

Proposal for a Directive of the European Parliament and of the Council on common rules for the internal markets in renewable and natural gases and in hydrogen

Introduction

The Swedish Gas Association welcomes the EU's ambitious comprehensive approach to climate policy. The climate package "Fit for 55" is an important big step in reducing emissions by at least 55 per cent by 2030 and achieving climate neutrality by 2050 – two urgent targets that the Swedish Gas Association fully supports and stands behind.

The Commission's initiative to review the EU's gas regulations aims to remove unnecessary regulatory barriers to facilitate market access to renewable and low-carbon gases, thus helping to achieve the goals of the EU's Green Deal. The Swedish Gas Association agrees that a fully functioning internal energy market is crucial to ensure security of supply, the energy sector's competitiveness and energy at affordable prices.

Developments in recent years have shown that natural gas actually serves as a bridge to the increased use and production of biomethane. When compressed natural gas was introduced in Sweden it largely consisted of natural gas. Today it is almost completely renewable. A similar development is taking place within industry where 20 or so industrial companies have already switched from natural gas to biomethane. The shipping industry has shown that natural gas-powered vessels can run just as well on biomethane. The biomethane share of Sweden's largest gas network (the west Sweden gas network) is increasing rapidly and now amounts to just over 30 per cent. In Stockholm, where total volumes are smaller, the biomethane share is already up to 78 per cent. Almost all Swedish private gas customers who use gas for heating or cooking have switched to biomethane.

Among the many benefits of biomethane that can be mentioned is that biomethane is part of a closed cycle where society's waste, such as food waste, wastewater and residual products from industry provide renewable products such as fuel, electricity, heat and plant nutrients. The production and use of biomethane and its digestate (biofertiliser and sewage sludge) is thus an important and central part of a circular bio-based economy and contributes to environmental and climate benefits along the entire circle. Biomethane has great domestic potential and can therefore contribute to the security of supply.

Hydrogen has long been an important raw material within parts of the Swedish process industry. Most of the hydrogen used today in Sweden (approximately 6 TWh per year) is used in industry, mainly in the chemical and refinery industries, and is of fossil origin. Since the EU's hydrogen strategy¹ was presented on 8 July 2020, there is no doubt that the EU Commission sees hydrogen as a key player on the road to zero net emissions in 2045. The EU Commission has identified three core elements of the Union's joint energy transition where hydrogen is one of them, along with electrification and energy efficiency.

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0301&from=EN>

There are currently a number of major industrial projects in Sweden, where production and use of hydrogen is, or is planned to be, central in one or more value chains. A well-developed infrastructure for hydrogen is crucial for hydrogen to become the key player it needs to be in the transition. But building and investing in infrastructure for gas takes time, not least as a result of long permit processes. It will take a long time to achieve large-scale production of renewable hydrogen on site, which the EU Commission also confirmed in the EU's hydrogen strategy. For this reason, production of hydrogen by reforming natural gas in combination with CCS, so called low-carbon hydrogen, must be supported in parallel with the scaling up of renewable production. A one-sided focus on electrolysis also does not take into account hydrogen production that takes place with sustainable raw materials, such as biomass. As we are facing a massively increased need for hydrogen, it is necessary to also prioritise climate-neutral hydrogen production other than electrolysis. There is no doubt that we need to get started now. *The Swedish Gas Association would like to see clear regulation for investments and expansion of hydrogen networks as soon as possible.*

Overall views

It is important that the proposed legislation package is designed so that the different conditions prevailing in different Member States can be taken into account. Sweden is an elongated country, without a comprehensive gas network, but where gas is extremely important for certain industries, both in connection with the gas network and outside the gas network. The share of biomethane is high and the opportunities to produce low-carbon or renewable hydrogen gas are great. Sweden has a well-developed infrastructure for liquefied biomethane and its use, mainly of liquefied biomethane, is increasing primarily in the transport sector. It is important that development is not hampered by excessive demands for detailed reporting and increased administration for the players in the market.

Too much detailed regulation in the third gas market package

An EU regulation is directly applicable and applies in all Member States without being incorporated into national legislation. It becomes part of the national legislation through its entry into force. If a Member State has national provisions that contravene an applicable EU regulation, it is the regulation that applies.

The Swedish Gas Association sees a risk with the proposal to decide such detailed legislation in the third gas market package. In its current form, little or no opportunity is given to take into account the different conditions of the Member States. Sweden is an elongated country, without a comprehensive gas network, but with a high and growing share of renewable gas in the network. This situation is completely different from the situation in many other countries. In order to take advantage of the unique conditions of each Member State, the rules should first be set out in the directive, with room for national flexibility in the implementation of the legislation of each country.

