The newly revised European H-Gas Standard

EN 16726:2025

Tobias van Almsick, Convenor CEN/TC 234 / WG 11

ENTSOG Gas Quality Workshop, Bruxelles, Nov. 19th , 2025

Revision of EN 16726 – Quality of Gas – Group H

Responsible: CEN TC 234 / WG 11 „Gas Quality“

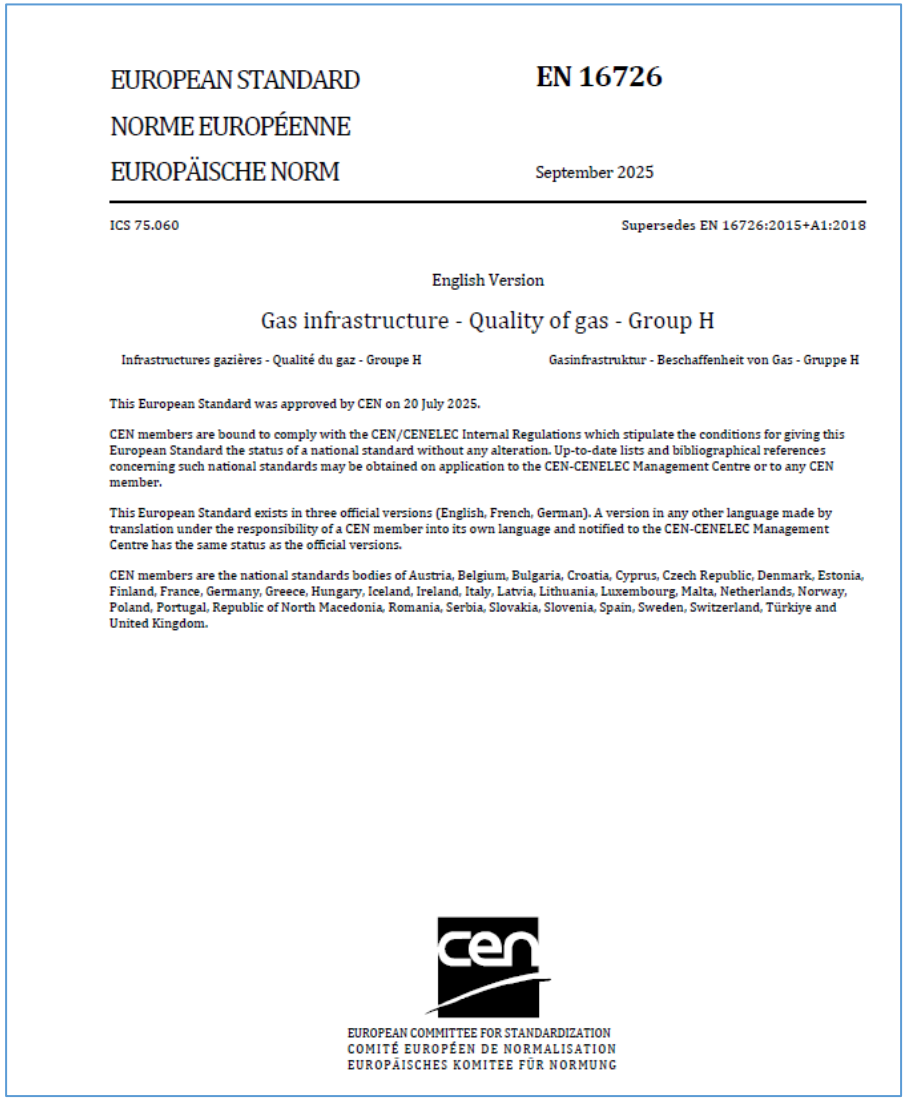
Content work in five working groups: Dec. 2021 – Aug. 2023
Enquiry draft in August 2023

Public enquiry: 2023-12-21 – 2024-03-14

Comments received: approx. 650
10 sessions of comments treatment: April 24 until September 24

- **Formal vote: 2025-06-19: 100% approval**

- **Publication: 2025-09-10:**



EUROPEAN STANDARD **EN 16726**

NORME EUROPÉENNE

EUROPÄISCHE NORM September 2025

ICS 75.060 Supersedes EN 16726:2015+A1:2018

English Version

Gas infrastructure - Quality of gas - Group H

Infrastructures gazières - Qualité du gaz - Groupe H Gasinfrastruktur - Beschaffenheit von Gas - Gruppe H

This European Standard was approved by CEN on 20 July 2025.

