

Response of the Czech Gas Association to the draft delegated acts of the Taxation Regulation

The Czech Gas Association (hereinafter CGA) is an independent association of companies and experts operating in the gas and related industries. It brings together organizations active in the gas industry, along with research and scientific institutes, and further comprises experts whose specialization corresponds to the focus of the CGA.

Hereinafter, we would like to express our initial view on the proposal of the delegated act presenting technical screening criteria. Following the adoption of the Taxonomy Regulation, we believe fit for purpose Technical Screening Criteria in the delegated act (DA) will be crucial, in particular for enabling and transitional activities which would facilitate a swift and decisive decarbonization effort towards 2050, while ensuring an overall adequacy of the energy system, affordable energy and a secure energy system.

Scope

We welcome the fact that the proposed DA recognizes, in line with Art. 19(1), point (h), of the Taxonomy Regulation, that technical screening criteria should “*take into account the nature and the scale of the economic activity, including: (i) whether it is an enabling activity as referred to in Article 16; or (ii) whether it is a transitional activity as referred to in Article 10(2);*”. We share in particular the view that the technical screening criteria for these activities will have to include quantitative elements (i.e. threshold or minimum requirement) in an effective and balanced way. We also believe in the need for, as a relative improvement, qualitative elements related to performance, process or practice-based requirements, taking into account the economic activity itself.

We welcome the principles embraced by the proposed DA recognizing notably the fact that the technical screening criteria referring to greenhouse gas emissions should signal the decarbonization pathway for enabling and transitional activities. However, considering that emission thresholds alone would not fully capture the benefits of these activities, there is a need to further assess and review the relevant technical screening criteria. This is especially true for transitional and enabling activities that facilitate the long-term decarbonization where the nature of the activity and the use of best available technologies become crucial.

We believe that the activities related to gaseous fuels fully respond to these characteristics and should be included in this approach in light of the contribution they bring to the overall security, resilience and sustainability of an integrated energy system, in particular:

- Thanks to the contribution offered by the gas value chains to the energy system in terms of security of supply, storability and flexibility, particularly as a low-carbon alternative to solid fossil fuels and in support to an additional deployment of renewable energy and as an alternative fuel in transport;

- Thanks to the gradual replacement of natural gas by renewable, decarbonized and low-carbon gas in the mid/long-term, while in the short term a fuel switching from coal towards gas can ensure substantial emission reductions in the energy sector, as demonstrated by the latest EU carbon market report¹.

We underline, to avoid any unwarranted and negative spill over, that the specific technical screening criteria in the proposed Annexes to the DA should better reflect these principles. Therefore:

1. A dedicated section for “transitional” and “enabling activities” is required

A dedicated section in the Annexes to the DA for “transitional activities” as defined in article 10.2 of Regulation (EU) 2020/852 and for “enabling activities” as referred to article 16 of the Regulation should be provided for, which will be subject to review every 3 years as per the requirements of article 19 of the Taxonomy Regulation. This would allow for a regular stock-taking exercise and would ensure a level – playing field on the approach related to best available technologies being used as a benchmark.

These dedicated sections should outline a set of criteria that include both quantitative and qualitative elements that allow enabling and transitional activities, upon compliance with these criteria, to be classified as environmentally sustainable activities. Such criteria may include inter alia:

- ❑ Associated greenhouse gas emission and efficiency levels that correspond to the best performance in the sector or industry compared to the initial situation;
- ❑ Improvement of the air quality also based on Best Available Technologies;
- ❑ Enabling the achievement of EU 2030 energy and climate objectives, particularly by providing solutions across the overall energy system and across sectors, in the context of the National Energy and Climate Plans;
- ❑ The presence of a credible transition pathway consistent with a climate-neutral economy;
- ❑ The possibility to adapt these activities to future technologies and solutions for the development and deployment of low-carbon alternatives (such as renewable, decarbonized and low-carbon gases) in a climate neutral perspective (i.e. via retrofiting, repurposing, ICT for new functionalities), avoiding any lock-in effect or risk of stranded asset since enabling the decarbonization of gas and other sectors;
- ❑ Measurable contribution of the transitional activities to energy security, system adequacy, energy affordability; and/or
- ❑ the use of a broad set of “complementary emissions reduction activity” to mitigate emissions profile, with an approach similar to that suggested by the Technical Expert Group with regards to hydropower (P.209 of the TEG report).

