

EEAC
30th
anniversary

KEYNOTE SESSION

14:00-15:00

EUROPE'S GLOBAL RESPONSIBILITY IN COMBATting CLIMATE CHANGE



Tim Gould
International Energy Agency



László Borbély
Romanian Prime
Minister's Office



Sirpa Pietikäinen
MEP for Finland

#EEAC30
#CriticalDecade



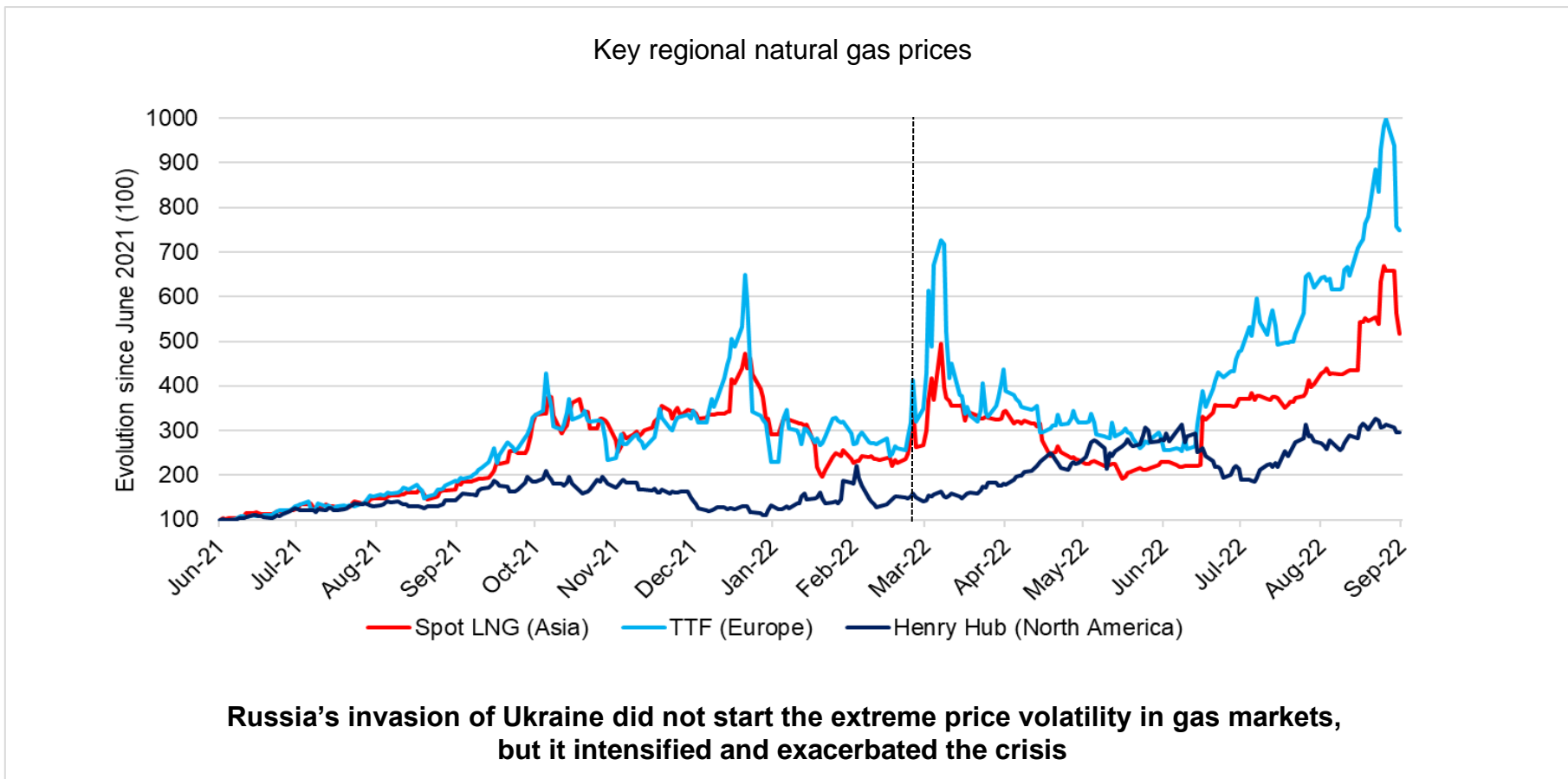


