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# **Evaluation of Responses**

# Stakeholder Comments on CEER's Public Consultation on Regulatory Challenges for a Sustainable Gas Sector Ref C18-RGS-03-03

**19 November 2019** 



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### 1 Stakeholder responses

The public consultation on "Regulatory Challenges for a Sustainable Gas Sector" was launched on 22 March 2019. Reactions were sought, via an online questionnaire, by 17 May 2019.

In total, 73 responses from external stakeholders have been received out of which 19 responses were marked as confidential. The comments were received from a variety of organisations (Annex 2). Within this total, about one-third of the responses were submitted by infrastructure operators and the majority of responses were provided by energy suppliers, producers and industry organisations. CEER thanks the respondents for their involvement and input.

This Evaluation of Responses summarises the opinions expressed by respondents and presents CEER views on them.

CEER intends to publish its Conclusions Paper as a joint document with the Agency for the Cooperation of Energy Regulators (ACER). It adds to the <u>Public Consultation on The Bridge beyond 2025</u> launched by ACER on 23 July 2019. Where appropriate, CEER's position presented on the detailed comments chapter takes into account the mentioned Public Consultation on The Bridge beyond 2025.

In line with our current practice, CEER will continue to provide opportunities for stakeholders' contributions to our work via public consultations and events. All information is available online on <a href="https://www.ceer.eu">www.ceer.eu</a> and is updated on a rolling basis.

### 2 General comments

In general,

- Regarding the involvement of transmission system operators (TSOs)/distribution system operators (DSOs) in new activities, two main groups of respondents could be identified. Whereas one group of respondents, mainly commercial market actors, are of the view that TSOs/DSOs should not be active in activities open to competition, another group of respondents, mainly network operators, are of the view that TSOs/DSOs should be allowed to invest in power-to-gas and biomethane plants to support scaling up of the market. CEER sees a need for clarifying the legal framework regarding the conditions under which an involvement of TSOs/DSOs in new activities may be allowed. The conditions could be based on those introduced in the Electricity Directive (EU) 2019/944 for electricity TSOs/DSOs with a view to the secure and efficient operation of the interconnected (electricity-gas) system.
- The large majority of respondents recognised that power-to-gas technologies can play an important role for the gas sector in the future. Many of them highlighted that there are issues of double charging for power-to-gas, in particular, regarding taxes and levies. CEER recognises that, in the future, power-to-gas technologies could play an important role, in particular for the sector coupling. Regarding technological development, NRAs have a neutral approach: the role of regulators is to set a level playing field for competition among technologies. On the tariffs paid by power-to-gas operators, CEER thinks that it is important to distinguish between use-of-network tariffs and other charges or taxes. The use-of-network tariffs are meant to pay the cost of using the networks, and CEER considers that they may



be reviewed to ensure a fair treatment of facilities providing similar services. With regards to taxes and levies, they are in general defined by policymakers, and are not related to the use of the network. It is important to rethink if and how those taxes and levies should be applied in order to minimise possible distortive effects.

- Regarding hydrogen, there is no shared view amongst respondents as to whether there should be a common European threshold for the blending of hydrogen in gas networks. CEER agrees with responses expressing that it might be premature to decide but is of the opinion that there is already a need to start making the preparatory assessments at a European level at least in terms of principles or methodology. CEER recognises that national/regional conditions differ and underlines that an EU threshold for hydrogen admixture should not prevent any significant development of blending of hydrogen or should not trigger high investment while flows of hydrogen may remain marginal in parts of the network. Therefore, further assessments are needed as to whether there should be set one or more thresholds, or if a threshold should be set (extremely) high or low.
- Concerning the regulation of hydrogen networks, the majority of the respondents stated that the regulation for hydrogen networks, if needed, should be coherent with the regulation of gas networks. A vast number of respondents emphasised that the situation differs for existing (industrial) networks and for new networks (connecting diverse supply and demand). A third large group of respondents stated that it is too early to decide whether hydrogen networks should be regulated. CEER agrees that it is too early to decide whether hydrogen networks should be regulated but uncertainty over future regulation should not hamper (or delay) the initial investments in decarbonised gases. Therefore, CEER encourages policymakers to give further guidance on their possible thinking on the market organisation of hydrogen. In cases with cross-border impact, a joint legal framework can be required.
- The key take-away regarding 'cost efficiency' as a legitimate reason for pro-active market intervention is that 'cost efficiency' and 'technology neutrality' are not necessarily in conflict with each other. CEER's view is that a technology-neutral approach based on markets is a valid mechanism to achieve cost-efficiency especially in the long term. CEER is of the opinion that regulation should be neutral towards technologies; regulatory conditions should allow the most cost-effective technology to be developed.
- Regarding renewable gas guarantees of origin (GOs), most of the respondents agree on the
  merits of a harmonised framework based on common standards (e.g. for issuing, trading,
  tracking, expiration and cancellation of GOs) and definitions of different types of gas. CEER
  is convinced that this will ensure interoperability of different national guarantees of origin
  systems and thereby facilitate their cross-border trading.
- On infrastructure planning, respondents see an important role for ACER and regulators, even beyond the existing legal provisions. Many respondents (essentially infrastructure operators) call for keeping the current balance of duties. CEER's view is, however, that, due to the strategic importance of infrastructure planning, ensuring a deeper control by independent authorities would provide more guarantees regarding the selection of most appropriate solutions to achieve the long-term energy policy goals of the EU. That could even involve an approval of TYNDPs by ACER.
- In terms of projects of common interest, respondents largely support the inclusion of parameters relating to green gases. They are more reluctant about cross-references



between Regulation 347/2013 and the CAM network code. CEER acknowledges that market-based procedures are not meant to be the exclusive way of deciding new investments but sees a merit in ensuring the coherence between various regulations and, in particular, that the economic test provided by the CAM NC offers the appropriate flexibility to address positive externalities such as security of supply in PCI procedures.

- Respondents' views on stranded assets are mixed. CEER's view is that it is important to be
  prudent about specific measures: an efficient management of infrastructure should be the
  responsibility of operators which should thus bear part of the risk. Accelerated depreciation
  or decommissioning should be options of last resort, based on solid evidence. A European
  framework may be provided to deal with risks of undesirable effects on neighbouring
  countries. CEER advocates for cross-border coordination and transparent CBAs similar to
  the ones carried out for investment decisions.
- Regarding network tariff, the respondents were divided in two groups. For the first group, it is too early to assess the TAR NC and priority should be given to its implementation and monitoring. For the second group, there are issues with the current transmission tariff framework that need to be tackled, including the risk of spread increases due to the end of long-term contracts and possible decrease of gas demand. In CEER's view, it is important to finalise the implementation of the Harmonised Transmission Tariff Network Code in all Member States, as well as to monitor its effects on the gas market to assess if and where adjustments may be required. However, in regions where tariffication problems may occur, regulators may design specific solutions based on sound cost-benefit analysis.
- The critical point regarding the gas market design pointed by the majority of the respondents is the incorporation of renewable or decarbonised gases into the current market; especially regarding standard conditions for grid access for power-to-gas and adjustment of the national technical rules and standards regarding hydrogen concentration. On the other hand, respondents mentioned that the focus should be put on the implementation and enforcement of existing EU rules (i.e. network codes). CEER agrees with the incorporation of renewable or decarbonized gases into the current market is a key priority in a mid- to long-term perspective. However, CEER recognises that some gas markets are still struggling with some inefficiencies, such as lack of liquidity and transparency that need to be tackled to achieve an EU common market.
- The majority of respondents were in line with the presented regulatory challenges. Nevertheless, it was proposed to create an EU gas DSO entity, to develop regulatory sandboxes and pilot-projects in order to incentivise R&D and promote transparency in imported hydrogen products. CEER sees the establishment of an EU DSO entity as a mean to ensure DSOs' views are part of the EU deliberations when developing new measures. To better understand the implications of new technologies in the gas sector, CEER will continue to develop in its work programme a number of topics mentioned by respondents. Finally, international collaboration is seen as a key factor to implement a transparent, fair and competitive trading system also covering imported hydrogen products.



