

Astana, 25.09.2017

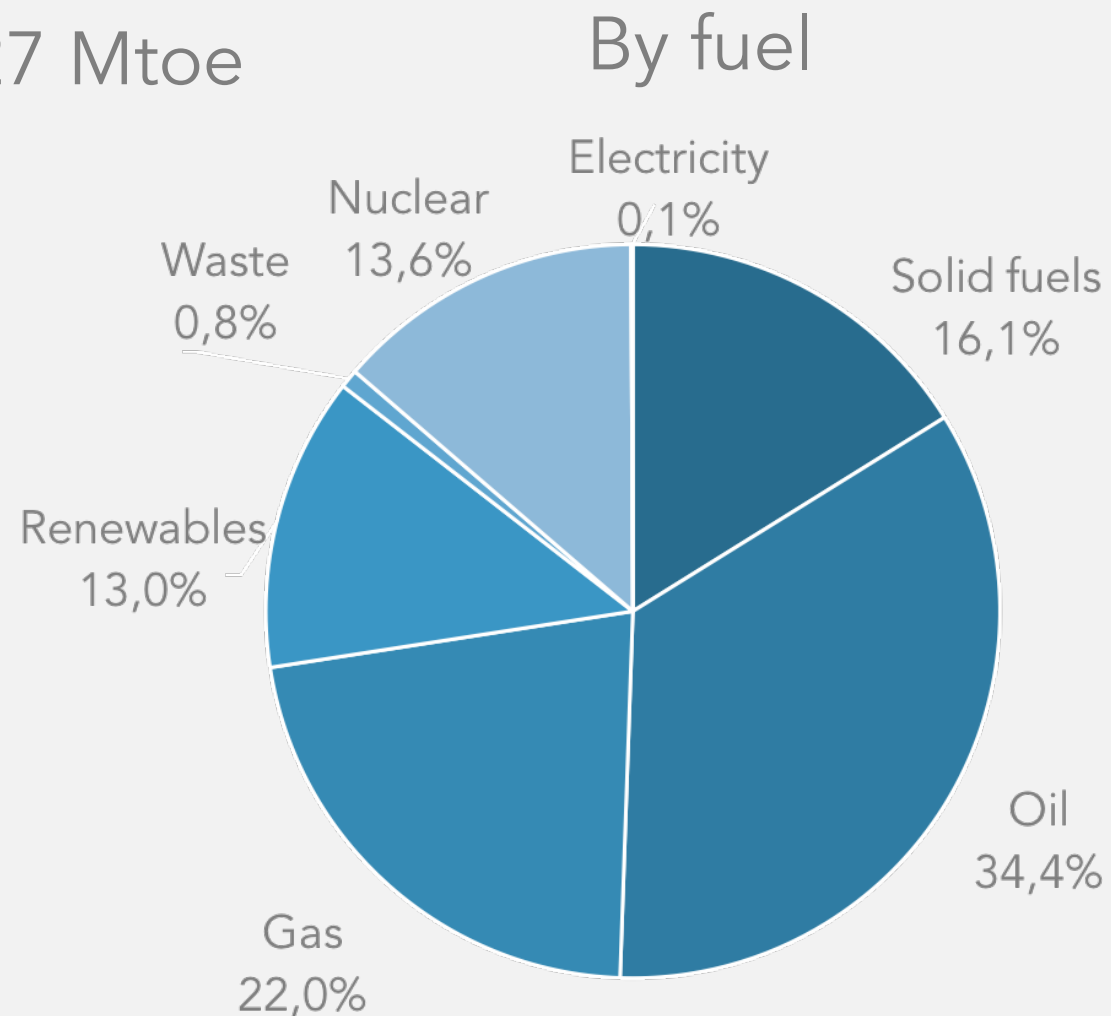