Aligning global energy investment with the Paris Agreement

Tim Gould, Chief Energy Economist

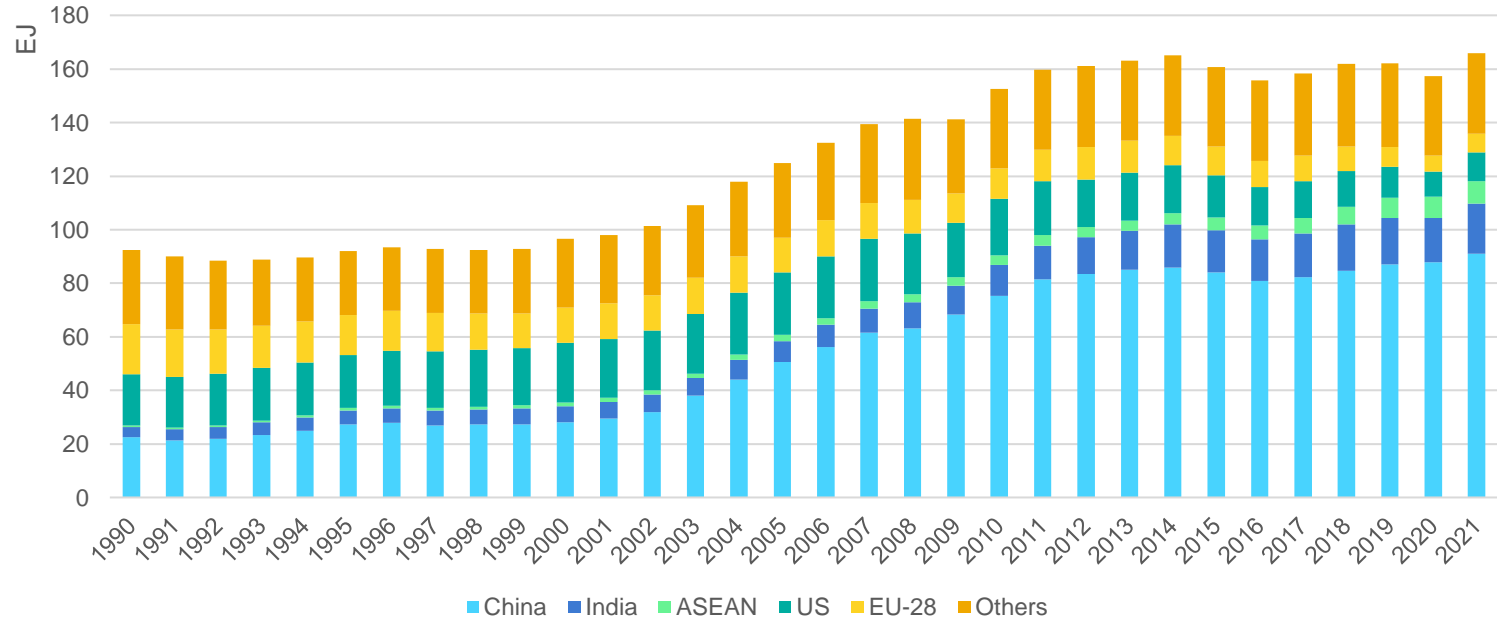
30th anniversary EEAC Annual Conference, 14 September 2022

Gas markets at the centre of the global energy crisis



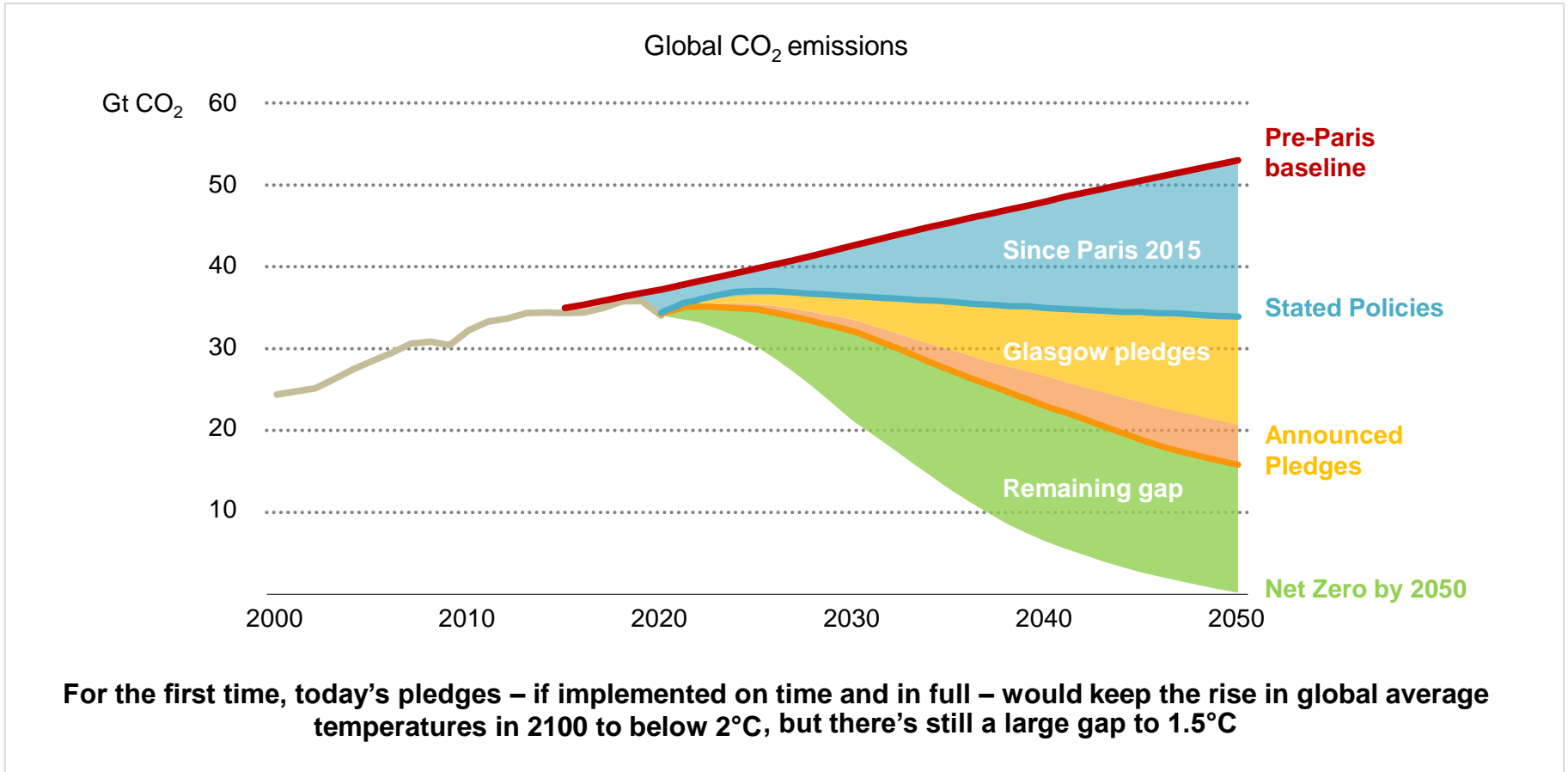
Global CO₂ emissions underpinned by robust coal demand

