

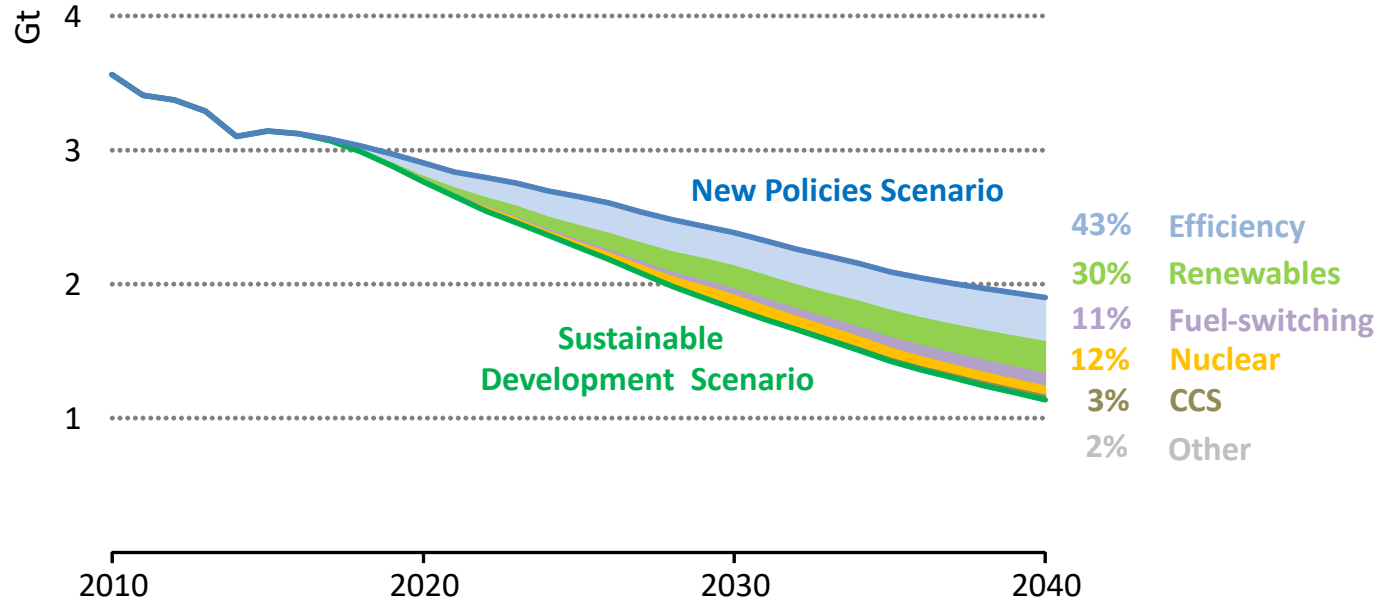
World Energy Outlook 2017

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Trondheim, 27 February 2018

A wide range of technologies needed to cut emissions

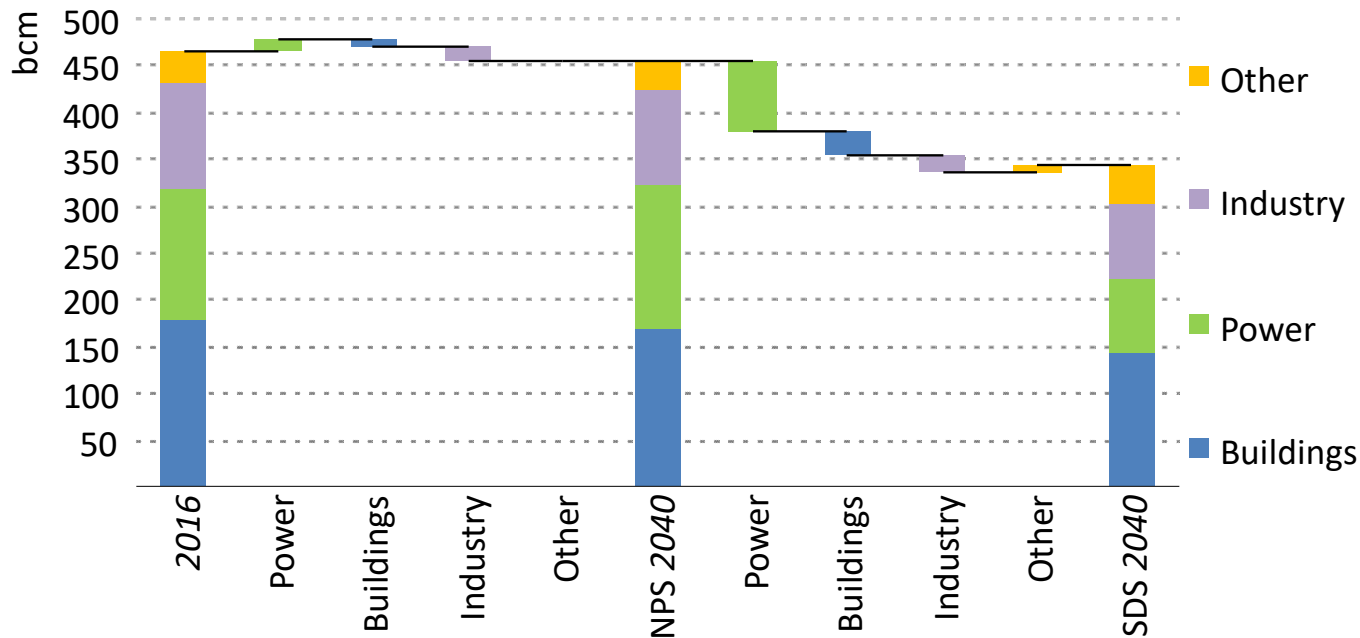
Decomposition of CO₂ emission reductions between the NPS and SDS in the European Union