The third gas market package also includes proposals for regulating issues that are dealt with in other directives and regulations, which may make it unclear when implementing the current regulations. The introductory text to the directive states, for example, that regulation of solidarity and issues relating to security of supply are dealt with in the proposal for this directive and in (EU) 2017/1938. In light of escalating energy prices in the autumn of 2021, the Commission wishes to highlight in particular the issue of the third gas market package ensuring cooperation and resilience to achieve a more efficient and coordinated use of storage and other solidarity mechanisms. Examples of other such issues are the Union database, see comments below on Article 8, paragraph 10, and matters that are regulated in the Renewable Energy Directive², abbreviated as REDII.

Concerning references to delegated and implementing acts

The Swedish Gas Association also notes that there are a number of references to delegated and implementing acts in the Commission's proposal. *The Swedish Gas Association generally believes*

² Directive of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources

that there is reason to be cautious about the type of authorisation that gives the Commission the power, via delegated acts, to change the meaning of the legislation that has previously been dealt with in the EU's legislative process.

Industry's perspective – uses gas as a raw material as well

Gas has an important role as an input raw material, for example in the chemical and steel industries. Many chemical industries today use natural gas as a raw material as the carbon compound is an important component in the production of, for example, chemically produced products. These industries have high ambitions to switch to biomethane as soon as the conditions are right. Industries that use methane as a raw material are, however, dependent on the gas maintaining a consistent gas quality over time and are very sensitive to large variations. Today, hydrogen is also often used as a raw material, for example in refineries and the chemical industry, which require a consistent gas quality. *The Swedish Gas Association therefore considers that it is unfortunate that the raw material perspective is completely omitted in the Commission's proposal.* Both energy and raw material use are crucial parts of the industry's transition work for climate-neutral production in 2045.

Concerning regulation and unbundled regulations

The expansion of hydrogen infrastructure will be crucial for the transition. When large amounts of energy are to be transported between production and consumption, it is important that it takes place in a secure, energy-efficient and cost-effective manner. Transporting energy in the form of hydrogen in a hydrogen network is 2-4 times cheaper³ than transporting energy in the form of electricity, even offshore. As power production in many cases will be far from consumption, it is likely that a hydrogen infrastructure will emerge in large geographical clusters.

It is positive that the Commission's proposal proposes to regulate hydrogen networks. However, the Swedish Gas Association believes that requirements for regulation need to be met from the outset, before new hydrogen networks begin to be built on a large scale, instead of 31 December 2030 as the Commission proposes. The Swedish Gas Association considers that the security aspect is very important and otherwise sees a significant risk that regional hydrogen networks will have to be built up under different conditions, standards, pressures, etc. and that problems will thus arise when these regional clusters are to be connected to each other and built together into a cohesive national hydrogen network.

Introducing hydrogen on a large scale in the market is an important part of the Commission's gas market package and a well-developed hydrogen infrastructure is crucial to making hydrogen the key player it needs to be in the transition. The directive (Chapter 9, Section 4) sets out the unbundling rules required for a hydrogen network operator. *The Swedish Gas Association considers that these requirements are difficult to interpret and it is unfortunate that the requirements are stricter for a network operator for hydrogen than those which apply to natural gas and electricity today.* The risk with stricter requirements for hydrogen is that it will counteract expansion and that important players will be excluded. Networks (both transmission and distribution) for natural gas today provide an important service to society and have enabled efficient, transparent and non-discriminatory network access. The hydrogen infrastructure is likely to share the same monopolistic characteristics as the electricity and natural gas transmission networks and there is therefore no reason to assume that existing unbundling models in the natural gas sector could not be applied in the same way in the hydrogen sector. In the directive proposal, Article 62 states that Member States shall ensure that the hydrogen network operators are unbundled in accordance with the rules that apply for a system manager for the transmission system (TSO) for natural gas (Article 56 (1-3)). Furthermore, it appears that distribution network operators who want to convert their gas network to hydrogen and/or invest in new infrastructure for hydrogen will have increased requirements for unbundling. In the existing legislation, the unbundling provisions for distribution operators are not as extensive as those

³ https://gasforclimate2050.eu/wp-content/uploads/2021/06/EHB_Analysing-the-future-demand-supply-and-transport-of-hydrogen_June-2021_v3.pdf

applicable to a TSO. Furthermore, the distribution operators are in many cases a part of municipal or publicly owned energy companies with a broad energy business in their immediate geographical area where the desired sector connection can easily be achieved. *The Swedish Gas Association therefore considers it important that there are no stricter requirements for unbundling for the network operator for hydrogen than those which apply to natural gas and electricity.*