In light of the above, we believe a time-reference is necessary for the Technical Screening Criteria of transitional activities, to demonstrate their compatibility over time along a credible transition pathway towards a climate-neutral economy, on a

¹ <https://ec.europa.eu/transparency/regdoc/rep/1/2020/EN/COM-2020-740-F1-EN-MAIN-PART-1.PDF>

similar model to that of the EIB's updated energy lending policy criteria. (i.e. averaged over the lifetime of the asset)

2. Equal treatment of green activities

All economic activities meeting the quantitative GHG emission values for “green” activities should be considered as significantly contributing to climate change mitigation. Hence once gas assets are 100% greened through the replacement of natural gas by renewable, decarbonized and low carbon gases, such economic activity should no longer be considered as transitional activity but be fully recognized as “green” activity.

Additional considerations based on a preliminary assessment of the DA open for consultation:

- 1. Hydrogen:** We welcome the support for renewable hydrogen production along with electrolysis technology (3.2), and welcome the support for low-carbon manufacturing of hydrogen (3.9), but urge the draft DA to include the technologies necessary for its production (3.5), notably SMR/ATR and pyrolysis in the scope of the draft DA. In addition, the fact that the operation of hydrogen storages (4.13) can only be considered sustainable in case it stores taxonomy compatible hydrogen seems to blur the lines between an activity which can be market based or regulated and a market for guarantees of origin which are traded in parallel to hydrogen flows. As regards the manufacture of hydrogen (section 3.9. annex 1 DA) we want to express our concerns about the “significantly contributing” criterium set at *life cycle GHG emissions savings requirement of 80 % relative to a fossil fuel comparator of 94g CO₂e/MJ resulting in 2.256 tCO₂eq/tH₂*, which may be problematic for certain production pathways and energy sources used for the production of clean hydrogen. Such overly restrictive threshold (being approx. 50% of the threshold recommended by the TEG risks compromising the objectives of decarbonization and competitiveness of the EU and Member State hydrogen and electrolysis industry
- 2. Infrastructure:** We wish to point out that the need for security of supply should allow for power and gas grid extensions to connect new flexible units, with the unfortunate impact otherwise possibly leading to more complex renewable injection and expensive grid reinforcement. Limitations on capacity adjustment when repurposing grids may also prove to create a technical barrier to swift decarbonization as future grid planning including blending and conversion will inherently cause variations in the flows. In addition, methane and hydrogen storages will continue to remain crucial throughout the energy transition and should be adequately covered by the DA
- 3. Buildings:** We support the objective of reducing primary energy demand in existing buildings by 30% (section 7.2) but deplore that many technologies which could help a quick reduction in GHG emissions may not be covered by section 3.2 such as highly efficient gas condensing boiler, which are biomethane ready and can blend in hydrogen up to a certain level

- 4. Mobility:** The delegated act should be consistent with the existing legislation such as the Clean Vehicles Directives and the Alternative Fuel Infrastructure Directive. It should recognise the contribution of all low-carbon solutions in clean mobility – namely hydrogen vehicles, gas vehicles (CNG, LNG, bio-CNG and bioLNG) and electric vehicles – and therefore avoid resource scarcity resulting from an exclusive EV roll-out. The suggested tailpipe emission approach does not measure the total CO₂ emissions associated to vehicles. A life-cycle assessment methodology for low-emission vehicles across all segments needs to be introduced. For instance, on a LCA-basis, using biomethane from liquid manure is a very pragmatic and effective way to generate negative carbon emissions. Running a bio-CNG vehicle would therefore contribute to capturing CO₂ from the atmosphere (IFP, 2019)².
- 5. Technology – neutrality:** Whereas the Taxonomy Regulation stipulates that a technology neutral approach should be adopted (article 19.1.(g)), this has not been the case either in the TEG report, nor in the draft delegated acts. All technologies should be treated equally and should focus on best available technologies, whilst supporting the emergence of promising technologies with significant abatement potential and transitional technologies to allow for a system resilient, inclusive and cost-efficient transition. In this respect, we are deeply concerned by the lack of LCA approach in the transport section and the focus on tailpipe rather than ensuring decarbonization of the vector and mobility sector in parallel and would call for a more comprehensive inclusion of CCS, as outlined in art.10.1(e) of the taxonomy regulation.

