

# Winter Outlook & TYNDP 2018 Scenarios

**Madrid Forum – 19-20 October 2017**

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**How does it look like for next Winter?**  
***Winter Outlook***

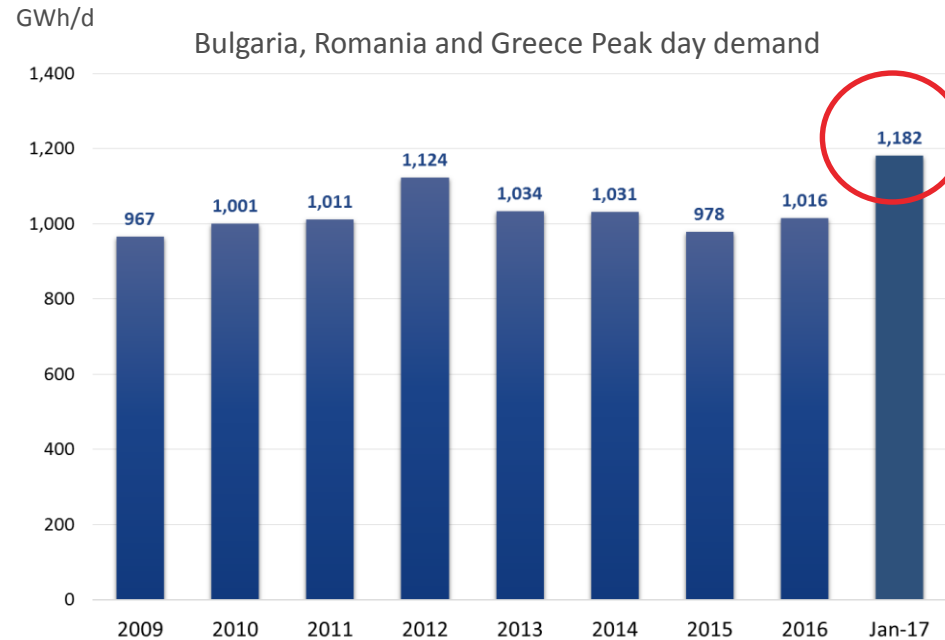
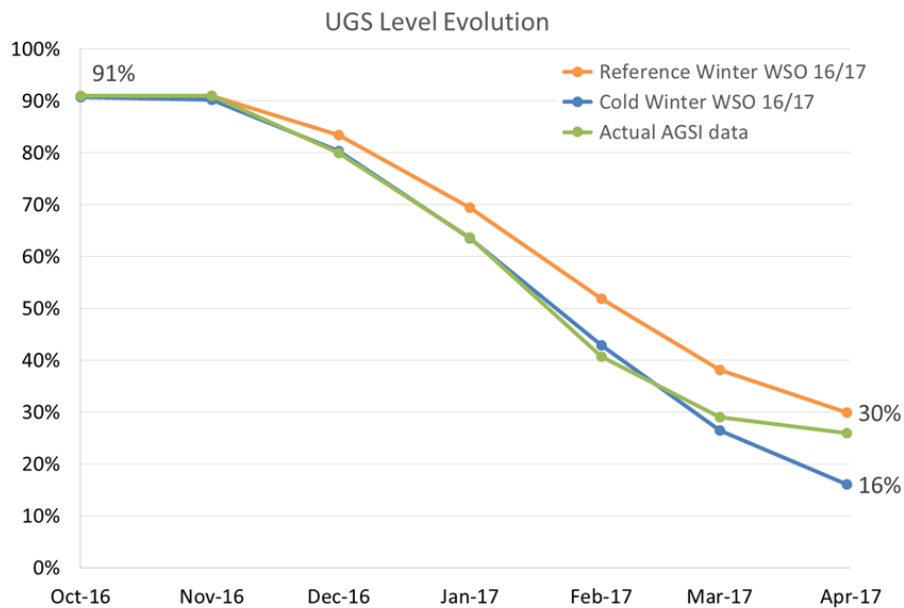