### 3 Detailed comments

The table below provides an overview of the comments received to the questions asked in the public consultation on "Regulatory Challenges for a Sustainable Gas Sector" in March 2019. CEER's reaction and views on this input is included in the right-hand column of the table.

	Public Consultation Question	Summary of Responses	CEER position
1	Question 1: Which activities do you consider relevant for potential TSO/DSO involvement that should be considered in the assessment?	<ul> <li>66 respondents (out of 73) answered to this question.</li> <li>Several respondents considered the following activities (beyond the involvement in power-to-gas plants and CNG/LNG fuelling infrastructure mentioned in the consultation document) relevant for potential TSO/DSO involvement that should be considered in the assessment: <ul> <li>Synthetic gas plants</li> <li>Biomethane plants (including compression) / upgrading biogas</li> <li>CCS and CCU</li> <li>Steam methane reformer and autothermal reformers</li> <li>CO2 pipelines</li> <li>Hydrogen networks</li> </ul> </li> <li>Regarding the involvement of TSOs/DSOs, two groups of respondents can be identified.</li> </ul>	In general, CEER favours market-based approaches where conditions allow this. Regulation should be neutral between technologies and support efficient outcomes and investments.  As regards the involvement of gas TSOs/DSOs in the development of new technologies and activities, a parallel can be drawn with the approach for electricity storage adopted in the CEP. In the consultation document CEER identified the need for providing a clear legal framework for such activities of gas TSOs/DSOs.  The legal framework should define a set of conditions under which an involvement may be allowed. Regarding the question whether the market is sufficiently developed to provide the activity, an open, transparent and non-discriminatory tendering



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	One group (24 respondents), mainly commercial market actors, are of the view that TSOs/DSOs should not be active in activities open to competition. TSOs/DSOs should act as neutral market facilitators and should focus on infrastructural solutions aimed at facilitating innovative uses of the gas grids (transmission and distribution) and the maximisation of green gas injection. Many respondents of this group share the view that any activity falling in the category of "allowed under conditions" should first be put to competition (typically via tenders). Where the market cannot yet provide the activity there should be exceptions under regulatory control and with a separate legal entity.  The other group (33 respondents), mainly network operators, are of the view that TSOs/DSOs should be allowed to invest in power-to-gas and biomethane plants to support scaling up of the market. Some respondents point out that power-to-gas plants should not be classified as production plants but as conversion plants. Some of the respondents within this group propose the introduction of regulatory sandboxes for emerging technologies that may allow TSO/DSO involvement at R&D stage and innovation stage.	procedure should be carried out in a first step. The activity should be necessary for the TSO/DSO to fulfil their legal obligations for the efficient, reliable and secure operation of the transmission system. In order to reflect the need to further integrate the gas and electricity systems, TSOs/DSOs should also take into account the secure and efficient operation of the interconnected (electricity-gas) system when carrying out their tasks. In an integrated energy system, this should apply both to gas and electricity TSOs.  Additional restrictions could be considered such as requiring investment to be made through a separate but related company for greater transparency, and requirements to divest once the market is ready to take over. Care would need to be taken not to allow TSO/DSO-operated assets to foreclose the market for the services these assets provide, to use their inside information to secure the best sites or to cross-subsidise the new projects putting the TSO/DSO in a favourable position while creating detrimental effects on existing markets (e.g. flexibility market).  We note that support for investment in technologies
	<b>Some respondents (9 respondents)</b> did not voice a clear position on this question.	that are not yet commercially viable may be justified to promote learning, but this is largely a matter for governments rather than regulators (which have to act on the basis of the legal framework).



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			Several stakeholders mentioned the merits of regulatory sandboxes. Sandboxes could allow pilot projects for a limited time and scope as exemptions to the general rules. Legal frameworks have been introduced in some Member States at national levels and a clarification in the EU legal framework could enable this across all Member States.  Nonetheless, and without pre-empting the question of whether some or all such new installations (e.g. power to gas, CCS/CCU, Hydrogen networks) should or should not be in the regulated domain we note that the existing tools such as the TEN-E Regulation could be amended to include these investments in the TYNDP and possibly as PCIs, where this would facilitate increased efficiency to support the energy transition in the best interests of energy consumers.
2	To what extent should a common European threshold for the blending of hydrogen in gas networks be mandatory and which timing	69 respondents (out of 73) answered to this question.  Nearly one third of the respondents stated that a common European threshold for the blending of hydrogen in gas networks – or at least at IP level – should be mandatory. This is, for example, to ensure cross border trade, to enable the flow of gas and to provide a clear framework for equipment providers and consumers of fuel.	Looking forward, CEER favours a European approach as to investigate the development of a common threshold for blending of hydrogen in gas networks to ensure the flow of gas and cross border trade and to provide a clear framework for equipment providers and consumers of fuel. CEER supports the suggestion made by respondents that at first a revision of the CEN



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should be taken into account? Please explain your reasoning.	<ul> <li>Some of these respondents added that the threshold should be raised to the maximum level of technical feasibility, others indicated that a threshold should rather set the minimum threshold while others noted that the ultimate goal should not be a single threshold across Europe.</li> <li>Concerning timing responses differ: it should take place the sooner the better, at an early stage in order to support the development of hydrogen, or it depends on the speed of electrification.</li> <li>Several respondents added that a (gradually) timely progressive, step-wise increase of blending concertation of hydrogen should be considered to avoid barriers for hydrogen to develop. Others prefer a fuel switch in parallel pipeline systems as to reach maximum efficiency (hydrogen should be transported without blending).</li> </ul>	provisions on gas quality and in the long run also a revision of network codes (Interoperability) can be the right framework for this.  At the same time CEER recognises that national/ regional conditions differ and acknowledges the freedom of Members States to develop their own pathway(s) to decarbonisation. As brought forward by several respondents, CEER underlines that EU threshold for hydrogen admixture should not prevent any significant development of blending of hydrogen or should not trigger high investment while flows of hydrogen may remain marginal in parts of the network. Therefore, CEER is of the opinion that whether there should be set one or more thresholds, or if a threshold should be set (extremely) high or low, should be part of further assessments taking into account the technical capabilities of infrastructure.
	A similar number of respondents stated that imposing a common EU threshold for H2 admixture to grid operators is at this stage premature or further assessments on the possibilities of and of developing dedicated networks adapting gas infrastructure elements and end use applications, is required first.  This because, for example, a threshold could lead to technical refurbishments which might not be useful, and	Concerning timing CEER notes that the responses differ widely. CEER agrees with responses expressing that further assessments on the possibilities of adapting gas infrastructure elements and end use applications, is required. In that sense, imposing a common EU threshold for H2 admixture to grid operators at this stage might be premature. Nevertheless, CEER is of the opinion that, there is already a need to start making the preparatory assessments at a European level.