Article 63 states that if a hydrogen network operator is part of an undertaking active in transmission or distribution of natural gas or electricity, the hydrogen network operator shall be independent, at least in terms of its legal form. *The Swedish Gas Association considers it is important to be able to benefit from collaboration that can be achieved between natural gas and hydrogen network operations regarding, for example, the skills, knowledge and resources required to develop and safely operate gas and future hydrogen networks.* Existing gas network operators can offer both a driving force and cost savings for both natural gas and hydrogen for the benefit of society as a whole. The proposal for legal unbundling should therefore not exclude key players or prevent synergies between natural gas and hydrogen network operations.

The Swedish Gas Association also notes that, in the third gas market package, no distinction is made between the transmission system operator (TSO) and the distribution system operator (DSO) in hydrogen. Instead, all players become hydrogen network operators, regardless of size, location or network pressure. A player in the natural gas market who is currently a TSO is involved in most European contexts and handles a number of issues concerning network codes, security of supply, network planning, etc. These are tasks that none of the DSOs for natural gas need or should need to get involved in. This system works well for the natural gas market and *the Swedish Gas Association therefore questions whether indeed all hydrogen network operators, even the smallest companies, should or must be involved at all international levels proposed in the regulation, or if there is reason to divide the players at the TSO and DSO level respectively for the hydrogen market as well.*

Detailed comments on the proposed directive

Chapter 1 Subject matter, scope and definitions

Article 2 Definitions

According to the definition of "natural gas", paragraph 1, biomethane is defined as natural gas provided that it can be safely injected into, and transported through, the natural gas system. *The Swedish Gas Association opposes the inclusion of biomethane in the definition of natural gas, and considers that the definitions should instead be unbundled.* It is important that biomethane that is co-distributed with natural gas via the gas network, and that is contracted, traded and used by customers in different sectors, is clearly defined as biomethane. If biomethane that is co-distributed with natural gas is defined as natural gas, there is a risk that demand for biomethane from customers who want to contribute to the green transition will decrease.

Paragraph 4 defines "natural gas system" as a system of infrastructures including pipelines, LNG terminals and storage facilities, which transports methane (that is, both natural gas and biomethane). *The Swedish Gas Association considers it unfortunate that the gas network is defined in this way as a natural gas network, despite the fact that a growing proportion of the gas distributed via the gas network consists of biomethane.* An example that can be mentioned is that the share of biomethane in Stockholm's gas network already amounts to 78 per cent, and that the share of biomethane in the west Sweden gas network is more than 30 per cent. Today, the majority are customers (both in the private sector and in other sectors) who buy 100 per cent biomethane. In this situation, continuing to refer to the gas network as a natural gas network gives a misleading picture, which leads to associations that the gas network only transports and transfers fossil fuel, when the gas network is in fact an enabler for transporting biomethane in a very cost-effective and energy-efficient manner. The gas network is thus an important prerequisite for the transition and contributes to the possibility of achieving our climate goals. This should be more clearly reflected in the definitions. *For this reason,*

the Swedish Gas Association considers that the natural gas system should instead be referred to as the gas system or the methane gas system.

For the definitions of “low-carbon gas” in paragraph 11 and “low-carbon fuels” in paragraph 12, see the comments under our views on Article 8 below.

Chapter 2 General rules for the organisation of the markets

Article 3 Competitive, consumer-centred, flexible and non-discriminatory markets for gases

Paragraph 1 states that all customers shall be free to have more than one supplier contract for natural gas or hydrogen at the same time/on the same occasion. It is difficult to understand how this will work in practical terms as there is usually only one pipeline in which the gas is transported. In order for this to work, the customer must have several connections and different measuring points (where each measuring point can only have one supplier and one balance manager). If there is only one measuring point at the customer, it is not possible to measure how much volume comes from one or the other supplier. The problem applies to natural gas/biomethane and hydrogen. If the paragraph is to remain, this should be clarified.

Article 8 Certification of renewable and low-carbon fuels

Paragraph 1. It is reasonable that renewable gases up to and including production must meet the sustainability criteria in Articles 29 and 30 of REDII and the requirements for control systems and principles of mass balance that are set there. However, "certified" should be changed to "comply with" in order not to exclude verification via national systems that have not been approved as a voluntary certification system. *However, the Swedish Gas Association, like EBA, Eurogas and others believe that for the distribution stage (that is, from production/injection to final consumption), guarantees of origin provided with information on meeting the sustainability criteria should be used.* This means that mass balance according to the sustainability criteria should be used up to and including the production of the gas and then traceability through guarantees of origin (book and claim).

