

Harmonizing and Developing the European Gas Markets – market design and future for gas grids

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ENTSOG Members



European Network of Transmission Operators for Gas was created December 2009 - and has in 2017 45 Members, 3 Associated Partners and 8 Observers



3 Associated Partners: elering (Estonia), Conexus (Lithuania), TAP (3 countries)

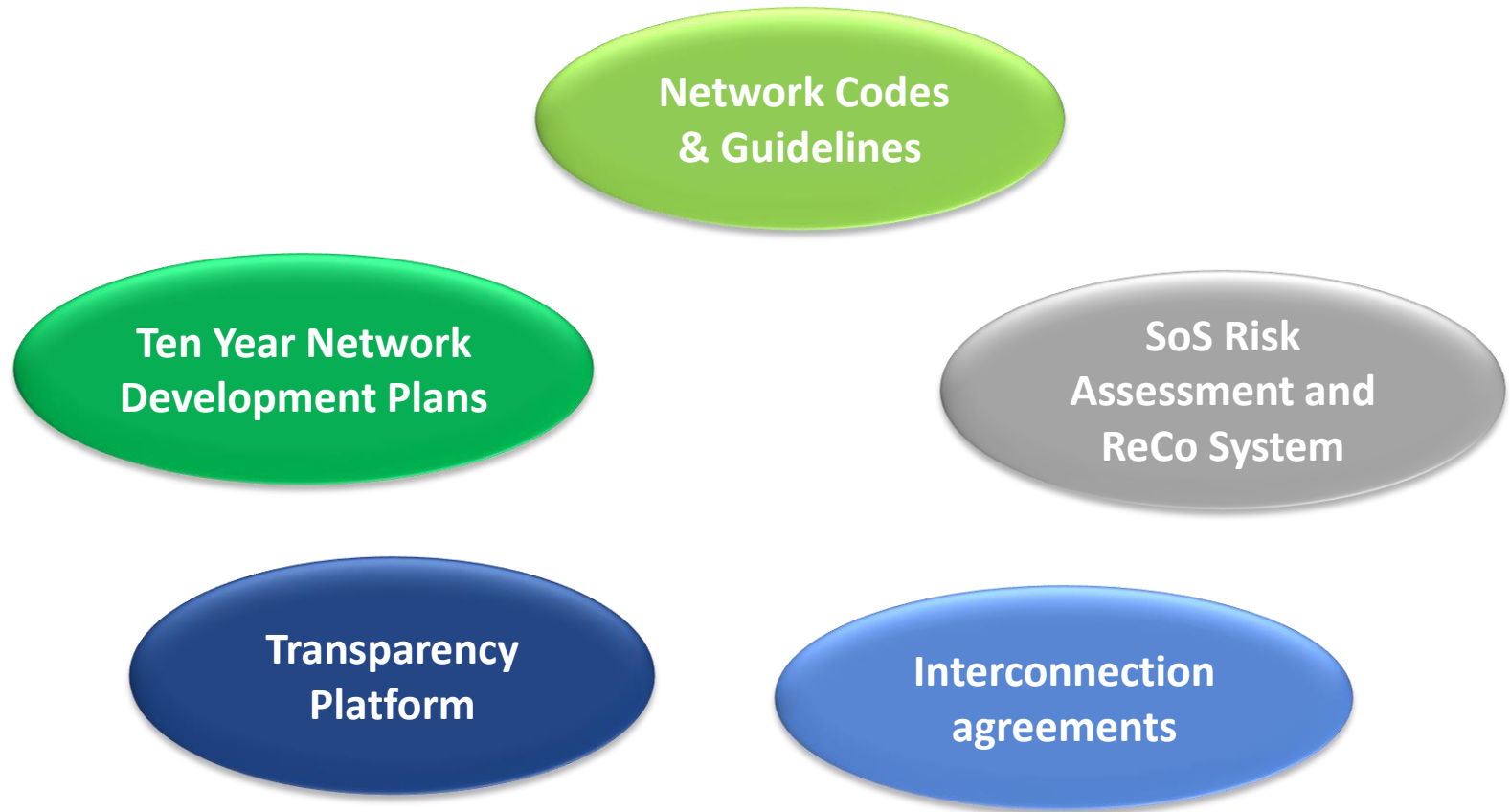


8 Observers from EU affiliate countries:

GA-MA AD (FYROM)	AlbGaz (Albania)
Gassco AS (Norway)	BHGaz (Bosnia-Herce.)
Swissgas AS (Switzerland)	Erdgas Ostschweiz
Ukrtransgas (Ukraine)	
Moldovatrangaz (Moldova)	



ENTSOG's Main Responsibilities and Deliverables





Gas Network Codes and Guidelines



Congestion Management Procedures

Methods to handle capacity congestion on cross-border points

Capacity Allocation Management

Allocation of capacity via auctions procedures, standard capacity products & product bundling

Balancing

Harmonization of balancing regimes - facilitating gas trading and competition

Inter-operability

Facilitating cooperation of gas transmission systems – technical, operational and communication