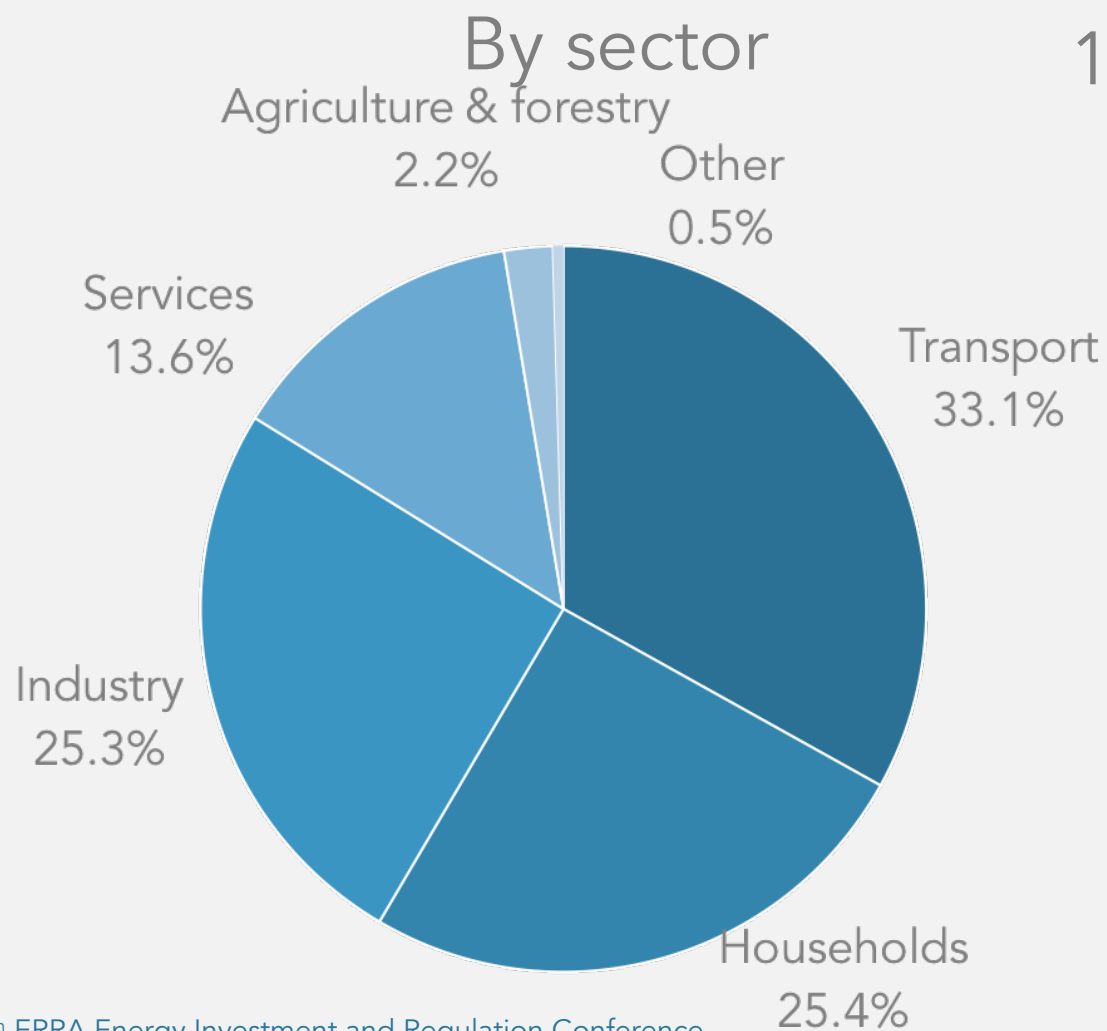
What

