

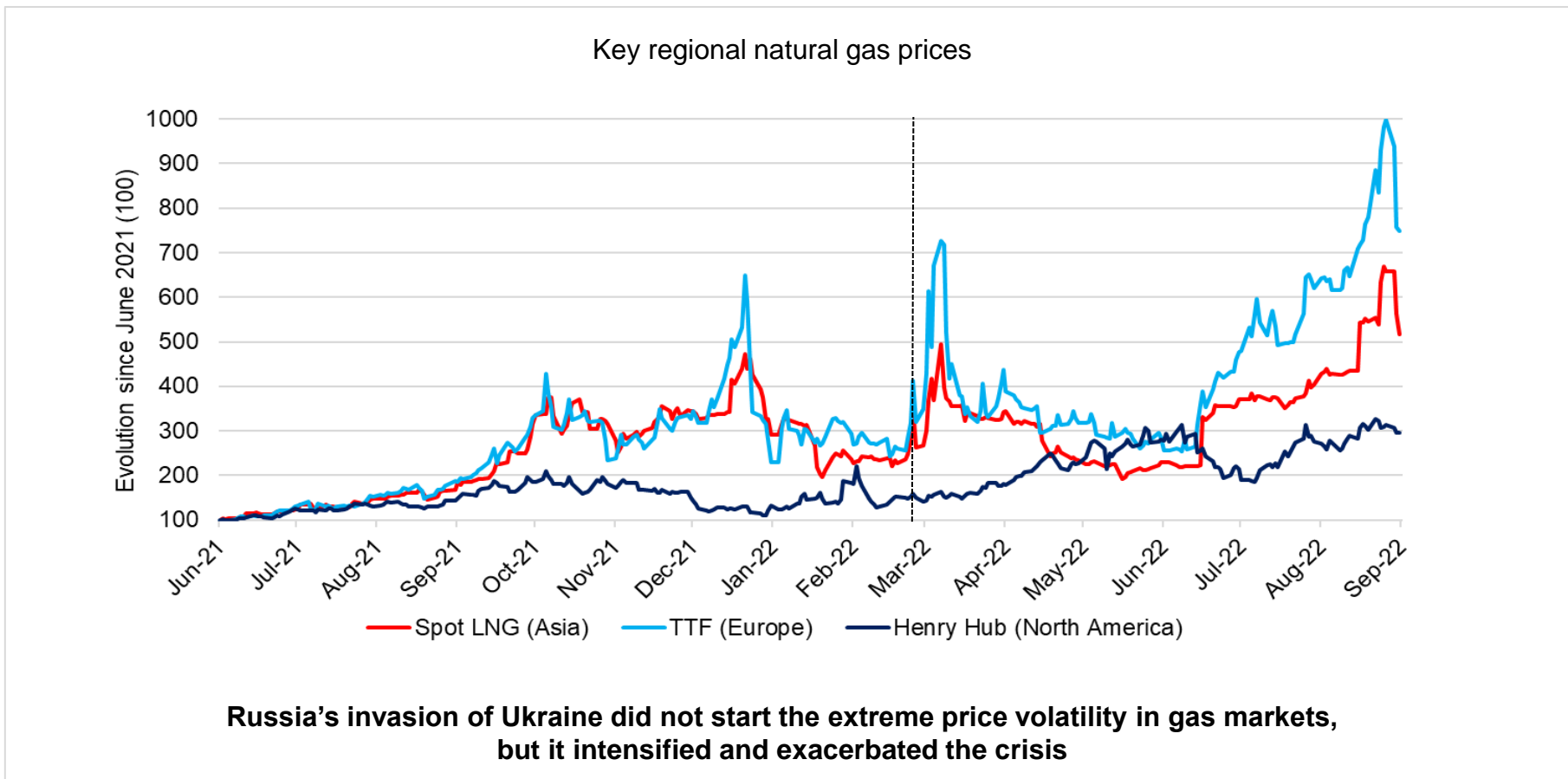


# Implications of the global energy crisis

Tim Gould, Chief