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	since not all gas networks are capable of carrying the same amount of hydrogen in their grid with the risk of the smallest common denominator prevails, limiting hydrogen development.	
	Anticipating a next phase, several of these respondents stated that the allowed percentage of hydrogen should be harmonised at EU level. The level of the percentage should be defined within norms such as CEN/TC234 and EN16726 or in the long-term a network codes should fix common rules for blending hydrogen.	
	<ul> <li>A smaller, but still significant number of respondents stated that a common European threshold for the blending of hydrogen in gas networks is not desirable or should not be mandatory. This because, for example:</li> <li>National and regional conditions are specific, and regulation should not block any situation</li> <li>They support the initiatives of CEN on the Wobbe Index, which will be affected by blending hydrogen with the natural gas.</li> </ul>	
	<ul> <li>a common mandatory threshold would restrict the TSOs from having flexibility to opt for either blending or pure hydrogen networks.</li> <li>Member states should have a right to decide on their energy mix, pathway(s) and timelines. Thresholds should be defined at national/local level.</li> </ul>	



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		A few respondents were <b>neutral</b> or left it to the technical experts to which extend a common European threshold is feasible and reasonable.  In addition, a number of respondents added other related insights, like:  • Blending of hydrogen and especially synthetic methane should be made mandatory since they are nearly the only option for decarbonizing the fossil gas industry.  • Targets could be set for the % of sustainable gas to be transported through gas networks in Europe. It would not be wise to set separate targets for biomethane and hydrogen as some countries have different local availability of resources  Manufacturers of end-products should be obliged to produce devices that are able to support a higher percentage of H2.	
3	Under which circumstances or conditions should hydrogen networks be regulated, and should this regulation be in the same way as gas networks or	66 respondents (out of 73) answered to this question.  The majority of the respondents stated that the regulation for hydrogen networks should be in the same way as for gas networks, if:  Hydrogen networks have similar economic characteristics as the existing natural gas networks.  It is a natural monopoly, serving the same purpose  Because of the gradual change of flows from pure	CEER agrees with the responses that at this stage it might be too early to decide whether hydrogen networks should be regulated but it is crucial to launch a discussion.  When a market for hydrogen really develops and the transport and distribution of hydrogen via an extended network is foreseen, the economic characteristics of such networks might give reason for regulation.



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are there alternatives? Please explain your reasoning.	<ul> <li>natural gas to pure hydrogen</li> <li>Foreseeable distortions if the regulatory regimes for gas and for hydrogen are fundamentally different.</li> <li>To ensure there are no undue cross-subsidies between gas transmission and hydrogen transmission</li> <li>Regulation may help facilitate financing of new hydrogen networks.</li> <li>Most of these respondents stated that the same regulatory criteria and principles as for gas networks should apply, like non-discriminatory third-party access, a high degree of security of supply and important items to facilitate crossborder transmission and trading. Several others (most of them network operators) stated that the level of regulation would depend on the level of maturity of the market, objectives tried to achieve and national circumstances.</li> <li>Some respondents suggested that the scope of the Gas Directive should be enlarged to include hydrogen. Others added the nuance that the regulation framework for hydrogen networks and hydrogen storage should not have to be exactly the same taking into account hydrogen business particularities. Several noted that in the early stages of development new hydrogen markets, overregulation or too early regulation mimicking the regulation of existing gas networks should be avoided to avoid hampering said development of the markets.</li> </ul>	However, uncertainty over future regulation could hamper (and delay) investments in decarbonised gases. At the same time, it will be important to avoid unnecessary regulation of competitive activities. CEER encourages policy makers to give further guidance on the possible evolution of the market organization of hydrogen.  CEER maintains its position that the existence of market failures like externalities and a risk for market dominance could be reasons for government intervention. Such intervention should be based on a thorough market analysis.  CEER notes the responses largely supporting its assessment that the situation differs for existing (industrial) networks and for (new or converted gas) hydrogen networks (connecting diverse supply and demand) and that it is important that this should be taken into account when deciding on if and how hydrogen networks should be regulated.  CEER notes that possible regulation for hydrogen could be achieved by extending the existing Gas Directive and Regulation to apply beyond natural gas to include decarbonised gases, with clear carve-outs for direct pipes to individual (or small clusters of) industrial users where additional regulation is unwarranted.



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	A vast number of respondents emphasised that the situation differs for existing (industrial) networks and for new networks (connecting diverse supply and demand). Owners of existing hydrogen (industrial) networks should not be regulated in the sense to offer 3rd party access to their pipelines and this infrastructure should not be regulated. For new hydrogen dedicated infrastructure, connecting diverse supply and demand, regulation should be considered, and the principles could be the same as for the current natural gas networks.  A third large group of respondents stated that it is too early to decide whether hydrogen networks should be regulated. It is unclear at this stage how hydrogen will be optimally and safely used. At first a detailed impact analysis is needed in order to identify all necessary steps and to assess whether pure hydrogen grids are natural monopolies. Whenever the hydrogen use reaches a consistent level of use, the decision of a network implementation and its regulation will have to be taken.  Very few respondents stated that the regulation for hydrogen networks should not be in the same way as for gas networks. They pointed out that hydrogen networks are more dangerous than gas network and their safety and reliability should be addressed properly through regulation.  In addition, a number of respondents added comments on	CEER appreciates the responses pointing out the need to take account of hydrogen business particularities, mainly the aspects of safety and reliability, when designing regulation for hydrogen.  Concerning the role of the TSO/DSO, CEER refers to its response to question 1 of the consultation document.



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		<ul> <li>the role of TSOs/DSOs for the transport of hydrogen and/or the use of existing infrastructure for the transport of hydrogen:</li> <li>Some stated that TSOs/DSOs should not have a legal monopoly to build and operate hydrogen networks; private operators should continue to be allowed to build and operate direct pipelines</li> <li>Others pointed out that, depending on the relative maturity of the activity and its competitive situation, DSOs/TSOs should have the possibility to invest in hydrogen networks (to develop a hydrogen industry at scale).</li> <li>Several (mainly network operators) pointed at the benefits of TSOs building and managing hydrogen pipelines.</li> <li>Various respondents noted that using the existing gas infrastructure for the transport of hydrogen would be economically sensible (cost-efficient) compared to developing new hydrogen networks.</li> </ul>	
4	Is 'cost efficiency' a legitimate reason for pro- active market intervention which may be contrary to a general	67 respondents (out of 73) answered to this question.  The responses can generally be split into three broad groups and one category 'others'. It should be noted that responses are often 'hybrid' in the sense that more principles are stated as relevant.	The key take-away regarding 'cost efficiency' as a legitimate reason for pro-active market intervention is that 'cost efficiency' and 'technology neutrality' are not necessarily in conflict with each other.



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"technology neutral" approach? Please explain your reasoning.	<ul> <li>The largest group respondents stated that a technology-neutral approach should prevail. In general, they stated that markets should be led to work properly, ensuring a level playing field between technologies and energy carriers.</li> <li>Several respondents added that a technology-neutral approach based on market mechanisms is the best way to achieve cost-efficiency (technologies and related know-how might still be so immature that any pro-active market intervention could be a pure gamble). Cost-efficiency, a key element of EU energy policy, shouldn't be seen with only a short-term perspective but should rather focus on long-term cost-efficiency of decarbonisation.</li> <li>Various respondents added that other criteria like SoS, diversification of resources, peak demand and societal and environmental impacts should be considered as well.</li> <li>Some marked that a (temporary) exemption to a 'technology-neutral approach' could be necessary to support nascent activities for which positive externalities are significant (see also the third group) and/or that intervention should only take place as a last resource after a clear market failure has been identified</li> <li>Some respondents noted that policy or regulatory signals or targets will be needed to deliver expected (decarbonisation) objectives in time.</li> </ul>	CEER agrees with the responses underlining that a technology neutral approach based on markets is a valid mechanism to achieve cost-efficiency especially in the long term. CEER is of the opinion that regulation should be neutral towards technologies and energy vectors; regulatory conditions should allow the most cost-effective technology to be developed.  CEER notes that various comments are made on the need for proactive market interventions – like support schemes.  CEER notes that support for investment in new technologies is largely a matter of governments rather than regulators.  CEER is of the opinion that support schemes should be limited in time and not favour one technology above another to avoid making a selection between technologies upfront.  To assure that markets will deliver technologies and know-how that will contribute to achieving the decarbonisation targets, CEER agrees with respondents stating that the presence of clear policy goals and targets are needed. These can provide the trigger to invest in these new technologies.