Paragraph 2. For "low-carbon gases", in the same way as for renewable gases according to paragraph 1, it is reasonable that requirements are set for control systems, mass balance and methods for calculating greenhouse gas reduction in accordance with REDII that is proposed. *But here too the Commission should provide that the information must be indicated on guarantees of origin and that downstream of production/injection (that is, in the distribution stage) there are guarantees of origin used.*

Paragraph 5. *The Swedish Gas Association is critical of the fact that the methodology for how greenhouse gas emissions are to be calculated for "low-carbon fuels" is to be developed by the Commission through a delegated act.* These rules are too important to give the Commission a mandate to define them on its own; moreover they should be known when the directive is adopted because it is so crucial. A parallel can be drawn to the delegated acts concerning the calculation method for Renewable Fuels of Non-Biological Origin, RFNBO, in REDII and proposed in the proposal to amend REDII (REDIII) - absolutely crucial rules that come very late while the directive contains targets for these fuels. This is not acceptable. *The Swedish Gas Association is also calling for clarification on how low-carbon fuels and RFNBO relate to recycled carbon fuels.*

Paragraphs 6 and 7 provide an opportunity for the Commission to approve voluntary certification systems, just as for biofuels in REDII, and that Member States must approve them as evidence. *The Swedish Gas Association considers this to be a good solution, but the Commission should not be given self-determination.* It is very important that guidelines or "implementing acts" are drawn up through negotiations with the Member States and industry, as these can have a decisive role in how the regulations are to be interpreted and how the market is to function.

Paragraph 10. *The Swedish Gas Association opposes further expansion of the Union database in REDII. The Swedish Gas Association also opposes transactions for all renewable gases being entered into the Union database as proposed in REDIII and that it should be further broadened by including low-carbon gases under this proposal. The Swedish Gas Association is instead calling for a simpler solution based on a combination of sustainability criteria and guarantees of origin with sustainability information (GOs +).*

As mentioned above, the Swedish Gas Association considers that certification, control systems and mass balance principles in accordance with REDII (respectively corresponding requirements for low-carbon gases) should be applied up to and including production and injection. During production/injection, a guarantee of origin is issued for the certified gas. The Commission should upgrade Article 19 of REDII so that the guarantees of origin have to include information on compliance with REDII sustainability criteria for renewable gases and equivalent certification in accordance with Article 8 of this proposal, as well as information on greenhouse gas emissions (see further comments under Annex 5). Downstream of production/injection, the system of guarantees of origin should instead be used to track transactions and ensure that no double counting takes place. There are no guarantees of origin for liquefied and solid biofuels, which is why the Union database can be justified to ensure that no double counting takes place. But for gas, there is now this market instrument with all the necessary information that can achieve the aim of the Commission with the Union database: to track sustainable gas transactions, monitor target fulfilment and ensure that no double counting takes place. The Union database should either exclude gases, or registration in the database should only take place in connection with the issuance of a GO (for production/injection) and for cancellation (for final consumption/origin labelling)

Chapter 3 Consumer empowerment and protection and retail markets

Article 11 Right to switch and rules on switching-related fees

Paragraph 1 states that it may take a maximum of three weeks to change supplier, until no later than 2026, when the change shall then technically be possible within 24 hours on weekdays. A change of supplier within 24 hours is not possible for the gas suppliers to manage as they buy the gas the day before it is used by the customer. In addition, an administration is required to implement the change itself.

Article 15 Bills and billing information and Annex 1

In paragraph 1, reference is made to Annex 1 regarding the minimum requirements for what must appear on the invoice. Annex 1, Chapter 1 (MINIMUM REQUIREMENTS FOR BILLING AND BILLING INFORMATION FOR GASES), paragraph 1.3a, states that the customer's consumption of gases shall be compared with gas use in the same period of the previous year in graphic form. In order for a gas supplier to be able to fulfil this, it is required that the customer was also a customer of the same supplier in the same period of the previous year. If it is a new customer for the gas supplier, this information is missing. Furthermore, paragraph 1.3 c states that the customer must have access to a comparison of consumption with an average "normalised" consumption profile within the same customer category to which they belong. Here it must be clear where the players can find this information and it must not be assumed that the supplier/network owner knows what type of customer group the customer belongs to.

