is aligned with the latest available NDPs of the neighbouring Member States.
Belgium	The gas NDP gas covers transmission, storage as well as LNG terminals. It is coordinated with other operators including for electricity. The hydrogen NDP covers hydrogen transmission by pipelines at the moment (also storage but not yet the case in BE). According to the current Belgian hydrogen law, H₂/NH₃ terminals are not covered by the HNO nor by the NDP hydrogen. Market interests and coordination (incl. cross-border) are part of the hydrogen NDP. The plans are coordinated at “working group level” between the concerned parties. The gas NDP is aligned with the latest available NDPs of the neighbouring Member States.
Bulgaria	The gas NDP is aligned with the latest available NDPs of the neighbouring Member States.
Croatia	When preparing an NDP, gas TSO takes into account plans for the development of the gas production system, gas storage system, gas distribution systems and LNG terminals. The gas NDP is aligned with the latest available NDPs of the neighbouring Member States.
Cyprus	By Decision No.87.649 of 5 June 2019, the Council of Ministers, in accordance with the provisions of the Laws Regulating Natural Gas Market of 2004 to 2022, specified the operating framework of the natural gas market for the period of validity of the emerging market or until the Council decides to terminate the derogations and appointed Operators. More specifically, according to the Decision, the competition is not applied in the supply of natural gas to the end consumers for the period that the market is considered as an emerging market. In addition, by this Decision, the Natural Gas Public Company (DEFA) was appointed as the Gas Supplier, a TSO, a DSO and an LNG Operator for thirty years, starting from the date of issuance of the corresponding licenses by CERA.

Description of the cooperation by the NRA	
	CERA granted to DEFA the following licenses until today: • license for the construction, ownership, exploitation and operation of a natural gas transmission system; • LNG Facility Operation License; • Gas Supplier License to Non-Eligible Consumers. The interaction among the licensed TSO and LNG terminal operator will be done in accordance to the relevant Codes to be established by the two entities. Besides, the regulatory framework determines their collaboration for the preparation of the NDP. The appointed gas DSO has not initiated the licensing procedure in order to obtain relevant license by CERA.
Czech Republic	The operators cooperate within the limits set by law and relevant implementing regulations.
Denmark	HNO (Energinet Brint A/S), gas TSO (Energinet Gastransmission A/S), electricity TSO (Energinet eltransmission A/S) and natural gas storage operator (Gas Storage Denmark) are part of the Energinet group which is owned by the Ministry.
Estonia	-
Finland	-
France	When developing NDPs, gas TSOs take into account inputs from adjacent infrastructure operators, including other TSOs, LNG-terminal operators, storage-system operators and DSOs. They also organise public workshops involving electricity TSOs, DSOs and market stakeholders.
Germany	Industry and potential sources are consulted by TSOs and possible future HNOs. Results are part of the scenarios. The gas NDP is aligned with the latest available NDPs of the neighbouring Member States.
Hungary	The NRA has no information.
Ireland	The gas TSO, which also acts as the gas DSO, engages with a range of relevant stakeholders in the preparation of the NDP. This includes coordination with the electricity TSO to ensure alignment of assumptions underpinning adequacy assessments, as well as consultations with electricity generators through dedicated surveys used to support NDP development.
Italy	Company SNAM collects and makes available in the Plan information on transportation, storage and LNG regasification projects promoted by third parties, distinguishing between projects under study, assessment, planning, authorization or construction. For scenarios, SNAM cooperates with TERN (Electricity TSO) to deliver a common scenario.
Latvia	The TSO cooperates with several other infrastructure operators both in the Baltics and in the wider Baltic Sea region. With LNG terminal operators, TSO coordinates transmission capacity, maintenance work and market operations. For example, in the Baltic-Finnish region, the company develops joint maintenance and capacity plans with LNG terminal operators and other TSOs. TSO itself is also a storage system operator and cooperates with the Baltic and Finnish transmission operators within the framework of the single gas market. The TSO maintains close cooperation with the DSO to facilitate the efficient integration and operation of Latvia's gas infrastructure. Through the coordination of technical, operational, and regulatory matters, as well as the management of system interconnections and information

Description of the cooperation by the NRA	
	exchange, both operators contribute to the safe, reliable, and uninterrupted supply of natural gas. In the area of hydrogen infrastructure, TSO cooperates with other European gas transmission operators to develop hydrogen transmission infrastructure in the Baltic Sea region. Cooperation with electricity TSOs is mainly related to energy system integration, decarbonization and security of energy supply. Hydrogen and energy system integration projects require close coordination between gas and electricity infrastructure operators. Regarding district heating infrastructure operators, TSO cooperation is mainly expressed through natural gas supplies and system security for heating companies, as natural gas remains an important resource in heating supply in Latvia.
Lithuania	The TSO conducts surveys with other infrastructure operators and public consultations are carried out by both the TSO and the NRA. The gas NDP is aligned with the latest available NDPs of the neighbouring Member States.
The Netherlands	Cooperation with the DSOs is close. The parties jointly develop demand scenarios and coordinate the planning of investments. Alignment of the plans with electricity TSO could be further improved. For example, the gas TSO currently bases its investment planning on the highest gas demand scenarios and electricity TSO relies on the highest electricity demand scenario. This approach may create a risk of over investments on the longer turn.
Poland	According to the national law, energy companies engaged in the transmission or distribution of gaseous fuels or energy, or the transmission or distribution of hydrogen, shall cooperate in preparing the NDP to ensure the selection of energy-efficient solutions that enable cost-effective decarbonization of the gas sector and the flexible and efficient use of assets, taking into account all energy carriers, including through the conversion of gas grids to hydrogen. The TSO cooperates with its counterparts in neighbouring countries for example in the incremental capacity assessment procedure. If there is a need to include a new project, it is included in the NDP.
Portugal	Gas TSO cooperates with the transport and distribution infrastructure operators.
Romania	The TSO includes in NDP some hydrogen projects. The gas NDP is aligned with the latest available NDPs of the neighbouring Member States.
Slovenia	The gas TSO consults with DSOs and the electricity operator as part of the preparation of the NDP.
Spain	The gas TSO consults with electricity operators as part of the preparation of the NDP.
Sweden	-

Table 11: Cross-sectoral components in gas and hydrogen NDPs

	Member States
Joint NDP (covering gas and hydrogen infrastructure)	Integrated gas and hydrogen NDP by the TSO and HNO: DK, HU, LT Gas TSO NDPs include hydrogen plans or studies in AT, BG, CZ, FR, HR, DE, LT, RO and SI.

	Member States
Joint scenarios	AT: The MADAM prepares joint gas and hydrogen scenarios for DSOs which also feed into TSO gas and hydrogen scenarios. In the future, the electricity TSO and MADAM are expected to jointly develop scenarios. BE: Electricity TSO and the HNO drive the joint scenario exercise, cooperating also with gas TSO. DE: Gas and possible future HNOs jointly develop scenarios. Some scenarios are jointly prepared with electricity TSOs. DK: According to the information available to the NRA, joint scenarios for electricity, gas and hydrogen are applied. ES: Joint electricity and gas scenarios are prepared. FR: Joint scenarios are used for gas and hydrogen network planning, but not for electricity planning HU: Joint gas and hydrogen scenarios are prepared. IT: Joint electricity and gas scenarios are prepared. LT: Joint cross-sectoral scenarios were developed for the first time in the recent NDP cycle, encompassing electricity, natural gas and hydrogen sectors. NL: Electricity and gas TSOs and DSOs jointly develop scenarios, taking into account hydrogen developments. RO: There are joint scenarios for gas and hydrogen network planning. PL: Scenarios for gas and hydrogen are developed separately, but the relevant operators coordinate.
Joint assessment of infrastructure needs	AT: Infrastructure needs are assessed jointly through a questionnaire for market participants, non-binding market assessments and auction results. DE: Gas TSOs and possible future HNOs together jointly consult the industry to identify infrastructure needs. PL: According to the law, energy companies engaged in the transmission or distribution of gaseous fuels or energy, or the transmission or distribution of hydrogen, shall cooperate in preparing the NDP to ensure the selection of energy-efficient solutions that enable cost-effective decarbonization of the gas sector and the flexible and efficient use of assets, taking into account all energy carriers, including through the conversion of gas grids to hydrogen. HR
Joint identification of projects	AT: When hydrogen demand arises, the availability of existing gas assets for repurposing is evaluated. DE, LV
Other	AT (joint consultation), SI (consultation with the electricity TSO on optimal locations for hydrogen injections)
Not applicable	CY (the first NDP not yet submitted), FI, SE