Annual global coal consumption by region, 1990-2021

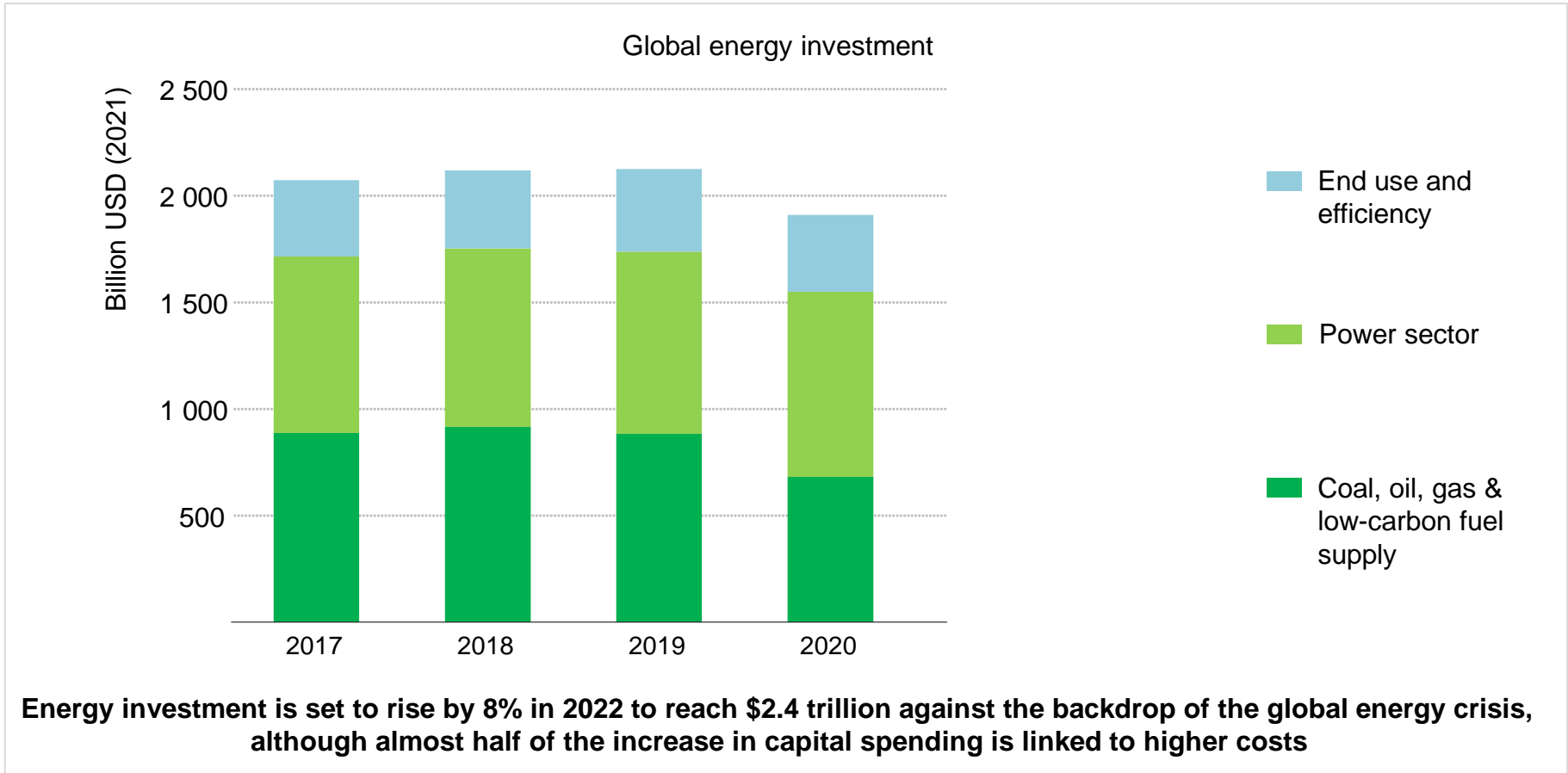


Despite the narrative of the imminent end of coal, global demand has been quite stable for over a decade at historical high levels, putting a floor under global CO₂ emissions

