entsog
european network
of transmission system operators
for gas

Brussels, 6 December 2018

Role of gas in decarbonizing EU energy sector

ENTSOG perspective

EU-Russia Gas Advisory Council - WS2

Brussels – December 7, 2018

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ENTSOG General Manager

Image Courtesy of Thyssengas

Some quantification of the gas potentials

Further quantification and scenarios work pending

Cost efficiency with green gases vs. full electrification in studies:

- ***Pöyry 2018 Decarbonisation Study estimates 94 B€/y savings for EU***
- ***Ecofys 2018 "Gas for Climate" study estimates 138 B€/y savings for EU***
- ***Frontier Economics 2017 Green Gas Study estimates 12B€/y savings for Germany***

European-wide exchange and storage of renewable energies via the gas infrastructure

1 000 GW
cross-border capacities
>100% of EU demand

270 GW
EU wind & solar capacity

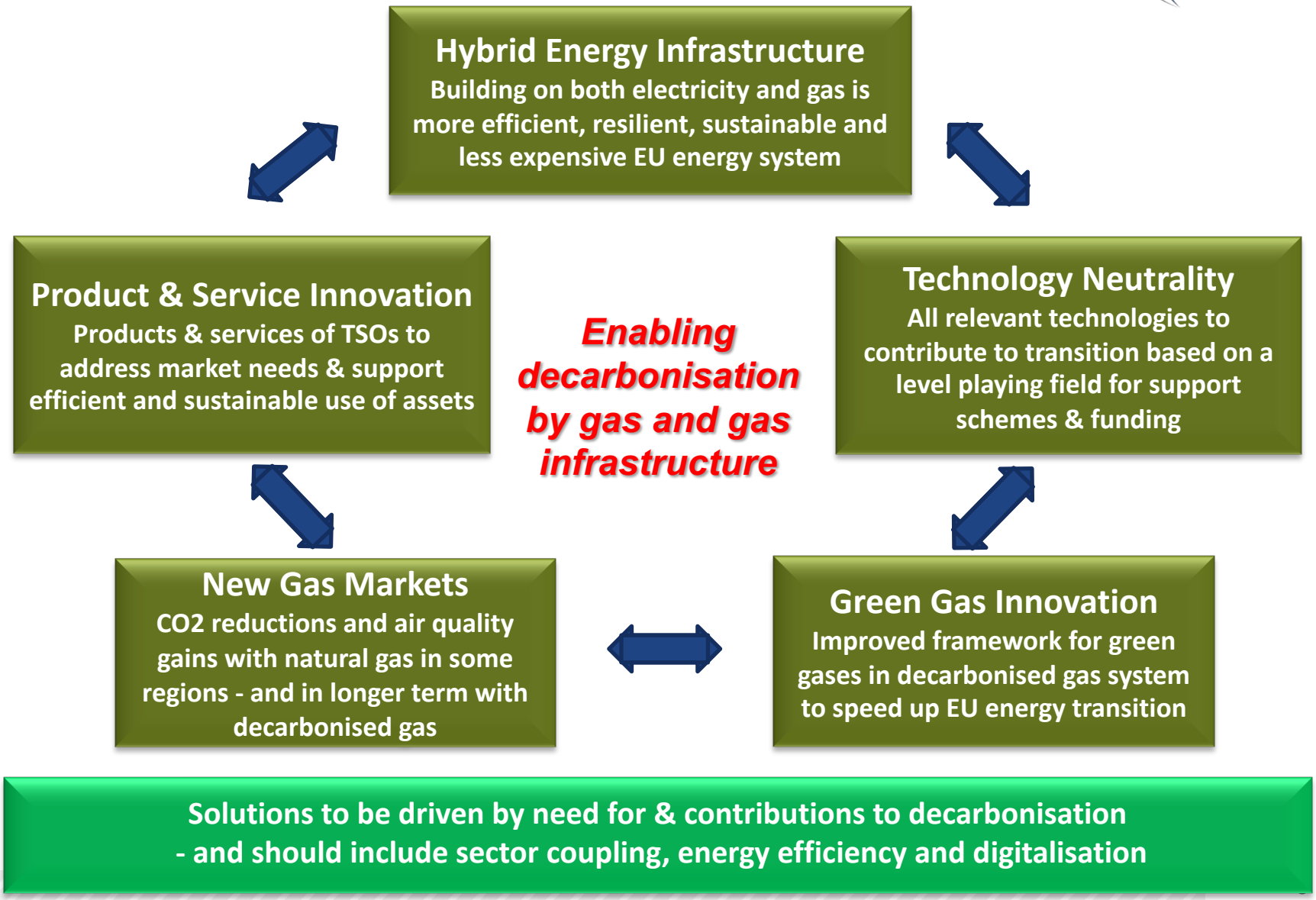
1 100 TWh
EU Gas storage capacity

372 TWh
EU wind & solar generation 2016

Gas cross-border transmission capacity equals more than 3x current wind/solar capacity

Gas storages equals 3x annual energy production from current variable e-RES

ENTSOGs Themes for Gas Package 2020



ENTSOG Messages for Gas Package 2020

BUILD ON SYNERGIES

- ***Political acceptance/support at EU and MS level for a hybrid energy carrier system - utilizing electricity and gas assets efficiently and obtaining improved flexibility and security of supply***
- ***Improve sector integration between electricity and gas, also including transport and heat***
- ***Obtain better regulatory coordination between electricity and gas on both EU and MS level***
- ***Ensure level playing field for green energy technologies, including green gas support schemes***

INNOVATE WITH GAS

- ***Promote and support innovation decarbonizing the gas sector***
- ***Establish consistent terminology for renewable/decarbonised/climate-neutral gases***
- ***Establish EU-wide green gas certification for trustworthy tracking and efficient cross-border trading of green gases***
- ***Incentivize TSO product/service innovation - meeting needs to decarbonize EU energy system***
- ***Clarify role of gas grid operators in facilitating decarbonizing of EU energy system – including scaling up R&D/pilot projects, investing & operating P2G biogas facilities etc.***
- ***Establish risk-reward scheme for gas-related innovation ensuring sufficient investments/R&D***

ENTSOG will contribute actively and constructively to the Gas Package 2020 process

Evolving discussion on decarbonization

Evolution of discussion on gas infrastructure:

From stranded assets and decommissioning
To optimal usage of existing assets
Through support for concept of Hybrid energy infrastructure
CONDITION: decarbonization of gas infrastructure

Evolution of discussion on gas demand:

From full electrification path
To sector coupling and more open strategy with more stable gas position
Through realistic roll-out plan for decarbonized and renewable gases
CONDITION: decarbonization of gas and methane leakage prevention

New ENTSOG Website

www.entsog.eu - to be launched 12 December

FUTURE OF GAS INFRASTRUCTURE

Including ENTSOG response to EU Long-term strategy for GHG Emission Reduction

MEMBERS INNOVATIVE ACTIVITIES

Including 60 projects with direct involvement of EU TSOs

Thank You for Your Attention

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