# Winter 2016/17 marked by cold spell



> Actual EU storage level close to “Cold winter case” foreseen in Winter Outlook

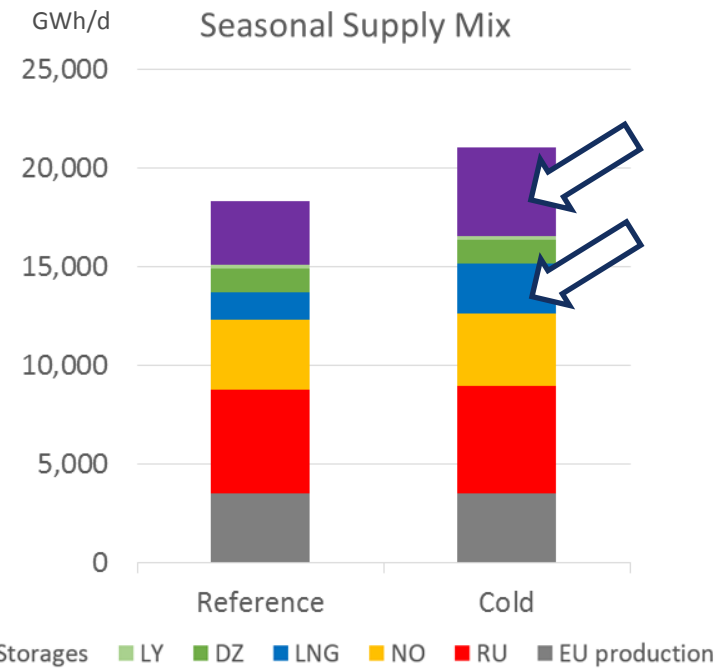
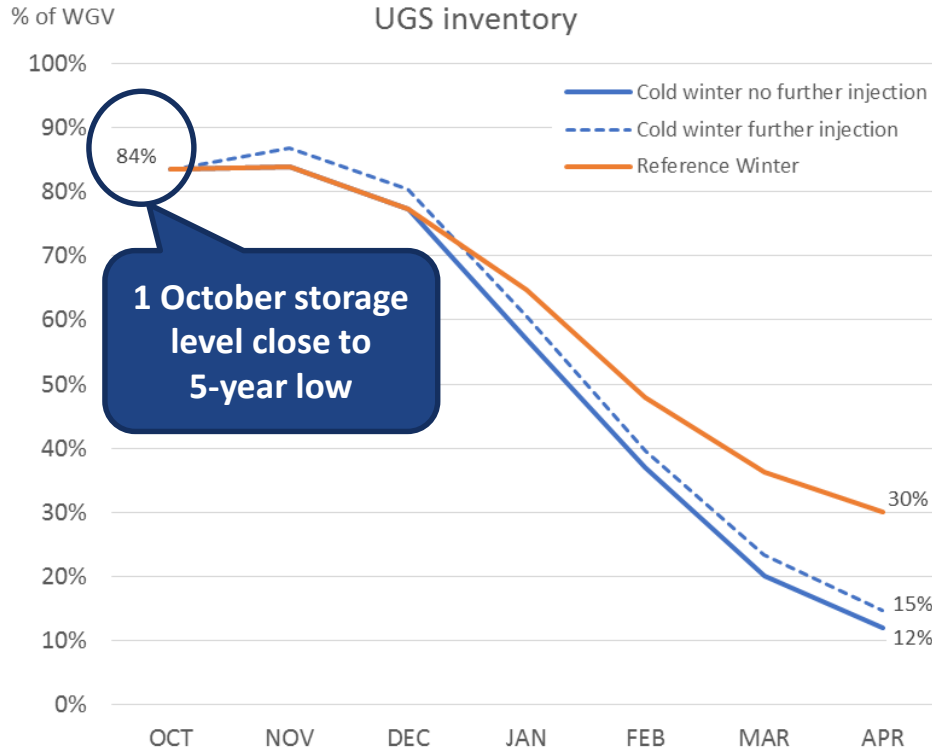
> Cold spell led some SEE country to revise their Design Case demand upward



*January 2017 cold spell analysed in ENTSOG Winter Review*



# Winter Supply Outlook 2017/18



> Upcoming winter's supply situation is tense: EU gas production keeps decreasing, UK Rough storage announced closure, storage level is low

