



# Update on energy markets and trends

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OECD Global Parliamentary Network Plenary Meeting

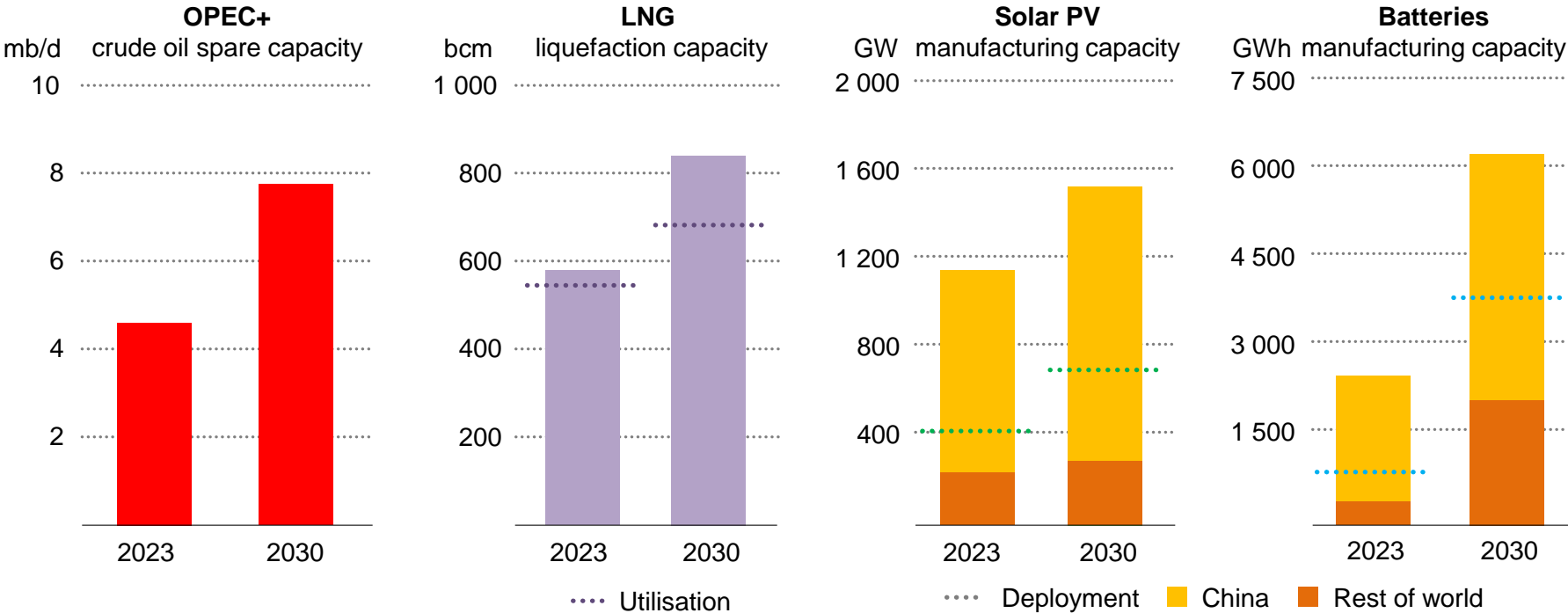
5-7 February 2025

OECD Conference Centre, Paris, France

# Energy security risks remain high even as market balances ease



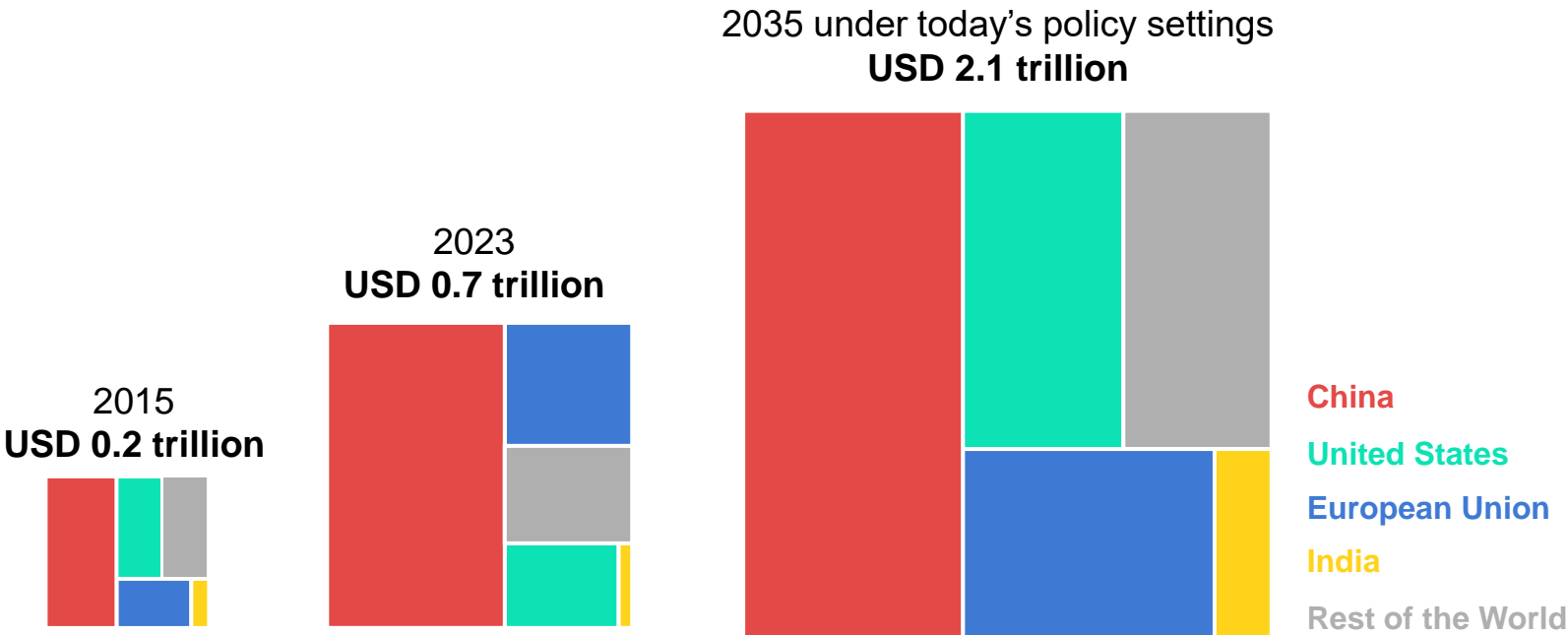
Capacities and utilisation in the Stated Policies Scenario (STEPS)



The world is set to enter a new energy market context in the second half of this decade, marked by continued geopolitical hazards but also by relatively abundant supply of multiple fuels and technologies

# Clean & modern technologies are a sizeable economic opportunity

Global market value for clean energy technologies



The market for clean technologies is set to triple to 2035 under current policy settings, close to value of the global crude oil market in recent years.

