



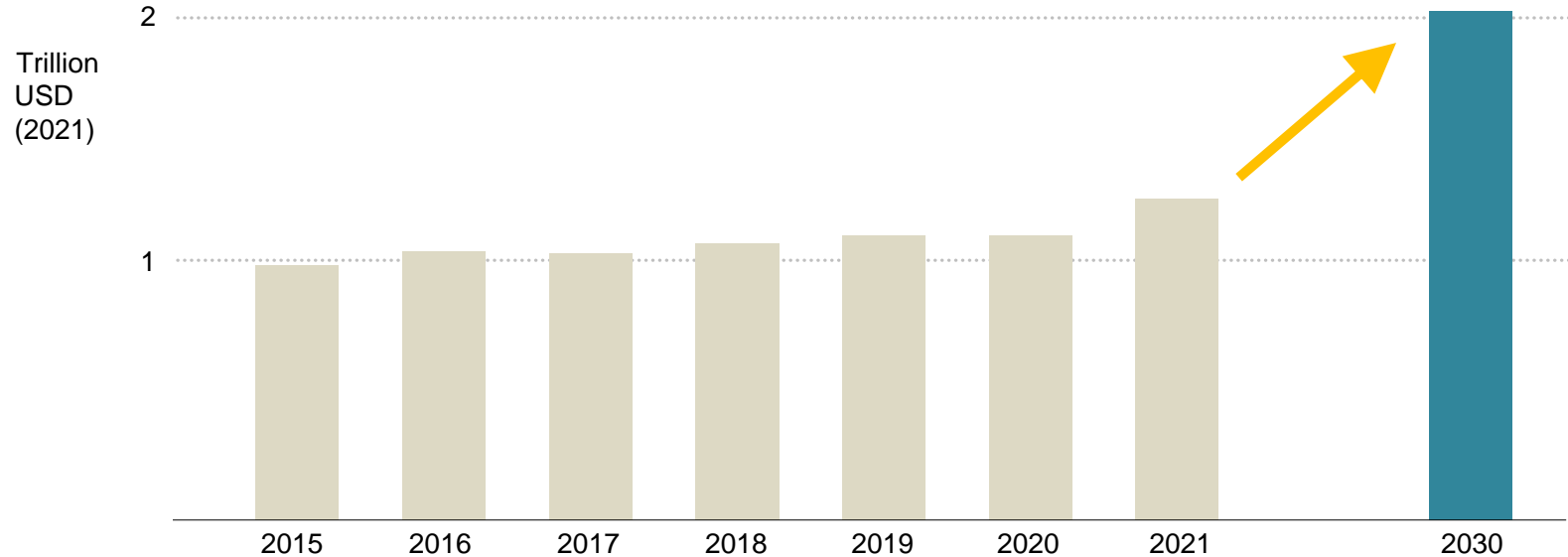
World Energy Outlook 2022: Global state of affairs and perspectives for Europe's decarbonisation

