



BP Energy Outlook

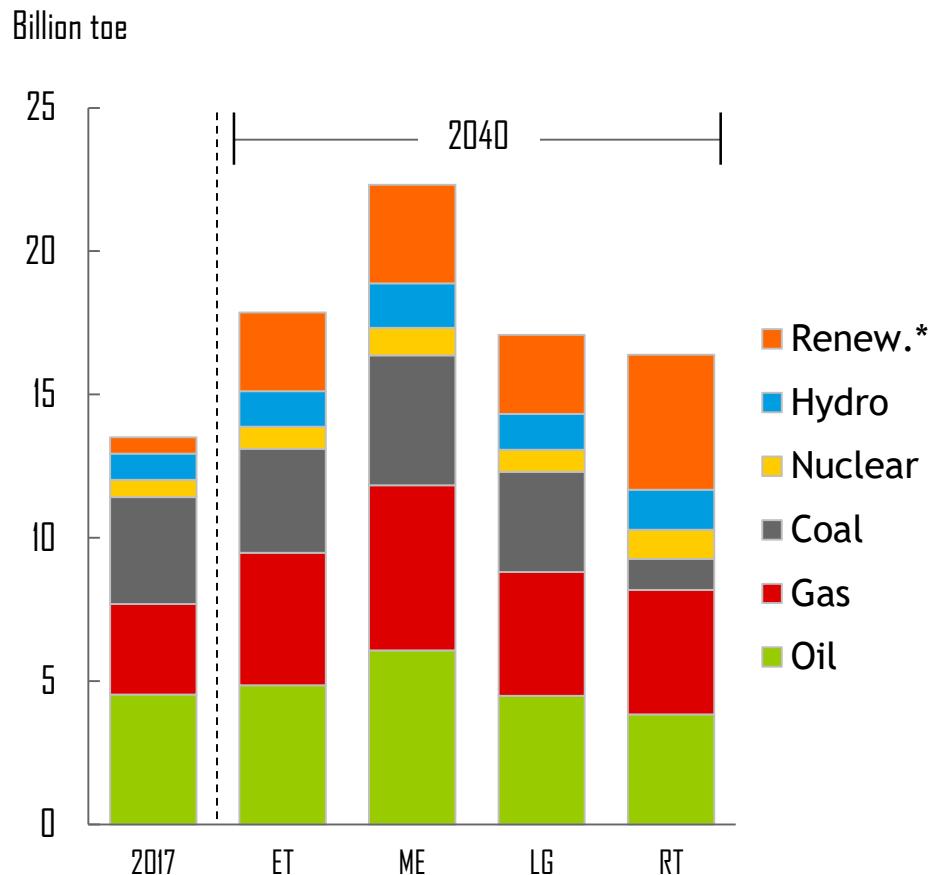
2019 Edition



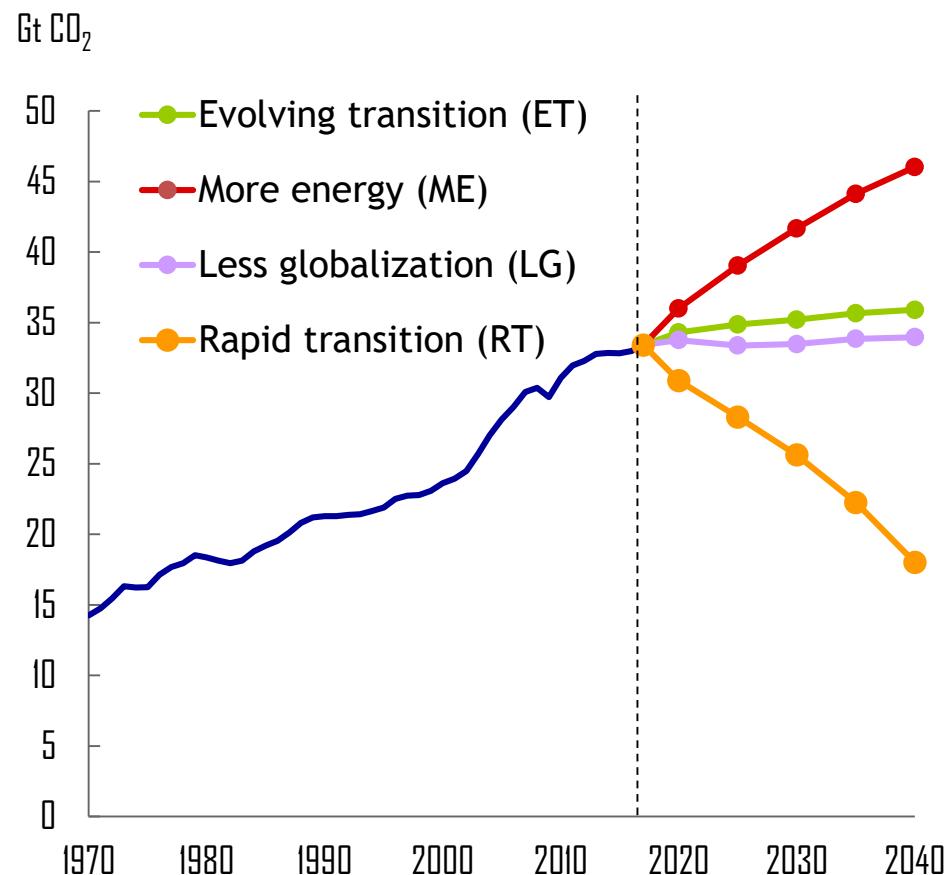
Anne-Sophie Corbeau
Head of gas analysis

