Eurogas at glance

Gas Distribution Workshop: measurement and unbundling in focus
Session 1
Vienna – 25 April 2018

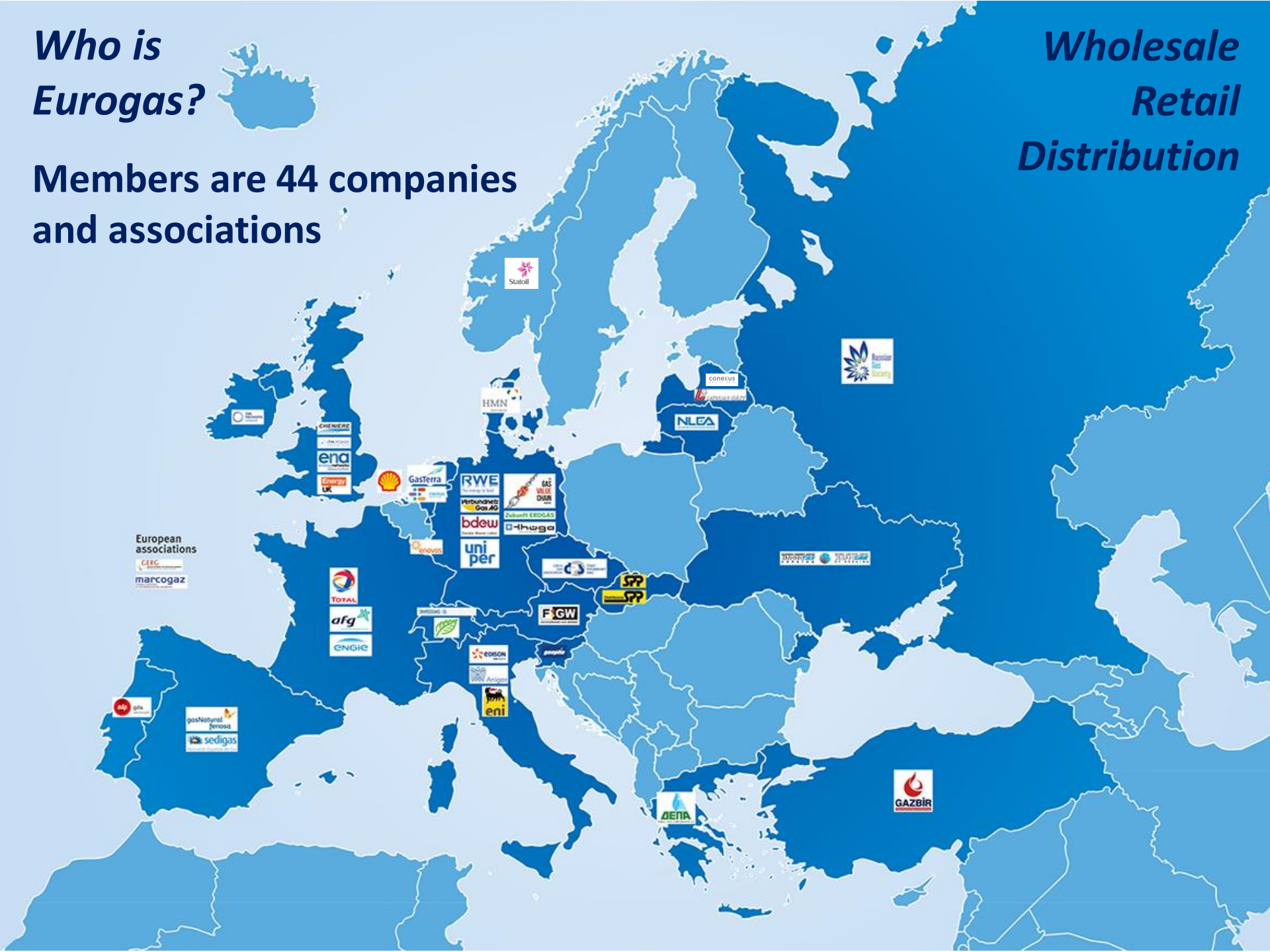
Nicolas Jensen
EU Affairs Officer

Members, organisation and goals

Who is Eurogas?