Table 12: Public consultation of gas NDPs²⁴

		Member States
Public consultation of the draft NDP	By the TSO	AT ²⁵ , BG, HR, CZ, DK ²⁶ , EE ²⁷ , DE, FR, HU, IT ²⁸ , LT ²⁹ , NL, PL, RO, SI, SK
	By the NRA	AT, BG ³⁰ , HR ³¹ , CZ ³² , DE, FR, GR, IE ³³ , LV, LT, PT ³⁴ , SI, SK
	By the Ministry	ES
Public consultation regarding the scenarios for the NDP (carried out separately from NDP consultation)		BE, DE, DK, IT, LT, NL ³⁵
Public consultation regarding projects (carried out separately from NDP consultation)		DE
Public consultation regarding the infrastructure needs (carried out separately from NDP consultation)		DK
No public consultation		LU

²⁴ As regards the consultation of hydrogen NDPs, consultation arrangements remain largely unclear pending the transposition of the Hydrogen and Decarbonised Gas Market Package transposition. However, no NRA has so far reported any difference compared to the consultation approach for gas NDPs.

²⁵ AT: Results of public consultation of the latest approved NDP (comments published in full): [German version](#), [English version](#)

²⁶ DK: [Public consultation results](#) (comments and responses published)

²⁷ EE: [Public consultation results](#) (comments and responses published)

²⁸ IT: [Public consultation results](#) (comments and responses published)

²⁹ LT: [Public consultation results](#) (comments and responses published)

³⁰ BG: [Public consultation results](#) (summary of comments published)

³¹ HR: [Public consultation results](#) (comments and responses published)

³² CZ: [Public consultation results](#) (comments and responses published)

³³ The Irish NRA explains stakeholder comments are published by the NRA unless marked confidential; responses are integrated into a revised NDP where appropriate and a response paper is published by the gas TSO

³⁴ PT: [Public consultation comments](#), [Public consultation report](#)

³⁵ The Dutch NRA explains that summary of public consultation comments and responses are published as an attachment to an NDP.

Table 13: Market consultations (e.g. non-binding expression of interest) and open seasons in the context of hydrogen development

		Member States
Market consultations to understand hydrogen infrastructure needs of stakeholders	Carried out or planned	AT (by MADAM within the NDP process, no explicit role for the NRA), BE (by the HNO, NRA informed about the results), DK (by the HNO), DE (by gas TSOs and possible future HNOs, no role for the NRA), ES, FR (by TSOs, no role for the NRA), HU (by the TSO), IT, LV (by the TSO, no role for the NRA), LT (by the TSO, stakeholder engagement with potential hydrogen producers and consumers that may connect to future hydrogen network; results reflected in the NDP, no explicit role for the NRA), LU, NL (by Hynetwork Services, no role for the NRA), PL (by the TSO, monitoring role for the NRA), RO (planned),
	Not carried out and not planned	EE, GR
	Information not available to the NRA	BG, HR, CY, CZ, FI, IE, PT, SI, SE, SK
Open seasons with binding commitment phase in hydrogen infrastructure development context	Carried out or planned to be carried out	DK: Open season by the HNO is ongoing. NRA approved the methodology. BE: Joint open seasons are planned by the HNO and NRA for cross-border interconnection points. DE: Open seasons by future possible HNOs are planned. LT: Open seasons by the HNO are planned with the NRA in the supervisory role. FR: Hydrogen open seasons are planned; TSOs will organise them, NRA has no role for the moment
	Not carried out and not planned	NL, PT, RO,
	Information not available to the NRA	AT, BG, HR, CY, CZ, EE, FI, HU, IE, LV, PL, SI, SE

Table 14: Number of NDP scenarios and consideration of specific elements

		Member States
Elements considered in scenarios	The latest National energy and climate plan (NECP)	AT, HR, CY, DE, FR, HU, LV, LT, LU, PL, RO, SI, SK
	Climate-neutrality objective set out in Article 2(1) of Regulation (EU) 2021/1119	DE, IE, LV, LT, NL, PL, FR
	Other relevant scenarios at national level	AT, BE, BG, CZ, DK, EE, ES, IE, PL, PT, RO

		Member States
Number of scenarios	1 scenario	AT, BE ³⁶ , BG, CZ, EE, HU, RO
	2 scenarios	LV, LT, SI
	3 scenarios	ES, GR, IE, IT, NL, PL, PT, SK
	More than 3	HR (6), DE (at least 6, 7 for the latest NDP), FR (4)
	Information not available to the NRA	CY (NDP not yet submitted), DK (DUR is not involved in evaluating scenarios.)

Table 15: Time horizon of scenarios in NDPs

Time horizon of scenarios	
Austria	The end year of the last approved NDP 2022 is 2032.
Belgium	The plans should consider at least 10 years ahead and may look beyond that horizon. In practice, longer horizons are considered, but due to higher uncertainties, the focus is on the next 10 years and investment programme also spans 10 years ahead. Beyond the 10 years, the nature is more strategic.
Bulgaria	2035
Croatia	2035
Cyprus	The gas NDP that shall be submitted for approval has a horizon of ten years from the date of submission and the time horizon of scenarios must be at least 10 years.
Czech Republic	The time horizon of scenarios is ten years. The final year of the current ten-year transmission system development plan is 2035.
Denmark	Based on the information available to the NRA, the latest NDP applied scenarios up to 2050.
Estonia	2035
Finland	-
France	2024–2033 (10-year time horizon for the current NDP scenarios).
Germany	The current draft has one scenario for 2030, three for 2037 and three for 2045.

³⁶ The Belgian NRA explains market interest is key to underpin investments and verify actual needs and use of capacities to guarantee a sufficient pay-back from subscribed capacities. The NDP is based on scenarios and on outcomes of market interests and coordination with adjacent operators.

Time horizon of scenarios	
Hungary	2036
Ireland	The time horizon of scenarios is 10 years (e.g. 2023/24, 2032/33).
Latvia	2035 for gas NDP
Lithuania	2035 for gas and hydrogen scenarios
the Netherlands	2050
Poland	Time horizons of scenarios are 2040 for gas NDP and 2050 for Hydrogen NDP. The time horizon of NDP is 10 years.
Portugal	2035 for gas NDP
Romania	2035
Slovenia	2035
Spain	Scenarios have a 10-year time horizon. Last NDP was dated 2008 and end-year is 2018.
Sweden	-

Table 16: Infrastructure needs assessments in NDPs

Description by the NRA	
Identification and quantification of infrastructure needs for gas and hydrogen infrastructure as part of NDP	AT: Infrastructure requirements for the transmission network are in general bottom-up based on capacity auctions and the customer needs assessment at DSO level. Another driver is the consideration of security of supply and the need for diversification. The TSOs perform on a rolling-basis hydraulic optimisations of their systems, furthermore technical assessments regarding the systems integrity are being performed. CZ: Evaluation after analysing the “needs” of customers and shippers (bottom-up), outcome of decarbonisation assessment (e.g. network investments for additional biomethane volumes) (top-down approach), total import need as an outcome of security of supply assessments (diversification of gas supply) DE: Gas TSOs and possible future HNOs consult the market to identify projects. They take future developments into account to develop scenarios and model gas/hydrogen transmission networks to meet future needs. FR: Evaluation after analysing the “needs” of customers and shippers (bottom-up), outcome of decarbonisation assessment (e.g. network investments for additional biomethane volumes) (top-down approach), total import need as an outcome of security-of-supply assessments (diversification of gas supply) LT: evaluation after analysing the “needs” of customers and shippers (bottom-up), outcome of decarbonisation assessment (e.g. network investments for

