**CEER Public Consultation on Regulatory Challenges for Sustainable Gas Sector**

**[Q1] Which activities do you consider relevant for potential TSO/DSO involvement that should be considered in the assessment?** *(Scope of Network Operator Activities)*

* To enable and foster the energy transition and the ongoing change to low emission energy system beyond 2050, TSOs/DSOs are well placed to be involved in activities that enable decarbonisation and promote future sector coupling.
* The Czech Gas Association believes that the assessment should, among others, consider activities focused on production of renewable and decarbonized gases (e. g. biomethane), as well as on alternative gas facilities (e.g. Power to Gas facilities). By allowing TSOs/DSOs to invest in either a fully commercial way or to apply for financing through an open regulatory support scheme, they can support the development and scaling-up of the market.
* Investing by TSOs/DSOs in alternative gas facilities should be possible in a commercial way if it is possible in given market– in competition with commercial investors.
* If the commercial investments are not possible due to the market condition the Czech Gas Association believes that it would be beneficial to establish regulatory scheme open for any investor for ensuring that the underlying technologies can reach required scale and fully unlock its potential. A regulatory scheme should be under oversight of national NRAs.
* The final decision on the possible implementation of regulatory scheme should be done by member states and should be based on market conditions.
* TSOs/DSOs ownership and operation of alternative gasfacilities and offering conversion services to network users can comply with unbundling rules. Moreover, flexibility of alternative gas facilities can be offered as balancing service to electricity grid operators.

**[Q2]: To what extent should a common European threshold for the blending of hydrogen in gas networks be mandatory and which timing should be taken into account? Please explain your reasoning**

* At first there should be no minimum threshold for hydrogen injection into the current gas grids. The maximum limit should be based on CEN and other expert institutions discussion and it should respond to realistic perception of current technical and legislative potential of transmission system operators.
* Having in mind different stage of technical preparedness of infrastructure for hydrogen injection within the EU and still missing legislation covering hydrogen issue in several member states, it is difficult to set up common European threshold. Nevertheless, maximum threshold for hydrogen shouldn’t exceed 2 %, at minimum from the short-term perspective. However, impact of even 2 % hydrogen injection into gas grids and for CNG cars has to be further analyzed.
* Further development and common agreement on standards for gas quality is needed in order to enable blending of hydrogen in gas networks reaching limits of 3 % - 5 % and more.
* Regulation covering conditions for connection of points which could influence gas quality in the grids, including liabilities related to potential differences in gas quality stability and gas quality itself, should be considered on European or at minimum on national level.
* The Czech Gas Association supports further analytical work of ENTSOG and CEN on possible hydrogen scenarios for 2050. Scenarios for concentration of hydrogen in the gas grids as well as in the whole gas chain on the level of 2%, 20% and 50% - 100% in 2050 should be developed and further analyzed in order to reach implementation of carbon neutral technologies.
* Transition period will be needed in order to accommodate new requirements in this field.
* Operators should be allowed to include in the RAB the cost of replacing depreciated assets by ones that are ready to integrate at least the hydrogen fraction indicated by threshold with the possibility to go beyond. Storage system operators should have access to climate-focused national or EU funds or financial support schemes to ensure that storage as an important part of the gas infrastructure is ready for future needs of the energy markets.

**Q3]: Under which circumstances or conditions should hydrogen networks be regulated, and should this regulation be in the same way as gas networks or are there alternatives? Please explain your reasoning.**

* The use of hydrogen as an energy carrier may have a huge potential as part of the energy transition. For the potential of hydrogen to be fully enabled there is a need to make sure that there are no barriers to its growth.
* Hydrogen networks need to be regarded as natural monopolies as building parallel network structures would not be efficient mainly because of the large investment costs needed for building such network. It is likely that large scale hydrogen pipelines will have to have similar economic characteristics as the existing natural gas networks. The Czech Gas Association thinks that it will be necessary to allow TPA and further develop the EU Internal Energy Market to ensure pipelines full utilization. We believe it will be most efficient if the hydrogen networks will be managed by operators as a regulated business.
* The Czech Gas Association believes that the benefits of applying regulatory regime and TSO/DSO management over future hydrogen pipelines are following:
* Infrastructure optimization and cost savings as a result of coordinated planning that reflects the future development of the sector
* Guaranteeing non-discriminatory third-party access, so that all interested market players can benefit from gaining access to the hydrogen network and allowing its maximal possible utilization
* Guaranteeing the viability of pipelines in the development stage, as the load factor progressively increases.
* Allows a potential integration of hydrogen and (bio)methane markets to deliver one price signal for gaseous energy. This integration will prevent market fragmentation as hydrogen usage develops EU wide alongside gas usage.
* Conversion of parts of current natural gas grid to hydrogen pipeline can reduce the total investments that would be need for hydrogen pipeline construction. Such pipeline conversion still requires additional R&D, capital and time. These investments will have to be taken into consideration by NRAs and appropriately incentivised.