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	A second, large group of respondents stated that 'costefficiency' is a legitimate reason for proactive market intervention where sustainability is the main driving force of the energy transition. Several added that a focus on SoS and affordability must be maintained as well. Reasons to legitimate 'cost-efficiency' as a reason for intervention:  • technology neutrality would be more expensive and could lead to not meeting the required (decarbonisation) goals in time  • markets do not necessarily deliver the expected results for ambitious decarbonisation in the required time  • European technology excellency.  • Specific gas related technologies should be given the supports to ensure successful developed and deployed so that it can play a key role in decarbonising Europe (like what happened to renewable electricity technologies many years ago).  Several respondents nuanced their response by adding that technology neutrality is needed for the efficient development of a decarbonized energy market as well and that support schemes should not favour one technology over another. Some added that a focus on SoS and affordability must be maintained as well.	
	A core message of the third group respondents is that, as	



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		<ul> <li>an exception to the technology neutral approach, (time-limited) proactive market interventions may be required to enable the advancement of technologies (which are at first not economically viable or cost-inefficient) and to reach long-term cost-efficiency.</li> <li>Most of these respondents emphasised that the technology-neutral approach should be a fundamental principle.</li> <li>The 'cost-efficiency' criterion should not only be applied with regard to short-term effects but should also consider long-term developments of new technologies (high upfront investment costs are often necessary to reap benefits of a long-term cost-efficient solution).</li> <li>Some respondents stated that only research and highly innovative projects should be subsidised. Experiments are key to develop these new technologies to a more mature level.</li> <li>Pro-active intervention can be supported only in case of a proven market failure due to e.g. externalities.</li> <li>Several responses point out that there is no opposition between cost efficiency and technology neutrality when they both take into account system resilience, externalities and the long-term need of the energy system.</li> </ul>	



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5	Which role do you see for power-to-gas infrastructures?	<ul> <li>73 respondents (out of 73) answered to this question.</li> <li>For the large majority (59 respondents) power-to-gas can play an important role in the future energy system because it can bring several benefits: <ul> <li>facilitating the integration of RES electricity production by using the energy that would be lost due to the volatility of intermittent RES generation;</li> <li>in combination with the gas transmission system, allowing long-term storage and transportation of energy;</li> <li>facilitating the decarbonisation of sectors that may be difficult to electrify (like heating, industry and heavy transport) by producing synthetic low-carbon gas (by using CCS technology), and hence, avoiding new investment in electricity grid;</li> <li>facilitating sector coupling to the extent that it allows an optimal planning, development and management of gas and electricity network;</li> <li>facilitating the balancing of the power grid;</li> <li>producing renewable and low-carbon hydrogen needed for industrial purpose;</li> <li>contributing to the better functioning of the energy market by reducing the occurrence of negative/very low prices on the power wholesale market;</li> <li>improving SoS in both the electricity and the gas sectors.</li> </ul> </li> <li>Several respondents however highlighted that power-to-gas technologies are not yet economically viable, at least in the</li> </ul>	CEER recognises that, in the future, power-to-gas technologies could play an important role for sector coupling, as highlighted by many stakeholders. In particular, in a scenario with a significant excess of generation from RES, power-to-gas installations can produce renewable gas, increasing SoS, providing flexibility to the whole energy system and helping to reach the decarbonization targets. However, as some respondents pointed out, power-to-gas technologies are still far from being economically viable, and it is unclear when they will become so.  Regarding technological development, NRAs have a neutral approach: the goal of regulators is to define the regulatory conditions that would allow the most cost-effective solution to be developed. Subsidising specific technologies is not under the remit of the regulators: it is a political choice that should be left to policymakers. This principle also applies to power-to-gas technologies: the role of regulators remains to set a level playing field for competition among technologies.



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		short-medium term and some also questioned if power-to-gas would ever become cost-efficient. For 3 respondents, the role of power-to-gas should be market driven: power-to-gas technologies will need to show their added value in competition with other technological options. The role of regulators should be to set a level playing field for competition among technologies.  Six respondents do not see a mayor role for power-to-gas, at least in the short term in their countries.	
6	In your opinion, do the electricity and gas tariff systems create possible distortions to the efficient deployment and use of power-to- gas technologies? If yes, how and in what circumstances?	<ul> <li>67 respondents (out of 73) answered to this question.</li> <li>For 54 respondents the tariff system creates distortions for the use of power-to-gas.</li> <li>For 33 respondents, there is a double charging in particular regarding taxes and levies, which impacts the profitability of power-to-gas (especially in Member States where power-to-gas installations are considered as end-users). For many respondents, power-to-gas should be classified as conversion service, as they transform one energy carrier to another, and thus double charging should always be avoided. In particular, power-to-gas should not bear tax and levies on electricity consumption. One respondent stated that it is unfair and inefficient that levies for renewables support are paid by power-to-gas technologies which are</li> </ul>	Here, it is important to distinguish between use-of-network tariffs (UoNT) and other charges or taxes. The use-of-network tariffs are meant to pay the cost of using the networks. To this regard, CEER view is that network charges should be related to network costs in order to avoid distortive effects. Other benefits should be rewarded with appropriate instruments. Notably, network tariffs should not be used to subsidize technologies. power-to-gas may compete with other infrastructures such as gas or electricity storage, which are applied cost-based tariffs (considering that power-to-gas alone is not a storage technology but may be part of storage solutions). The tariffication system for those infrastructures may differ from country to country, and there are also different frameworks in the electricity



Public Consultation Question	Summary of Responses	CEER position
	<ul> <li>important for the development of renewable generation; for one respondent, there is an issue of double tariffication or charging also for DSO tariffs;</li> <li>For 19 respondents, power-to-gas tariffs should reflect all benefits of power-to-gas (SoS, balancing, supporting renewable and decarbonization, avoiding grid extension, etc);</li> <li>20 respondents highlighted the importance of P2G to store energy, and that both power-to-gas and storage installations should not pay double tariffication/charging. Some respondents wrote that, if the national regulatory framework has special rules for storage installations, those should also be applied to power-to-gas;</li> <li>For 18 respondents, tariffs should be designed to support P2G development, at least till they are economically viable.</li> <li>For some respondents, power-to-gas and gas-to-power are complementary, and both are needed for sector coupling. Hence, the tariffication system should be based on the same principles for both of them. Thus, power consumed in power-to-gas could be exempted from certain taxes (to avoid double imposition) if there are similar provisions for natural gas used in electricity generation;</li> <li>A few respondents mentioned that, in some Member States, "green" hydrogen is subject to high levies that put its production into an unfavourable position in</li> </ul>	and gas sectors. As a general principle, CEER considers that tariffs may be reviewed to ensure a fair treatment of installations providing similar services. In this context, it may also be considered that gas-to-power provides a transformation of energy from a vector to another.  An important aspect to be considered is the "regulatory status" of power-to-gas that can be very different from country to country. For example, if power-to-gas were to be seen as an element of the networks (i.e. interface between gas and electricity networks or assets used for network management), they may be regulated and see their costs covered within a specific regulation (however, as it may interfere with competitive activities, this approach remains highly questionable). Instead, if power-to-gas installations are considered simply as network users, they have to be charged regular access charges (i.e. consumer of electricity and producer of gas) but, as said before, they should not be discriminated against other technologies providing the same kind of services. power-to-gas could also be considered as service provider to other network users and remunerated for such services. Those aspects are of primary importance for the development of power-to-gas and have an impact on how tariffs are defined and applied. They need further analysis, and CEER has



Public Consultation Question	Summary of Responses	CEER position
	<ul> <li>relation to the production of "grey" hydrogen;</li> <li>For some respondents, it is important to distinguish between use-of-network tariffs (to be allocated based on cost reflectivity) and taxes and levies (not related to the cost of the network) and could therefore have a distortive effect; one respondent mentioned that the use of capacity-based tariffs for gas negatively impacts power-to-gas with a low load factor;</li> <li>For some respondents, power-to-gas should be treated as energy intensive industrial consumers and thus the same exemptions should be applied;</li> <li>On the opposite, for eight respondents the gas tariff system does not create distortions to the efficient deployment and use of power-to-gas, or it is premature to discuss it as power-to-gas is in the early stages of development. They in general advocate for a technology neutral approach in tariff setting which should only be used to cover networks costs, leaving support to new technologies to explicit subsidies. For some, power-to-gas have to be considered as producers that inject gas into the network.</li> <li>One respondent asks for ACER to give guidance on basic principles on tariff regulation or best practices. Some respondents pointed out that the power-to-gas using exclusively the electricity network is not convenient</li> </ul>	With regards to taxes and levies, they are in general defined by policymakers. Those tariff components are not related to the use of the network and they may be distortive. In the case of power-to-gas installations, these charges increase the marginal cost of the energy input in the transformation process. It is important to rethink if and how those taxes and levies should be applied in order to minimise possible distortive effects.