# Investment in clean technology manufacturing is booming

Clean technology manufacturing facilities in operation, 2023

## Solar PV

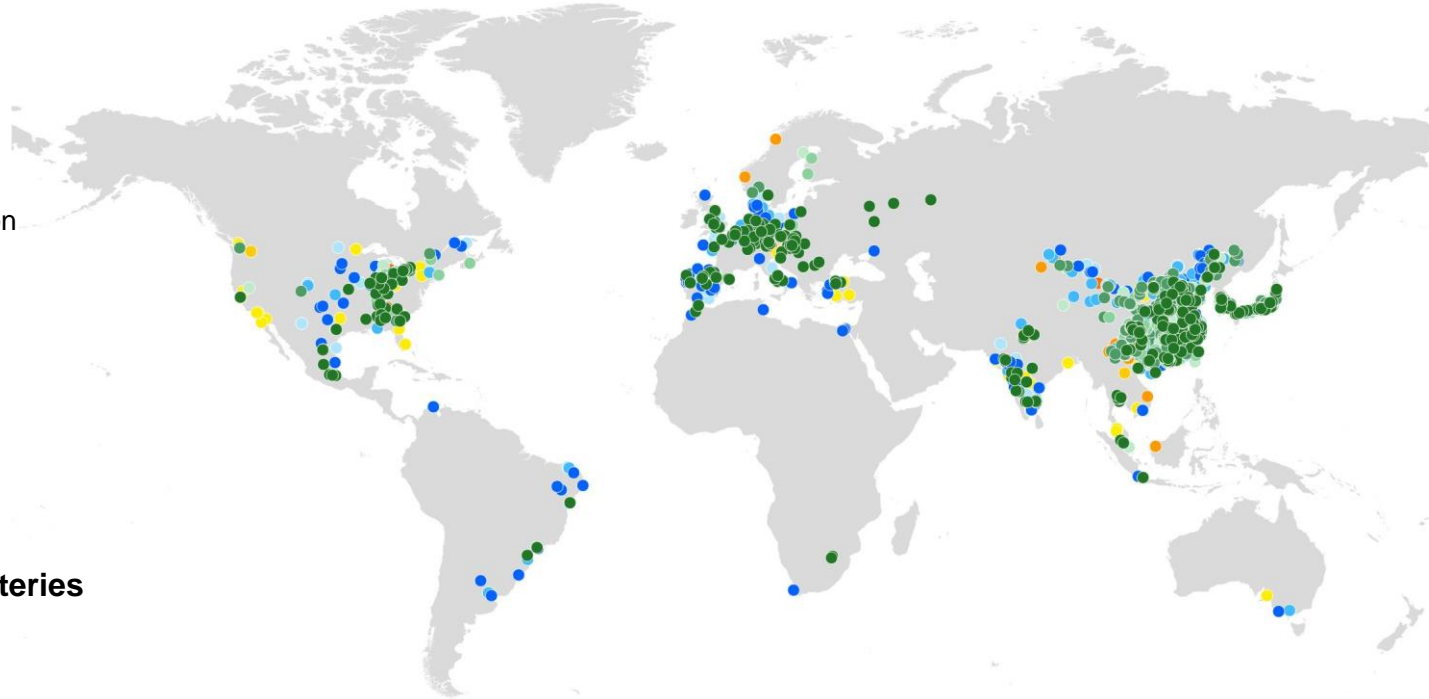
- Polysilicon
- Wafer
- Cell
- Module

## Wind

- Blade
