



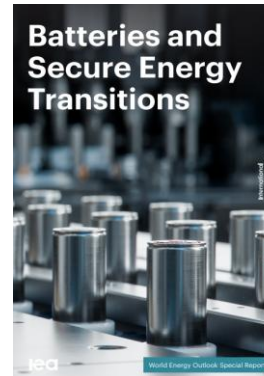
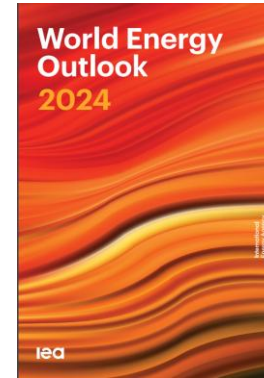
# Batteries and Secure Energy Transitions

Brent Wanner, Head of Power Sector Unit

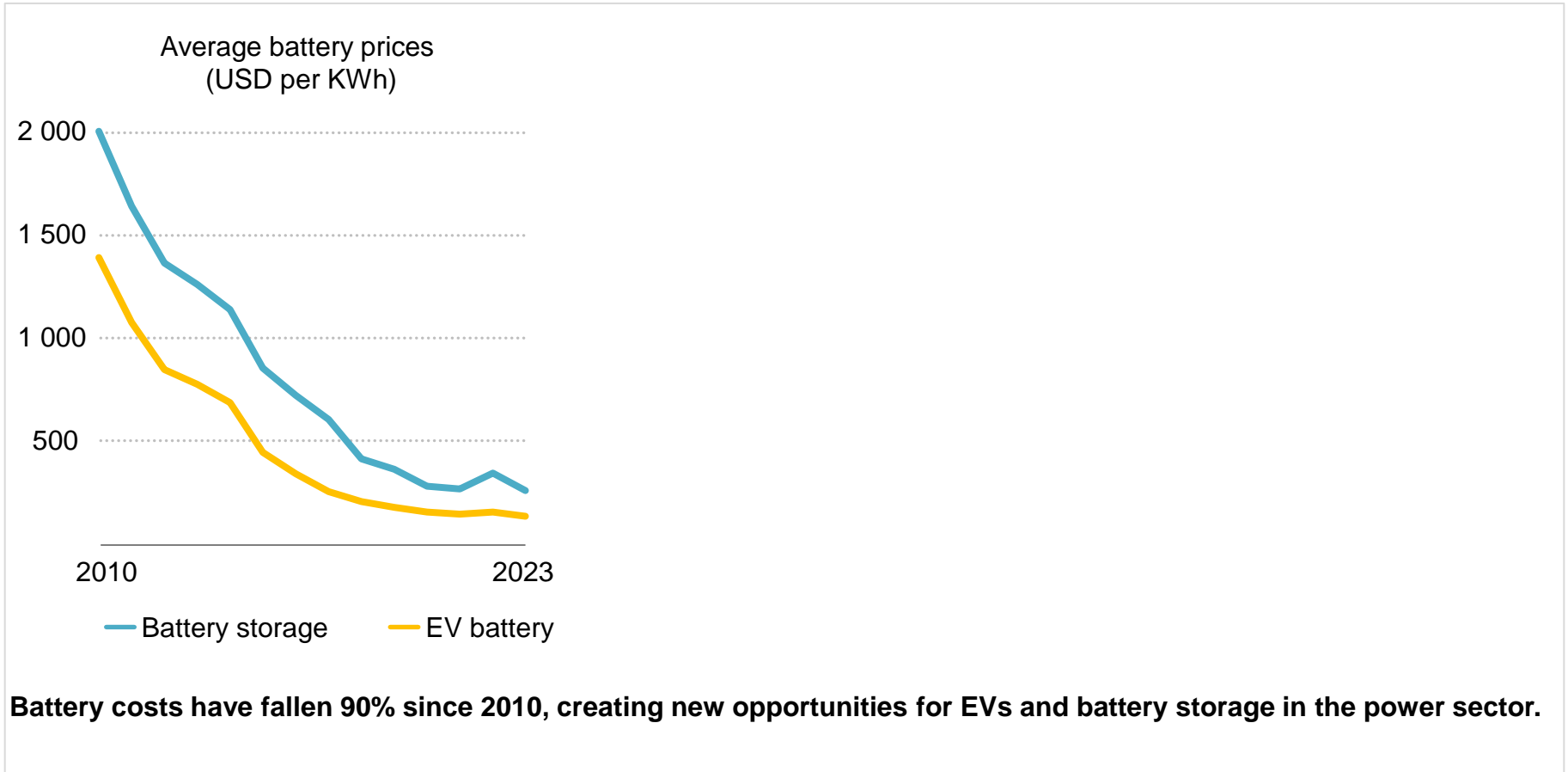
Energy Storage Summit 2025, London – 18 February 2025