The *Energy Outlook* scenarios

Primary energy consumption by fuel



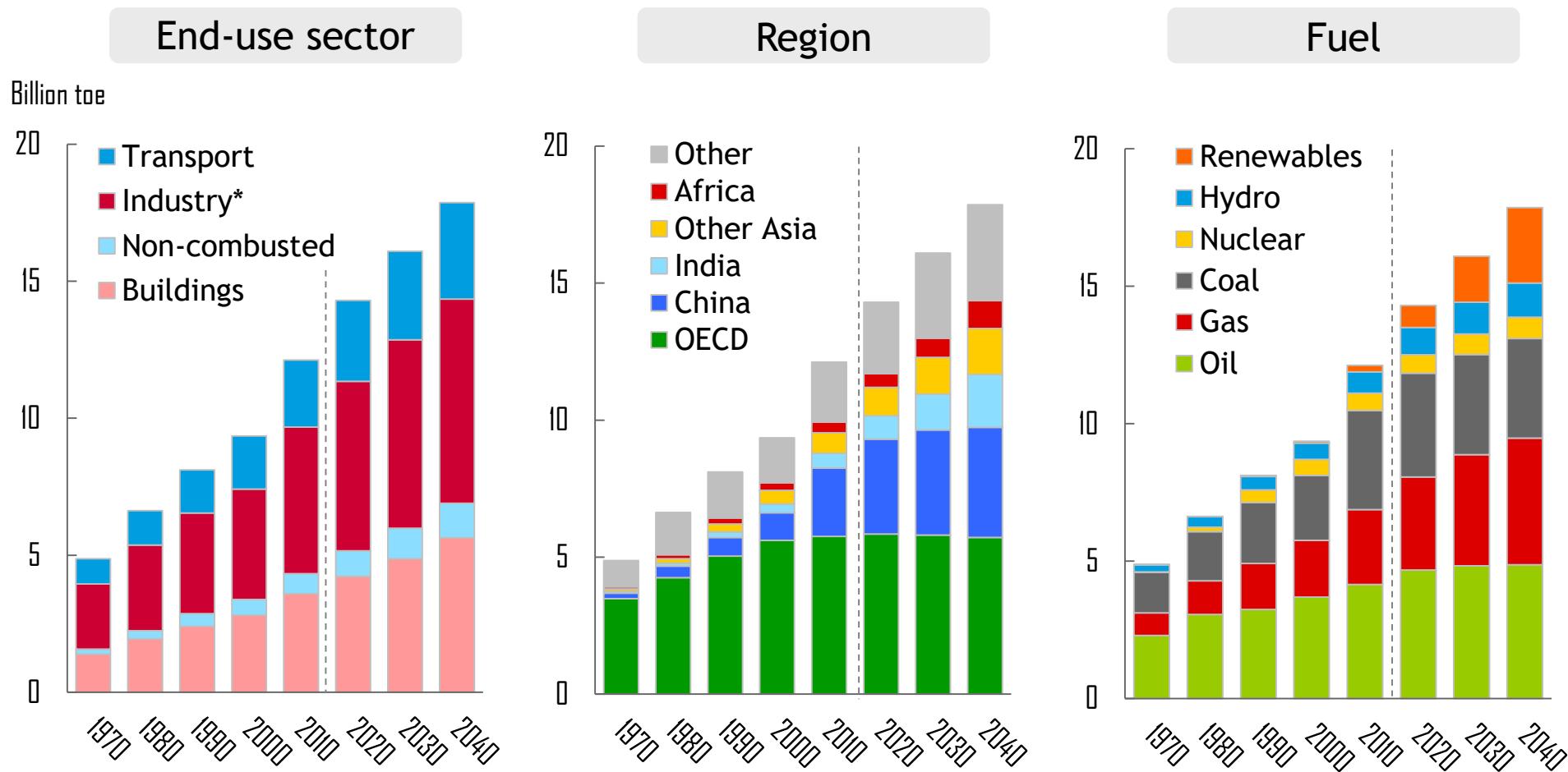
CO₂ emissions



*Renewables includes wind, solar, geothermal, biomass, and biofuels.

Three windows on the energy transition

Primary energy demand (ET scenario)

