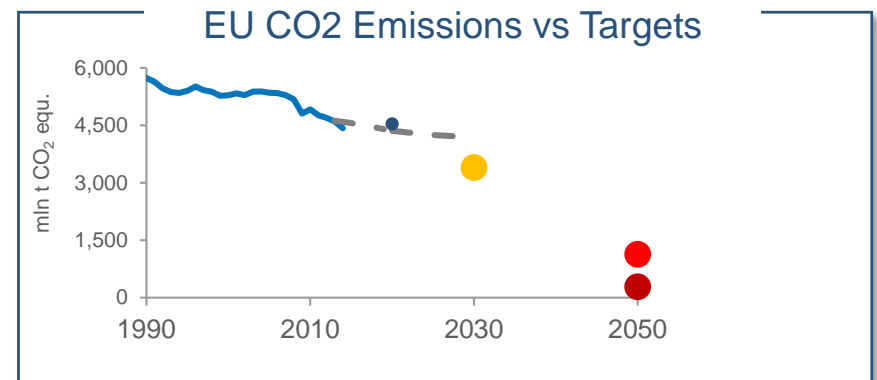
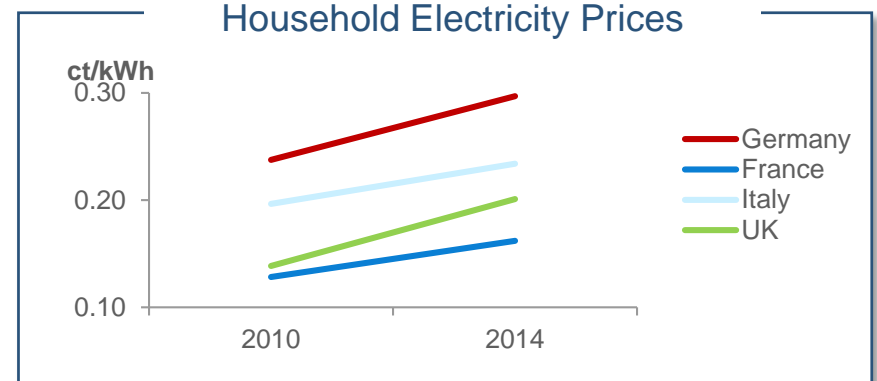
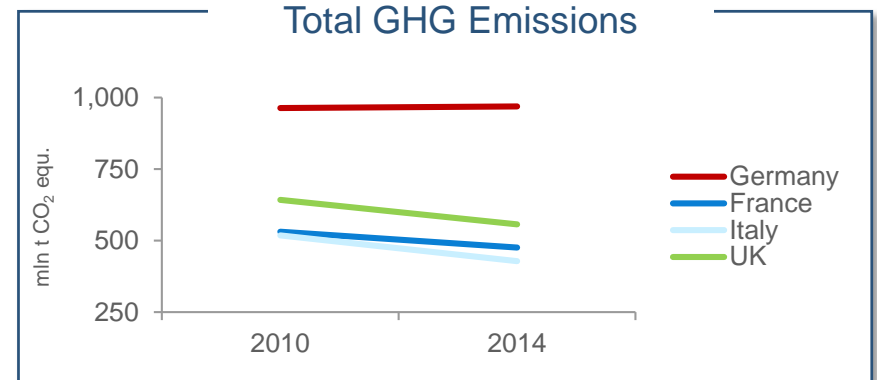
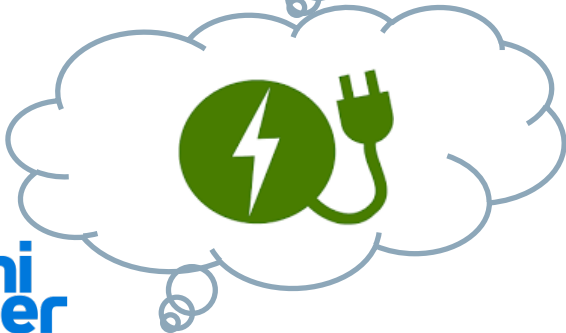




