



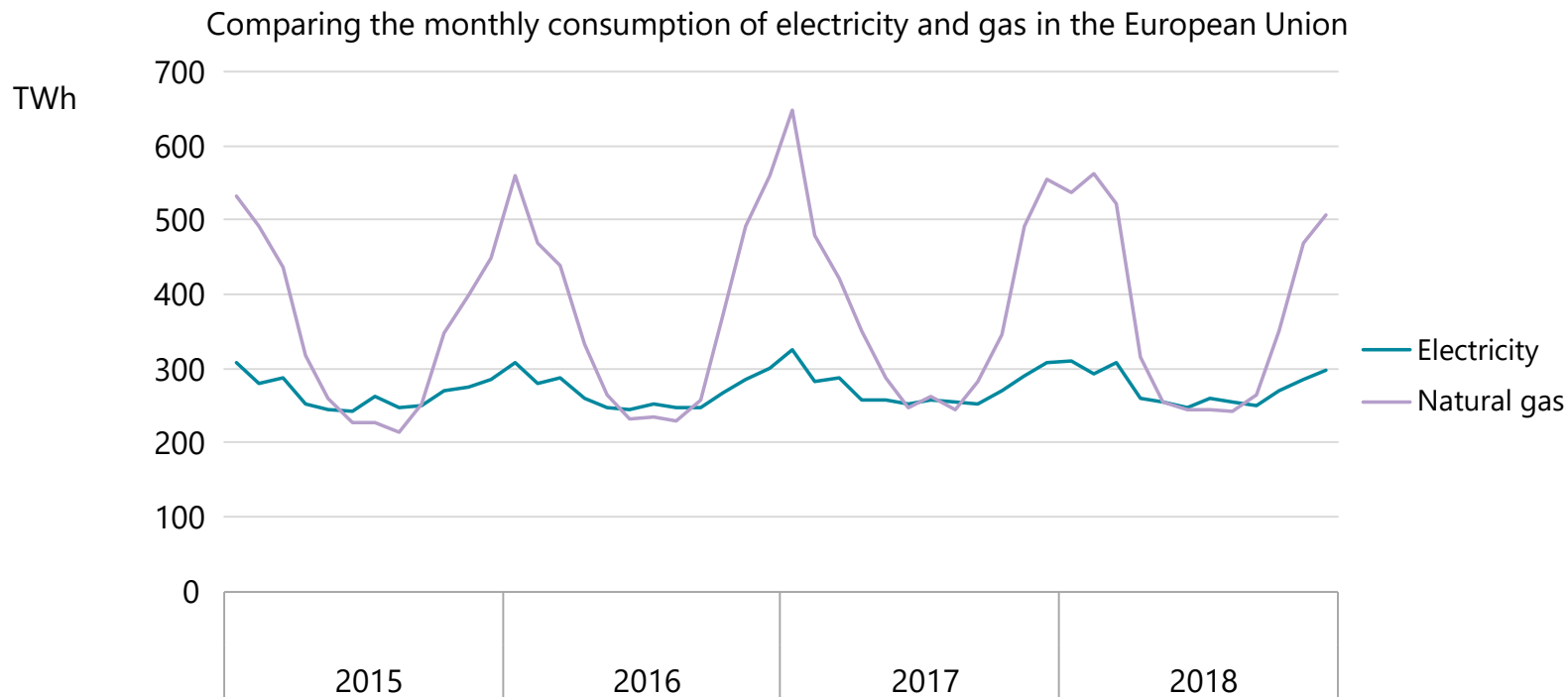
FSR Online debate

What Outlook for the gas infrastructure?