Transparency Guidelines

Publication of gas transmission related data EU-wide platform

Tariffs

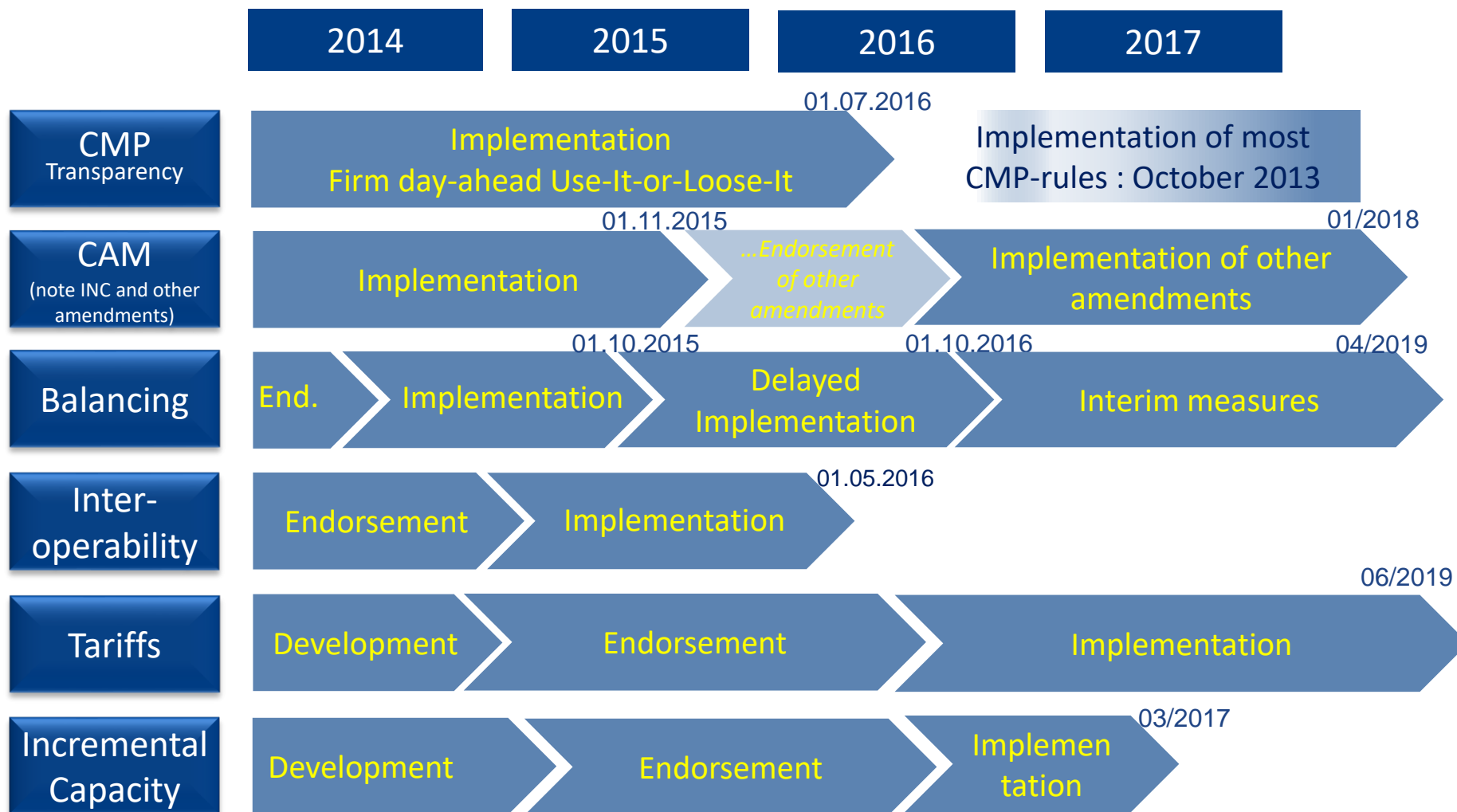
Tariff structures on cross-border points - facilitating cost-reflective, non-discriminating, transparent and stable tariffs

Incremental Capacity

Processes for capacity beyond existing capacity – facilitating market-based, efficient and financially viable investments