The key to a cost-efficient energy transition

When looking at likely economic impact, the main one being access to finance, ensuring coherence between the taxonomy delegated acts and the relevant EU sectoral legislation becomes crucial. Hence, the DA should ensure - when setting the Technical Screening Criteria for the energy sector - compliance with existing threshold and sustainability requirements already set in the existing EU sector specific legislation. This includes but is not limited to the Energy Efficiency Directive, the Renewable Energy Directive, the Clean Vehicles Directive, the Industrial Emission Directive etc. which will be subject to revision in light of the revised EU climate and energy targets. In addition, investments aimed at aligning the economic activities with the TSC should be positively factored in and contribute to classifying these activities as providing a substantial contribution to climate change mitigation.

In the context of the future Technical Screening Criteria, we believe that the definition and implementation of thresholds for the different economic that depart substantially from the references already set in the relevant EU sectoral legislation - i.e. Regulation (EU) 2019/943 or (EU) 2018/2001 – would create uncertainty for public and private investment at times when the relaunch of the economic activities building on Best

² IFP Energies Nouvelles (2019) Etude ACV de véhicules roulant au GNV et bio-GNV, September 2019. Available at: https://www.afgaz.fr/sites/default/files/u200/rapport_afg_versionfinale.pdf

Available Technologies becomes a matter of urgency. Additionally, the Taxonomy should incentivize capital to flow to more sustainable and transitional activities, without excluding necessary technologies. The latter should allow for progressive reduction of GHG emissions over time, for instance by allowing flexible approaches and the blending of renewable and decarbonized gas over the economic lifetime of the project. This, in addition to a portfolio approach for the economic activities, including an evaluation of activities reflecting their contribution towards the improvement of sustainability profiles in other sectors, would provide a coherent adaptation metric by which to assess activities.

Building on this, the DA should pursue a coherent approach to the transition of the energy system by ensuring that both electrons and molecules can contribute to more sustainable and reliable models, as recognized by the most recent EU Energy System Integration Strategy³. In practice, the retrofitting and repurposing of existing assets and investments in new assets should also be taxonomy eligible when a substantial improvement can be demonstrated in the field of energy efficiency/environment and/or climate performance of the asset, for example the improvement provided by a fuel switch in the context of National Energy and Climate Plans. In addition, we see that only through the blending of increasing levels of renewable and decarbonized molecules in the gas grid, underpinned by a clear and stable framework supporting sector integration and the energy union objectives, will we be able to achieve the 2050 objective of climate neutrality in a cost-efficient manner.

Request for modifications

[Additionally, we would like to propose the following amendments to the text to Annex I – economic activities contributing to climate change mitigation:](#)

European Commission’s proposal – Annex I 3.2. Manufacture of equipment for the production of hydrogen	European Commission’s proposal – Annex I 3.2. Manufacture of equipment for the production of hydrogen
<i>Technical screening criteria</i>	<i>Technical screening criteria</i>
Substantial contribution to climate change mitigation	Substantial contribution to climate change mitigation
The economic activity manufactures hydrogen electrolysis technologies.	The economic activity manufactures renewable and low-carbon hydrogen conversion/production electrolysis technologies.

Justification: Both renewable and low-carbon hydrogen are needed to realize the EU’s energy and climate ambitions. The impact assessment accompanying the 2030 Climate

³ <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2020:299:FIN>

Target Plan⁴ states that a decarbonized energy system will require going beyond electrification, and that further deployment of both renewable and low-carbon fuels will be needed to meet increased climate ambitions. The EU Hydrogen Strategy itself also recognizes the need for low-carbon hydrogen produced from natural gas with CCS and pyrolysis over the short to medium term in order to rapidly reduce emissions from existing hydrogen production and support the future uptake of renewable hydrogen. We therefore strongly recommend to reflect this in the upcoming DA. This will ensure that all types of hydrogen technologies will be able to contribute to significant GHG emission reductions.

European Commission’s proposal – Annex I 3.4 Manufacture of energy efficiency equipment for buildings	Recommendation – Annex I 3.4 Manufacture of energy efficiency equipment for buildings
<i>Technical screening criteria</i> The economic activity manufactures the following products and their key components: (...) <ul style="list-style-type: none"> g) space heating and domestic hot water systems rated in the top energy labelling class in accordance with Regulation (EU) 2017/1369; h) cooling and ventilation systems rated in the top 2 energy labelling class in accordance with Regulation (EU) 2017/1369; (...)	<i>Technical screening criteria</i> The economic activity manufactures the following products and their key components: (...) <ul style="list-style-type: none"> g) space heating and domestic hot water systems rated in the top energy labelling classes in accordance with Regulation (EU) 2017/1369 and in compliance with the Ecodesign directive; h) cooling and ventilation systems rated in the top 2 energy labelling classes in accordance with Regulation (EU) 2017/1369 and in compliance with the Ecodesign directive; (...)