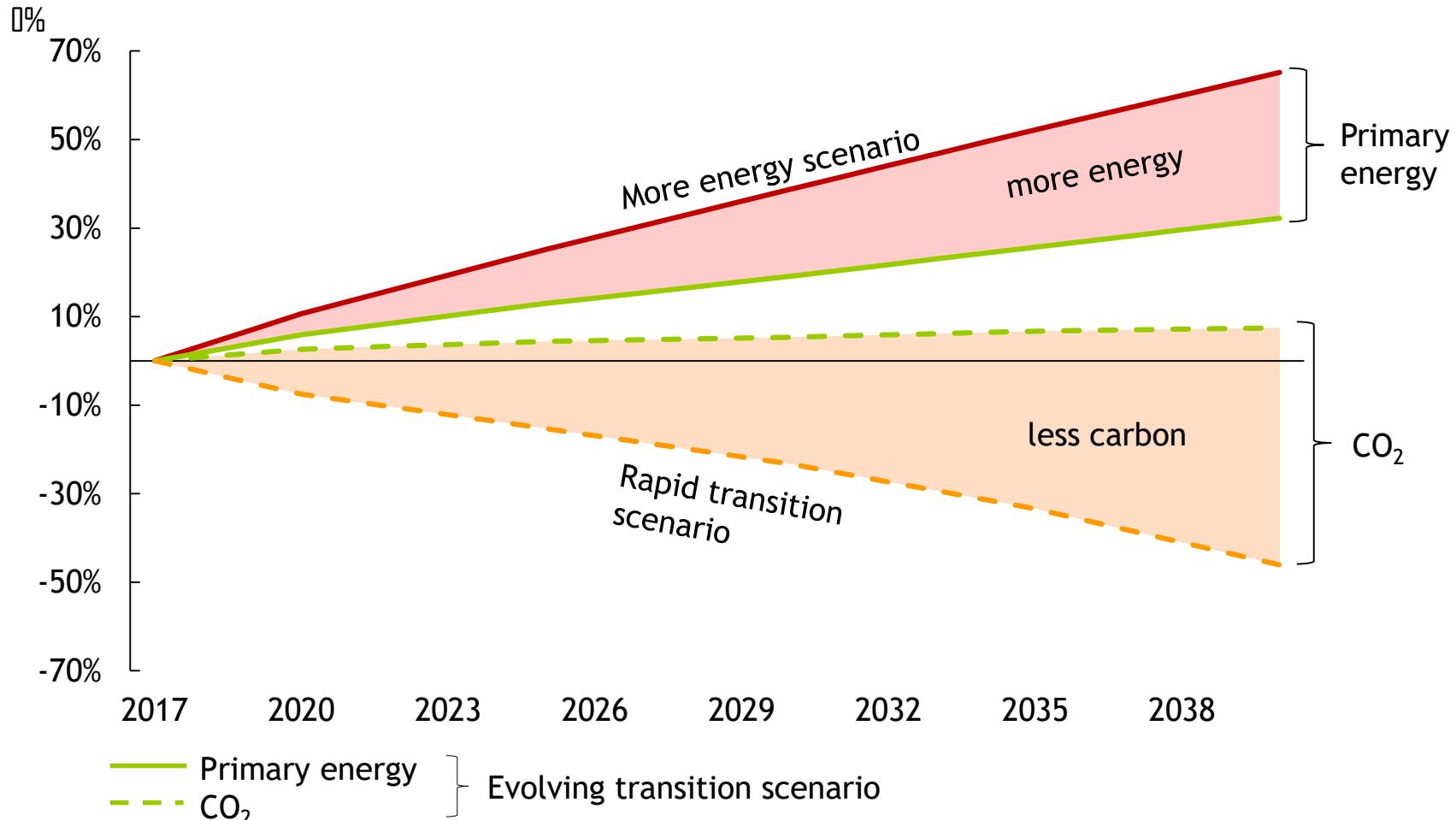


*Industry excludes non-combusted use of fuels

The global energy system faces a dual challenge

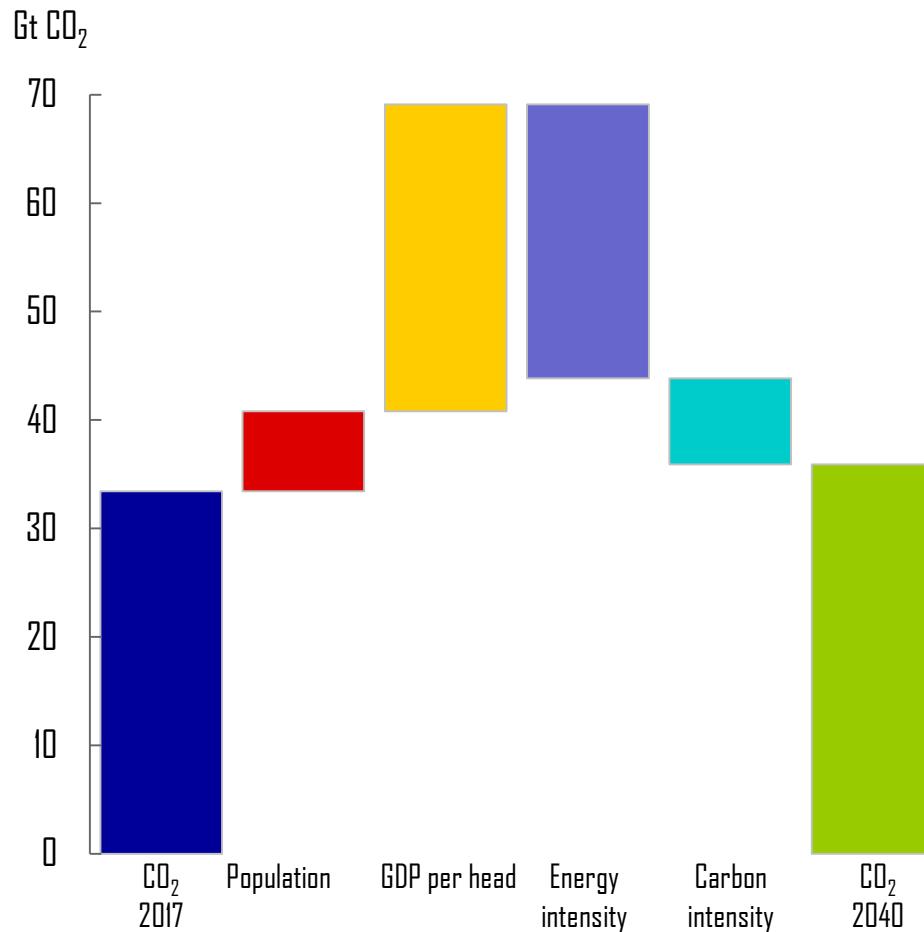
Primary energy demand and carbon emissions