Network Codes and Guidelines - Status

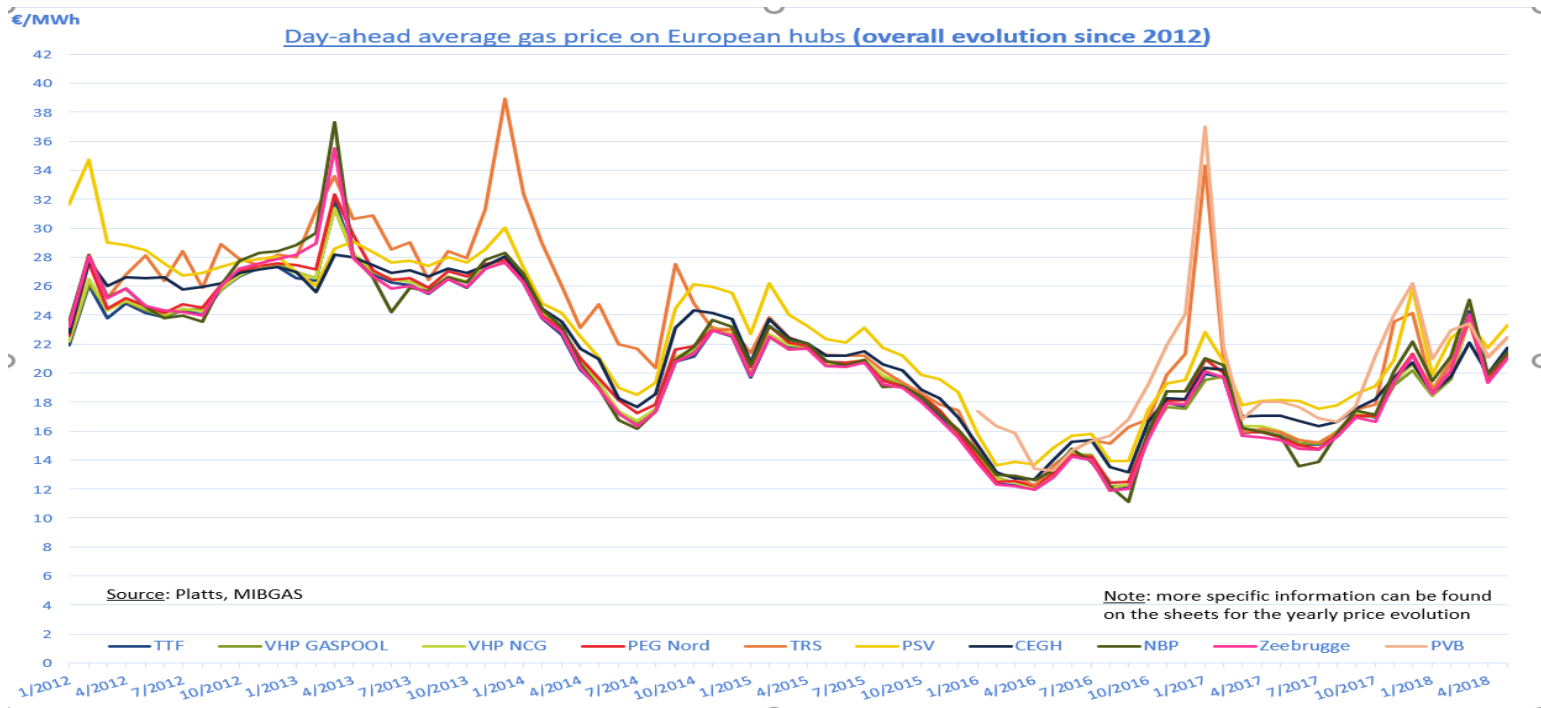




Network Codes and Guidelines

– Hub Price development

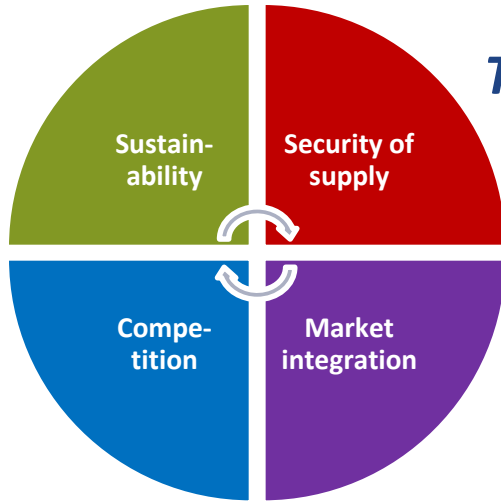
Hub price
convergence



Delivered
functionality

- Increased transparency on cross-border transmission
- Increased market liquidity
- Capacity booking platforms established
- Standard capacity products (short term & bundled capacity)
- Congestion is rare & situations can be resolved
- Harmonised TSO cooperation (agreements, data exchange, gas quality)

TYNDP - Is further gas infrastructure needed?



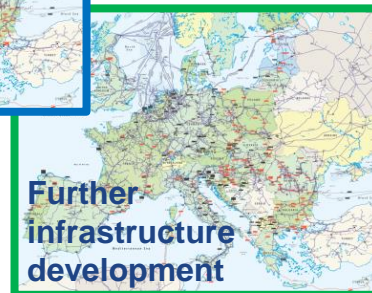
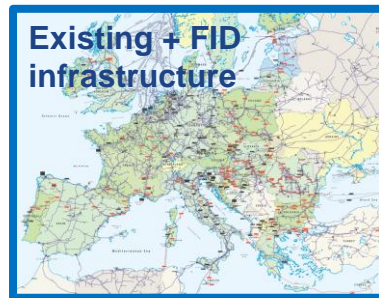
TYNDP assesses the gas infrastructure against the Union energy policies



Are they achieved with the existing infrastructure and FID projects?