The Importance of Power and Heat Generation

Sabine Augustin, SVP Uniper, Chair Strategy Committee, Eurogas

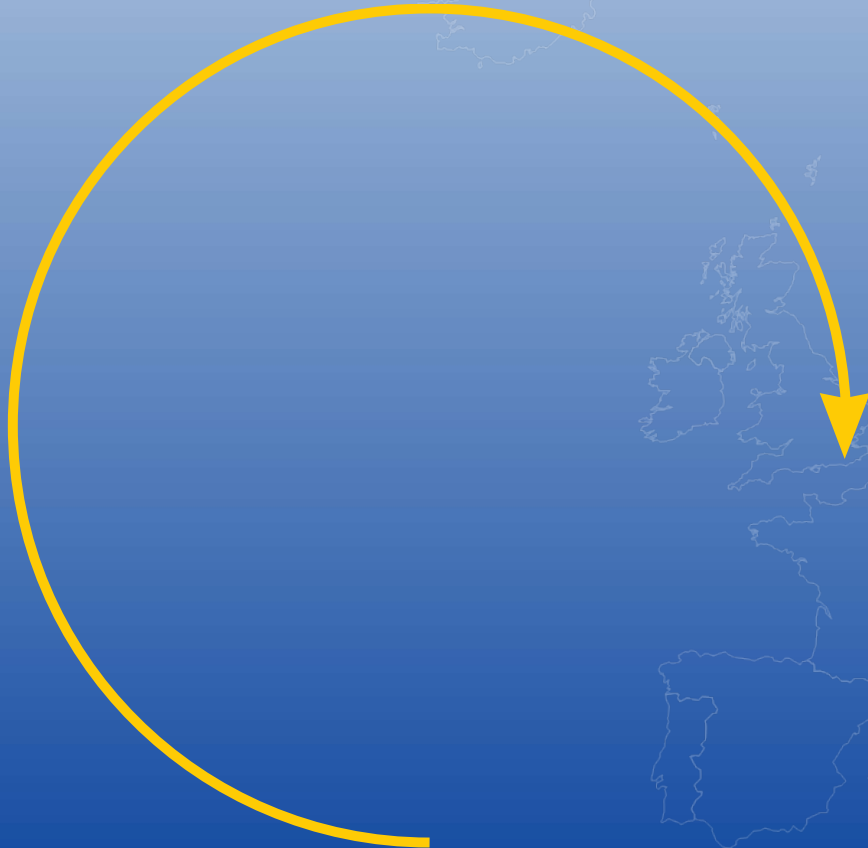
Energy transition – is Europe on the right track?



Roadmap for the Energy Transition

2030: Achieve quick wins for decarbonisation with gas.

2050: Complete the energy transition.