> Coping with a Cold winter would require a significant increase of LNG supplies compared to past years, further storage refill in October and significant storage use

*Security of supply remains a point of attention, today... and in the future.  
Union-wide SoS simulation will be released in November 2017.*

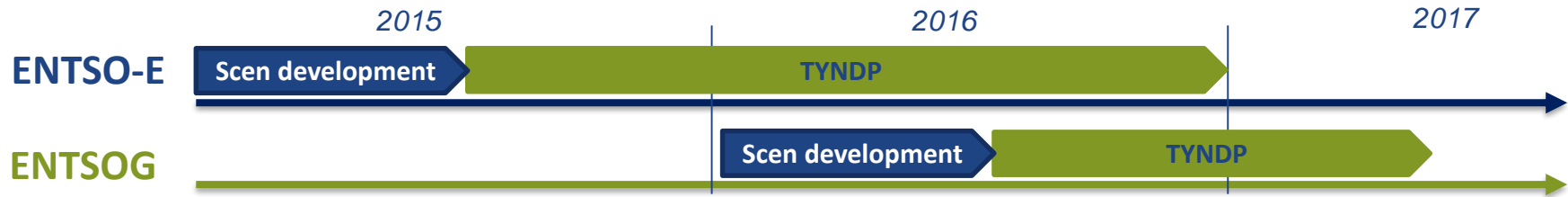


**How does it look like for next 20 years?**  
***TYNDP 2018 Scenarios***

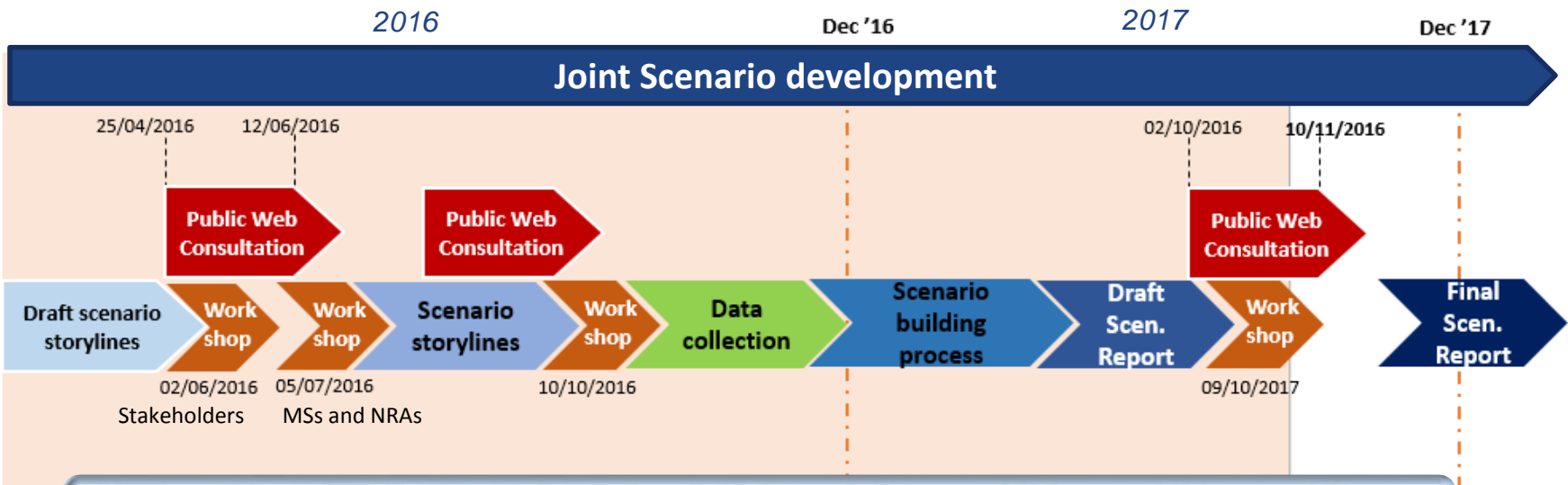


# ENTSOs Joint Scenario Development

## Previous TYNDP editions



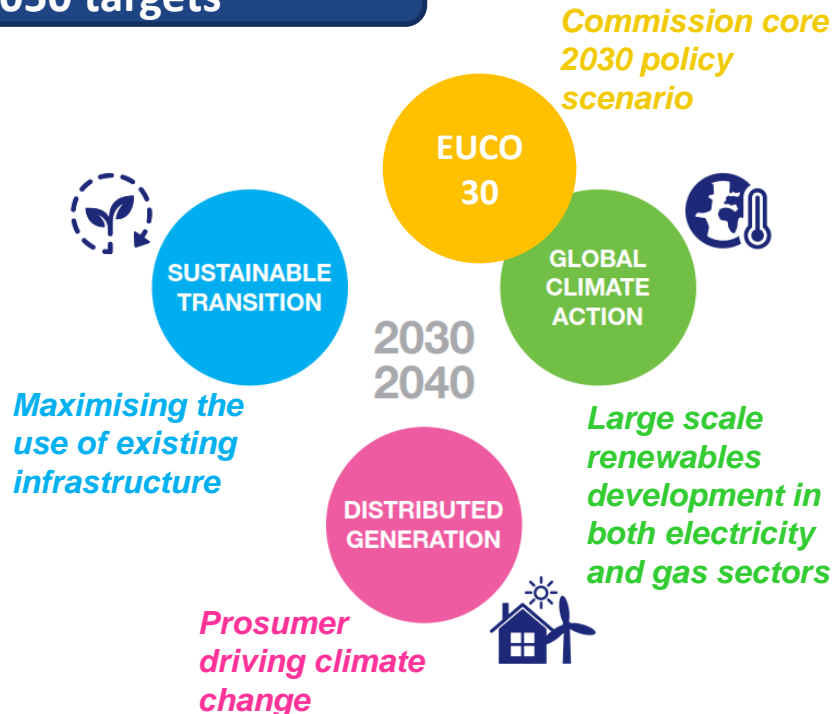
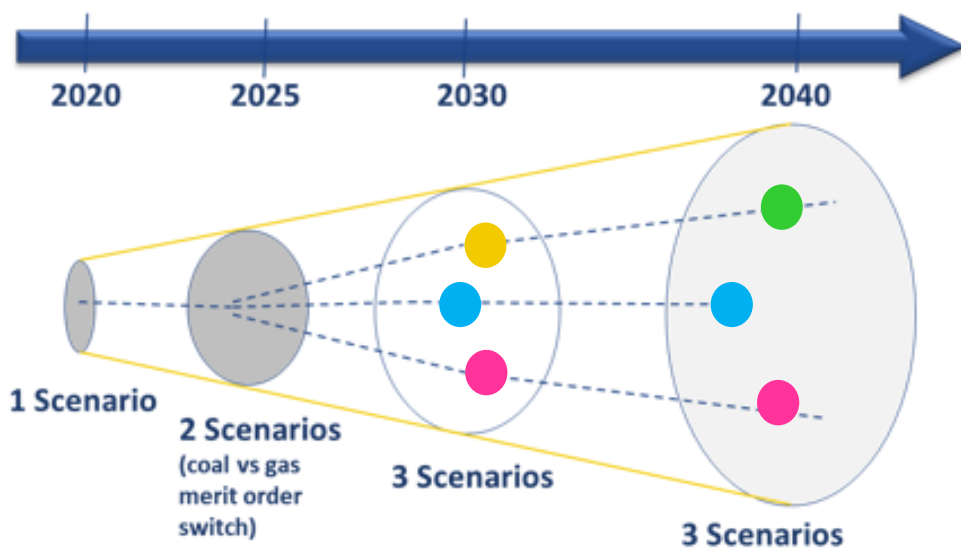
## TYNDPs 2018