No further infrastructure needs



TYNDP assesses further infrastructure development

Transparency Platform 2.0



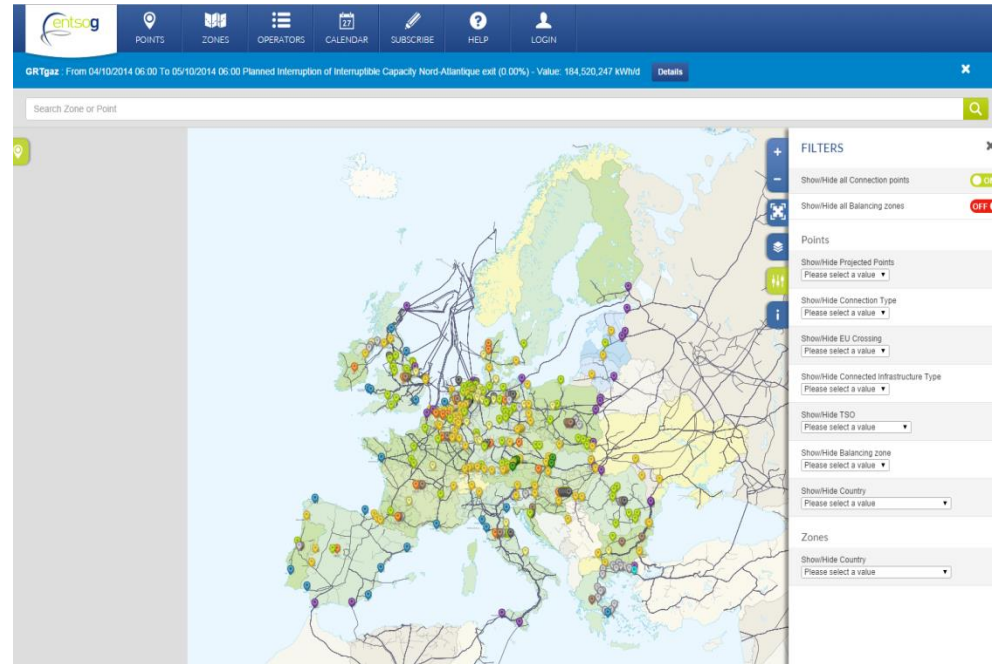
Transparency Platform...

Continuous upgrading of:

- tools and features
- user friendliness and design

Key features:

- Improving data quality
- Improving display of information
- Graphical displays
- Timestamps
- Easy access to CMP data
- Standard format of data



Link to ENTSGs Transparency Platform :
<https://transparency.entsog.eu/>



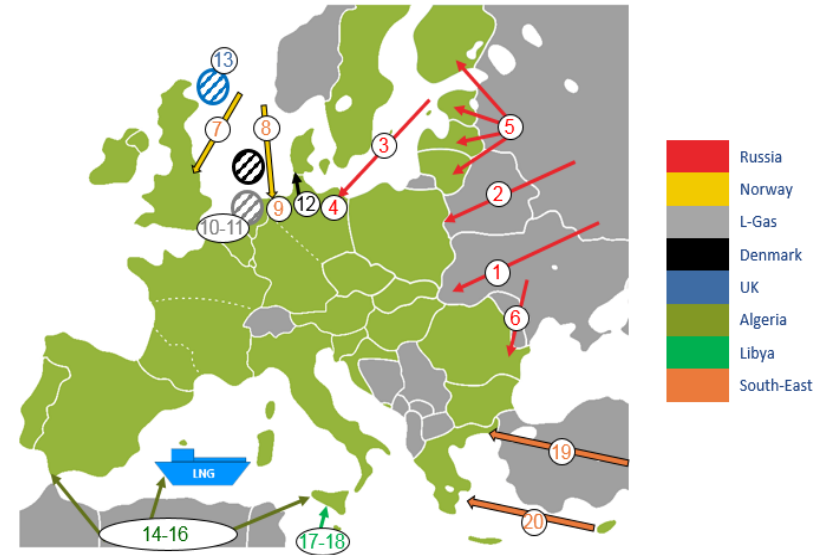
Revised SoS Regulation for Gas



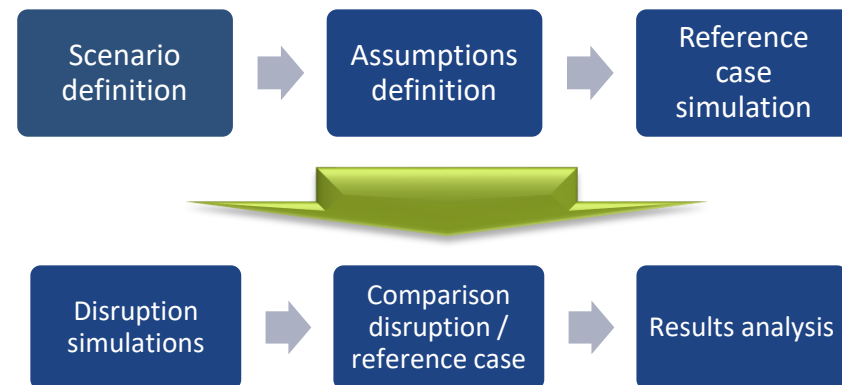
By 1 November 2017 ENTSOG carried out the 1st **Union wide simulation** of supply and infrastructure disruption scenarios

- Identify/assess **Emergency Supply Corridors**
- Identify how identified risks can be addressed
- Defined **scenarios and methodology**
- **Transparency on modelling assumptions**
- To be updated **every four years**
- - unless circumstances warrant intermediary updates.

