Proposal for a Regulation 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 strategy[1] 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

Energigas Sverige Service AB
Swedish Gas Association
Box 49134
SE-100 29 Stockholm, Sweden

tel +46 8 692 18 40
info@energigas.se
www.energigas.se
Besöksadress: S:t Eriksgatan 44

Org no 556081-9194
Bankgiro: 631-0239

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 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.

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 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.

Integration of biomethane

A scale-up of biomethane requires significant integration into the gas infrastructure. The quality standard for cross-border gas (article 19) needs to be revised to ensure it is fit for purpose for a significant green transition of the gas system. Furthermore, it should be stipulated that Member States must not restrict cross-border flows of biomethane and other green gases.

Concerning regulation and network operators for hydrogen

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 cheaper[2] 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 have the time to be built up under different conditions, standards, pressures, etc. and that problems thus will arise when these regional clusters are to be connected to each other and together into a cohesive national hydrogen network.

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 natural gas DSOs 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 network operators for hydrogen, even the smallest companies, should or must be involved at all international levels proposed in the regulation, or if there is reason to also divide the players for the hydrogen market at the TSO and DSO level respectively.

Detailed comments on the proposed regulation

Chapter 2 GENERAL RULES APPLICABLE TO THE NATURAL GAS AND HYDROGEN SYSTEMS,

Section 2 NETWORK ACCESS

Article 16 Tariff discounts for renewable and low carbon gases

The Article contains a requirement that the introduction of renewable and low-carbon gas must receive a 75 per cent discount on the feed-in tariff. The discount will then be increased to one hundred per cent. The Swedish Gas Association considers it positive that the Commission is proposing measures to increase the share of renewable and low-carbon gas in the gas networks. On

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

the other hand, the Swedish Gas Association considers that the requirements are too detailed as it is clearly stated which levels are to be introduced. Instead, it should be formulated as an option for a discount or a requirement for a discount on the tariff for the supply of renewable and low-carbon gas, without determining the size of the discount. The reduced cost from the feed-in tariff will most likely be borne by natural gas customers. Sweden differs from large parts of Europe and today has fewer customers in total, with several already switching to biomethane today. The willingness to switch to other players is great, but the conditions are currently insufficient. It is therefore important that natural gas use does not become too expensive, but this must be in line with the option of being able to switch.

The Swedish Gas Association also considers that general measures to increase the supply of renewable and low-carbon gas should be specified in the directive to create the possibility of adaption to national conditions. This should replace the more detailed requirements now proposed to be introduced in the regulation.

Section 3 TRANSMISSION, STORAGE, LNG AND HYDROGEN TERMINAL SYSTEM OPERATION

Article 20 Hydrogen blends at interconnection points between Union Member States in the natural gas system

The Article requires that all TSOs must accept up to 5% by volume of hydrogen in the natural gas system from 01/10/2025. This will mean that the gas quality of the gas network will vary due to varied blending of hydrogen. Since several of the large gas customers in the Swedish market (and also in parts of the European market) use the gas as a raw material and in many cases demand just the carbon compound and are dependent on a consistent gas quality over time, this will cause major disruptions for these customers. *The Swedish Gas Association therefore considers that this text should be deleted so that gas customers are taken into account.* If it is possible to blend hydrogen in the network, it is important that it is required that the mixture does not vary but rather that it is at the same level. This is to avoid problems in the industries concerned.

Chapter 3 RULES APPLICABLE TO THE DEDICATED HYDROGEN NETWORKS

Article 40 European Network of Network Operators for Hydrogen, Article 42 Tasks of the ENNOH and Article 44 Costs

The regulation proposes that a separate European Network of Network Operators for Hydrogen (ENNOH) is established. Article 40 requires hydrogen network operators to cooperate through the ENNOH in order to promote the development and functioning of the internal market for hydrogen and for cross-border trade. The aim is to ensure optimal management, coordinated operation and sound technical development of the European hydrogen network. Furthermore, Article 42 presents a long list of the tasks that ENNOH must handle, including development of network codes, network development plans, cooperation with ENTSOE and ENTSOG, etc. The Swedish Gas Association also notes that no distinction is made between TSO and DSO levels in hydrogen in the third gas market package. Instead, all players become hydrogen network operators, regardless of size, location or network pressure. Today, TSOs on the natural gas side are involved in ENTSOG and handle issues related to network codes, security of supply, network planning, etc. These are tasks that none of the Swedish distribution network operators for natural gas need or should need to get involved in. This system works well for both natural gas and electricity (ENTSOE) and the Swedish Gas Association therefore questions whether all hydrogen network operators, including the small companies, should or must be involved at all international levels proposed in the regulation. Article 44 states that the costs of ENNOH shall be shared between the hydrogen network operators. *The Swedish Gas Association therefore wonders whether the current expertise, organisation and routines already established within ENTSOG can be better utilised to achieve sectoral connections and synergies between the networks (natural gas, hydrogen and electricity) and between the European networks, in order to streamline and not increase costs in the expansion of hydrogen.*