# About the International Energy Agency (IEA)

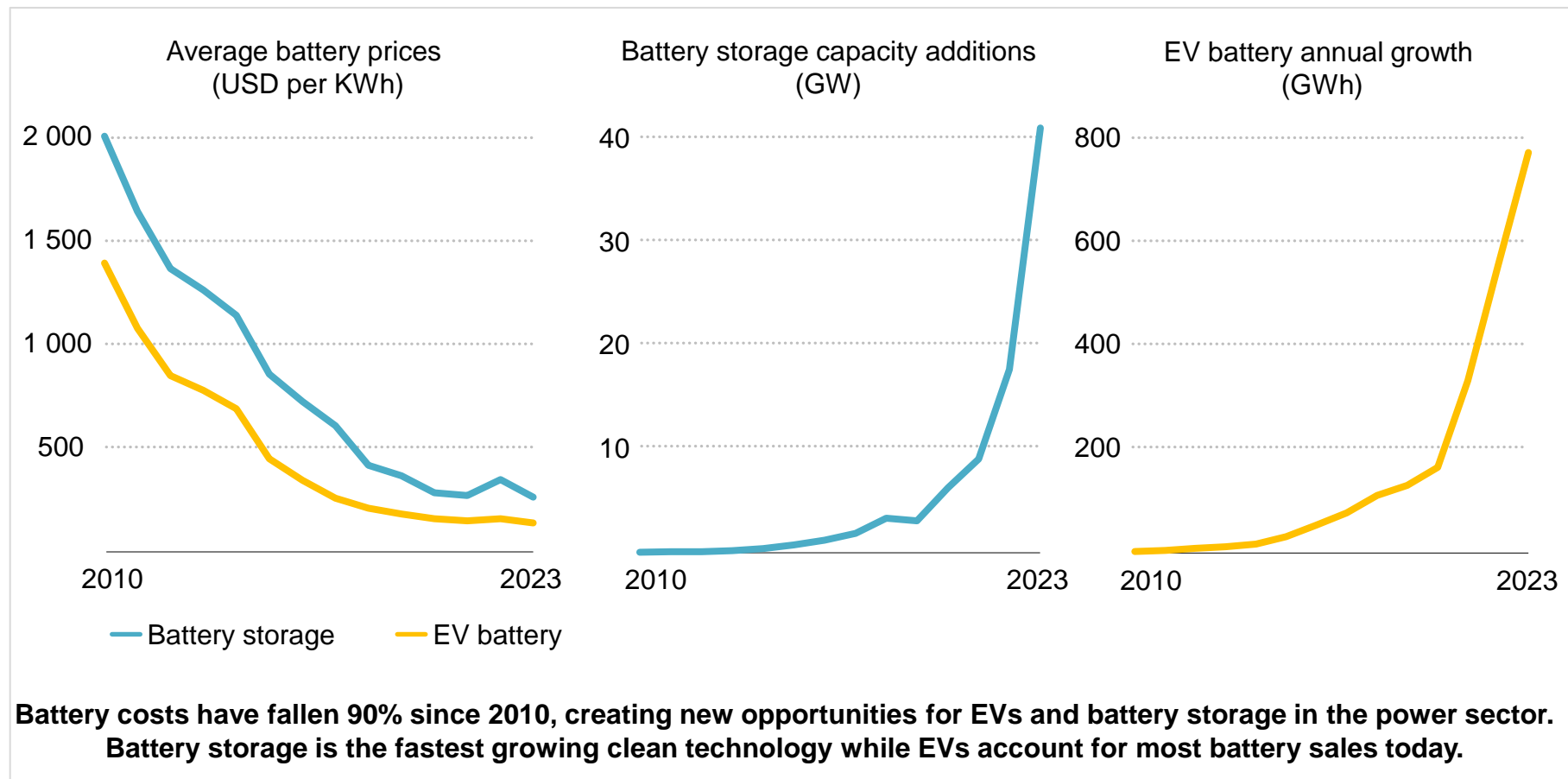
- Intergovernmental organization, initially founded in 1974 to safeguard oil security of supply
- Mandate has since been broadened to examine all fuels, all technologies and global energy issues ...
- ... including renewables, oil, gas and coal supply and demand, electricity systems and markets, energy efficiency, clean energy technologies, access to energy, and more
- The IEA has become the global authority on energy – recommending policies that enhance the reliability, affordability and sustainability of energy
- The IEA publishes comprehensive energy data, outlooks and market reports for global energy demand and supply, technologies and regions



