

The roadmap to 2050 and the energy security concerns

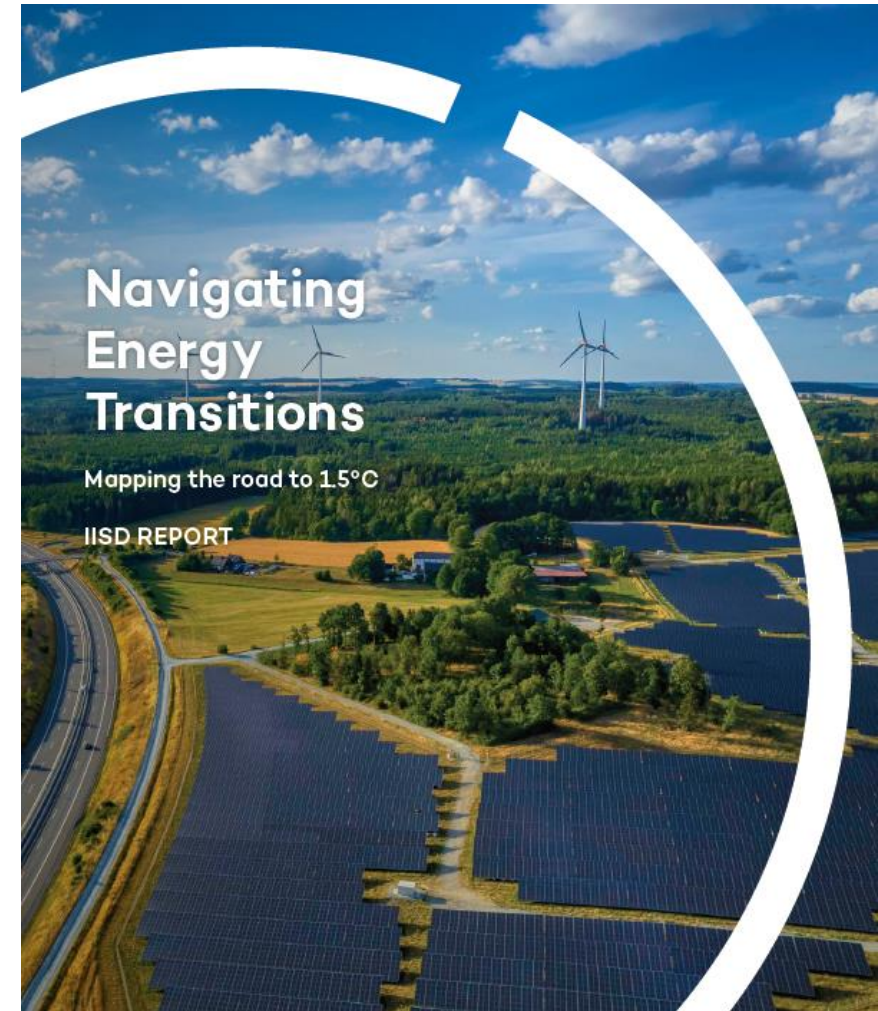
Angela Picciariello
