



# WHAT WILL THE FUTURE OF GAS BE IN THE POWER SECTOR?

British Institute of Energy Economics

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# AGENDA

- Pathways for the EU energy sector
- What should the role of gas be?
- Why is the EU not grasping this opportunity?
- What is needed?

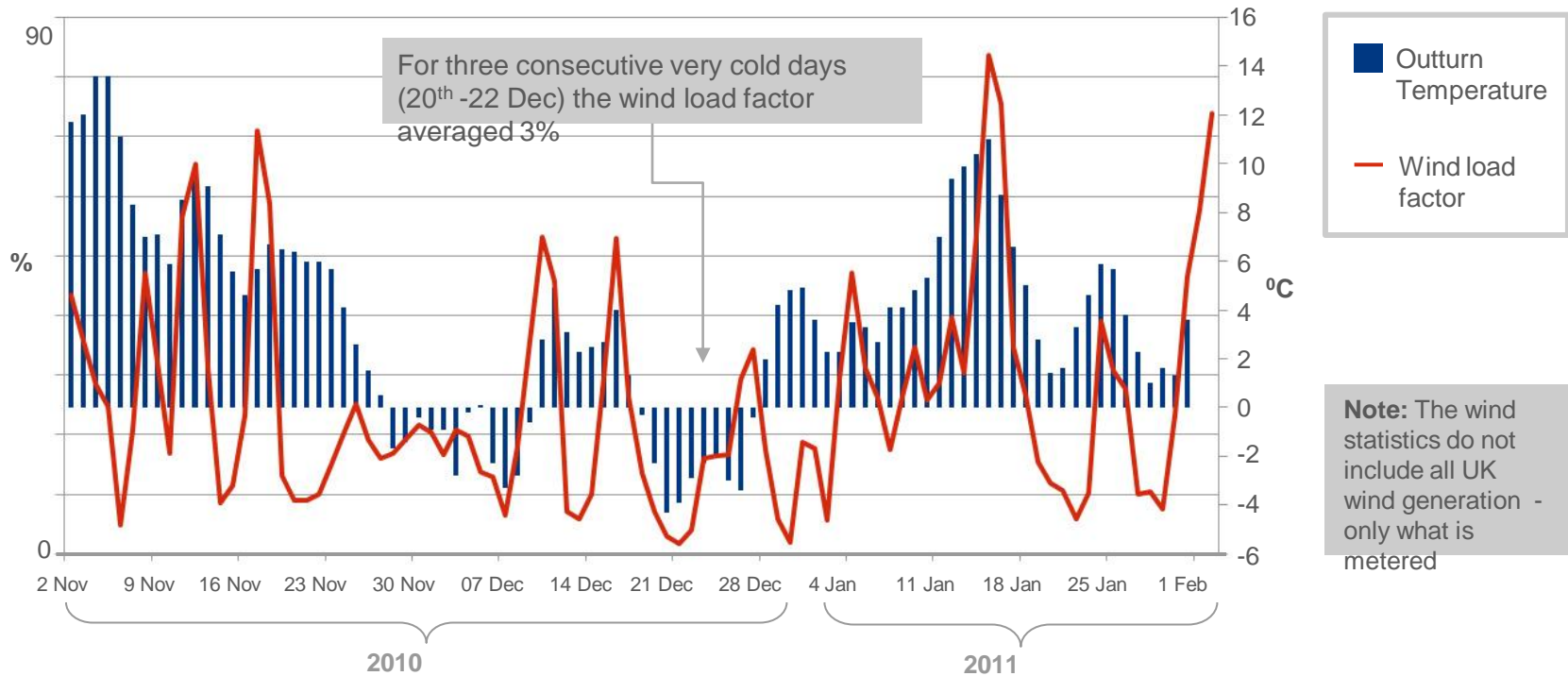
# THE EU ENERGY 2050 ROADMAP SHOWED MULTIPLE PATHWAYS

EU Decarbonisation scenarios – 2030 and 2050 range of fuel shares in primary energy consumption compared with 2005 outcome (in %)



