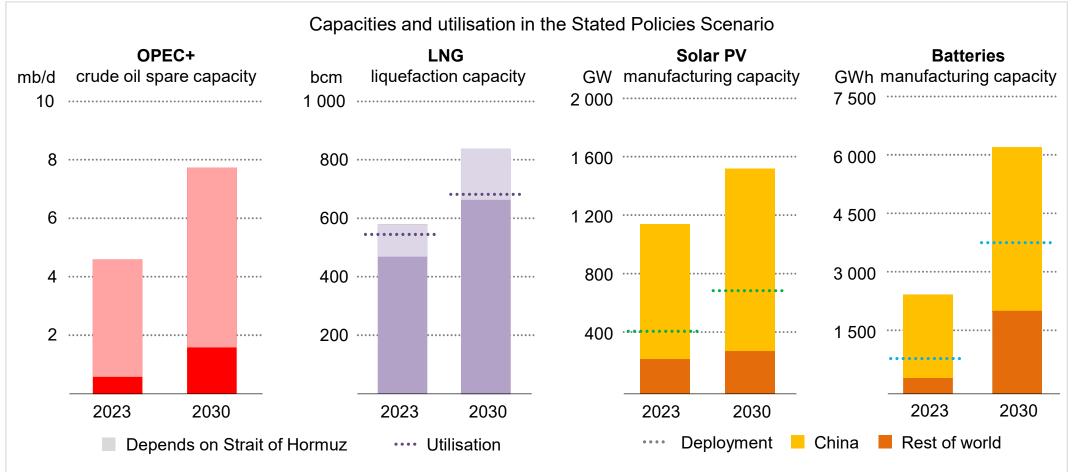


Global Energy Landscape

Presentation for the Strategic Policy Committee, METI Laura Cozzi, Director of Sustainability, Technology and Outlooks, IEA

Tokyo, 23 October 2024

Energy security risks remain high even as market balances ease

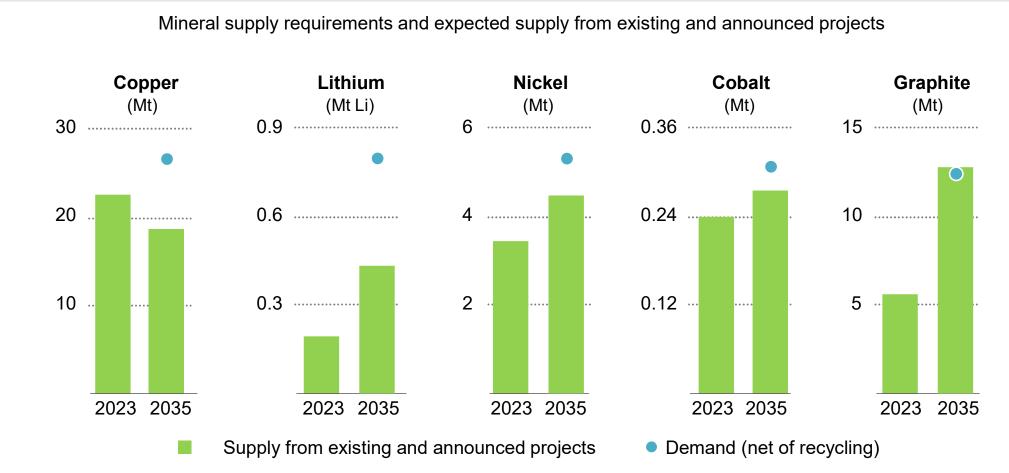


The world is set to enter a new energy market contest in the second half of this decade, marked by relatively abundant supply of multiple fuels and technologies, but also by continued geopolitical hazards

IEA 2024. CC BY 4.0.

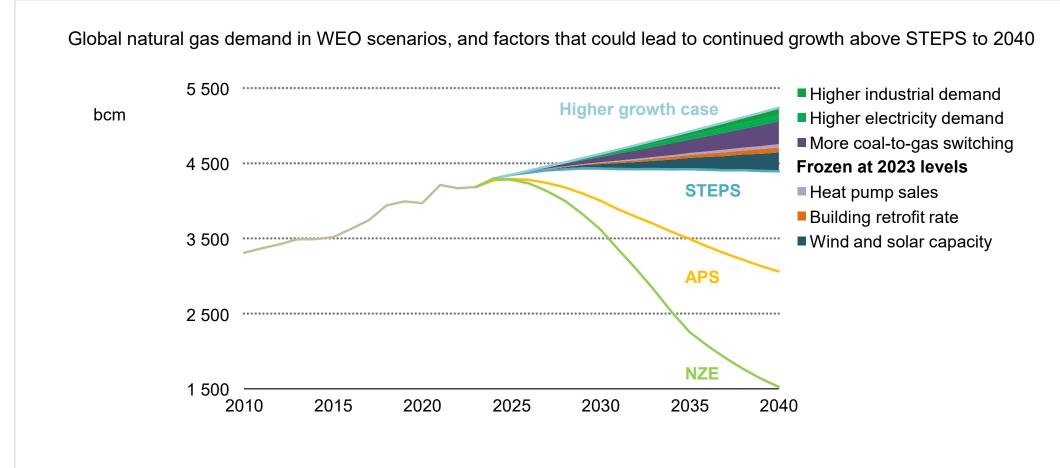
120

Not all projected supplies are abundant



Supply from existing and announced projects falls short of 2035 requirements for some key minerals, notably copper and lithium: additional efforts on recycling and new project development are needed to close the gap