Energy Economist

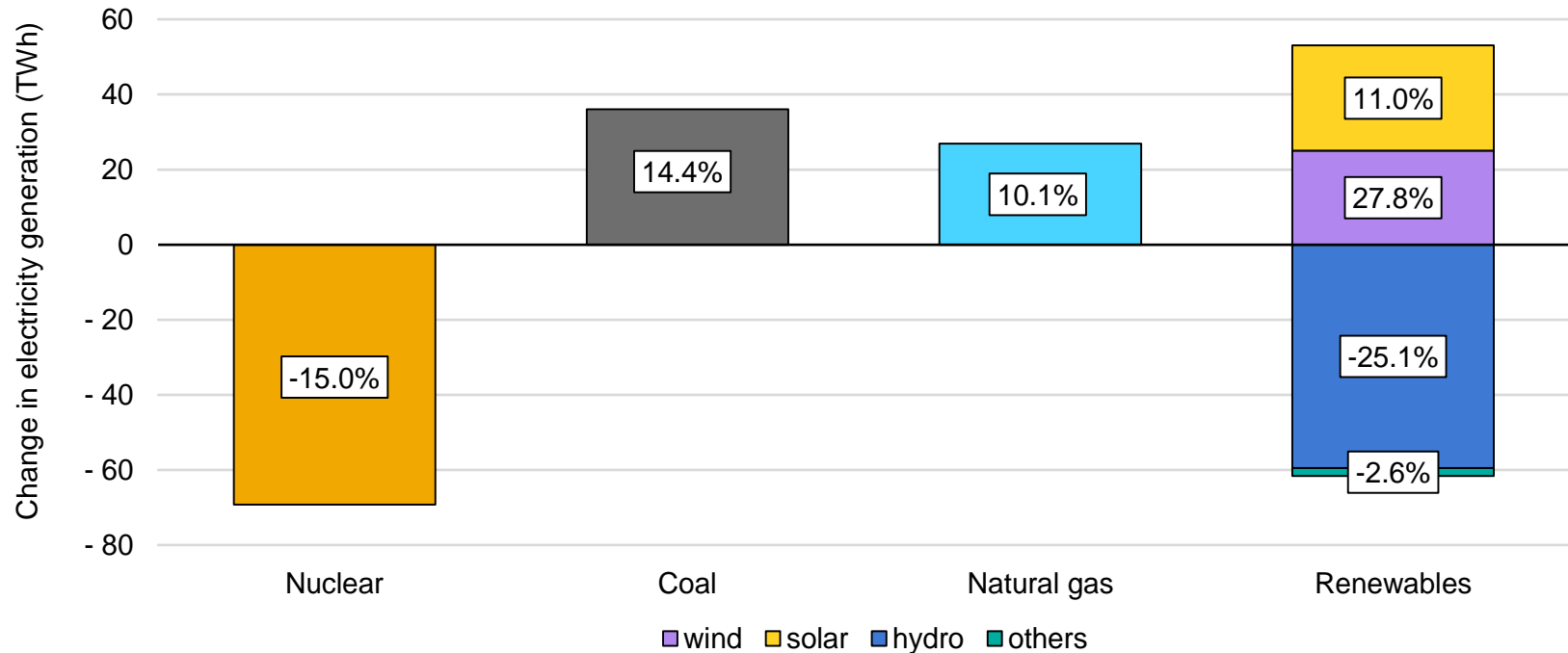
BIEE Energy Policy Conference, 22 September 2022