Description by the NRA	
	additional biomethane volumes) (top-down approach), total import need as an outcome of security of supply assessments (diversification of gas supply) RO: evaluation after analysing the “needs” of customers and shippers (bottom-up); total import need as an outcome of security of supply assessments (diversification of gas supply)
Identification and quantification of infrastructure needs for gas infrastructure	Part of NDP ES: There is a planning process meant to identify and quantify the infrastructure needs in a chapter of the NDP (gas). Infrastructure needs are determined in the gas NDP with an evaluation after an in-depth analysis of the “needs” of infrastructure (top-down approach); the needs are the outcome of the system/market modelling, the needs are the outcome of an economic test and total import need as an outcome of security of supply assessments (diversification of gas supply) is taken into account. In Spain, the last NDP (2008) was done with a perspective of sector integration (electricity and gas coordinated network development). HR: evaluation after analysing the “needs” of customers and shippers (bottom-up), total import need as an outcome of security of supply assessments (diversification of gas supply); HU: Total import need as an outcome of security of supply assessments (diversification of gas supply) NL: evaluation after analysing the “needs” of customers and shippers (bottom-up), outcome of decarbonisation assessment (e.g. network investments for additional biomethane volumes) (top-down approach)
	Standalone activity CY: Evaluation after analysing the “needs” of customers and shippers (bottom-up)
Activities to identify gas and hydrogen infrastructure needs as part of the NDP, but without a formal concept and metrics	BE: evaluation after analysing the “needs” of customers and shippers (bottom up); extensive network hydraulic simulations to verify capacity needs in order to meet various injection and offtake scenarios according to market information and scenario assumptions; IT LV: Needs are identified by consulting market participants. PL: evaluation after analysing the “needs” of customers and shippers (bottom-up); total import need as an outcome of security of supply assessments (diversification of gas supply)
Activities to identify gas infrastructure needs as part of the NDP, but without a formal concept and metrics	BG: evaluation after analysing the “needs” of customers and shippers (bottom up); PT: evaluation after analysing the “needs” of customers and shippers (bottom-up); outcome of decarbonisation assessment (e.g. network investments for additional biomethane volumes) (top-down approach); total import need as an outcome of security of supply assessments (diversification of gas supply) SI: evaluation after analysing the “needs” of customers and shippers (bottom-up), total import need as an outcome of security of supply assessments (diversification of gas supply)
No activities to identify gas and hydrogen infrastructure needs	EE, IE (activities planned)
Not applicable	DK: Information is not available to the Danish Utility Regulator, as it is not involved in the planning processes.

Description by the NRA	
	SE: no NDP FI: Activities are planned.

Table 17: Metrics to identify and quantify gas infrastructure needs

Member States	
Quantified target cross-border capacities ('optimal' levels of transmission capacities)	BE: Targets are based on coordination with adjacent operators. IE: Moffat interconnection point of 386.9 GWh/day. PL: The target cross-border capacities identified in the latest NDPs are equal to the existing capacities. SI: The estimate is a slight increase in entry capacity (2%) and a doubling of exit capacity by 2030.
Other metrics to identify and quantify infrastructure needs	AT, BE, LV LT: The latest NDP identifies existing technical cross-border capacities and expected flow needs based on market demand and system adequacy, rather than separate normative "optimal" capacity targets. The NDP also includes expected flow assumptions for Santaka and indicative hydrogen cross-border assumptions, assessed on a case-by-case basis as market and infrastructure conditions develop. FR: No target cross-border capacities identified; the NRA was not able to assess other specific metrics used to identify and quantify infrastructure needs.
Specific infrastructure need, featuring a locaatin/area/border	
Country-wide level infrastructure need (e.g. total import need)	CY, ES, HR

Table 18: Application of cost-benefit analysis (CBA)

Decription by the NRA	
Austria	A qualitative assessment of the costs and benefits of different options (stages of expansion) is carried out.
Belgium	A CBA is carried out before the final investment decision, and the NRA evaluates projects before allowing their costs to be included in the regulatory asset base (RAB). This process is currently under review and is being further formalised.
Bulgaria	No CBA is applied.
Croatia	Feasibility study is prepared by the TSO and submitted with the draft NDP to NRA.
Cyprus	CBA is applied for gas infrastructure projects.
Czech Republic	No CBA is applied.

Description by the NRA	
Denmark	The Danish Utility Regulator is not involved in the planning or approval processes. Some economic evaluation is part of the investment request to be approved by the Ministry.
Estonia	CBA is applied for both hydrogen and gas infrastructure projects.
Finland	There are no NDPs yet in Finland.
France	There is no general CBA methodology applied to NDP investments. CBA is conducted project by project when projects are submitted for NRA validation.
Germany	No CBA is applied.
Greece	All the proposed projects are evaluated according to their impact on the Average Tariff for the use of National Natural Gas System. CBA is carried out for the major projects.
Hungary	No CBA is applied.
Ireland	No CBA is applied.
Italy	The CBA methodology is based on the monetization of benefits, so as to provide results that are easily comparable and understandable. Cost estimates are based on a standard costs' methodology developed by the main gas TSO, unless otherwise specified and properly justified by the TSO. When security of supply issues are concerned, or in cases where the provision of additional information is considered useful for the clear representation of the project, additional quantitative indicators can be presented. The Italian regulation, consistently with TYNDPs, devotes particular attention to: the N-1 indicator; the Import Route Diversification Index, IRDI; the Bidirectional Project Index, BPI
Latvia	No CBA is applied.
Lithuania	As of September 2026, the requirement to conduct a CBA for projects has entered into force. For investment projects, a CBA is provided, carried out in accordance with the operator's cost-benefit analysis methodology, which is aligned with the provisions of Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency, amending Regulation (EU) 2023/955. The analysis assesses alternative options and takes into account the wider benefits of energy efficiency solutions, demand flexibility, and investments in assets that contribute to climate change mitigation.
the Netherlands	No CBA is applied.
Poland	CBA is applied for gas infrastructure projects.
Portugal	CBA (multicriteria) is applied for gas infrastructure projects.
Romania	CBA is applied for gas infrastructure projects.
Slovakia	CBA is applied.
Slovenia	CBA is applied for gas infrastructure projects.

Description by the NRA	
Spain	No CBA is applied (gas NDP) (Spanish last NDP was done with a perspective of sector integration (electricity and gas coordinated network development), was approved in 2008 and is outdated).
Sweden	No CBA is applied.

Table 19: Main drivers for network development for gas NDP projects

	Member States
To meet market demand for capacity	BE, BG, CY, CZ, ES ³⁷ , HU, IE, LU, LV, PL, RO, SI
To meet predefined policy scenarios	HR, DE, EE, FR, GR, NL, PT, SK
To guarantee high level of availability for existing capacity	AT, DK, LT (also to ensure system reliability)

Table 20: Time horizon of gas projects in NDPs

	Member States
10 years with a flexible deadline (possibility to include some projects expected for commissioning after 10 years)	BE, BG, GR, IE, IT, LV, LT, LU, NL, PL, RO, SI, SK, FR
10 years with a strict deadline	AT, HR, CY, CZ, EE, ES, HU, PT
Other	DE: NDP is scenario-based and the furthest outlook of scenarios is 2045.

Table 21: Time horizon of hydrogen projects in NDPs

	Member States
10 years	AT, BE, BG, CZ, EE, HU, LV, PL, RO, SI
Other	DE: NDP is scenario-based and the furthest outlook of scenarios is 2045. LT: While hydrogen-related activities are included in the 2024–2033 NDP, they are primarily at preparatory/feasibility stage (market consultations, route studies, technical assessments for H2/gas blending). FR: No hydrogen NDP exists per se at present; hydrogen is considered within the integrated gas and hydrogen NDP, but without a separate hydrogen-project time horizon
Not applicable (no hydrogen projects planned and/or no NDPs in place)	CY, DK, FI, IE, NL, PT, SE

³⁷ In Spain, the last gas national development plan (2008) was designed to cover consumption rather than demand for capacity.