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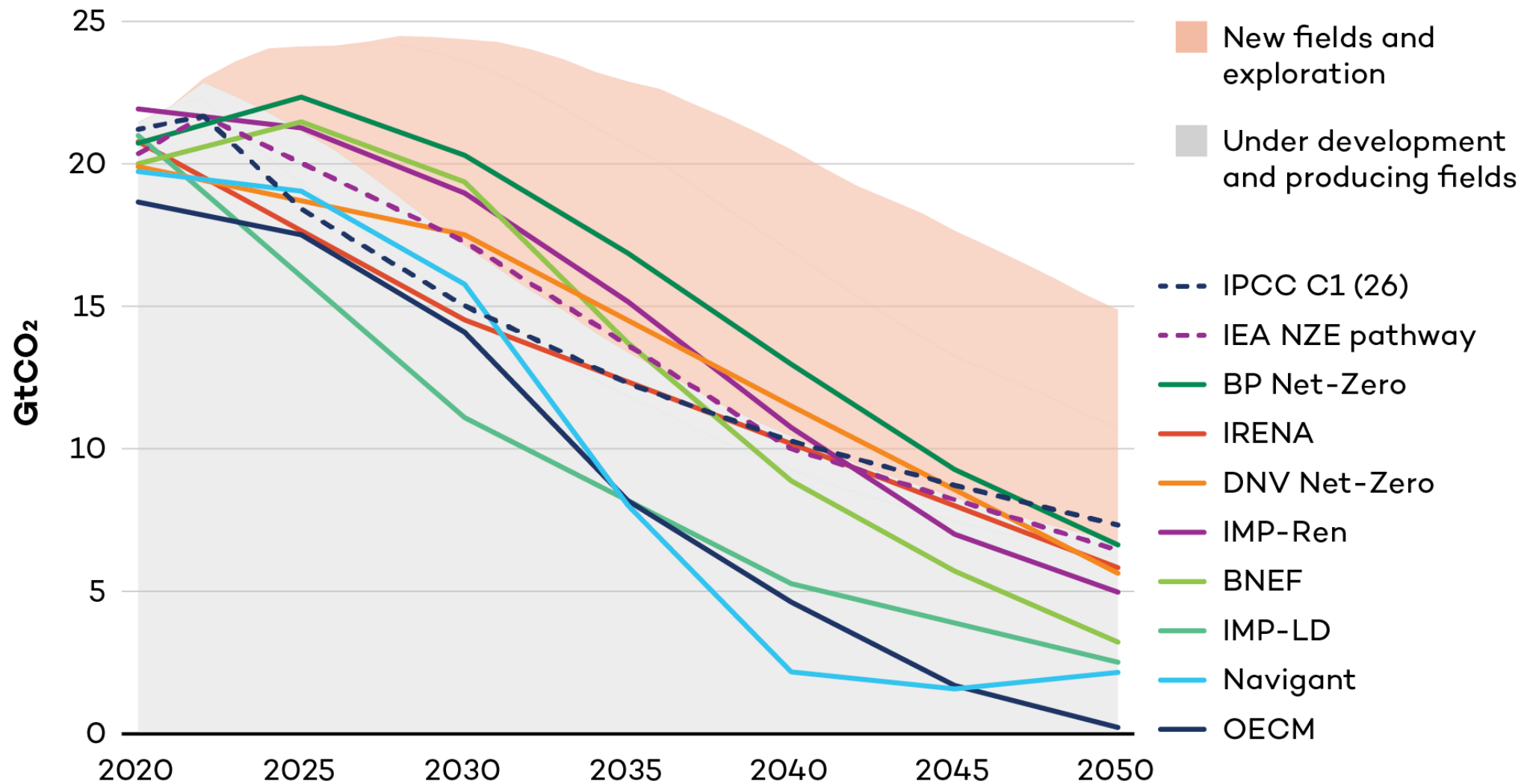
Integrated Assessment Models and Climate Policies