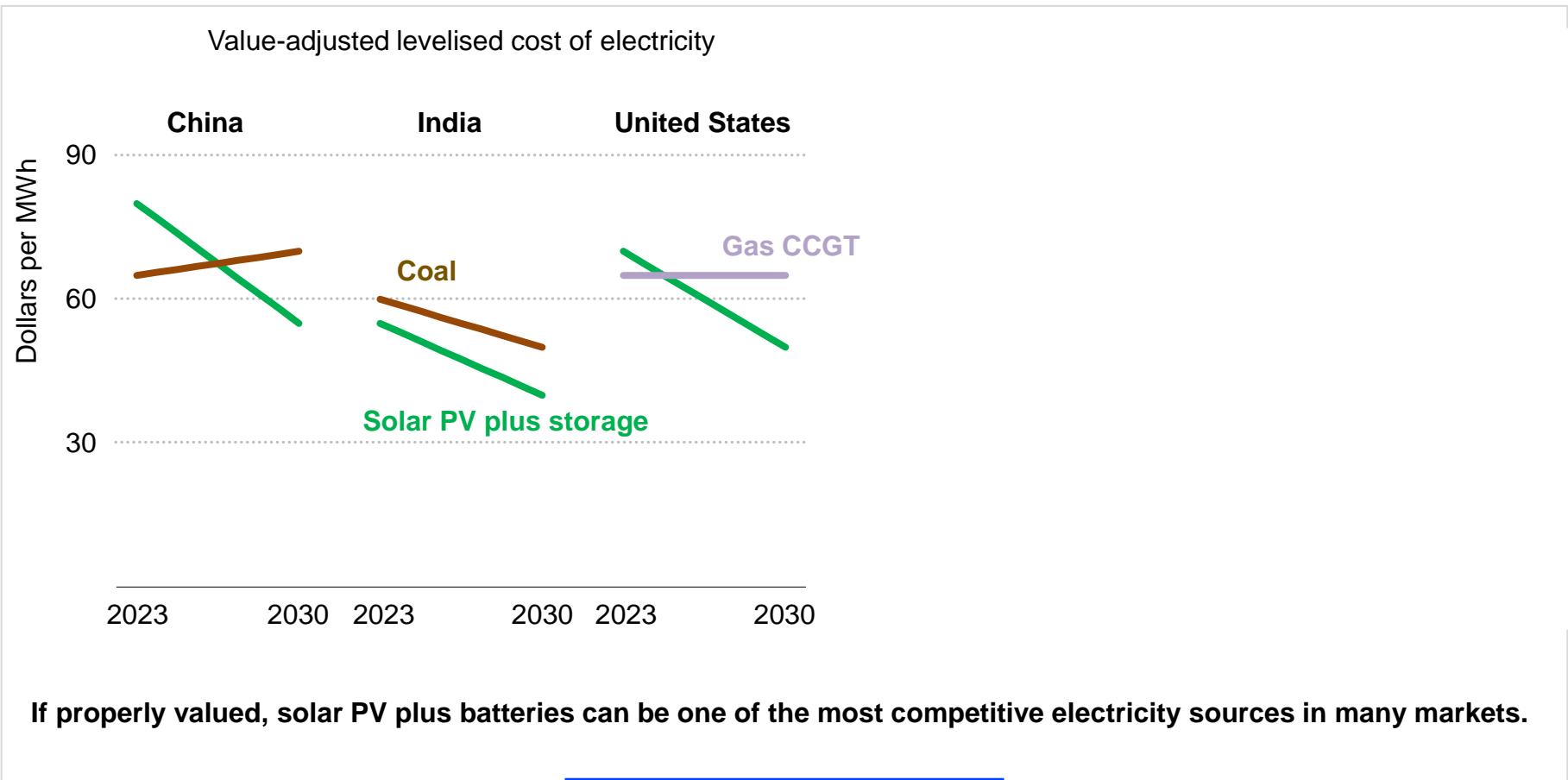
# Batteries are taking off and transforming electricity and transport