Justification: In line with the objectives of the taxonomy, and the section on renovation of buildings, technologies which can help deliver a 30% reduction in primary energy demand for buildings should be readily available. Limitations of the appliances which can be considered sustainable may limit this, particularly in case appliances such as highly efficient boilers, which can run on renewable gas, cannot be considered due to existing labelling rules. Flexibility in this approach would be required to ensure quick wins and GHG emission reduction.

⁴ SWD(2020) 176 final: [Impact assessment accompanying the 2030 Climate Target Plan](#) (p.12).

European Commission's proposal – Annex I 4.7. Electricity generation from gaseous and liquid fuels	Recommendation – Annex I 4.7. Electricity generation from gaseous and liquid fuels
<p style="text-align: center;"><i>Description of the activity</i></p> <p>Construction or operation of electricity generation facilities that produce electricity using gaseous and liquid fuels (not exclusive to natural gas, oil or other refined products). The activity is classified under NACE codes D35.11 and F42.22 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006. The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this section.</p> <p>Substantial contribution to climate change mitigation</p> <p>1. Life-cycle GHG emissions from the generation of electricity using gaseous and liquid fuels are lower than 100gCO₂e/kWh.</p> <p>Life-cycle GHG emissions are calculated based on project-specific data, where available, using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.</p> <p>Quantified life-cycle GHG emissions are verified by an independent third party</p>	<p style="text-align: center;"><i>Description of the activity</i></p> <p>Construction or operation of electricity generation facilities that produce electricity using gaseous and liquid fuels (not exclusive to natural gas, oil or other refined products). The activity is classified under NACE codes D35.11 and F42.22 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.</p> <p>The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this section.</p> <p>Substantial contribution to climate change mitigation</p> <p>The activity complies with either of the following criteria:</p> <p>1. Life-cycle GHG emissions from the generation of electricity using gaseous and liquid fuels are lower than 100gCO₂e/kWh.</p> <p>Life-cycle GHG emissions are calculated based on project-specific data, where available, using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.</p> <p>Quantified life-cycle GHG emissions are verified by an independent third party.</p> <p>4. The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where life-cycle GHG emissions from the generation of electricity using gaseous and liquid fuels averaged over the life-time of the asset are lower than 250gCO₂e/kWhe.</p>

	<p>To avoid carbon lock-in, direct emissions need to reach the emissions threshold outlined in 4.7 (1) by 2050.</p> <p>New power plants need to be</p> <ul style="list-style-type: none"> • hydrogen- ready based on European technical specifications or norms, as soon as they are available, or • ready for renewable, low carbon and/or decarbonised gases. <p>Operators need to have a credible plan about how to reach the emissions threshold in (4). The implementation of such plan being verified at regular intervals by an independent third party.</p> <p>Power plants reach the efficiency levels of best available technologies</p>
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Justification: One size does not fit all, and a variety of transition pathways should be considered, as long as they are compliant with climate neutrality in 2050. More opportunities for transitional activities could have a significant impact especially in regions still highly reliant on coal. In this context, investing in high-efficiency gas-fired power plants today can bring immediate efficiency and significant carbon reductions, supporting the energy transition.

Technical screening criteria, in particular for transitional activities, should reflect a gradual approach and efficiently incentivise transitional efforts. Setting thresholds and ceilings too low at the beginning could de facto exclude relevant activities regardless of both their potential contribution to the transition and their ability to improve their own environmental performance, running the risk of unintentionally creating a niche market. In our view, the single threshold 100gCO₂e/kWh is not appropriate for the transitional activities. The transitional activity threshold should be based on the best performance of technology and signal the decarbonization pathway. Such an approach will ensure a trajectory for meeting the targets and ensure inclusion of activities that contribute to emission reduction including retrofitting of existing processes. The threshold can be reduced with time but should not be set too low too early as otherwise suitable technology that can contribute to the transition or could be retrofitted, will be excluded already at this stage.