The report provided the first-ever comparison of a large number of climate and energy pathways to outline what is needed to limit global warming to 1.5°C.

- Selected 1.5°C IPCC pathways from Scenarios Explorer (based on IPCC assessment of CDR and CCS)
- Selection of authoritative and most used pathways from academia, intergovernmental organizations and consultancies



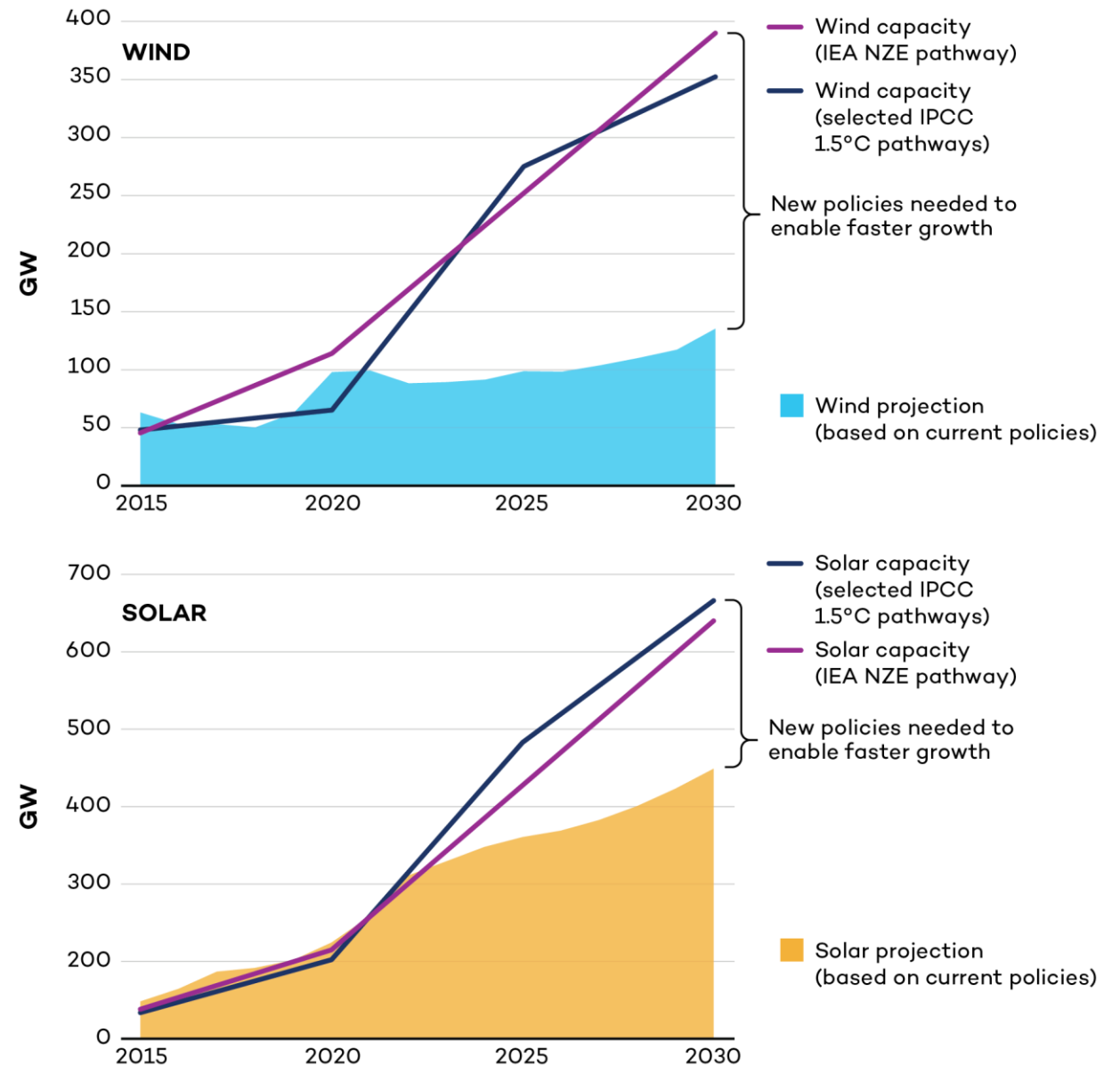
No room for new oil and gas development



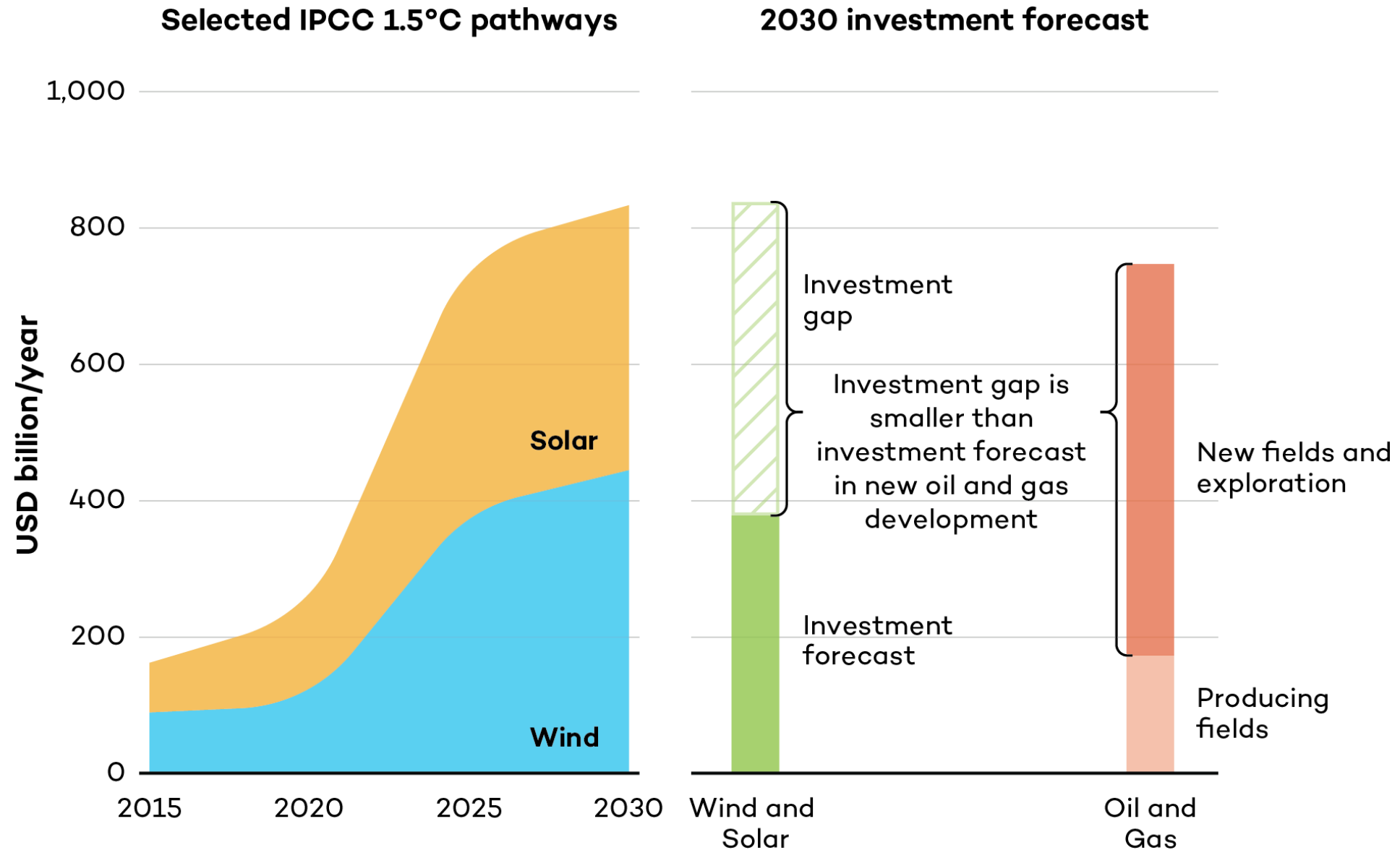
Source: Navigating Energy Transitions. Mapping the road to 1.5°C. IISD report. October 2022.