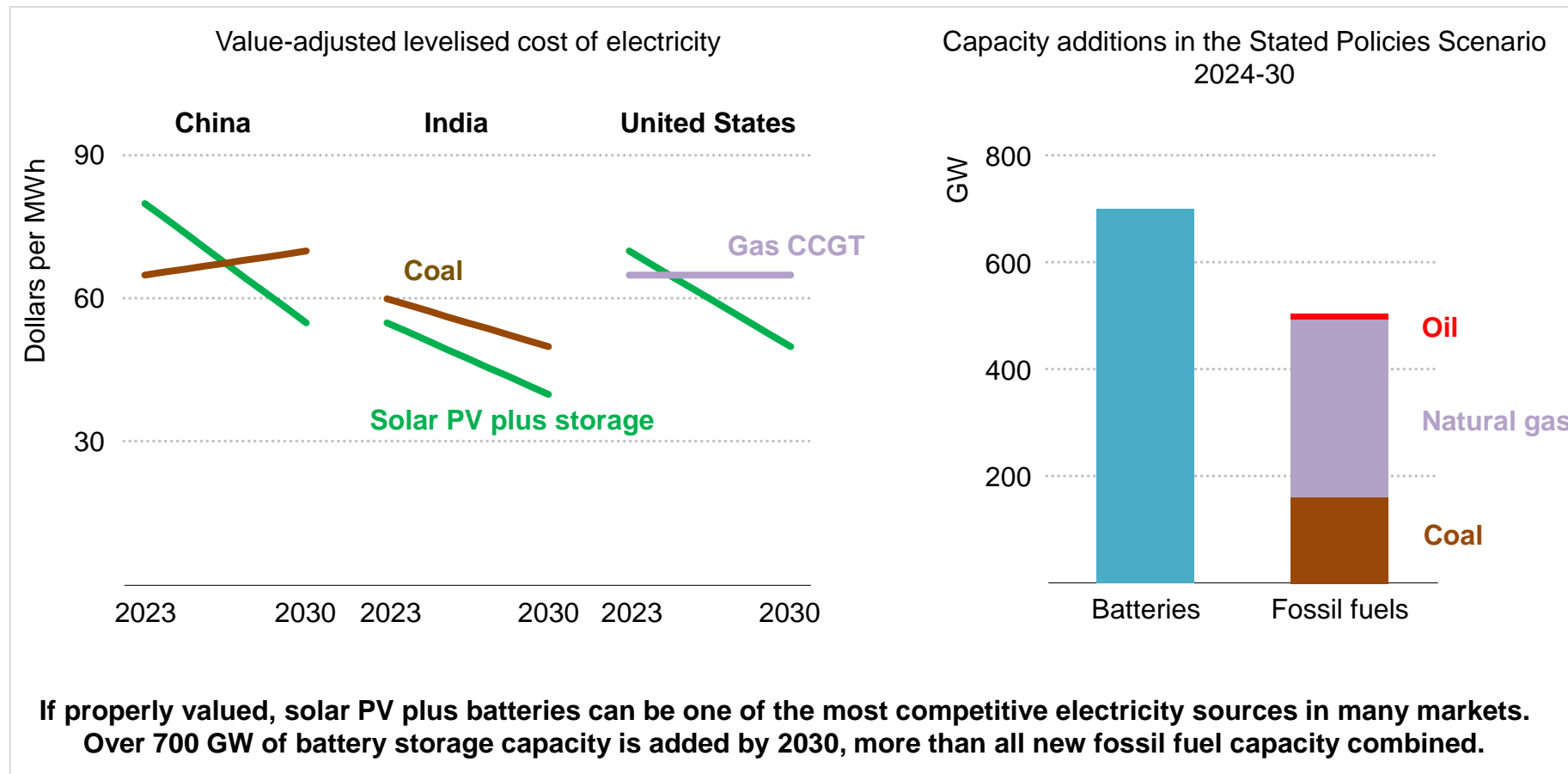
# Batteries are taking off and transforming electricity and transport



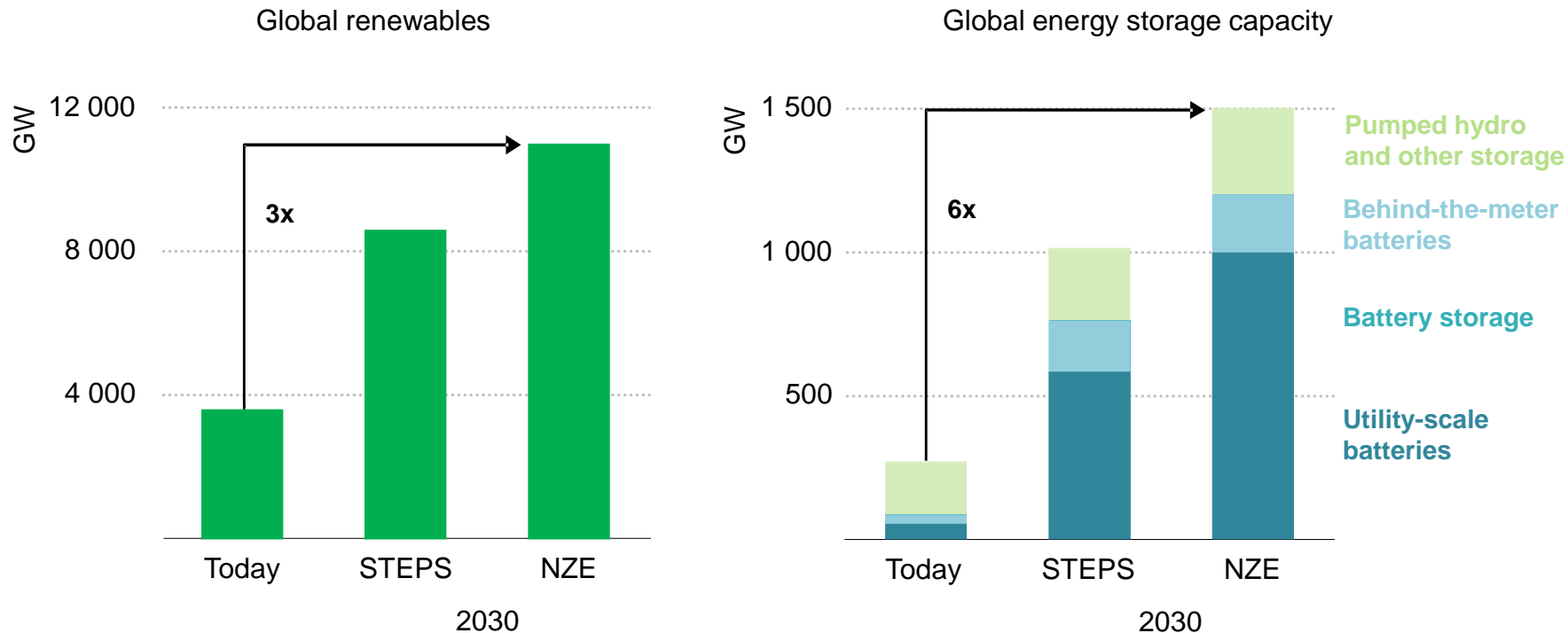
# Favourable economics drive huge uptake under today's policies



