

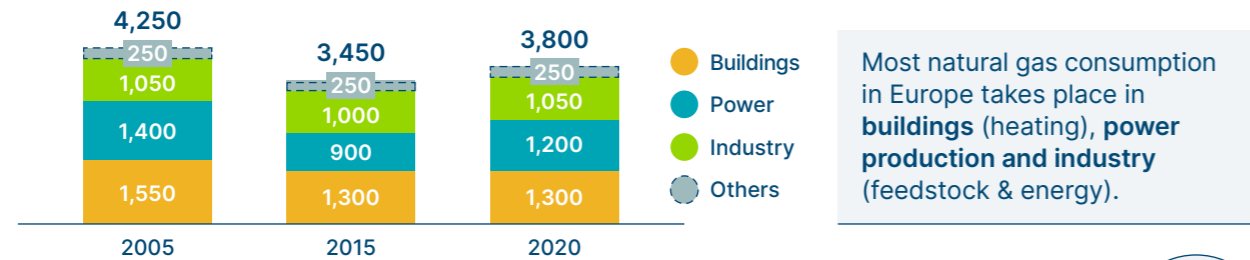
What you need to know about...

How energy efficiency and demand reduction can reduce fossil fuel use



What is the role of gas in Europe?

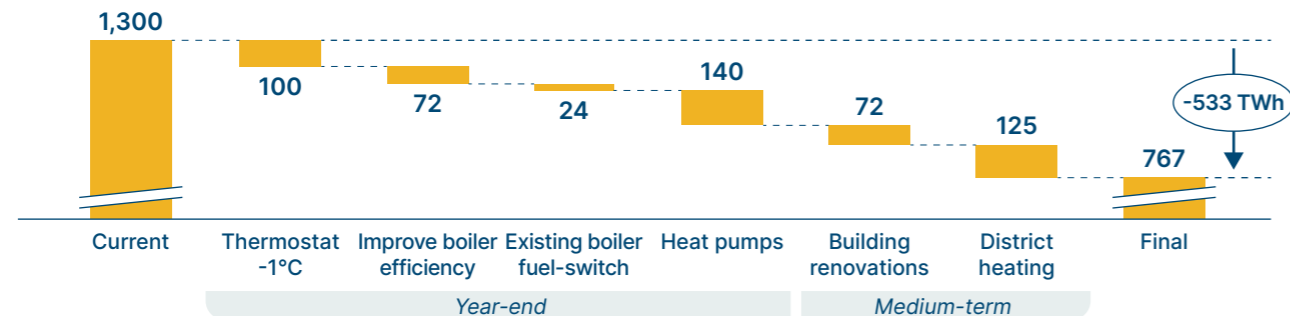
Repatriation of natural gas consumption in Europe across sectors - in TWh of gas equivalent per year



How can demand for gas be reduced in buildings with no impact on comfort?

Natural gas demand in buildings can be reduced significantly with limited to no impact on the comfort of occupiers through short-term actions.

Contribution of actions to reduce natural gas demand in households - in TWh of gas equivalent per year



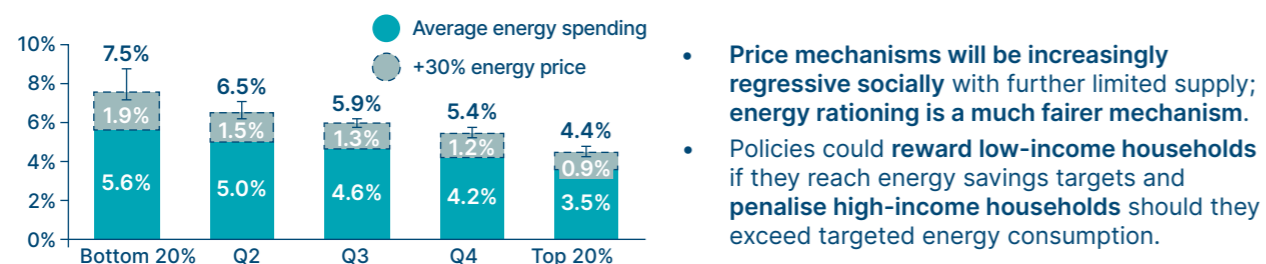
How can behaviour change in buildings be incentivised by governments?