Peter Zeniewski, Energy Analyst, World Energy Outlook

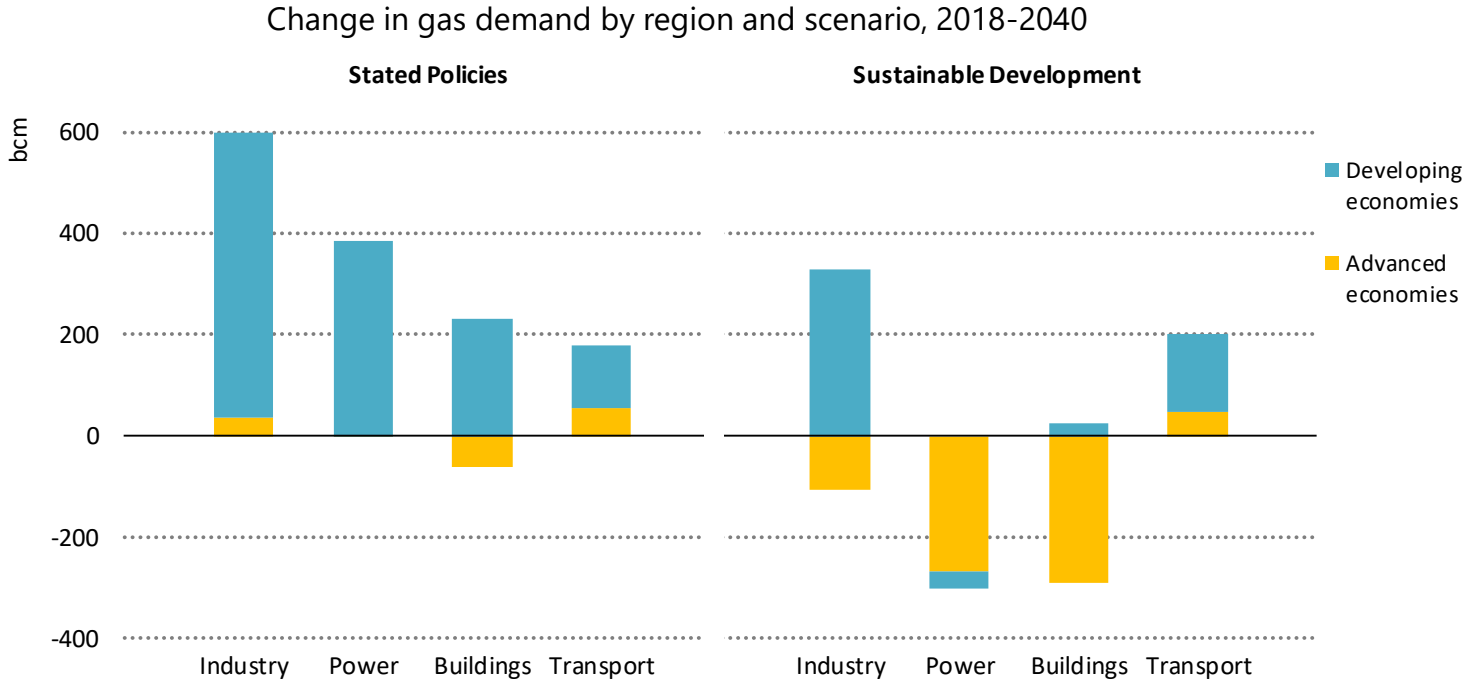
06 March 2020

Gas infrastructure is sized to meet significant in demand



Significant demand for heat in buildings means gas plays a crucial seasonal balancing role that is difficult to replicate using electricity.

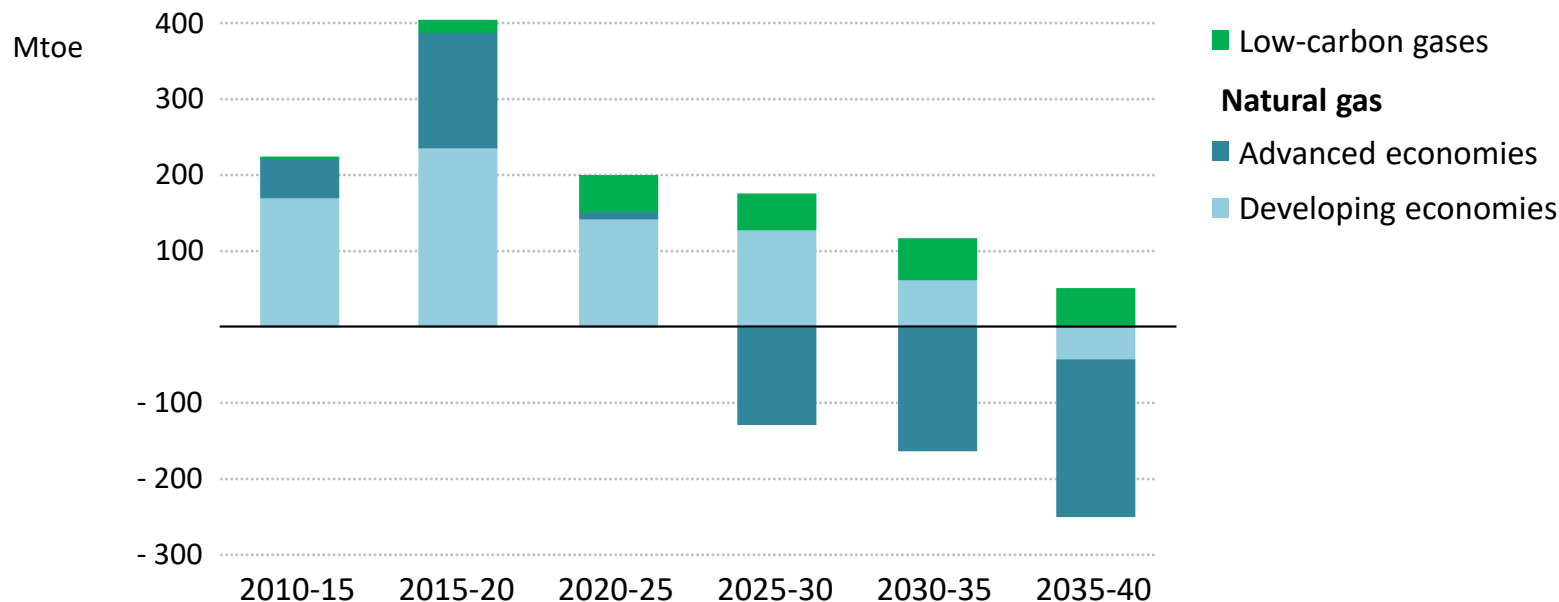
There is no single storyline about the role of gas in energy transitions