Future for Natural Gas in Europe?

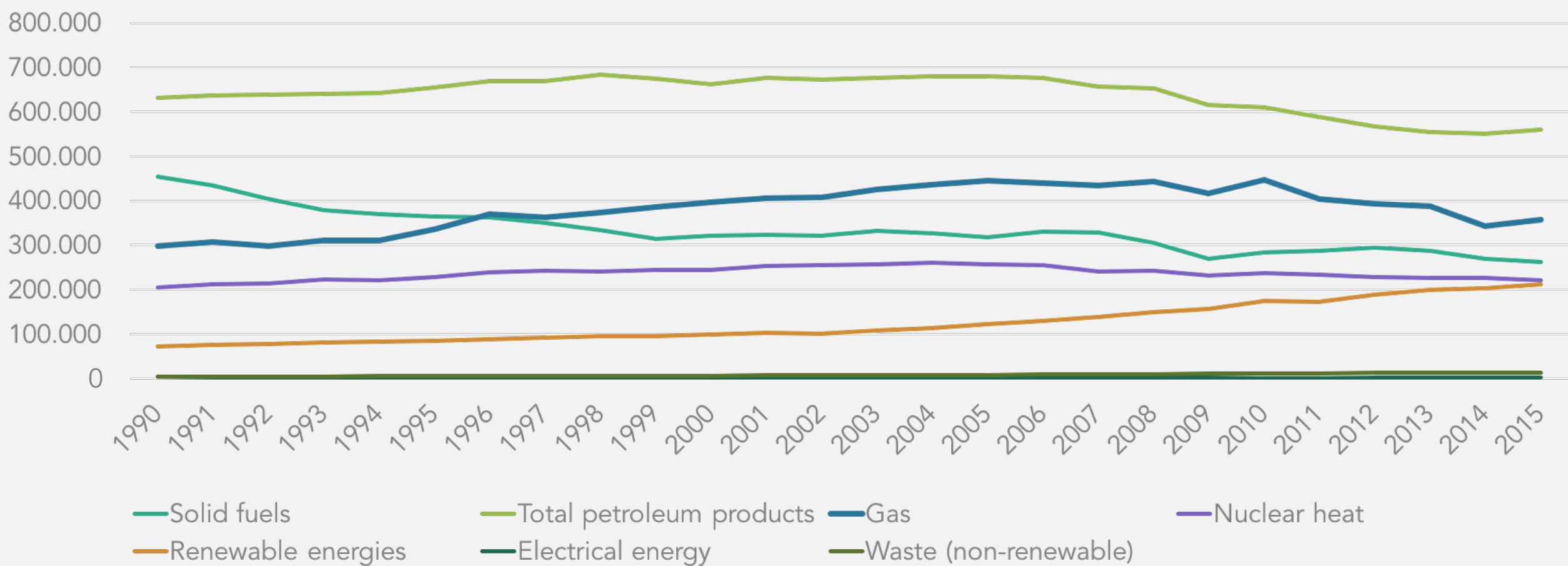
Walter Boltz

Senior Adviser European Energy,
Member ACER Board of Appeal,
Former Chair ACER Gas Working Group

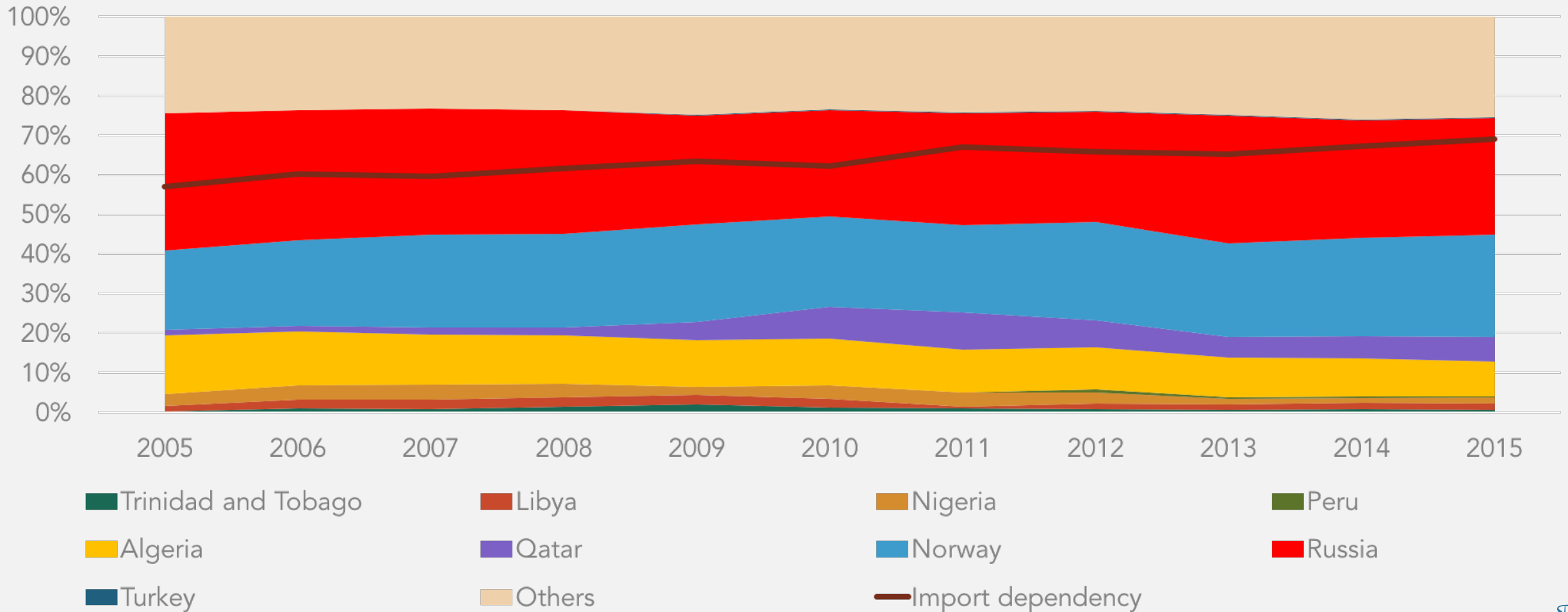
EU28 final energy consumption, 2015 (%)