# Gas markets at the centre of the global energy crisis



# A significant rise in coal- and gas-fired generation in Europe

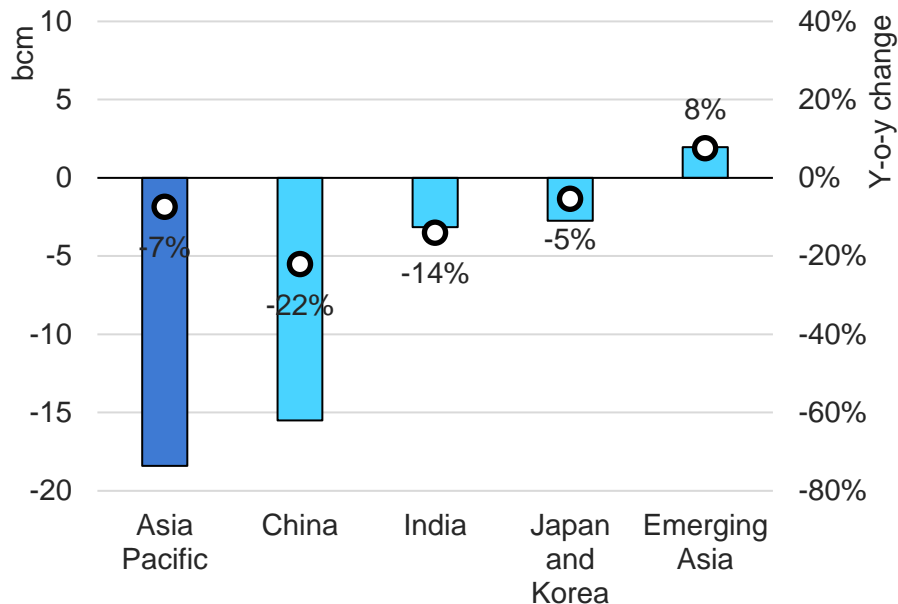
Year-on-year change in electricity supply until August in the EU+GB



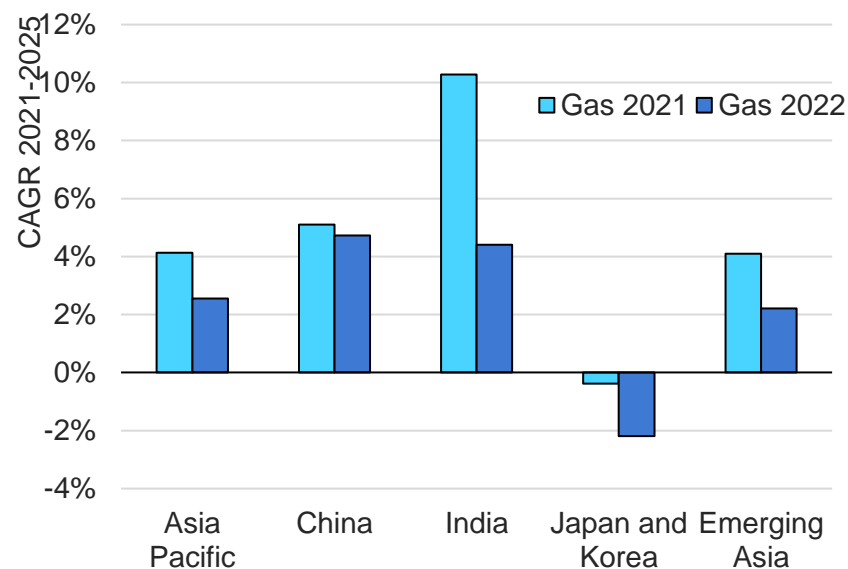
**While other sectors of gas demand have been squeezed by high prices and curtailments, gas-fired electricity is up year-on-year in Europe due to a miserable year for nuclear and hydropower**

# Gas crunch impacts LNG flows and growth prospects across Asia

Change in LNG demand in Asia Pacific  
(8M 2022 vs. 8M 2021)



