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Eurelectric feedback on the Gas Package

Eurelectric position paper

May 2022

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:
- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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Markets & Investment Committee
Electrification & Sustainability Committee
WG Power & Gas interactions
WG Electrification & Energy Efficiency

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KEY MESSAGES

- **Ambitious actions are needed to adapt the gas regulatory framework for the phase-out of fossil fuels and the changing role of the gas system.** Over recent decades, affordable and accessible unabated natural gas has shaped the European gas market. Today, Europe is aiming to reduce its greenhouse gas emissions as well as its dependency towards on imports.

- In the future integrated energy system, gaseous and liquid fuels will complement electrification when the direct use of electricity is not feasible or not efficient. On the final demand side, direct electrification should be encouraged to sweep aside fossil fuel energy and reach carbon neutrality. On the supply side, **all energy vectors should compete on a fair basis, framed by clear market rules, technology neutrality, EU climate objectives for decarbonisation and the energy efficiency first principle.** Open competition, transparency, fair access and non-discrimination will ensure the best choices are made.

- **Eurelectric supports an adaptation of the gas market regulatory framework in line with the objectives of the European Green Deal.** The Gas Package must leverage the ambitious targets proposed by the Fit-for-55 Package, support the increased electrification of the economy and enable the accelerated deployment of renewable and low-carbon energy sources, in particular with a view to the envisaged phase-out of fossil fuel imports from Russia.

- **The current gas network model should serve as a basis for hydrogen market design, while taking into account the uncertainties regarding the development of the hydrogen network and the national specificities.** Implementing a coherent regulatory framework for the hydrogen market should help Europe reach the objectives set by the European Commission and reduce the cost of producing clean hydrogen, especially from electrolysis which should become the dominant source of hydrogen supply.

- **Investment decisions from market players and network operators should be guided by coherent network development plans.** A coordinated, cost-effective and future-proof approach to infrastructure requirements and investments is needed to avoid investment in assets that do not contribute to a cost and energy efficient decarbonisation path.

- **Gas customers' protection and empowerment rules should mirror the provisions for electricity consumers** as conferred by the Clean Energy Package and be adjusted appropriately to the specific terms for gas market actors.

Eurelectric key priorities in a nutshell

- Adjust the **definitions** proposed which are currently inconsistent with the Fit-for-55 objectives and delay the transition to carbon-free energy carriers.

- Coherently develop a **certification scheme** for low-carbon gases, in parallel to the renewable-only certification scheme currently discussed in the RED II revision.

- Implement consistent **vertical and horizontal unbundling** rules for hydrogen network operators, ensuring that network operation and planning are performed in a neutral manner.

- Guarantee **functional regulated system operation and planning**, avoid any cross-subsidies between electricity, gas and hydrogen activities and ensure cost-reflective tariffs.

- Encourage the implementation of tighter monitoring and transparency requirements of **gas quality** by network operators.

- Support the harmonised, transparent and non-discriminatory **access of renewable and low-carbon gases** to transmission and distribution networks.

- Encourage better coordination of national **network planning** within the European Network Development, ensuring that the different network development plans established by system operators are based on joint cooperation on power, hydrogen and gas scenarios

- Create a **distinct EU DSO Entity for gas,** closely cooperating with the Entity for electricity.

- Ensure **consumer protection and empowerment**, especially for the most vulnerable, with the same rights conferred to electricity consumers.

- Avoid adopting additional rules or regulatory obstacles to the existing legislation on **bundling products** which is already providing simple, transparent and cost-effective solutions to consumers.

The revision of the Third Energy Package for gas is being discussed in a troubling context for the European Union and its internal energy market. The lengthened high energy prices situation caused by fossil fuel prices and the state of war in Ukraine are directly impacting European consumers' bills and the proper functioning of the electricity & gas markets. **More than ever, the European Green Deal must be quickly implemented as it is a robust plan to achieve carbon neutrality and reduce Europe's dependency on non-European imported fossil energy.** In this context, the Hydrogen and Decarbonised Gas Market Package (hereafter the 'Gas Package') should leverage the ambitious targets proposed by the Fit-for-55 Package, enable the accelerated deployment of renewable energy sources, promote energy efficiency and support the increased electrification of the economy.

The energy system of tomorrow will be further integrated and cross-commodity interlinked: many technologies will compete on a fair basis to deliver clean and affordable energy, relying on an integrated internal market providing electricity, gas or hydrogen to final energy users. Eurelectric strongly believes that **electrification is the most cost-efficient way to decarbonise the European economy and is essential for reaching at least 55% greenhouse gas emission reductions by 2030**. The direct use of electricity comes with major socio-economic benefits, in terms of jobs, health and system efficiency, and can put citizens at the heart of the energy transition. Moreover, the smart coupling of electricity and gas systems by using power-based solutions to produce clean gases, such as hydrogen, is a new dimension to bolster to complement direct electrification, accelerate the transition to a carbon-neutral economy and reduce our dependency on energy imports.

As stated in the Energy System Integration Strategy[1], **renewable and low-carbon fuels will primarily be consumed when the direct use of electricity is not yet technically or efficiently possible.** The current context attests to the ongoing change in the role of gas on the way towards the 2030 and 2050 GHG emissions reduction objectives and demands the decarbonisation of gases. Europe will reduce its overall natural gas demand whereas new types of carbon-free molecules will gradually scale-up, enabling the decarbonisation and diversification of the gas supply to customers. Gas-fired power plants may still have to account for 15% of total installed electricity generation by 2050 in order to secure system reliability, especially in regions that don't have access to hydro or nuclear, depending on national specificities and the changes in their generation mix[2].