- Nacelle
- Tower

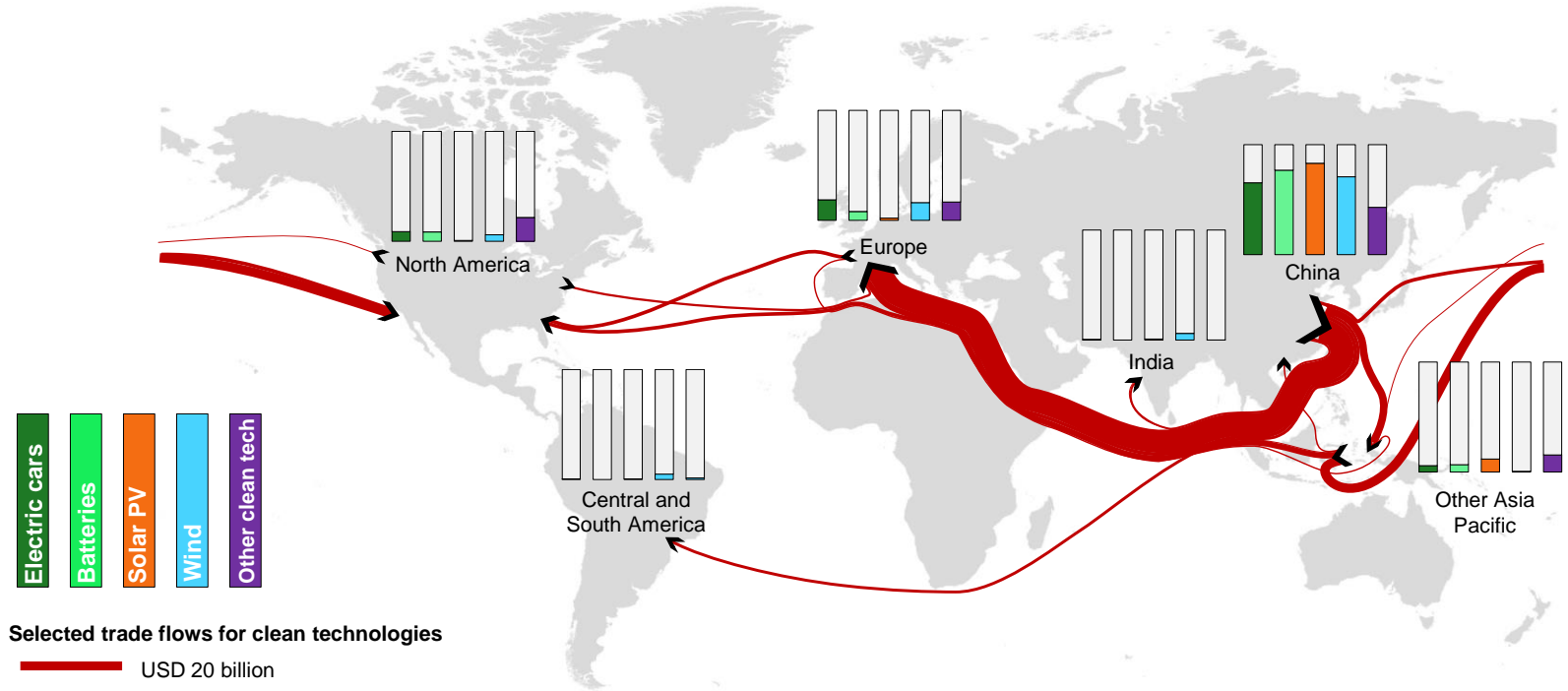
## EVs & batteries

- Anode
- Cathode
- Cell
- Electric vehicles



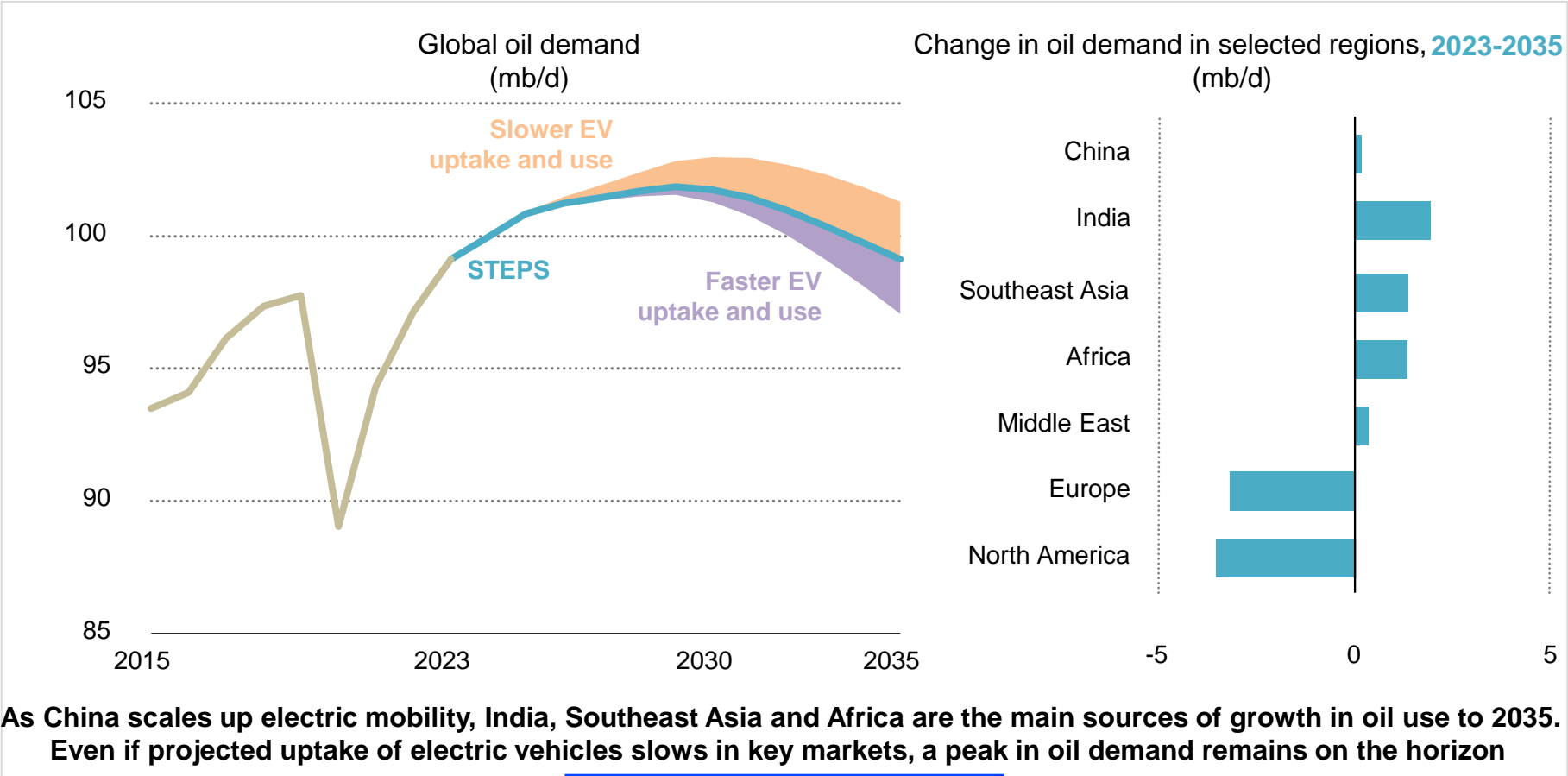
# Investment in clean technology manufacturing is booming

