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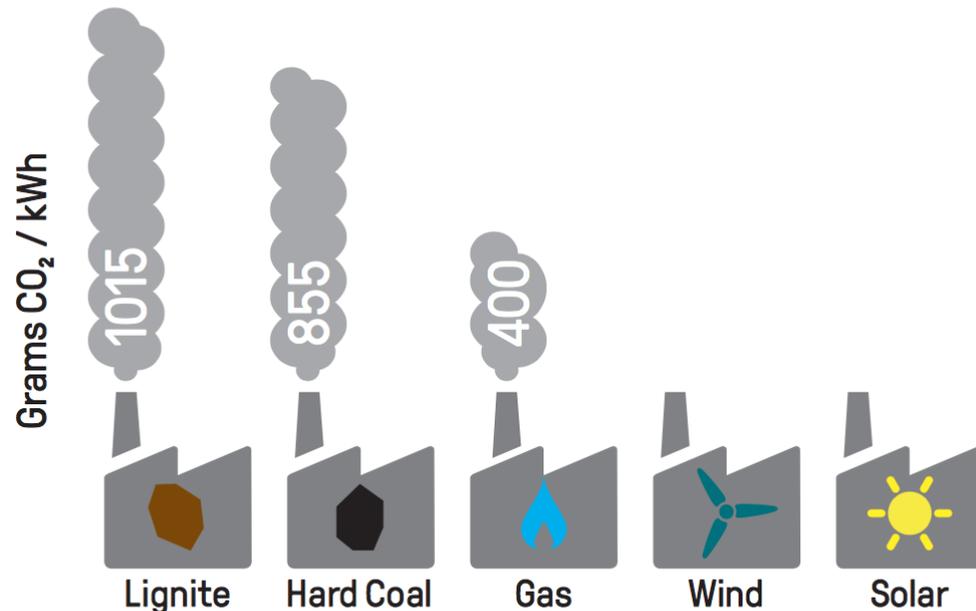
# Coal – the need for smart retirement

28 June 2017

Presented by Phil Baker

# We need to decommission coal - climate change & health imperatives!

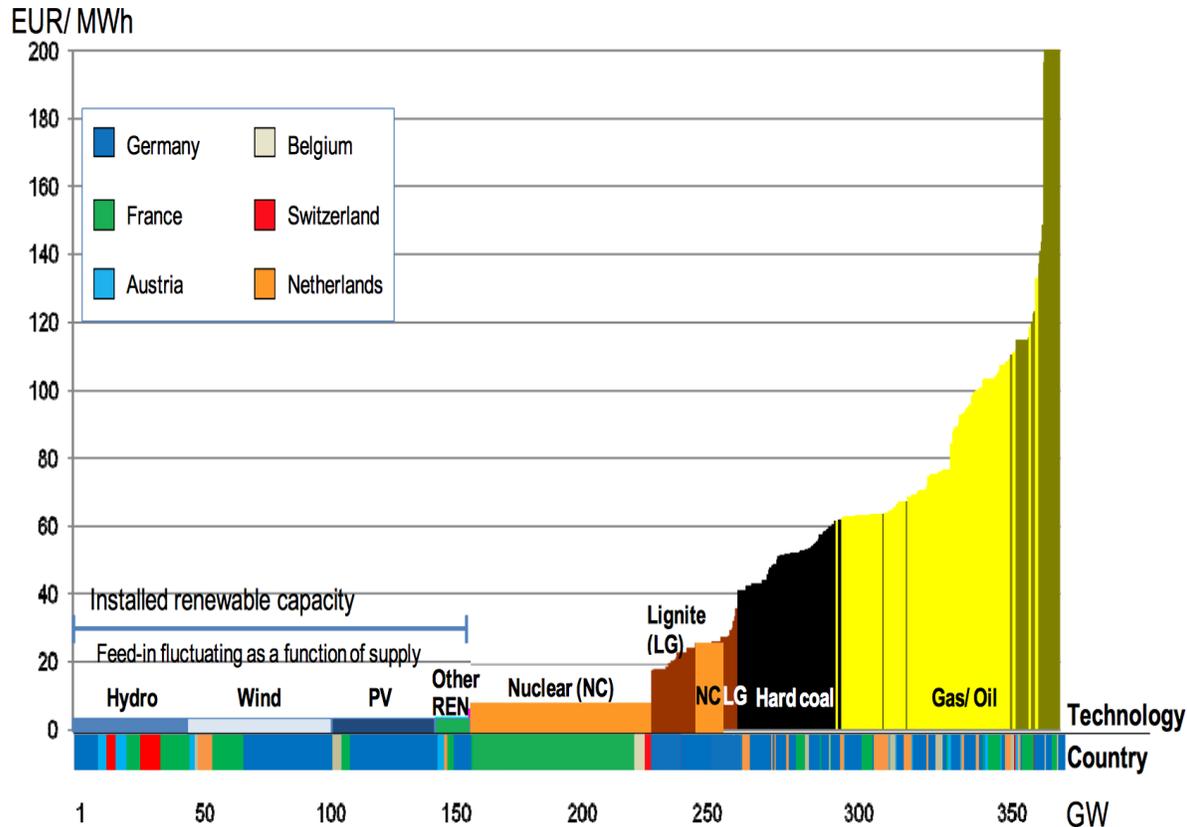
CO<sub>2</sub> emissions from coal are significantly higher compared to other energy sources



Source: IEA (2014): CO<sub>2</sub> emissions from fossil fuel combustion. Edition 2014, p.60.