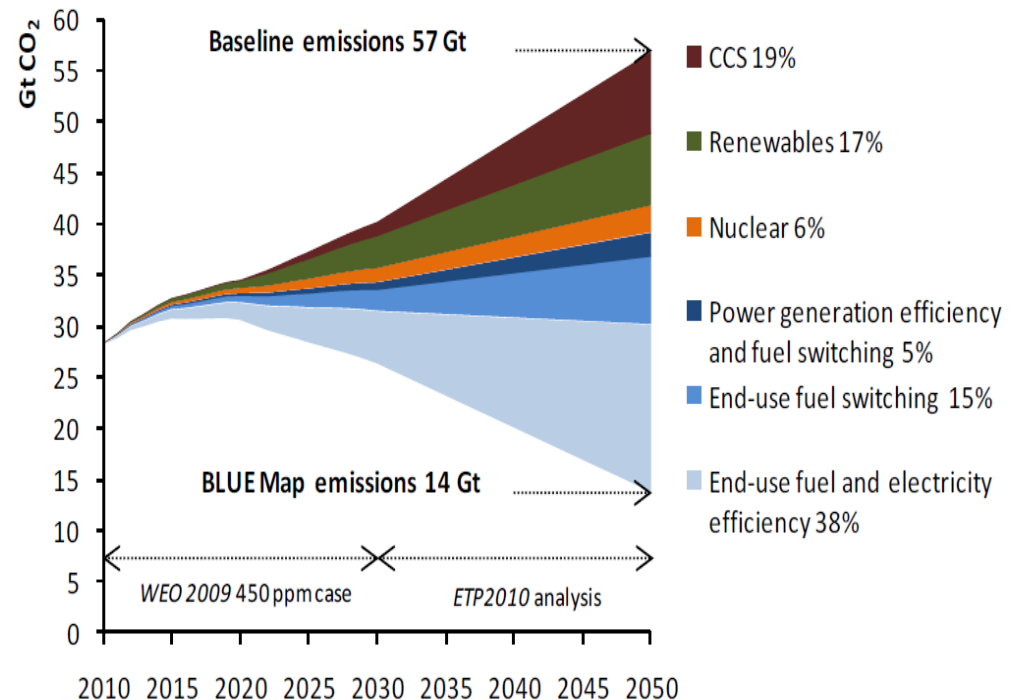
# GAS CAN COMPLEMENT RENEWABLES

## AVAILABILITY OF UK WIND GENERATION



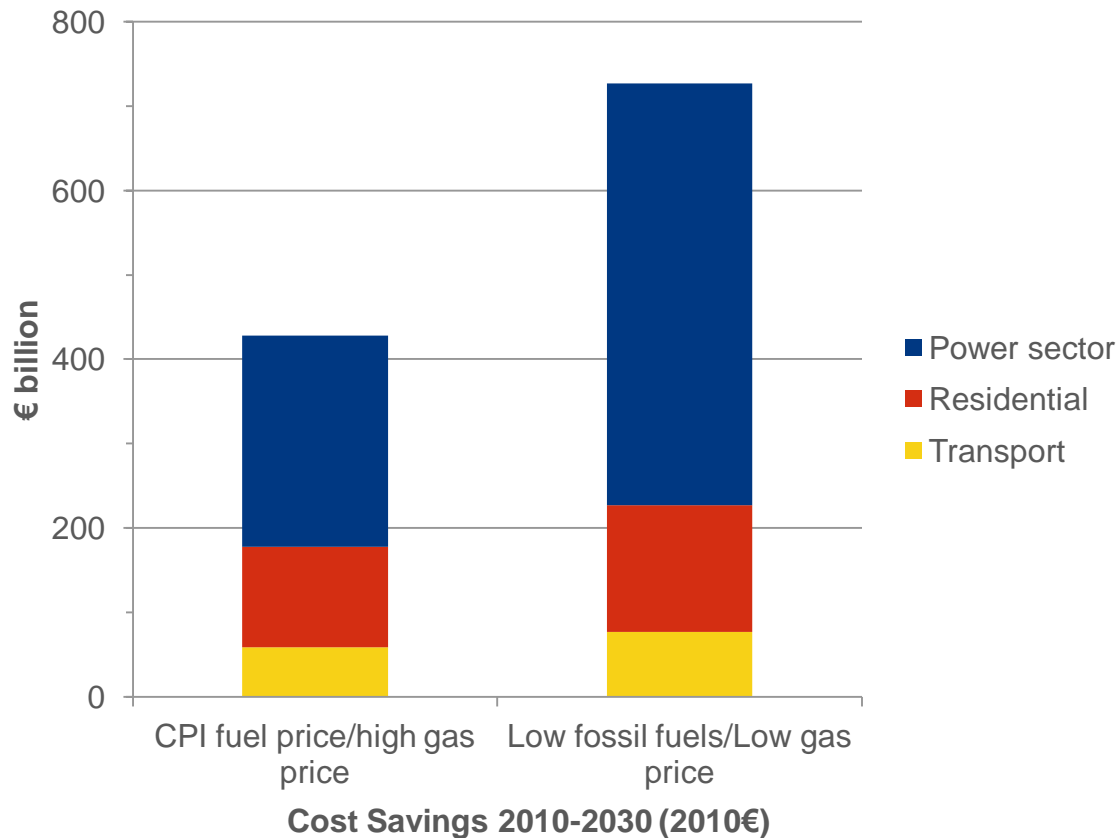
# GAS WITH CCS WILL HAVE A LONG-TERM ROLE

- The IEA states that CCS technology could remove over 10 billion tonnes of CO<sub>2</sub> emissions a year by 2050, and account for 19% of the CO<sub>2</sub> reduction effort needed by 2050.
- This is equivalent to a third of current fossil fuel emissions.
- The IEA BLUE Map results revealed that **without CCS, the overall cost to achieve a 50% reduction in CO<sub>2</sub> emissions by 2050 will increase by 70%.**



