



Energy transitions in times of crisis

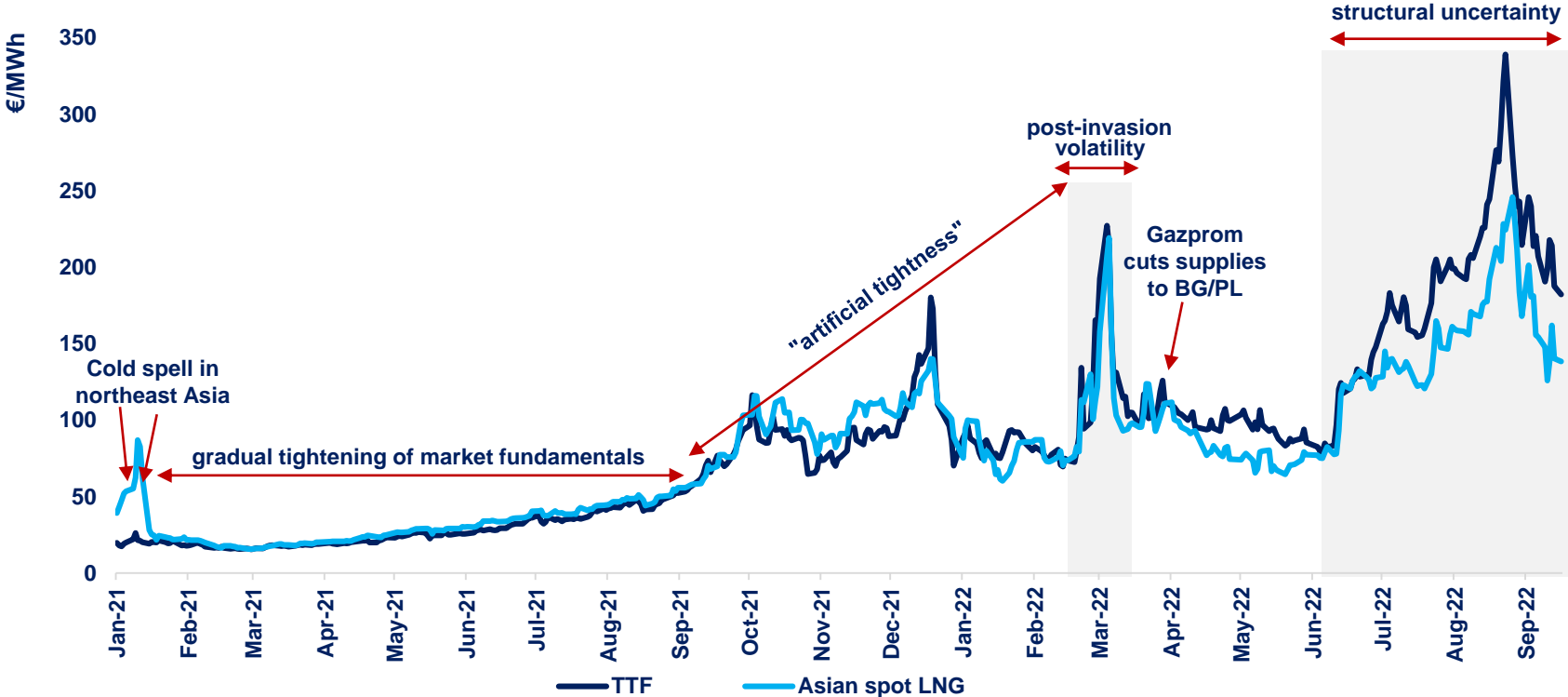
Laura Cozzi, Chief Energy Modeller

GlobeEU Wakeup Call, 28 September

European and Asian gas prices hit record highs in Q3 2022



TTF prices and Asian spot LNG prices, 2021-2022



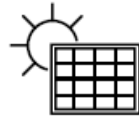
A 10-Point Plan to reduce the EU's Reliance on Russian Natural Gas

Action 1



No new gas supply contracts with Russia

Action 4



Accelerate the deployment of new wind and solar projects

Action 7



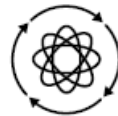
Speed up the replacement of gas boilers with heat pumps