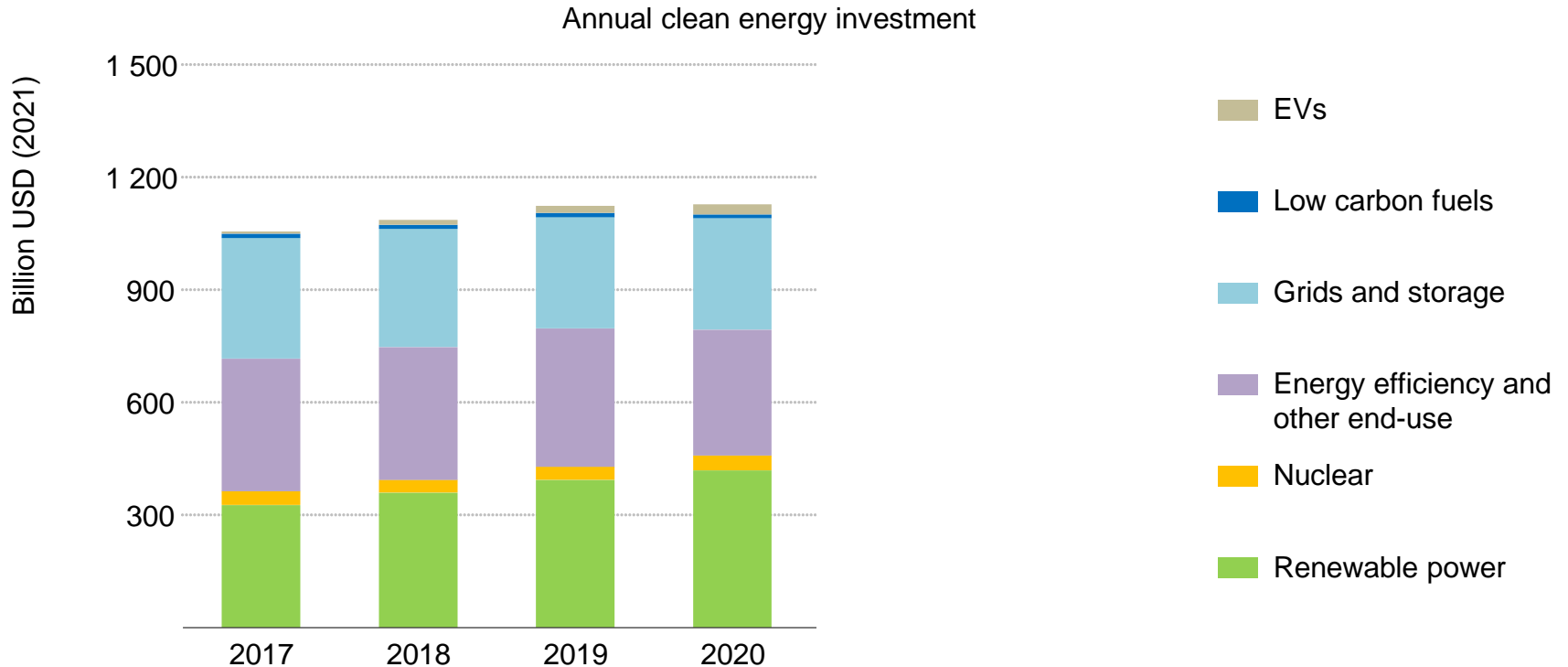
Where are we along the road to Net Zero?