The Gas Directive and Regulation have been initially shaped to accommodate market rules with a centralised system characterised by large volumes of imported natural gas. To fit with the new dilemmas of our current time, **Eurelectric supports an ambitious and much-needed adaptation of the gas market regulatory framework**. Transitioning to a fully decarbonised economy will change the requirements for the production, transport and consumption of gaseous fuels. With the view to this transition, the revision of EU gas rules should enable the use of energy carriers, services and infrastructure that contribute to a sustainable, cost-effective, secure and just decarbonisation path.

[1] European Commission, Communication 'Powering a climate-neutral economy: An EU Strategy for Energy System Integration', July 2020.
2 Eurelectric, Study 'Decarbonisation Pathways', May 2018

As highlighted in the EU Hydrogen Strategy[3] and in the 2030 EU Climate Target Plan[4] , hydrogen will be used for what makes it unique: the potential to decarbonise applications where direct electrification is neither feasible nor efficient. Developing a **regulatory framework for the European hydrogen market should learn from the positive experiences of electricity and natural gas market development**. The liberalisation of the European energy sector carried out over the last 20 years contributed to major achievements in infrastructure and market-related developments, in both electricity and gas sectors. The EU regulatory framework should continue to support a competitive European energy market to deliver on the Energy Union's objectives:

- security, solidarity and trust
- a fully integrated internal energy market
- energy efficiency,
- climate action, decarbonising the economy
- research, innovation and competitiveness.

The current gas network model should serve as a basis for hydrogen market design. Therefore, **similar criteria and principles should apply to both hydrogen and gas markets, under an adequate revision of the natural gas Directive and Regulation.** To this end, Eurelectric fully agrees with the inclusion of hydrogen in the scope of the Directive and Regulation. Coherence and consistency should drive the revision of the Third Energy Package for gas to enable a rapid transformation of the gas system in order to reach our decarbonisation objectives, incorporating the increased ambition of the REPower EU Communication while avoiding market fragmentation.

In order to contribute to the debate on the future role of gas, hydrogen and their market designs, the European electricity industry has developed this position paper around five main considerations:

1. Ensure a **level-playing field** between all energy markets, thus reflecting the main guiding principles for efficient energy system integration and cost-effective decarbonisation.
2. Design an **enabling framework** for consumers, investors and market players to deliver on the integration of renewable and low carbon gases into markets and networks as well as the new role of the gas sector.
3. Implement **cooperation on energy infrastructure planning** based on the application of the energy efficiency first principle.
4. Ensure good **governance**, driven by the interests of European citizens and the protection of our ecosystems.
5. Protect and support all energy **consumers** with the same rights and duties

3 European Commission, Communication 'A hydrogen strategy for a climate-neutral Europe', July 2020
4 European Commission, Impact Assessment accompanying the Communication 'Stepping up Europe's 2030 climate ambition", September 2020.

I. A level-playing field across markets

Europe's liberalised energy markets have been shaped around key principles that have proven their efficacy in reaching the objectives of open competition, transparency, fair access and non-discrimination. With the challenges of this new decade, the appropriateness of some of these principles is being reconsidered in certain circumstances. **Eurelectric would like to reiterate its strong support for the market design developed for both electricity and gas**, based on clear price signals and cost-effective supply of energy to the EU and individual citizens, to maximize efficiency and overall welfare. As pursued by the Clean Energy Package and now by the Gas Package, continuous integration of markets, countries, energy sources and technologies will contribute to better absorbing price shocks and deliver appropriate price signals as we promote the transition to a carbon neutral and integrated energy system.

Therefore, **Eurelectric welcomes the alignment of the Directive & Regulation's scope with the EU's decarbonisation goals by '*the transition of the natural gas system to a system based on renewable and low-carbon gases*".** Additionally, revised EU gas rules should support an integrated approach to the development of the energy system. **Reaching the EU climate objectives primarily requires further direct electrification and, where neither feasible nor efficient, the deployment of other energy carriers such as renewable & low-carbon (R&LC) gases as a complement.**

Clear definitions

The primary objective of the Gas Package is to provide certainty on the future gas and hydrogen regulatory framework. Therefore, it must be:

- in line with the EU's energy and climate objectives, and
- coherent with the EU acquis to ensure a level-playing field between all different gases as well as between the different energy carriers (i.e. take full stock of the possibilities for substitutability as the basis for both the energy efficiency first principle, energy system integration and the decarbonisation of the economy).

Legal certainty will primarily be ensured by **consistent and clear definitions of the different types of gases flowing across the European market**. The electricity industry, in its capacity as a gas user and supplier for the future hydrogen production, calls for **a classification indicating the chemical features of the gas considered (CH4, H2), the "origin of the gas (renewable, non-renewable), reflecting the "climate performance of the gas" and including the production of a GHG footprint, notably based on the source of CO2 used.**

Looking into the first set of definitions proposed by the Commission, **Eurelectric believes that additional work is needed to streamline the Gas Package's definitions with the rest of the Fit-for-55 Package proposals, remove inconsistencies (e.g., 'renewable natural gas') and clarify some of the proposals made.** For instance, the definition of 'natural gas' is confusing because it does not properly reflect the different characteristics of the gases encompassed by the new denomination and the difference in GHG emissions levels pertaining to the different gases. Therefore, we call for clearer and more fine-tuned definitions of the various gases involved. They should be segregated not only by the type of

network (natural gas network vs. hydrogen network) they refer to but also based on their chemical features (CH4 vs. H2), their sustainability character and the renewable nature of the feedstock or primary source used for their production (i.e. biogas, biomethane or renewable vs. non-renewable hydrogen, fossil methane or natural gas). Such definitions could be established leveraging the definitions set in the last 2 years by some Member States in the scope of implementation of their national hydrogen strategies.