Cumulative growth rate 2017 =

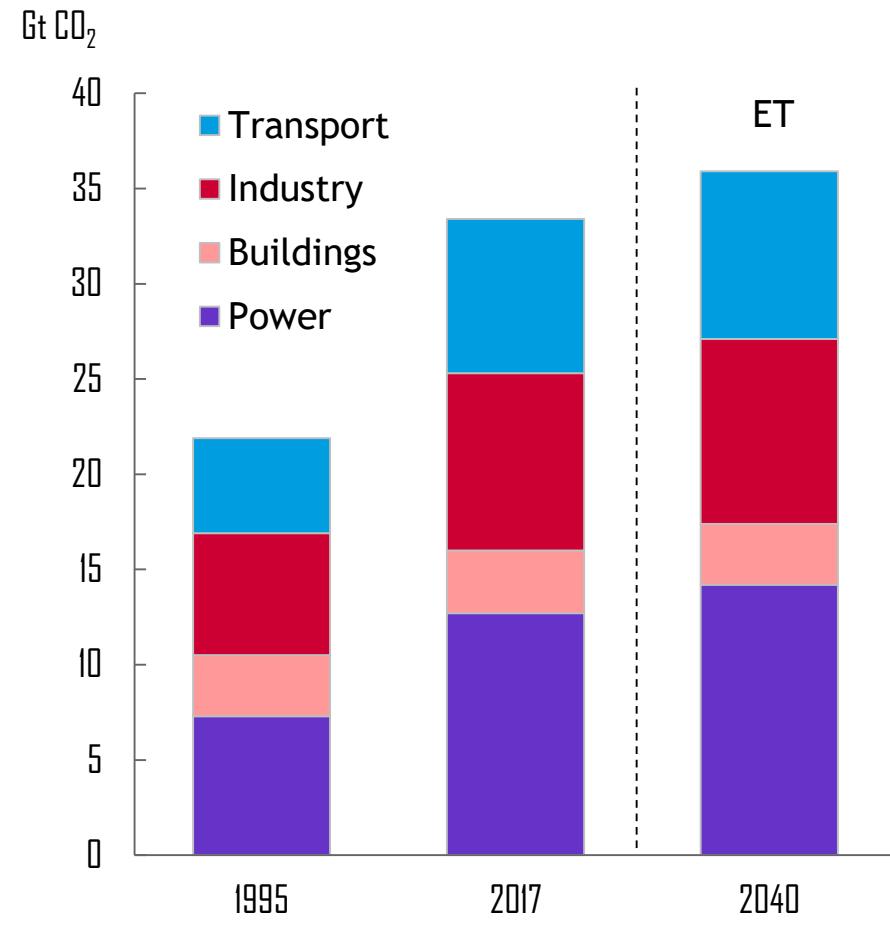


Carbon emissions increase further in the ET scenario

CO₂ emissions in ET scenario,
2017-2040

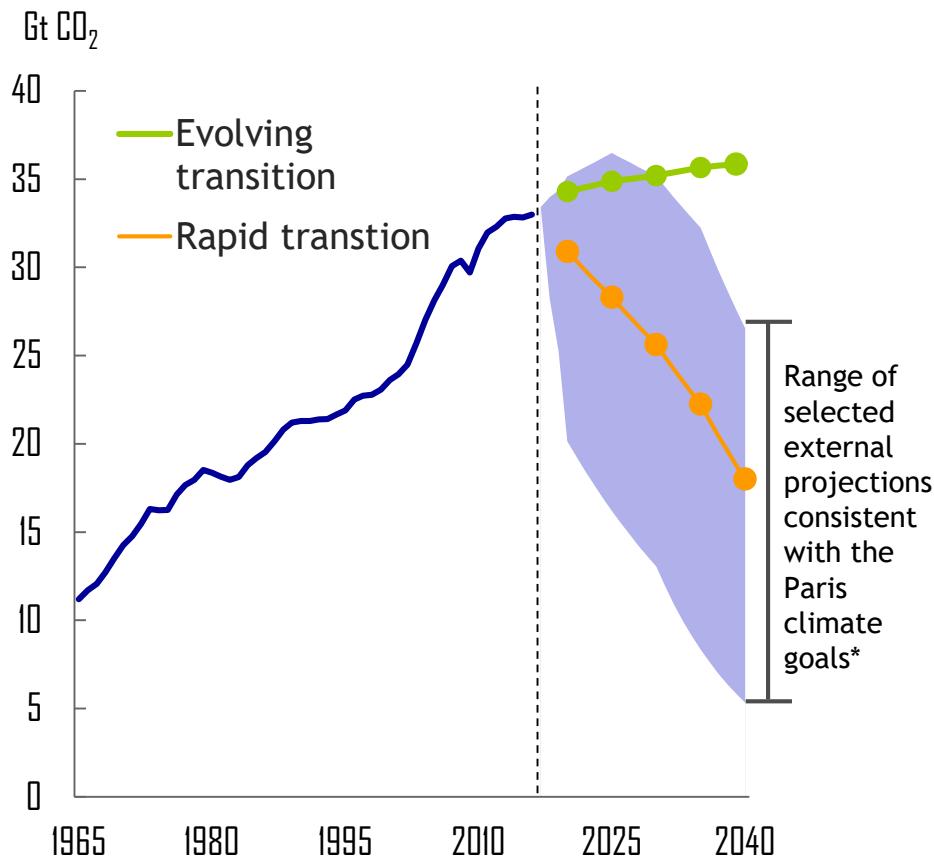


CO₂ emissions by sector

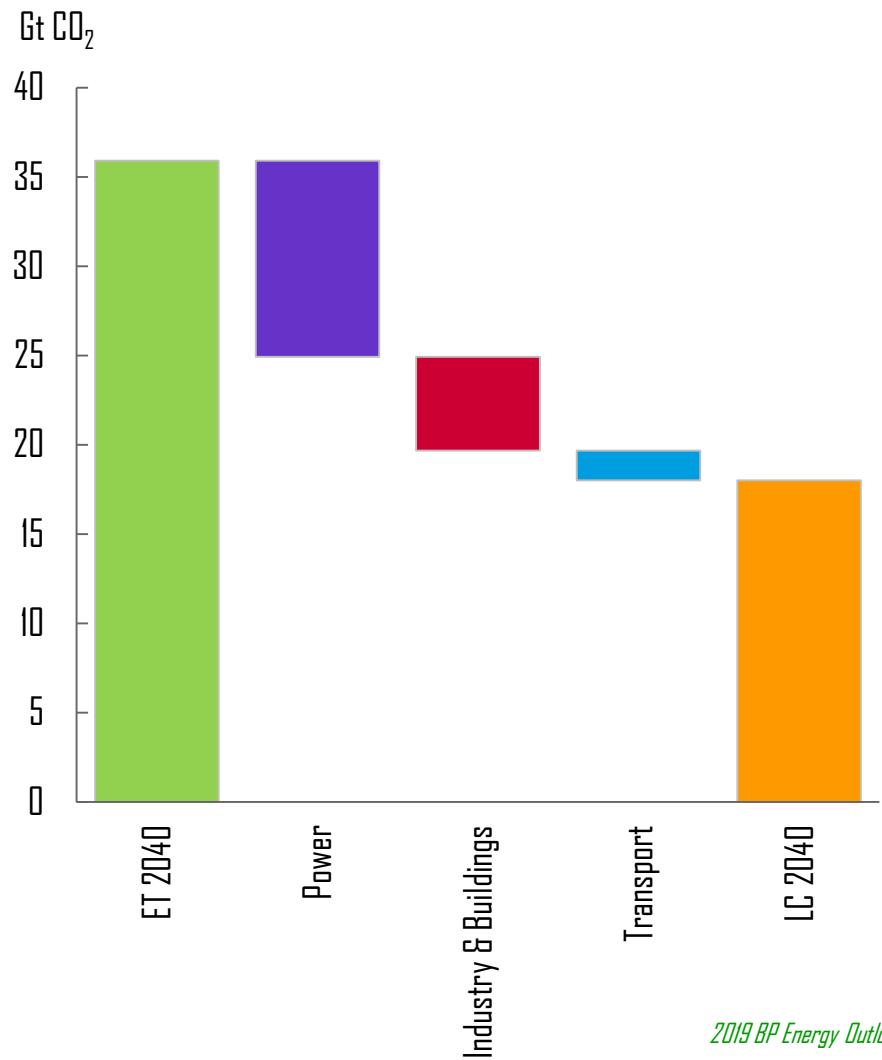


Alternative scenario: a more rapid transition (RT)