	Public Consultation Question	Summary of Responses	CEER position
7	Do you see other possible issues regarding power-to-gas technologies that require consideration from a regulatory point of view?	<ul> <li>67 respondents (out of 73) answered to this question.</li> <li>Most respondents (65) highlighted the need of a review and/or amendment of the legislative and regulatory frameworks to ensure the development of power-to-gas. The main issues raised are: <ul> <li>to establish a taxonomy of "green gas" that includes also low carbon gas and a Guarantees of Origin system based on CO2 production pathway;</li> <li>to define a regulation assuring or, at least, encouraging power-to-gas plants to use "clean/green" electricity;</li> <li>to remove barriers for cross-border trade of renewable and low carbon gasses;</li> <li>to simplify and unify the procedure for power-to-gas for permitting, connecting to the gas grid and integrate power-to-gas into the market;</li> <li>rethinking connection tariff;</li> <li>to define a communication protocol among TSO/DSO/Gas Network Operator/H2 producer for an efficient use of those technologies;</li> <li>to establish a definition of power-to-gas in the legislation and those of the facility operator and user, in particular in the context of sector coupling; for many stakeholders power-to-gas should be defined as conversion and storage technology;</li> <li>to incorporate power-to-gas into the framework of local energy and serve as demand-side response also on the</li> </ul> </li> </ul>	Several points raised are addressed in other questions, in particular: on the establishment of a GO system and definition of green gases (questions 8 and 9); on hydrogen (questions 2 and 3); on the involvement of TSOs/DSOs on the development and use of power-to-gas technologies (question 1); on the support schemes (questions 4); on tariffication of power-to-gas installations (question 6).  Regarding the establishment of power-to-gas definition in the legislation, as technologies are still developing and the future mix is still uncertain, CEER favours adopting consistent principles at European level and a dynamic regulatory approach.  CEER is in favour of defining technical standards for connection and gas quality. This is also important when blending of green gases with natural gas becomes prevalent and variations in gas quality standards across MS should not become a barrier to cross-border trade.  CEER is in favour of simplifying the permit system and procedures for the installation, connection and use of power-to-gas facilities. Moreover, power-to-gas technologies should be remunerated for the services they provide, as any other technology.



	Public Consultation Question	Summary of Responses	CEER position
		<ul> <li>gas side;</li> <li>to allow exemption of pilot projects from administrative burdens such as levies and charges; incentivising R&amp;D and cross border cooperation;</li> <li>some respondents commented on hydrogen; one respondent proposed to create a market design for it, in line with the electricity and gas market designs, while, on the opposite, two respondents that that there is no need to regulate hydrogen now and that development of hydrogen should be left to the market;</li> <li>some respondents commented on the possible involvement of TSOs/DSOs in the development and use of power-to-gas installations;</li> <li>many stakeholders asked for supportive schemes to enable the roll-out of power-to-gas as they are not economically viable.</li> </ul>	
8+9	Question 8: What is required to facilitate efficient cross-border trading of renewable gas guarantees of origin (GOs)?	<ul> <li>59 respondents (out of 73) answered to these questions.</li> <li>Most of the respondents (51 stakeholder) agree on a harmonised framework based on common standards (e.g. issuance, trading, tracking, expiration and cancellation of GOs) and definitions of different types of gas.</li> <li>Many stakeholders (26 respondents) would prefer a system which enables transparent and trustworthy trading across borders.</li> <li>Interoperability and conversion of different GOs (in the</li> </ul>	CEER welcomes the broad support for a harmonised framework for GOs based on common standards. CEER is convinced that this will ensure interoperability of different national GO systems and thereby facilitate cross-border trading of GOs. The design of GOs should be based on the criteria defined in RED II. Redrafting the standard CEN - EN 16325 should be done in due time.



Public Consultation Question	Summary of Responses	CEER position
lessons from the EU-wide system for renewable electricity, if any, should be considered when setting up an EU-wide GO system for renewable gas?	sense of different national systems and different forms of energy) are for many (27 respondents) key elements to ensure the integrity of the system.  • Several respondents (17) would welcome GOs along the criteria of the Renewable Energy Directive (EU) 2018/2001 (RED II) or the upcoming revision of standard CEN - EN 16325. Several respondents (17 respondents) also emphasize that double counting and double issuing of GO should be avoided to ensure the credibility of the system. Several answers (16 respondents) refer to existing schemes and propose cooperation between AIB, ERGaR and CertifHy.  On top of renewable gas (44 respondents), a GO system should be designed to cover also low carbon (25 respondents) and decarbonized gas (24 respondents), which would have a positive impact on the reduction of greenhouse gas emissions (GHGE) and create a more liquid market for GOs. A few respondents are in favour of full disclosure as soon as possible as this would create liquidity in trading GOs.  Reponses do not converge with respect to mass balancing or book&claim. The first and smaller group (5 respondents), mainly TSOs and DSOs, would keep the link between the GO and the molecule for more transparency towards the customer (mass balancing), whereas the latter one (8 respondents) would trade the certificate independently from the commodity gas (book&claim).  Some respondents propose to include the GHGE footprint	CEER supports a broad disclosure of the various origins of gas including low carbon and decarbonized gases.  Definitions and criteria should unambiguously determine the different types of decarbonised gas and the extent to which each can be regarded as "green" or "low carbon". These definitions are also essential to apply GO for renewable gases  RED II requires that energy shall be tradable independently of the GO. For CEER it is key that the GO system is compatible with the internal energy market principles. Given the structure of traded markets and the current form of implementation of electricity GOs there are strong arguments for applying book and claim for all renewable energy GOs.  Regarding information on the GHGE footprint, CEER proposes to mirror the provisions in place for electricity (cf. point 5 of Annex 1 to Directive (EU) 2019/944) for gas.  The validity of a GO is limited to 12 months according to Article 19 (3) of RED II and GOs shall be cancelled or expire 18 months after their production. In CEER's view, this period is sufficient to enable seasonal storage of gas. For CEER it is important that renewable energy GOs are disclosed towards customers within a reasonable period of time after their issuing and ensure



	Public Consultation Question	Summary of Responses	CEER position
		as minimum information in an EU-wide GO system for renewable gas.  Unlike for electricity, as gas is storable over long periods, some stakeholders argue that the lifetime limitation applicable to electricity GOs may not be relevant for gas GOs.  Some stakeholders are in favour to extend GOs for gas to cover also off-grid applications, i.e. also gas which is not injected to the network.  Some replies (12 respondents) would also welcome a system of GO supervised by a competent authority.  A smaller share of responses (5 respondents) would be in favour of considering additional information on top of the standardized GOs in order to e.g. offer more sophisticated products to specific customers.	full complementarity in their duration.  The purpose of GOs is the disclosure of origin of energy delivered to final customers. Additional information on a GO is possible. To allow the value of additionality to be traded, harmonised criteria on European level are essential. In line with RED II and alike the system in place for electricity, GOs are used on an annual basis. Market events within this period are not reflected in the GO itself but e.g. in the price of the GO or its underlying commodity. A similar logic applies for the location.  Based on RED II, the disclosure towards customers relates to the supplier mix. Beyond that a customer-specific disclosure based on products is possible.
10	Question 10: In your view, what should be ACERs and NRAs' responsibility in the development and approval of the TYNDPs, their underlying scenarios and the CBA methodologies?	59 respondents (out of 73) answered to this question.  For the vast majority of respondents agree with ACER and regulators having an important role in the TYNDP process, with a responsibility in terms of developing opinions and recommendations and, more precisely, regarding transparency of scenarios, assumptions and models. Stakeholders of different kinds (market players, associations, infrastructure operators) recognize a role to ACER and NRAs in the improvement of the TYNDP processes and methodologies. Answers insist on aspects such as ensuring electricity and gas are included in the	In the current context, CEER's view is that infrastructure planning plays an increasingly important role in the implementation of a coherent energy system at EU level. Long term planning indeed translates long term energy policy goals, involving scenario building and analysis of various options. Therefore, CEER sees an independent assessment of possible orientations as necessary to identifying the most efficient ways of achieving long term targets; in particular, infrastructure development should be assessed against alternative