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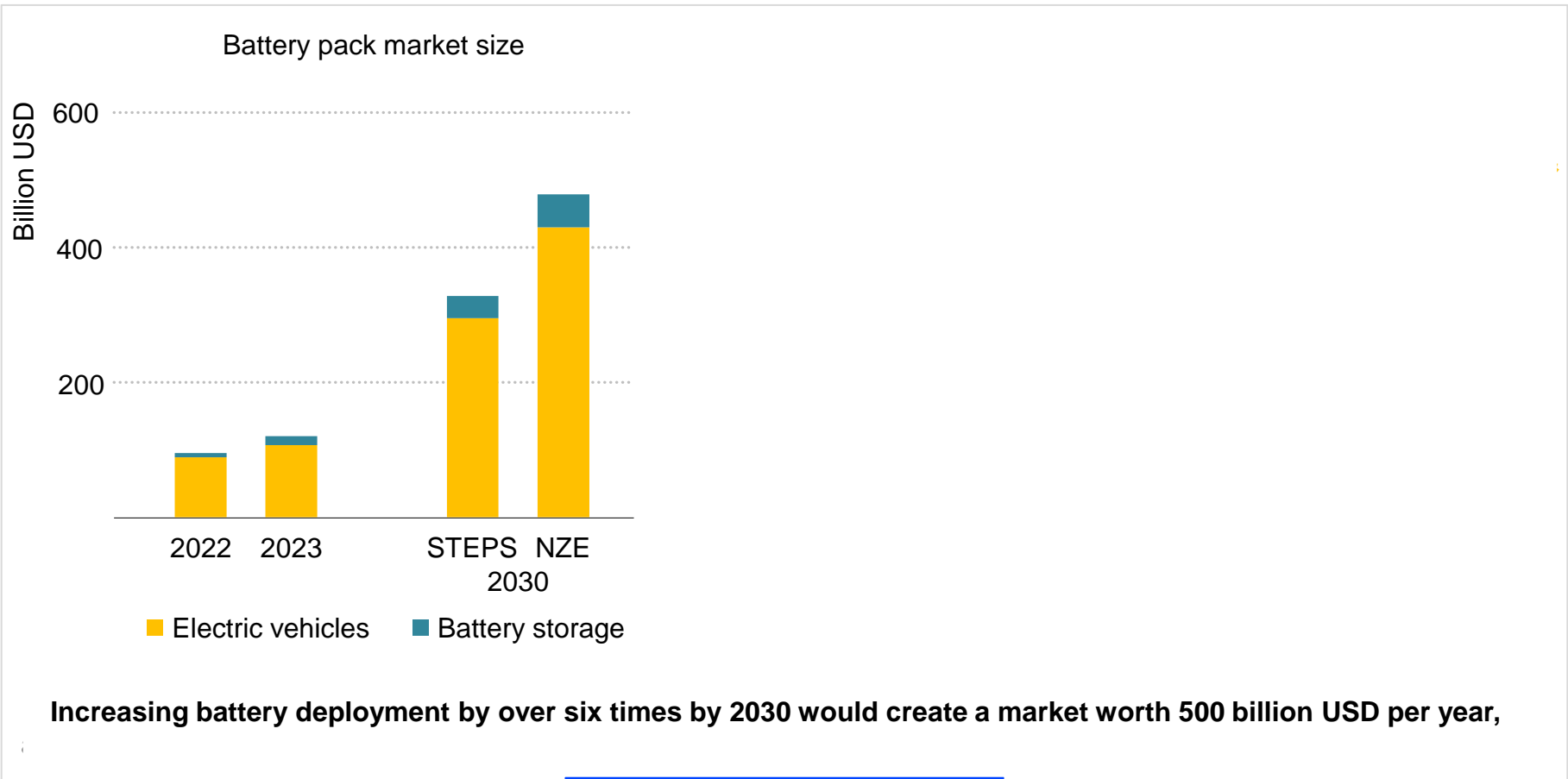