In the Sustainable Development Scenario, advanced economies consume much less gas than today; in developing economies growth is more subdued, especially in power

Biomethane & low-carbon hydrogen gain momentum

Change in global gas demand in the Sustainable Development Scenario, 2010-2040



In the Sustainable Development Scenario, natural gas demand reverts to today's level by 2040 and gas grids are gradually repurposed to bring in higher volumes of biomethane and low-carbon hydrogen



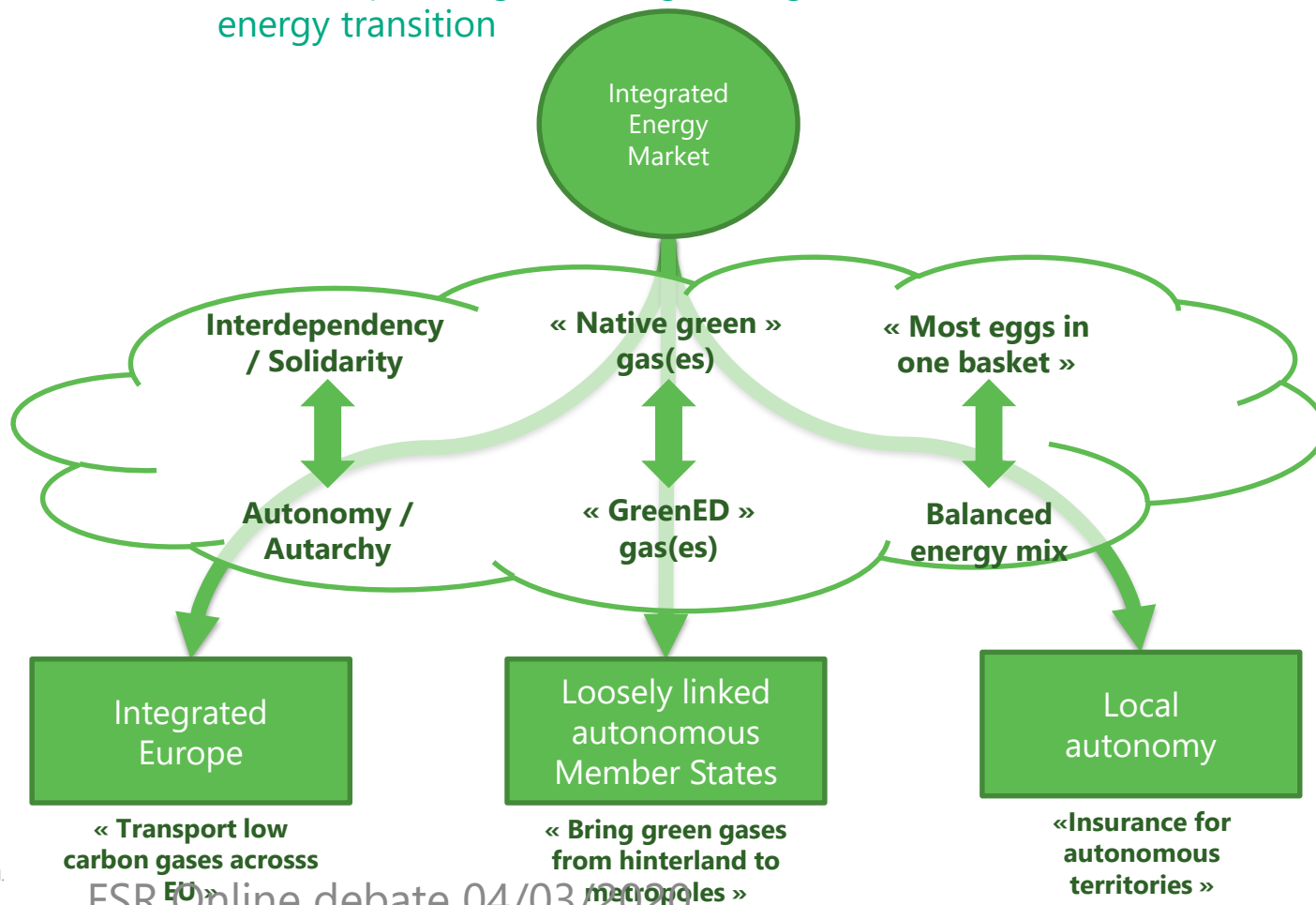
Connecter les énergies d'avenir

- What outlook for the EU gas infrastructure?

- FSR online debate

- 04/03/2020

- Scenario planning: investing in long-life assets ahead of the energy transition





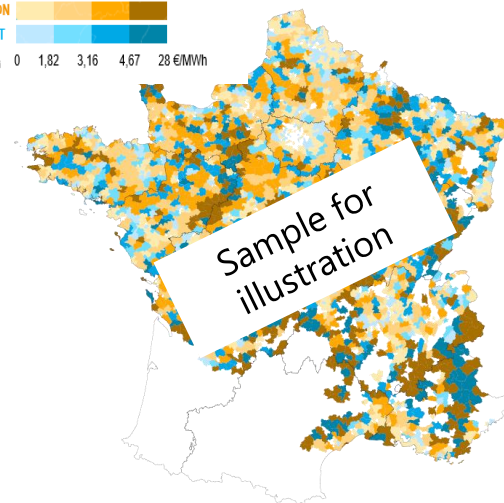
