



## NGO and stakeholder briefing on the EU gas package

**The Russian invasion of Ukraine changes the perspective on the gas package and even further underlines the need to move away from fossil gas.**

The Russian invasion of Ukraine shows the need to decrease our dependence on fossil gas. The proposals under the Fit for 55 package focusing on clean solutions are key levers to achieve it. Delivering the EU Fit for 55 package and accelerating the deployment of renewable electricity, energy efficiency, and electrification would cut 101 billion cubic metres (bcm) of gas consumption, or 66% of the yearly Russian imports by 2025. Among the files under discussion, the Renewable Energy directive (RED), the Energy Efficiency directive (EED), and the Energy Performance of Buildings directive (EPBD) contain crucial provisions that can deliver deep fossil gas demand cuts. They should be prioritised and their ambition ramped up.

However, **the proposed gas package offers very little to address the effects of the current crisis**. The package is built on price assumptions that are now out of date: the relative price of gas under an LNG-based diversification strategy will be much higher than the one supplied by Russia in the last decade. Furthermore, the current situation casts serious doubts over the availability and affordability of blue hydrogen (i.e. made of fossil gas and coupled to carbon capture and storage), a key feature of the proposed gas package strategy and presented as an enabler for the hydrogen economy.

To be fit for purpose, **the gas package should drop its framing of a one-to-one replacement of fossil gas with renewable and low carbon gases**. Instead, it should focus on putting in place tools that enable the scaling down of gas use in the market and on using hydrogen only for the most strategic applications. Due to the expected impact of the war on gas energy prices, the package should bring special attention to managing this in a socially equitable way. In practice, this means revising the Commission's impact assessment to

include the impact of the Russian disruption on the future gas market, the cost of the current LNG diversification strategy, and the impact of prices on the future of blue fossil-based hydrogen to identify the most cost-effective phase-out pathway. In particular, the role of gaseous fuels in buildings should be re-assessed and compared to electricity-based solutions. Such a revision would also be the opportunity for the Commission to ensure the consistency of the proposal with the climate targets and the broader Fit for 55 package, as foreseen by the climate law.

### Introducing this briefing

This NGO briefing analyses the European Commission's proposals for a regulation and a directive "*revising common rules for the internal markets in renewable, natural gases and in hydrogen*" (referred hereafter as the "gas package"). It sets out recommendations for how the gas package can contribute to greenhouse gas emission reductions in line with achieving the Paris Agreement, to limit the temperature increase to 1.5°C, ensuring air quality improvements and affordable energy that European citizens want.

However, unless significant changes are made to the Commission's proposals, **this crucial piece of legislation risks creating further fossil gas lock-in, endangering the EU's climate and energy targets and will fail to resolve the conflicts of interest established in the current legislation and exacerbate energy poverty**. The Commission's proposal to decarbonise the gas system hinges on the idea that fossil gas can be replaced by renewable and so-called 'decarbonised' (non-renewable) gases. While renewable gas (hydrogen, biogas and biomethane) will play a small role, **the proposal fails to provide the much broader framework to reduce fossil gas consumption across the EU by 2030 significantly<sup>1</sup>** and reach a complete [phase-out of fossil gas by 2035](#) at the latest.

**This requires a real reform which include:** setting the pathway to downsize the fossil gas grid; enabling alternatives such as direct electrification in the heating sector while aiding households and communities to move away from fossil gas dependence; steering a targeted use of (100% renewable) hydrogen in specific priority sectors only all the while excluding hydrogen blending; defining robust criteria for "low carbon" and "decarbonised" gases.