Laura Cozzi, Chief Energy Modeller

Franco-German Energy Forum, 24 November 2022

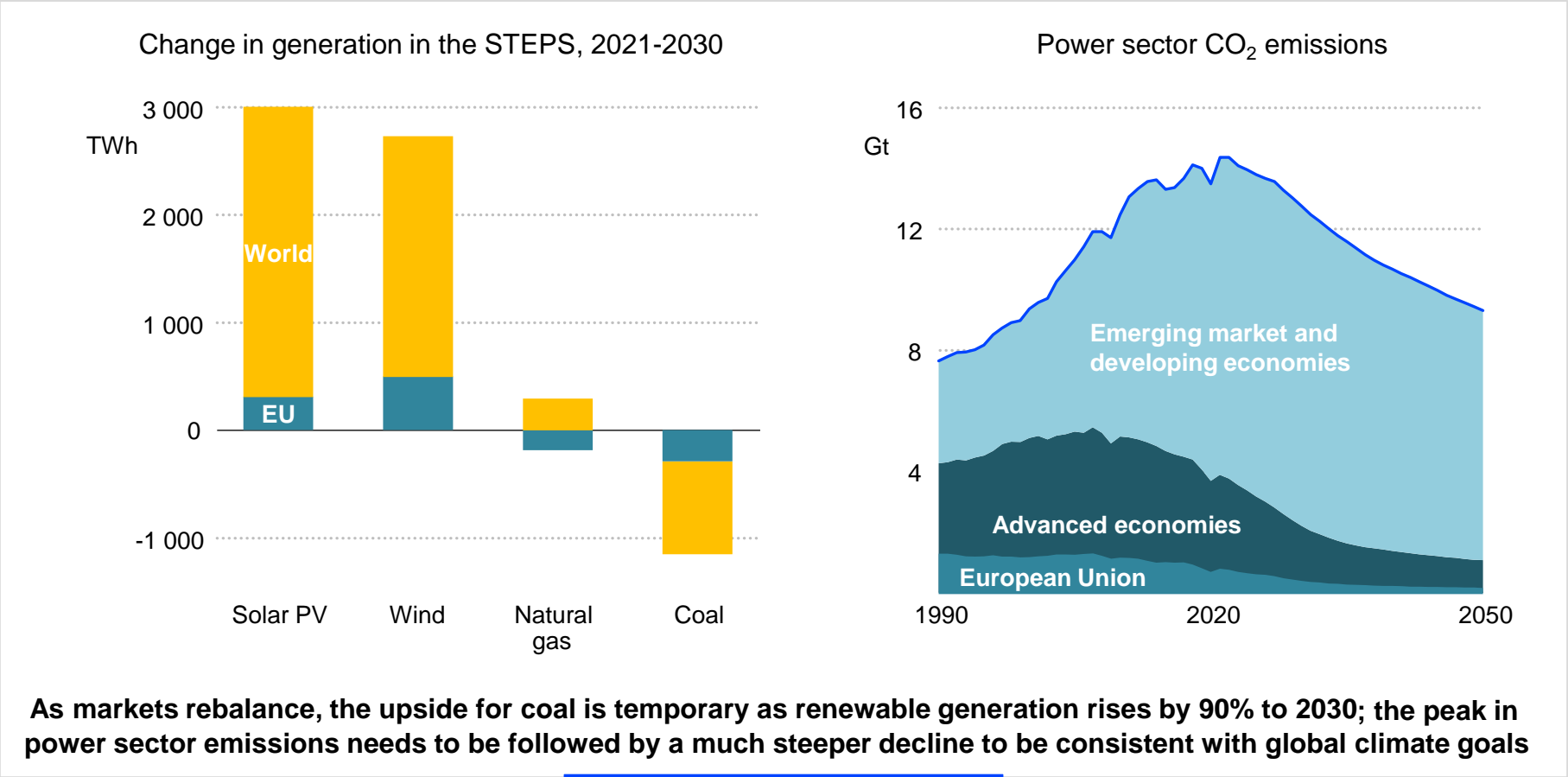
Government responses are fast-tracking the clean energy economy

Clean energy investment in the Stated Policies Scenario



The US Inflation Reduction Act, the EU's Fit for 55 package, Japan's GX, China's new clean energy targets and India's solar revolution propel clean energy investment to new highs, but \$4 trillion is needed by 2030 to be on track for 1.5 °C