Table 22: Types of gas and infrastructure assets and projects

		Member States
Gas asset types	Transmission (pipelines and compressor stations)	AT, BE, BG, CY, CZ, DK, DE, EE, ES, FI, FR, GR, HR, HU, IE, IT, LV, LT, LU, NL, PL, RO, SI
	LNG terminals	BE, CY, ES, GR, PL, RO
	Underground storage	BE, ES, PL, RO
	Biomethane injection projects (e.g. reverse flow from distribution to transmission)	BE, DK, EE, FR, IE, IT, LV, LT, NL, PL, SI
Gas project types	Network development projects	AT, BE, BG, CY, CZ, DE, EE, ES, FR, GR, HR, HU, IE, IT, LT, LV, LU, NL, PL, RO, SI, SK
	Replacement projects	AT, BE, DE, HR, EE, FR, IT, LV, LT, LU, NL, SI
	Projects that can or are to be repurposed	AT, BE, CZ, DE, FR, IE, IT, PL, SI
	Projects that are deemed necessary due to repurposing	AT, BE, DE, IE, IT, LV, LT, PL, RO, SI
	Projects that can or are to be decommissioned ³⁸	BE, FR, HR, IT, IE, PL, SI, SK
	Other types	AT: Network adaptations (retrofitting) to allow H2 blending in gas network would be in the gas part of the joint NDP. BE: information technology, buildings, investments for emissions reductions

³⁸ The Austrian NRA explains that the current NDP does not include decommissioning projects, but it expects them to be included with the next NDP.

Table 23: Types of hydrogen projects and developments in NDPs

	Member States
New dedicated hydrogen pipelines	AT, BE, BG, CZ, DE, DK, EE, HU, LV, PL, RO
Hydrogen compressor stations (new or adaptations)	AT, DE, DK, PL
Hydrogen underground storages	PL
Network adaptations (retrofitting) to allow hydrogen blending in gas networks	HR, LV, PL, RO
Repurposing existing gas pipelines to dedicated 100% hydrogen pipelines	AT, BE, CZ, DE, DK, PL
Best locations for power-to-“x” developments	AT, PL
National hydrogen production development from electricity (electrolysers)	AT, BE, DE, PL
National hydrogen production developments from blue hydrogen (produced from natural gas and supported by carbon capture, use and storage)	BE, PL
Hydrogen terminals (including terminals for pure hydrogen, ammonia terminal with cracking, other hydrogen derivatives like methanol or liquid organic hydrogen carriers (LOHC))	BE, DE, PL
Hydrogen distribution networks	AT, DE
Connection points for hydrogen injection	BE, DE, LV, PL

Table 24: Requirement for new gas investments comply with the technical standards for hydrogen

	Member States
New gas investments have to comply with the technical standards for hydrogen	BE, HR, CY, LV, RO
New gas investments do not need to comply with the technical standards for hydrogen	AT, BG, CZ, DE, EE, FI, HU, IE, LT, NL, PL, PT, SI, SE, FR

Table 25: Project-specific information in NDPs^{39,40,41}

	Gas projects	Hydrogen projects
Technical description (e.g. capacity, location)	AT, BE, CY, CZ, DE, ES, FR, HR, HU, IE, IT, LT, LV, NL, PT, RO, SI	AT, BE, CZ, DE, HU, LT
Commissioning date	AT, BE, CY, CZ, DE, FR, HR, HU, IE, IT, LV, LT, NL, PL, PT, RO, SI and ES ⁴²	AT, BE, CZ, DE, HU, LT
Implementation status	AT, BE, CY, CZ, DE, FR HR, HU, IE, IT,LT, LV, NL, PL, RO, SI	AT, BE, CZ, DE, HU, LT
Progress since the previous NDP	AT, BE, CY, CZ, DE, ES, FR HR, IE, IT,LT, LV, PL, RO	AT, BE, CZ, DE, LT
Increase of cross-border capacity	AT, BE, CZ, DE, ES, FR, HR, IE, IT,LT, LV, PL, SI	AT, BE, CZ, DE, LT
Capital expenditure	AT, BE, CZ, FR HR, HU, IT,LT, LV, PL, PT, SI, ES ⁴³	AT, BE, CZ, HU, LT
Operational expenditure	HR, IT,LT, SI	LT
Total expenditure	CY, DE, HR, IT, LT, NL, RO	DE, LT, RO
Benefits	AT, BE, CY, CZ, FR, HR, IE, IT, LV, NL, PL, PT	AT, BE, CZ
Outcome of market consultation (economic test)	ES, HR, IT, LV, SI	
Contribution to the energy transition (decarbonisation, sector integration)	AT, BE, FR, HR, IE, IT, LT, LV, PL, PT	AT, BE, LT

 Table 26: Transparency on investment costs in NDPs⁴⁴

	Member States
Investment costs of all or most investments are available to the public	BE, BG, CY, EE, IT, LV, NL, PT, SI

³⁹ The Austrian NRA explains that result of economic tests is not presented in the NDP, however, its approval is conditional to a positive test outcome.

⁴⁰ The Croatian NRA explains that the published NDP 2026-2035 includes technical description, commissioning date, progress since the previous NDP, increase of cross-border capacity and explanation of benefits for the gas projects. Feasibility Study as a part of NDP which is not publicly published includes projections for CAPEX and OPEX, investment return period, IRR and NPV.

⁴¹ The Slovene NRA explains that OPEX and results of economic tests are only provided in the three-year investment plan for some projects.

⁴² The Spanish NRA explains that most of the projects include an indicative date of commissioning, but a few of them were subject to some viability studies and therefore a date of commissioning could not be provided by the TSO

⁴³ The Spanish NRA explains cost is provided by type of infrastructure and by each year of the horizon, but not project by project.

⁴⁴ Costs of the NDP planned investments:

- In the latest approved NDP in Austria, the maximum of publicly available cost considering competing projects amounts to app. 330.4 million EUR.

	Member States
Investment costs of all or most investments are available to the NRA, but not to the public	HR, CZ, FR, LT, PL
Total cost (sum) of all investments is available to the public	AT (In the latest approved CNDP 22, individual project cost disclosure was tied to the project category and the relevant TSO, with the NRA holding all cost data. Although the subsequent CNDP 24 draft was rejected, the consultation version published the total investment amounts broken down by TSO and by category.), DE, IT, FR, LT, RO
Total cost (sum) of all investments is available to the NRA, but not to the public	ES, HU
Other	DK (The NDP does not include investment costs estimates, however, the Danish Utility Regulator cannot exclude the possibility that such information is available elsewhere.), IE (Costs are not provided in NDPs, but are generally made available to public via the price control process.)
Not applicable	FI, SE

Table 27: Inclusion of required financing sources for gas and hydrogen projects

	Gas projects	Hydrogen projects
Inclusion of financing sources for projects	AT (market contracts for new capacity, socialisation in overall tariffs, subsidies, cross-border cost allocation) HR: For projects for which have been given grants by the Croatian Government, financing of the projects is described in the NDP. Furthermore, additional NDP documents as Business Plan and	AT: The NRA assumes the same approach will be applied for hydrogen as for gas projects. CY: The NRA expected the same approach will be applied for hydrogen as for gas projects.

- In Belgium, gas NDP 2025-2034 includes capital expenditures of 1506 million EUR (indicative, including e.g. upgrades for lower emissions, buildings, replacements, IT) and hydrogen NDP 2025-2034 includes capital expenditures of 1105 million EUR (highly indicative, including less mature projects).
- In Croatia, the most recent gas NDP includes capital expenditure of 1808 million EUR for the period from 2026 to 2035.
- In Hungary, the sum of CAPEX of binding infrastructure development projects in the most recent NDP amounts to 22.5 million EUR.
- In Latvia, capital expenditure of 94.78 million EUR is planned in the forthcoming 10 years for gas infrastructure.
- In Lithuania, capital expenditure of 201 million EUR is expected in the forthcoming 10 years.
- In the Netherlands, capital expenditure of 1195 million EUR is planned for gas investments between 2026 and 2035.
- In Portugal, capital expenditure of 131 million EUR is planned for gas investments in the most recent NDP.
- In Romania, capital and operational expenditure of 4103 million is planned in the forthcoming 10 years.
- In Slovenia, capital expenditure of 596 million EUR is planned for gas investments.