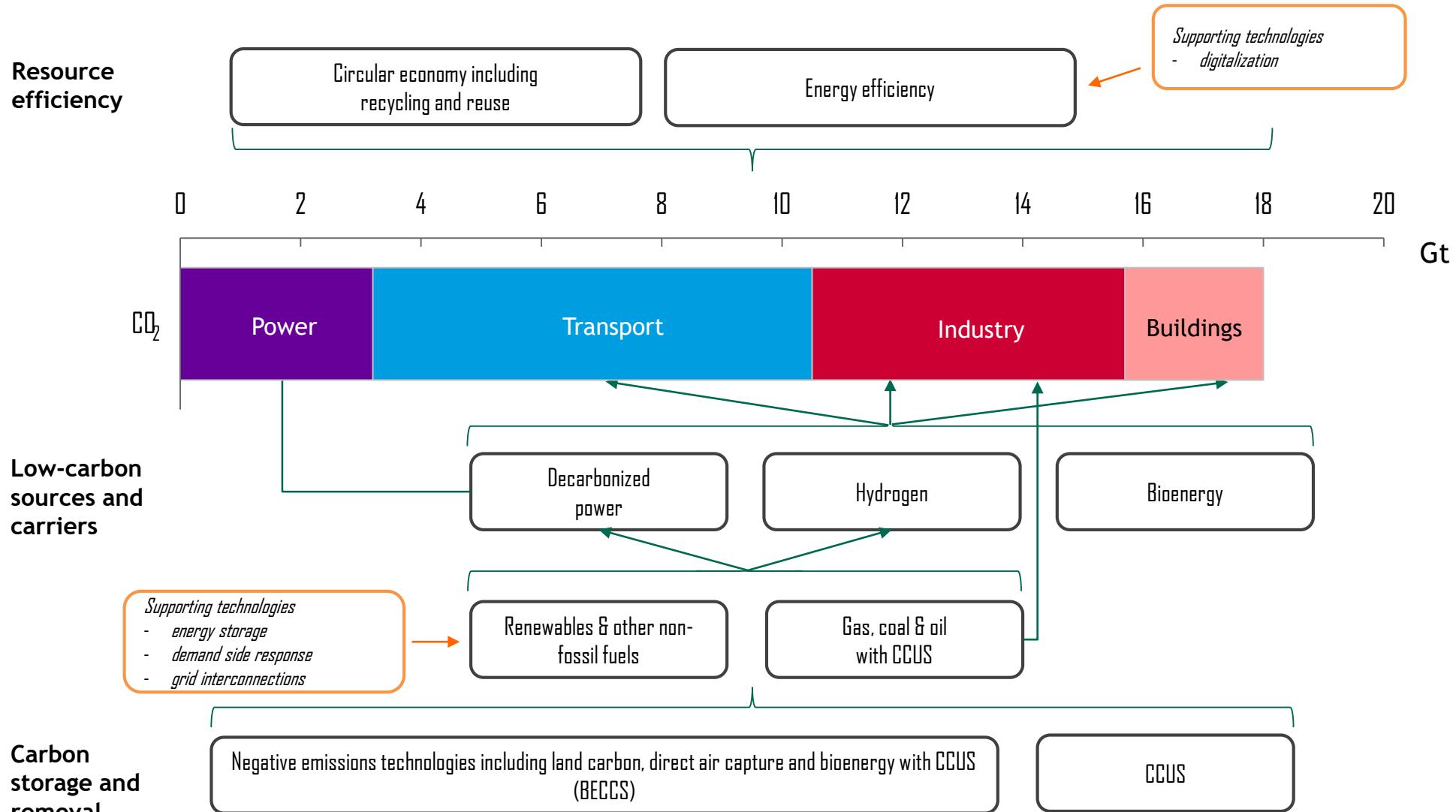
CO₂ emissions



CO₂ in 2040: ET vs RT scenario

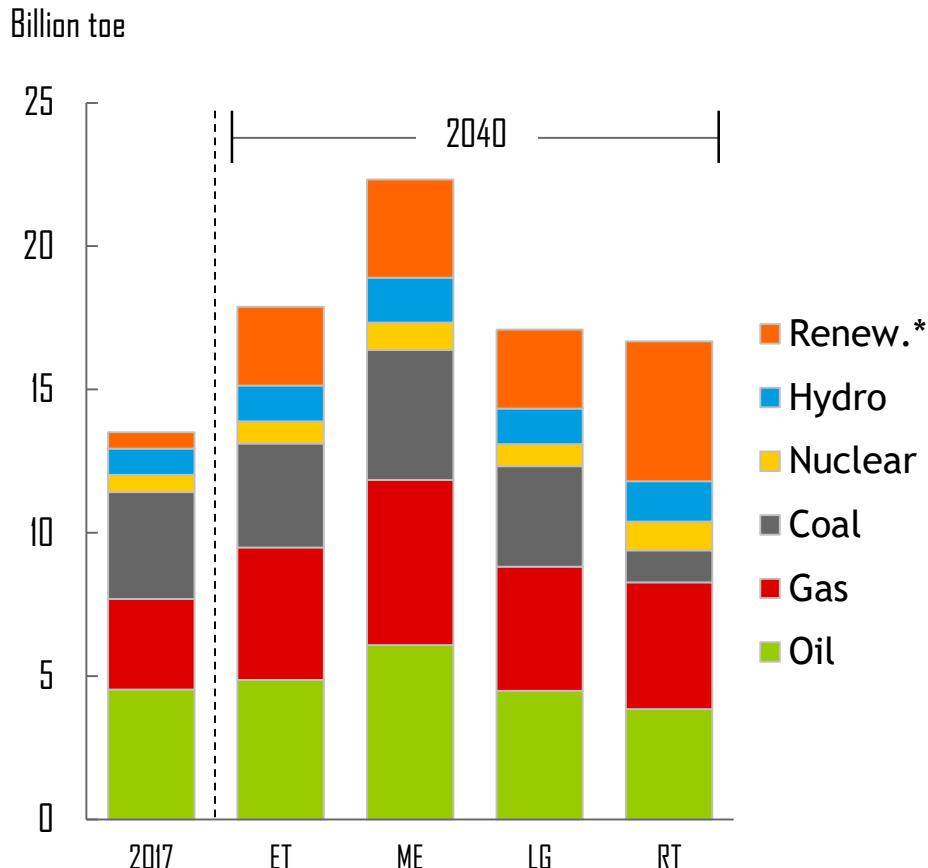


Reducing emissions further is likely to require a wide range of improvements and changes