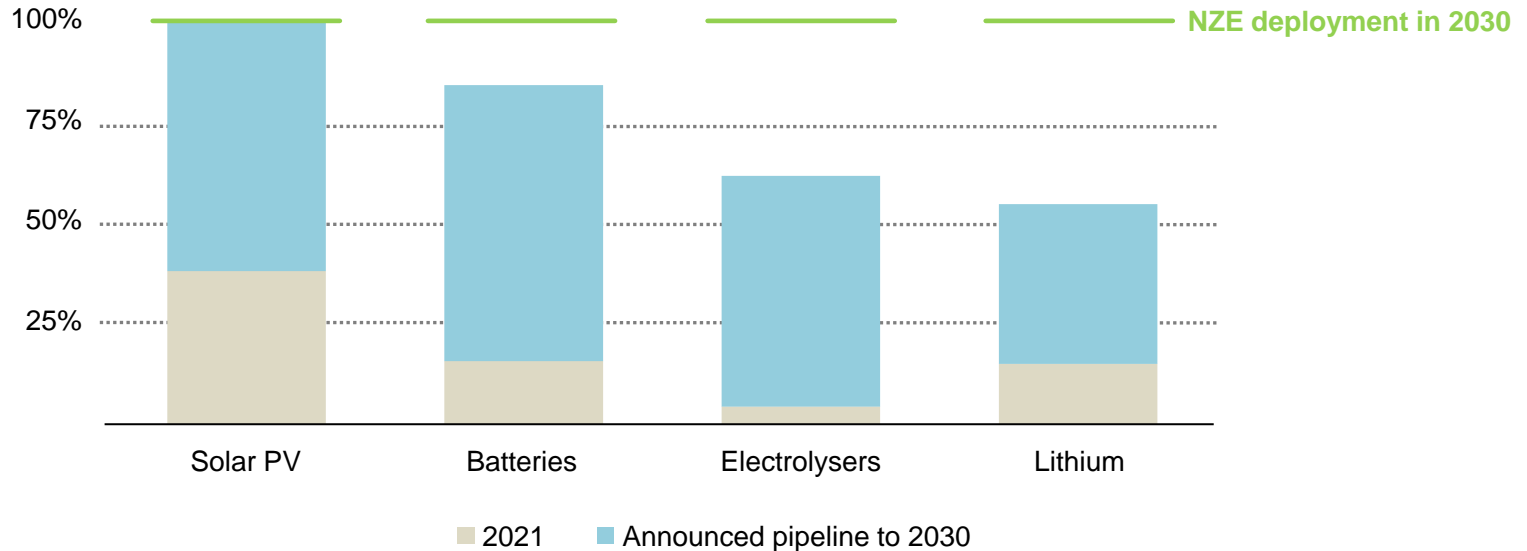
Electricity is turning the corner



As markets rebalance, the upside for coal is temporary as renewable generation rises by 90% to 2030; the peak in power sector emissions needs to be followed by a much steeper decline to be consistent with global climate goals

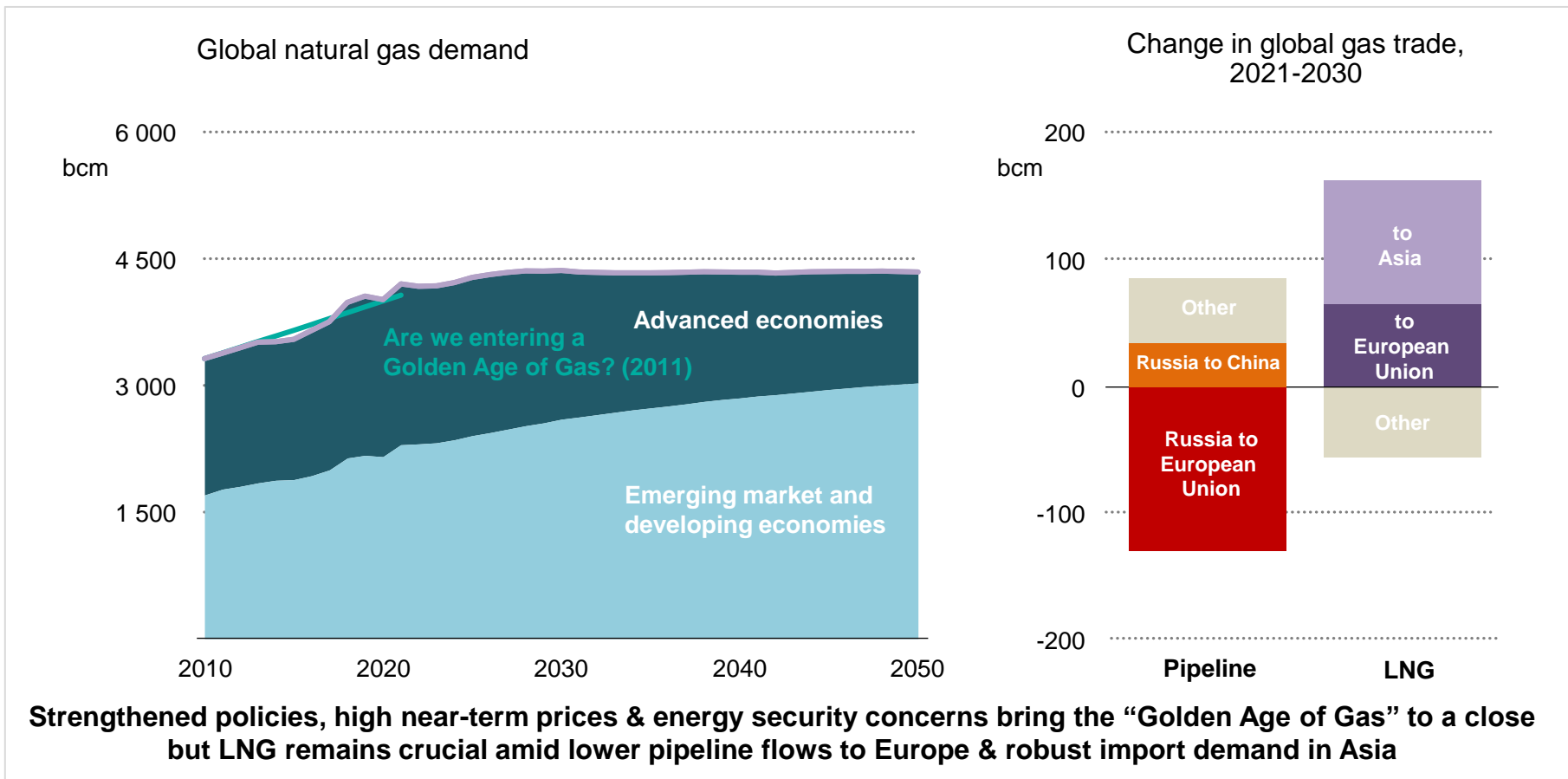
Clean energy manufacturers prepare the ground for faster transitions