	Gas projects	Hydrogen projects
	Feasibility Study, which are not publicly published, refer to financing sources for the investment projects. CY: The NDP will include TSO's estimation for the impact of the development and connection projects on the mean cost of the transmission system as well as the share of the additional cost which will be covered by the individual consumer vs. the share that will be socialized through transmission tariffs. EE LT: The NDP identifies financing sources for planned investments, including EU/third-party grants and regulated asset base funding recovered through transmission tariffs. LV: The NDP identifies financing sources for planned investments. PL: For each group of investment tasks, the sources and structure of financing must be explained. This data is commercially sensitive therefore it is available for NRA but not publicly available.	EE LV PL: The NRA expects the same approach will be applied for hydrogen as for gas projects.

Table 28: Biomethane developments

Member State	Inclusion in NDPs	Biomethane currently injected into gas transmission system	Investments in the current gas NDP to allow or increase direct injection of biomethane into transmission system	Obligation for gas operators to prioritise direct biomethane injection into the transmission grid	Obligation for TSOs to provide a connection point for direct biomethane injection upon user's request
Austria ⁴⁵	In scenarios	No	No	No	No
Belgium	As NDP projects (network adaptations to allow direct biomethane injection at transmission level, direct connection points for	Yes	Yes	No	No

⁴⁵ The Austrian NRA sees limited practical relevance of connection of biomethane injection to the transmission grid in Austria, because all gas customers are connected to the distribution grid, while the expected scale of biomethane projects and availability of feedstock do not justify transmission-level connections. The NRA questions the cost-effectiveness of such connections, noting that the costs of gas compression would be disproportionately high relative to the limited volumes of biomethane injected, especially given the already high tariffs in the Austrian transmission grid.

Member State	Inclusion in NDPs	Biomethane currently injected into gas transmission system	Investments in the current gas NDP to allow or increase direct injection of biomethane into transmission system	Obligation for gas operators to prioritise direct biomethane injection into the transmission grid	Obligation for TSOs to provide a connection point for direct biomethane injection upon user's request
	biomethane injection at transmission level, reverse flow capacity from distribution to transmission network)				
Bulgaria	No inclusion	Information is not available to the NRA	No	No	No
Croatia	As NDP projects (network adaptations to allow direct biomethane injection at transmission level, direct connection points for biomethane injection at transmission level)	No	Yes	No	No
Cyprus	No inclusion	No	Information is not available to the NRA because the first gas NDP is still to be submitted to the NRA.	No	No
Czech Republic	Inclusion as drivers for network reinforcement, but not directly as NDP projects	No	No	No	No
Denmark	As NDP projects (Reverse flow capacity from distribution to	Yes	Yes	No	No ⁴⁶

⁴⁶ The Danish Utility Regulator explains that the TSO can reject connection to its network if connection to the DSO network is more economical, provided the DSO has available capacity.

Member State	Inclusion in NDPs	Biomethane currently injected into gas transmission system	Investments in the current gas NDP to allow or increase direct injection of biomethane into transmission system	Obligation for gas operators to prioritise direct biomethane injection into the transmission grid	Obligation for TSOs to provide a connection point for direct biomethane injection upon user's request
	transmission network)				
Estonia	No inclusion	No	Information is not available to the NRA	No	No
Finland	Not applicable	Yes	Information is not available to the NRA	No	Yes ⁴⁷
France	Inclusion as drivers for network reinforcement, but not directly as NDP projects (network adaptations to allow direct biomethane injection at transmission level, reverse flow capacity from the distribution to the transmission network, direct connection points for biomethane injection at transmission level)	Yes	Yes	Yes	Yes
Germany⁴⁸	In scenarios	Yes	Yes	Yes	Yes
Greece	No inclusion	No	No	no	No
Hungary	No inclusion	No	Yes	No	No
Ireland	In scenarios	No	Yes	No	No

⁴⁷ According to the Finnish natural gas market act, network operators must connect natural gas use and storage facilities, liquefied natural gas processing equipment, gas production facilities from renewable energy sources and separate lines in its operating area to its network that meet the technical requirements. The conditions and technical requirements for connection must be open, fair and non-discriminatory and must take into account the conditions required for the interoperability and operational reliability of the natural gas transmission system and the network, as well as the efficiency of the natural gas transmission system.

⁴⁸ [The German NRA's decision on access to biogas](#)

Member State	Inclusion in NDPs	Biomethane currently injected into gas transmission system	Investments in the current gas NDP to allow or increase direct injection of biomethane into transmission system	Obligation for gas operators to prioritise direct biomethane injection into the transmission grid	Obligation for TSOs to provide a connection point for direct biomethane injection upon user's request
Italy	Inclusion as drivers for network reinforcement, but not directly as NDP projects	Yes	Yes	No	Yes
Latvia	As NDP projects (network adaptations to allow direct biomethane injection at transmission level, direct connection points for biomethane injection at transmission level)	Yes	Yes	No	Yes
Lithuania	Inclusion as drivers for network reinforcement, but not directly as NDP projects	Yes	No	No	Yes
Luxembourg	No inclusion	No	No	no	Yes
the Netherlands	As NDP projects (reverse flow capacity from distribution to transmission network)	No	Information is not available to the NRA	No	No
Poland	Inclusion as drivers for network reinforcement, but not directly as NDP projects	Information is not available to the NRA	Yes	Yes	Yes ⁴⁹

⁴⁹ The Polish NRA explains that an energy company engaged in the transmission or distribution of gaseous fuels or energy is obliged to conclude a grid connection agreement with entities applying for connection to the grid, on the basis of equal treatment and give priority for connection of renewable energy source installations, if there are technical and economic conditions for connection to the grid. If an energy company refuses to conclude an agreement for connection to the grid or to connect a renewable energy source installation first, it is obliged to notify the President of the NRA of the refusal and the reasons.

Member State	Inclusion in NDPs	Biomethane currently injected into gas transmission system	Investments in the current gas NDP to allow or increase direct injection of biomethane into transmission system	Obligation for gas operators to prioritise direct biomethane injection into the transmission grid	Obligation for TSOs to provide a connection point for direct biomethane injection upon user's request
Portugal	As NDP projects (direct connection points for biomethane injection at transmission level, biomethane production potential (estimates of biomethane installed capacities))	No	Yes	Yes	No
Romania	No inclusion	No	Information is not available to the NRA	No	Yes
Slovakia	In scenarios	No	No	No	No
Slovenia ⁵⁰	As NDP projects (network adaptations to allow direct biomethane injection at transmission level, direct connection points for biomethane injection at transmission level, reverse flow capacity from distribution to transmission network)	No	No	No	Yes
Spain	No inclusion ⁵¹	Yes	No	No	Yes
Sweden	Not applicable	Yes	Information is not available to the NRA	No	Yes

⁵⁰ The Slovene NRA notes that the development of biomethane in Slovenia is in its very early stages. In 2025 there was no biomethane in the transmission or distribution system.

⁵¹ The last gas NDP in Spain was approved in 2008.