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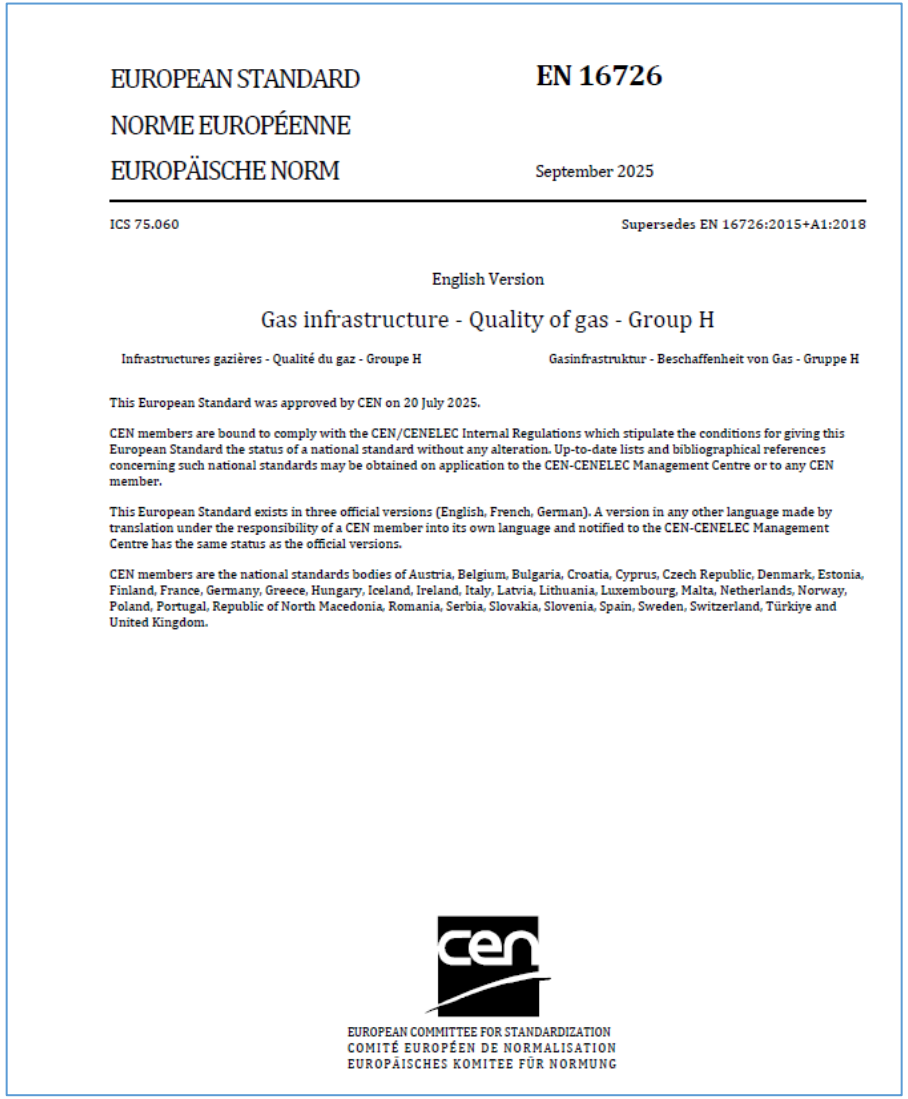
Revision of EN 16726 – Quality of Gas – Group H

Major changes:

- Wobbe-Index
- Hydrogen
- Relative density
- Oxygen
- Methane number



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Revision of EN 16726 – Hydrogen / relative Density

Relative density [a]	no unit	0,45	0,70	EN ISO 6976, EN ISO 15970
Hydrogen	mol/mol	not applicable	2 %	None
	A hydrogen concentration shall be accepted up to two percent by mol across the whole value chain. It may deviate nationally, regionally or locally for higher values than 2 mol/mol of hydrogen concentration provided that the requirements of the applications sensitive to hydrogen are met for lower values than 2 mol/mol of hydrogen concentration in case of proven sensitivity of installations to hydrogen, e.g. some underground gas storage and some gas turbines. For further information reference is made to 5.4 and Annex K.			

- In alignment with European Gas package
  - Directive (EU) 2024/1788
  - Regulation (EU) 2024/1789

- Facilitating the introduction of (green) hydrogen into the market.

Revision of EN 16726 – Oxygen

Oxygen	mol/mol	not applicable	1 % or below 1% to 0,01 % or below 0,01 % to 0,001 %, according to assessment process (see below)	EN ISO 6974-3, EN ISO 6974-6, EN ISO 6975
	In the gas infrastructure the concentration of oxygen shall be no more than 1 %. However, if it can be demonstrated by an **assessment process** that a gas with oxygen content can flow to installations with proven sensitivity to oxygen at the level: — of below 1 % to 0,01 %, the maximum limit shall be lowered to the maximum acceptable limit, expressed as a moving 24-hour-average. — of below 0,01 %, the maximum limit shall be limited to 0,001 % at the lowest, expressed as a moving 24-hour average. Solutions for protecting these specific installations shall be defined in co-operation of the parties concerned, as part of the assessment. NOTE 1 Most applications can accept a level of 0,01 % of oxygen or higher; certain types of underground storages are sensitive to oxygen contents higher than 0,001 %. On a case-by-case basis, it can be required to identify the techno-economical optimal solution enabling the level of O_2 acceptable for the part of the gas grid affected, e.g. from biomethane producers to installations sensitive to O_2. The assessment process for identification of installations sensitive to O_2, and evaluation of the applicable threshold and responsibilities need to be stipulated to facilitate the application of the standard requirement on O_2 content. NOTE 2 Considering the expected development of biomethane production, the lower maximum limit of 0,01% will probably have to be reassessed upwards in the coming years. NOTE 3 0,01 mol/mol is equal to 100 ppm(mol) and 0,001 mol/mol is equal to 10 ppm (mol). More information on oxygen origin, challenges, mitigation measures and measurement are given in Annex I.			