Members are 44 companies and associations

Wholesale
Retail
Distribution



Eurogas: Managed by people who know the business

President

Klaus Schäfer

Uniper

Vice-Presidents

Martin Herrmann

Czech Gas Association

(RWE)

Annie Krist

GasTerra

Massimo Mantovani

Eni

Edouard Neviaski

ENGIE

David Wells

Shell Energy Europe

Key tasks of committees

Wholesale Market Design Committee	Content Work on issues related to wholesale market design, e.g. Gas Package 2020, Network Codes, wholesale regulation, SoS	Regulatory experts
Transparency & Market Integrity TF	Content work on REMIT, EMIR, MiFID etc.	Financial regulation experts
Retail Committee	Content Work on issues related to retail issues, e.g. rules for gas in different customer segments, customer needs	Sales and marketing experts
Distribution Committee	Content and lobbying work on distribution system operator issues, e.g. customer switching and customers' profiles, best practices in nomination, operational procedures	Regulatory experts distribution
Strategy Committee	Strategic steering of Eurogas activities incl. other committees, preparation of board meetings, content and lobbying work on broader political topics	Experts in strategy or political affairs
2030 WG	Finish work on Clean Energy Package	Political affairs experts
(temp) topic related WGs	Policy work on specific topics	Political affairs experts
Gas Advocacy WG	Develop material and comms plan for advocacy work, incl. Gas in Mediterranean	Gas advocacy and comms experts
Stakeholder Mapping WG	Develop stakeholder map for key topics, coordinate member support for lobbying activities	(Brussel based) lobbyists
(temp) Renewable Gas WG	Collect content on renewable gas	Renewable Gas experts
(temp) CCS/CCU WG	Collect content on CCS/CCU	CCS/CCU experts
R. Hartmann & Secretariat	Maintain relationship with Russian Gas Society	Stakeholder Manager Russia

Goals

- Eurogas was founded in 1990 as a non-profit organisation to represent the interests of the gas industry in one strong voice towards European and global stakeholders.

- The association aims to strengthen the role of gas in the energy mix by establishing an ongoing dialogue with European industry players, global producers of gas and relevant institutions such as the European Commission.

- Our vision is for a robust European gas market that encourages competitiveness, supports security of supply, delivers benefits to customers, stimulates energy efficiency and plays a significant role in reducing CO_2 emissions.

- The main objectives of Eurogas are to:
  - Strengthen the role of gas in the European energy mix.
  - Promote the smooth functioning of the European internal gas market.
  - Provide structured support to our members on EU policy issues relevant to gas interests.

DSO Committee, scope of work, achievements

Distribution System Operators Committee

MAIN OBJECTIVES:

- Ensure that the interests of gas distribution companies, excluding retail questions, are efficiently represented
- Liaise with other sister associations and correlated international institutions, and with other interests in Eurogas
- Advise the Eurogas Board on all issues related to the economic and legal issues with regard to development, maintenance and operation of distribution networks.

INDICATIVE ACTIVITIES:

- Analysis of policy, legal, economic aspects of gas distribution matters; looking for a framework conducive to:
  - A framework enabling Europe's adaptation to energy transition (smart, renewable, cleaner)
  - Granting an adequate and competitive returns on the assets
- Preparation of distribution companies' positions for the debate with authorities, regulators and other stakeholders, and preparation of input to the Madrid Forum or other discussion or decision-making fora at European level → DG ENER, AGRI, RTD, FCH JU; Bio-Economy Strategy
- Input on the current legislative agenda (CEP) re gas DSO issues (mirroring; DSO Entity), R-Gas, flexibility at DSO level & from DSOs to the energy system
- Coordination with TSOs, network users and suppliers on data exchange issues related to:
  - Customer switching and customers' profiles
  - Information and operational procedures

EXAMPLE OF MEMBERS:

- Anigas (IT), BDEW (DE), Thuga (DE), GRDF (FR), AFG (FR), Nedgia (ES), Sedigas (ES), REN Portgás Distribuição (PT), ENA (UK), FGW (AT), Alliander (NL)

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Fuelling the future

Cooperation with external associations/stakeholders 2017 wrap-up and 2018 planning

- 2017
  - DSO brochure on renewable gas
  - Workshop on renewable gas: Hydrogen Europe, GIE, EBA
  - Bilateral meetings: EBA, ENTSOG (towards a structured collaboration? Can we win ENTSOG support for the DSO Entity and role of gas? How?),
    Cogen Europe, Energy Community, ACER etc…
  - Annual conference on renewable gas: EBA, WWF energy, Audi and the Frech Farmer-biomethane producer!