**[Q4]: Is ‘cost efficiency’ a legitimate reason for pro-active market intervention which may be contrary to a general “technology neutral” approach? Please explain your reasoning.**

* The Czech Gas Association believes that ‘cost efficiency’ is a legitimate reason for pro-active market / policymakers and/or regulators intervention where sustainability is the main driving force of the energy transition, but a focus on security of supply (SoS) and affordability must also be maintained.
* ‘Technology neutrality’ is needed for the efficient development of a decarbonised energy market and its associated regulation. Support schemes should not favour one technology over another e.g. biogas support mechanism for the production of electricity but not for injection into in the gas system.
* Besides cost efficiency, other criteria like SoS of the whole energy system, diversification of sources, peak demand, societal and environmental impacts (externalities) and future potential of the technology should be considered to promote activities like Power-to-Gas and hydrogen networks. In addition, any decision that will impact the future of gas and gas infrastructure, like a shift from a methane network to a pure hydrogen one, should be carefully assessed taking into account long-term cost efficiency.
* Nowadays, there are support schemes and an adequate regulatory framework in place to promote the production of renewable electricity. All technologies, including those which enable renewable and decarbonised gases, that contribute to the decarbonisation of the energy system should benefit from the same kind of treatment assuring a level playing field between all technologies and all energy carriers.

**[Q5] Which role do you see for power-to-gas infrastructures?**

The Czech Gas Association believes that power-to-gas as a technology will enable sector coupling which is essential for affordable, sustainable and secure energy transition. The role of alternative gas facilities should be to convert surplus of RES electricity to gaseous fuels - it should be treated as a conversions device.

The Czech Gas Association believes that usage of Power-to-gas has a number of benefits:

* It would facilitate sector coupling, thereby maximising the potential of the overall energy system, allowing for optimal planning and development of gas and electricity networks in a complementary manner.
* It allows the maximisation of the renewable electricity production by converting renewable electricity to renewable gas which can be injected into the existing gas network and used among others as a raw material by industry.
* It will contribute to better functioning of the energy market by reducing the occurrence of negative/very low prices on the power wholesale market and enabling the development of additional market-based renewable electricity generation whilst providing a renewable source of gaseous energy.
* It will ease the balancing of the power grid by providing both up and downwards operational reserve and will contribute towards the reduction in electricity grid congestion.
* It allows to store gas in large quantities of energy derived from renewable electricity over long periods in gas storage facilities.
* It improves SoS in both electricity and gas sector.

Unfortunately, it is not economically sustainable to operate alternative gas facilities under current market conditions and therefore additional support may be needed. Regulation could have a role to play, as it is an efficient way to develop infrastructure and provide viable framework for potential investors. The Czech Gas Association proposes regulation as a mechanism that could be used to incentivise the development of alternative gas facilities.

Furthermore, the Czech Gas Association believes that TSOs in cooperation with DSOs and storage system operators are ideally suited to contribute to the ramp-up of power-to-gas infrastructure as they have the knowledge, experience and resources to develop this type of infrastructure.

 **[Q6] 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?**

* The current electricity and gas tariff system is not designed to support efficient deployment and use of power-to-gas technologies.
* Tariffs as well as other payments such as taxes and market operators fees shall be adjusted or avoided for power-to-gas station to avoid double payment for energy consumption (once at the power-to-gas station, for the second time with the final consumption of the converted energy) and also to provide a level of regulatory support for power-to-gas technology.

**[Q7] Do you see other possible issues regarding power-to-gas technologies that require consideration from a regulatory point of view?**

* The current legislative and regulatory frameworks were developed prior to the development of power-to-gas infrastructure, therefore not taking into account its potential and possibilities. The current market conditions are not supportive for alternative gas facilities operation therefore a review and amendments of the regulatory framework is needed to ensure development of power-to-gas infrastructure.