- Facilitating the market ramp up of renewable gases
- Oxygen removal from biogas is cost expensive
- Higher limiting values for oxygen incentivise biomethane injection
- Assessment process to clarify details in case of possible issues.

Revision of EN 16726 – Wobbe-Index

- Introduction of Wobbe-Index originated in Mandate M/400 (2007)
- Specifications for both
  - Entry-Points
  - Exit-Points
    - Class Specified
    - Class Extended
- Concept for Wobbe can only be applied if accompanying rules / legislation is in place (e.g. NC Int, MS regulation)

Revision of EN 16726 – Wobbe-Index - Entry

5.2 Entry point Wobbe index range (recommendation)

The Wobbe index entry range should be within 46,44 MJ/m³ and 54,00 MJ/m³ [15 °C/15 °C] (see Table 2).

Table 2 —Wobbe index entry range recommendation

Parameter	Unit	Limits based on standard reference condition 15 °C/15 °C	
		Min.	Max.
Wobbe index at entry points	MJ/m³	46,44	54,00

NOTE 1 The Wobbe index limit values at entry points need to comply with the national requirements on the Wobbe index entry range.

Revision of EN 16726 – Wobbe-Index - Exit

5.3.2 Class 'Specified'

Class Specified shall be assigned to exit points (or to a cluster of exit points) for the distributed gases if the following conditions apply:

— Wobbe index bandwidth of ≤ 3,7 MJ/m³;

— within the Wobbe index range of 46,44 MJ/m³ to 53,00 MJ/m³ [15 °C/ 15 °C at 1 013,25 mbar].

- Downstream Sector / End users shall be informed about the assignation.
- No further action to be taken.

Revision of EN 16726 – Wobbe-Index - Exit

5.3.3 Class 'Extended'

Class Extended shall be assigned to exit points (or a clusters of exit points) for distributed gases which are not covered by the Class Specified within the recommended Wobbe index entry range of 46,44 MJ/m³ to 54 MJ/m³ (5.3) or within the national Wobbe index specification for H-gas (see Annex E).

NOTE 1 In many countries national legal Wobbe index ranges exist, which can differ from the recommended Wobbe index entry range; in other countries generally acknowledged national standards and/or codes of practices apply.

Allocating Class Extended to exit points (or clusters of exit points) requires

— unbiased assessment of the presence of users' applications sensitive to Wobbe index at the concerned exit point or cluster of exit points and,

— if any, the implementation of appropriate mitigating measures in cooperation with all parties involved (Annex C).

5.3.6 Implementation of Wobbe index classification

The Wobbe index classification system in this document shall apply, if the corresponding national/European framework is available to support it.

At least the assessment procedure for identification of applications sensitive to Wobbe index, the assignation and change of classes, related time scales and responsibilities need to be stipulated to enable an implementation of the classification system.

Regulatory framework needed

- **CEN TC 234 / WG11**
  - Emphasizes the strong need for a regulatory framework to support the applicability of EN 16726.
  - Is ready to deliver further normative input, if appropiate.
  - Stakeholders along whole value chain are committed to contribute to the elaboration of solutions.

- **Madrid-Forum 2025**

  The Forum welcomes the imminent completion of the work of CEN to develop common standards under the so-called European standard EN 16726 "Gas infrastructure - Gas Quality - Group H" and highlights the importance of this work for the removal of any barriers to the free flow of natural gas in the internal energy market.

  The Forum invites the Commission to consider carrying out a public consultation, or designating ACER to carry out such consultation, for the purpose of identifying the exact need, timing and scope of a potential amendment of the Interoperability Network Code.

- **CEN TC 234 / WG11**
  - works in close coordination with ACER, DG ENER and the NRAs to initiate the regulatory process
  - The next workshop on this topic will take place in November.

New work in preparation, resulting from EN 16726 process

- **Technical Report on rate of change (ROC) of gas quality parameters**
  - Focus mainly on Wobbe-Index
  - Importance of RoC acknowledges but not yet completed in EN 16726

- **Technical Report on Oxygen**
  - Supporting the assessment process stipulated in the standard
  - Regulatory framework Wobbe could also support oxygen assessment

➢ **Start of work in CEN TC 234/WG11 back in June 2025**

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