Second, while it is recognised that biogas (as defined in REDII) is part of the renewable gas category, it isn't clear if the definition of "renewable gas" includes all end-uses for renewable hydrogen. Article 2(2) of this Directive proposal refers to the definition of RFNBOs which currently exists in RED II and which only covers RFNBOs used in transport. Thus, it excludes renewable hydrogen used in other sectors from the definition of renewable gas. The proposal for an amended RED III, part of the Fit for 55 Package, currently under negotiation, amends the definition of RFNBOs (art. 2, point 36) in order to extend it to all end-uses (going beyond transport). Hence, the revised Gas Directive should make a reference to the definition in the amended RED III proposal, in order to ensure an alignment. In any circumstances, it shall be ensured that the scope of **renewable hydrogen is extended beyond the sole transport sector, by clarifying the alignment with the RFNBOs definition provided by RED III.**

Third, the definition for low-carbon fuels (gas and hydrogen) will only be known and applied in 2025, once the delegated acts containing methodology to calculate the 70% threshold would have been fully adopted. This long implementation period could create uncertainty and delays in the development of clean gases and the investment in the installations necessary for their production and transport. For projects not respecting the emission savings once the detailed rules will come out, there would be a risk for them to be grandfathered or negatively influence the achievement of the emission reduction objectives. We therefore think that **the directive should already specify that the 70% GHG reduction threshold refers to lifecycle emissions, consistent with the approach used for RFNBOs. Concerning the CO2 content of low carbon electrolytic hydrogen, Eurelectric supports a methodology based on hourly average CO2 emissions of the national power mix.**

Fourth, on the retail side, the "wholesale consumer" definition has existed for several years for now, but it doesn't make sense in the Directive. The way it's defined, it's a supplier.

On the concept of Citizen Energy Community, the proposal considers production, distribution, supply, consumption, or storage of renewable gas in the natural gas system, or provides energy efficiency services or maintenance services to its members or shareholders. Eurelectric feels that direct electrification will be the most cost and energy efficient way for citizen energy communities to power their household members. However, we understand that this concept may be applied in such a way that industrial customers may also be supplied by a Citizen Energy Community. **We believe that the expansion to the gas system should be limited to industrial and transportation uses which are hard to electrify**, including certain high-temperature industrial processes and H2 charging stations for specific types of heavy-duty or long-haul vehicles (aircrafts, heavy duty long-haul trucks, and ships).

Finally, bundled offer information should not be part of the comparison tool requirements. **Adding consumer information on documents other than contracts will be difficult, and it would have an impact on costs to the provider.** Moreover, the energy supplier will be

competitively disadvantaged compared to other sellers only offering those other products and services, because these sellers do not also supply energy.

Coherent certification scheme

Article 8 of the revised gas Directive proposal should mirror the requirements set for the certification of renewable gases in the Renewable Energy Directive (under revision – RED III) to non-renewable gases within the revised Gas Directive. However, the two schemes should be separated while RED III should remain reserved for renewables only.

We support the current proposal about how operators prove that their low-carbon gas respects the 70% saving threshold. The compliance regime proposed by the EC in article 8 of the revised gas Directive seems aligned with the revised article 30 of RED II on 'verification of compliance with the sustainability and greenhouse gas emissions saving criteria'. This article 30 requests Member States to require economic operators to demonstrate compliance with the sustainability and GHG saving criteria for all biofuels, bioliquids and biomass fuels consumed and counting towards the targets (in the revision proposal of REDII, RFNBOs and recycled carbon fuels are also included). The approach used is a 'mass balance' one: this means that at each step in the supply chain, material with different sustainability characteristics can be physically mixed, as long as the material sold has the same sustainability characteristics overall as the material that was taken in. Provided that gases can flow in both forward and reverse modes, the European gas system should be defined as a single mass balancing system to facilitate trade within the internal market.

Vertical Unbundling for Hydrogen Network Operators

The vertical unbundling regime aims to make sure that network operation and planning are performed in a neutral manner, avoiding any conflict of interest between producers, suppliers and system operators. Eurelectric supports the application of similar vertical unbundling principles to all networks, whether they transport electricity, methane or hydrogen, in order to promote efficient infrastructure investment, fair network access and market transparency. **The revised Directive should ensure that the purpose of unbundling rules, as presented in the current electricity and gas Directives, is also applied to hydrogen network operators.**

To match the gradual development of the hydrogen network, a single "Hydrogen Network Operator" (HNO) category is considered by the revised Directive, with no differentiation of Transmission and Distribution activities. The new article 62 will make the ownership unbundling model mandatory after 2030 for HNOs, unless for existing hydrogen activities within a vertically integrated undertaking, for which an independent system operator (ISO) model would be eligible (although the ISO model is currently barely applied in the EU in both the gas and electricity sectors).

The future for hydrogen is not easy to predict in terms of pace for the rolling out of the hydrogen network, as the "no one size fits all" principle may apply to hydrogen scaling-up across Europe. Depending on their national renewable and low-carbon sources potential,

local specificities or geographical features, some Member-States may opt for a decentralised hydrogen production set-up (close to industrial consumption clusters), whereas others may require deployment of an interconnected, meshed hydrogen network for mid-to-long haul hydrogen transport within their country or for imports or exports purposes.