Global energy investment is picking up

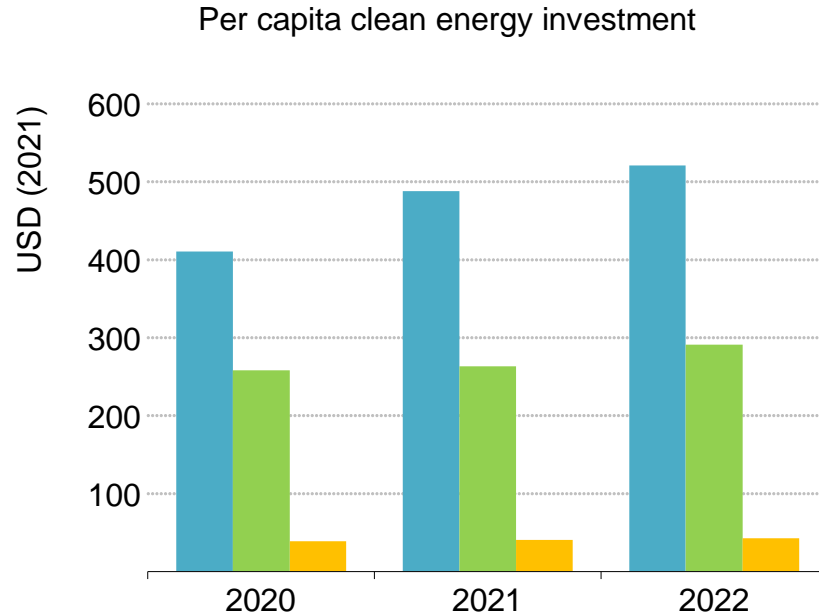


Investment in energy transitions is – finally – gaining momentum



After flatlining for several years, investment in clean energy technologies and infrastructure is stepping up, with renewable power, efficiency and EVs leading the way

A risk of new dividing lines on energy and climate



Advanced economies

China

Emerging and developing economies

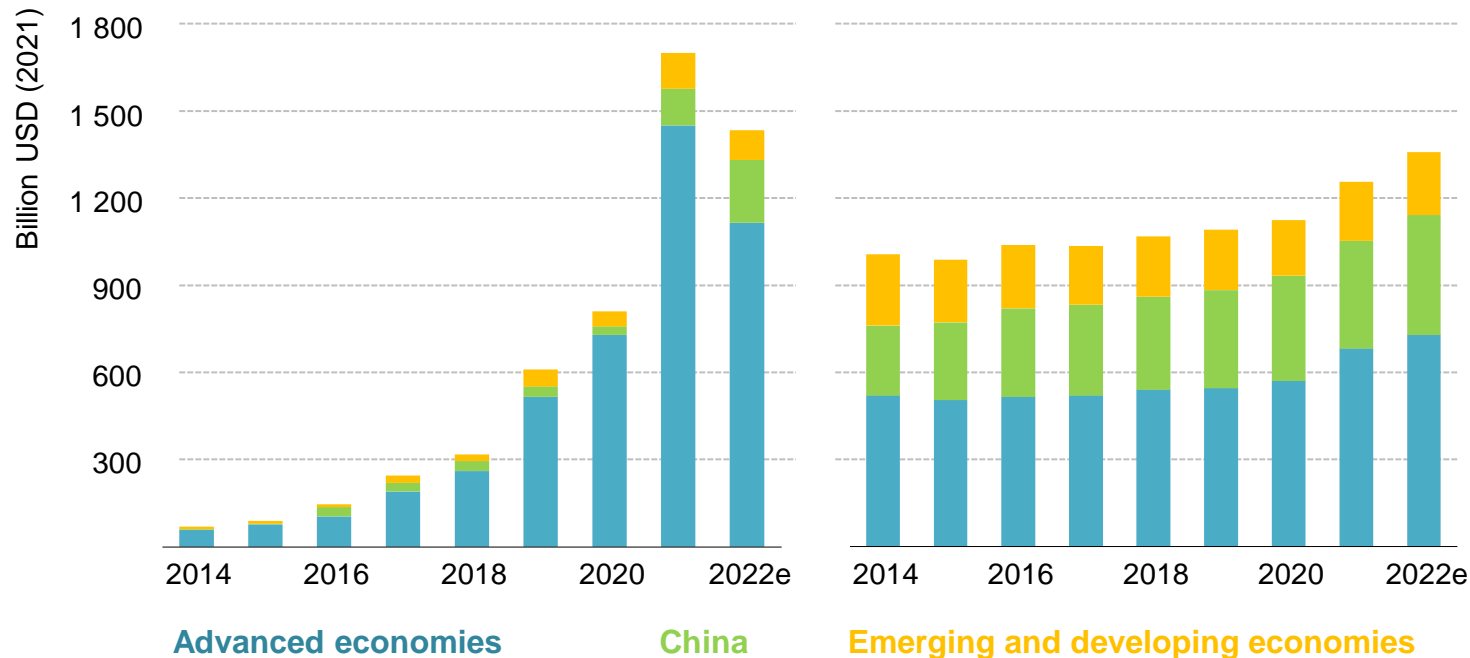
The rise in clean energy spending is concentrated in advanced economies and China: despite some bright spots, like solar in India, in other emerging and developing economies this investment remains stuck at 2015 levels