Announced manufacturing capacity pipeline compared with NZE Scenario deployment in 2030

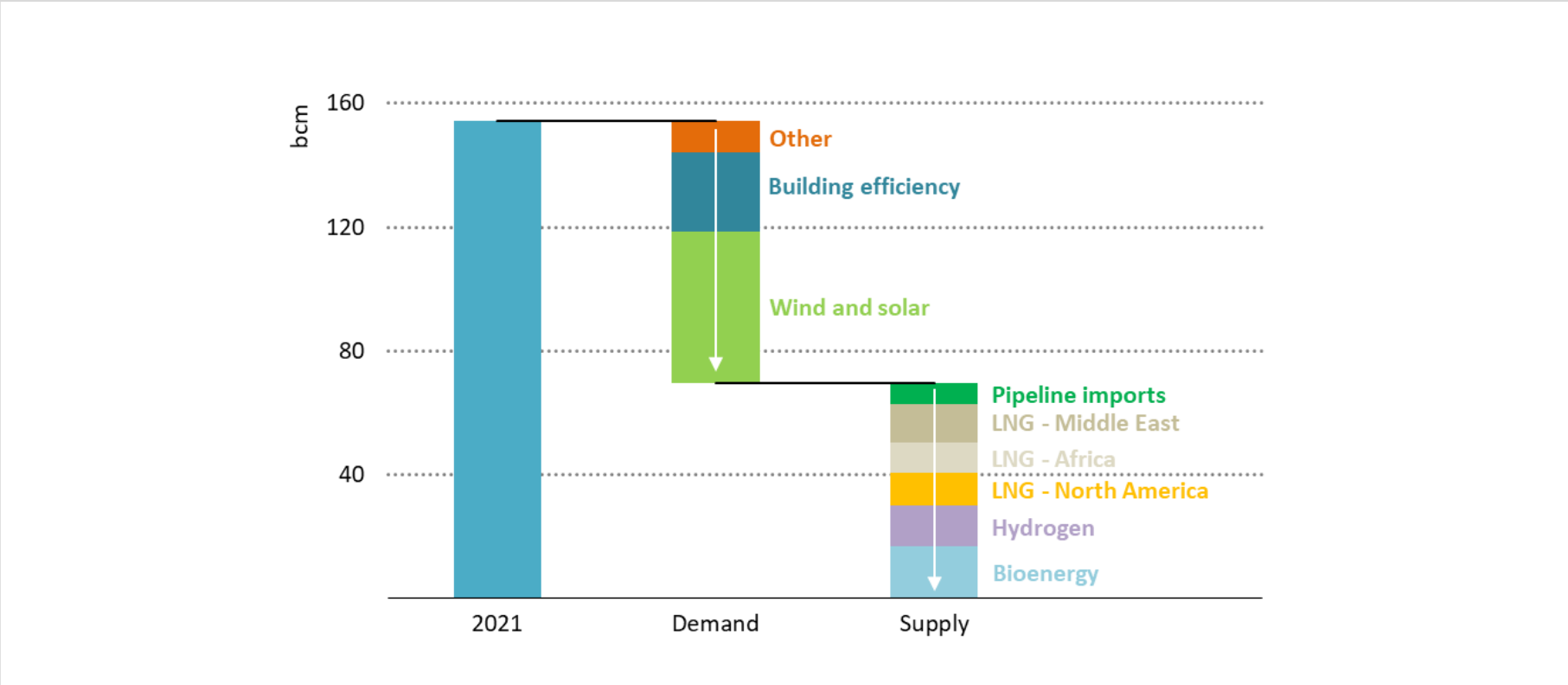


Announced plans to scale up clean energy manufacturing capacity help to accelerate cost reductions and would, in some cases, approach the levels needed to put the world on track with a 1.5 °C pathway