To preserve neutrality in network operation while taking into account the uncertainties regarding the development of the hydrogen network and the national specificities, the Commission should:

- perform a comprehensive and transparent examination of the advantages and disadvantages of ownership unbundling (OU) as well as other existing & effective unbundling designs (ISO and ITO) also applied in the gas and electricity systems
- ensure that the implementation of vertical unbundling rules to hydrogen networks would not hamper the objectives of article 194 TFEU, lead to additional barriers to the deployment of decarbonised solutions as well as complexity for the integrated technical and organisational network planning.
- make sure that network operators do not own or operate power-to-gas installations (or do not participate in activities of production or supply) – investment and management of power-to-gas installations should be market-based and open to competition.

Finally, any repurposing from gas pipeline to hydrogen has to be carefully assessed by NRAs, in order to ensure economic efficiency in network planning/development. Moreover, hydrogen consumption should be foreseen in areas where direct electrification is not possible or not efficient.

Geographically confined hydrogen networks

Exemptions regarding tariffs for Third-Party Access are recognised in the gas and electricity sectors within the framework of "closed distribution systems". The proposal of the EC goes further on the one side to grandfather existing hydrogen networks, on the other side to favour the development of new "geographically confined hydrogen networks" (article 48 of the revised Directive proposal), a category we consider as poorly defined in the Commission proposal. The EU Hydrogen Strategy released in July 2020 introduced the concept of hydrogen valleys. Hence, we wonder if the exemptions proposed for "geographically confined hydrogen networks" would also be applied to hydrogen valleys, the latter being a more developed network than a "geographically confined hydrogen" one (hydrogen valleys are presented as the first element of a future "EU hydrogen backbone". Access to these hydrogen valley's infrastructures will be paramount to allow competition as well as letting market participants conclude supply agreements with industrial offtakers.

In order to allow merchant initiatives to contribute to the deployment of a hydrogen network while avoiding the emergence of monopolistic positions that foreclose competition, some improvements could be done to the EC proposal. Existing hydrogen networks should make available to the market capacity which is not used by existing grey hydrogen assets and facilitate hydrogen end-users to switch from grey to clean hydrogen.

Exemptions to new geographically confined networks should be clarified and limited to configurations reflecting the requirements applied to closed distribution systems.

Horizontal unbundling

In the context of sector integration, **the regulated system operation and planning should remain functional, avoid any cross-subsidies between electricity, gas and hydrogen activities and ensure cost-reflective tariffs.** Any infrastructure development plan should follow a sound cost-benefit analysis, based on long-term projections of electricity, gas and hydrogen demand, taking into account the level of maturity of all technologies and aligned with the EU's decarbonisation objectives. Therefore, horizontal unbundling rules (articles 63 and 68 of the revised Directive) should support an unbiased, coordinated, cost-effective and future-proof approach towards energy infrastructure development.

Financial transfers

All over Europe, there is a need to modernise, upgrade and extend the transmission and distribution networks for the energy transition. Achieving a carbon-neutral EU economy, requires significant investments to reinforce and/or expand the electricity network in order to accommodate new demand as electrification progresses. The power grid will support a cost and energy efficient transition and should not be hampered by charges that are not related to its network/value chain. Moreover, as clearly stated by the Regulation proposal, network users should pay for the infrastructure they use; consumers should not finance the development of networks they are not using.

Gas and hydrogen networks will also need investments to adapt their role for the transport of renewable & low-carbon gaseous fuels to specific applications where the direct use of electricity is not yet technically or efficiently possible. Gas and hydrogen grids will support the whole energy system stability by leveraging flexibility solutions in their network. Nonetheless, **the financial stability of any network should rely on cost-reflective grid tariffs and sound investment decisions aligned with their prospective development plans and robust market assessment scrutinised by NRAs.**

The Gas Package should implement an adequate regulation ensuring that the development of the energy infrastructure (including the repurposing of gas networks) is cost-efficient in particular in terms of coordination with renewable and low-carbon generation development and the need to electrify the economy for the sake of decarbonisation and energy independence. Eurelectric supports ACER/CEER recommendation to introduce an inter-temporal cost-allocation mechanism whereby a share of cost recovery would be shifted later in the future and be borne by later users of the hydrogen network. Indeed, the risk of stranded assets in the nascent hydrogen network should be borne by the hydrogen network operators. Additionally, the use of financial instruments funded by taxation could also be envisaged, if the hydrogen network is identified as pivotal to reaching the decarbonisation objectives.

II. Enabling measures

Facilitating the penetration of renewable and low-carbon gases should go along with the transformation of the grid to supply gas when and where it will be needed. The recent Commission Communication "REPowerEU"[5] is aiming to lower the EU's gas consumption by 30% by 2030, together with additional gas diversification and more renewable gases. The European regulatory framework should not only enable fair competition and a level-playing field between all commodities but also be consistent with the energy efficiency first principle and the increased electrification of final energy uses. This would ensure a beneficial environment for energy carriers that would meet consumers' needs while supporting the unflinching reduction of our GHG emissions.

In our view, if enabling measures are adequately developed through Energy and Climate policies and markets are well designed, this should favour the most cost-efficient solution to the energy transition. A combination of well-designed markets indeed ensures non-discriminatory market participation by all complementary technologies and gives the right economic signals, taking into account the positive or negative externalities. The right signals should be sent to consumers, market players and investors coherent with the development of the energy system as a whole. For instance, a supportive scheme in the methane-based network should not undermine and penalise the electrification effort, and vice-versa. To do so, **any enabling measures developed by the Gas Package should be based on a robust analysis of the gas demand in the coming years.** On top of that, regarding hydrogen imports, the EU's dependency on third countries shall be carefully monitored.