Cooperation with external associations/stakeholders 2017 wrap-up and 2018 planning

- First half of 2018
  - EBA annual conference
  - Launch of our flexibility report at DSO level
  - Participation in several European Commission studies
  - CEER FROG study launch
  - Energy Community workshop
  - Copenhagen Infrastructure forum
  - COGEN Europe conference
  - ACER/ENTSOG workshop

Case study: DSO brochure

Distribution System Operators (DSOs)

Key link to consumers and rolling out renewable gas

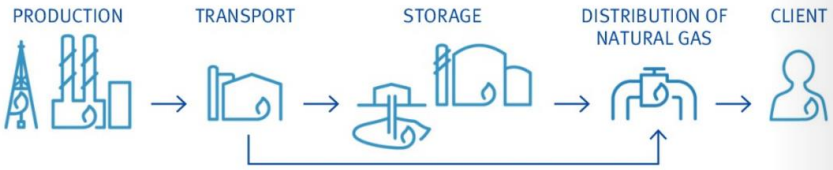
Today DSOs distribute gas to **over 118 million customers**, across the residential, industrial and power sectors through more than **2.21 million kilometres of pipelines** in a **cost-efficient** way. The **natural and renewable gas, distributed by DSOs**, can ensure a **low-disruption energy transition** by limiting cumbersome shifts away from highly efficient final uses for customers.

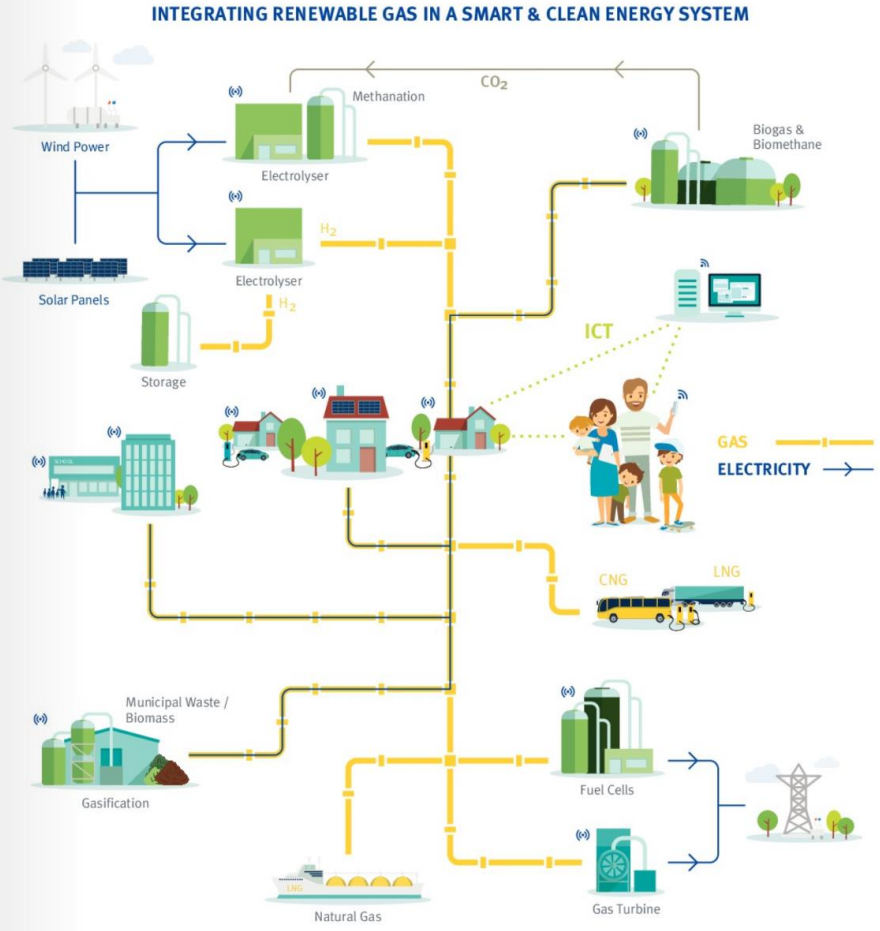
DSOs have vital responsibilities in:

- delivering natural gas to final customers
- providing cost-efficient solutions to decarbonise society, through the existing gas infrastructure
- ensuring security of supply and safety of delivery to customers
- developing a smarter grid and protecting customer data through innovative solutions.