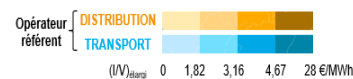
- TSOs: invest in « steel + brain »

- A smart network starts with a smart investment



Integrated network and market mechanisms planning

Embark stakeholders / Network Users: CBA analysis and co-construction a « must »



Even for « no brainers » like biomethane, optimise across operators (TSO+DSO)

... and prepare to think across energy carriers (electricity, hydrogen ...)



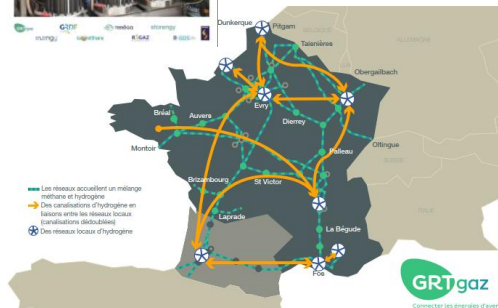
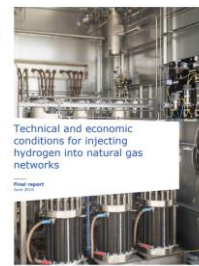
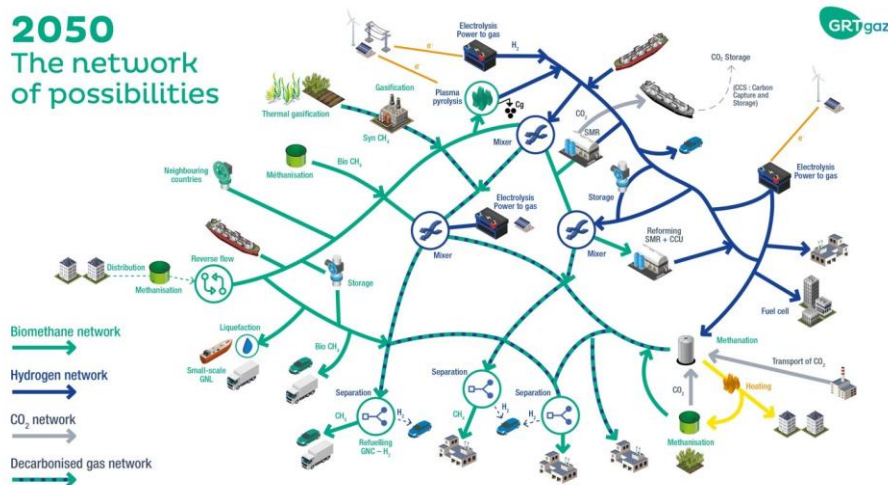


- Where there's a pipe, there's an (energy transition) way

Prepare adaption / re-purposing of gas system (network + market mechanisms)

R&D, modelling, policies

2050
The network
of possibilities



Imagine possible futures and identify where your homework is.