Table 29: Energy efficiency first principle and consideration of potential for alternatives to system expansion

Reporting NRA's Member State	How is potential for alternatives to system expansions considered in the context of the energy efficiency first principle?
Austria	At the DSO level, potential for alternatives to system expansions is being considered as part of the consumer-centric needs assessment during the scenario-building process. In general network expansion is solely driven by either market demand or security of supply considerations.
Belgium	Investments are primarily driven by market interest and the willingness of market participants to subscribe to capacity, enabling financially viable final investment decisions (FIDs) and subsequent investments. These decisions are made in the context of scenario analysis and system optimisation.
Cyprus	Prior to the preparation of the NDP a gas demand assessment is being conducted based on CERA's Guidelines on the procedure to assess gas demand in the gas transmission system (CERA Decision No.73/2021).
France	The scenarios include a consumption shrinkage, resulting in a limited need of system expansion.
Germany	Potential for alternatives to system expansions in the context of the efficiency first principle is considered within the different scenarios.
Hungary	Regional demand assessments and diversification options are taken into account.
Latvia	TSO plan considers alternatives to traditional system expansion within its network development and scenario planning processes, particularly in the context of decarbonisation, energy efficiency, and regional energy system integration.
Lithuania	As natural gas remains an important energy source during the transition period, the scenarios continue to consider the need to maintain adequate gas transmission infrastructure, while also assessing optimisation, energy efficiency and demand-reduction alternatives where relevant.
the Netherlands	Alternatives are briefly considered, but not consequently. Reduction due to energy efficiency is partly taken into account and demand side response is not. The scenario's for energy intensive industries are not based on price development of the different energy commodities.
Poland	Every two years TSO prepares the 'Transmission service demand forecast' which provides several variants of demand development for the needs of NDP. These forecasts are adjusted to take into account regulatory changes and anticipated technological progress in construction, in particular the thermal modernization of buildings and the introduction of energy-efficient installations. Forecast assumes also replacing coal-fired units with new gas powered plants and development of local biomethane plants, supplying distribution networks, bypassing transmission networks.
Portugal	The abatable sectors are expected to transition away from gas.
Romania	Potential for alternatives to system expansions in the context of the efficiency first principle is considered via the use of demand response and energy efficiency.

Reporting NRA's Member State	How is potential for alternatives to system expansions considered in the context of the energy efficiency first principle?
Slovenia	In its scenarios, the TSO takes into account goals and guidelines for the gradual introduction of renewable energy sources, the introduction of hydrogen and reduced consumption of fossil gas. It is not shown in detail how individual goals and development aspects are taken into account.

Table 30: Programs to phase-out or decrease natural gas demand

Member State	Description of the program to phase-out or decrease natural gas demand
Austria	There are initiatives for out-phasing in heating (and cooking) in some regions.
Belgium	Gas grid expansion for new household connections is restricted.
Croatia	Croatian Government has adopted Low-carbon Development Strategy of the Republic of Croatia until 2030 with a view to 2050 (Official Gazette 63/2021).
Denmark	Intention of phasing out household consumption by 2035
Germany	The " Systementwicklungsstrategie " sets the frame for a climate neutral transformation of the energy system in Germany.
Ireland	Climate Action Plans include a ban on fossil fuel exploration, the prohibition of gas boilers in new dwellings, and grant schemes to support home retrofitting.
Latvia	There are general energy efficiency support programs (e.g. insulation of buildings to lower heat loss) which indirectly reduces also the need for gas, as heat or electricity consumption is reduced. There are some programs to modernize district-heating systems and to move to renewable resources.
Lithuania	The first plan set the target for the complete phase-out of fossil fuel boilers by 2040. Furthermore, Lithuania's National Energy Independence Strategy aims to achieve climate neutrality by 2050 through the complete substitution of fossil fuels with renewable and low-carbon energy sources.
Luxembourg	New residential buildings are not allowed to use gas.
the Netherlands	The national energy scenario's give an outline for the decrease of natural gas demand. However, at the moment there is no clear plan for desinvestments/decommissioning of gas assets yet.
Poland	Currently available government support programs exclude technologies based on the use of natural gas and other fossil fuels. At the same time, technologies based on electricity and renewable energy sources are supported, which leads to the decrease in demand for natural gas.
Portugal	Since 2025, the Portuguese government has encouraged the replacement of old gas household appliances (such as hobs, ovens and water heaters) with more energy-efficient

Member State	Description of the program to phase-out or decrease natural gas demand
	electric appliances. The initiative provides grants to help households replace their appliances, particularly those in an energy poverty situation.
Slovenia	Key points of legislation to phase-out or decrease natural gas demand: • Municipalities must prepare plans to phase out fossil fuels for heating and define priority energy sources through local energy concepts (LEK) and regulations. • Renewable energy sources, waste heat, and low-carbon technologies are prioritized over fossil fuels and higher-emission systems. • Efficient district heating systems have priority in designated areas, except for very low-energy buildings fully heated with renewable or low-carbon sources. • Municipalities may define areas for heat and gas distribution networks, including planned expansions for the next five years. If connection is not possible within five years, owners of nearly zero-energy buildings are not obliged to connect. • The installation of natural gas or LPG boilers is prohibited in new residential buildings and restricted in mixed-use buildings for residential sections. • Hybrid heating systems are allowed in certain multi-unit or mixed-use buildings if the primary heating source is emission-free and gas is only used for peak demand. • New gas distribution concessions are only allowed if at least 80% of planned gas consumption is expected to come from renewable gas sources. • Existing gas distribution concessions may be extended under limited conditions, such as planned renewable gas integration, industrial dependence on gas, or continued significant household usage. • Natural gas consumers have the right to disconnect from gas distribution systems and switch to renewable energy sources, regardless of municipal regulations or contractual obligations, without paying penalties for disconnection.

Table 31: Existing hydrogen infrastructure and hydrogen injections acceptance into the gas transmission network

Member State	Existing hydrogen pipelines that connect several industrial sites for industrial purposes	Hydrogen injections into the gas TSO network
Austria	No, but approximately 20 km of pipelines is planned.	Yes, up to 2 % according to directly applicable Article 21 of Regulation (EU) 2024/178.
Belgium	Current yearly hydrogen consumption in the existing hydrogen network is about 14 TWh and the existing hydrogen network is interconnected with the Netherlands and France.	Yes, up to 2%
Bulgaria	No	No

Member State	Existing hydrogen pipelines that connect several industrial sites for industrial purposes	Hydrogen injections into the gas TSO network
Croatia ⁵²	No	No
Cyprus ⁵³	No	No
Czech Republic	No	Yes, up to 2 %.
Denmark	No	No
Estonia	No	No
Finland	No, but it is planned	Information not available to the NRA
France	No	No

⁵² The Croatian NRA adds that Current "Croatia and Slovenia Smart Gas Grid project" included in the latest adopted PCI/PMI list refers to retrofitting to allow hydrogen and biomethane blending in the gas networks of Croatia and Slovenia. The implementation of the project will enable the reception and mixing of decarbonised gases (hydrogen and biomethane) into the gas transmission system, which will reduce greenhouse gas emissions. Furthermore, it will enable the cross-border transmission of gas with an increased hydrogen content and the development of the cross-border hydrogen market and other decarbonized gases. Furthermore, additional NDP project refers to connecting biomethane production facility to the gas transmission network.

The development of future decarbonized infrastructure will be planned respecting the following guidelines:

- all larger gas interconnection and transmission pipelines planned in the next ten-year period will be developed as hydrogen-ready,
- planning and reconstruction of gas nodes, safety and measuring equipment for receiving and mixing decarbonized gases into the gas transmission system will begin.

This includes the development of a "smart gas network", which includes advanced digital systems and components, control systems, sensor technologies, devices for gas flow and quality management (construction of compressors, gas flow control circuits, reconstruction and equipping of chromatographic equipment, etc.). Implementation timeline for the next 15 years:

- in line with the plans of the neighboring TSO' the existing interconnections will be repurposed for hydrogen transmission between 2030 and 2040,
- all larger urban centers will be supplied with hydrogen, and between 2030 and 2050, the entire 75-bar system and the 50-bar system towards Varaždin and Osijek, and potentially towards Vukovar and Virovitica will be repurposed for the reception and transmission of hydrogen, while it is assumed other areas will be supplied with local production of biomethane,
- after 2040, the existing location of the UPP terminal will be repurposed for receiving decarbonized gases and a new evacuation infrastructure will be built,
- potential new corridors for the transmission of decarbonized gases from Eastern Europe and the countries of the southern and eastern Mediterranean to Central Europe will be developed

projects for the reconstruction of inactive pipelines and development of new pipelines with the aim of developing three transmission clusters for CO₂ capture and storage.