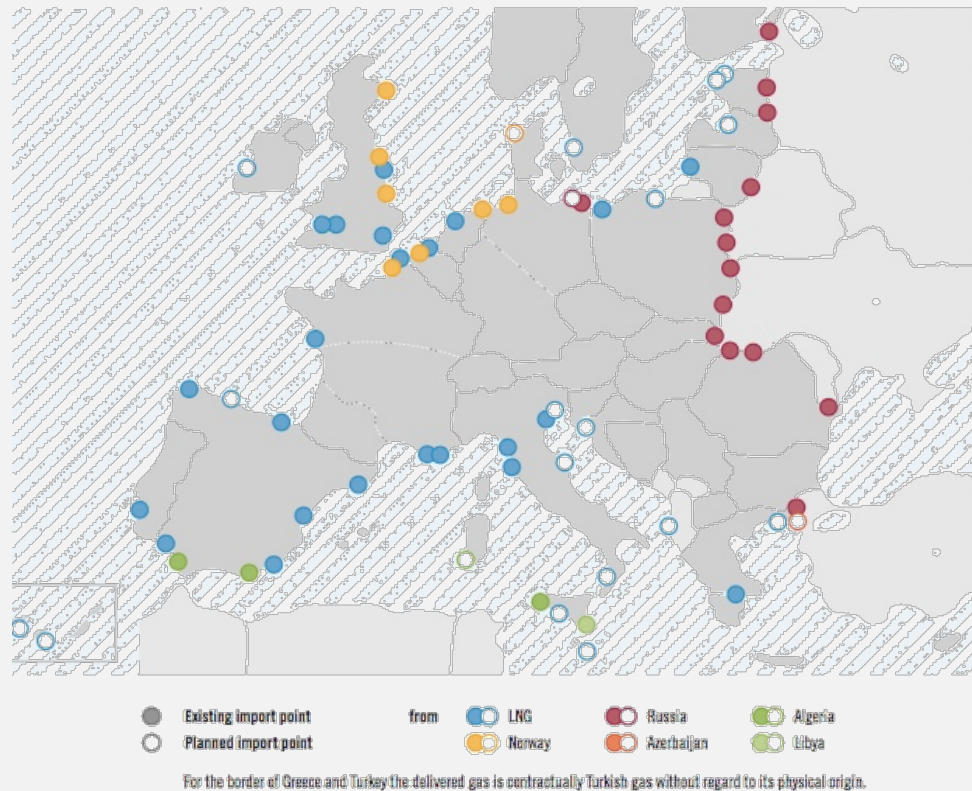
EU28 gross energy consumption (toe)



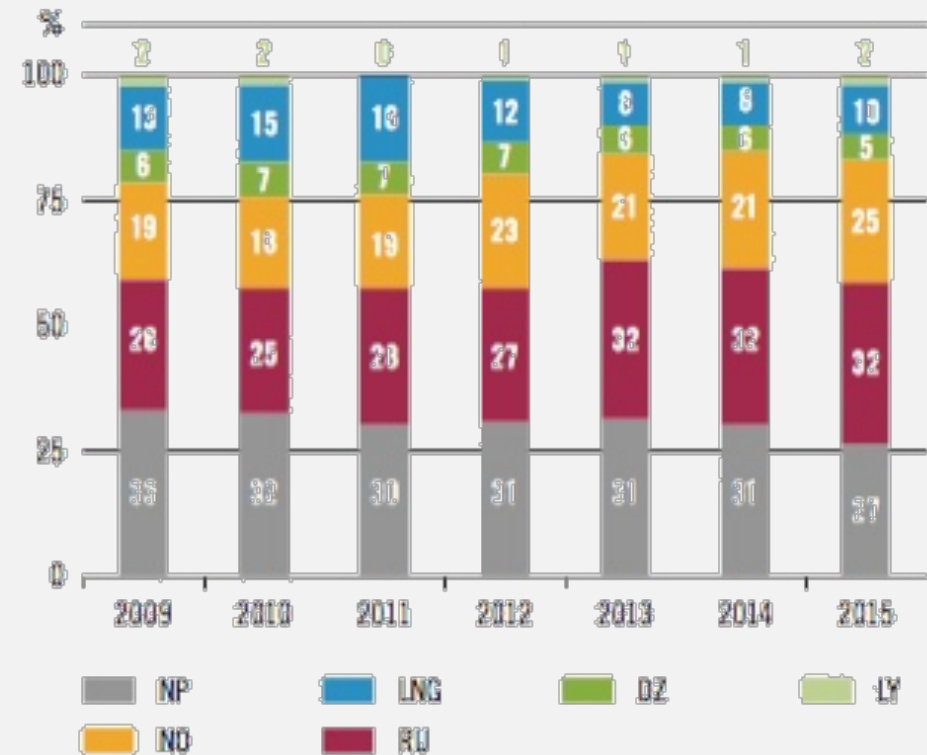
Main origin of natural gas imports & import dependency, EU28 (%)