Action 2



Replace Russian supplies with gas from alternative sources

Action 5



Maximise generation from existing dispatchable low-emissions sources: bioenergy and nuclear

Action 8



Accelerate energy efficiency improvements in buildings and industry

Action 9



Encourage a temporary thermostat adjustment by consumers

Action 3



Introduce minimum gas storage obligations to enhance market resilience

Action 6



Enact short-term measures to shelter vulnerable electricity consumers from high prices

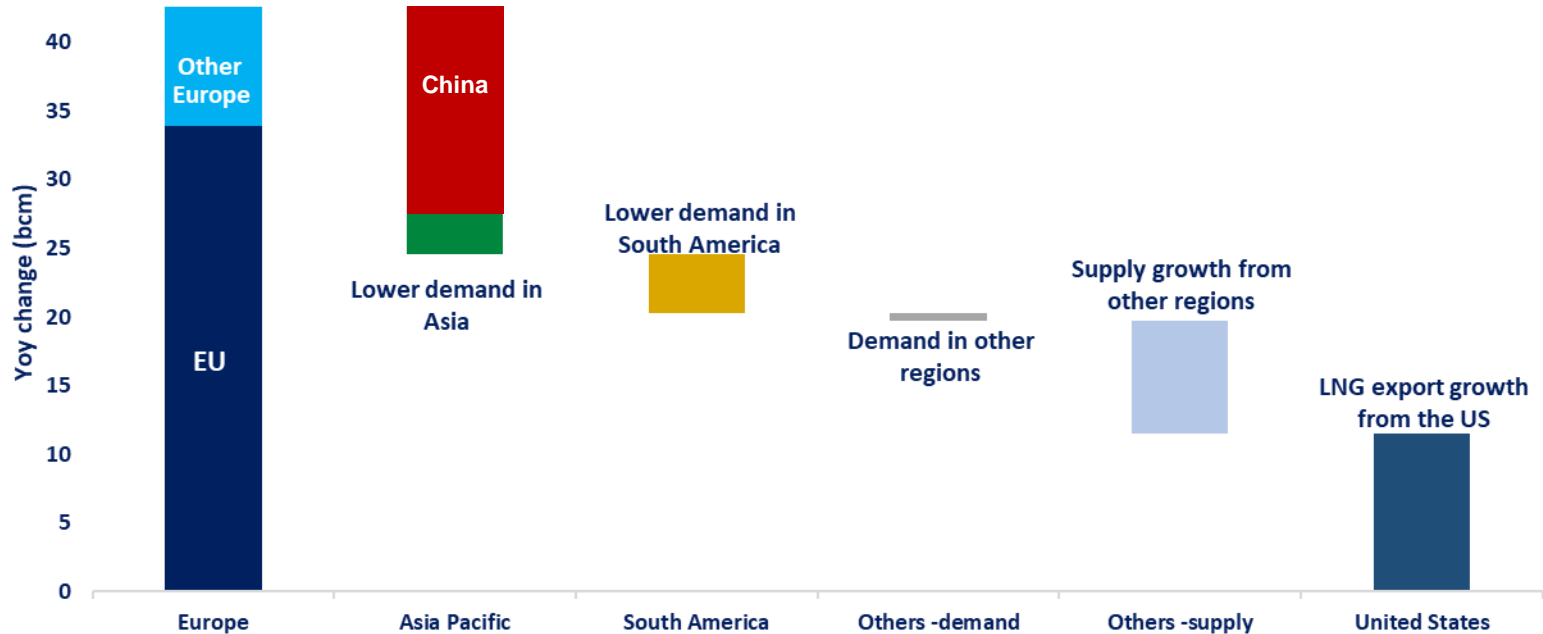
Action 10



Step up efforts to diversify and decarbonise sources of power system flexibility

The European pull on LNG led to a reconfiguration of global flows

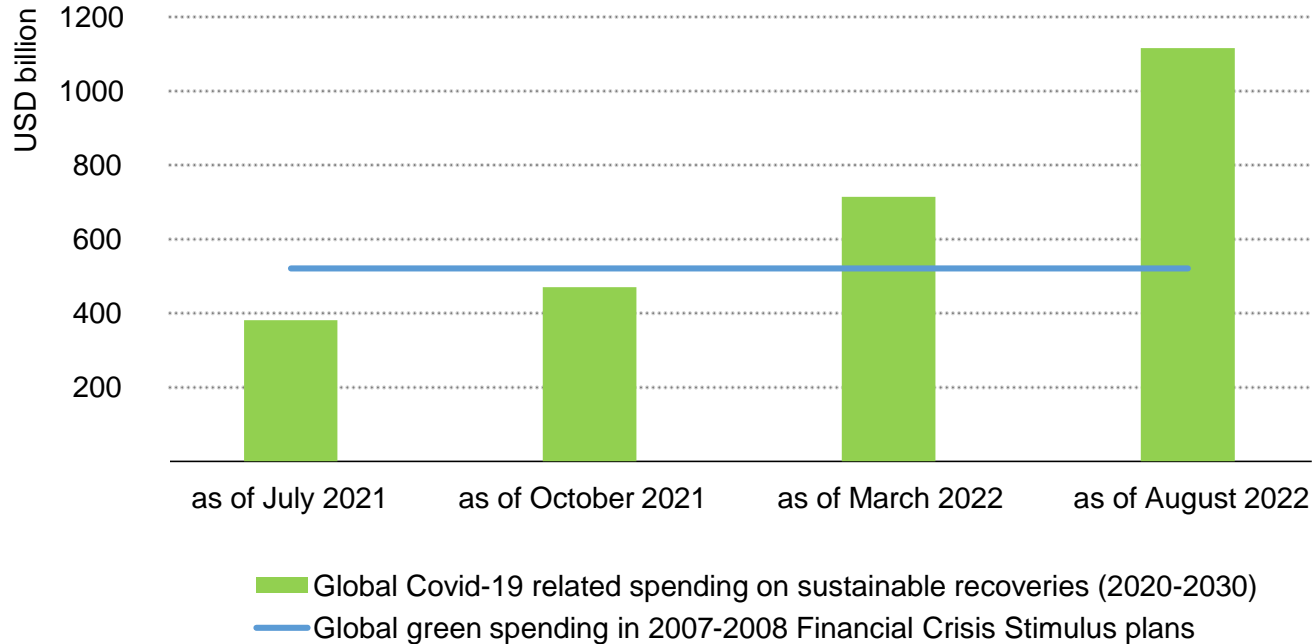
Year-on-year change in global LNG exports and imports by key regions, January to August 2022



The strong increase in the EU's LNG imports pulled away flexible LNG volumes from other importing regions, primarily from the Asia Pacific.