Sustainable finance has boomed... in advanced economies

Sustainable debt issuances compared with clean energy investment

Sustainable debt issuances by region

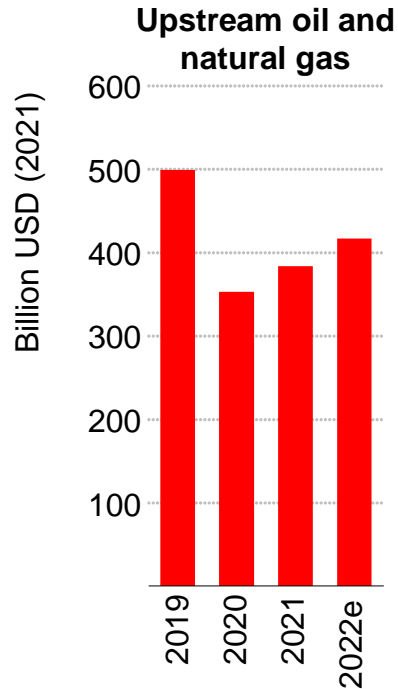
Clean energy investment



The sustainable debt market more than doubled over 2021, presenting a major opportunity to fund energy transitions, but the effects are concentrated in advanced economies

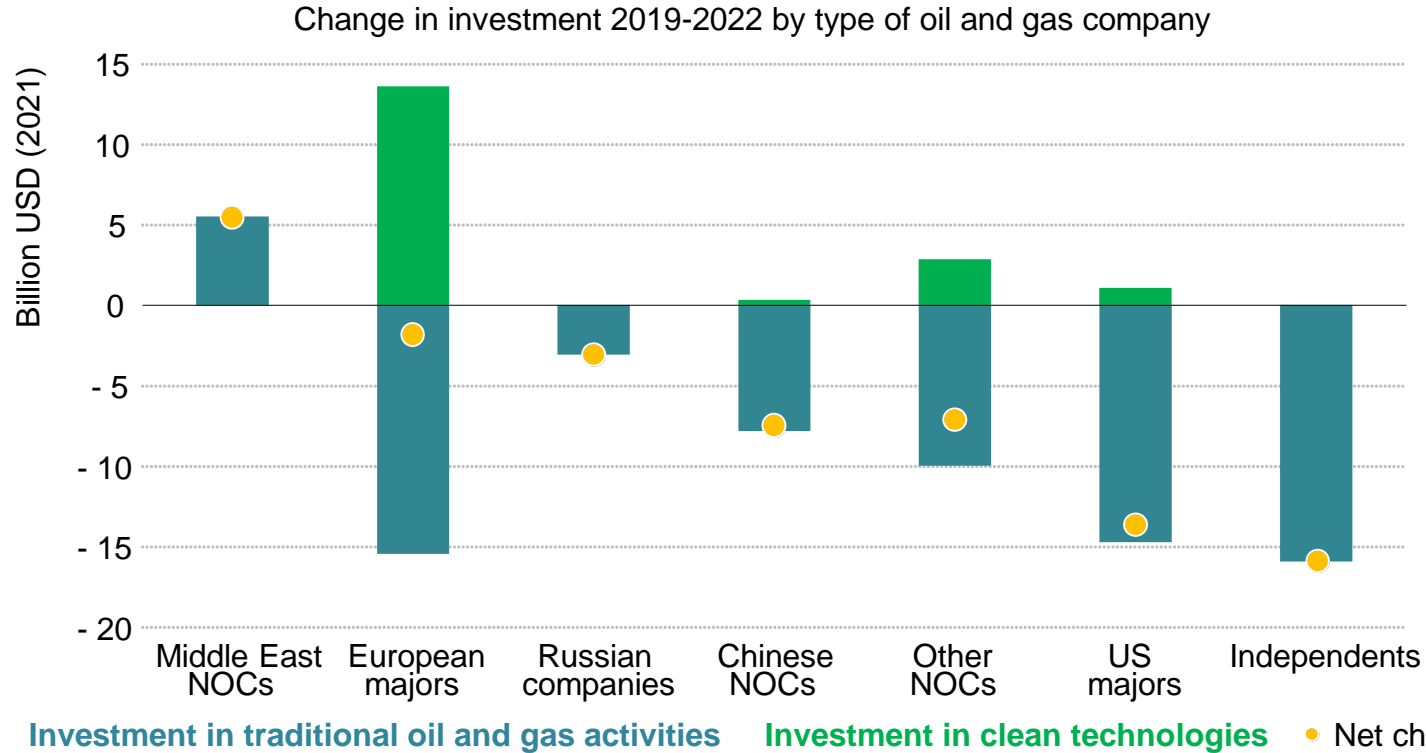
Investments in fuel supply are responding to higher prices...

Change in fuel supply investment 2019-22



The energy crisis is spurring new investments in fuels, including an expansion of coal supply in emerging Asia, commitments to new LNG infrastructure, a rise in upstream spending, and new momentum behind low-carbon fuels