The threshold is proposed to reduce to 0g CO₂e / kWh by 2050. With current technologies, in order to provide stable electricity grids (without blackouts), there is a need to have a range of different power generation sources feeding into the grid.

Renewables are critical for the supply of electricity, but other power generation sources need to be operational to address the times when renewable sources are unavailable due to, e.g. lack of wind or darkness.

European Commission's proposal – Annex I 4.8. Electricity generation from bioenergy	Recommendation – Annex I 4.8. Electricity generation from bioenergy
<i>Description of the activity</i>	<i>Description of the activity</i>
<p>Construction and operation of electricity generation installations that produce electricity from biomass, biogas and biofuels. The activity is classified under NACE code D35.11 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006. The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria specified in this Section.</p> <p style="text-align: center;">Substantial contribution to climate change mitigation</p> <p>2. The greenhouse gas emission savings from the use of biomass are at least 80 % in relation to the GHG saving methodology and the relative fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001.</p>	<p>Construction and operation of electricity generation installations that produce electricity from biomass, biogas and biofuels. The activity is classified under NACE code D35.11 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006. The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria specified in this Section.</p> <p style="text-align: center;">Substantial contribution to climate change mitigation</p> <p>2. The greenhouse gas emission savings from the use of biomass are at least 80 70% in relation to the GHG saving methodology and the relative fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001.</p>

Justification: Directive 2018/2001 on the use of renewable energy, outlined that biogas used for the production of electricity, heating or cooling starting production on 1 January 2021 and until 31 December 2025, shall be considered sustainable. This delegated act, which should enter into force on 1 January 2022, should help provide adequate signal to investors and streamline information in line with European legislation which is currently being implemented avoiding going directly against what it contains

European Commission's proposal – Annex I 4.12. Storage of hydrogen	Recommendation – Annex I 4.12 Storage of gaseous fuels
<i>Substantial contribution to climate change mitigation</i>	<i>Substantial contribution to climate change mitigation</i>
<p style="text-align: center;">Construction of hydrogen storage facilities. Operation of hydrogen storage facilities where the hydrogen stored in the facility meets the criteria for manufacture of hydrogen set out in section</p>	<p style="text-align: center;">Construction and operation of renewable and low-carbon gas storage facilities. Repurposing and operation of gas storage</p>

3.9. of this Annex.	facilities where the main purpose is the integration of hydrogen and other renewable and low-carbon gases, enabling the gas storage to increase the blend of hydrogen or other low carbon gasses in the gas system.
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Justification: Gas storage facilities are connected to the gas transmission and distribution networks (see also 4.14) and therefore part of the overall gas infrastructure. The activity 4.12 therefore must be harmonised with activity 4.14. The EU should leverage existing assets and use existing gas infrastructure for renewable and low-carbon gases to save time and costs and ensure security of supply and system stability. Also, during the transition period, all enabling investments and technologies should be covered - and gradually converted to accommodate renewable and low carbon gases. Apart from the development of a dedicated hydrogen infrastructure, the ability to blend renewable gases (including hydrogen) with natural gas is key. In future, with the increasing feed-in of renewable and low-carbon gas (biomethane, hydrogen, synthetic gas) into the natural gas grid, additional quantities of renewable energy can be successfully stored. Furthermore, the storage activity per se is independent from the storage medium and fulfils the function of structuring energy flows - short term and inter-seasonal - thus ensuring overall security of supply. Therefore, Infrastructure operators may not discriminate between sustainability credentials of hydrogen, but instead will have to ensure the technical integrity of the storage. While technologies for deblending may help plan and structure the energy system, the sustainability credentials of a specific energy vector, will be traded independently of the physical flows, to ensure reliance on the internal market.

European Commission's proposal – Annex I	Recommendation – Annex I
4.13 Manufacture of biogas and biofuels for use in transport	4.13 Manufacture of biogas and biofuels for use in transport
<p>The activity is classified under NACE code D35.21 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.</p> <p>The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.</p>	<p>The activity is classified under NACE code D35.21 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.</p> <p style="color: red;">The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening criteria set out in this Section.</p>

Justification: This activity allows for the production of carbon neutral and even carbon negative fuels which will have a central place in the energy transition beyond 2050, as such they should not be considered as solely transitional.