	Public Consultation Question	Summary of Responses	CEER position
		same planning exercise and that TYNDPs actually correspond to the EU objectives regarding the development of renewable energy sources. That includes notably the inclusion of DSOs activities.  Respondents also considered, in a large number (24, mainly TSOs), that the current system works properly, thus that NRAs/ACER duties do not need to be strengthened. 8 requested however that regulators get an approval role and a few suggested that at least their role is reinforced.  There were few comments on CBAs, except to mention that the development of green gases should be better taken into consideration.	Regulators' view is thus that TYNDPs would merit further assessment by ACER and regulatory authorities, providing independent and documented evaluations. The strategic importance of TYNDPs could even deserve a formal approval by ACER and NRAs.  CEER concludes from responses received that stakeholders see an important role for regulators, even beyond the existing legal provisions. CEER also acknowledges that many respondents (essentially infrastructure operators) call for keeping the current balance of duties. Regulators however remain convinced, according to their experience, that a stronger control upon infrastructure planning and ENTSOs would be relevant, notably to limit the risk of conflict of interest with planning carried out exclusively by TSOs.
11	Question 11: How should the whole process be designed to maximize the	51 respondents (out of 73) answered to this question.  Most of the responding stakeholders would support the CEER proposal to extend the PCI selection scope to projects dedicated to green gas.	CEER welcomes the general agreement of stakeholders about enlarging the PCI selection criteria to green gas. It sees this as crucial in terms of
	efficiency of decision taking	Stakeholders do not agree, if additional cross-references	coherence of energy policy orientations and actions.  Ensuring a proper coordination between gas and



Public Consultation Question	Summary of Responses	CEER position
about new infrastructures? In particular, would you support the addition of cross-references between the infrastructure regulation 347/2013 and the CAM NC (2017/459)?	between the infrastructure regulation 347/2013 and the CAM NC (2017/459) are needed. A larger share of those stakeholders (mostly TSOs) assess, that both frameworks have different targets and there is no need for additional cross-reference. The incremental capacity process is market-driven, whereas PCI may be also market-based, but consider positive externalities such as security of supply or diversification of supply sources as well. The smaller group of those respondents (rather from the utility sector) would demand more clarity and better coordination in order to increase transparency and predictability.  Stakeholders would also prefer a coordinated assessment of new infrastructure between electricity and gas. Some stakeholders would be in favour of adding more market-oriented elements in the selection process for PCI.	In terms of regulation, CEER wants to clarify that the coherence of European legal provisions is a motivation when proposing to include cross-references between regulation 347/2013 and the incremental capacity part of the CAM network code. Many respondents stated they are not convinced by the proposal to establish cross-references as the two regulations have different purposes. CEER agrees that PCIs are not meant to be decided on market-based procedures only, however, when security of supply or positive externalities do not solely justify projects, the market test becomes important to motivate the investment decision, providing evidence of its value in terms of market integration and competition. The CAM code includes a market test where the parameters offer enough flexibility to properly address the value of positive externalities (via the <i>f</i> factor for example), it could valuably be referred to in the PCI process. Such a cross-reference would help clarify the respective roles of different procedures and, especially, how to design and what to expect from market tests in the PCI procedures.



	ic Consultation Question	Summary of Responses	CEER position
you se strand your of become releva could appro	tion 12: Do tee a risk for ded assets in country? If it mes of ance, what I be the opriate atory tools to te this risk?	59 respondents (out of 73) answered to this question.  21 Stakeholders do not see a risk for stranded assets in their country nor in Europe as the need to reduce carbon emissions will lead to the phase out of coal plants and more carbon intensive fuels. With this, natural gas will have an increasingly important role in electricity production. In addition, in the case of hydrogen (with 1/3 calorific power compared to natural gas), more capacity and compression power will be needed to transport and store the same amount of energy. So, the current gas infrastructure system could be fit for that purpose in the view of this group of stakeholders.  14 Stakeholders recognise a risk for stranded assets, pointing out that decommissioning of gas networks is a real possibility. The reasons identified by these stakeholders include that natural gas demand is expected to go down in a medium/long term period and that renewable gases will be an important contributor to a decarbonised energy system in Europe but will not replace all volume of today's fossil gas consumption. The remaining economic lifetime for parts of the existing infrastructures may be longer than the actual lifetime of these parts.  Some stakeholders (6) did not answer yes or no to this question and think that in some countries the risk may be bigger than in others, and some infrastructures are more	CEER does not have a specific position on the future gas consumption level but considers it is crucial to be prepared to important changes and, notably, significant changes in flow patterns and infrastructure needs.  The answers are contrasted, reflecting the uncertainty about the future role of gas. An important point here is the magnitude of green gas development and the extent to which it could compensate for the potential decline of natural gas consumption. On the other hand, some respondents argue that natural gas has a role to play as a transition energy source, replacing coal in power generation for example. Another element mentioned relates to the complementarity between different components of networks and the infrastructure dimensioning based on peak supplies, which can make it difficult to identify stranded assets.  CEER would distinguish short- and long-term perspectives, namely, observed versus anticipated stranded assets. In the first case, the issue becomes about managing potential decommissioning (see question 13). Addressing the risk of stranded assets, however, requires developing long-term analyses similar to TYNDPs. Actually, TYNDPs could be used to identify such risks.



Public Consultation Question	Summary of Responses	CEER position
	likely to turn in stranded assets than others.	In a long-term perspective, reducing risks of stranded assets thus starts with careful decision making for new investments: uncertainty on future demand should lead to be much more selective regarding infrastructure projects. In terms of regulation, the question is whether tariffs and depreciation of assets should be modified according to the level of uncertainty. In other words, should the risk be transferred from operators to consumers in an anticipated way? In this respect, two positions have been expressed by stakeholders, in favour of accelerated depreciation versus positions arguing against actions on tariffs.
		CEER understands these positions but is very careful about modifying the way infrastructure is depreciated and remunerated. CEER view is that reducing risks consists first in incentivizing operators to make good decisions, which goes with keeping the responsibility of efficiency in their remit. This argues against accelerated depreciation, which would result in increasing tariffs in the short term. However, it may be the case that socializing the risk is legitimate, the conditions would need to be further investigated.  Energy regulators intend to look at these various elements and reflect on possible combinations of tools aiming at providing regulatory flexibility and delivering



	Public Consultation Question	Summary of Responses	CEER position
			incentives to achieve the EU targets in terms of energy consumption and efficiency. However, in all instances, cost neutrality and avoiding increased expenditures for consumers are driving principles.  Regarding distribution infrastructures stranded assets, this topic will be addressed in a specific CEER paper.
13	Question 13: In	52 respondents (out of 73) answered to this question.	this topic will be addressed in a specific GEEN paper.
	your opinion, should decisions on decommissioning be assessed with methodologies similar to those used for investing in new cross-border infrastructures? Do you see the need of an EU framework for decommissioning infrastructure with a cross-border impact?	Most of the responding stakeholders emphasise that consequences of potential decommissioning should be considered thoroughly beforehand (e.g. security of supply, market integration and functioning, impact on neighbouring countries or markets, price convergence, optionality in managing uncertain future energy requirements and diversification).  A lot of stakeholders (mostly TSOs) agree that the discussion about decommissioning is premature and they do not see the need for an EU framework for decommissioning of infrastructure.  On the other hand, there is also a decent share of stakeholders who would consider a common EU framework for decommissioning as useful and that decommissioning should be assessed with methodologies similar to those used for investing in new cross-border infrastructure.	Whatever their detailed positions, most stakeholders remain very prudent on decommissioning: some consider it is too early to raise this issue, other argue that, in all cases fundamental elements like security of supply have to be preserved, transparency is crucial, and principles of CBA should be elaborated. The answers of stakeholders also highlight the importance of having sound processes. They underline the complexity of the issue, which would claim for a case by case treatment according to the factors leading to stranding assets, e.g. demand evolution, decarbonisation, technological changes, government/political decisions, others  In the current context of uncertainty, CEER agrees that some assets may become stranded, but it is of the view that decommissioning should be done at last resort, when the assets are not used any more. Clear evidence