The Czech Gas Association suggests to make the following changes:

* A definition of Power-to-Gas in the context of sector coupling should be included, with a clear distinction between the facility operator and the facility user.
* A supportive framework is needed to enable the roll-out of Power-to-Gas. The possibility to apply for European investment funding (e.g. CEF) should be taken into account.
* There should be no barriers to renewable and low-carbon gases to cross borders and sectors. EU-wide transparent guarantees of origin or certification scheme needs to be flexible enough to allow the cross-border transfer of energy and support cross-border trade of all kind of gases.
* Furthermore, TSOs, DSOs a SSOs should be allowed to transport and store hydrogen and other gases to enable the scale-up of renewable hydrogen production from Power to Gas facilities.

**[Q8] What is required to facilitate efficient cross-border trading of renewable gas GOs?**

The Czech Gas Association believes that the cross-border trade of GOs for renewable gas is supported by ensuring ‘interoperability’ of different GOs. In this sense, ‘different GOs’ stand for different energy carrier (e.g. gas, electricity) and different issuing bodies. Therefore, compatibility should be ensured by the following measures:

* Ability to convert the GO of one energy carrier to another when such is physically taking place
* Cooperation of national issuing bodies and possibility of a EU-wide solution: National issuing bodies are encouraged to work towards setting up interoperable scheme for all GOs. This scheme includes recognition by every issuing body of GOs issued by every other issuing body – to allow the transfer of GOs. Additionally, a European-wide solution for the abovementioned cooperation could be established.

The Czech Gas Association also supports the establishment of GOs for energy from “non-renewable” energy sources, in the terminology of the recast Renewable Energy Directive (RED II), that have a positive impact on the Green House Gas (GHG) emission reduction (e.g. decarbonised/low-carbon gas). This directive allows Member States to put in place that option.

**[Q9] Which 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?**

* Instead of copying the solutions from the renewable electricity to renewable gas, we should work towards being able to convert GO from one carrier to the other carrier.
* Lessons learnt from the electricity sector include the necessity of common understanding of the data that should be included in the GO and certificate. All GOs, regardless of the energy carrier for which they are issued and regardless of the issuing body, must comply with the same transparency requirements. To that end, the common understanding of concepts and corresponding terminology is needed.

**[Q10] 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?**

* Existing regulation provides an important role to ACER (and NRAs) in providing opinions to ENTSOs Draft TYNDPs and CBA Methodologies.
	+ The recommendations provided to ENTSOG are published in the final version of the ENTSOG TYNDP as well as an explanation on how those where taken into account.
	+ Also the CBA Methodology includes a dedicated document where ACER opinion, as well as other stakeholders feedback, are published together with the way those feedback have been taken into account.
* Such ACER (and NRAs) role should be kept as it is foreseen today in order to provide important recommendation to improve TYNDPs/CBA Methodology while still preserving an open, transparent and non-discriminatory process towards all stakeholders.
* Taking account the existing important roles for ACER/NRAs the Czech Gas Association does not see a need for extending them.

**[Q11] How should the whole process be designed to maximize the efficiency of decision taking 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)? (In charge:**

* It is important to underline that Regulation (EU) 347/2013 and CAM NC (2017/459) have different targets.
* The Incremental Capacity process was designed for market-based investments, whereas PCI projects may be market-driven, but are important also for other reasons like security of supply or supply source diversity. This does not mean that those two Regulations are in conflict to each other.
* The Czech Gas Association does not see a need for addition of cross-references between Regulation 347/2013 and CAM NC (2017/459).

**[Q12] Do you see a risk for stranded assets in your country? If it becomes of relevance, what could be the appropriate regulatory tools to reduce this risk?**