European Commission's proposal – Annex I 4.14. Transmission and distribution networks for renewable and low-carbon gases	Recommendation – Annex I 4.14. Transmission and distribution networks for gaseous fuels including renewable and low-carbon gases
<p><i>Description of the activity</i></p> <p>Repurposing of gas networks for the distribution of gaseous fuels through a system of mains.</p> <p>Repurposing of gas networks for long-distance transport of renewable and low-carbon gases by pipelines.</p> <p>Construction or operation of transmission and distribution pipelines dedicated to the transport of hydrogen or other low-carbon gases.</p> <p>[...]</p> <p>Substantial contribution to climate change mitigation</p> <p>1. The activity consists in one of the following:</p> <p>(a) construction or operation of new transmission and distribution networks dedicated to hydrogen or other low-carbon gases;</p> <p>(b) conversion/repurposing of existing natural gas networks to 100 % hydrogen and retrofit of gas transmission and distribution networks, where the main purpose is the integration of hydrogen and other low-carbon gases, including any gas transmission or distribution network activity, which enables the network to increase the blend of hydrogen or other low carbon gasses in the gas system;</p>	<p><i>Description of the activity</i></p> <p>Repurposing and/or operation of gas networks for the distribution of gaseous fuels through a system of mains and their connections.</p> <p>Repurposing and/or operation of gas networks for long-distance transport of renewable and low-carbon gases, including blended with natural gas, by pipelines.</p> <p>Construction or operation of transmission and distribution pipelines dedicated to ready for the transport of hydrogen or other low-carbon gases.</p> <p>[...]</p> <p>Substantial contribution to climate change mitigation</p> <p>1. The activity consists in one of the following:</p> <p>(a) construction or operation of new transmission and distribution networks dedicated to ready for hydrogen, other renewable and low-carbon gases or a blend within the existing natural gas system.;</p> <p>(b) conversion/repurposing of existing natural gas networks to up to 100 % hydrogen and retrofit of gas transmission and distribution networks, where the main purpose is the integration of hydrogen and other low-carbon gases, including any gas transmission or distribution network activity, which enables the network to increase the blend of hydrogen or other low carbon gasses in the gas system;</p>

Justification: The EU should leverage existing assets and use existing gas infrastructure for renewable and low-carbon gases to save time and costs compared to substantial power transmission expansion. To complement this, the development of a dedicated hydrogen infrastructure and the ability to blend hydrogen with natural gas is key. Blending should be allowed provided that it is compatible with the gas quality requirements for end users and their processes/appliances; to this end existing exercises are looking at solutions by involving actors from along the value chain. We support the integration of renewable and low-carbon gas infrastructure planning in the TEN-E and TYNDP frameworks, particularly as a way to ensure early involvement of all relevant infrastructure operators at the TSO, DSO, SSO and LSO level, as well as connected end-users.

European Commission's proposal – Annex I 4.19. Cogeneration of heat/cool and power from gaseous and liquid fuels	Recommendation – Annex I 4.19 Cogeneration of heat/cool and power from gaseous and liquid fuels
<p style="text-align: center;"><i>Substantial contribution to climate change mitigation</i></p> <p>1. The life-cycle GHG emissions from the co-generation of heat/cool and power from gaseous and liquid fuels are lower than 100gCO₂e per 1 kWh of energy input to the co-generation.</p> <p>Life-cycle GHG emissions are calculated based on project-specific data, where available, using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.</p> <p>Quantified life-cycle GHG emissions are verified by an independent third party.</p>	<p style="text-align: center;"><i>Substantial contribution to climate change mitigation</i></p> <p style="text-align: center;">The activity complies with either of the following criteria:</p> <p>1. The life-cycle GHG emissions from the co-generation of heat/cool and power from gaseous and liquid fuels are lower than 100gCO₂e per 1 kWh of energy input to the co-generation.</p> <p>Life-cycle GHG emissions are calculated based on project-specific data, where available, using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.</p> <p>Quantified life-cycle GHG emissions are verified by an independent third party.</p> <p style="text-align: center;">The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where life-cycle GHG emissions from the cogeneration of heat/cool and power using gaseous and liquid fuels averaged over the life-time of the asset are lower than</p>

	<p>250gCO₂e/kWhe. GHG emissions are allocated between heat/cold and power using the heat bonus approach⁵.</p> <p>To avoid carbon lock-in, direct emissions need to reach the emissions threshold outlined in 4.19 (1) by 2050.</p> <p>New power plants need to be hydrogen- ready based on European technical specifications or norms, as soon as they are available, or ready for renewable, low carbon and/or decarbonised gases.</p> <p>Operators need to have a credible plan about how to reach the emissions threshold in (4). The implementation of such plan being verified at regular intervals by an independent third party.</p> <p>Cogeneration plants reach the efficiency levels of best available technologies.</p>
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Justification: One size does not fit all and a variety of transition pathways should be considered, as long as they are compliant with climate neutrality in 2050. More opportunities for transitional activities could have a significant impact especially in regions still highly reliant on coal. In this context, investing in high-efficiency gas-fired power plants today can bring immediate efficiency and significant carbon reductions, supporting the energy transition.