Gas quality

The European gas system will have to manage different fluctuating gas composition. It is therefore necessary to manage the type and volume of gas that can be technically and safely transported and distributed. The provisions in articles 35 and 40 of the Directive proposal are adequately creating new tasks for TSOs and DSOs to efficiently manage gas quality in their facilities. **We welcome the obligation made towards DSOs to make public detailed information regarding the quality of the gases transported in their networks** (article 35 revised Regulation proposal) **and towards ENTSOG to release, every two years, a gas quality monitoring report** (art. 23 revised Regulation proposal).

As direct users of gas for electricity generation, the power industry welcomes tighter requirements in the information and/or technical rules to be published by network operators. **Changes in gas quality characteristics can result in impacted performances of gas-fueled power plants which in turn could create a security of electricity supply risk for a Member State.** Given the potential impact of gas quality changes, detailed assessment should be overseen by national regulators (as proposed in article 72 of the revised Directive). **We also encourage a close dialogue with operators of gas-fueled power plants and their**

[5] European Commission, Communication 'REPowerEU: Joint European Action for more affordable, secure and sustainable energy', March 2022.

respective OEMs to understand the impacts in full before any changes are finalised to ensure risks are minimized.

Blending of hydrogen into natural gas networks

As previously mentioned, renewable and low-carbon hydrogen is a yet scarce resource and its use should be limited where direct electrification is not feasible or not efficient (the 'hard to abate' sectors). While the priority (in the short to medium term) should be to support growing direct electrification, we also need to leverage the existing flexibilities available between existing power and gas systems, prior to blending or to launching a large deployment of a dedicated hydrogen network. In the long run, the (national) markets should decide which option is the best to transport hydrogen from production to consumption points, considering sustainability requirements, the need to avoid the fragmentation of the internal market, and the necessity of a coordinated planning of an integrated energy system that optimises it as a whole.

It is also necessary to fully understand the increased complexity in the operation of the network as well as the additional costs and investment needs induced by hydrogen blending into natural gas, including potential adaptation costs of end-users appliances. This should require assessing the benefits and limits blending would deliver compared to possible investments in dedicated hydrogen networks during the period until the dedicated hydrogen network would be finally deployed. While we do appreciate that the Commission has not introduced a blending mandate within Europe, we note that TSOs would have to accept cross-border flows of gases with a hydrogen content of up to 5% by volume from 1 October 2025 (Article 20 revised Regulation proposal) to facilitate the future gas flows internal gas market. **In this context, article 20 of the revised Regulation proposal should not be considered as a blending mandate of 5% (such as a blended flow commitment).** Should this provision be endorsed in the interinstitutional legislative process, **we stress the importance that particular attention should be given to the adaptation costs associated to these obligations and their allocation.**

Enhance transparency and facilitate connection

In addition to safety requirements for the gas transported, the access of renewable and low-carbon gases to the network should be framed by transparent and practical rules. As stated in article 26 of the Directive proposal, fair access to the market and infrastructure should be ensured to all gases regardless of whether the production facilities are connected to distribution or transmission networks. **We support the harmonised and more transparent/informative approach in the new Directive and Regulation regarding the rules for the access of R&LC gases to the transmission and distribution networks** (articles 37 and 41 of the Directive) **as well as the tighter requirements for their operators** (such as the publication of connection tariffs to connect gas from renewable sources – art. 9 Directive).

On top of easier connection rules, **the promotion of regional cooperation and integration, foreseen in article 6 of the revised Directive proposal, will help to focus on achieving**

optimal use of gas assets and transport capacities. Therefore, we encourage the convergence of gas hubs and reinforce the cooperation among regional markets through appropriate guidance from Member States.

Tariffs discounts

The network is a facilitator for the energy transition, including for efficient energy system integration, and should be managed in a neutral and cost-efficient manner. **Cost-reflective and non-discriminatory network tariffs, complementing energy prices, should enable efficient use of the grid and allow non-distorted market access.** Over the past years, Eurelectric has called for a review of gas network tariffs and developed general design criteria for all grid tariffs, ensuring efficient economic signals both to injections and offtake from the grid.

Eurelectric does not consider the reduction of network tariffs for injection of renewable gases to the grid as the most important tool to facilitate the uptake of clean gases. In general, we do not support the implementation of technology specific electricity or gas grid tariff reductions or exemptions to encourage the development of power to gas production units, or to compensate for services they may supply to the grids. Should a tariff discount be allowed by Union Law, a level playing field must be ensured and tariff structures tailored so that each grid user pays a price covering the costs it induces on the grid and that no disproportionate burden is imposed on certain categories of consumers.

Regarding cross-borders tariffs at interconnection points, we believe that gas TSOs should aim at achieving the most efficient dispatch to capture maximum social welfare. To achieve this purpose, gas TSOs' cost recovery should be set in a transparent way. In particular, it should identify which investments and assets are being considered in the definition of interconnection tariffs and could be decoupled from specific border charges to enable optimised use of interconnection capacities. Low cross-border tariffs would strengthen the connection between gas markets and foster their liquidity and maturity across Europe. As for electricity, it would facilitate the trade and transport of gas from supply sources to end-users and prevent distortive effects for gas-fired generators, which are critical to delivering firmness and flexibility to the electricity system, particularly during the transition.

Hydrogen-specific tariffs considerations

Eurelectric believes it is important to have rules on tariff setting for hydrogen networks. The current structure of a cross-border gas transmission tariff system is suitable for the development of the hydrogen market. In any case, setting zero cross-border tariffs will certainly not be enough to develop the interconnected hydrogen market, for which significant investments will be needed in both hydrogen production and end-usage, as part of the indirect electrification process.

Public support may be needed to prepare the deployment of clean technologies (such as electrolysers). It will be up to policy makers to decide whether Member States should subsidize renewable and low-carbon hydrogen technologies. From a regulatory point of view,

if such instruments are implemented, Eurelectric considers this public support should be directed (direct subsidies for instance) to ensure visibility and avoid distortion for other grid users, while being adapted to the maturity of relevant technologies.