There is a huge gap in wind and solar deployment

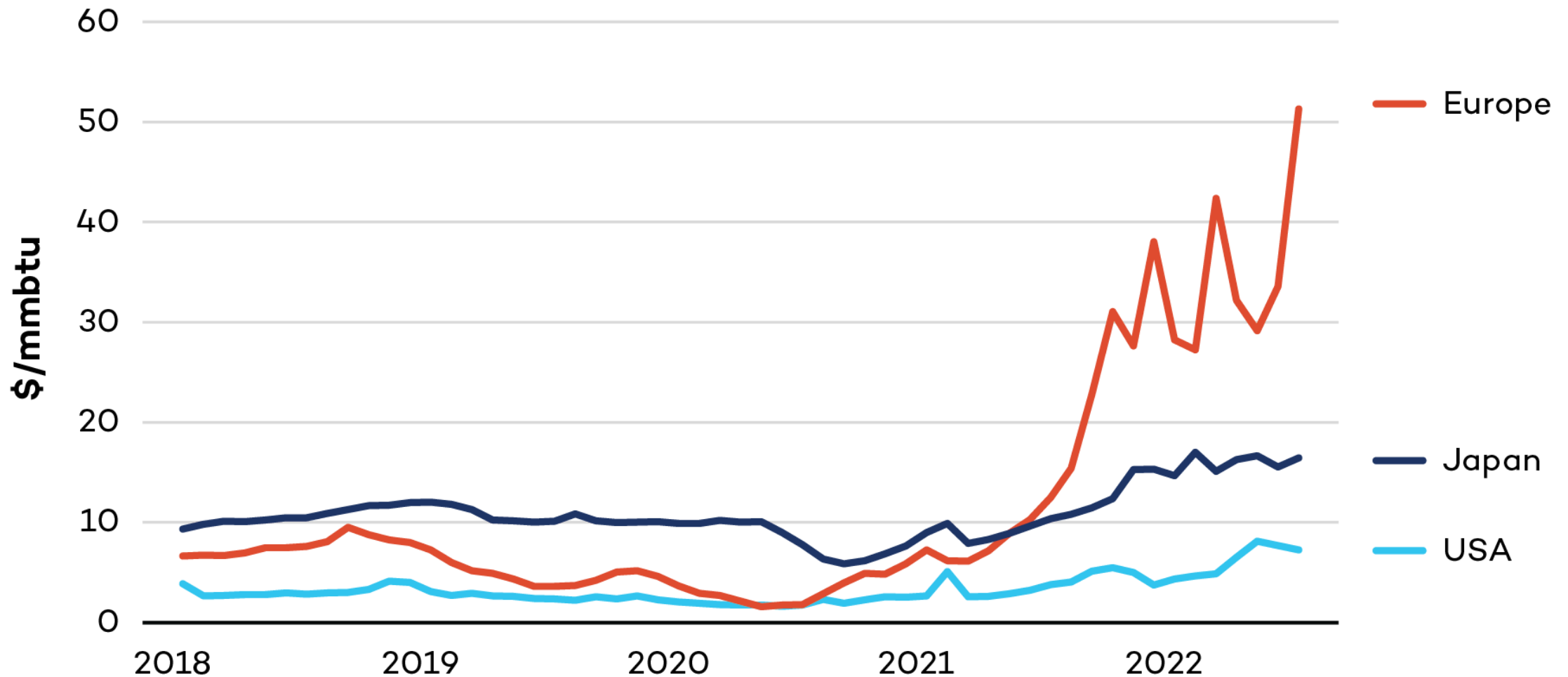
- **Selected IPCC and IEA 1.5C pathways show that annual capacity deployment needs to be significantly higher by 2030 compared to forecasted levels**
- **Other scenarios estimate that wind and solar deployment needs could be up to 3 times higher**