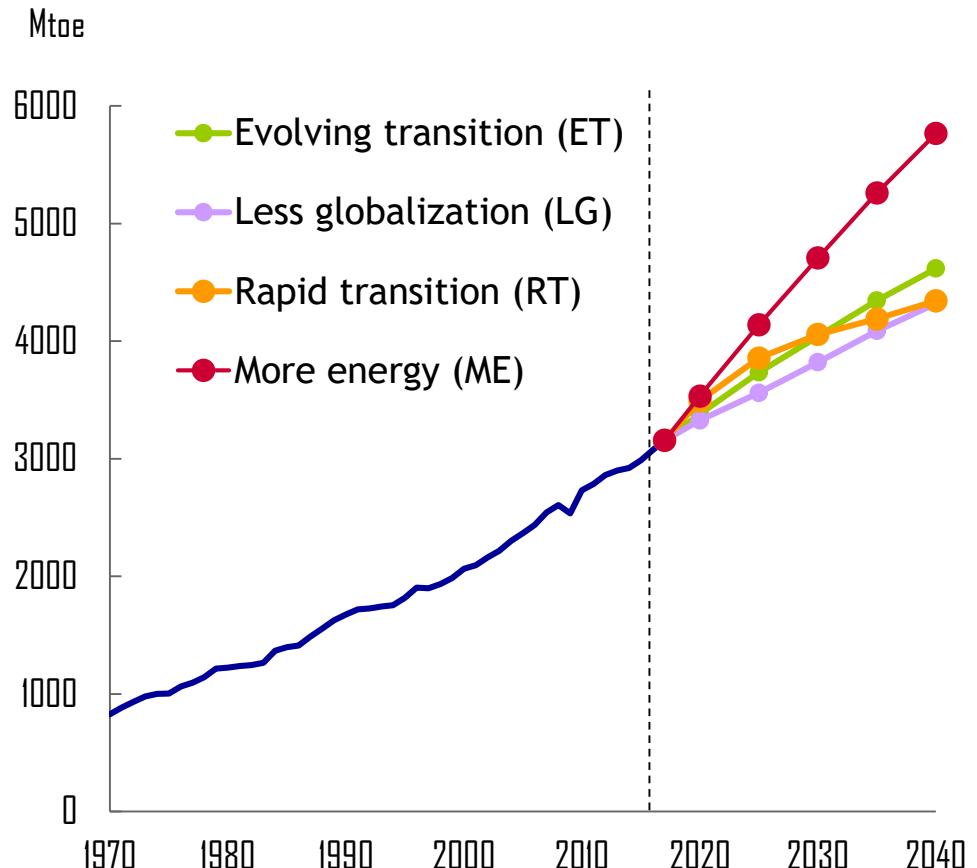


Different scenarios' implications for gas demand

Primary energy consumption by fuel



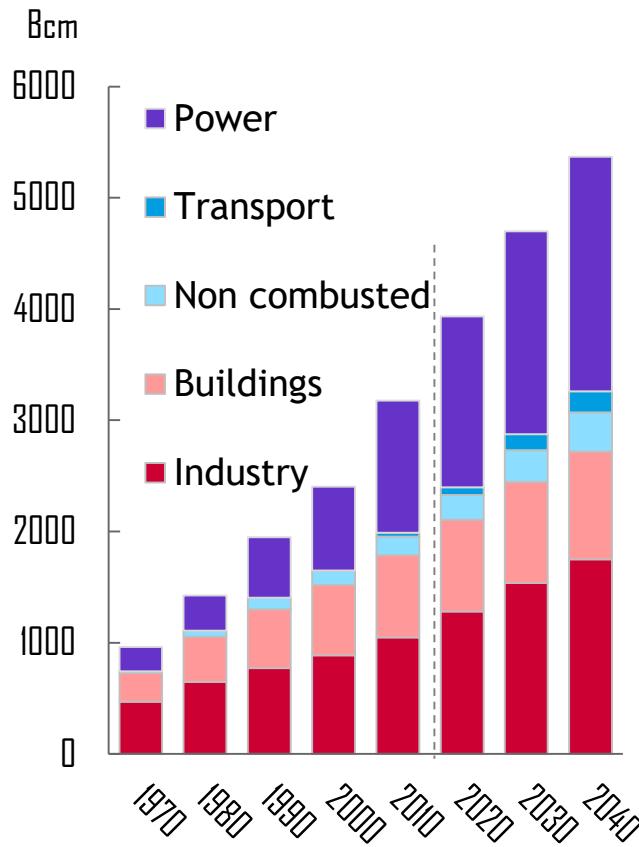
Gas demand



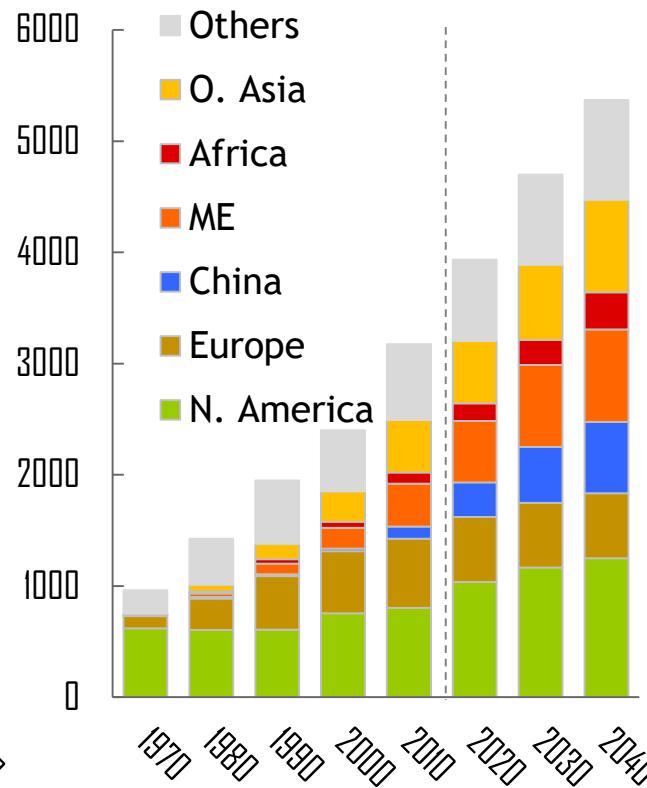
Looking at gas demand from different perspectives