The era of natural gas demand growth is coming to an end

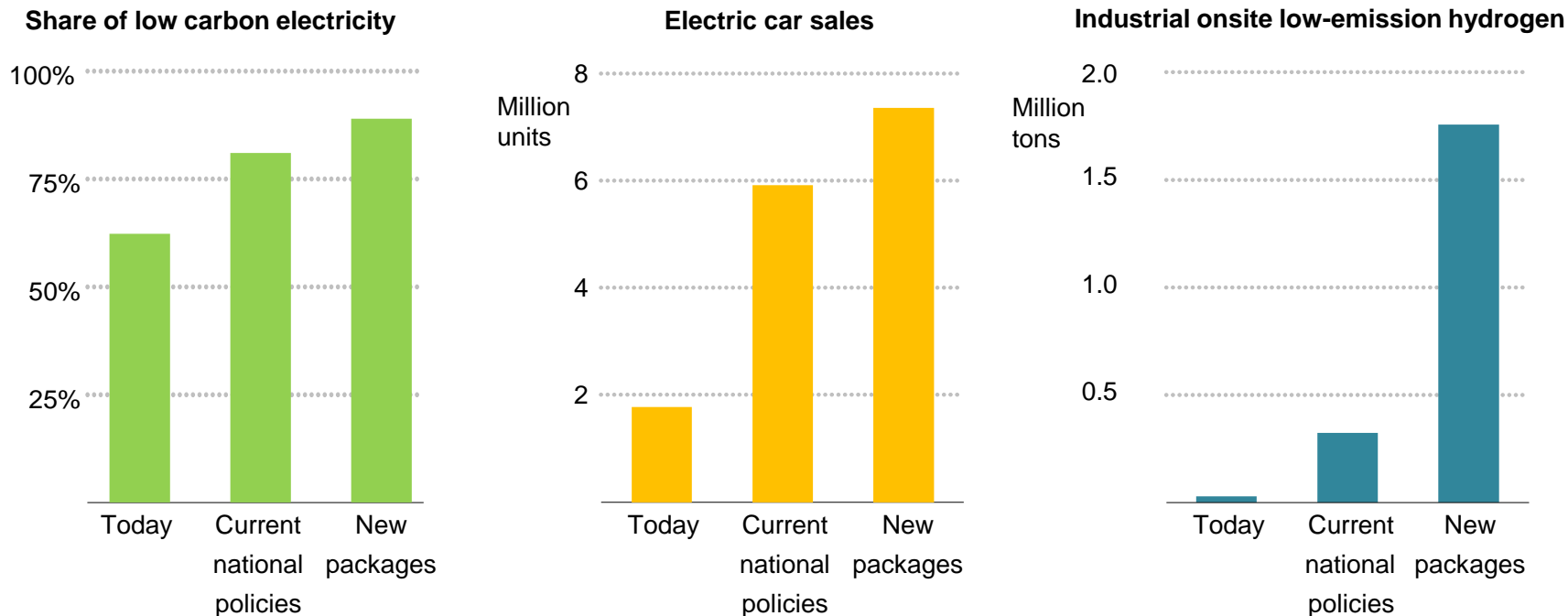


Demand and supply measures reduce EU gas dependency on Russia



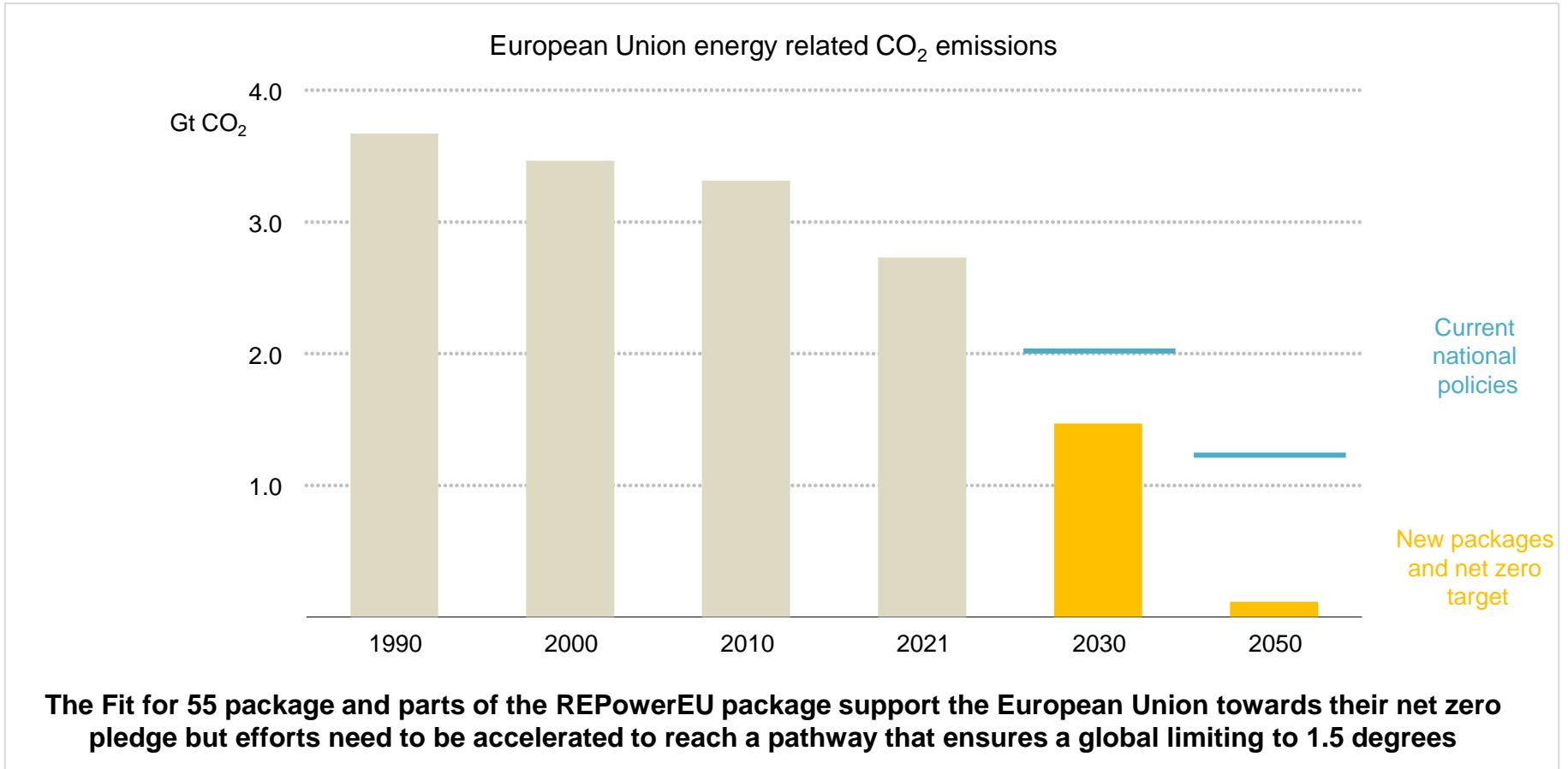
Renewables and building efficiency on the demand side as well as LNG diversification and other fuel shifts on the supply side are required to reduce the reliance on Russian gas to zero before 2030 as envisioned by REPowerEU