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<sup>1</sup> Climate Target Plan projection: 32-37% by 2030

## 1. Improving governance

### Independent oversight

Decisions relating to the gas system should be made based on science, avoiding conflicts of interest, ensuring early and effective public participation open to all stakeholders, requiring the publication of all relevant information, and complying with an adequate level of transparency. These decisions should be reviewed by independent experts. Unfortunately, the proposed gas package continues to provide the **European Network of Transmission System Operators for Gas (ENTSOG)** a disproportionate role, including developing Ten-Year Network Development Plans, writing draft network codes at the European level, and in overseeing hydrogen network planning until 2024.<sup>2</sup>

The creation of a new body dedicated to the hydrogen market and infrastructure development, the **European Network of Network Operators for Hydrogen (ENNOH)**<sup>3</sup>, could be a step in the right direction to decrease the influence of ENTSOG over any future hydrogen networks. However, in the absence of strong horizontal unbundling provisions, the membership of ENNOH will include many active ENTSOG members.<sup>4</sup> As those provisions are proposed, fossil gas entities can freely engage in hydrogen-related activities, **so long as they maintain separate legal forms, accounts, and regulatory asset bases**. Such horizontal unbundling provisions must be significantly strengthened to avoid obvious conflicts of interest (for example, a fossil gas operator using guarantees of “hydrogen readiness” to expand their networks or impede the development of new, renewable hydrogen networks). The only way to meaningfully prevent such conflicts is to **require a complete separation between the ownership, control, and operation of fossil gas and hydrogen assets**.

This strong presence of fossil gas interests hinders the implementation of **fully independent and transparent planning processes** and significantly risks the expansion and lock-in of unnecessary fossil gas infrastructure for decades. **It incentivizes a hydrogen network that suits the interests of the incumbent gas transmission industry in maintaining uneconomic assets, rather than a network that is fit-for-purpose; namely, one that is isolated, organised in regional clusters, transporting renewable gases only to priority end-users.**

### Integrated planning at national level

The **planning of fossil gas and hydrogen networks** at national level is a key feature of the gas package. Given the importance of piping hydrogen to priority end-uses, the future hydrogen network is likely to look very different to the existing gas network: if hydrogen is deployed in clusters to target priority end uses, a sizable portion of the existing fossil gas infrastructure will need to be downsized, phased-out or decommissioned.

**Integrated gas and electricity network planning** is key in fostering energy system integration to achieve climate neutrality. A quick reduction in emissions requires that gas, electricity and hydrogen networks are underpinned by the energy efficiency first principle.

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<sup>2</sup> Gas Reg. proposal, Art. 23, 41, 53

<sup>3</sup> Gas Reg. proposal, Art. 40, 42

<sup>4</sup> Gas Reg. proposal, Art. 4; Gas Dir. Art. 63, 64

Their integrated planning and operation is key to achieving energy system integration. It facilitates the swift integration of high shares of variable renewables into energy networks, enabling variable energy sources (most notably solar and wind energy) to be transported more easily to final consumers while making fossil backup capacities redundant.

The proposed gas package supports integrated planning through a joint scenario framework at the national level. Scenario building, cost-benefit assessments, modelling and planning of the infrastructure for the upcoming decades should rely on the latest scientific evidence and bring in independent, interdisciplinary expertise to ensure it is in line with the EU's and national climate and energy targets. Independence in determining the future energy system is key to avoiding overbuilding. **Planning for all options separately in the established silos of electricity and gas grid operators would lead to a disproportionate increase in network bills which would ultimately be paid for by consumers.** The recently revised regulation for trans-European energy infrastructure (TEN-E) starts to give independent oversight a bigger role; similar guarantees are needed for national level planning.

#### **Recommendations**

- ***Ensure independent oversight and remove conflicts of interest in network planning.***
- ***Establish processes that facilitate the integration of gas, electricity and hydrogen network planning at EU and national level.***
- ***Involve the European Scientific Advisory Board on Climate Change - established under the European Climate Law and included in the revised regulation for TEN-E - in integrated hydrogen infrastructure planning.***
- ***Guarantee a complete separation between the ownership, control, and operation of fossil gas and hydrogen assets.***

#### **Exemptions from market rules**

The gas package proposes a tool for granting **market rules exemptions**<sup>5</sup> which risk becoming a loophole for unnecessary gas and hydrogen infrastructure (e.g. by exempting from compliance with general tariff rules, third party access obligations or unbundling rules). The conditions to grant exemptions must be reassessed to enable a swift decarbonisation of the energy system and avoid infrastructure lock-in. Exemptions from market rules are granted at national level and subsequently reviewed by the Commission. This procedure must be revised to ensure transparency and openness, including public consultations open to all stakeholders organised by Member State authorities.