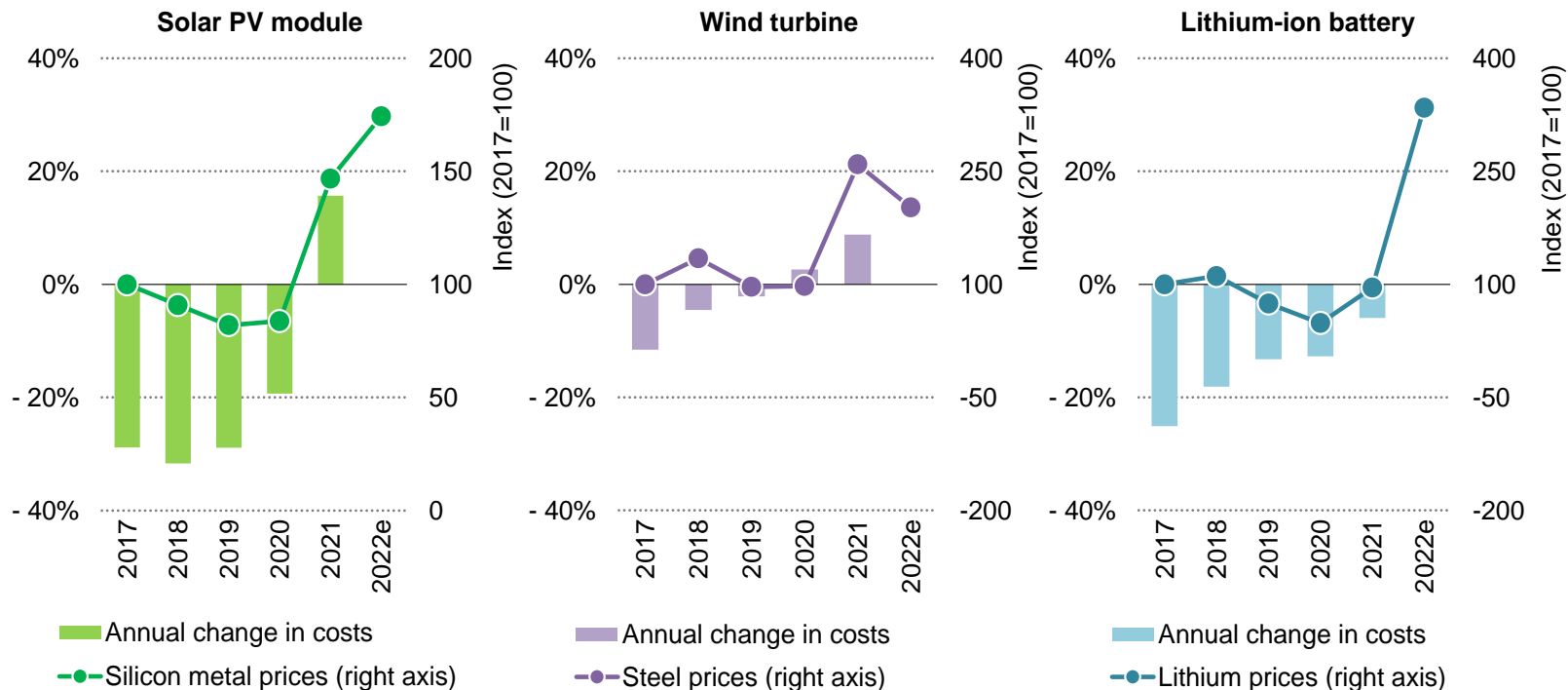
...but with a wide range of responses from oil and gas companies



Today's high prices have generated an unprecedented \$2 trillion windfall for oil and gas producers, generating a range of strategic responses from different types of company, only Middle East NOCs are spending more than in 2019

Investment in critical minerals is central to successful transitions

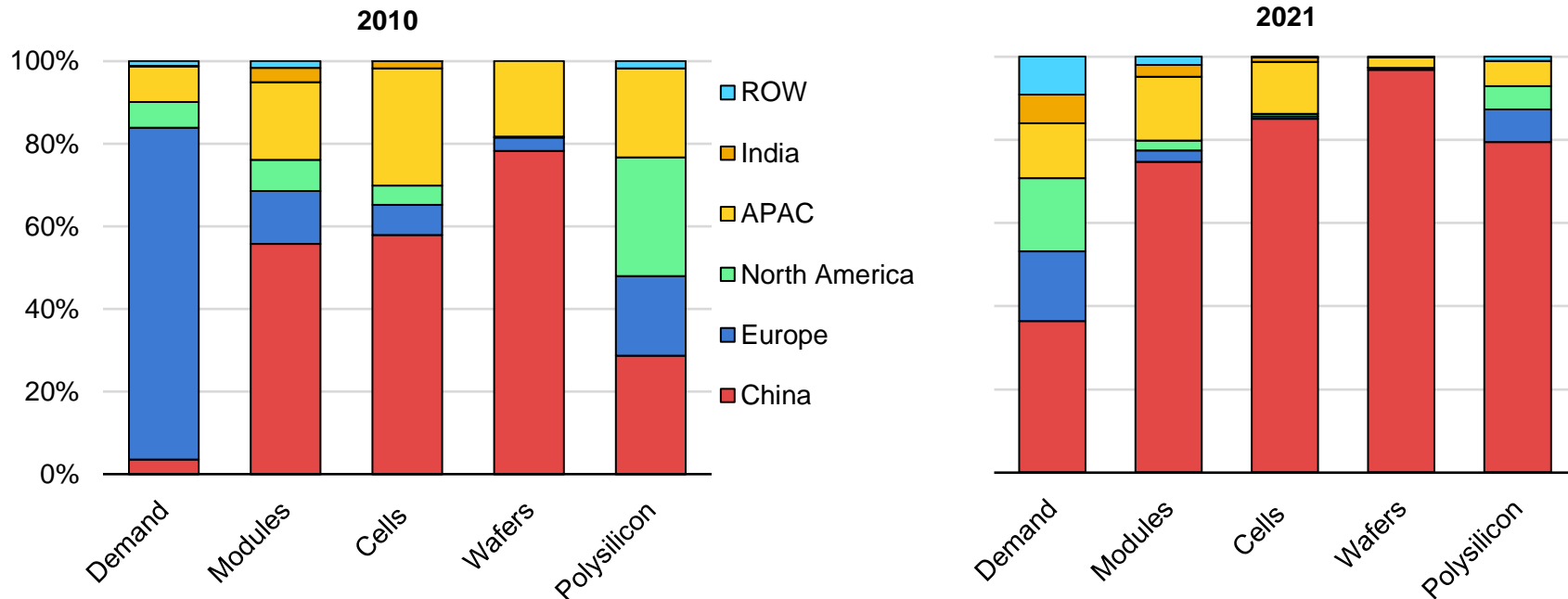
Technology cost trends and key material prices for solar PV module, wind turbine and lithium-ion battery