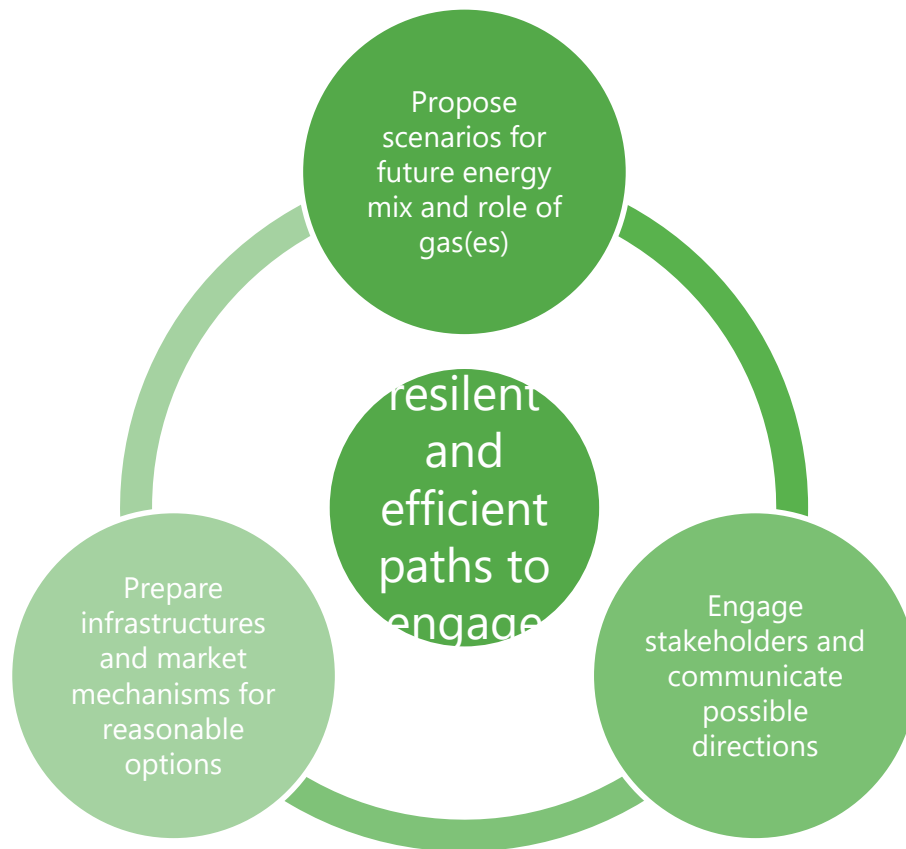
TSO's compass: ensure that supply and demand can match all along the energy transition process

Engage stakeholders in fact-based discussions on reasonable scenarios to identify affordable paths





Role of TSO: ensure that supply and demand can match all along the energy transition process



European Gas Conference - Vienna - Jan.



WHAT OUTLOOK FOR THE EU GAS INFRASTRUCTURE?

Claudio Marcantonini

ARERA

March 6th, 2020 – FSR webinar

Disclaimer: views and opinions expressed are those of the speaker and do not necessarily reflect the official policy or position of ARERA

The Context

- 2050 target: stop using natural gas in the long-term, however in the medium-term we still need it
- Electrification of all energy end-uses may be too expensive:
 - In some sectors electrification is too expensive
 - We already have an infrastructure for gas that can use used
- Different options for decarbonizing the gas sector (biomethane, synthetic methane, green H₂):
 - Uncertainties on the most economic solutions, in which locations and combinations
 - Uncertainties on the regulatory framework to develop them
- Power-to-gas installations could allow a full coupling between gas and ele. sectors, but costs are still very high

Infrastructure development: the regulatory view

- Technological neutral approach to allow the most cost-effective solutions to be developed

Infrastructure planning

- Developing a coherent approach across multiple sectors
- Regulatory oversight to assure a neutral approach

Development of new technologies

- Market-based approach where conditions allow it
- If not, possibility of regulatory derogation and pilot projects but under strict conditions

ACER-CEER, The Bridge Beyond 2025 Conclusions Paper