Market Consultation 71- report

Standard Connection Agreement – Local Producer

Non Compatible Gas

Annex 7 Gas Quality Requirements at the Connection Point

1. Introduction

From October 17th 2025 until November 7th 2025 included, Fluxys Belgium consulted the market on its proposed changes of "annex 7 - Gas Quality Requirements at the Connection Point" of the Standard Connection Agreement – Local Producer - Non-Compatible Gas.

In consultation 69, Fluxys introduced a new Standard Connection Agreement for Local Producers of Non-Compatible Gas. This Standard Connection Agreement enables the injection of essentially pure hydrogen (100%) or gases with a high hydrogen concentration (10% or more). To allow the injection of hydrogen with a minimum purity of 98%, it was necessary to lower the minimum limits of the Gross Calorific Value and the Wobbe Index in Annex 7, "Specification Non-Compatible Gas", of the Standard Connection Agreement. The new lower limit for the Gross Calorific Value has been changed from 3.54 kWh/m³(n) to 3.47 kWh/m³(n), and the new lower limit for the Wobbe Index has been changed from 13.43 kWh/m³(n) to 11.05 kWh/m³(n).

2. Consultation process

Fluxys Belgium launched this market consultation by publishing the proposed changes in the regulated documents on its website – at the usual location for such consultations, supported by an announcement on the homepage – and via direct e-mailing to all registered market participants and associations.

From 17 October until 7 November 2025 included, stakeholders were invited to submit their written feedback and, if needed, to seek additional information through bilateral contact with Fluxys Belgium.

Taking into account the comments received, Fluxys Belgium submits for approval to the CREG, the so amended version of the above-mentioned regulatory document "annex 7 - Gas Quality Requirements at the Connection Point" of the Standard Connection Agreement – Local Producer - Non-Compatible Gas, that aims to become applicable as from publication.

3. Outcome of consultation process

Feedback regarding the proposed changes was received from one End User and one Representing Organisation. None of the comments was confidential. All comments are listed in the appendices of the present report.

First remark from an End User concerns the worry that the natural gas delivered to End Users could contain between 2 and 100 mol% hydrogen, potentially causing damage to steel pipelines and installations of the End User. Fluxys provided additional clarification that the mentioned hydrogen concentration refers to the concentration in the Non-Compatible Gas, which is blended into the natural gas via a blending service, ensuring that the resulting hydrogen concentration in natural gas remains limited to a maximum of 2%. This additional clarification was considered sufficiently clear by the End User.

The second remark from a Representing Organisation (on behalf of a trader) regarding the concern about the (in-) compatibility of hydrogen gas with future hydrogen networks. Fluxys further clarified

that the consulted specification relates to hydrogen gas intended for blending into the natural gas network. Hydrogen gas intended for injection into the hydrogen network is subject to specific requirements. This additional clarification was considered sufficiently clear by the End User.

4. Appendices

a. E-mail : invitation for consultation

b. List of documents in consultation

c. Questions & Answers

d. Printed copy of written comments

E-mail invite for consultation

Fluxys Belgium - Market Consultation 71: Update of the ani 7 of the Standard Connection Agreement - Local Producer - Non-Compatible Gas

Dear Customer,

Participate in our market consultation that will take place **from 17 October 2025 to 7 November 202** following changes are introduced in the regulatory document:

- Annex 7 of the Standard Connection Agreement - Local Producer - Non-Compatible Gas
  - The lower limits of the Gross Calorific Value and the Wobbe-index

The documents can be consulted on our website.

You are kindly invited to send your written comments to marketing@fluxys.com by **7 November 2025 before 17:00 CET.**

Please mention in your response whether the content is to be treated as confidential or not. Unless otherwise mentioned, all comments will be treated as non-confidential.

Yours sincerely,

The Commercial Team

Documents in consultation

Gaskwaliteitsvereisten op het Aansluitingspunt

Qualités requises du gaz au Point de raccordement

XXXXX – YYYYY

	Eenheid / unité	Min.	Max.	Mogelijk aangepaste limieten/ Possible adaptation des limites (1)
Calorische Bovenwaarde / Pouvoir Calorifique Supérieur	kWh/m³ (25°C, 0°C)	... (2)	12,77	Min
Wobbe-index / Indice de Wobbe	kWh/m³ (25°C, 0°C)	... (3)	... (4)	Min – Max
Druk / Pression	Barg	XX	XX	/
Temperatuur / Température	°C	2	XX	/
Zuurstof / Oxygène (O_2)	ppm (mol)	/	... (5)	Max
Koolstofdioxide / Dioxyde de carbone (CO_2)	% (mol)	/	2,5	/
Waterstof / Hydrogène (H_2)	% (mol)	/	... (6)	Max
Ethyleen / Ethylène (C_2H_4)	% (mol)	/	0,5	/