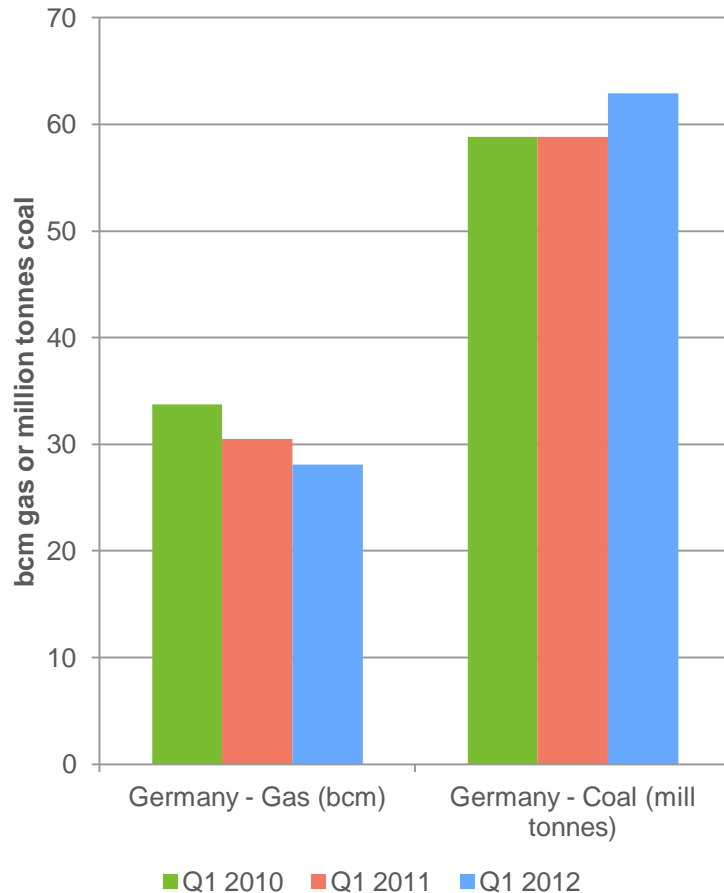
# MAINTAINING A KEY ROLE FOR GAS CAN LEAD TO LARGE COST SAVINGS

- Optimised' pathways offer cost savings of about €250-500 billion in period 2010 to 2030 in the power sector.
- Savings across all three sectors could be €500 billion and higher under a low gas price scenario.
- Total savings of same order in period 2030 to 2050 (but more uncertainty).

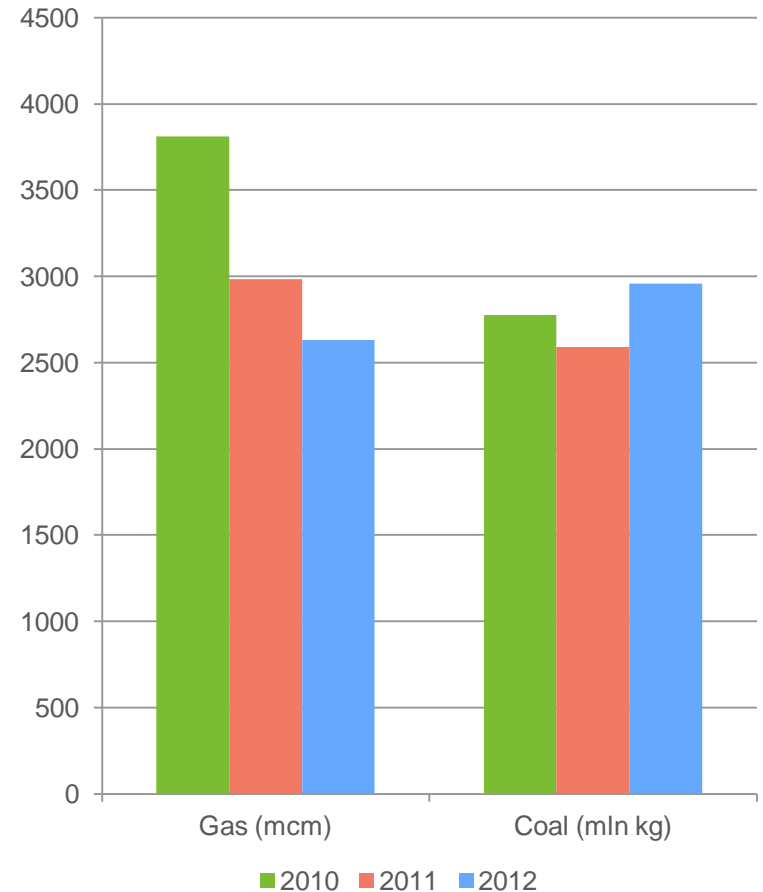


# THE USE OF GAS IN POWER HAS DECLINED RECENTLY

## German Gas and Coal Consumption (Q1)



## NL - Coal and Gas to Power





# WHAT IS NEEDED TO GET IT BACK ON TRACK?

Gas can play an important role if:

- Make policy and regulation more coherent
- Robust Emissions Trading Scheme
- Government support for CCS