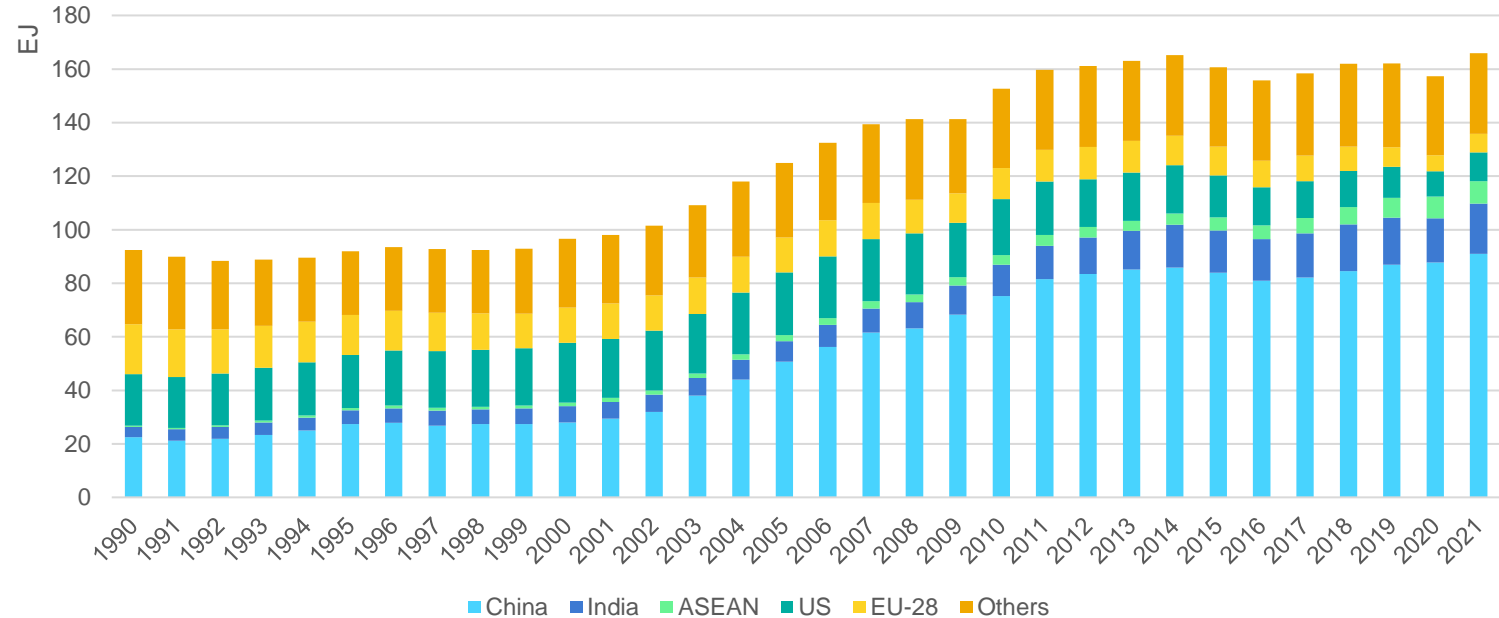
Annual average gas demand growth in Asia Pacific in 2021-2025  
(Gas 2022 report vs. Gas 2021 report)



**As Russia curtailed gas supply to Europe, so Europe's LNG imports have surged: Asian imports and near-term growth prospects for gas are sharply lower**