(1) Aangepaste limieten zijn afhankelijk van de locatie van het Aansluitingspunt / L'adaptation des limites dépend de la localisation du Point de Raccordement

(2) Waarde tussen / Valeur entre : ~~3,54~~ 3,47 en/et 10,8 kWh/m³ (25°C, 0°C)
(3) Waarde tussen / Valeur entre : ~~13,43~~ 11,05 en/et 14,49 kWh/m³ (25°C, 0°C)
(4) Waarde tussen / Valeur entre : 15,05 en/et 15,47 kWh/m³ (25°C, 0°C)
(5) Waarde tussen / Valeur entre : 10 en/et 5000 ppm mol
(6) Waarde tussen / Valeur entre : 2 en/et 100 % mol

Bijkomend dient te worden voldaan aan de specificaties van de andere parameters opgenomen in "Algemene voorschriften Synergrid – Decentrale gasinjectie": de injectie van decentraal geproduceerd Compatibel Gas inclusief de kwaliteitscontrole gebeurt conform de voorschriften opgenomen in document Synergrid G8 / 01.

En outre, les spécifications pour les autres paramètres repris dans les « Prescriptions Générales Synergrid - Injection de gaz Décentralisée » doivent être respectées : l'injection de gaz compatible produit décentralisé, y compris le contrôle qualité, se fait conformément à la réglementation reprise dans le document Synergrid G8 / 01.

Questions & Answers

Questions and Answers					
#	From	Confidential?	Topic	Questions / Comments by Stakeholders	Answers / Comments by Fluxys Belgium
1	Air Liquide	No	Hydrogen concentration	Le document des qualités nous a fait constater que la teneur en hydrogène peut aller de 2 **à 100% mol** ? Qu'est-ce que cela signifie concrètement pour un end-user comme Air Liquide ? D'après nos standards, dès que la teneur en hydrogène est supérieure à 5%, il peut y avoir un endommagement sévère de l'acier utilisé pour les canalisations ?	Comme repris dans la consultation, la teneur en hydrogène peut aller de 2 à 100% pour l'**injection de gaz non compatible**. Il y a bien un service de mélange de ce gaz non compatible avec un gaz porteur pour que **la teneur en hydrogène du gaz après mélange soit inférieure à 2%**.
2	FEBEG on behalf of a member	No	Hydrogen concentration	With regard to the consultation I am wondering if those specifications are compatible with those of the proposed network plans of Hy Network Services (HNS) in the Netherlands. As a trading company we would like to be able to supply our potential Belgian and Dutch customers from either the Netherlands or Belgium with local produced or imported H2. Therefore, it is 'prerequisite' that H2 specifications are equal in both proposed grids. And, I am wondering if the values mentioned below have been checked with HNS? For the sake of completeness, I have added the indicative quality specs of HNS as an attachment to this email and as you can notice there is quite a difference on e.g. minimal H2 purity. ➔ As I understood it, the consultation applies to hydrogen that is blended in the natural gas network (max 2%, I thought). (The hydrogen purity the member is referring to, is that for the hydrogen network.) Can you please confirm this?	In response to the question from one of your members regarding the quality specifications of hydrogen, the subject of the ongoing consultation "Annex 7 – Standard Connection Agreement – Local Producer – Non Compatible Gas", we can indeed confirm that this specification concerns the injection of hydrogen-containing gas that is **not** compatible with natural gas and will be diluted therein at a rate resulting in a maximum hydrogen concentration of 2%. The consultation of "Annex 7 – Standard Connection Agreement – Local Producer – Non Compatible Gas" therefore does **not** concern the hydrogen that will be injected into the pure hydrogen network in Belgium, for which Fluxys has been appointed as HNO – Hydrogen Network Operator. We hope to have informed you sufficiently with this.

Printed copy of written comments

All reactions			
Company	**First Name**	**Last Name**	**Confidential**
Air Liquide	Valentin	Chable	No
FEBEG (on behalf of a member)	Luc	Huysmans	No

Air Liquide

marketing@fluxys.com

From: CHABLE, Valentin <valentin.chable@airliquide.com>
Sent: 07 November 2025 11:19
To: marketing@fluxys.com
Cc: Bawin Denis; Goossens Aart; Francois DEMOISY
Subject: Fwd: Fluxys Belgium - Market consultation 71: Update of annex 7 of the Standard Connection Agreement – Local Producer - Non-Compatible Gas

You don't often get email from valentin.chable@airliquide.com. Learn why this is important

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Chers collègues Fluxys,

Merci pour cette consultation.
Nous n'avons pas de commentaire spécifique à faire sur les adaptations des valeurs du Pouvoir Calorifique Supérieur et du Wobbe Index.
Ceci dit, le fait d'ouvrir le document des qualités requises nous a fait constater avec étonnement que la teneur en hydrogène peut aller de 2 **à 100% mol** ? Qu'est-ce que cela siginifie concrètement pour un end-user comme Air Liquide ? D'après nos standards, dès que la teneur en hydrogène est supérieure à 5% , il peut y avoir un endommagement sévère de l'acier utilisé pour les canalisations ?