Natural gas use is sensitive to policy, technology and market forces

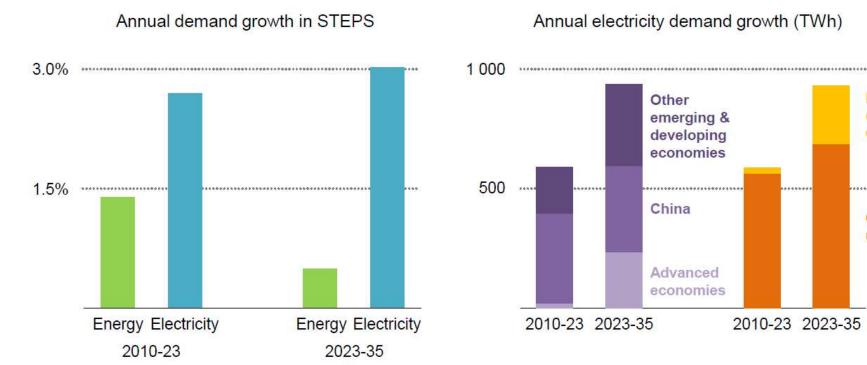


Natural gas faces an uncertain outlook, especially in emerging economies. The World Energy Outlook explores the impact of potential uncertainties on the outlook for natural gas and other fuels

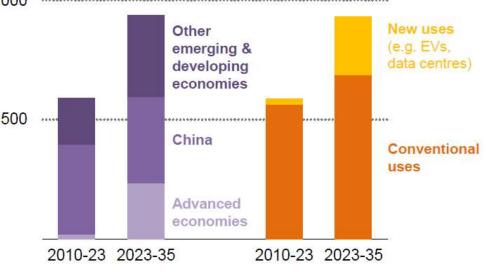
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Moving at speed into the Age of Electricity



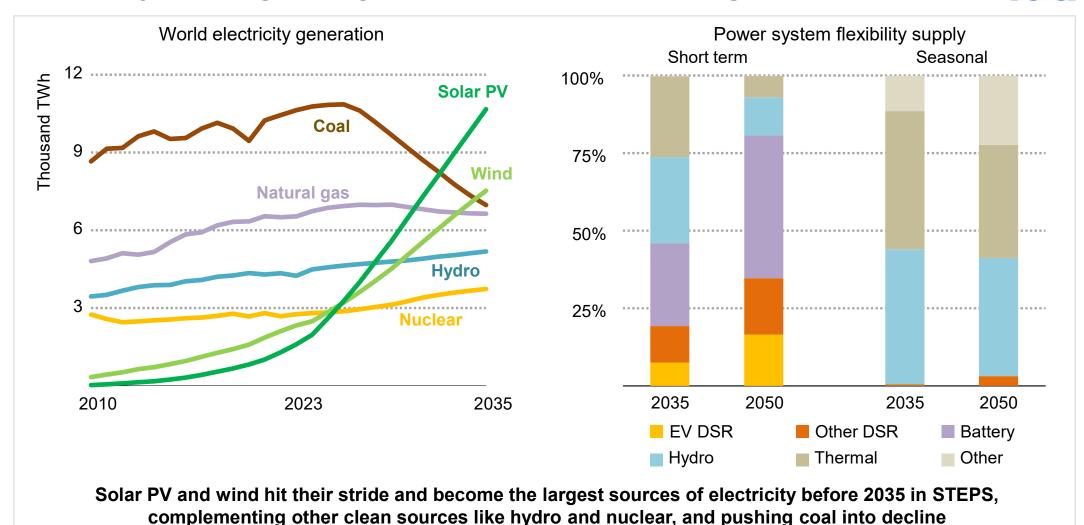


Annual electricity demand growth (TWh)