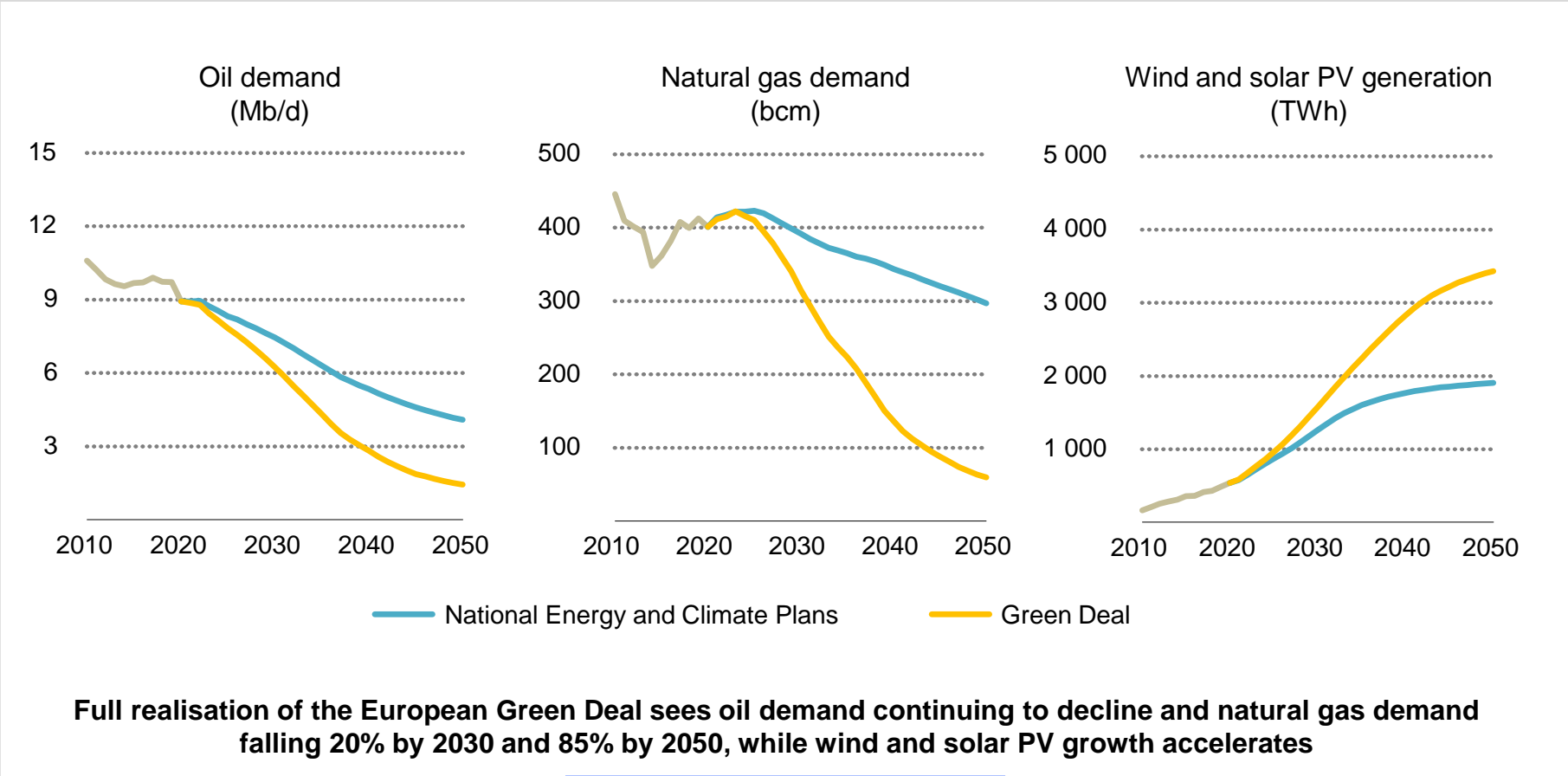
Government recovery spending for clean energy reaches new high