Gas distribution networks play a key role in rolling out renewable gases:

- biomethane and synthetic gas can be injected directly into the existing grid and mixed with natural gas, thereby in no way affecting end-uses for customers
- they are a viable solution to improve air quality in cities, reduce NOx and particulate matter emissions through use of gas in mobility
- they improve supply security and energy independence through local production.





Case study: DSO brochure

Turning waste water into compressed natural gas for transport

Smart Green Gas project, Spain

SMART green gas

As the energy transition is accelerating across the EU, the **interest for innovative technologies to produce renewable gas is growing**. To this end, a consortium of Spanish gas stakeholders, supported by the Spanish government, has launched an innovative **'Smart Green Gas project'. The project aims to obtain renewable biofuel from waste water to then be used in compressed natural gas (CNG) powered cars.**

The Smart Green Gas project is based on three activities:

- **developing next-generation highly-efficient systems to produce biogas**
- **establishing new ground-breaking biogas treatment and repurposing systems**
- **providing innovative solutions for the smart control and distribution of biomethane.**

Gas Natural Fenosa Engineering is leading in the development of systems for the control and smart and specialised distribution of biomethane. Now that the specifications and procurement of the necessary metering equipment have been undertaken, the following step in the process will be validating this equipment at the wastewater plant of FCC in Jerez de la Frontera, scheduled for the second semester of 2017.

gasNatural Distribución

Gas Natural Distribucion brings together a total of 11 distribution companies responsible for the development, operation and maintenance of **53 042 km of network and 5.3 million consumers in more than 1 000 towns and cities** connected to this network. **www.gasnaturaldistribucion.com**

Policy Asks

DSOs are a **key** link in the gas value chain and the whole energy system as they **enable** a smooth and secure **energy transition** by **empowering at local level**. DSOs are at the forefront of the energy transition through the **development of environmentally-friendly and cost-effective solutions for gas**.

DSOs can help ensure a well-functioning Energy Union

WE OFFER

- 2.21 million kilometres of flexible gas grids to distribute natural gas, a low carbon energy, in a cost-efficient way.
- A resilient gas grid that can incorporate renewable gas and provide storage solutions for excess electricity through power to gas.
- Development of low-carbon solutions for road and maritime transport through gas and renewable gas mobility.

WE SUGGEST

- For all renewable gases to be recognised as a significant enabler of energy transition and to be supported as such.
- For the voice of Gas DSOs to be considered in any future energy market legislation, as Gas DSOs are key enablers of the energy transition.
- For DSOs to be considered as neutral market facilitators and key enablers for the development of renewable gas.

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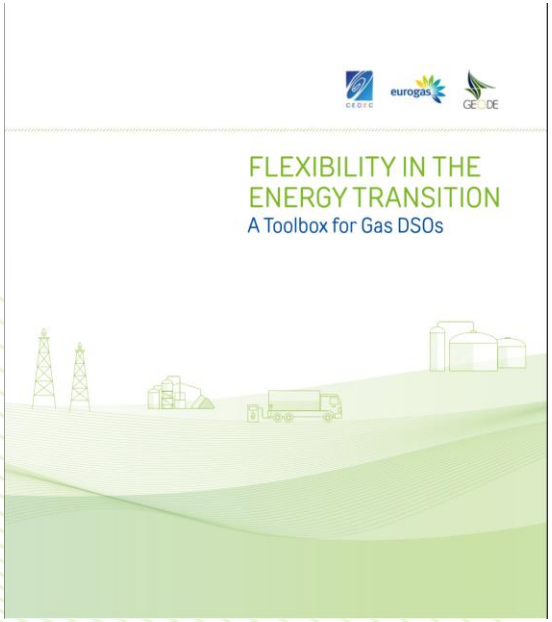
Fuelling the future

Gas DSOs for a more flexible energy system

1. Gas is naturally flexible

Gas Infrastructure is by nature flexible and gas is easy to store in pipes or gas storages. Gas is already a solution to manage winter peak demand for heating.