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

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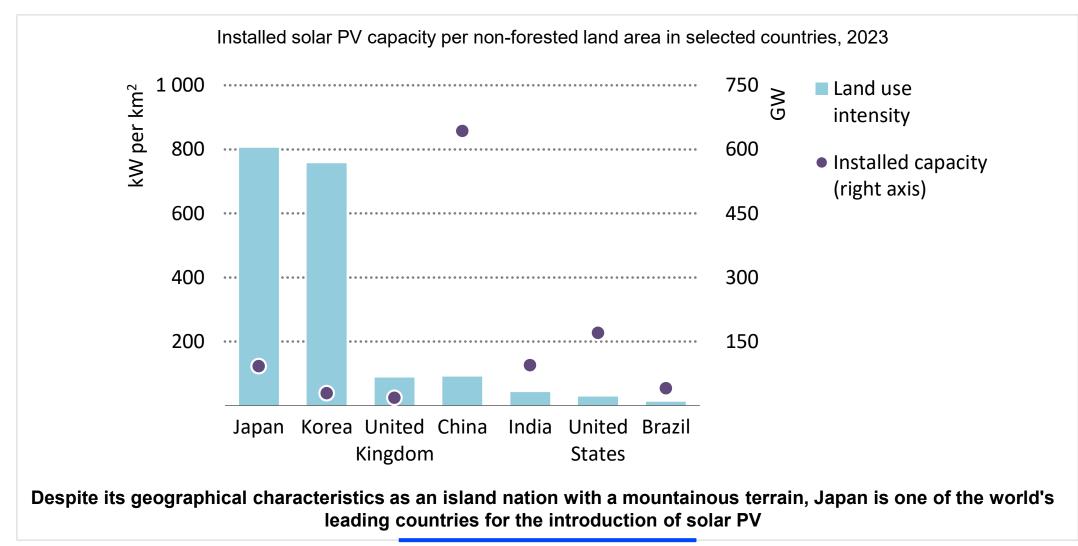


Electricity use is growing fast, clean power is rising even faster

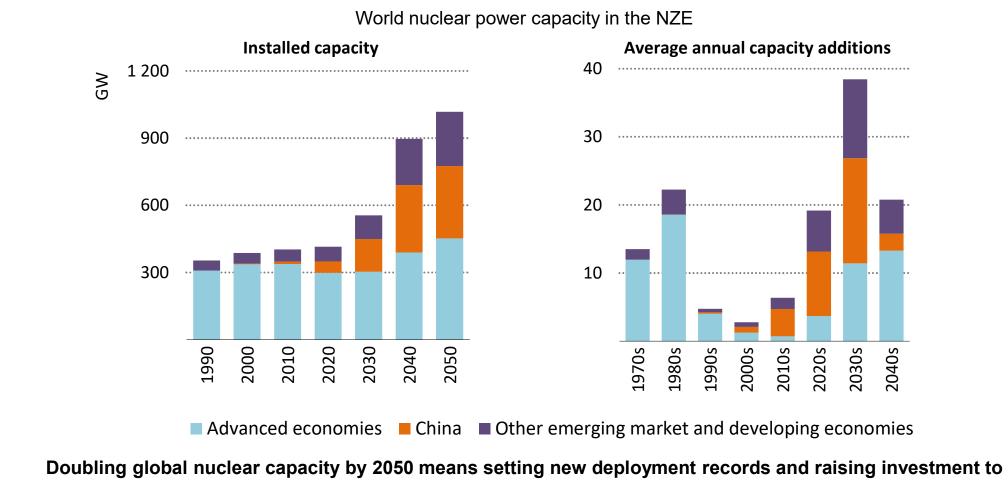
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led

Japan has installed significant solar PV in its non-forested land area



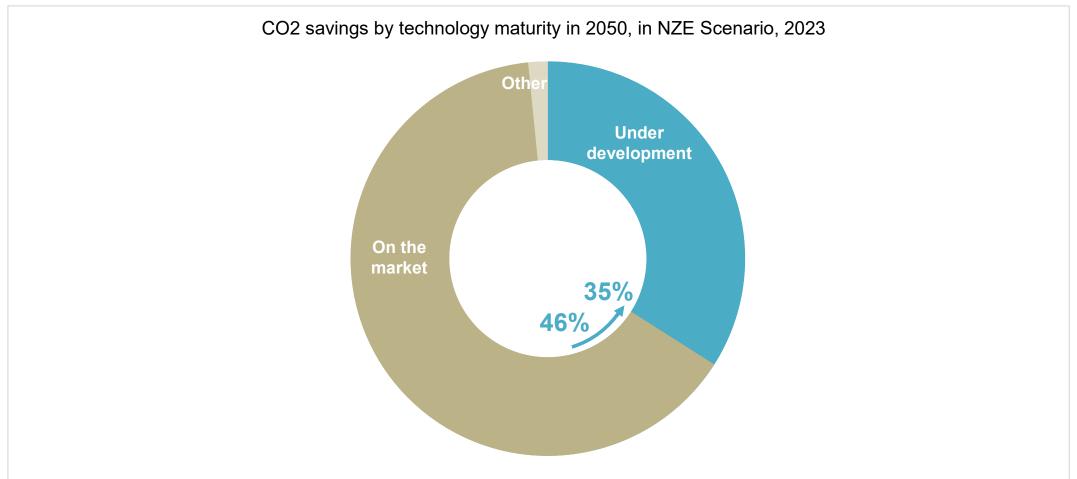
Nuclear capacity more than doubles to 2050 on the path to Net Zero



USD 130 billion per year, while tripling nuclear capacity would require much higher levels in the 2030s and 2040s

120

Prepare for the next phase of the transition by boosting innovation



Unlocking the next generation of low-emissions technologies requires accelerating clean energy innovation by making demonstration projects bankable and by incentivising competition with effective international cooperation.



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