In the New Policies Scenario CO₂ emissions fall by 40% over the next 25 years; cutting emissions further requires a concerted push of all available decarbonisation options

Climate policies have a marked impact on EU gas use

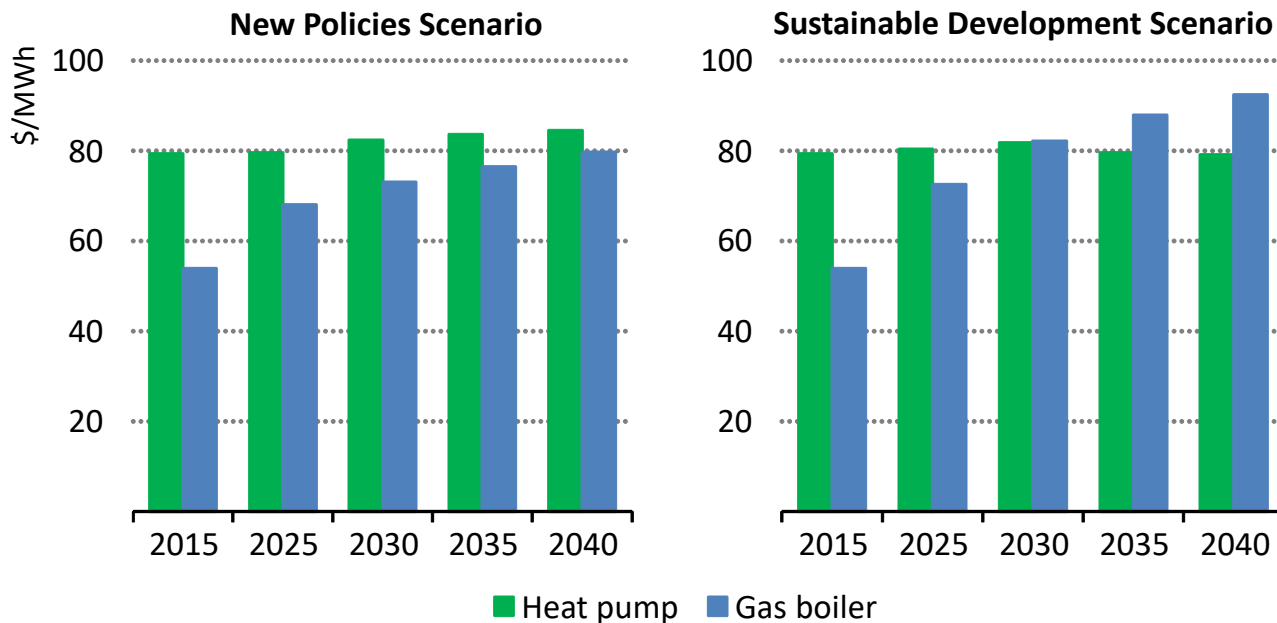
Change in gas demand in the European Union by sector and Scenario, 2016-2040



Buildings remains the largest gas consuming sector in the EU; power sector gas use faces the biggest policy uncertainty in the long run

