

CEER

**Council of European
Energy Regulators**



CEER follow-up to the study on "Future role of gas from a regulatory perspective"

31st Meeting of the European Gas Regulatory Forum

16 October 2018

Background

- **Green technologies and energy vectors** need to be developed and diffused in the next decades if the gas sector wants to play a role in a low carbon economy, in particular
 - ▶ renewable gas sources (biomethane)
 - ▶ power-to-gas to couple the electric and gas sectors
 - ▶ hydrogen to be injected into the gas grid
- In parallel, flow patterns across EU may significantly change (locally decreasing consumption or production, new supply routes, new gas sources), and **some gas infrastructures might become less used** but peak demand could remain high
- The **regulatory framework might need to be adjusted to facilitate the energy transition** while **preserving the achievements** of the (still ongoing) implementation of the **gas target model**

CEER work for a Sustainable Gas Sector

- After the **FROG study**, within the **3D Strategy**, CEER is now focusing on:
 - ▶ the **regulatory challenges** for an efficient transition of the gas sector towards a low-carbon scenario
 - ▶ **opportunities for regulatory actions** to make this transition possible
- CEER is addressing:
 - ▶ **Potential regulatory barriers** to green gases development
 - ▶ **Infrastructure** investment framework including stranded assets issues
- Ongoing work:
 - ▶ August 2018: **NRA questionnaire**, first results in the following slides
 - ▶ Beginning of 2019: **public consultation** document
 - ▶ Spring 2019: final document
- **Note:** these slides **do not reflect a final CEER position**; they introduce the main topics for the next public consultation

I. DEVELOPMENT OF GREEN GASES: New business models for TSOs/DSOs should be in line with principles of unbundling

- First evidence from NRAs
 - ▶ In a number of MS, TSOs/DSOs are active in the construction and operation of CNG/LNG fueling and power-to-gas infrastructures
- Challenges
 - ▶ Avoiding unintended interactions between the regulated and contestable sectors in terms of cost and revenue allocation and information advantage
- Opportunities
 - ▶ Ensure a proper market environment for contestable activities through a clear separation between
 - ownership/operation of the infrastructure; and
 - production, buying and selling of gas
 - ▶ Enable “traditional” gas sector companies to actively contribute to energy transition
 - ▶ As a general rule, TSOs/DSOs should act as neutral market facilitators, unless the market is not able to deliver

I. DEVELOPMENT OF GREEN GASES: Power-to-gas as enabler of sector coupling

- First evidence from NRAs
 - ▶ Electricity and gas tariff systems do not acknowledge the specific role of power-to-gas infrastructure as a sector coupling enabling technology
- Challenges
 - ▶ Risk of distortive charging for network access by sector coupling technologies
- Opportunities
 - ▶ Gas infrastructure could contribute to sector coupling and to cost-effective decarbonisation
 - ▶ Since sector coupling benefits both the gas and electricity systems, the respective tariffs should reflect the overall system value
 - ▶ Network fees could be waived if electricity is stored and re-fed into the (same) electricity connection



I. DEVELOPMENT OF GREEN GASES: Moving towards hydrogen networks in the future

- **First evidence from NRAs**
 - ▶ In most MS, existing hydrogen pipelines are mainly owned by companies which produce gases for industrial purposes
 - ▶ In most MS, currently, only small quantities of hydrogen may be injected into the gas network
- **Challenges**
 - ▶ Defining the regulatory framework for hydrogen infrastructure
 - ▶ The transition to hydrogen requires intensive coordination between sectors and adequate regulatory oversight
- **Opportunities**
 - ▶ Given that hydrogen networks have similar economic characteristics to gas networks, they could be regulated according to the same criteria
 - ▶ Pipelines for pure hydrogen that constitute a supply network could be subject to TPA obligations
 - ▶ Gas quality definition which could be reconsidered to facilitate the injection of renewable gases



I. DEVELOPMENT OF GREEN GASES: EU system for trading renewable gas guarantees of origin to facilitate cross-border trade

- **First evidence from NRAs**
 - ▶ Some guarantees of origin (GO) initiatives for renewable gases at national level
 - ▶ In some MS, NRAs are responsible for issuing GO for electricity
- **Challenges**
 - ▶ Need to extend the GO as from the revised renewable energy directive, also to renewable gases injected into the network
- **Opportunities**
 - ▶ GO are important to allow renewable gas product differentiation for consumers
 - ▶ Discussions could be started on establishing a EU-wide GO system for renewable gas to enable cross-border trade
 - ▶ Lessons learned from electricity and pilot projects should be taken into consideration

I. DEVELOPMENT OF GREEN GASES: Fair billing of energy becomes more relevant with increased share of renewable gases

- **First evidence from NRAs**
 - ▶ Renewable gases may have different calorific values (CV) from natural gas (but still within natural gas standards)
- **Challenges**
 - ▶ This could create problems for fair energy billing if injection of renewable gases increases to substantial level
- **Opportunities**
 - ▶ Identifying charging areas with different CV within an entry-exit zone could be explored at national level
 - ▶ Sharing of best practices

II. INFRASTRUCTURES

Carefully assessing the need for gas infrastructure

- First evidence from NRAs
 - ▶ The EU framework for investment in gas infrastructure was designed over time and it is now scattered across several pieces of legislation (Directive 2009/73, Regulations 715/2009, 347/2013 and 459/2017)
- Challenges
 - ▶ New investment decisions shall be carefully assessed in an environment where an efficient coupling between electricity and gas systems is required
 - ▶ Lack of coherence in some areas of EU legislation: a better streamline is needed
- Opportunities
 - ▶ Better coordination between the incremental capacity framework (based on market test) and the PCI framework (based on CBA)
 - ▶ A stronger oversight by ACER and the NRAs of ENTSOG and ENTSOE TYNDPs, CBA methodology and underlying scenarios might be necessary

II. INFRASTRUCTURES

Carefully assessing the need for gas infrastructure

- First evidence from NRAs
 - ▶ Regulation provides a framework for existing and new infrastructures, but lacks cross-border instruments to address the decreasing use of some infrastructures
- Challenges
 - ▶ Although it is not certain if and to what extent gas consumption will decrease, at least locally, some infrastructures could be less used
 - ▶ Decommissioning of gas infrastructures might have relevant cross-border impacts
- Opportunities
 - ▶ NRAs could consider designing regulatory tools to deal with the risk of stranded assets, for example:
 - for new assets, the depreciation periods might be shortened and non-linear
 - a coordinated framework for the decommissioning of cross-border assets might be needed