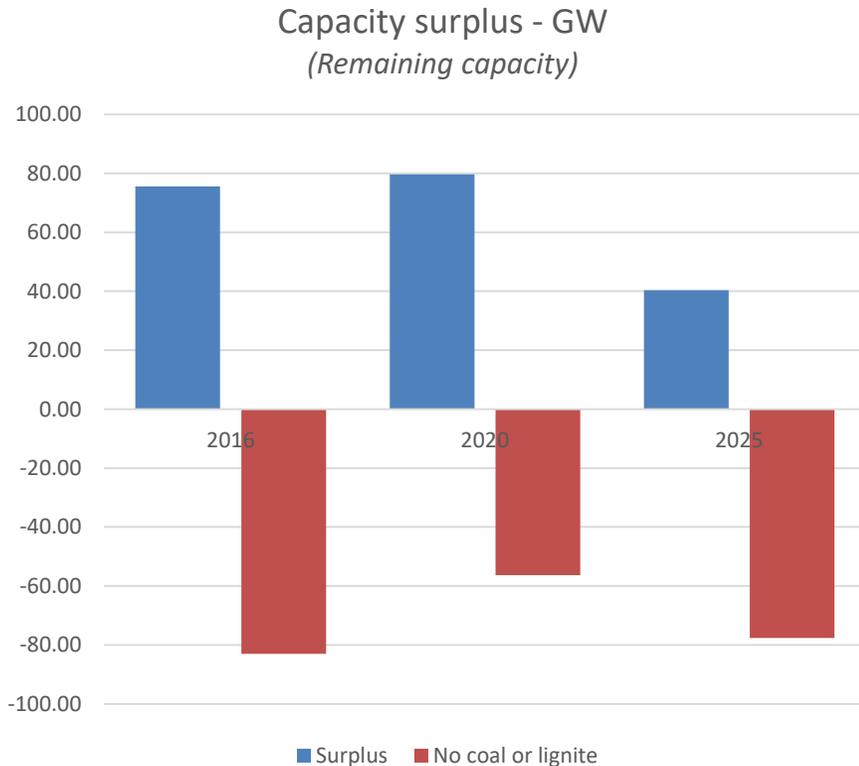
- Dirtiest way to produce electricity
- Not only CO<sub>2</sub>, but other pollutants as well
- To limit climate change to 2°C, IEA modelling shows that CO<sub>2</sub> emissions should halve by 2030.

# Market unlikely to get rid of coal on its own



- Coal sits below gas in the merit order
  - ETS has failed to displace coal
- Renewables replacing gas not coal
- Market redesign not the answer
  - Coal would benefit from scarcity pricing

# Europe has a capacity surplus



- Europe has a capacity surplus
  - Depressed energy prices
- However, surplus would be eliminated if all 160 GW of coal and lignite plant closed
  - Need for phased closures
  - Need for some replacement capacity

# Smart retirement strategy

- Coal & lignite phase out by specific date
  - Defined by MS specific circumstances, jobs, pension funds, local issues
  - Give developers time and confidence to invest in replacement plant, renewables & gas
- An example - UK intention to phase out coal by 2025
  - Progress made, some “no coal” days this year, wind generated more energy than coal in 2016
  - CM to deliver replacement plant
  - Intention conditional on maintaining supply security, the “how” is not yet clear.

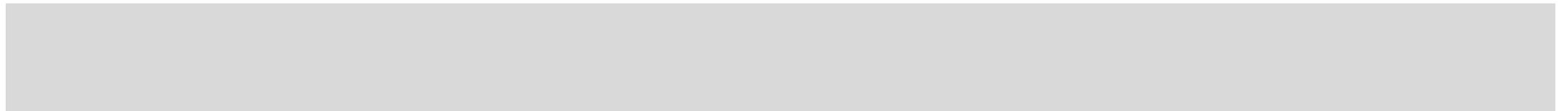


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- Promote economic efficiency
- Protect the environment
- Ensure system reliability
- Allocate system benefits fairly among all consumers

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Beijing, China • Berlin, Germany • **Brussels, Belgium** • Montpelier, Vermont USA • New Delhi, India  
rue de la Science 23 • B - 1040 Brussels • phone: +32 2 894 9300

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