Electricity is a key competitor for gas in industry

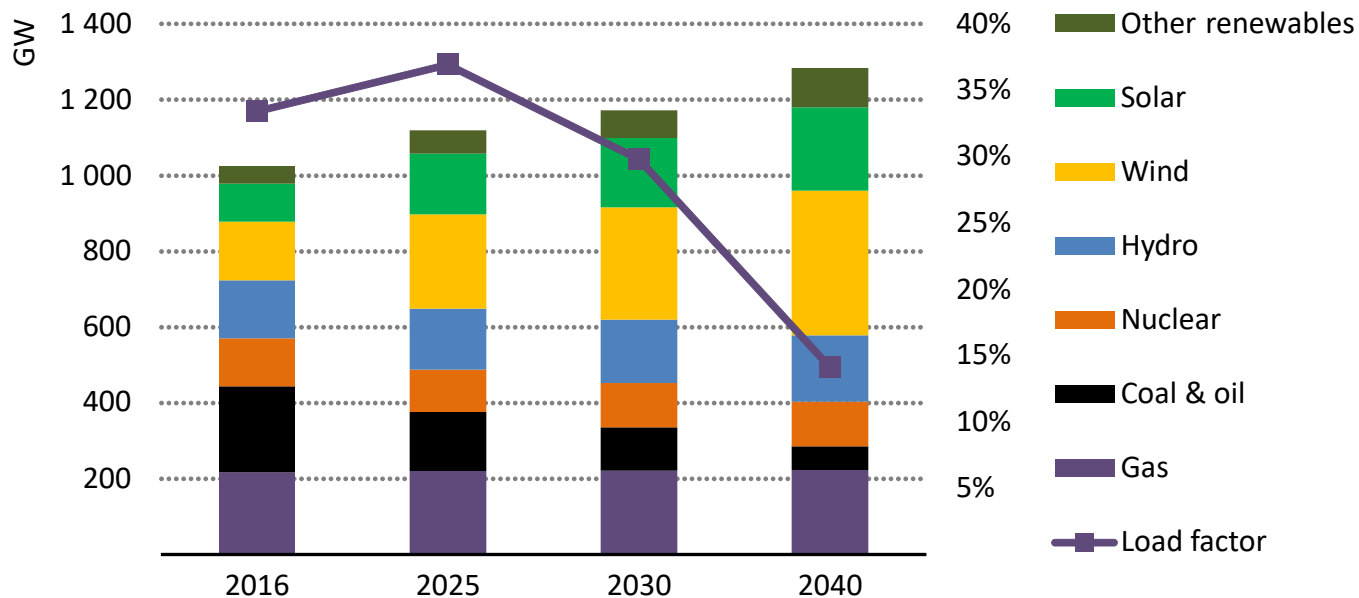
Low temperature heat production cost in the European Union by scenario



Industrial gas demand falls by 30% in the Sustainable Development Scenario as alternative technologies become competitive

Variable renewables require flexibility

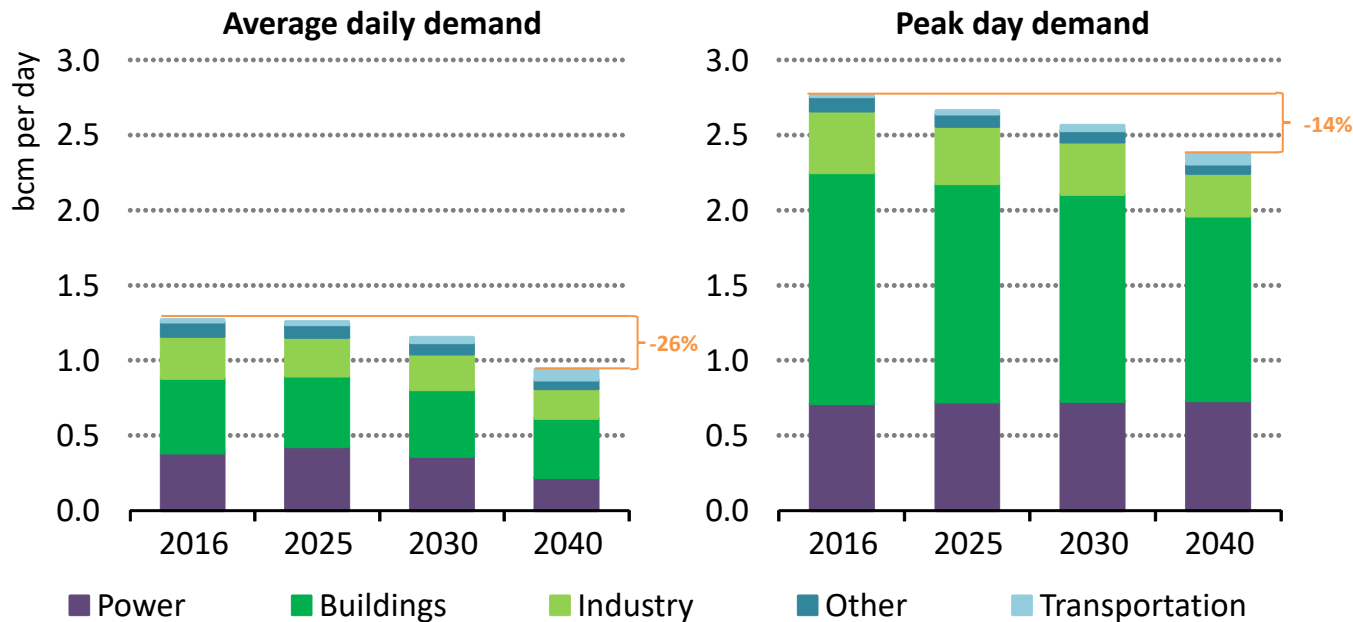
Power generation capacity in the European Union in the Sustainable Development Scenario