A surge in mineral prices has been a major factor in reversing the longstanding declines in the costs of clean energy, but upticks in investment offer hope for increased and more diversified supply in the years ahead

China currently dominates global solar PV supply chains

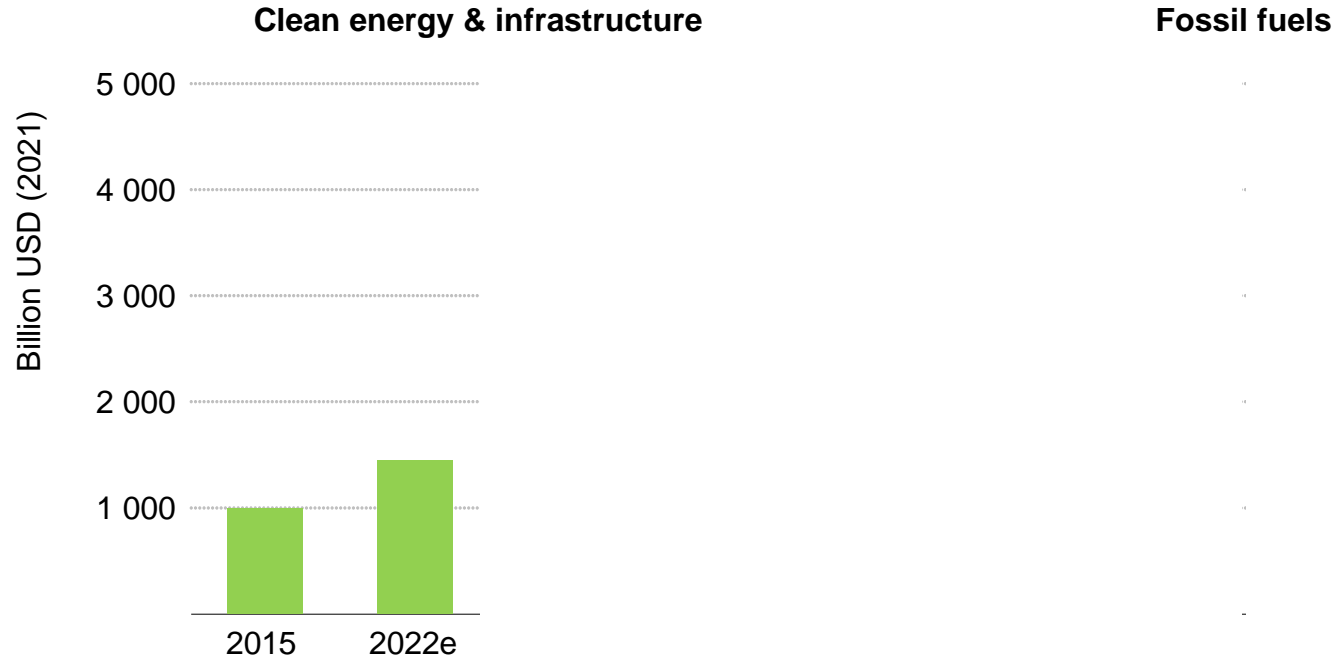
Solar PV manufacturing capacity by country and region, 2010-2021



Chinese supply and demand policies have enabled economies of scale and cost reductions in all manufacturing stages. Polysilicon production is currently a bottleneck in an otherwise oversupplied PV manufacturing value chain.

Investment trends don't yet answer the energy & climate crises

Global annual energy investment benchmarked against future needs



Investment to bring more clean and affordable energy into the system is rising, but not yet quickly enough to forge a path out of today's crisis or to bring emissions down to net zero by mid-century.