# Batteries play a critical role in tripling renewables by 2030



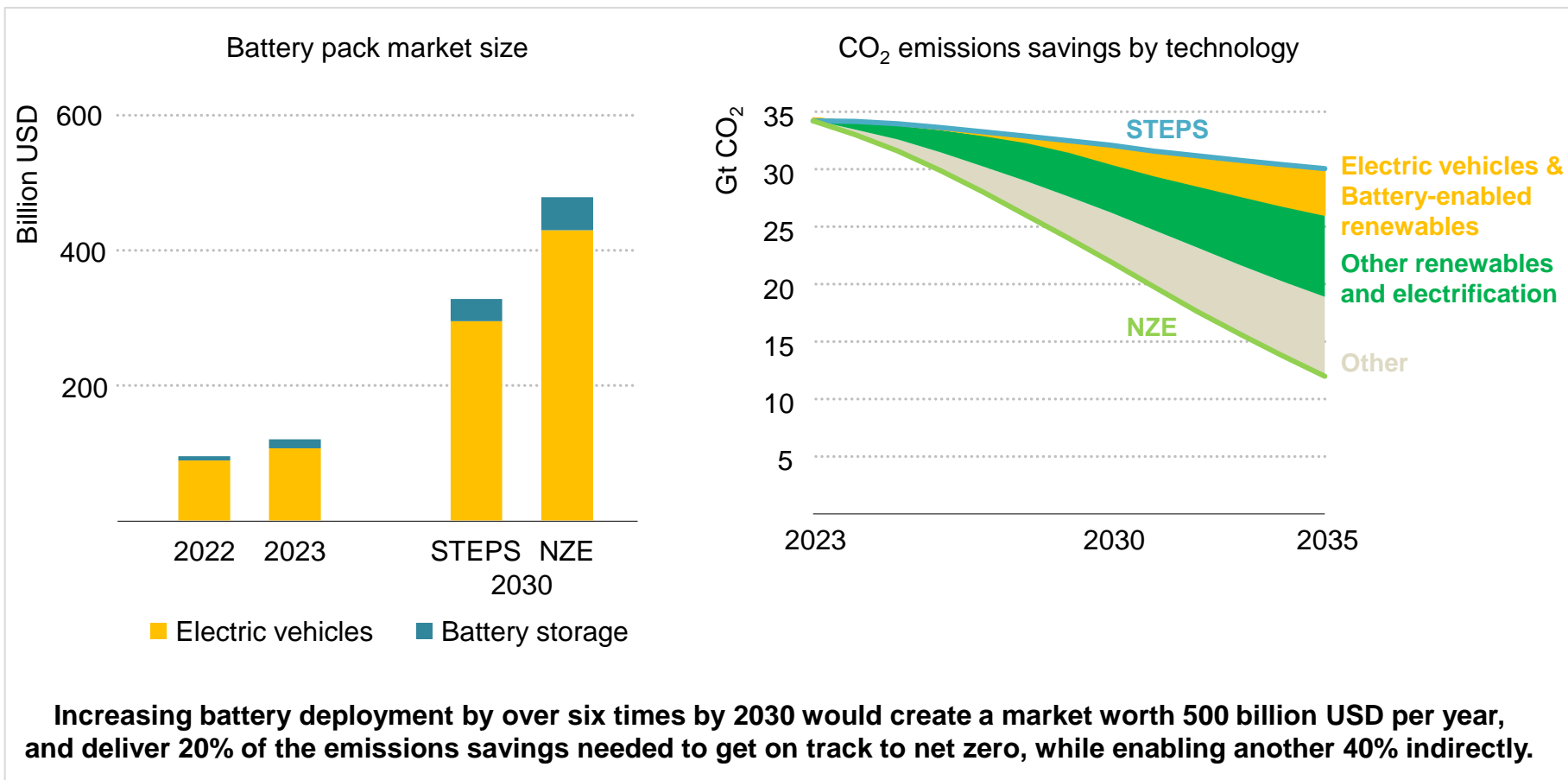
**To achieve the COP28 goal of tripling renewables by 2030, storage capacity needs to rise sixfold to over 1 500 GW, with batteries making up 90% the growth, complementing pumped hydro, compressed air and thermal storage.**