Share of global clean technology manufacturing output by technology, 2023

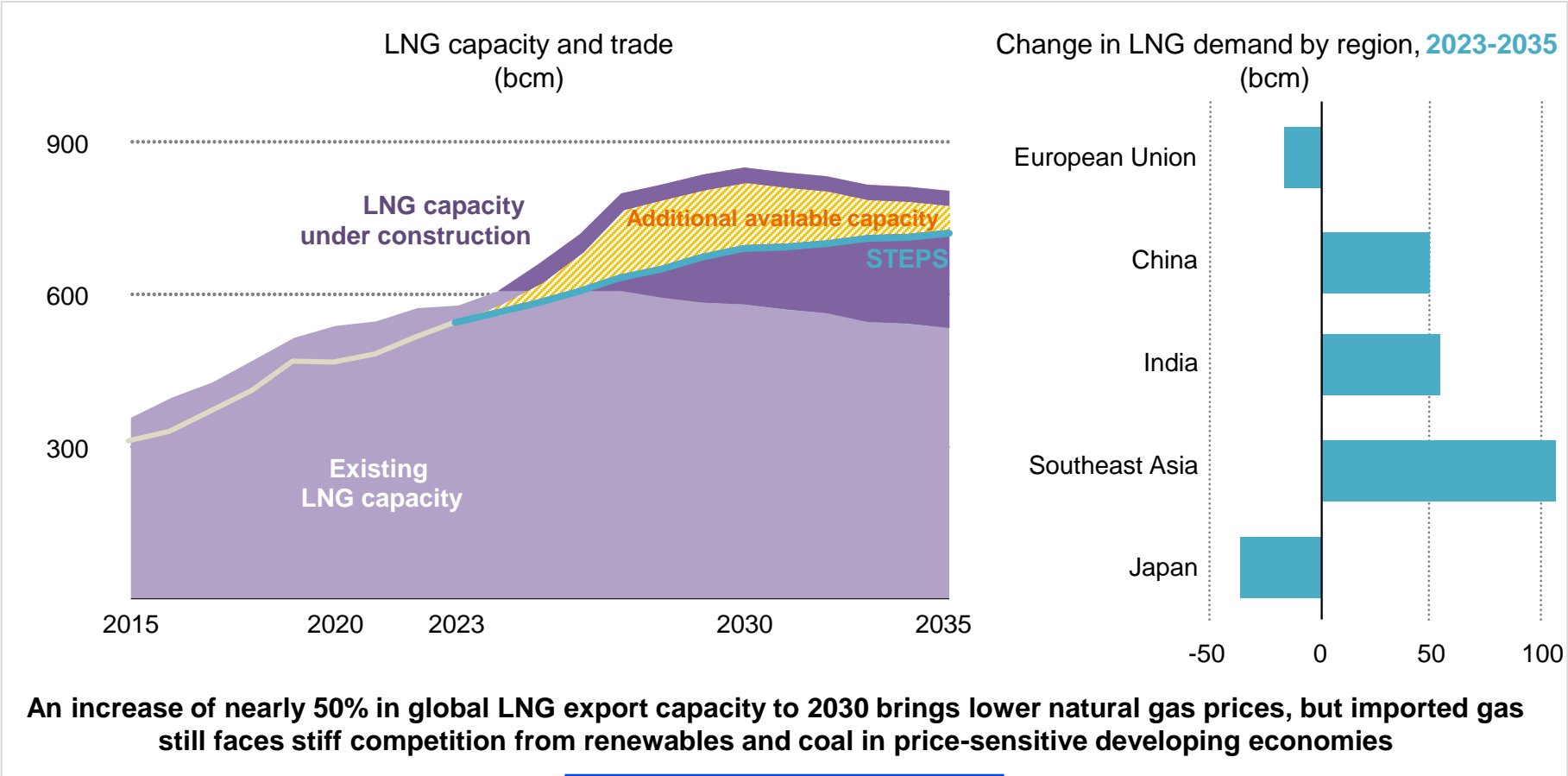


**The manufacturing of clean technologies is highly concentrated geographically, with China accounting for around 70% of the global manufacturing output value for the six key clean technologies.**