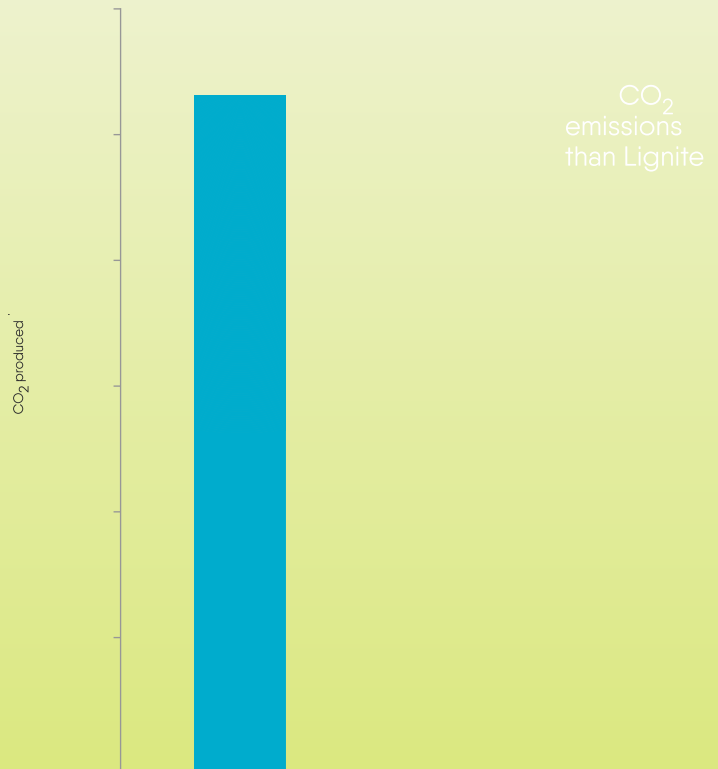
Flexibility through power-to-gas

Increase renewable gas, such as biogas and synthetic gas

Develop carbon capture and storage

Clean Power Generation

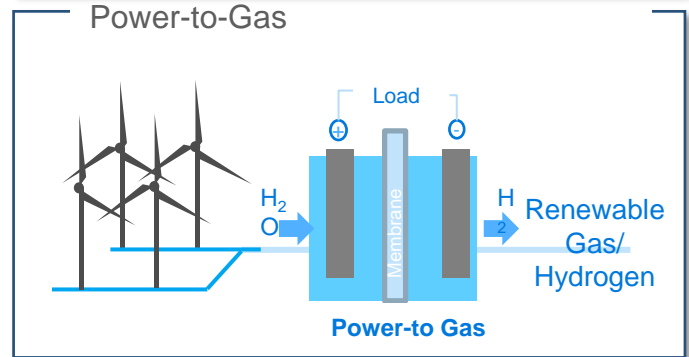
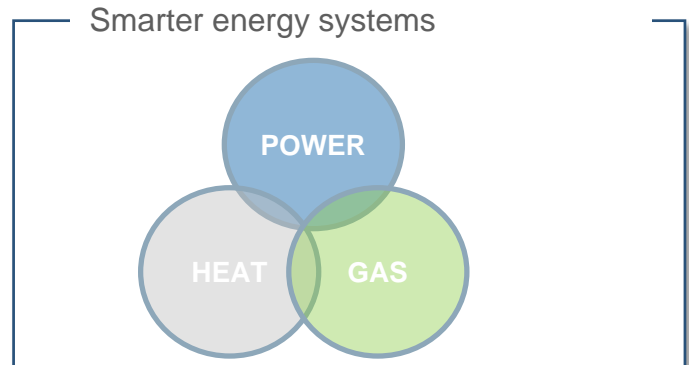
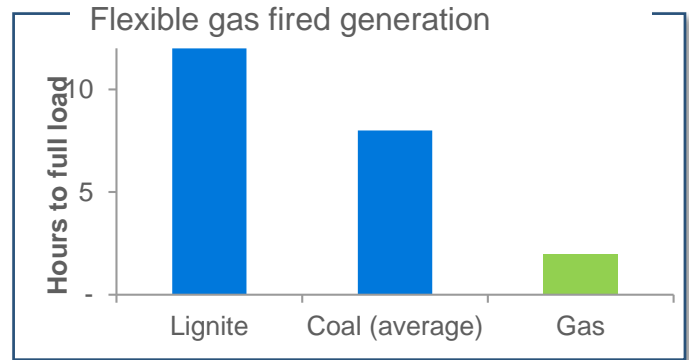
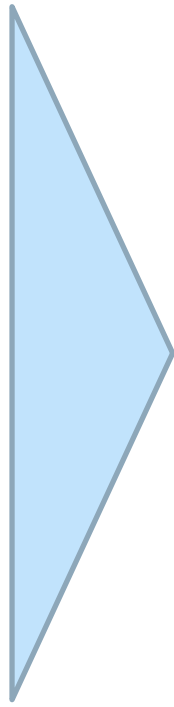
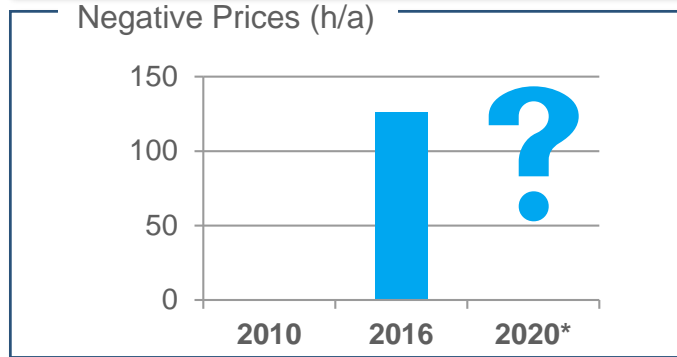
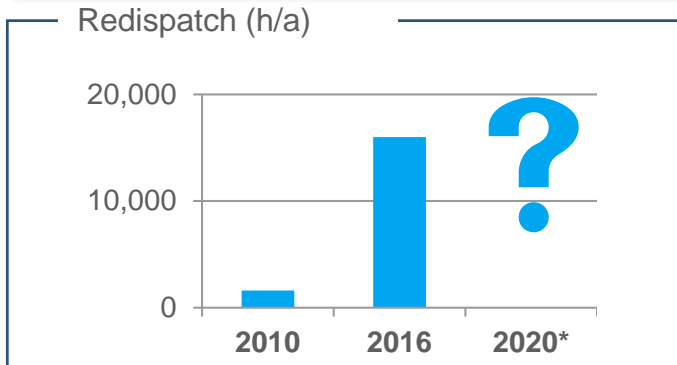
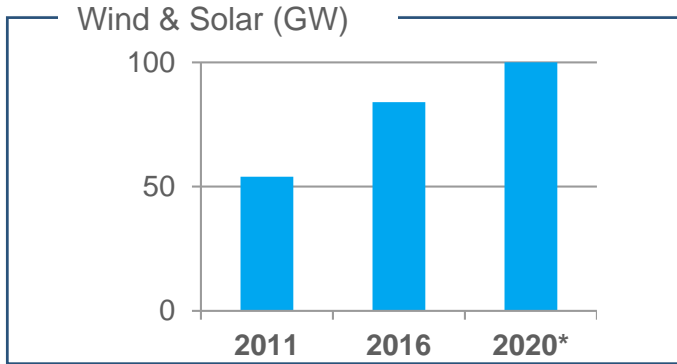
Switching from lignite to gas reduces CO₂ emissions by up to 66%.