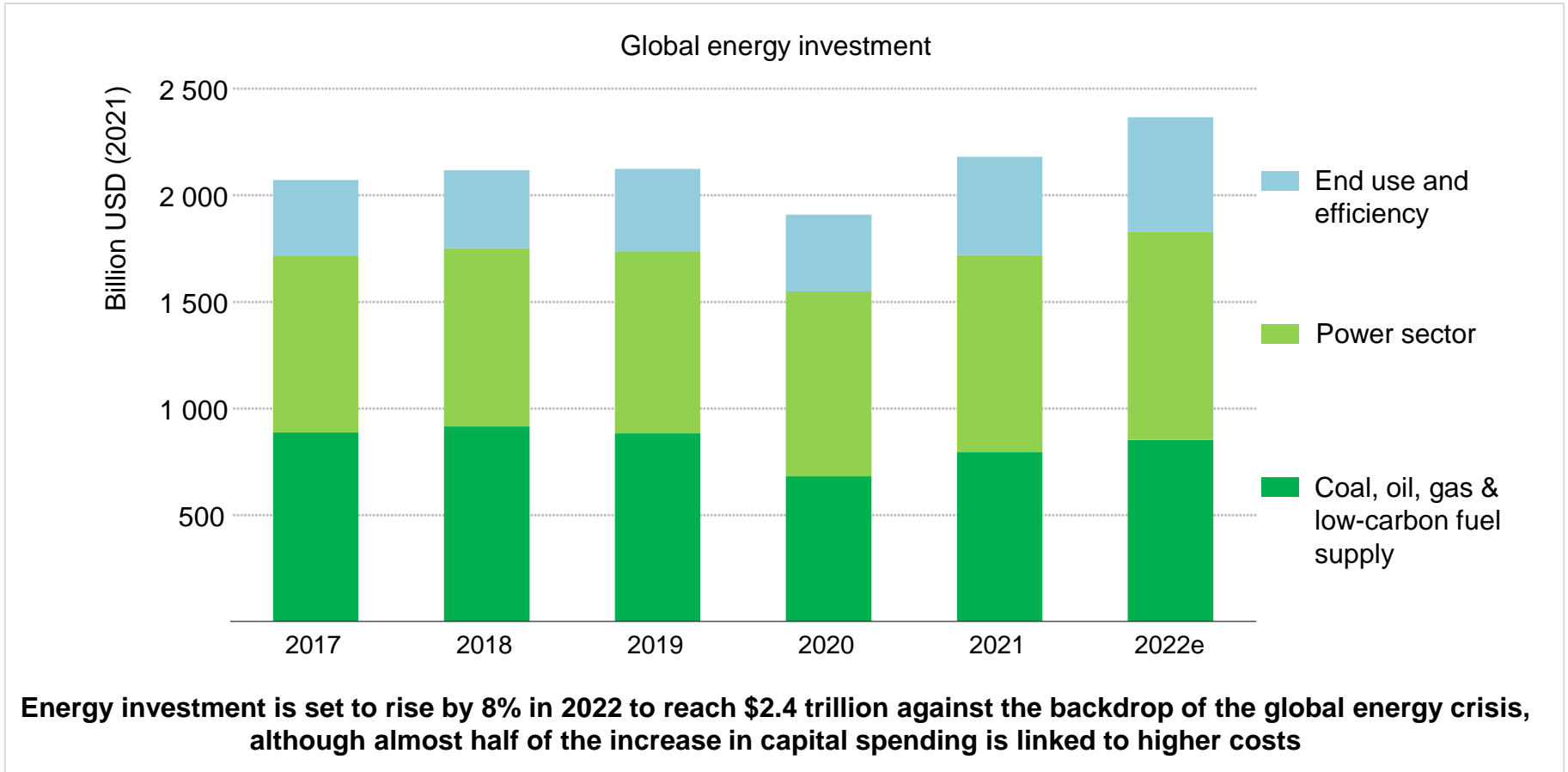
# Global CO<sub>2</sub> emissions underpinned by robust coal demand