Investment gap for wind and solar energy



The War in Ukraine (1): Gas prices in Europe have drastically increased



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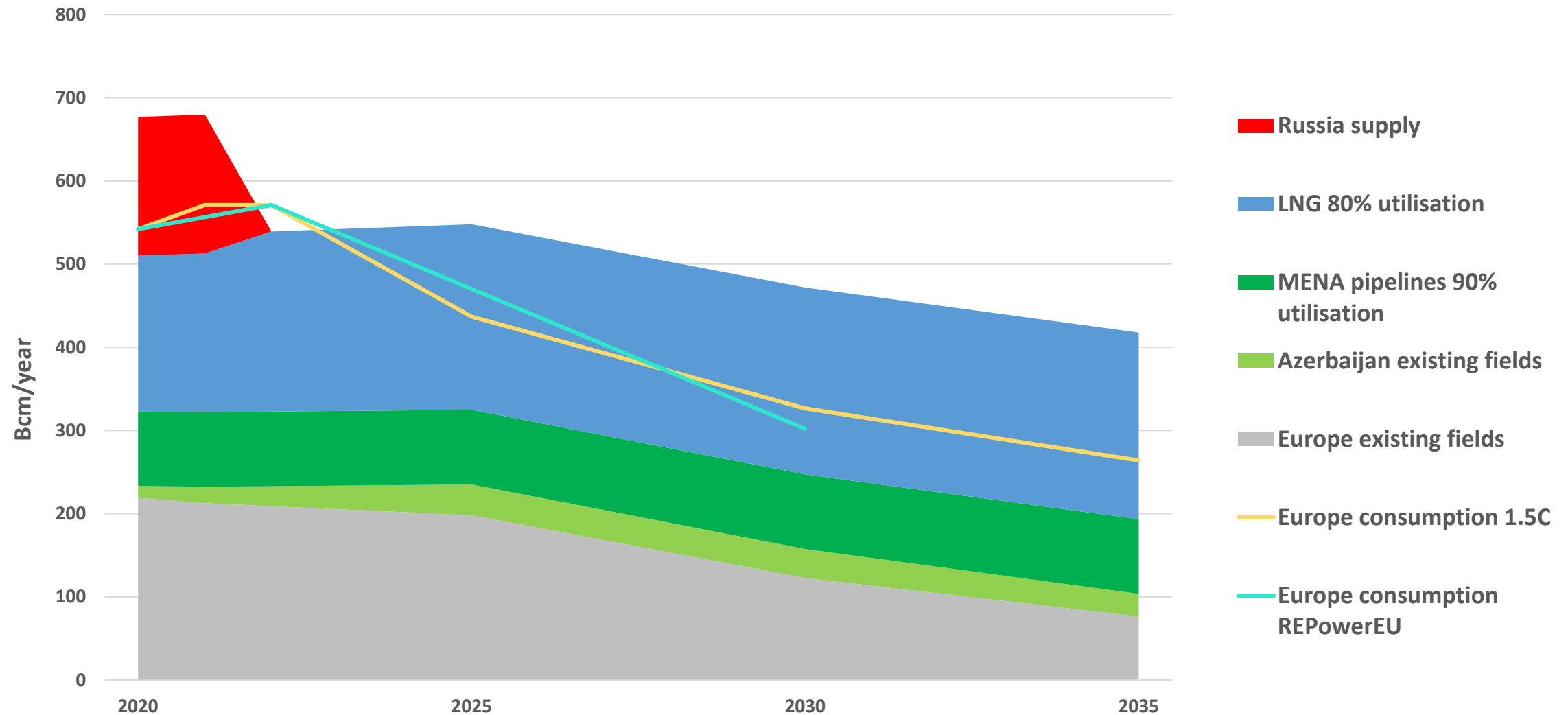
The War in Ukraine (2): the EU dash for gas

- The European dash for gas risks having serious consequences for Europe's energy transition *and* for several countries in the Global South.
- Alternatives to new gas in Europe exist:
 - Demand reduction and gas savings
 - Fuel switch to alternative energy carriers
 - A change in the EU gas market model
 - A strong uptick in investment in renewables and the energy transition

The War in Ukraine (3): likely impacts on renewables deployment

- New risks of derailing energy transition plans in many parts of the world (at least in the short term).
- However, in the long term, the cost-competitiveness of renewables continues to increase.
- Key concerns relate to supply chain disruptions, especially as policy instruments continue to focus on compressing prices.
- The design of renewable competitive procurement mechanisms and power markets have now resurfaced as ever-pressing needs.

Europe 1.5C-compatible gas consumption does not require new gas infrastructure



Source: Navigating Energy Transitions. Mapping the road to 1.5°C. IISD report. October 2022.

Thank You!

For more information:

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