Global sustainable recovery spending by governments

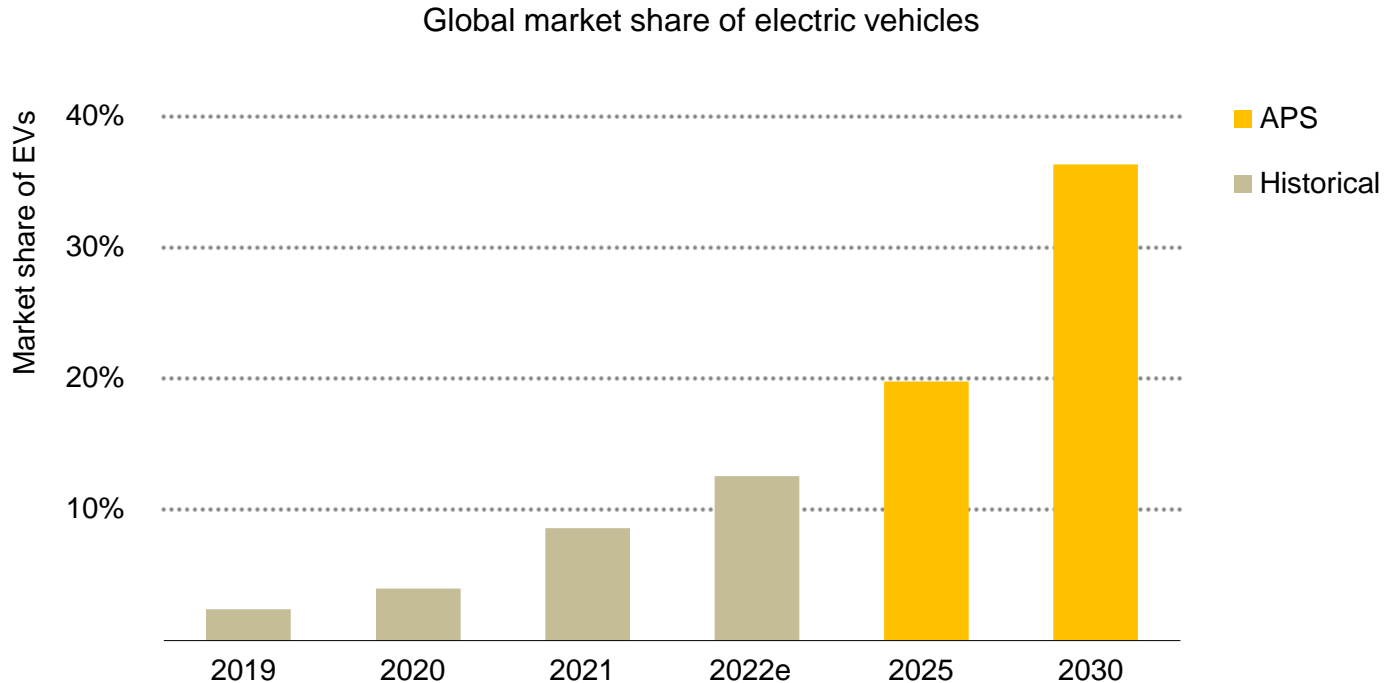


Government sustainable recovery spending has grown to USD 1.1 trillion, more than twice the amount dedicated to green recovery measures after the Global Financial Crisis.

Energy transitions re-shape the EU's energy needs