III. Infrastructure development

European and national energy networks are becoming increasingly complex due to the diversity of energy carriers, types of infrastructure, substitutability, decentralisation of assets and flexibility needs. The optimisation of interlinked energy systems (electricity, methane and hydrogen) is a crucial aspect of Europe's decarbonisation strategy. To concretely shape the integrated energy system, investment decisions from policymakers, market players and network operators should be guided by coherent network development plans. **A coordinated, cost-effective and future-proof approach to infrastructure requirements and investments is needed to avoid investment in assets that do not contribute to a cost-effective and energy efficient decarbonisation path.**

In this context, Distribution System Operators are amongst the natural proactive enablers of integrated energy systems and their planning. Developing planning capacities within this future integrated energy system taking into account the interdependence of the electricity and gas systems will be pivotal. Benefits will result from optimised infrastructure planning and development, and efficiency gains from competition between different energy carriers. **Moreover, Eurelectric welcomes the necessity given to Transmission system operators to take into account the potential for alternatives to system expansion (art. 51 Directive).** It is important that the revised Regulation requires DSOs and TSOs to include, into the TYNDP, the information on infrastructure that can or will be decommissioned (art. 51.2(c)).

European network development plans

The proposals from the European Commission are adequately reiterating **the important role of TYNDPs to impartially identify future infrastructure needs in order to support an integrated & decarbonised energy system while ensuring security of supply.** The growing interdependencies between energy commodities in Europe require more integrated infrastructure planning, co-ordinated risk preparedness and system operation across the sector. In this picture, we believe that electrification is a direct, effective and efficient way of reaching carbon neutrality. Renewable and decarbonised gases, especially hydrogen produced from electrolysis, will be a needed complement to electrification in hard-to-abate sectors. Therefore, **we welcome the Commission proposal (new article 43 of the revised Regulation) asking the hydrogen network operators representative at European level to develop a Union-wide ten-year network development plan for hydrogen, alongside the plans already developed for electricity and gas.** We also support article 23 (4) of the revised Regulation proposal aiming to include, in the TYNDP for gas, the modelling of the integrated network, including hydrogen networks. As a general rule, a balanced approach should be ensured in terms of competencies between electricity, gas and hydrogen system operators on European network development plans. In particular, the operators shall remain

responsible for evaluating the needs in their respective sectors: gas TSOs for the gas system and electricity TSOs for the electricity system. In this regard, both types of TSOs shall be equally responsible for evaluating the optimal location and size of energy storage and power to gas assets.

As a golden rule, any investment in networks should be based upon a Cost-Benefits Analysis evaluating every option and the evolution of the energy demand. While ensuring the mainstream role of electrification for the sake of decarbonisation and energy independence, a broad range of scenarios should be considered in the context of any future policy design around the connectedness and diversity of features of national energy systems, including the role that renewable and low-carbon gas will play. **The new gas Regulation could make even clearer the necessity to align these scenarios with the EU targets and NECPs.** This should be done transparently by systems operators for their networks (with a greater role for DSOs), applying guidelines defined by the regulator and pursuing an integrated approach considering the energy efficiency first principle, a high level of SoS and connection of new customers. **Moreover, Eurelectric supported the introduction of measures coordinating the adaptation of LNG terminals to renewable and low-carbon gases.** Therefore, a positive step is also the inclusion, in the new investment plan, of the market assessment for renewable and low-carbon gases by LNG and storage system operators (new article 8 of the Gas Regulation).

Reinforce bottom-up perspectives

The energy transition cannot be orchestrated solely by top-down measures, but in parallel with structured bottom-up measures through integrated energy systems. **Eurelectric supports an alignment of national network planning with the European Network Development** (article 51 of the revised Directive proposal), based on joint scenarios that include natural gas, hydrogen and electricity projections, consistently with the energy efficiency-first principle. DSOs are also key actors in the implementation of the energy mix chosen by national governments and have the required experience and knowledge to bring more granularity to the plans. The scenario building & planning exercises should be aligned with the EU targets and NECPs. Scenarios should be considered in the context of any future policy formulation around the connectivity and diversity of individual member state energy systems and the role that hydrogen will play. When dealing with the need for more integrated network development plans, we share the approach designed by the European Commission in requiring consistency in the frequency of the release of the European and national plans (every two years) and the use also at national level of joint scenarios aligned with the European climate target plans and NECPs. However, it should be made clear that national planning exercises will be separate for different energy carriers as well as differentiated at transmission and distribution level, in order to actually reflect the peculiarities and specific needs of an evolving and complex energy system that has to be precisely modelled at the periphery of the pan-European one. Enhanced coordination and information sharing among different network operators will allow a coherent and cost-efficient development of energy infrastructures.

Transmission system operators should prioritise the most efficient solutions in the longer-term for the identified system needs, taking into account non-infrastructure solutions. The

gas regulatory framework should prevent unnecessary (re)investments in gas infrastructure where possible and promote timely investments in alternative solutions which lead to GHG emissions reductions. Any investment decision in infrastructures should be preceded by continuous monitoring of the maturity and competitiveness of hydrogen, biomethane and power to gas technologies. It should also be based on gas demand forecasts that are compliant with the EU's decarbonization objectives and in line with the most recent analysis. Such hypotheses and scenarios should take into account:

- technology costs and competitive alternatives for clean energy carriers,
- demand-side flexibility potential,
- energy efficiency and conversion losses,
- the impact of the overall gas volumes on bio resources and on the electricity system,
- foreseen imports and their implications,
- infrastructure requirements for different types of gases and blends.