Russian supply share is roughly 1/3

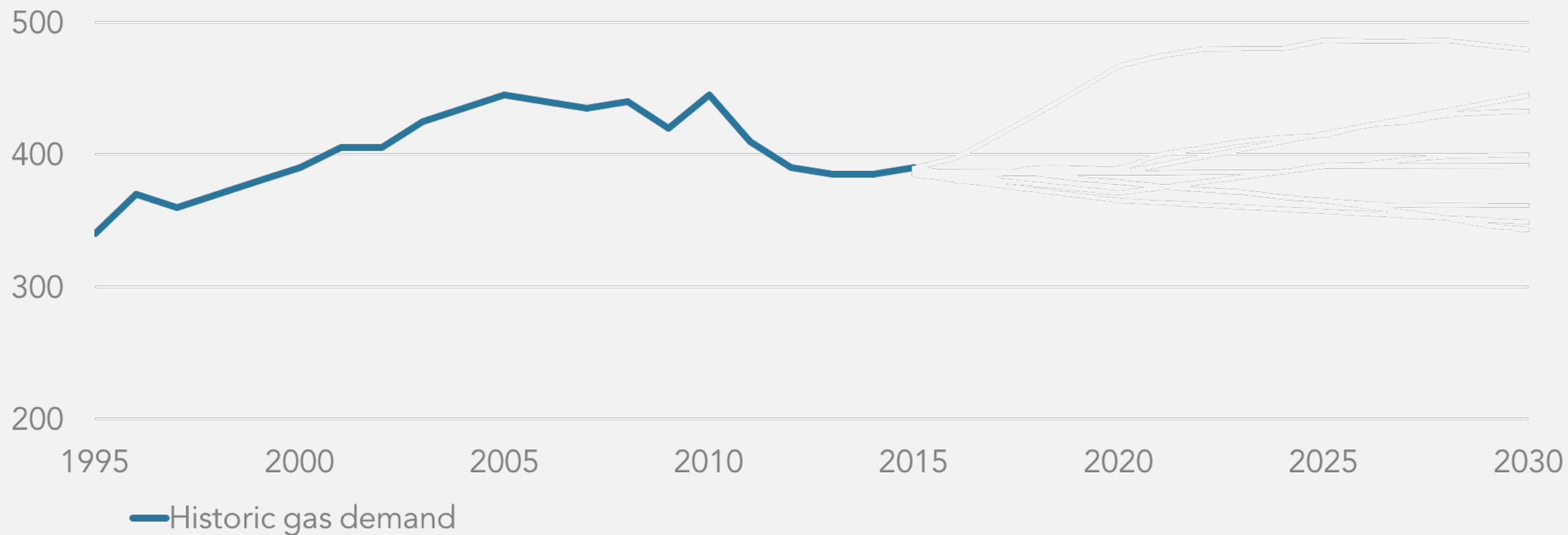


Import routes by source

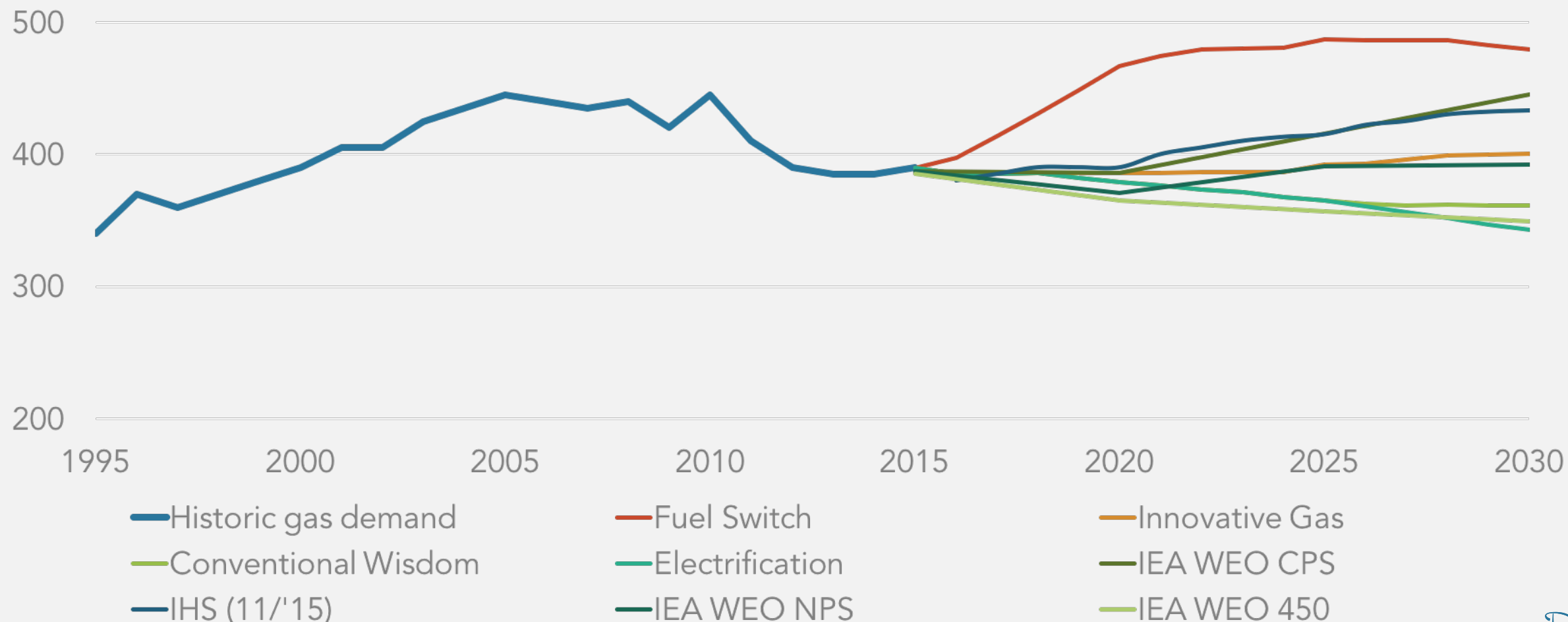