⁵³ The Cypriot NRA has no information available on inclusion of hydrogen in NDPs, because the first has not yet been submitted to the NRA. PCI project Eastmed has increasingly been discussed in connection to hydrogen, because the EU's decarbonisation strategy encourages existing and new gas infrastructure to become hydrogen-ready.

Member State	Existing hydrogen pipelines that connect several industrial sites for industrial purposes	Hydrogen injections into the gas TSO network
Germany	Yes	Yes, up to 20 %.
Greece	No	No
Hungary	No, but it is planned. 100 MW of electrolyser capacity is planned.	No
Ireland	No	No
Italy	No	Yes
Latvia	No, but it is planned	Yes, up to 0.1 % in part of the system connected to storage and 2 % in the remaining part.
Lithuania	No, but 535 km (yearly capacity of 97 TWh) are planned.	Yes, up to 2 %.
Luxembourg	No	No
the Netherlands	Yes	No
Poland	No, but it is planned	It is assumed that it would be possible to introduce a 2% hydrogen mixture into the network, however, for safety reasons, further research is necessary on the impact of this fuel on the condition of existing gas networks.
Portugal	No	Some blending projects were included in the NDP and in the TYNDP, but the NRA recommended that approval of blending projects involving up to 10 % hydrogen be conditioned to interoperability with consumers and with Spain's TSOs. Since 2025, the National Gas Transmission Network Regulation has set the maximum hydrogen concentration at 10%, subject to proof that the infrastructure can support it and in accordance with the European legal and regulatory framework which establishes a maximum of 2% for interconnections. Previously, the limit was 5% (Order No. 806-C/2022, dated January 19)
Romania	No, but it is planned	Yes, up to 2 %.
Slovakia	No	
Slovenia ⁵⁴	No	Yes, up to 2 %. No hydrogen was blended into transmission or distribution system in 2025.

⁵⁴ The Slovene NRA notes that the development of biomethane in Slovenia is in its very early stages. In 2025 there was no biomethane in the transmission or distribution system.

Member State	Existing hydrogen pipelines that connect several industrial sites for industrial purposes	Hydrogen injections into the gas TSO network
Spain	Yes	Yes, the percentage of hydrogen that can be injected in the network is limited to 5% mol, with a 2% limit at interconnection points and network areas near sensitive facilities (compression stations, underground storages, some consumers' facilities, etc.)
Sweden	No	No

Table 32: Changes, updates and improvements to NDPs in the last two years and planned for the future

	Recent change	Planned change ^{55, 56, 57}
Unbundling model for gas TSOs	CY: Based on the Decision of the Council of Ministers No.91.503/2021, the unbundling of the operations of the National Gas Company (DEFA) is effective from January 2026 onwards. CERA published the relevant Guidelines (CERA's Regulatory Decision No.04/2025).	BE, FI
Frequency		FI: Biennial frequency is planned. IE: Biennial NDP elaboration frequency is planned to be introduced from 2026 onwards. SI: Biennial frequency is planned. BE: Biennial frequency is planned.
Scenario development	LT, FR (previous NDPs considered only the main TSO scenario; current approach includes both low and high variations of the TSO scenario)	AT: Joint scenarios process is expected after the Hydrogen and Decarbonised Gas Market Package transposition. BE, FI, IE
Transparency	AT, LT	AT: Cost transparency is expected to be improved without awaiting legal changes. BE, FI

⁵⁵The Belgian NRA reports revisions to the legislation and regulatory framework are planned in connection with the Hydrogen and Decarbonised Gas Market Package.

⁵⁶ The Finnish NRA explains that proposals for changes in the natural gas market act and for the new hydrogen market act are currently publicly consulted. They include obligation to prepare NDPs. The proposals for changes in the natural gas market act and for the new hydrogen market act are available [here](#).

⁵⁷ The Slovene NRA explains the planned changes are in accordance with the relevant EU Directive.

	Recent change	Planned change ^{55, 56, 57}
Coordination and alignment of NDPs	DE: Germany now has one integrated model for a gas/hydrogen NDP. The draft for the NDP is put forward by a single entity, the "Koordinierungsstelle" KO-NEP, which is run by all the TSOs and possible future HNOs combined. The first run for this integrated NDP started with the draft in March 2026. IT: There is now a single NDP for all TSOs. LT: Recent improvements include a more integrated planning process. The Gas TSO and Electricity TSO prepared a joint cross-sectoral scenario covering gas, electricity and hydrogen assumptions, which improved scenario development, transparency and coordination between operators.	AT: Multi-sectoral approach is expected to strengthen after the Hydrogen and Decarbonised Gas Market Package transposition by introducing integrated gas and hydrogen NDPs. LT: A potential future improvement is the preparation of a joint NDP covering both the gas and electricity TSOs, or further alignment of the two plans through a common planning approach. BE, FI, IE, SI
Governance of NDPs		AT: Changes regarding governance and monitoring are expected to strengthen NRA powers after the Hydrogen and Decarbonised Gas Market Package transposition. BE, FI
Consultation		BE, FI
Framework for hydrogen network planning	LT PL: In January 2025, an amendment to the Energy Law Act came into force in Poland, aimed at accelerating hydrogen investments. It introduced legal definitions for hydrogen, a framework for its transmission, distribution, storage, and, among other things, network planning principles for hydrogen. FR: Transposition of Directive (EU) 2024/1788 into the French national law is expected to introduce hydrogen NDPs.	AT, BE, FI, IE, PT
Infrastructure needs assessment	LT: The updated NDP includes more detailed information on infrastructure needs.	BE, FI, IE
Assessment of projects, project inclusion or project features	AT: Although the latest draft NDP was rejected, transparency in CAPEX was improved with the consultation draft. IT: The NDP shall now also provide information on third-party transport, storage and LNG regasification projects, and identify related network infrastructure needs; provide information on planned infrastructure decommissioning or repurposing; provide 5- and 10-year estimates of the tariff impacts of planned	AT: Inclusion of decommissioning projects and replacement investment needs improvement are planned. BE, FI

	Recent change	Planned change ^{55, 56, 57}
	investments. It shall also subject decommissioning projects to specific CBAs, except where justified by safety reasons; provide additional information on certain replacement and safety investments; require an assessment comparing the cost-effectiveness of gasification of new areas with alternative energy vectors. LT: The updated NDP includes more detailed information on biomethane projects, hydrogen projects and project status. PT: The latest NDP includes biomethane projects. Hydrogen projects are expected to be defined after Directive (EU) 2024/1788 is transposed.	
Other	LT: The updated NDP includes information on changes compared to the previous NDP. LV: The recent amendments are presented here. Together with the NDP, the TSO shall submit to the NRA: - an estimate of the impact of the transmission infrastructure investments on tariffs in the next regulatory period, as well as a forecast of the average transmission tariff for at least the next regulatory period and no fewer than the next five years, - a CBA for capital investments for planned newly constructed capital investment facilities that are not included in the approved plan and in which the TSO's planned capital investments exceed 500.000 EUR. A CBA shall not be carried out for newly constructed capital investment facilities if their construction is necessary for the performance of obligations specified in regulatory enactments.	IE: Core flexibility report is under development by the TSO for longer term scenarios beyond the NDP timeframe.

Part B: Results of the consistency check of projects in the draft EU TYNDP 2026⁵⁸ and NDPs

ACER invited NRAs to review the data of candidate projects for the draft EU TYNDP 2026 in the period between 15 April and 6 May 2026. NRA views were collected on the version of the project list made available by ENTSOG during the data collection period and accessible via the following link: <https://www.entsog.eu/tyndp#entsog-ten-year-network-development-plan-2026> (Annex A1).

The views and comments by the NRAs about the projects were communicated to ENTSOG with the main aim of improving the quality of the draft TYNDP 2026 project data, to help resolve potential inconsistencies and to provide a general feedback on the projects concerned.