What's more, the Energy Efficiency Directive 2012/27/EU (EED) stipulates: "*High-efficiency cogeneration should be defined by the energy savings obtained by combined production instead of separate production of heat and electricity... To maximise energy savings and avoid energy saving opportunities being missed, the greatest attention should be paid to the operating conditions of cogeneration units.*" Therefore, in any economic activity, each time an investment in separate electricity or heat generation is planned, cogeneration should be considered first - as a sustainability criterion on its own. To ensure the highest ambition, the definition of high efficiency cogeneration in EED

⁵ Following the EIB energy lending criteria for high efficiency co/tri-generation: (https://www.eib.org/attachments/strategies/eib_energy_lending_policy_en.pdf)

should apply, requiring that at least 10% primary energy savings are achieved compared with the best alternative solutions available on the market.

Cogeneration is subject to the 100g CO₂e/kWh emissions threshold while heat pumps would not be subject to meet such a threshold for the electricity it uses. Yet this electricity is on average 296g CO₂e/kWh and closer to 446g CO₂e/kWh or higher when heat or transport are electrified. This is discriminatory, sets an unlevel playing field and denies that electricity used in heat pumps is not Taxonomy compliant.

Technical screening criteria, in particular for transitional activities, should reflect a gradual approach and efficiently incentivize transitional efforts. Setting thresholds and ceilings too low at the beginning could de facto exclude relevant activities regardless of both their potential contribution to the transition and their ability to improve their own environmental performance, running the risk of unintentionally creating a niche market. In our view, the single threshold 100g CO₂e/kWh is not appropriate for the transitional activities. The transitional activity threshold should be based on the best performance of technology and signal the decarbonization pathway. Such an approach will ensure a trajectory for meeting the targets and ensure inclusion of activities that contribute to emission reduction including retrofitting of existing processes. The threshold can be reduced with time but should not be set too low too early as otherwise suitable technology that can contribute to the transition or could be retrofitted, will be excluded already at this stage.

The threshold is proposed to reduce to 0g CO₂e / kWh by 2050. With current technologies, in order to provide stable electricity grids (without blackouts), there is a need to have a range of different power generation sources feeding into the grid. Renewables are critical for the supply of electricity, but other power generation sources need to be operational to address the times when renewable sources are unavailable due to, e.g. lack of wind or darkness.

European Commission's proposal – Annex I 4.20. Cogeneration of heat/cool and power from bioenergy	Recommendation – Annex I 4.20. Cogeneration of heat/cool and power from bioenergy
<i>Description of the activity</i>	<i>Description of the activity</i>
<p>Construction and operation of electricity generation installations that produce electricity from biomass, biogas and biofuels. The activity is classified under NACE code D35.11 and D35.30 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006. The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening</p>	<p>Construction and operation of electricity generation installations that produce electricity from biomass, biogas and biofuels. The activity is classified under NACE code D35.11 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006. The activity is a transitional activity as referred to in Article 10(2) of Regulation (EU) 2020/852 where it complies with the technical screening</p>

<p>criteria specified in this Section.</p> <p style="text-align: center;">Substantial contribution to climate change mitigation</p> <p>2. The greenhouse gas emission savings from the use of biomass in cogeneration installations are at least 80 % in relation to the GHG emission saving methodology and fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001.</p>	<p style="color: red;">criteria specified in this Section-</p> <p style="text-align: center;"><i>Substantial contribution to climate change mitigation</i></p> <p>2. The greenhouse gas emission savings from the use of biomass in cogeneration installations are at least 80 70% in relation to the GHG saving methodology and fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001.</p>
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Justification: Directive 2018/2001 on the use of renewable energy, outlined that biogas used for the production of electricity, heating or cooling starting production on 1 January 2021 and until 31 December 2025, shall be considered sustainable. This delegated act, which should enter into force on 1 January 2022, should help provide adequate signal to investors and streamline information in line with European legislation which is currently being implemented avoiding going directly against what it contains.