1 Governments can incentivise behavioural change from building occupiers (households, businesses and administration).

- Financial incentives:** grants for energy savings or fuel-switching-related investments, tax breaks on energy-efficient items, support for low-carbon heat development.
- Non-financial incentives:** information / training campaigns, mandatory energy audit of households, stringent energy rating systems for appliances, installation of real-time energy and price information.

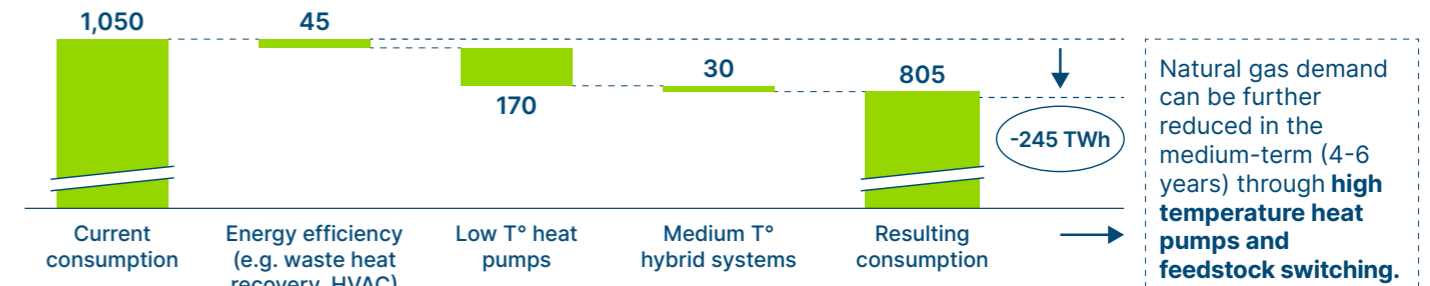
2 Policy design to promote behaviour change must account for distributional effects as low-income households are more exposed to energy price increases.

Share of energy spendings (excl. vehicle fuel) as a function of total disposable income of households, per income quantile



How can demand for gas be reduced in the industry?

Contribution of actions to reduce natural gas demand in industry in 1-2 years - in TWh of gas equivalent per year



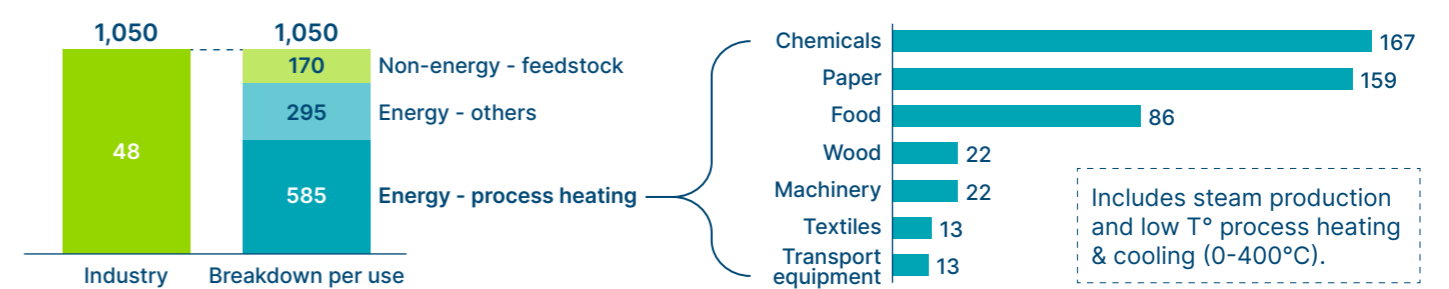
Unlike buildings, the potential for natural gas demand reduction in the industry is more limited as it requires alternative technology development rather than changing behaviours. Short-term switch to alternative energy sources for process heating can deliver significant demand reduction.

How can industrial natural gas uses be prioritised to further reduce demand?

1 Some sectors can electrify process heating needs, today met by natural gas.

~55% of natural gas demand in the industry is used for process heating in Europe. Technologies to electrify low-temperature heat supply in the industry are already mature, and can displace a significant amount of natural gas demand, depending on sector.

Industrial natural gas consumption in Europe - TWh



2 Industrial plants across sectors can be operated with a varying degree of flexibility, depending on the availability of natural gas supply.



3 Economic losses from supply disruptions can be minimised by favouring sectors with a high contribution to the economy relative to natural gas consumption.

Gross value added per unit of natural gas consumption - in M€/ktoe