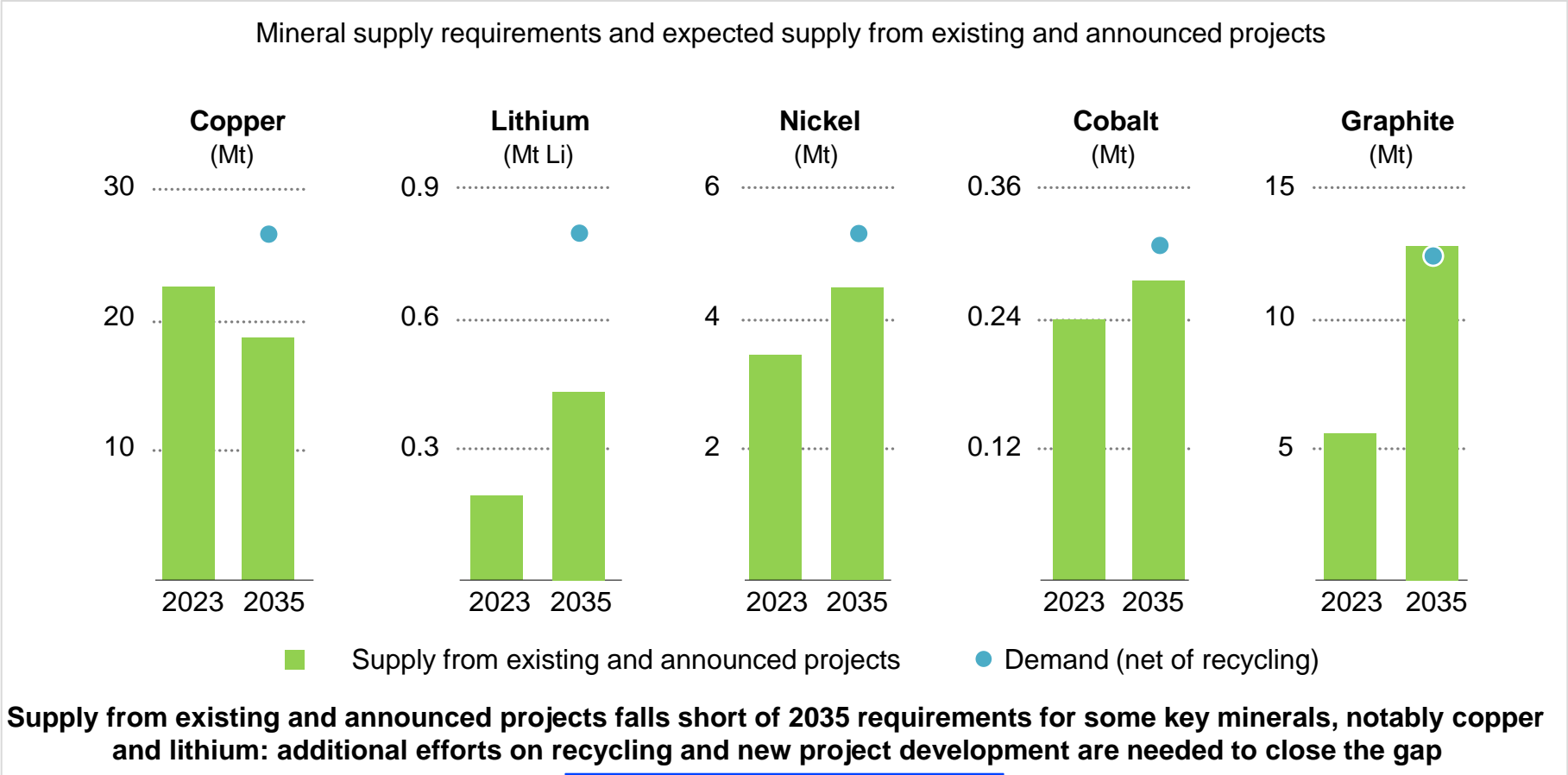
# Oil demand's engine is switching to electricity