2. Gas technologies offer flexibility solutions to the whole energy system

- Power-to-gas: can store excess electricity supply
- CHPs (micro, mini or large): can lower electricity demand

3. Gas DSOs are becoming key actors of flexibility due to decarbonisation & digitalisation

- Renewable gas decentralised development increases gas DSOs' active role in flexibility management vis-à-vis gas TSOs
- Smart gas grids development empower gas DSOs to be more active in flexibility management

Key recommendations

1. Develop gas technologies and gas DSOs' research and innovation focused on promoting energy flexibility
2. Set up an appropriate legal/regulatory framework to accelerate the development of gas technologies providing flexibility for the overall energy system
3. Set up an updated legal and regulatory framework to take into account the more active role of gas DSOs to manage flexibility

Current legal framework

In the EU discussion the buzz word is actual consumption, estimates are seen very negative

Gas Directive:

Art 3.6 (b) customers are entitled to receive all relevant consumption data.

Art. 45: In order to facilitate the emergence of well functioning and transparent retail markets in the Community, Member States **shall** ensure that the roles and responsibilities of transmission system operators, distribution system operators, supply undertakings and customers and if necessary other market parties are defined with respect to contractual arrangements, commitment to customers, data exchange and settlement rules, data ownership and **metering responsibility**.

Art. 41 q: ensuring access to customer **consumption data**, the provision for optional use, of an easily understandable harmonised format at national level for consumption data and prompt access for all customers to such data under point (h) of Annex I;

In the EU discussion the buzz word is actual consumption, estimates are seen very negative

Gas Directive:

Annex 1, Measures on consumer protection:

- Art. 1 (h) consumers have at their disposal their **consumption data**, and shall be able to, by explicit agreement and free of charge, give any registered supply undertaking access to its metering data. The party responsible for data management shall be obliged to give those data to the undertaking. Member States shall define a format for the data and a procedure for suppliers and consumers to have access to the data. No additional costs shall be charged to the consumer for that service;
- Art. 1 (i) are properly informed of **actual gas consumption** and costs frequently enough to enable them to regulate their own gas consumption. That information shall be given by using a sufficient time frame, which takes account of the capability of customer's metering equipment. Due account shall be taken of the cost-efficiency of such measures. No additional costs shall be charged to the consumer for that service;

Rules for gas metering are also included in the Energy Efficiency Directive

- Article 9 EED: “Member States shall ensure that, in so far as it is technically possible, financially reasonable and proportionate in relation to the potential energy savings, final customers for electricity, natural gas, district heating, district cooling and domestic hot water are provided with competitively priced individual meters that **accurately reflect the final customer’s actual energy consumption** and that provide information on actual time of use.

- Article 10 EED “Meters installed in accordance with Directives 2009/72/EC and 2009/73/EC shall enable accurate billing information based **on actual consumption**. Member States shall ensure that final customers have the possibility of easy access to complementary information on historical consumption allowing detailed self- checks. Complementary information on historical consumption shall include:
  - (a) cumulative data for at least the three previous years or the period since the start of the supply contract if this is shorter. The data shall correspond to the intervals for which frequent billing information has been produced; and
  - (b) detailed data according to the time of use for any day, week, month and year. These data shall be made available to the final customer via the internet or the meter interface for the period of at least the previous 24 months or the period since the start of the supply contract if this is shorter

CEP: Electricity Market Design/EPBD/EED

- Council Article 9b: “Sub-metering and cost allocation for heating, cooling and domestic hot water
  - 1. In multi-apartment and multi-purpose buildings with a central heating or cooling source or supplied from district heating and cooling systems, individual meters shall be installed to measure the consumption of heat or cooling or hot water for each building unit, where technically feasible and cost effective in terms of being proportionate in relation to the potential energy savings”

- Parliament article 9 “Member States shall ensure that, in so far as it is technically possible, financially reasonable and proportionate in relation to the potential energy savings, **final customers for natural** gas are provided, as regards the selected technology and functionality, with competitively priced individual meters and heating controls that accurately reflect the final customer's actual energy consumption and that provide information on actual time of use and others features, as applicable in alignment with the provisions related to electricity metering in Articles 19 to 22 of Directive (EU) .../... [on common rules for the internal market in electricity (recast)]

CEP: Electricity Market Design/EPBD/EED

- "The smart metering system shall provide final consumers with access to their energy consumption data and time series on the market settlement periods"

- Parliament: EMD the metering systems accurately measure actual electricity consumption and provide to final customers information on actual time of use. Validated historical consumption data shall be made easily available and visualised to final customers on at least an in-home display at no additional cost. Unvalidated **near-real time consumption data** shall be made available to final customers through a standardized interface in order to support automated energy efficiency programmes, demand response and other services

➔ It is important that in the upcoming gas package the topic of gas metering is treated differently than electricity. Near real time data can only be in m³ and is not helpful