#### **Recommendations**

- ***Revise the conditions for granting exemptions to ensure they are aligned with the achievement of EU and national climate and energy targets.***
- ***Ensure transparency through public consultations open to all stakeholders.***

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<sup>5</sup> Gas Reg. proposal, Art. 60

## **2. Create a framework for Distribution System Operators (DSOs) to prepare for a progressive change to their business model**

The rapid and large-scale electrification based on renewables as well as demand reduction and efficiency measures needed to meet the EU's climate and energy targets and the Paris Agreement have significant implications for gas DSOs. [A large part of fossil gas distribution networks must be decommissioned](#) to make way for an ever more growing electrified energy system powered by renewables, leaving only smaller distribution grids providing fully renewable hydrogen or sustainable biomethane to those few remaining hard-to-electrify sectors. In this new reality, gas DSOs will no longer be able to rely on network tariffs and fossil gas sales (for vertically integrated DSOs) as reliable revenue streams.

The gas package must ensure that regulators, local governments and communities are empowered to fully and independently examine the future role of gas distribution networks in order to prepare DSOs to adapt to these changing realities without imposing unnecessary costs on consumers, particularly those living in energy poverty. Regrettably, the Commission's proposal ignores the fact that disruption of the status quo is inevitable. The package envisions decommissioning<sup>6</sup> but places no obligation on regulators or gas DSOs to evaluate the need for such decommissioning (indeed, this obligation is not even imposed on TSOs in their TYNDP<sup>7</sup>). The proposal also does not provide gas DSOs with any guidance or regulatory tools that would allow them (and their customers) to better prepare the shift to a decarbonized and largely electrified future powered by renewables.

Key changes must be made to the proposed legislation to ensure DSOs are better prepared for these emerging realities and that they are not incentivized to maintain existing (or build new) unnecessary grid infrastructure. First, explicit transparency obligations must apply to the infrastructure planning undertaken by gas DSOs (the Clean Energy Package already sets this type of obligation for electricity DSOs<sup>8</sup>). In particular, gas DSOs must be required to publish and submit network development plans for approval by national regulators. These plans must include gas demand projections, electrification rates and other assumptions that are consistent with EU climate and energy targets (thereby also evaluating the need to decommission parts of the distribution grids).

Second, the public should have a greater say in gas DSO planning as, ultimately, gas consumers carry an important part of the cost of energy infrastructure. Network planning for DSOs must, therefore, also involve opportunities for public review and comment, with DSOs obligated to take this into consideration – and provide reasoned responses to concerns raised by the public and local communities. This planning should be linked to the local heating and cooling plans as proposed by the Commission under the reform of the Energy Efficiency Directive<sup>9</sup>. Ideally, the planning of district heating and cooling grids would entail gas distribution grid phase-out plans. Similarly, once district heating and cooling grids are rolled out, connections to gas distribution grids would be halted.

Lastly, greater direction can be given at the EU level as to the regulatory tools that Member States and gas DSOs may use to ensure distribution grids are promptly decommissioned

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<sup>6</sup> Gas Dir. proposal, Recitals 112-115.

<sup>7</sup> Gas Dir. proposal, Art. 51(2).

<sup>8</sup> Directive 2019/944 on common rules for the internal market for electricity, Art. 32(3).

<sup>9</sup> EED proposal, Art. 23.

with minimal financial impact on consumers. National regulators should be charged with looking into accelerated depreciation procedures of uneconomic DSO networks, [as per ACER's recommendation](#).