# Where will the new wave of LNG go?

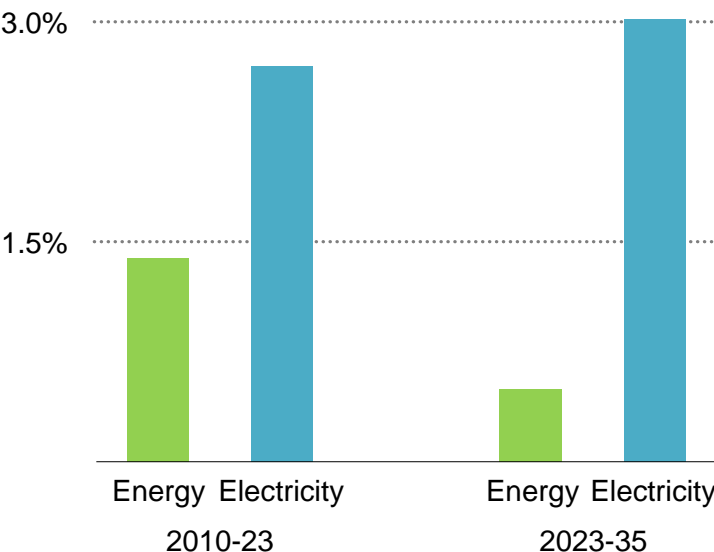


# Not all projected supplies are abundant

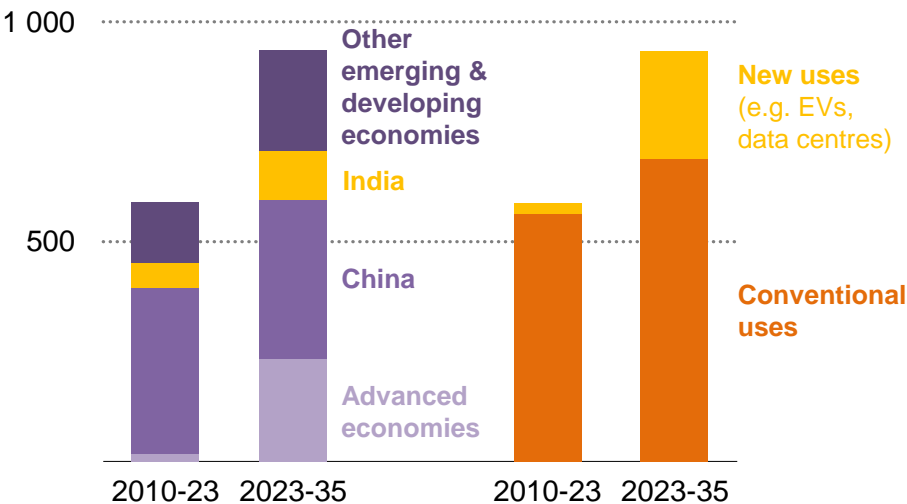




Annual demand growth in STEPS

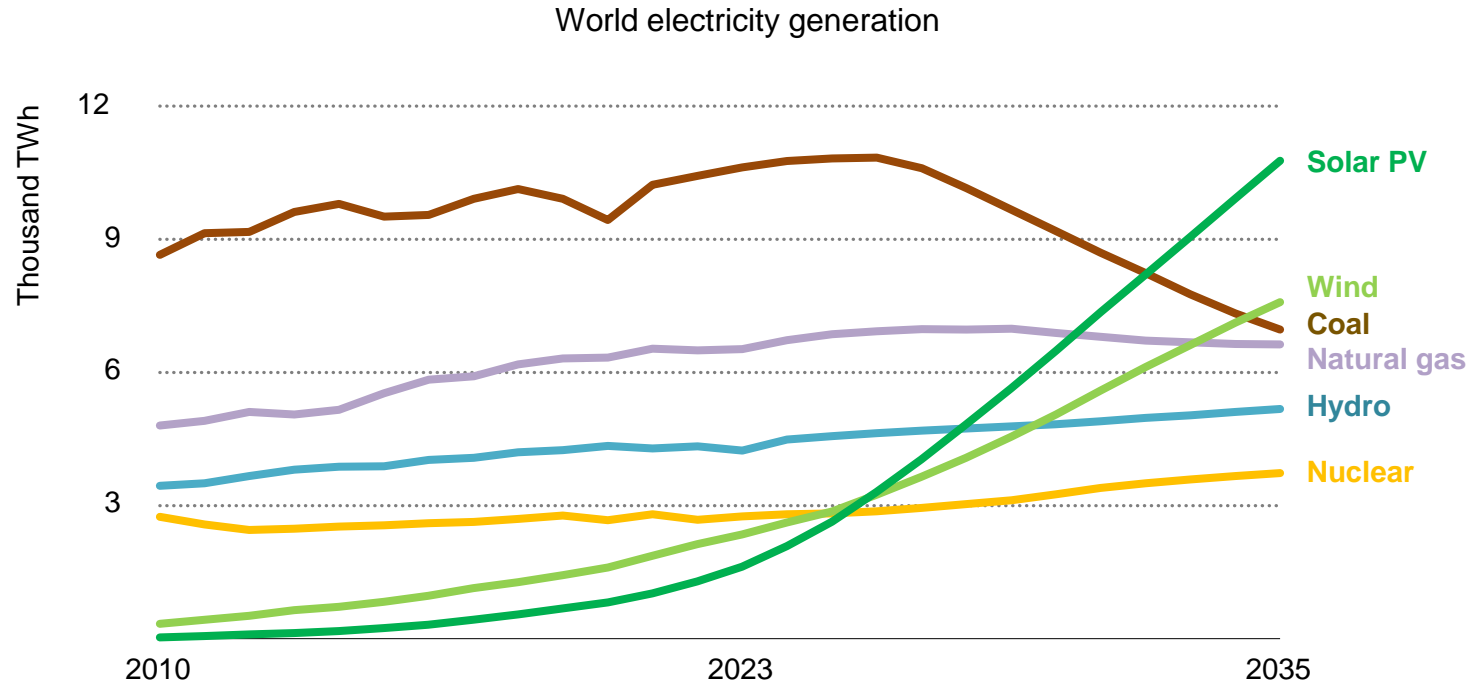


Annual electricity demand growth (TWh)



**Electricity is growing faster than all other energy sources and it's growing across a wide range of economies, as conventional drivers of growth are supplemented by new ones like EVs, data centres and heat pumps**

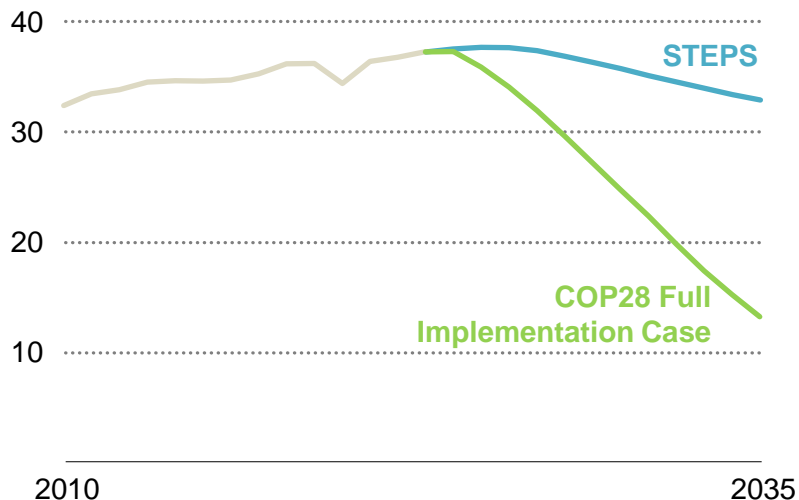
# Electricity use is growing fast, clean power is rising even faster



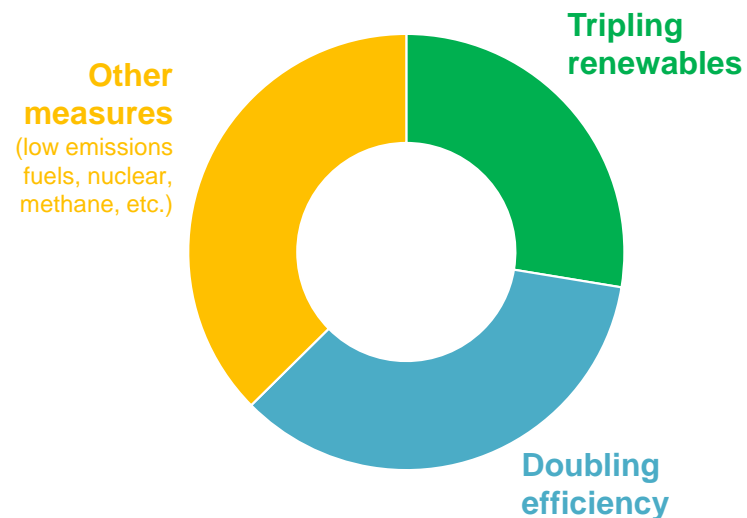
**Solar PV and wind hit their stride and become the largest sources of electricity before 2035 in STEPS, complementing other clean sources like hydro and nuclear, and pushing coal into decline**

# An imminent peak in global emissions, but not yet a rapid decline

Global energy related CO<sub>2</sub> emissions  
(Gt CO<sub>2</sub>)



Share of emissions reductions to 2035 between STEPS  
and the COP28 Full Implementation Case



**Policies and market trends are strong enough to deliver an imminent peak in global emissions, but full implementation of the COP28 energy goals is needed to accelerate their decline towards net zero emissions by 2050**