	Public Consultation Question	Summary of Responses	CEER position
		Instead of a discussion about decommissioning, some respondents suggest focusing on repurposing (e.g. Hydrogen, CO2), mothballing or a more efficient use of the gas infrastructure.	of the relevance of such a decision should be provided and, in first instance, would fall under the responsibility of operators within an efficient asset management behaviour. A specific regulatory treatment should not be seen as a pre-requisite.
			In terms of methodology, CEER's view is that applying similar method for decommissioning as for investment is necessary. In particular, CEER agrees with stakeholders that cross-border impacts of infrastructure decommissioning should be assessed in coordination with the concerned NRAs. No capacity reduction should affect neighbouring countries (for instance, on security of supply) unless the decision process is opened to neighbouring NRAs. Principles for managing decommissioning could be framed by EU rules whenever cross-border impacts are likely.
14 + 15	Question 14: What are the critical	61 respondents (out of 73) answered to these questions.	
	points that should be addressed	The critical points mentioned in the consultation responses are listed below in the order of importance (i.e. number of	CEER notices that its analysis of the achievements and remaining challenges for the EU internal gas market is
	regarding the gas	respondents that mentioned a point). In general, for a group	shared by most respondents.
	market design?	of respondents (20), the <b>current gas legislation provides a sound basis</b> for the ongoing development of an integrated	Monitoring results clearly show the positive gas market
	Question 15:	gas market and focus should be put on the implementation	development in large parts of Europe in recent years.
	Considering the	and enforcement of existing EU rules (i.e. network codes).	However, some problems remain in parts of Europe
	possible	Some of these respondents added that where gas markets	that need to be tackled.



Public Consultation Question	Summary of Responses	CEER position
development of renewable gases, in your opinion, do you see a need to update the gas market design?	<ul> <li>have not fully developed and are illiquid and still not fully functional, targeted measures that address the specific market needs should be considered.</li> <li>For 35 respondents, the incorporation of renewable or decarbonised gases into the current market is a critical point to be addressed. Some of the respondents stressed that the market design should be updated especially regarding standard conditions for grid access for power-to-gas and adjustment of the national technical rules and standards regarding maximum hydrogen concentration.</li> <li>A smaller group of respondents (9) mentioned that due to growing interdependencies between gas and electricity, consistency in the evolution of gas and electricity market design should be addressed.</li> <li>Five respondents mentioned cross-border transmission tariffs are a major issue for the gas market.</li> <li>A group of respondents (5) called for reviewing the relationship between TSOs and DSOs with a view to strengthening their cooperation.</li> <li>For two respondents, the current framework does not recognize/reward the full value of underground gas storages. In their view, the future gas market design needs to ensure that value of positive insurance and system externalities created by gas storages ae assessed and adequately captured in the regulatory</li> </ul>	The GTM identifies actions that can be taken, but progress remains mixed. Rather than changing the GTM or otherwise proposing new measures to be applied across the EU, a more targeted GTM-based approach appears to be merited. The Baltic-Finnish market integration initiative provides a positive example where action is being taken.  CEER agrees with the majority of respondents that the incorporation of renewable or decarbonized gases into the current market is a key priority in a mid- to long-term perspective. The basic preconditions for that development should be put in place as soon as possible in order to allow for a gradual scaling-up of renewable or decarbonised gases in the period beyond 2025.  Regarding the lack of guidance for market mergers especially regarding principles of ITC mechanisms, CEER refers to its response to question 16 and 17.



	Public Consultation Question	Summary of Responses CEER position	
		framework.  • Another 2 respondents stated that the lack of guidance for market mergers especially regarding principles of ITC mechanisms is a critical point.	
16 + 17	In your opinion, do you see an issue with the current transmission tariff regime for the efficient integration of the EU gas markets, in particular considering a scenario where long-term contracts expire and gas consumption may decrease?	<ul> <li>47 respondents (out of 73) answered to these questions.</li> <li>The answers to questions 16-17 were jointly reviewed, as many respondents answered them together. In total CEER received 47 answers. The respondents can be divided in two main groups of similar size.</li> <li>In the first group (20 respondents), the stakeholders do not see major issues in the current tariff system, or they think that before deciding if and how to change it, we need to wait for the full implementation of the TAR NC. In particular:</li> <li>for 16 respondents, the TAR NC has brought benefits and any modification might at present disrupt its implementation. Before amending the NC, it is necessary to monitor its effects and to act when problems arise;</li> <li>one stakeholder highlighted that not all TSOs are fully working on implementing the TAR NC;</li> </ul>	CEER is of the view that the introduction of the gas network codes (NC) has made the Internal Energy Market more efficient. The TAR NC, in particular, increased transparency and created an EU common framework for tariffication. Hence, it is important, on the one side, to properly implement the NC in all Member States and, on the other side, to constantly monitor its effects on the gas system to assess if and where adjustments might be needed.  CEER notes that almost half of the respondents, largely energy companies and traders, have serious concerns regarding the tariff framework, including the risk of spread increase due to the end of long-term contract and possible reduction of gas demand, that already may need attention and possibly action by NRAs. As highlighted in the 2018 Gas Wholesale Market Monitoring Report, this risk is probably higher in some
	the current tariff system, with	for some stakeholders, it is unclear today how existing long-term contracts will be replaced and it is not proved	regions and lower or absent in others. Different solutions are suggested by the respondents. Some of



Public Consultation Question	Summary of Responses	CEER position
particular regards to cost allocation methodologies, be amended?	that gas consumption will decrease;  • for some stakeholders highlighted that the ITC mechanisms are complex.  Nonetheless, in this group, 9 stakeholders supported	them, like merging of the market zones are envisaged by the GTM and could be already applied within the current framework, while others need adjustments of the tariffication framework.
	regional initiatives for voluntary market integration, while, for one stakeholder, ad hoc solutions developed at national level could add market distortions between MS.	In regions in which problems are experienced, a bottom-up approach seems an appropriate way to design possible solutions. When there is the risk of structurally high hub spreads, CEER thinks that
	For the second group (21 respondents), there are issues with the current transmission tariff regime, in particular the risk of tariff increase, and spread increases as explained in the CEER document. There is a need to act and, for some stakeholders, urgently. Regarding possible solutions, the respondents have many different opinions. Some of their proposals are as follows:	regulators could be allowed to elaborate specific solutions. Those solutions should be based on a sound cost-benefit analysis considering the impact that they would have in the gas sector (including in the neighbouring regions), allowing for a fair allocation of costs among consumers and avoiding hampering the benefits introduced by the Network Codes. More
	<ul> <li>reviewing the market zones (including merging or creating a single EU zone);</li> <li>allowing for more flexibility on discounting IP tariffs</li> </ul>	guidance regarding ITC mechanism principles when merging cross-border zones would be beneficial.
	<ul> <li>(including setting them to zero); if there are tariffication decisions with cross-border impact, there could be a CBCAs as in the case of PCIs;</li> <li>charging the costs of the transmission service in order</li> </ul>	In addition, in order to address sector coupling issues, NRAs should be tasked with reviewing the substitutability of gas and electricity assets and ensuring that network charges provide a level playing
	to allocate it to the effective beneficiaries (including those in the electricity sector) considering benefits like SoS, market integration; some respondents suggest splitting the TSOs allowed revenues according to the	field between gas and electricity – for example, between gas and electricity storage.