Gas consumption (ET scenario)

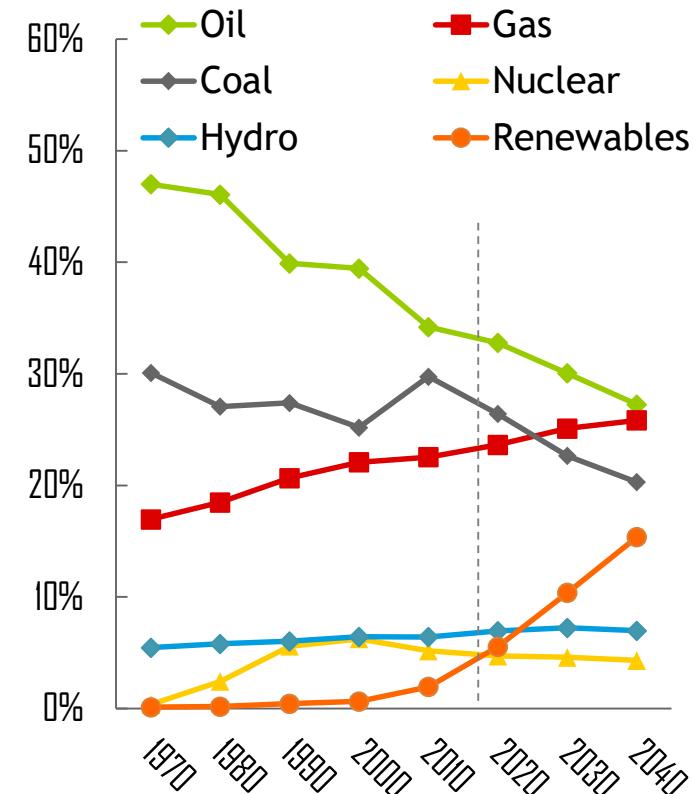
End-use sector



Region



Shares



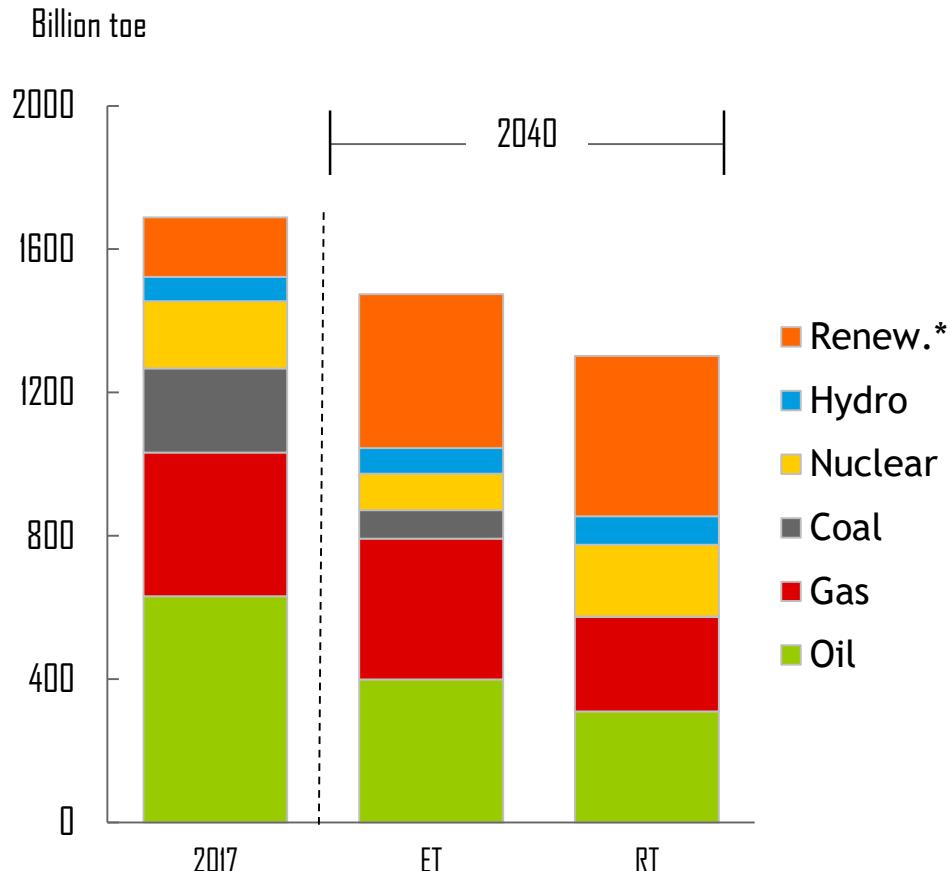
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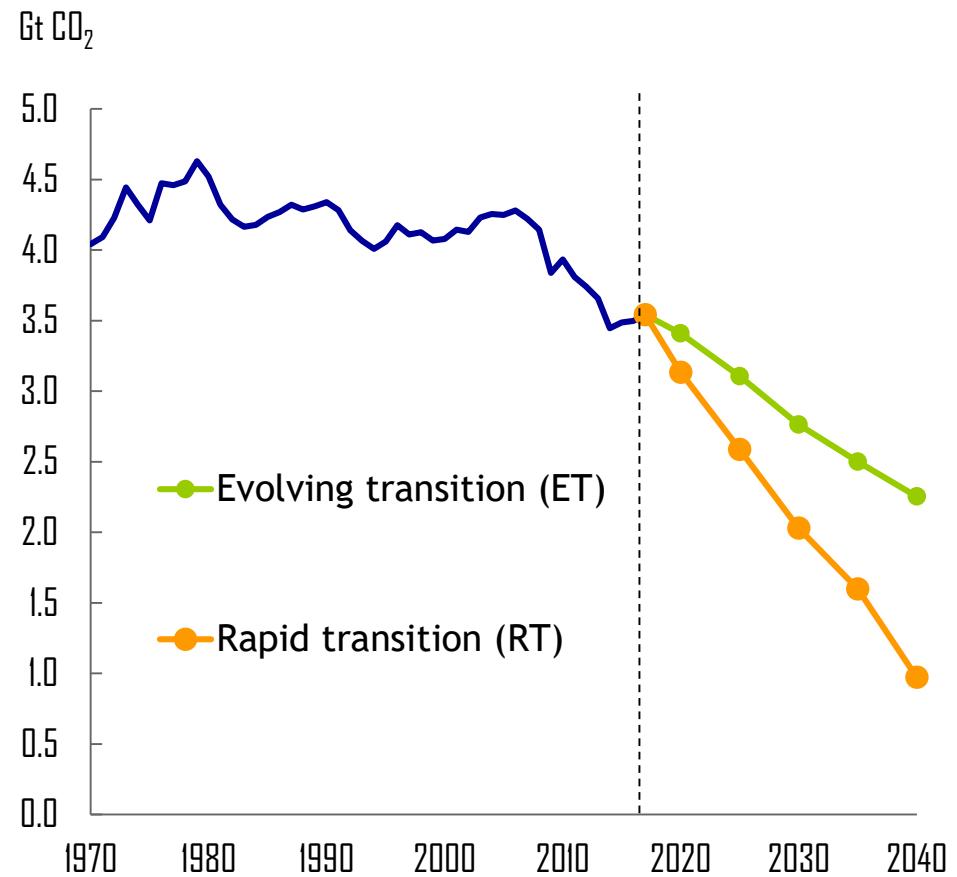
Implications for Europe