Representatives from 20 NRAs provided inputs about draft TYNDP 2026 projects:

- 10 NRAs (Belgium, Bulgaria, Denmark, Ireland, Lithuania, Luxembourg, Latvia, Malta, Romania, Slovenia) had **no** comments/remarks on the draft TYNDP 2026 projects in their countries,
- 10 NRAs (Austria, Croatia, Czechia, Germany, Hungary, Italy, the Netherlands, Poland, Spain, Sweden) provided comments on the draft TYNDP 2026 projects in their countries. Regarding the type of these comments:
 - 5 NRAs (Austria, Croatia, Czechia, Hungary, Italy) had project-specific comments on draft TYNDP 2026 projects,
 - 7 NRAs (Austria, Germany, Italy, the Netherlands, Poland, Spain, Sweden) had general comments on draft TYNDP 2026 projects,
 - 1 NRA (Austria) provided information on a project with cross-border relevance that is listed in the last NDP, but not in the draft TYNDP 2026 list of projects.

Table 33: Number and share of draft TYNDP 2026 projects per (sub)categories⁵⁹

		TYNDP 2024		TYNDP 2026	
		Number of projects	Number of projects	Share	Share of NDP-listed
Natural gas	Transmission pipeline	72	61	22 %	89%
	Reception, storage and regasification or decompression facilities for LNG or CNG	12	6		83%
	Underground storage	11	9		89%
Hydrogen	Transmission	114	139	70 %	45%
	Storage	38	44		34%
	Reception	20	26		19%
	Mobility	1	0		-
	Electrolysers	29	34		29%
	Retrofitting infrastructure to further integrate hydrogen	7	5	3 %	80%

⁵⁸ The project list made available by ENTSO-G on [its website](#) on 15 April 2026 was used for the assessment.

⁵⁹ For reference, the corresponding numbers of projects from the [EU TYNDP 2024](#) are also included. More detailed information (per subcategories) is available in Table 33 of the Annex.

		TYNDP 2024		TYNDP 2026	
		Number of projects	Number of projects	Share	Share of NDP-listed
Smart gas grid	Biomethane	5	4	5%	50%
	Synthetic methane	1	1		0%
Other	Repurposing for CO2 transport and/or storage	4	7	5%	43%
	Other related	12	9		44%
TOTAL		326	345	100%	50 %

Table 34: List of draft TYNDP 2026 projects commented by the NRAs

Commented projects	
Austria	TRA-N-766, H2T-N-1354, H2T-A-757, H2T-A-986, TRA-N-954, TRA-F-891, TRA-A-720
Czech Republic	H2T-A-1034
Croatia	TRA-F-75, TRA-F-86, H2T-N-619, LNG-N-815, TRA-N-1058, H2T-N-1255, TRA-A-1398, H2T-N-66, H2T-N-68, H2T-N-70, H2T-N-302, H2T-N-303
Hungary	H2T-N-1259, H2T-A-1206
Italy	BIO-N-1265, H2L-N-1314, H2S-A-1189, H2T-A-1205, H2T-A-418, H2T-N-1023, H2T-N-1027, H2T-N-1053, H2T-N-1054, LNG-N-304, TRA-A-1195, TRA-F-607, TRA-N-1067, TRA-N-9, TRA-N-1194

Table 35: General comments by the NRAs on the draft EU TYNDP 2026 list

Projects commented by the NRA	
Austria	The most recent approved Coordinated Network Development Plan (CNDP) is the CNDP 2022, approved on 31 May 2023 (V KNEP G 01/23). On 30 October 2025 E-Control rejected the CNDP 2024 (V KNEP G 01/24). The TSOs have filed appeals, and court proceedings are pending. When submitting data for the EU TYNDP 2026, the Austrian TSOs correctly indicated that the latest approved CNDP is from 2022. However, at the time of submission CNDP 2024 proceedings were still ongoing and they assumed approval, not rejection. Consequently, the data provided to the TYNDP 2026 contains partially inaccurate information regarding projects as well as the status of the CNDP 2024. This concerns especially TRA-F-891, TRA-A-720 and TRA-N-954. Furthermore, the TYNDP26 includes an electrolyser and H2-storage project (H2S-N-673) which are in general not covered by the CNDP. In the meantime this project has become a project of common interest.
Germany	The NRA's assessment of the draft EU TYNDP 2026 projects and their comparison to the NDP is challenging, as there is currently no approved integrated NDP for gas and hydrogen. The naming and description of individual projects in the draft EU TYNDP 2026 is often not sufficient for review. This particularly applies to projects that were not (correctly) assigned to either the NDP or the hydrogen core network. If, for example, the project H2L-N-863, Blue

Projects commented by the NRA	
	Danube, is about lorry and/or ship transport of hydrogen, this does not represent a pipeline infrastructure and should not be included in the TYNDP in our opinion.
Italy	The NRA does not have formal competences in assessing CO ₂ and hydrogen projects. They are currently included in the national Ten-Year Network Development Plan (NDP) for information purposes only.
Poland	ERO confirms the inclusion of natural gas projects LNG-F-947 FSRU 1 terminal in Gdańsk and TRA-N-245 North-South Gas Corridor in Eastern Poland in the NDP for 2026-2035. On April 14, 2026, Gaz-System S.A., acting as the HNO submitted a request for an agreement of the first Hydrogen NDP with the President of the NRA. The draft NDP contains general information on projects H2S-N-981 Damasławek Hydrogen Storage, H2T-N-1144 Nordic-Baltic Hydrogen Corridor - PL section, H2T-N-856 Baltic Sea Hydrogen Collector - tie-in to the Polish system, H2T-N-779 Pomeranian Green Hydrogen Cluster, H2T-N-983 Polish Hydrogen Backbone - Southern Section. As the approval process has just started and is pending, it could be premature to raise any comments in regard to this type of infrastructure. No discrepancies were found in the data provided and there is no objection to including the projects in the TYNDP 2026. On 26 June 2026, URE (NRA) agreed with Gaz-System S.A. (HNO) on the first hydrogen NDP covering the years 2027-2028. NDP contains general information on projects H2S-N-981 Damasławek Hydrogen Storage, H2T-N-1144 Nordic-Baltic Hydrogen Corridor - PL section, H2T-N-856 Baltic Sea Hydrogen Collector - tie-in to the Polish system, H2T-N-779 Pomeranian Green Hydrogen Cluster, H2T-N-983 Polish Hydrogen Backbone - Southern Section. No discrepancies were found in the data provided and there is no objection to including the projects in the TYNDP 2026.
the Netherlands	At this stage the NRA has not yet been appointed as an authority to regulate hydrogen sector. The NRA review therefore excludes hydrogen related projects.
Spain	At present, the Ministry of Ecological Transition and Demographic Challenge is still working on the transposition of Directive (EU) 2024/1788. On 20 March 2026, Royal Decree-Law assigned the NRA competences to temporarily develop tasks included in Article 16 of Regulation (EU) 2022/869 (Enabling investments with a cross-border impact). However, the NRA has not yet received any information or investment request from TSOs to this respect and the NRA cannot provide observations regarding hydrogen projects hosted in Spain.
Sweden	The draft TYNDP 2026 projects list includes information that Sweden has an ongoing project concerning Nordic Hydrogen Route. Sweden is currently not required by national law to carry out a gas NDP. However, the Swedish energy markets inspectorate has, in collaboration with a government commission, proposed that provisions be introduced in a new Gas Market Act stating that, inter alia, all transmission network operators for gas, other than hydrogen and distribution network operators for hydrogen, shall be obliged to produce NDPs. For a TSO, the NDP shall be updated and published at least every two years and for a distribution network operator every four years. More information is available at the webpage of the energy markets inspectorate.

Table 36: List of cross-border relevant projects included in the latest NDP, but not in the draft EU TYNDP

Country of the reporting NRA	Project category	Project name	Project code in the NDP	Project promoter	Expected commissioning date
Austria	Gas transmission	WAG Teil-Loop	GCA 2022/01	Gas Connect Austria	Jun-27