Utilisation of gas-fired generation* from 36% to 65%:
minus **300 million tonnes CO₂ /a**

Europe has **enough spare capacity** in gas-fired generation to **replace all the coal-fired** generation

Gas is ideal flexibility provider



Decarbonisation from customer's perspective

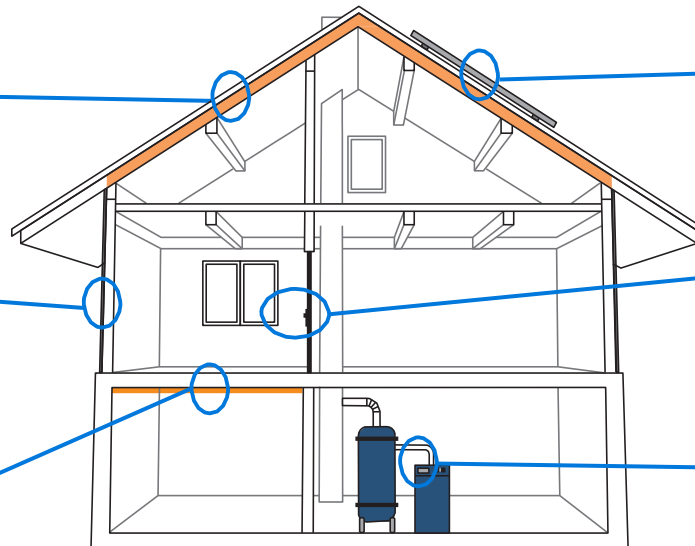
New gas heating systems are the most economic way to meet the climate goals

- 40% CO₂ 85% old boilers

Roof Insulation	
Costs	14.000 €
Amortisation	44 years
Energy savings	3 %

External Wall Insulation	
Costs	34.200 €
Amortisation	30 years
Energy savings	13 %

Basement Ceiling Insulation	
Costs	3.670 €
Amortisation	9 years
Energy savings	6 %



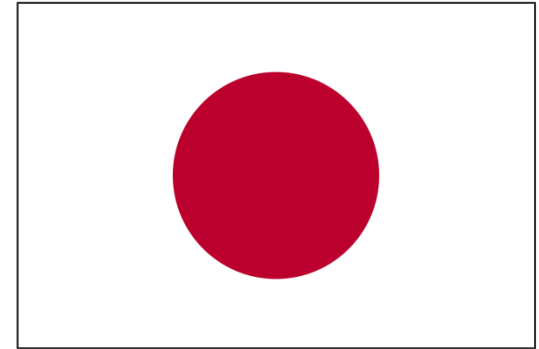
Solar Thermal System	
Costs	7.000 €
Amortisation	14 years
Energy savings	7 %

Window/Door Replacement	
Costs	26.200 €
Amortisation	32 years
Energy savings	9 %

New Gas Heating System	
Costs	10.500 €
Amortisation	6 years
Energy savings	25 %

The future of heating: Fuel Cells and Micro-CHPs

Producing reliable and clean heat and electricity for your home – at home.



**2030:
5.3 mln
fuel cells**

Reality check: PRIMES scenario study for Eurogas

e

Innovative gas scenario with lower cost than electrification scenario until 2050



Electrification is not the silver bullet

Making the energy transition happen!

Gas, wind and sun – providing Europe with clean heat, electricity and transport

- Develop a realistic long-term view for the energy sector
- Put the consumer in the center
- Create transparency and give choice
- Support boiler replacement programmes
- Support development of new technologies
- Adapt market design
- Give carbon a price that matters