Public Consultation Question	Summary of Responses	CEER position
	<ul> <li>beneficiaries.</li> <li>Recognising the value of new infrastructure developed on a merchant basis, meaning not restrict exemption process when these are justified;</li> <li>ACER should be granted a relevant role to ensure the national decision fulfil the TAR NC regarding cross-border tariffs; reviewing Article 5 of TAR NC, considering the fact that formulas proposed in this article are often leading to a result in contradiction with its objective (limiting cross-subsidies between intra-system and cross-system network users).</li> </ul>	
	Some stakeholders believe that solutions should also go beyond possible modification in the tariff framework. The solutions proposed are:  • considering broader mechanisms for risk-sharing as well as explicit payments for transmission capacity maintained exclusively or primarily to support electricity supply security;  • acting on the capacity contracts framework, such as: abandoning the regime of "Use It Or Lose It" and adopting the "Use It Or Sell It"; simplifying the logistic chain to buy spot cross-border capacities; increasing efficiency by integrating all the gas infrastructures in a EU gas capacity trading platform; providing flexibility to existing long-term shippers in using their contracts;  • promoting the substitution of natural gas with renewable	



	Public Consultation Question	Summary of Responses	CEER position
		<ul> <li>and low-carbon gases;</li> <li>a coordinated decommissioning of stranded infrastructure which is not critical for security of supply, explicit compensation outside network tariffs to avoid spiralling tariffs.</li> </ul>	
		In addition, CEER received some answers that were neutral, or did not address the questions Some stakeholders replied that answers cannot be given without assessing the scenario impact; or that the risk of stranded assets is real but avoiding them is not a legitimate objective of the energy policy.	
		This question received answers from a broad variety of stakeholders. Nevertheless, in the first group, most respondents were TSOs (12 out of 20) and, in the second group, most respondents (14 out of 21) were energy companies, including traders.	
18	Question 18: Are there other regulatory challenges for a sustainable gas sector not addressed in this document?	49 respondents (out of 73) answered to this question.  The majority of respondents expressed their concern and alerted for the necessity to develop additional discussion and analysis before putting into practice any regulatory changes.	CEER recognises the difficulty on predicting at this stage the challenges that might emerge in the sector. However, it is essential to take a forward-looking view considering the trends in the European energy sector.  From the responses to this final question, CEER



Public Consultation Question	Summary of Responses	CEER position
	Some respondents claimed that it is too soon for changes and that it is of the utmost importance to finish the implementation of the current legislation before advancing to further changes.  Respondents mentioned the following topics under this question:  • Promote regulatory sandboxes and pilot-projects in order to incentivise R&D in this field  • Create an EU gas DSO entity which should be different from the EU electricity DSO entity  • Create visibility and transparency of imported hydrogen products to distinguish that produced from RES and that from fossil-fuels. This demands international collaboration and a sustainable regulation. The absence of a comparable CO <sub>2</sub> cost of between EU and extra-EU competitors will promote a significant disadvantage  Nevertheless, the majority of the comments do not differ from those discussed in the consultation document, as follows:  • Review the current regulatory tariff design  • Standardised terminology  • Carbon capture and Storage (CCS) and Carbon capture	concludes that the most relevant challenges have been addressed in the consultation document.  Several of the additional challenges mentioned (e.g. standardised terminology, CCS and CCU, methane emissions, guarantees of origin, storage challenges) are also addressed by other stakeholder organizations based on the conclusions of the 31st Madrid Forum.  CEER acknowledges the relevance of promoting regulatory sandboxes and pilot projects in order to develop a deeper understanding of the implications that new technologies and legislation might create in the sector. Therefore, in its work programme, CEER will continue to work on a number of topics mentioned by respondents, including digitalization, infrastructure investment and storage.  CEER sees that the establishment of a EU DSO entity, with clearly defined tasks and objectives to support new technologies, could be a mean to ensure that the DSOs' views are part of the EU deliberations when developing new measures.
	and utilization (CCU)TSOs should be allowed to invest in these activities and also hydrogen networks, digitalisation, and related R&D and pilot project expenses	CEER recognises the importance of creating visibility and transparency in imported hydrogen products. International collaboration is a key factor in creating the principles needed to implement fair and competitive



Public Consultation Question	Summary of Responses	CEER position
	<ul> <li>Methane emissions</li> <li>Establish a guarantees of origin system)</li> <li>Sector coupling</li> <li>Possible contradictory national regulation</li> <li>Storage challenges</li> <li>Digitalisation of the network such as: require the revision every 5 years of the negative technical and economic study regarding the roll out of smart gas meters; make optimal the ON/OFF distance switching; DSOs as regulated entities; DSOs can socialize the cost of data management in their tariff; enact a principle of interoperability of data</li> <li>Standardization/establishment of a common approach at the European level</li> <li>Discussion along all gas value chain</li> <li>Incentives to develop/deliver carbon-free (or low-carbon) products of (traditional) gas producers</li> <li>Remove barriers to cross border trade</li> <li>Clear definition of new gases</li> <li>Pay attention to infrastructure investment</li> </ul>	trading systems.



### Annex 1 – About CEER

The Council of European Energy Regulators (CEER) is the voice of Europe's national energy regulators. CEER's members and observers comprise 39 national energy regulatory authorities (NRAs) from across Europe.

CEER is legally established as a not-for-profit association under Belgian law, with a small Secretariat based in Brussels to assist the organisation.

CEER supports its NRA members/observers in their responsibilities, sharing experience and developing regulatory capacity and best practices. It does so by facilitating expert working group meetings, hosting workshops and events, supporting the development and publication of regulatory papers, and through an in-house Training Academy. Through CEER, European NRAs cooperate and develop common position papers, advice and forward-thinking recommendations to improve the electricity and gas markets for the benefit of consumers and businesses.

In terms of policy, CEER actively promotes an investment friendly, harmonised regulatory environment and the consistent application of existing EU legislation. A key objective of CEER is to facilitate the creation of a single, competitive, efficient and sustainable Internal Energy Market in Europe that works in the consumer interest.

Specifically, CEER deals with a range of energy regulatory issues including wholesale and retail markets; consumer issues; distribution networks; smart grids; flexibility; sustainability; and international cooperation.

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More information at www.ceer.eu.



# Annex 2 - List of Respondents

In total, 73 responses from external stakeholders have been received out of which 19 responses have been marked as confidential. The non-confidential respondents (54) are listed in the table below.

AB Amber Grid	GAZ-SYSTEM S.A.
ANIGAS	GD4S
BDEW e.V.	GEODE
BVES - German Energy Storage Association	GERMAN CHEMICAL INDUSTRY ASSOCIATION - VCI
CEDEC	GIE
CEEP	GRDF
Centrica plc	GRTgaz
Czech Gas Association	Hydrogen Europe
EDF	IFIEC Europe
EFET	Initiative Erdgasspeicher e.V.
Enagas S.A.	International Association of Oil and Gas Producers (IOGP)
Enel	Klaipedos nafta
Energie-Nederland	N.V. Nederlandse Gasunie
ENGIE	Naturgy
Eni SpA	Netbeheer Nederland
ENTSOG	NGF Nature Energy A/S
Equinor ASA	Ørsted
Ervia	PGNiG SA
EUGINE - European Engine Power Plants Association	RheinEnergie AG
Eurelectric	SEAS-NVE
Eurogas	Shell
Europex - Association of European Energy Exchanges	Teréga
eustream,a.s.	UPRIGAZ
EUTurbines - European Association of Gas and Steam Turbine Manufacturers	Vattenfall AB
Galp Gas Natural Distribuicao	VERBUND AG
GAS CONNECT AUSTRIA GmbH	Vereinigung der Fernleitungsnetzbetreiber Gas e.V. (FNB Gas e.V.)
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