### **Recommendations**

- ***Include explicit transparency obligations for DSOs in the context of energy infrastructure planning and ensure network plans are in line with EU and national climate and energy targets.***
- ***Start planning for the decommissioning of parts of the DSO network.***
- ***Open network planning by DSOs to participation from stakeholders, including communities, civil society and local governments, and link it with local heating and cooling planning.***

### **3. Hydrogen is not a silver bullet for decarbonisation**

#### **Priority use for hydrogen**

The gas package needs to support a market that will have limited amounts of 100% renewables-based hydrogen, prioritising its use only in those sectors which cannot be electrified together with other viable decarbonisation options, such as energy and material efficiency. This is because producing hydrogen incurs significant energy conversion losses. Furthermore, producing renewable hydrogen would risk diverting renewables-based electricity from direct electrification of end-use, which is often more efficient (e.g. heat pumps vs. hydrogen boilers and battery electric vehicles vs. fuel cells electric vehicles). Hydrogen and hydrogen infrastructure are costly, and therefore caution is needed to avoid an inefficient market resulting in unnecessarily high prices for both gas and hydrogen consumers.

No-regret renewable hydrogen applications would include selected segments of industry (e.g. as reaction agent in direct reduction of iron steel making or as feedstock for, e.g., ammonia and other chemicals) or transport, most notably long-haul aviation and maritime shipping. Hydrogen should, however, not be used for [building-level heating, low temperature heat in industry, and road vehicles](#) (such as cars and light duty vehicles) as direct electrification is much more efficient and will deliver higher greenhouse gas emission reductions.

As highlighted in the EU hydrogen strategy, renewables-powered electrolytic hydrogen will have to make up the bulk of hydrogen used in the Union, potentially diverting significant amounts of renewables-based electricity from direct electrification.

#### **Hydrogen blending fails to deliver meaningful greenhouse gas reductions**

The Commission's gas package introduces hydrogen blending, i.e. the practice of mixing hydrogen with fossil gas in the gas grid. Transmission system operators (TSOs) must accept gas flows with a hydrogen content (irrespective of whether renewables or fossil-based) of up

to 5% by volume<sup>10</sup> at interconnection points<sup>11</sup> between Union Member States in the gas grid from 1 October 2025. The reform would also allow exceeding the 5% threshold upon agreement by adjacent TSOs at cross border.

Hydrogen blending is touted as a way to decarbonise the gas grid. However, **substituting 20 Vol-% of fossil gas with renewables-based hydrogen would only result in 6% to 7% greenhouse gas savings** but would also drastically increase the technical effort needed for the system adoption, with [EU end-users having to pay on average 24% more for their gas bill.](#)

Hydrogen blending is also portrayed by the European Commission as a way of kick-starting the EU hydrogen economy. However, there already exists a demand for hydrogen concentrated in well defined geographical areas (e.g. North-West Europe), almost exclusively satisfied through carbon-intensive fossil hydrogen, which ought to be decarbonised through the use of renewables-based hydrogen. Furthermore, a significant portion of the current and future hydrogen demand will be for pure hydrogen (i.e. not blended with other gases), such as in the steel and chemical sectors. Therefore, blending already scarce renewable hydrogen would make it more challenging for those sectors to procure it.

*Costs for hydrogen infrastructure deployment should be born only by its users*

The beneficiary-pays principle should be rigorously applied to hydrogen networks in order to prevent cross-subsidies between energy carriers. However, the proposed Gas Regulation permits cross-subsidisation, which is likely to result in gas or electricity users funding the development of hydrogen infrastructure they will never use.<sup>12</sup> This can only increase the financial burden on gas consumers instead of helping them to switch away from fossil gas solutions. Moreover, allowing cross-subsidisation risks financial resources being allocated to inefficient uses of hydrogen, including residential heating, instead of being directed towards hard-to-electrify sectors. More targeted options for supporting efficient uses of renewable hydrogen are available, such as Contracts for Difference or project-specific grants.

**Recommendations**

- ***Exclude hydrogen blending to enable a targeted use of hydrogen.***
- ***Ban connection to newly built (or repurposed) hydrogen distribution grids to users that are not identified as priority users.***
- ***Task regulators to examine the cost-effectiveness, including with regard to costly distribution grid upgrades, of supplying buildings with hydrogen.***
- ***Ban financial transfers between regulated services that are separate.***

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<sup>10</sup> Gas Reg. proposal, Art.20

<sup>11</sup> Gas interconnectors connect gas transmission systems of neighbouring countries.