Annual global coal consumption by region, 1990-2021

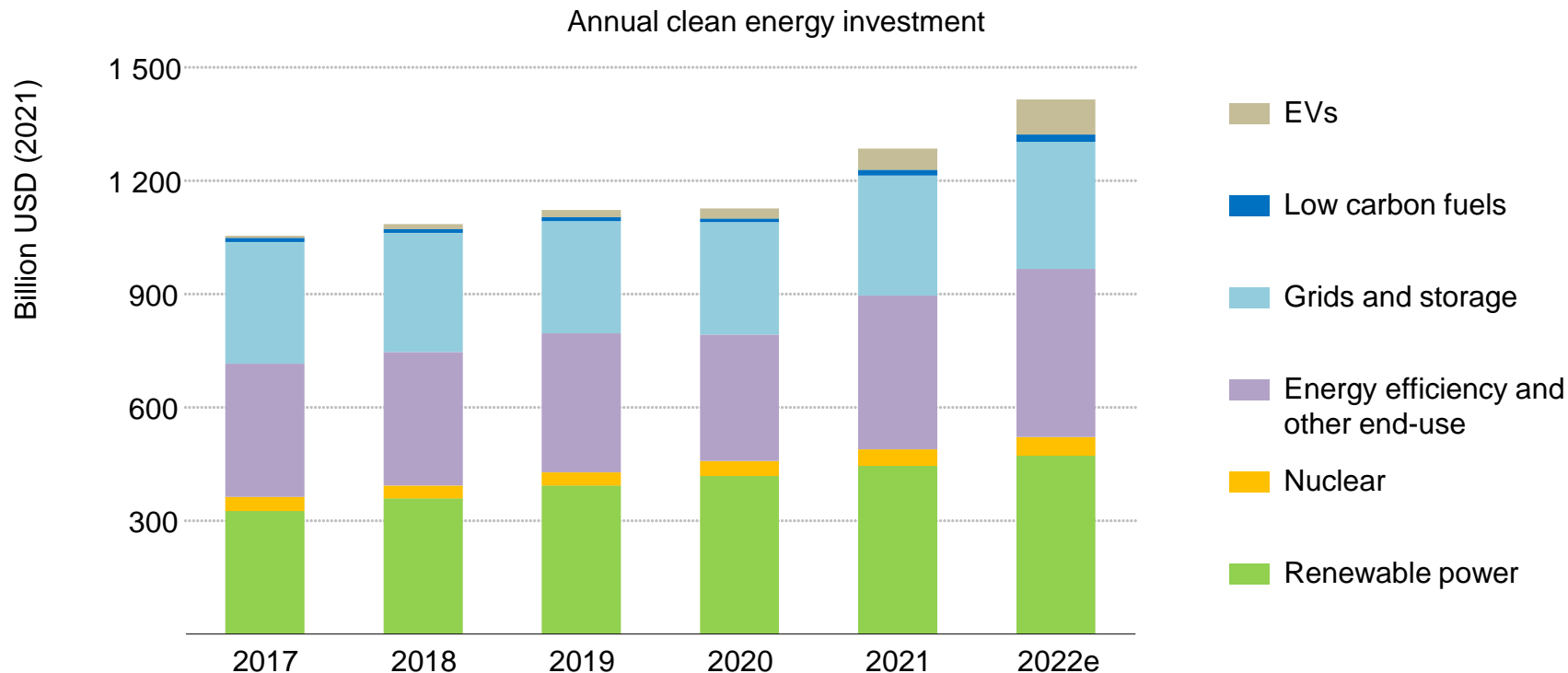


**Despite the narrative of the imminent end of coal, global demand has been quite stable for over a decade at historical high levels, putting a floor under global CO<sub>2</sub> emissions**

# Global energy investment is picking up

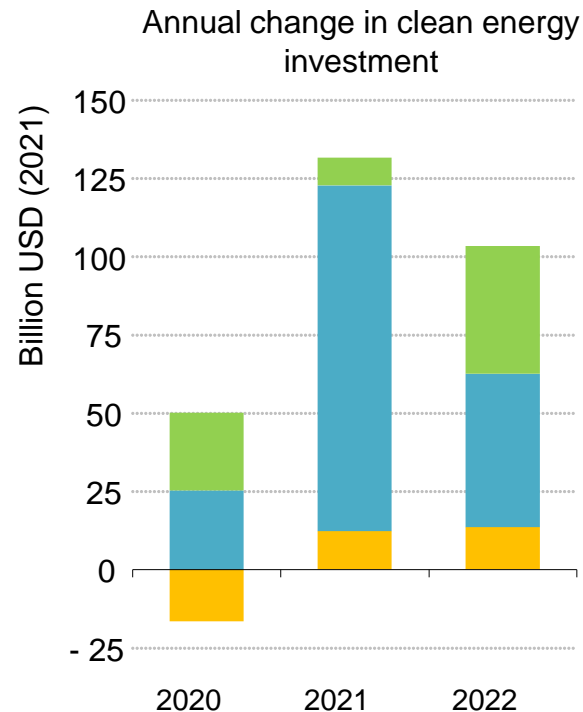
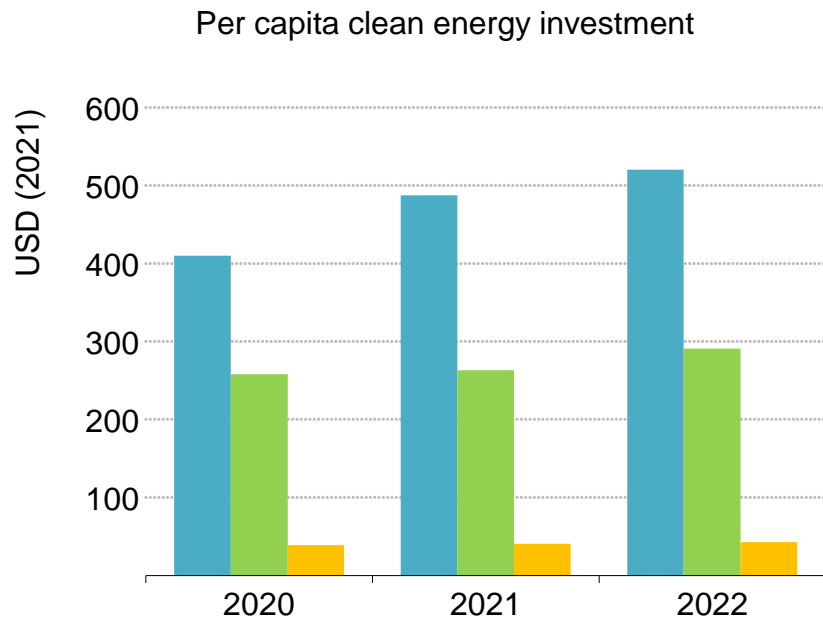