Electricity generation and end use demand indicators by 2030 in the European Union

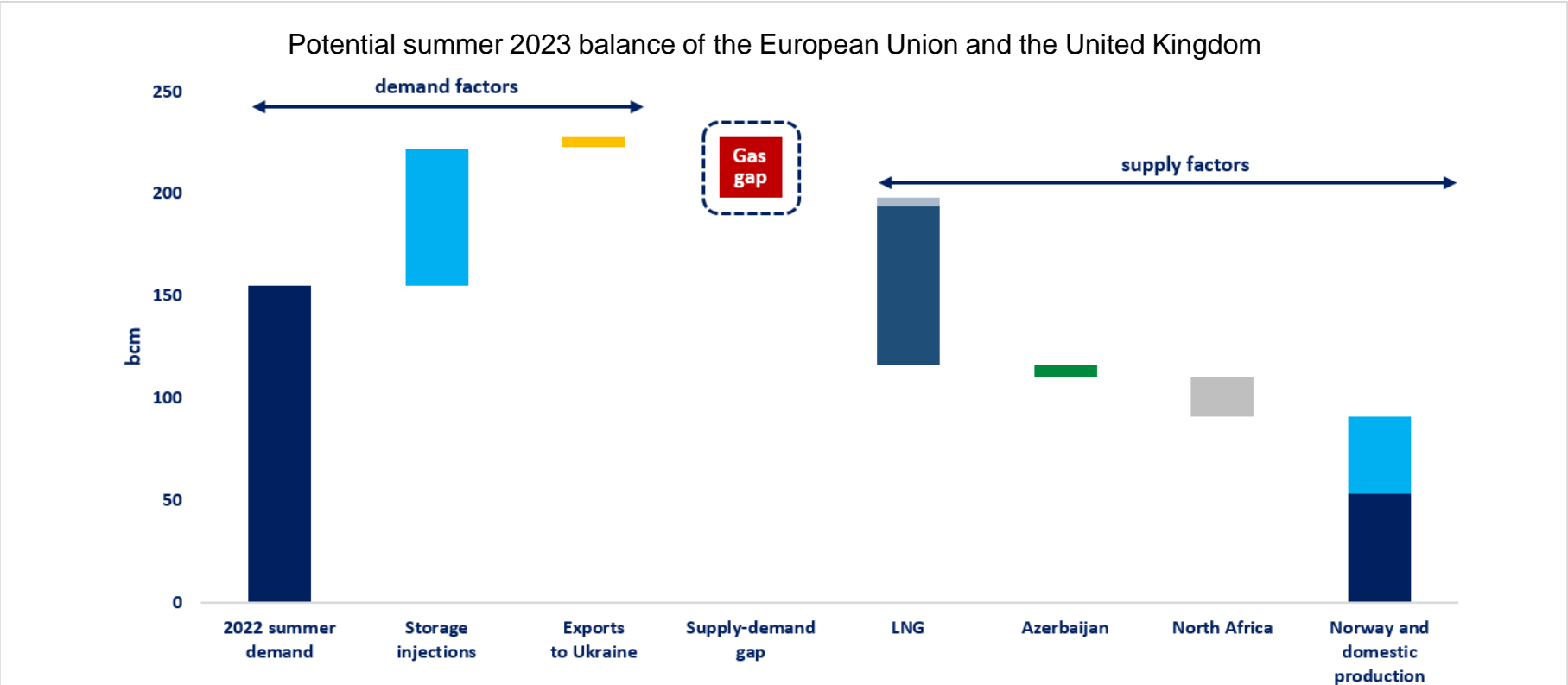


The Fit for 55 and REPowerEU package accelerate the deployment of clean energy technologies and particularly the use of low emission hydrogen in the European Union

New policy packages support the EU net zero target



Europe could see a supply-demand gap of 30 bcm in summer 2023



Assuming a full stop of Russian piped gas supplies to the EU, combined with a strong recovery in China's LNG imports and injection needs at 68 bcm, the European gas balance could be 30 bcm short.

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