Supply shares by source

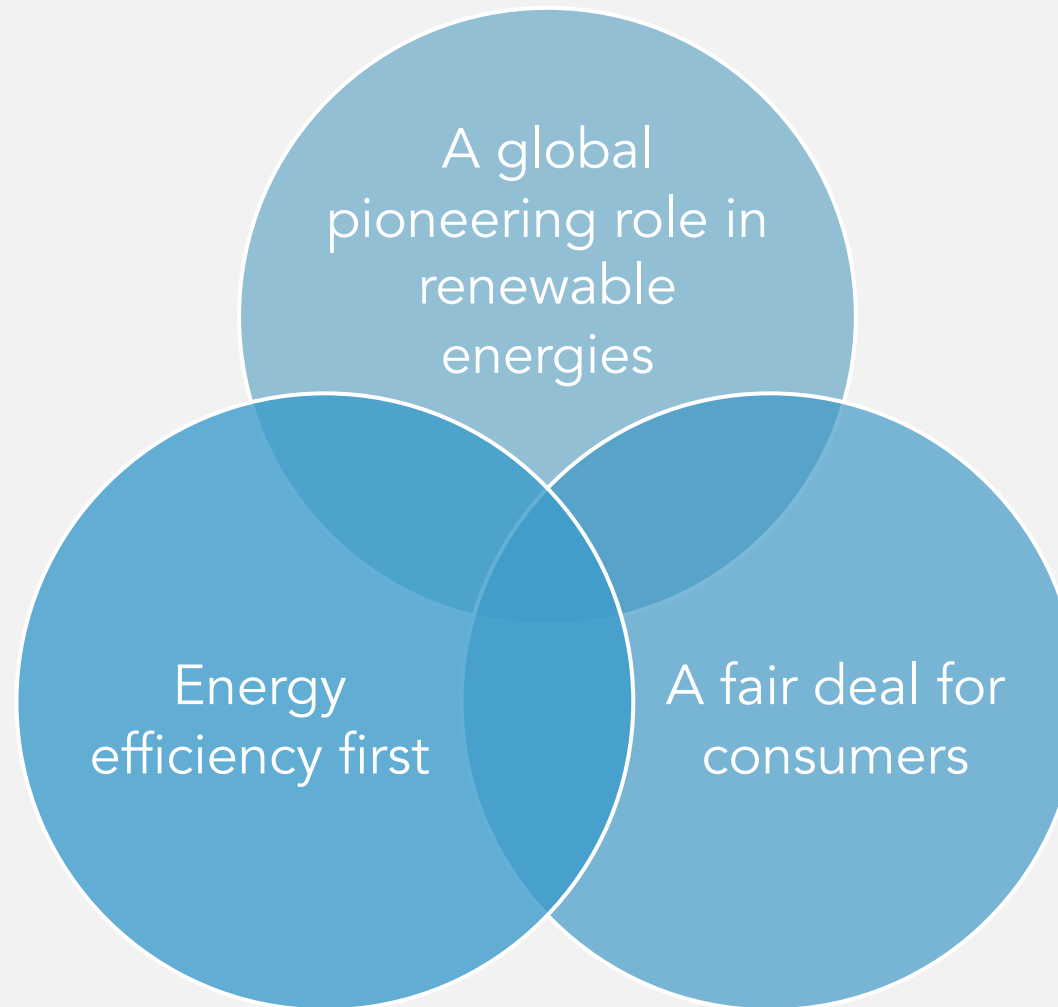
Gas consumption in Europe ...



Gas consumption in Europe ...