*A process building on a thorough and enlarged stakeholder engagement*

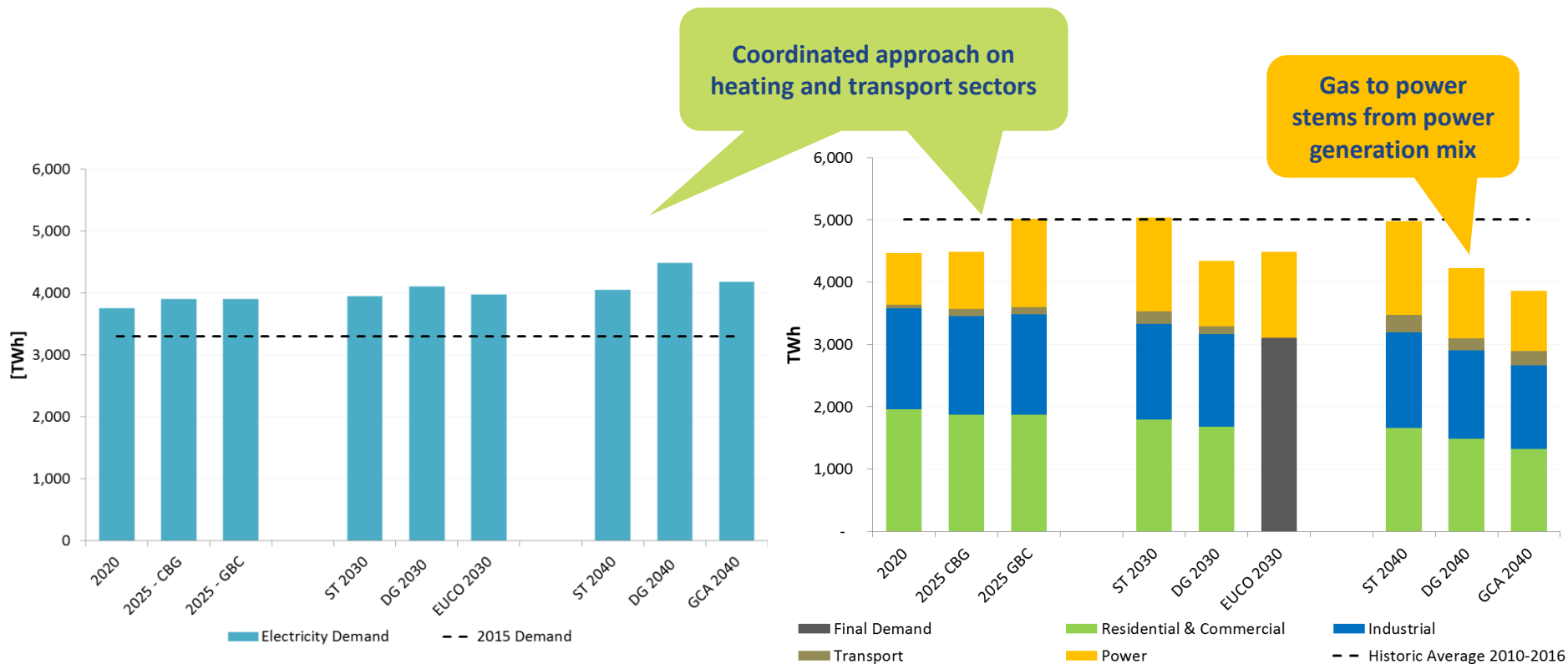
# Scenario Framework

**A common goal:  
EU 2030 and 2050 targets**



**3 scenarios to capture the possible future paths.**

# Electricity and Gas Annual Demand



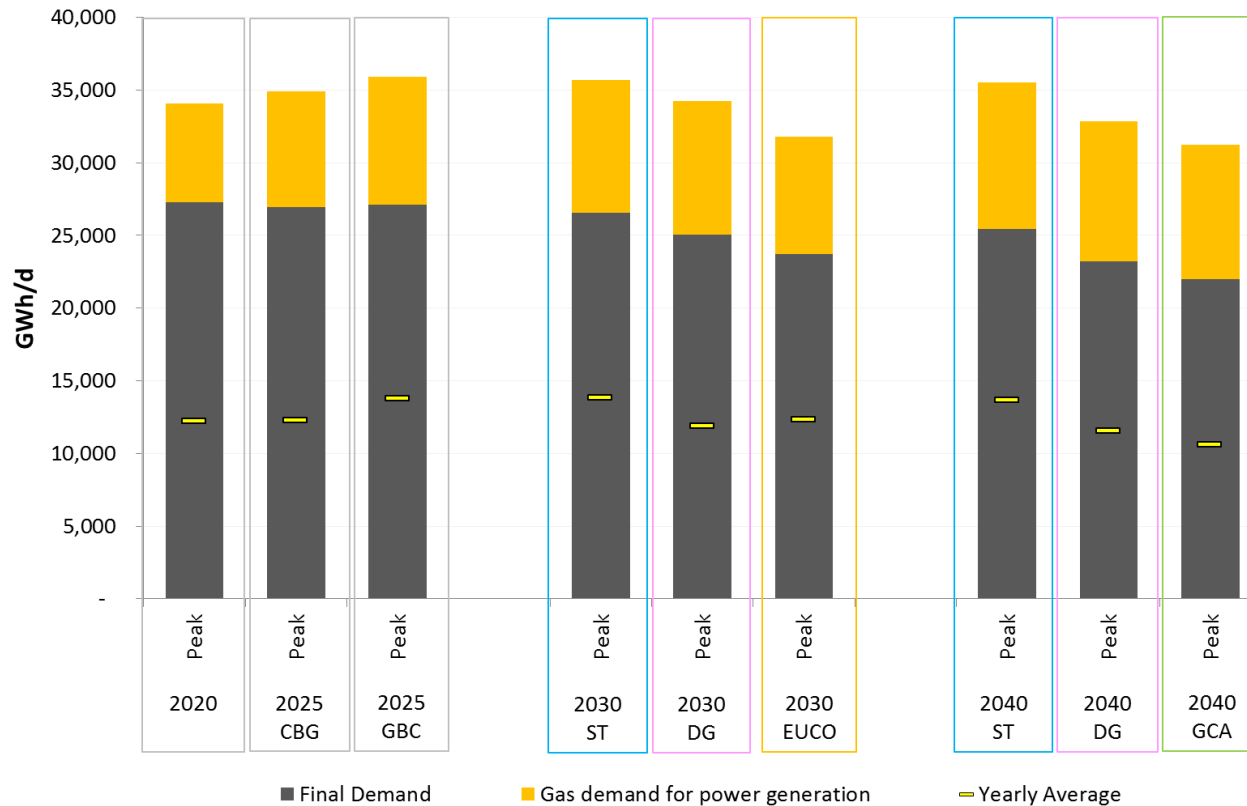
**Electricity**

**Gas**

**Decarbonisation and energy efficiency reshape energy demand.**



# Peak Gas Demand



**Peak gas to power maintained over time to back up intermittent renewable generation**



# Electricity generation

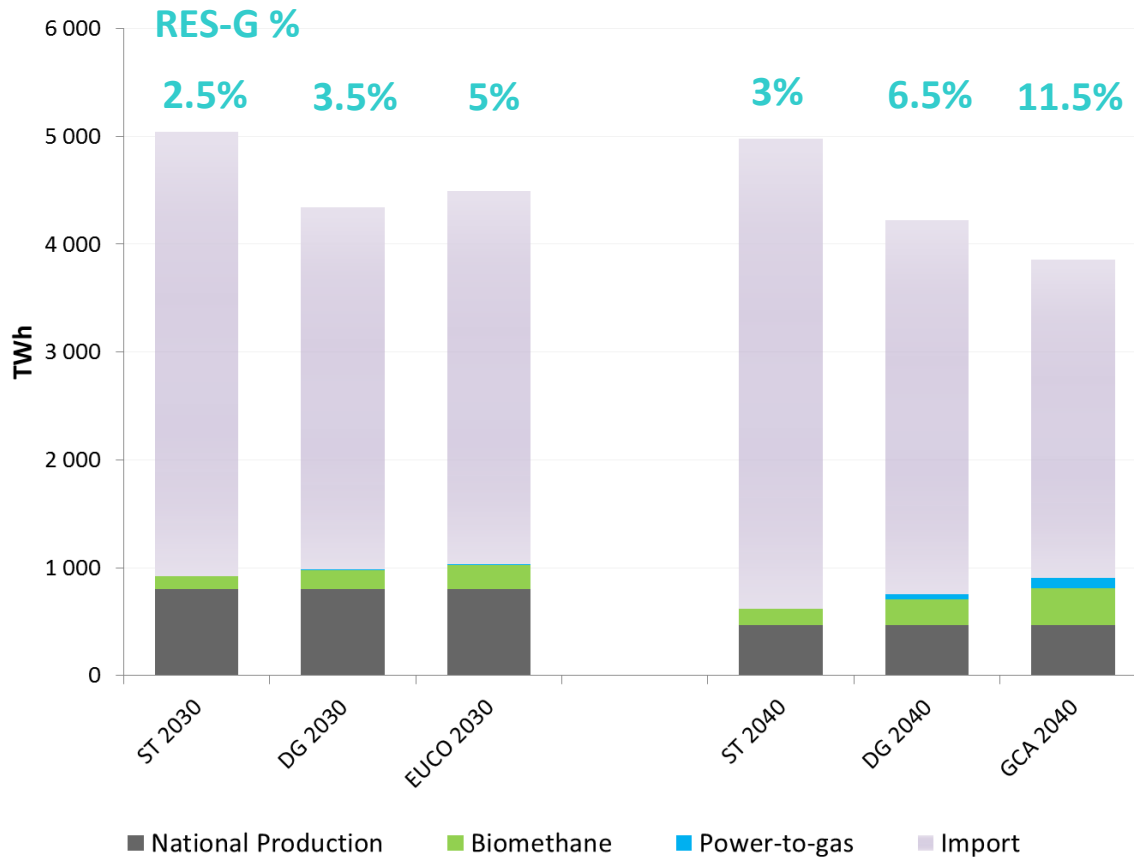


Renewable sources dominate the generation mix

Gas provides flexibility and support to the system

*Decarbonisation of the power sector is achieved through renewable generation.*

# Gas supply

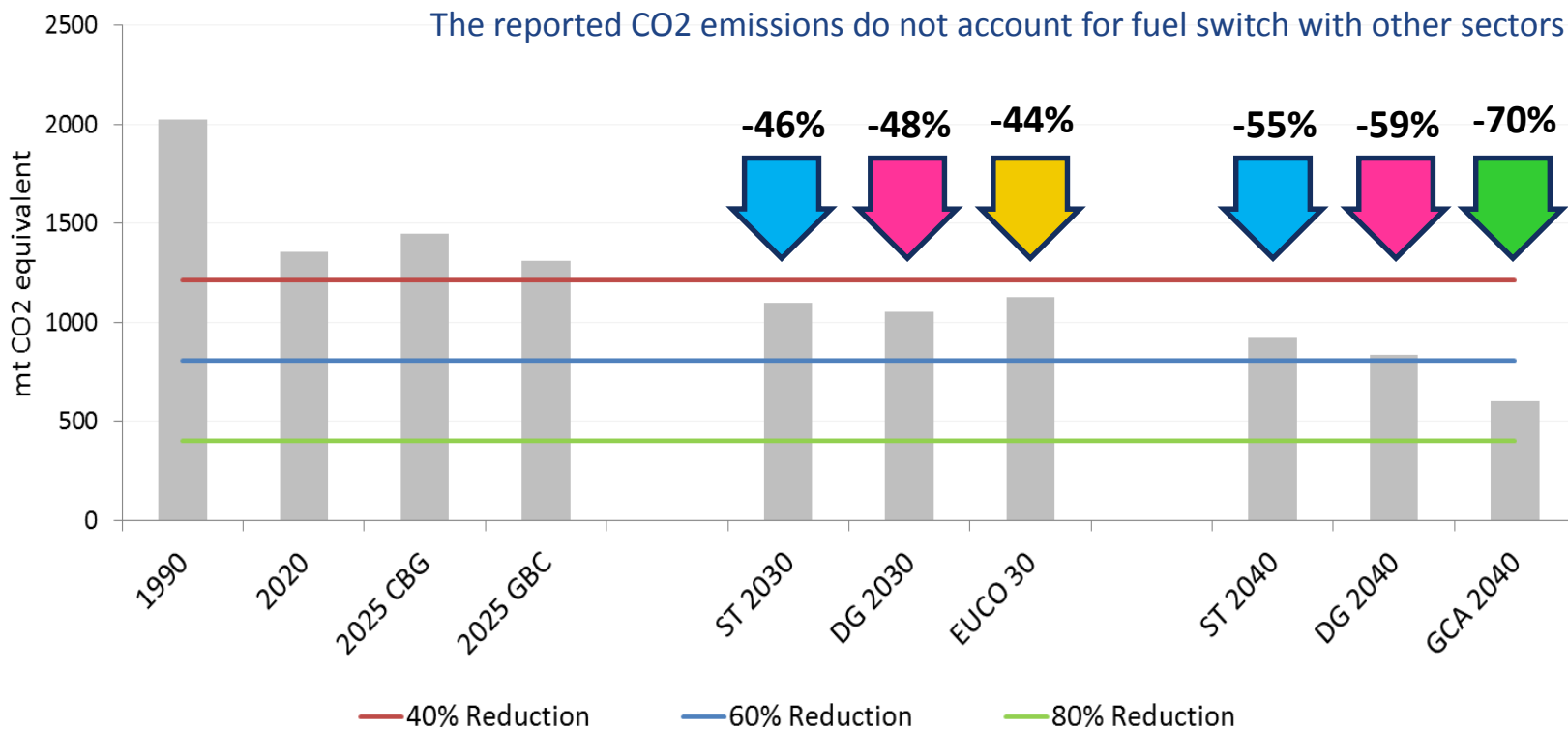