Supply and infrastructure disruptions scenarios



Simulation methodology

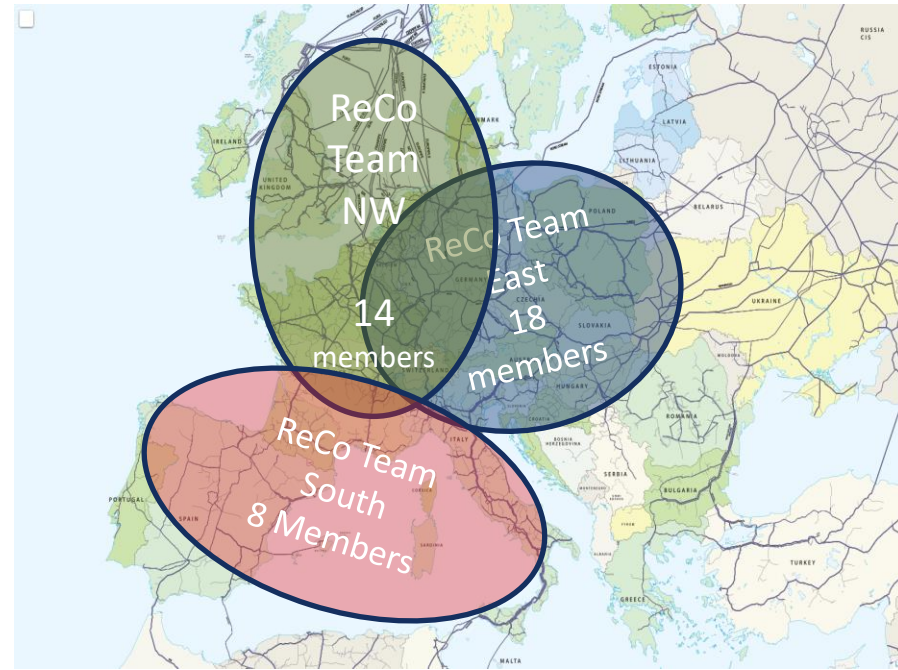




ReCo System for Gas



- *ReCo System: avoid/prevent/mitigate gas disruption impacts*
- *TSOs organized on main gas supply routes - Regional Coordination Teams (ReCo Teams)*
- *In a regional or EU emergency crisis, the ReCo Teams will cooperate and exchange information*



28 TSOs are already involved in the ReCo Teams – some in more than one team

Revised SoS Regulation provides a legal background for the ReCo Teams



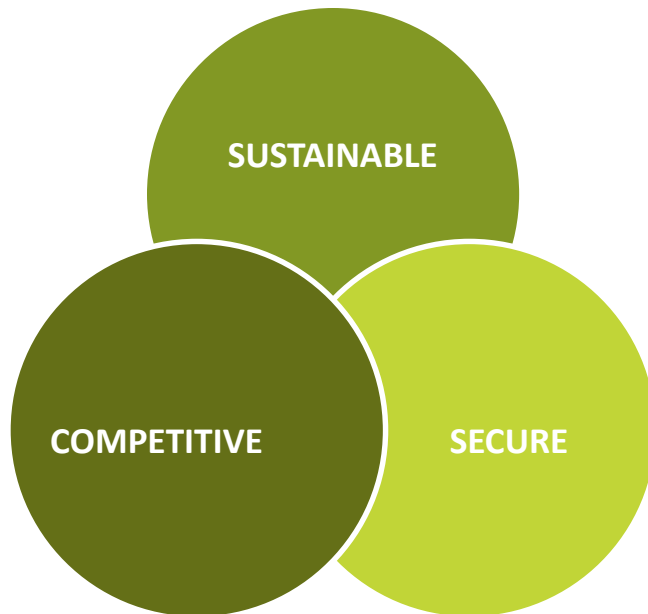
Future for gas Grids



EU Energy Goals



EU Internal Energy Market Goals:



EU Energy Union Goals:

SECURITY, SOLIDARITY & TRUST

FULLY INTEGRATED ENERGY MARKET

ENERGY EFFICIENCY

DECARBONISING THE ECONOMY

RESEARCH, INNOVATION AND
COMPETITIVENESS

*Clean Energy Package has addressed the electricity issues of the ENERGY UNION
- but has not addressed any gas issues or gas-electricity interactions.
A gas package will be more than just mirroring from electricity to gas legislation.*



Key elements of the Gas Package 2020



*To be delivered:
Gas Directive
Gas Regulation*

Role of Gas Infrastructure in the Energy Transition

- FRoG – CEER study
- Gas Infrastructure 2050 – EC study
- Sector Coupling – EC study
- Mid-Century – EC study
- Sustainable Finance – EP/EC report