* On one hand, we do see the risk of stranded assets on the side of DSO not only in the RES transition, but also in further use of (cheap) fossil fuels for economic reasons. Risk of stranded assets is also relevant for storage system operators. On the other hand, we assume a very low probability of this risk on the side of TSO.
* In the very long view there is some uncertainty of the future of gas and it is difficult to assess the development of the gas sector, which will be influenced by many factors. Possible regulatory tools could include introducing risk premiums as a compensation for this risk, adjusting the depreciation periods and the applying front-loading depreciation methods. With regards to storage operators operating in highly competitive environment, a right market design should be set in a way that allows to maximise usage of storage facilities, for example by setting a discount up to 100% on transmission tariffs to/from storage facilities. Also, storage operators should be allowed to offer tailor-made products and services within the scope of legal boundaries without a need of additional regulatory approval. Especially with a view of the upcoming major shift in the energy sector, there is and will continue to be a demand for flexible adaptation to ever changing market conditions.
* To reduce the potential future risks of underutilized or possibly stranded assets and their impact on investors regulators should appropriately balance the pace of old and new assets depreciation together with setting the adequate risk premia via WACC.
* As the gas sector being in increasing competition with the electricity sector in future, regulators and gas regulated companies can e.g. try to define some measurable sector-to-sector indicators as a tool/proxy for the assessment of the above mentioned risks, which could drive the future regulated depreciation strategies for gas assets (e.g. such indicators might be deployment of electricity heating pumps, volume of electricity produced from gas, alternative gas facilities development and utilization, development of regulated electricity prices, etc.).

**[Q13] In 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?**

* Given the clear indications on the key role of gas in the energy mix, it is premature to introduce discussions on the development of a formal decommissioning framework.
* Before decommissioning of any asset, there needs to be thorough analysis including the assessment of the monetary and non-monetary benefits (e.g. security of supply, diversification of routes, impact of other markers).
* We do not see any need for EU framework for decommissioning the infrastructure with a cross-border impact since the cross-border infrastructure is key in the fulfilment and preservation of integrated EU gas market.

**[Q14] What are the critical points that should be addressed regarding the gas market design?**

* The current gas legislation provides a sound basis for ongoing development of an integrated gas market. Implementation of the current legislation is almost complete and the impact on market development is already providing significant benefits, e.g. with better price convergence on many hubs, and improved market liquidity.
* The implementation of the current legislation has already had a clear positive effect in many market areas, resulting in liquid and functional market places, as indicated in ACER’s Market Monitoring Report in 2018. There are a number of EU gas markets that are mature. Where gas markets have not fully developed and are illiquid and still not fully functional, targeted measures that address the specific market needs should be considered.
* EU-wide measures should only be considered where there is strong evidence of an EU-wide problem.
* The focus should be on fully implementing the current legislation and where issues or problems are identified, additional measures could be considered.

**[Q15] Considering the possible development of renewable gases, in your opinion, do you see a need to update the gas market design?**

* The Czech Gas Association believes that future changes in the gas sector can have an impact on the dynamics of the gas market with the need to update it.
* When considering the development of a low-emission society, a one-size-fits-all solution is not ideal for a national energy markets in the EU with so many different requirements, political drivers, stages of maturity and geographical distribution of resources. The main concern would then be how to streamline all available solutions without hampering the integration of the European energy market already achieved.
* The incorporation of renewable and low-carbon gases into the current gas market arrangements shall be done however we do not see a need for a substantial EU gas market model update/reform.

**[Q16] 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?**

* The Czech Gas Association believes that an appropriate transmission tariff regime and the efficient integration of the EU gas markets is supported by the ongoing implementation of the TAR NC (Regulation (EU) 2017/460).
* Before suggesting any changes, the Czech Gas Association supports the idea:
	+ To finalize the implementation of all the requirements of the European legislation,
	+ To monitor and assess the development of gas markets,
	+ To continue with regional initiatives in less developed markets.
* The situation in the Czech Republic has been constantly improving. For example, EFET Gas Hub Benchmarking Study from November 2018 considers the Czech VTP among the biggest risers in maturity and in liquidity. This is also confirmed by ACER Market Monitoring report 2017 which shows that there is very strong price convergence between German NCG and Czech VOB hub, and also by the fact that the estimated gas sourcing cost compared to the TTF hub has lowered from >3 euro/MWh in 2012 to <=1 euro/MWh in 2017. Between calendar year 2017 and 2018 the Czech Gas Association has seen a significant drop of some IP tariffs by 25%, not an increase.
* Even though it is a trend in most of the Member States, that some long-term contacts may expire, it is not a general rule.
* With regard to “pancaking effect”, cumulative IP costs for shipping gas along a gas route represents the costs incurred by the TSOs to pass gas across several market zones under the current regulatory arrangements, approved by a relevant NRA.

**[Q17] If yes, how could the current tariff system, with particular regards to cost allocation methodologies, be amended?**

Please refer to our answer to Q16.

**[Q18] Are there other regulatory challenges for a sustainable gas sector not addressed in this document?**

**Prague 17th May 2019**