Considering the uncertainties on the timing of the uptake of the hydrogen sector and on the geographical patterns of supply and demand, investment decisions on hydrogen networks by Hydrogen Network Operators should be subject to reinforced scrutiny by regulatory authorities, at national level: a market test for newly developed and repurposed infrastructures should be imposed as the basis for the regulatory approval of regulated hydrogen investments. While this test is considered in the policy options analyzed in the impact assessment of the gas Package, this is not clearly retained in the provisions of the proposed legislation

According to art.51(3) of the Gas Directive, *'the transmission system operator shall assess how to address, where possible, a need across electricity and gases systems including information on the optimal location and size of energy storage and power to gas assets*'. Coordination in network planning between gas and electricity TSOs is essential, but **the operators shall remain responsible for evaluating the needs in their respective sectors**: gas TSOs for the gas system and electricity TSOs for the electricity system. In this regard, **both types of TSOs shall be equally responsible for evaluating the optimal location and size of energy storage and power to gas assets.**

Cross-border infrastructures

As already mentioned, any investment in networks should be based upon a sound, comprehensive, fair and unbiased Cost Benefits Analysis evaluating every option and the evolution of the demand. The financing decisions should intervene only when all the information is available for a sufficiently robust CBA. Eurelectric thinks it beneficial to have regulatory authorities ensure an enhanced coordination at national and European levels including very well interconnected third countries which are part of the synchronous grid of Continental Europe when grid development plans for gas and electricity are being elaborated. To this end, rules on cross-border operability of transmission hydrogen networks are of outmost importance.

IV. Governance

Eurelectric supports the development of new governance & regulatory oversight arrangements, especially for gas quality monitoring, network development plans and the assessment of the gas demand. National Regulatory authorities and ACER have a key role in ensuring that market integration, the harmonization of the regulatory framework and the required coordination of electricity and gas sectors are achieved. **Together with the recently revised TEN-E Regulation, the Gas Package will ensure that infrastructure development plans and their scenarios reflect the new reality and include long term projects for gas demand that are compliant with the Paris agreement,** in line with the most recent analysis and take into account the maturity of promising technologies such as power-to-gas.

With regards to the European entity for distribution system operators, Eurelectric calls for keeping the current EU DSO Entity for electricity in its current scope. We recommend creating a separate European entity for distribution system operators who operate natural gas distribution systems, effectively cooperating with the other network entities at European level, reflecting the fact that in future some DSOs may also operate hydrogen infrastructure in some instances.

Two separate EU Entities for electricity and natural gas DSOs respectively would not only mirror and create a level playing field with the current organization model at TSO level with ENTSO-E and ENTSO-G in place, but also provide for considerable efficiency gains: Electricity DSOs have important legal tasks in the current DSO Entity framework together with ENTSO-E already which have in scope only the power sector and its functioning, such as the Network Code on cyber security or the upcoming Network Code on demand side flexibility. Merging electricity and pure gas DSOs in one European body would unnecessarily blur scope and decision-making procedures in a single Board of Directors on these tasks.

Once established, both DSO Entities should cooperate closely as it is the case with the ENTSO's at present.

V. Consumers

Gas customers' protection and empowerment rules should mirror the provisions for electricity consumers as conferred by the Clean Energy Package and be adjusted appropriately to the specific terms for gas market actors. It is particularly important to guarantee the same level of protection among energy customers. It will evoke trust in gas markets and awareness of supplier choice for all gas customers.

Competitive, liquid markets are the most-effective way to ensure affordable prices. The risk of higher gas access tariffs due to low utilisation of infrastructure must be tackled by Member States without distorting competition between energy carriers, creating cross-subsidies or obstacles for the efficient development of other infrastructures. Problems with the affordability of residential gaseous fuel products require welfare state solutions (social policy) to avoid market & competition distortion.

Eurelectric supports the revision of the Natural Gas Directive to ensure consumer protection and empowerment, especially for the most vulnerable ones. **The new gas consumer regulatory framework should avoid adopting additional rules or regulatory obstacles to the existing legislation on bundling products which is already providing simple, transparent and cost-effective solutions to consumers.** Moreover, an alignment of hydrogen consumers rights and protection with consumers of methane, especially industrial consumers,will be the main one in the coming years.

Market-based supply prices (article 4)

Targeted measures of public intervention on gas prices to protect vulnerable customers must not cause economic deterioration or excessive administrative burden for the gas supplier. Measures to combat energy poverty are welcomed. However, implementation and funding of social policies and measures is a task for the public sector. It must be ensured that the energy companies in the free market can continue to operate economically.

Basic contractual rights (article 10)

Article 10 of the revised Directive proposal generally entitles the customer to a contract with a range of different information copying requirements from the Electricity Directive (EU 2019/944). In general, a somewhat alignment in how to draft contracts/terms for electricity and gas holds some administrative advantages and caters for easier understanding for customers. However, it is important that **implementation allows for different market regimes in member states (MS) implying that the Directive must not indirectly require one specific market model e.g., a supplier centric model.**

In addition, it should **be considered whether it is appropriate to also extend all customers' rights requirements to the B2B market** as professional entities in many instances do not ask for such provisions but find it sufficient to act within existing contract law. In this regard, it is important not to introduce unnecessary new administrative burdens which lead to more costs and higher customer prices.

In particular, the Commission should consider the provisions in art. 10.4. implementation of the electricity directive has shown this will be a significant cost driver for market participants (suppliers and distribution) without providing the customers with real added value in many instances. Among other reasons over-information. Hence, **the provisions in art. 10.4 should consider exceptions for notification e.g., when variable price models apply, we would propose notifications be limited to contractual changes, which do not apply to variable price models.** Similarly, it should be considered whether notification of price changes in regulated distribution prices which the customer cannot avoid in any way makes sense in the way art. 10.4 requires.