*Urgent Matter:
Drafting 2018
Closed Mid '19*

Clean Energy Package ("Mirroring")

- ACER Regulation
- Electricity Regulation
- Electricity Directive

Gas Market Design (Studies)

- Quo Vadis – EC Study
- FRoG – CEER study
- Sector Coupling – EC study
- Gas Target Model – rediscussed

Gas Package 2020



ACER Market Monitoring Shows Progress



Better market functioning

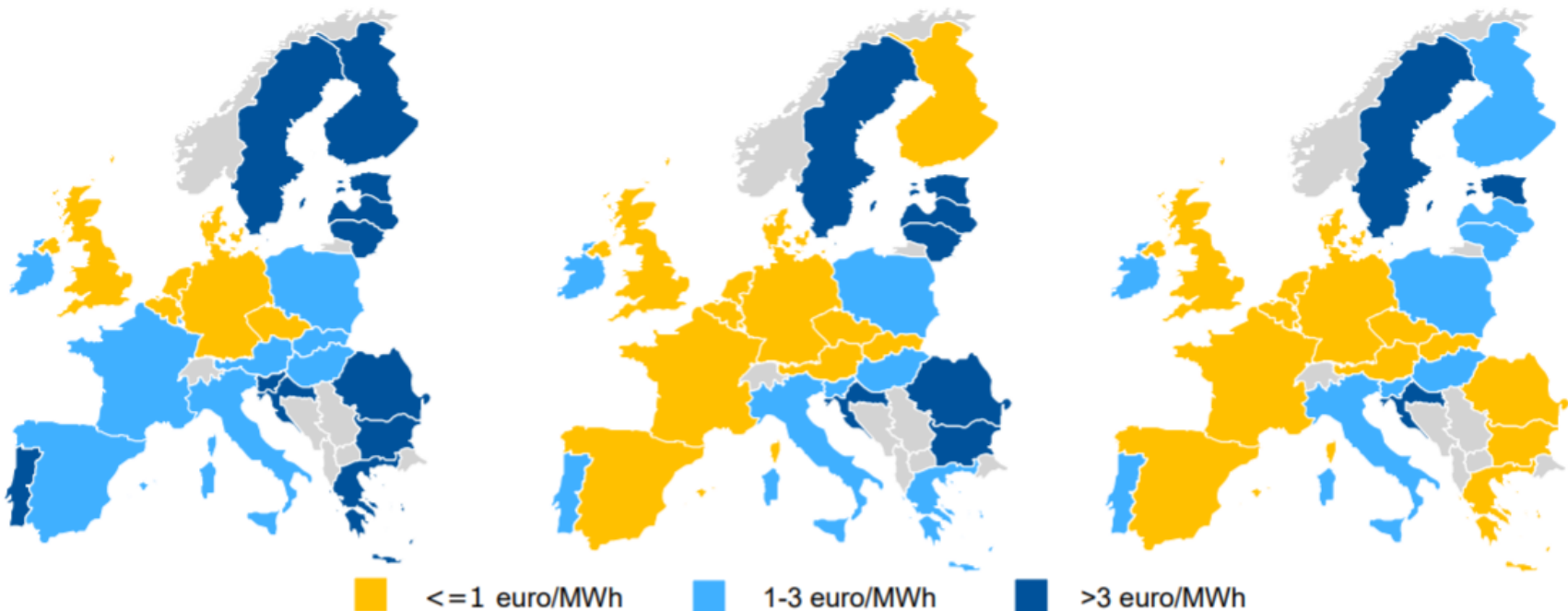
Gas supply sourcing costs continue to decrease and converge