Priorities of the Energy Union



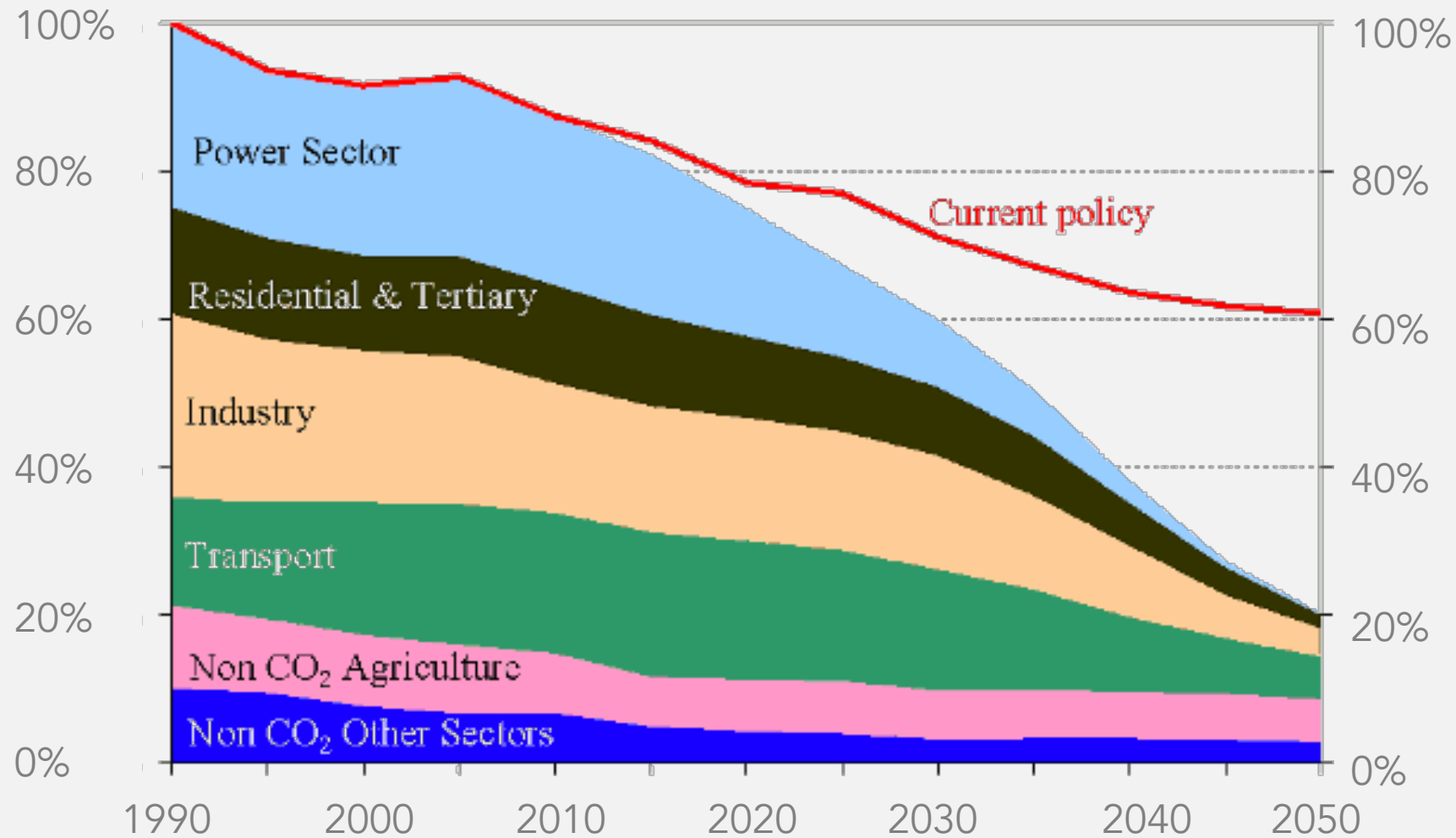
EU climate & energy targets

2020		2030		2050
Target	Path	Target	Path	Target
20% THG Reduction*	23% 2014; 24% 2020	40% THG Reduction*	30% THG Reduction*	80-95% THG Reduction*
20% RES	16% 2014	27% RES		
20% demand reduction*	11% 2014	Min. 27% demand reduction		