We see these clear and obvious flaws in the implementation in the electricity market and call on the Commission to avoid copying these 1:1 onto the gas retail market.

Right to switch and rules on switching-related fees

We support the right to switch supplier in general but are concerned about the effect of restrictions to impose fees on customers who terminates contracts before time (Article 11 of the revised Directive proposal). In a gas market where prices have risen dramatically and where a wish for more customers to engage in fixed price contracts constitutes a large economical risk to suppliers if the concept of 'fixed-term, fixed-price supply contracts' is not defined according to how the market and supply contracts work in practice. **It is important that fixed price only applies to the energy content of the delivery and not transportation costs, taxes etc. which are passed through**. Otherwise, this will lead to suppliers refraining from fixed price contracts to households and small businesses as it becomes too risky if prices fall and customers step out of the contract.

To ensure the same level of consumer protection, gas suppliers should be granted as much time as electricity suppliers for the implementation of the technical process for 24 hours switching. We would propose a deadline of 2028 or 2030

Citizen energy communities

Article 14 of the revised Directive mentions transfers of renewable natural gases when it should mention renewable gases (without the "natural") and renewable hydrogen (if this is not to be included in the definition of renewable gases).

The Directive envisages the implementation of energy communities in the gas market with the option of "buying or leasing distribution grids" and "managing themselves" using intelligent metering systems. For safety reasons, energy communities should not be allowed to buy or lease distribution networks. Operator responsibility should be left as far as possible with the existing regulated gas distribution system operators. In addition, very complex, new billing processes would have to be implemented across network operator boundaries, while on the other hand there are no comparable benefits as with renewable energy communities through local consumption of decentralized energy generation (e.g. PV systems on roof-tops). **If energy communities are possible in the gas sector in the future, this can only be allowed under the same strict conditions as for a public company/supplier, due to the complexity and necessary safety regulations operating a gas network.**

Member States should have the flexibility to allow these communities to manage their own distribution networks. Citizen Energy Communities operating their own distribution networks should be held to the same regulatory standard and obligations as distribution system operators, such as network access and the quality index. Citizen Energy Communities must also ensure customers are able to participate or leave at any time.

Bills and billing information (article 15)

Eurelectric is not in favour of extending billing information on printed bills to extend suggested. For information purposes we do not find the bill as a very good means of communication with customers. The bill should be used to give information on actual consumption and payments, but excessive information on energy content, out-of-law complaint mechanisms, energy advise etc. only drives cost without providing customers with real value-adding information. In the year 2022 information on the actual bill should be minimized to 'necessary only' and additional billing information should be provided electronically (and on self-service portals) as these more efficiently support content and offer flexibility in how to cater to customers needs at a cheaper price. In addition, it is important that **the directive considers that responsibility for data and billing information lies with different market actors across member states due to different market models.** In the Danish case, for example, this means that some information requirements should be put on suppliers and others on distribution in their separate bills.

Smart metering systems in the natural gas system (article 16)

Eurelectric supports the Member States right to do a cost-benefit assessment of installing smart metering (art.16.2). In markets where gas usage, especially for household heating purposes, is in decline it makes sense to avoid installing expensive meters as this will only drive tariffs up and payback time is too short (art.16.4 will require that installation cost is included in tariffs).

To avoid unnecessary investments, MS should be allowed to insert a lower limit for smart metering. This is also to avoid unnecessary revisions of the assessment on smart metering every 4 years. If the business case is not positive in the first instance it is hard to see the idea of a revised assessment in a market that is declining.

Entitlement to a smart meter for natural gas (Article 19)

It could also be considered if it makes sense to **allow customers below the limit to require a smart meter even at the customer's own expense (art. 19)** since this will put an additional burden on distributors to support this task.

Vulnerable customers (article 25)

Eurelectric supports the aim to care for vulnerable customers but finds that Member States should have the freedom to define how on national level. We find that this is best

catered to through social welfare schemes or fiscal measures and not through sector-specific regulation.

Minimum requirements for bill and billing information for gases (Annex I, Directive)

An overburdened complex bill should be avoided and allow for some of this information to be available by other means than the bill, which can be more effective and useful for consumers.

We propose that gas companies must include a disclosure of the mix of gasses supplied to consumers in the same way electricity suppliers are required to disclose the energy mix of electricity provided to consumers.

Smart metering systems in natural gas (Annex II, Directive)

The roll-out of smart metering systems in the natural gas system, as drafted in articles 16, 18 and 19, should be subject to a cost-benefit analysis undertaken in accordance with the principles indicated in Annex II. The wording in these articles and the Annex essentially mimic what is said Directive (EU) 2019/944 for electricity. However, the benefits of smart-meter systems for gas consumers, in different circumstances than those prevailing in electricity, are less evident compared to high equipment and technology costs. It is important to recall that neither flexibility, nor dynamic prices are mentioned in this proposal. Similarly, it is doubtful that the infrastructure in place for electricity smart-meters, which is optimised both in the technology choice and the data transmission capacity for specific usage, may provide synergies with gas smart-meters. In case such synergies exist and are exploited by gas smart-meters systems, compensation should be duly established for electricity systems:

Point 2, Paragraph 2: “Such assessment shall also duly consider potential synergies with an already rolled-out electricity smart metering infrastructure, or options for selective rollouts to cases that can quickly return net benefits to keep costs in check. Electricity smart metering infrastructure should be duly compensated for the utilisation of the system in place or for its upgrading”.

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability

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