Calculated gas sourcing cost* compared to TTF - estimates

2014: TTF = 23.7 € /MWh

2015: TTF = 21 € /MWh

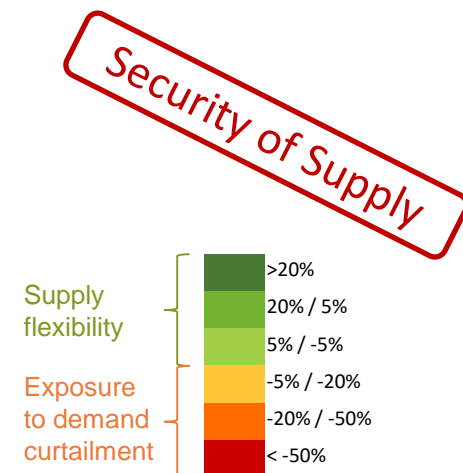
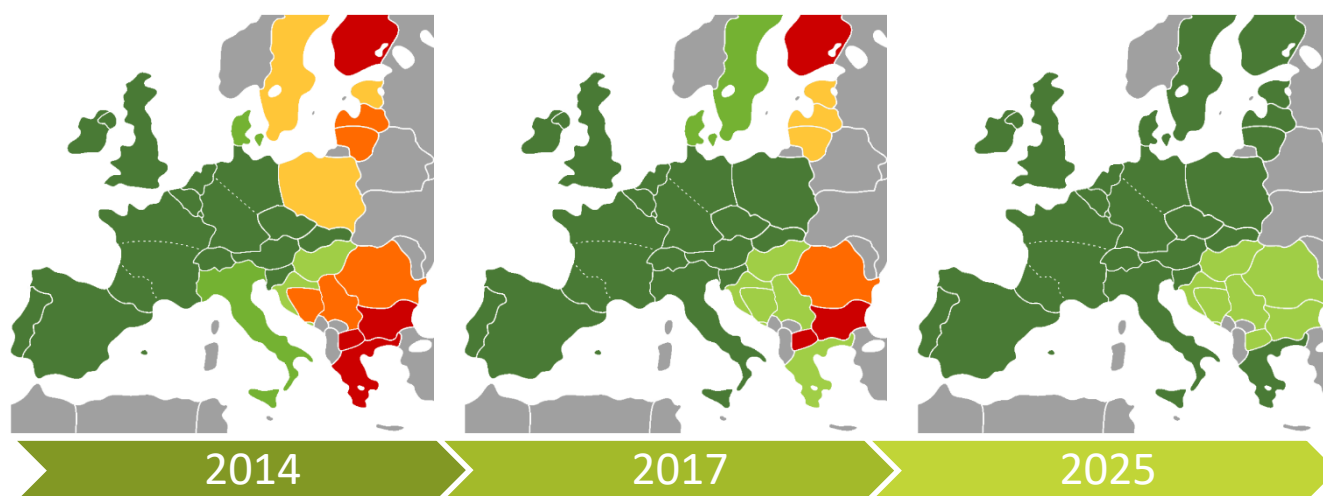
2016: TTF = 15.5 € /MWh



The current regulatory model should be allowed time fully to deliver its positive results.
Regulatory stability should be encouraged.

Today: gas projects implementation

- > ENTSOG regularly assesses the impact of gas projects implementation
 - TYNDP: long-term market integration, competition, sustainability and SoS
 - Summer and Winter Outlooks
 - From 2017: EU-wide SoS simulation
- > Security of supply: resilience to Eastern supply disruption
 - Projects implementation significantly improved the gas system resilience over past years
 - Further resilience is at hand in the coming years, provided projects get the right support