<sup>12</sup> Gas Reg. proposal, Art. 4



#### 4. “Low carbon” gases definitions and certification

The proposal defines “low-carbon gases”<sup>13</sup> as the part of gaseous fuels in recycled carbon fuels, low-carbon hydrogen and synthetic gaseous fuels that meet the greenhouse gas emission reduction threshold of 70%. “Low-carbon” hydrogen, in particular, is defined as hydrogen derived from non-renewable sources if it meets a greenhouse gas emission reduction threshold of 70%. A methodology for assessing greenhouse gas emissions savings from “low-carbon fuels” will be developed by the end of 2024<sup>14</sup>.

**The only true “low-carbon” way of producing hydrogen, however, is through renewable electricity.** Other production pathways, be they coupled with Carbon Capture and Storage (CCS) or not, only allow the continued use of fossil, non-renewable and non-sustainable energy sources. **This is why we do not support any reference to “low-carbon” hydrogen in the gas package.**

Furthermore, **the definition of biogas** is problematic because while it refers to sustainability criteria in the Renewable Energy Directive (RED), it still would count food and feed crops and all primary woody biomass. Therefore, we recommend that biogas can qualify only if it is produced from waste and residue feedstocks<sup>15</sup>, except for stemwood, which the majority of scientific literature shows is associated with significant carbon debt over a 30 year period.

#### **Recommendations**

- **Exclude any reference to “low-carbon” hydrogen.**
- **Include biogas produced exclusively from waste and residue feedstocks.**

#### 5. Gas communities & corporate capture

##### Creating a new definition of energy communities does not add value

The European Commission should be commended for its support of community energy in the Clean Energy Package and through the Green Deal. However, its proposal to mirror the concept of ‘citizen energy communities’ from the Electricity Directive is misguided.

Renewable Energy Communities already benefit from a number of rules under the REDII that promote the production of renewable energy from biomethane and biogas. Such activities may be supported under the newly adopted Climate, Energy and Environment Guidelines (CEEAG) on State aid. In fact, several Member States, in their transposition processes, have included renewable gas production and supply as an activity that renewable energy communities can undertake. Therefore, there is no need to replicate the concept of citizen energy communities in the Gas Directive.

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<sup>13</sup> Gas Dir. proposal, Art. 2

<sup>14</sup> Gas Dir. proposal, Art. 8

<sup>15</sup> As defined in Annex 9A of the RED



*A new gas energy community definition creates a significant risk of corporate capture*

Energy communities are an organisational concept aimed at empowering citizens, small and medium enterprises and local authorities to participate and take ownership of renewable energy and other clean technologies for a successful and democratic energy transition. They are there to make sure no one is left behind, to provide economic, social and environmental benefits, and increase local acceptance of renewables. Those benefits cannot be reflected through the concept of gas citizen energy communities.

First, **citizens are not able to organise themselves to invest in the gas sector in the same way they are able to do in the electricity sector**, for instance, in solar PV or wind projects. At the moment, only a handful of energy communities have activities around biogas and biomethane. The amount of expertise and finance capacity necessary to invest in biogas/biomethane risks to let large professionalised energy cooperatives dominate the scene. Overall, the gas sector itself is a lot more concentrated compared to the electricity sector, and harder to get into.

This risk is further expressed, as the **citizen energy community definition in the Commission's proposal contains weak participation, governance, and control provisions**. Any size enterprise may participate in a gas energy community, even if it is active in the gas sector. Furthermore, there are no safeguards to ensure citizen energy communities in gas are governed by democratic decision-making that ensures the community stays in the control of citizens. These issues are not present with Renewable Energy Communities, as they have stronger eligibility and governance requirements.

Given the specific characteristics of the gas sector, replicating the citizen energy community definition in the gas directive will not yield energy communities that are consistent with citizen empowerment. This will be mainly for businesses, almost assuredly with the participation from incumbents. This would result in a loss of confidence and trust by citizens in the concept of energy communities.

**Recommendations**

- ***Delete the definition and any other references to citizen energy communities in the Gas Directive.***
- ***If energy communities are to be acknowledged in the Gas Directive, this should be done through provisions that strengthen the ability of Renewable Energy Communities to store and inject biomethane into the network and to enter into the supply market.***