# Huge market potential and a linchpin for clean energy transitions



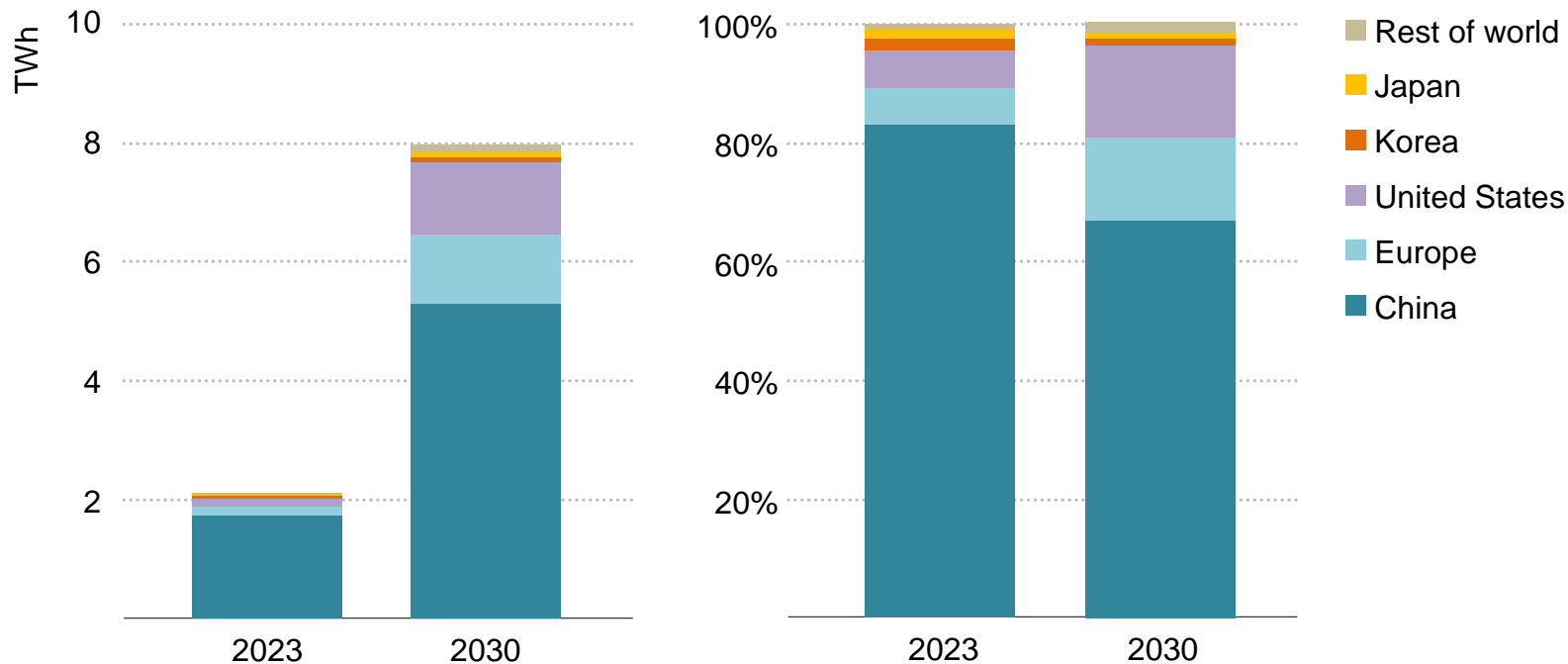


# Huge market potential and a linchpin for clean energy transitions

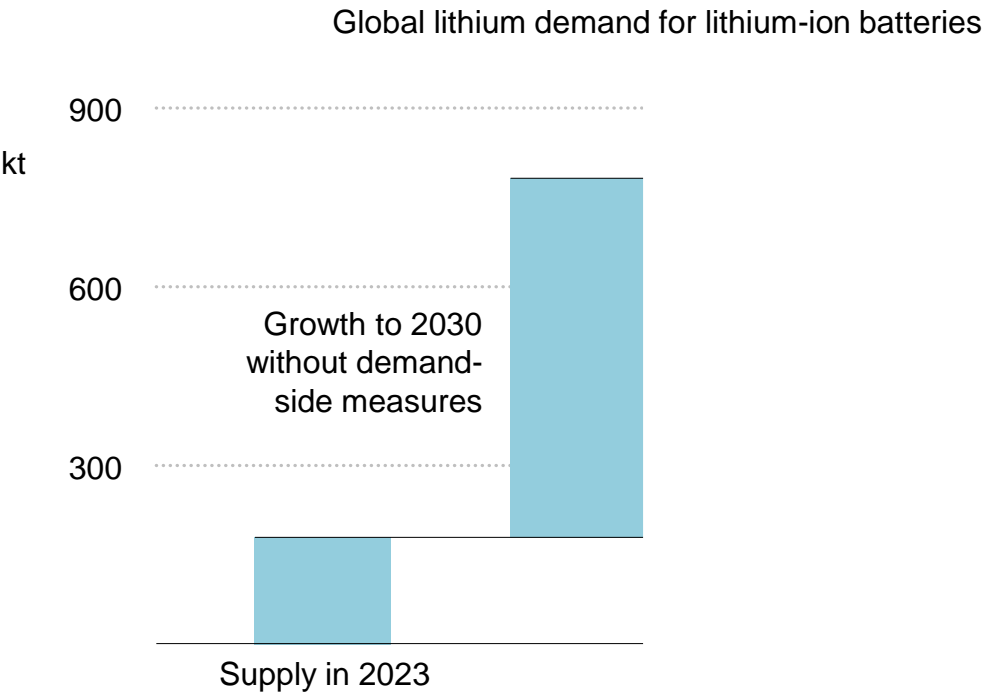


# Battery manufacturing is booming and set to diversify

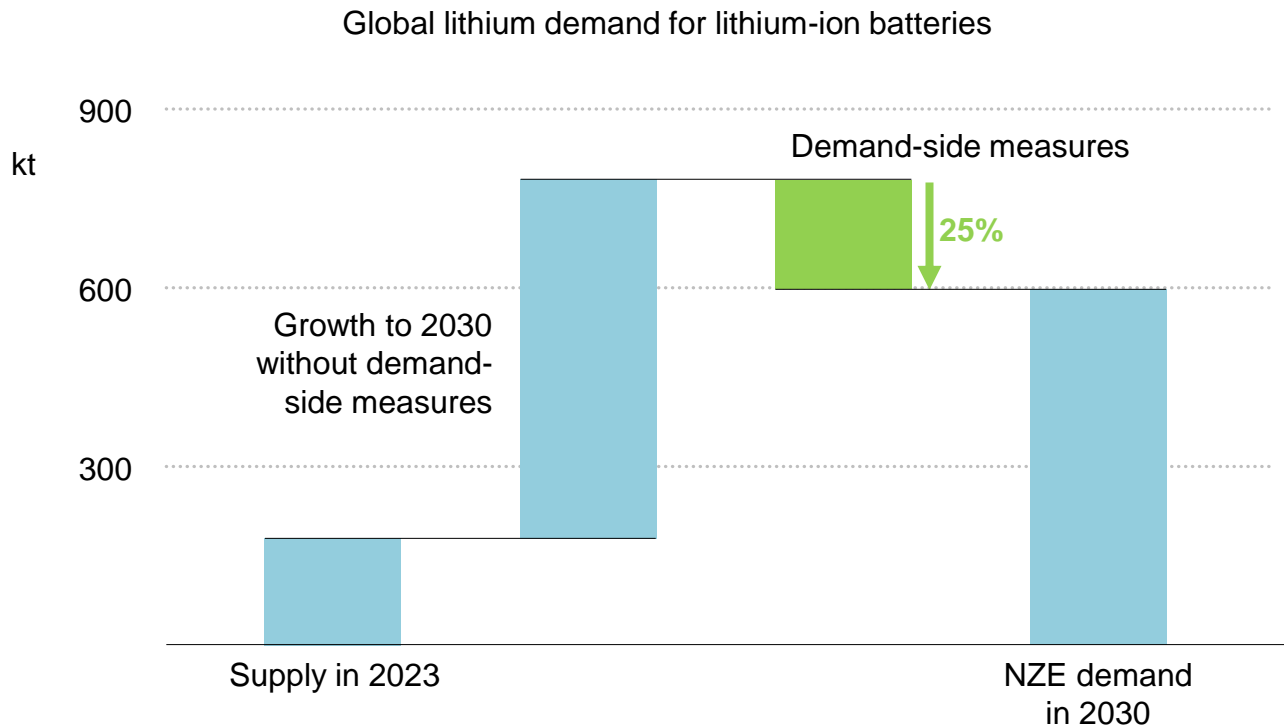
Current and announced battery manufacturing capacity by country



**Completing all announced projects would be sufficient to meet the 1.5 °C scenario needs. Supported by robust policy frameworks, the United States and European Union are scaling up battery manufacturing, increasing diversification.**



**A combination of new supply investments and demand-side measures could help address the challenges;**



**A combination of new supply investments and demand-side measures could help address the challenges; right-sizing batteries, enhanced recycling and innovation in battery chemistries could reduce demand by 25% in 2030.**