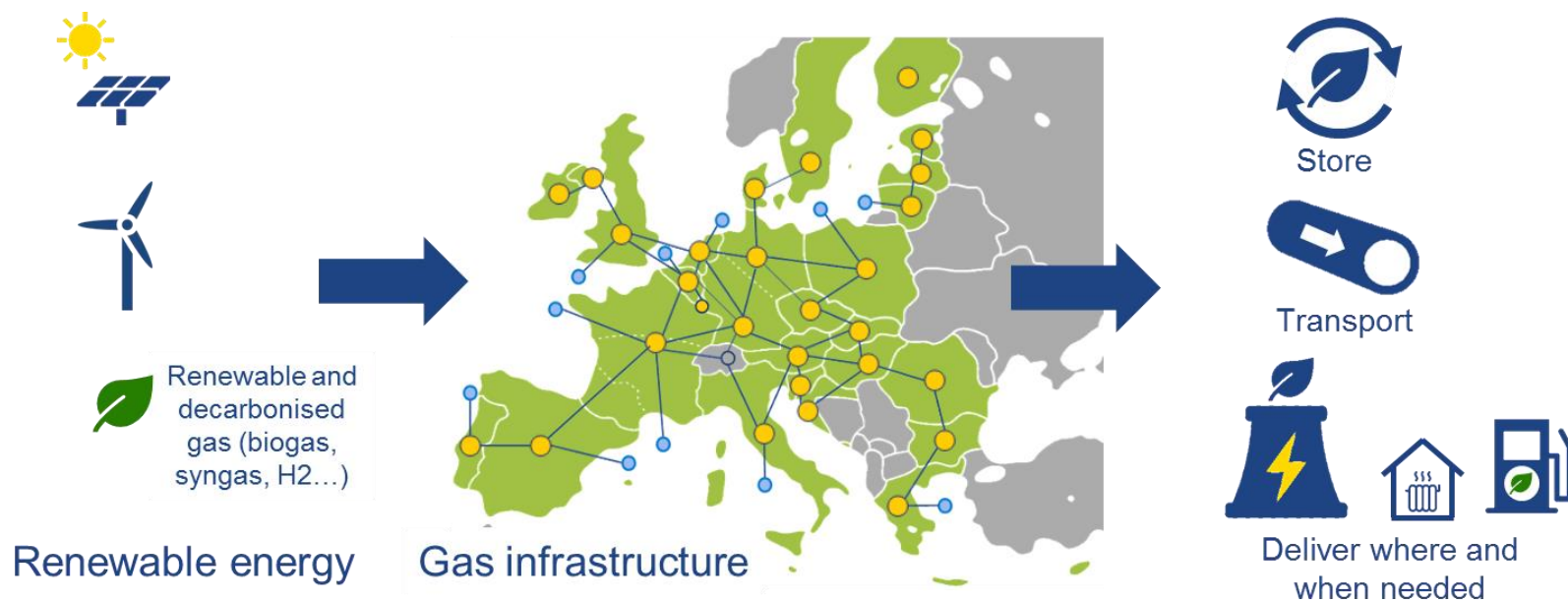


Tomorrow: Changing Priorities

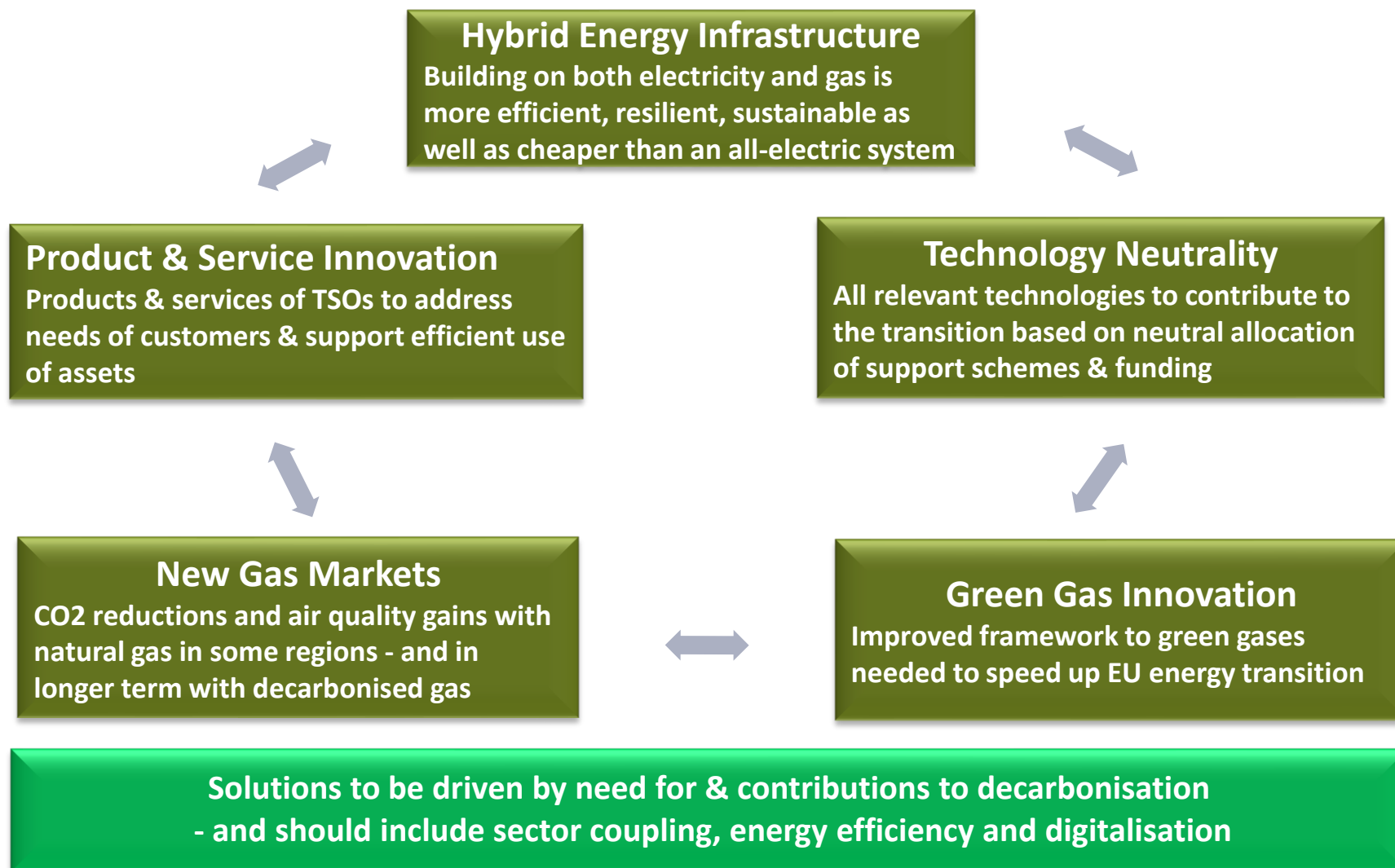
Besides enhancing SoS, diversification and competitiveness:

> How to make best use of the infrastructure?

- Support decarbonisation - develop & integrate **renewable energy (both electrons and gas)**
- Secure **energy supply** in a future of growing variable renewable generation
- Building on the gas system to efficiently **transport, store and deliver renewable energy**



*Will require the right regulatory framework,
policies, and infrastructure investment process*





Some Key Issues for Gas Package 2020

- *Need for political acceptance and support for a hybrid energy carrier system – aiming for utilization of existing assets, sector cooperation & optimization, improved flexibility and better security of supply*
- *How to facilitate and incentivize sector coupling/integration between electricity and gas?*
- *How to facilitate and incentivize innovation on green gas/gas decarbonization (biogas, P2G, CCS/CCU etc.)?*
- *How to facilitate and incentivize TSO product and service innovation – in a regulated environment?*
- *Does some of the existing regulatory principles – or the interpretations of these – need an update to meet the challenges of today and tomorrow?*



Thank You for Your Attention

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