European Commission's proposal – Annex I	Recommendation – Annex I
5.11. Transport of CO2	5.11. Transport of CO2
<i>Description of the activity</i>	<i>Description of the activity</i>
Transport of captured CO2.	Transport of captured CO2 by pipeline, ocean shipping, inland barges, rail or truck.
Construction and operation of CO2 pipelines and retrofit of gas networks where the main purpose is the integration of captured CO2.	Construction and operation of CO2 pipelines and retrofit of gas networks where the main purpose is the integration of captured CO2.

Justification: In the description of this activity, it should be clarified that it covers various transport modalities. Liquid CO₂ can also be transported efficiently and flexibly in ships, barges, by rail or in trucks, thereby unlocking access to CO₂ from installations located onshore without ready access to pipeline infrastructure, and providing flexibility to reach multiple carbon emission points across Europe.

European Commission's proposal – Annex I 5.11. Transport of CO2	Recommendation – Annex I 5.11. Transport of CO2
<i>Substantial contribution to climate change mitigation</i>	<i>Substantial contribution to climate change mitigation</i>
<p>1. The CO2 transported from the installation where it is captured to the injection point does not lead to CO2 leakages above 0.5 % of the mass of CO2 transported.</p> <p>2. The CO2 is delivered to a permanent CO2 storage site that meets the criteria for underground geological storage of CO2 set out in Section 5.11 of this Annex; or to other transport modalities, which lead directly to permanent CO2 storage site that meet those criteria.</p>	<p>1. The CO2 transported from the installation where it is captured to the injection point does not lead to CO2 leakages above 0.5 % of the mass of CO2 transported.</p> <p>2. The CO2 is delivered to a permanent CO2 storage site that meets the criteria for underground geological storage of CO2 set out in Section 5.11 of this Annex; or to other transport modalities, which lead directly to permanent CO2 storage site that meet those criteria.</p>

Justification: We recommend to remove the word 'directly' as it could create complications. For some projects CO₂ will be processed in intermediate storage before being transported for permanent storage. In that sense, the transport will not be 'direct'.

[Additionally, we would like to propose the following amendments to the text to Annex II – economic activities contributing to climate change adaptation:](#)

European Commission's proposal – Annex II 4.7. Electricity generation from gaseous and liquid fuels	Recommendation – Annex II 4.7. Electricity generation from gaseous and liquid fuels
Do no significant harm ('DNSH')	Do no significant harm ('DNSH')
<p>(1) Climate change mitigation The direct GHG emissions of the activity are lower than 270gCO₂e/kWh.</p>	<p>(1) Climate change mitigation The activity is adapted to reach the energy efficiency levels associated with best available techniques (BAT-AEELs)⁶</p>

⁶ COMMISSION IMPLEMENTING DECISION (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for large combustion plants

Justification: Economic activities contributing to climate change adaptation are different from the ones contributing to climate change mitigation. An approach favouring ensuring activities can be adapted to the level of best available technologies in their segment would provide a more suitable approach in our view. That is particularly important considering the impact which adaptation has across sectors and in ensuring an activity is compatible with an evolving climatic conditions and energy system as well as diversity of diverging national pre-conditions.

European Commission's proposal – Annex II	Recommendation – Annex II
4.14. Transmission and distribution networks for renewable and low-carbon gases	4.14. Transmission and distribution networks for renewable and low-carbon gases
<p>Do no significant harm ('DNSH')</p> <p>(1) The repurposing does not increase gas transmission and distribution capacity.</p> <p>The repurposing does not extend the lifespan of the networks beyond their pre-retrofit projected lifespan, unless the network is dedicated to hydrogen or other low-carbon gases.</p>	<p>Do no significant harm ('DNSH')</p> <p>(1) The repurposing does not increase gas transmission and distribution capacity</p> <p>The repurposing does not extend the lifespan of the networks beyond their pre-retrofit projected lifespan, unless the network is dedicated to hydrogen, or other renewable and low-carbon gases or blending within the existing natural gas system</p>

Justification: The increase of capacity may be required, albeit temporarily for technical reasons when working on adapting existing networks to higher blends of renewable and low-carbon gases, or their full adaptation to high blends or pure hydrogen flows. Need to add more bioenergy (use of bioenergy in power generation + CHP).