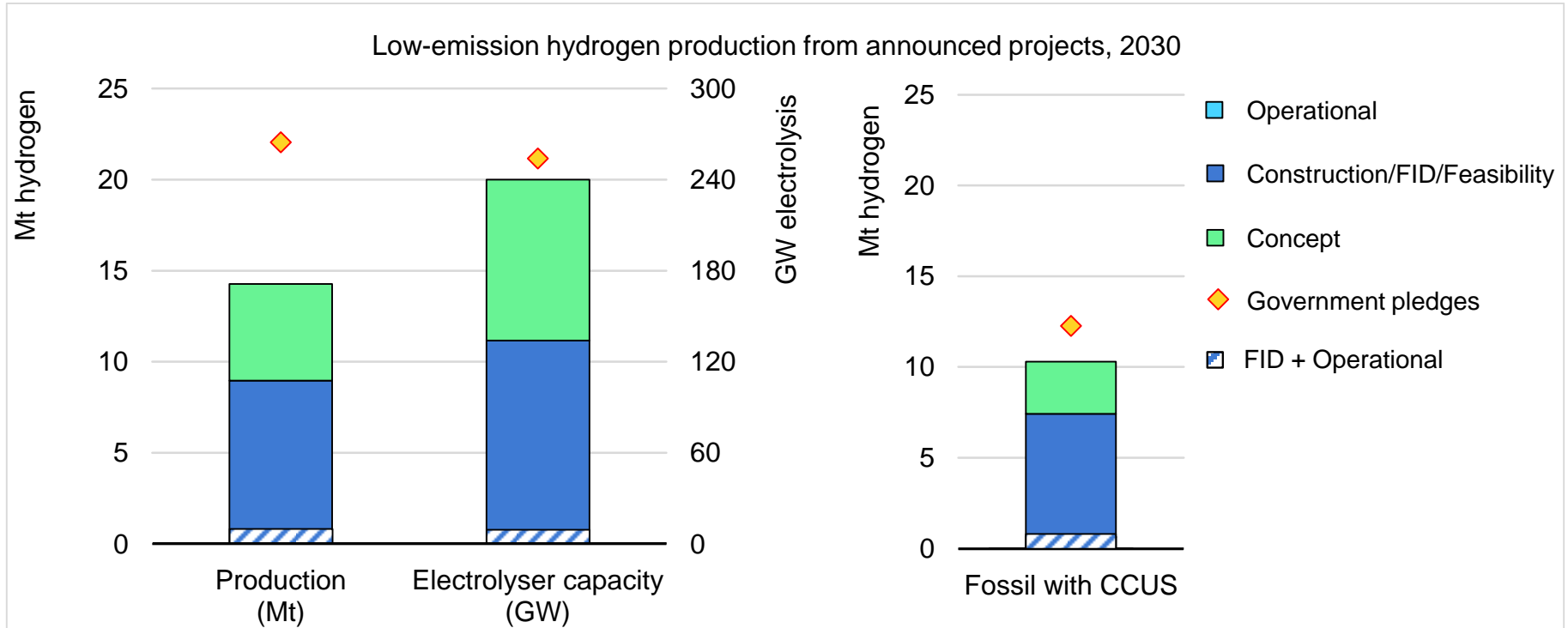


Spectacular growth in EVs signals a new energy economy taking root



By 2030, more than one out of every two cars sold in the US, the EU and China could be electric. EVs are vital for making energy supplies more secure rather than continuing to rely on fossil fuels.