*EC proposes now 30% binding.
European Parliament wants 40%.*

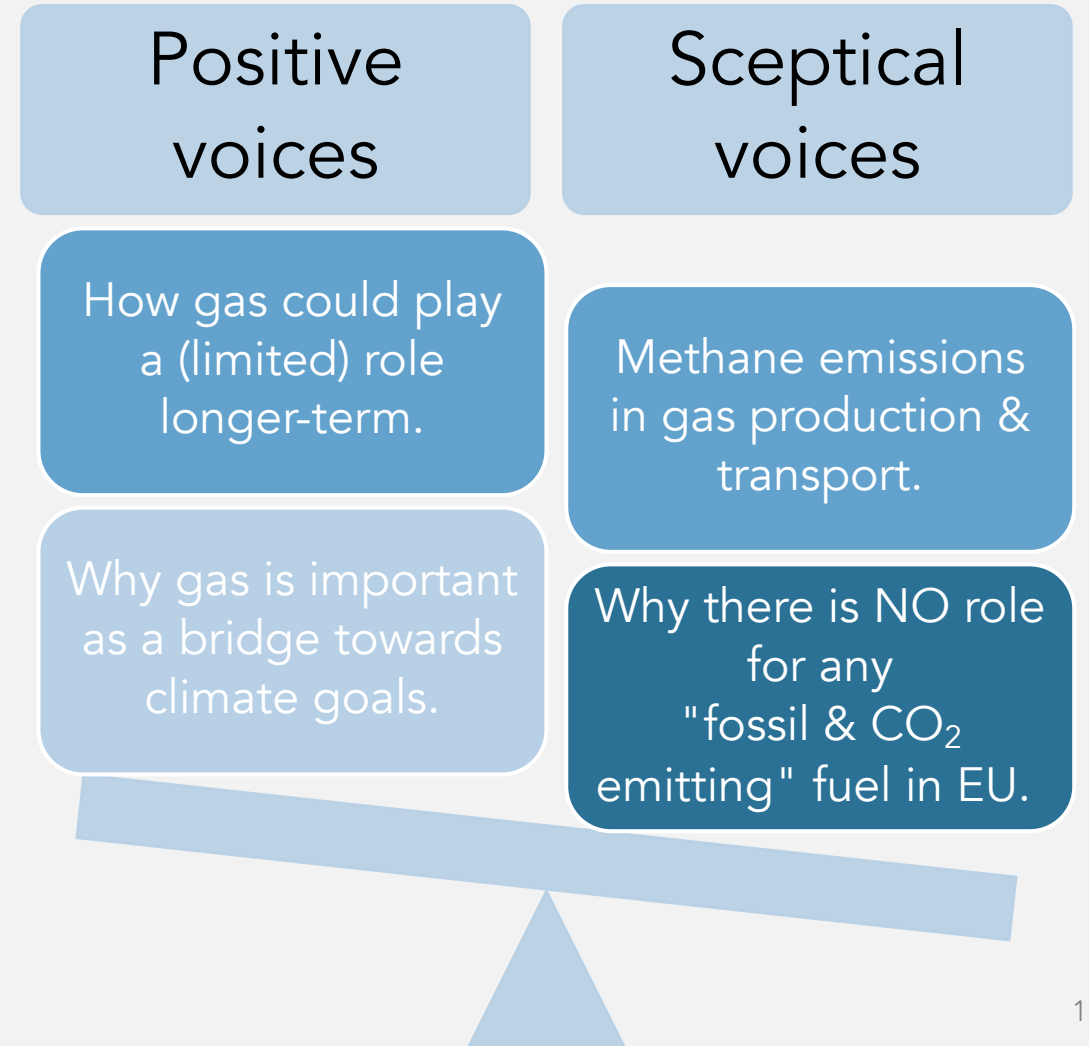
* Basis 1990; **13% vs. 2005

EU GHG emission targets mean zero emission from fossil fuel use



The Future Role of Gas is being discussed

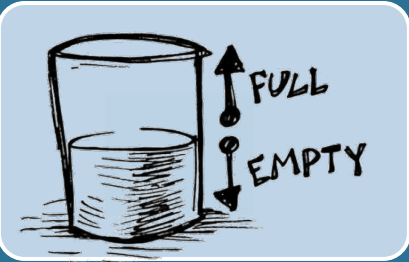
- Discussions are (still) ongoing and results open!
 - mid-term (until 2035) versus
 - Long-term (until 2050).
- However, so far the outcome seems to have a tendency in one direction ...
- The dice will fall within the next five years.



Natural gas faces several issues

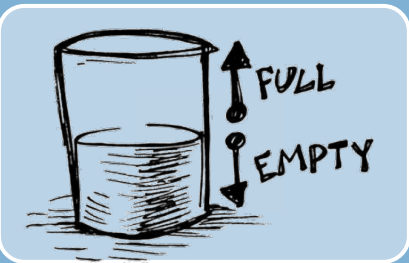
- Natural gas, as fuel, is in competition with
 - Renewable energies, with zero marginal costs
 - Oil, and
 - Coal.
- Methane leakage is becoming more and more a concern.
 - Production, transmission, storage, usage.
 - Even though gas is burning cleaner than other fossil fuels.
- Natural gas is and will remain a fossil fuel.

Role of Gas in 2030/2050 – possible scenarios



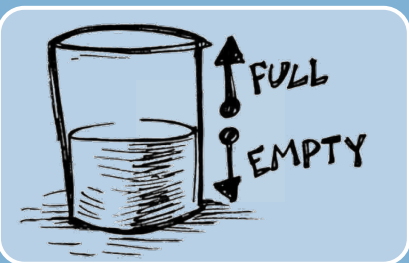
Gas is phased out step by step.

1st in power generation & heating, finally in industry as well.



Gas is step by step „de-carbonized“.

Fossil gas is replaced by „green gas“ from Bio sources or from P2G.



Gas retains a role in transportation & industry.

New technologies for reducing CO₂ emissions from gas (e.g. stripping C from gas through reforming or using CCS, etc.) emerge.

What producers & transit countries could do

- Follow (carefully) the debate.
- Reduce methane leakage as much as possible & enable full transparency of leakages.
- Participate in experiments & trials for CCS as well as pilots for „green gas“.
- Improve the competitive position of gas by enabling a market based price formation, which would make gas more competitive.
 - Until very recently gas was e.g. too expensive for power production in half of Europe, whereas in the US gas is cheaper than coal ...
- Look for other parts of the world for gas sales, as the global trends are different from Europe at the moment.

Walter Boltz

+43 664 202 23 60

walter@boltz.at