Power-to-gas, today at pilot phase, is considered for the first time in TYNDP 2018

Biomethane is expected to grow from today, also depending of how much biogas will be upgraded

*The potential for renewable gas is currently being explored, incl. several recent studies. It will need further investigation over time and may turn up at a higher level.*

# CO2 emissions and reductions for combined gas and electricity sectors



**CO2 savings meet 2030 targets.**

**Meeting 2050 targets is a matter of progress to be made from 2040 onwards.**



# Conclusions



- > ENTSOs scenarios aim at **assessing the infrastructure** and **security of supply**
- > It requires considering **several possible scenarios**, as a number technologies can contribute to decarbonisation and will shape supply and demand
- > Jointly developing these scenarios captures the increasing interactions and synergies between electricity and gas: it will ensure **the consistent assessment of the two networks against the same futures**
- > The scenarios confirm that gas infrastructure has a key role to play in ensuring security of gas and electricity supply, today and tomorrow, with gas demand and peak requirement remaining over time
  
- > ***Read more and get engaged!***

**ENTSOs Scenario Report** open for **public consultation** until 10<sup>th</sup> November

<https://www.entsog.eu/publications/tyndp#ENTSOG-TEN-YEAR-NETWORK-DEVELOPMENT-PLAN-2018>

<https://consultations.entsoe.eu/tyndp/entso-consults-the-stakeholders-on-the-2018-scenar/>

Numerous **studies** on the future role of gas, gas infrastructure and sector coupling, among which:

[http://www.enervis.de/images/stories/enervis/pdf/publikationen/gutachten/170321\\_enervis\\_Studie\\_Klimaschutz\\_durch\\_Sektorenkopplung.pdf](http://www.enervis.de/images/stories/enervis/pdf/publikationen/gutachten/170321_enervis_Studie_Klimaschutz_durch_Sektorenkopplung.pdf)

[https://www.ontras.com/fileadmin/user\\_upload/Dokumente\\_Presse/Aktuelles/Green\\_Gas\\_Potential\\_in\\_ONTRAS\\_Network\\_Area\\_Final\\_Report\\_on\\_the\\_Study\\_by\\_nymoenstrategieberatung.pdf](https://www.ontras.com/fileadmin/user_upload/Dokumente_Presse/Aktuelles/Green_Gas_Potential_in_ONTRAS_Network_Area_Final_Report_on_the_Study_by_nymoenstrategieberatung.pdf)

<http://www.energynetworks.org/assets/files/gas/futures/KPMG%20Future%20of%20Gas%20Main%20report%20plus%20appendices%20FINAL.pdf>



# Thank You for Your Attention

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