# Investment in energy transitions is – finally – gaining momentum



**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

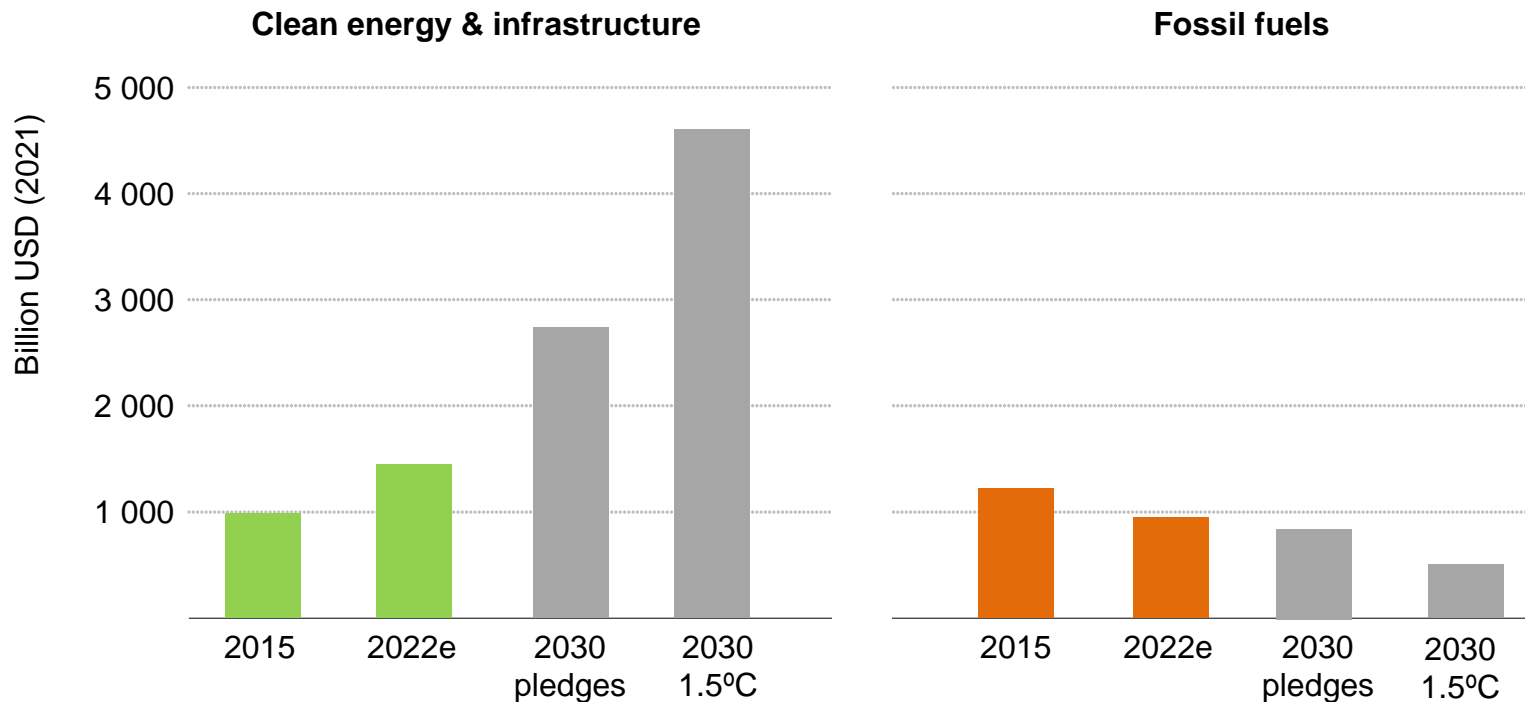
Emerging and developing economies

**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**



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

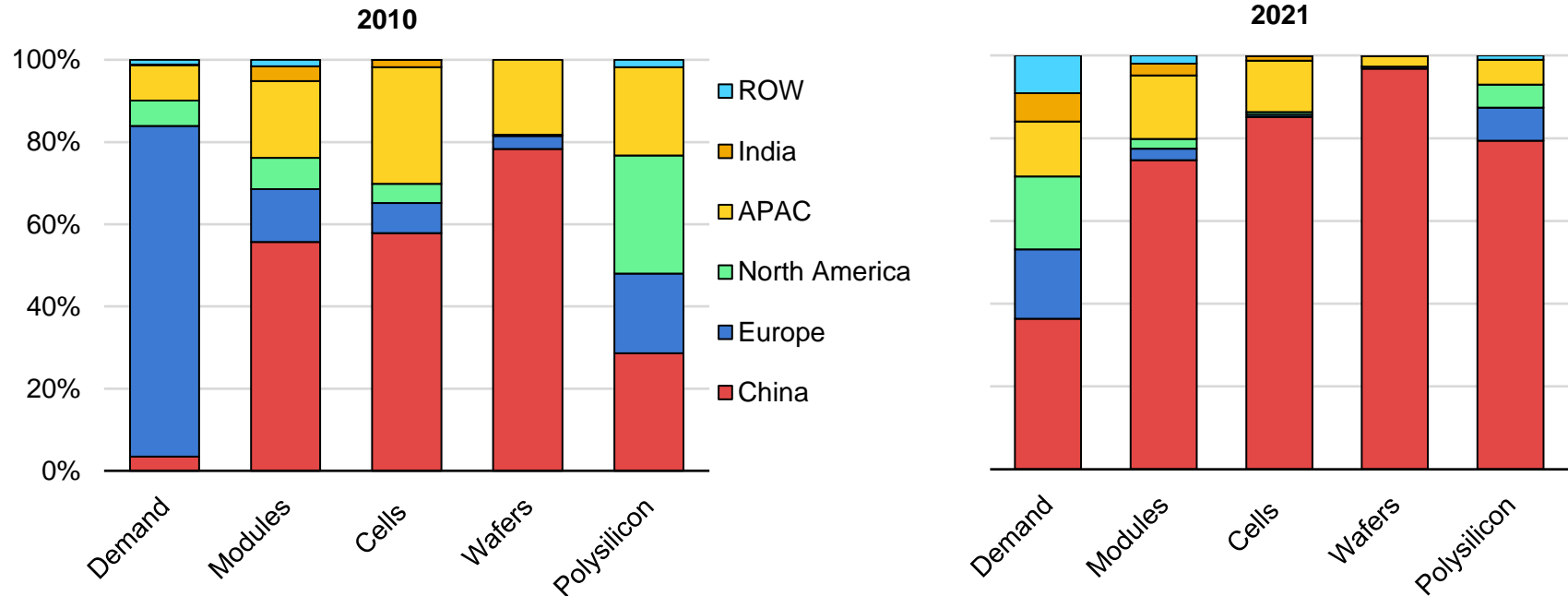
Global annual energy investment benchmarked against future needs



**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.**

# Rising scrutiny of global clean energy supply chains

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



**China dominates global solar PV supply chains, enabling cost reductions worldwide but also sparking a broad debate about how governments should act to ensure greater diversity and resilience**