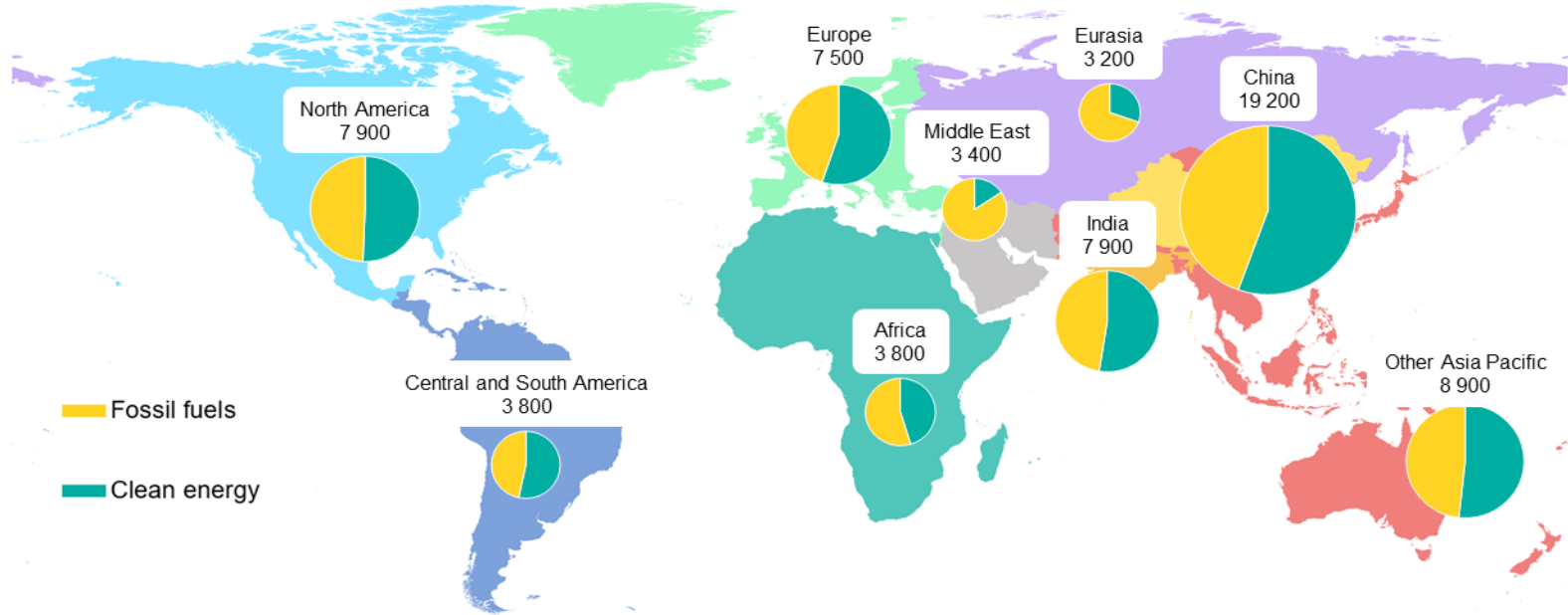
An increasing project pipeline for low-emission hydrogen production



Low-emission hydrogen could reach 16-24 Mt per year by 2030. However, just a few projects are under construction or have reached FID due to uncertainties about demand, regulation and infrastructure

Clean energy is fuelling employment growth

Energy employment in fossil fuel and clean energy sectors by region (thousands), 2019



Energy employment has exceeded pre-pandemic levels. Resilient growth in clean energy has brought it past the 50% mark of total energy employment, while fossil fuel jobs are just nearing pre-pandemic levels.

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