Annex 1 – Paragraph 5 Disclosure of energy sources

Origin labelling requirements for renewable gases are introduced here, based on guarantees of origin (GOs). It is reasonable and expected when GOs through REDII have now been expanded to renewable gas, but where, unlike electricity, there are no origin labelling requirements linked to GOs. It is proposed that this is introduced through this Directive. Even if the implementation of GOs for gas is delayed due to the revision of the mandated standard EN16325 if GOs are still not completed, it should be able to work once it has been implemented. It is important, however, that the time for the origin labelling requirement to take effect is synchronised with the completion of the standard and the Member States having fully implemented the GOs system.

Annex 5, paragraph 5, introduces an obligation to provide CO₂ emissions on delivered gas to the customer. This requirement is imposed indirectly since such information appears on GOs. *The Swedish Gas Association supports this.* It is worth noting that greenhouse gas emissions are likely to be included as a voluntary task in the GOs standard, that is, neither issuing bodies nor producers will be obliged to introduce the task of GOs. Furthermore, the method for greenhouse gas calculation will not be formally harmonised by the standard. It should therefore be clarified in Annex 5 that it is life cycle emissions expressed in CO₂ equivalents (that is, fossil CO₂ emissions and methane and nitrous oxide emissions must be included) for all gases, and that it is clarified which values or which method for calculating greenhouse gas emissions are to be used for fossil gases. *With regard to greenhouse gas emissions for renewable gases, the Swedish Gas Association considers that there should be life cycle emissions calculated in accordance with the methodology in Annex 5 and 6 in REDII and nothing else.* It can be noted that there is no obligation for Member States to provide GOs for fossil gases under REDII Article 19, so it is not obvious (or likely) that greenhouse gas emissions from fossil gases will be provided via GOs without further regulation. The Commission should consider whether or not full origin labelling requirements should be introduced by GOs for all gases (fossil, low-carbon and renewable).

As with fossil gases, Annex 5 does not specify how origin labelling/determination of the proportion of low-carbon gases is to be done. No requirements are proposed for the use of GOs or any other prescribed method. This is a reasonable consequence of the fact that in REDII there is no obligation (only the possibility) for Member States to offer GOs for gases other than renewable, so requirements for GOs for these gases can certainly not be met without introducing a corresponding obligation in REDII. Article 2 defines low-carbon gases. Article 8 proposes rules on how the greenhouse gas requirement of a 70% reduction is to be calculated to be covered by the definition, as well as rules on control systems, provision of information to customers, etc. (with reference to REDII's sustainability criteria and delegated acts). *The Swedish Gas Association considers that it would be appropriate for GOs to be the method used for origin labelling for these gases as well, so that different methods are not used for different types of gases.* See also under the paragraph in Article 8.

Article 16 Smart metering systems in the natural gas system. Article 19 Entitlement to a smart meter for natural gas and Article 20 Conventional meters for natural gas

The Swedish government, in connection with the implementation of the original so-called Energy Efficiency Directive⁴, has previously made the assessment that it is not economically justifiable to install individual meters and ensure billing data based on consumption for customers who use natural gas or biomethane only for cooking, so-called cooking appliance customers. Cooking appliance customers in Sweden thus received an exemption in Sweden from the requirement for individual measurement through a regulation. The same situation, that it is not economically justifiable to set requirements for individual measurement of cooking appliance customers for gas, still applies. *The Swedish Energy Association therefore considers that Articles 16, 19 and 20 of the now proposed directive should thus be formulated so that the possibility of exemption from metering can be granted in cases where it is not technically possible, economically reasonable or proportionate in relation to possible energy savings. In this context, the Swedish Gas Association considers that it is also important that there is no requirement to carry out cost assessments every 4 years for measuring cooking appliance customers but rather exclude cooking appliance customers completely in accordance with previous legislation, or that cost calculations are required less frequently than four years.* In Sweden, there are just over 70,000 cooking appliance kWh customers in Stockholm, Malmö and Gothenburg. These customers consume only about 480 kWh per year and households (40 kWh per month).

⁴ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30 / EU and repealing Directives 2004/8 / EC and 2006/32/EC (OJ L 315, 14.11.2012, p.1, Celex 32012L0027).

This view also applies to the requirements in Annex 2, where it is stated, among other things, that if an expansion of smart meters is assessed positively, 80 per cent of final customers shall be equipped with smart meters within seven years of the assessment being made. *Here, too, the Swedish Gas Association emphasises the importance of cooking appliance customers not being covered by the requirement.* Cooking appliance customers in the Swedish gas market make up about 80 per cent of the total gas customers. In terms of volume, however, these customers make up less than 1 per cent of the total natural gas and biomethane volume (west Sweden gas network and Stockholm's gas network).