The *Energy Outlook* scenarios: EU energy demand declines

Primary energy consumption by fuel



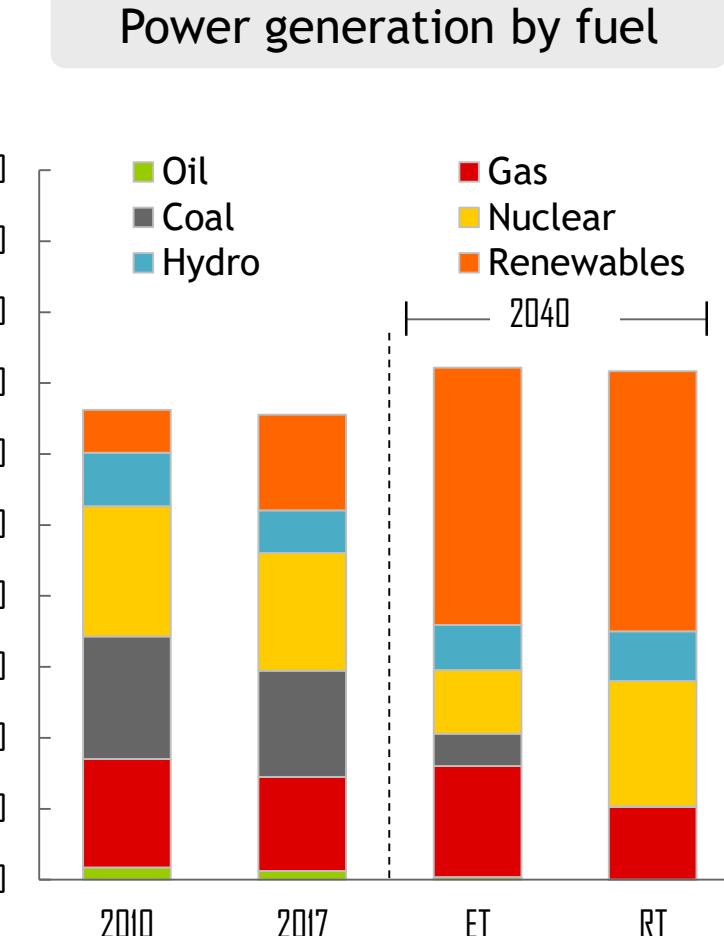
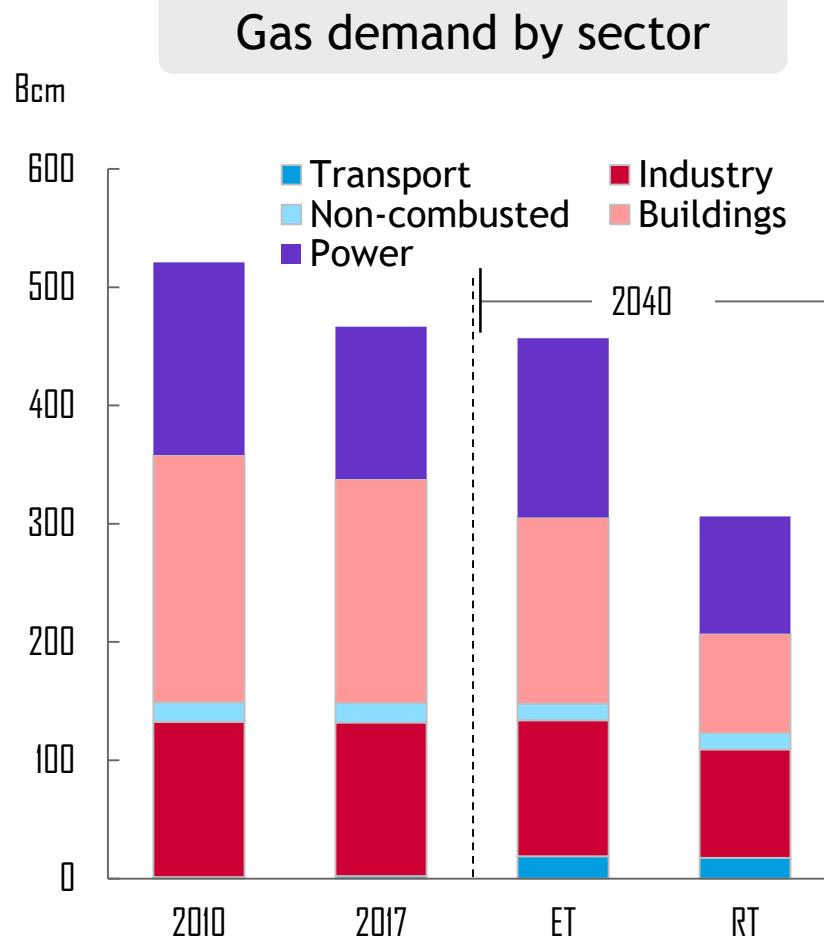
CO₂ emissions



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And so is EU gas demand

Gas demand and power generation





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