Est-ce une mauvaise lecture de notre part ou bien est-ce spécifique aux producteurs qui se connectent au réseau Fluxys ?
N'y a-t-il pas de risque pour les end-users ?

Merci d'avance pour votre retour.

Bien à vous

Valentin Chable

marketing@fluxys.com

From:	Bawin Denis
Sent:	12 November 2025 22:21
To:	valentin.chable@airliquide.com
Cc:	Vander Eeckt Yoran; marketing@fluxys.com; francois.demoisy@airliquide.com; Brysens Ivan; Goossens Aart
Subject:	RE: Fluxys Belgium - Market consultation 71: Update of annex 7 of the Standard Connection Agreement – Local Producer - Non-Compatible Gas

Bonsoir Valentin.
Je te remercie pour la question.
Comme repris dans la consultation, la teneur en hydrogène peut aller de 2 à 100% pour l'**injection de gaz non compatible**.
Il y a bien un service de mélange de ce gaz non compatible avec un gaz porteur pour que **la teneur en hydrogène du gaz après mélange soit inférieure à 2%**.

Je peux donc t'assurer que le gaz livré au end user Air Liquide aura bien **une teneur de maximum 2% d'hydrogène**.
J'espère avoir répondu à ta demande.

Bien à toi

Denis

FEBEG (on behalf of a member)

From: Luc Huysmans (Febeg) <luc.huysmans@febeg.be>
Sent: 22 October 2025 17:54
To: Stevenin Arnaud <Arnaud.Stevenin@fluxys.com>
Subject: Clarifying question FEBEG on Fluxys consultation 71 - Gross caloric value + Wobbe index

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hi Arnaud
I received a question from a member
With regard to the consultation I am wondering if those specifications are compatible with those of the proposed network plans of Hy Network Services (HNS) in the Netherlands. As a trading company we would like to be able to supply our potential Belgian and Dutch customers from either the Netherlands or Belgium with local produced or imported H2. Therefore, it is 'prerequisite' that H2 specifications are equal in both proposed grids. And, I am wondering if the values mentioned below have been checked with HNS? For the sake of completeness, I have added the indicative quality specs of HNS as an attachment to this email and as you can notice there is quite a difference on e.g. minimal H2 purity.

- ➔ As I understood it, the consultation applies to hydrogen that is blended in the natural gas network (max 2%, I thought).
  (The hydrogen purity the member is referring to, is that for the hydrogen network.)
  Can you please confirm this?

Best regards
Luc

Brysens Ivan

From: Bawin Denis
Sent: 14 November 2025 08:59
To: Brysens Ivan
Subject: FW: Clarifying question FEBEG on Fluxys consultation 71 - Gross caloric value + Wobbe index

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From: Luc Huysmans (Febeg) <luc.huysmans@febeg.be>
Sent: 05 November 2025 12:28
To: Bawin Denis <Denis.Bawin@fluxys.com>
Subject: RE: Clarifying question FEBEG on Fluxys consultation 71 - Gross caloric value + Wobbe index

Merci Denis

Réponse très clair, beaucoup apprecié

Bàv

Luc

From: Bawin Denis <Denis.Bawin@fluxys.com>
Sent: Wednesday, 5 November 2025 12:02
To: Luc Huysmans (Febeg) <luc.huysmans@febeg.be>
Subject: RE: Clarifying question FEBEG on Fluxys consultation 71 - Gross caloric value + Wobbe index

Dear Luc,
In response to the question from one of your members regarding the quality specifications of hydrogen, the subject of the ongoing consultation "Annex 7 – Standard Connection Agreement – Local Producer – Non Compatible Gas", we can indeed confirm that this specification concerns the injection of hydrogen-containing gas that is not compatible with natural gas and will be diluted therein at a rate resulting in a maximum hydrogen concentration of 2%.
The consultation of "Annex 7 – Standard Connection Agreement – Local Producer – Non Compatible Gas" therefore does not concern the hydrogen that will be injected into the pure hydrogen network in Belgium, for which Fluxys has been appointed as HNO – Hydrogen Network Operator.
We hope to have informed you sufficiently with this.

With kind regards,

Denis Bawin