Installed gas capacity stays at around 220 GW but utilisation drops strongly over time

Gas infrastructure is key for providing flexibility

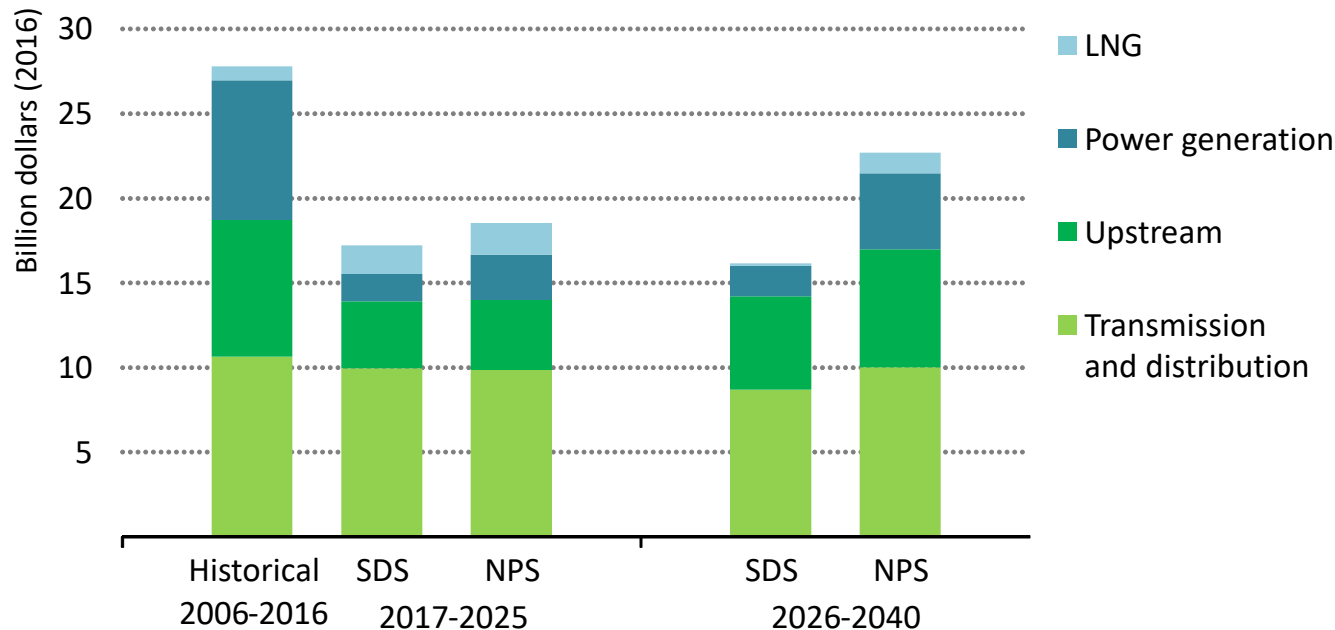
Average and peak day gas demand in the European Union in the Sustainable Development Scenario



Although gas demand falls markedly in the EU, gas T&D infrastructure needs remain high, to reliably supply consumers on dark, cold and windless winter days

Continued investment into gas infrastructure needed

Annual average investment into gas infrastructure by scenario in the European Union



*Repair and maintenance investments in the EU's gas network
are not very sensitive to climate policies*



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