

# Latest trends in electricity markets and systems

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## Electricity Mid-Year Update

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#### Global electricity use set to grow much faster in 2024-2025



A growth rate of 4% is forecast for both in 2024 and 2025 – the highest rate the world has seen since 2007, barring the exceptional rebounds in 2010 after the financial crisis and in 2021 following Covid-19.

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#### Global electricity demand from data centres & cryptocurrencies on the rise





Electricity consumption of data centres (excl. crypto) can range between 1.5-3% of global electricity demand by 2026. By comparison, electricity demand from EVs is forecast to be around 2% by 2026.

### As local bottlenecks emerge, better stocktaking becomes essential



While data centres' share of global electricity demand was limited, there are regions where they already account for a sizeable portion of electricity demand.

#### Electricity demand forecasts of data centres show a very wide range



Uncertainties around demand, technological advancements, and efficiency improvements, in addition to AI deployment, make it challenging to project the future energy consumption of data centres

#### Negative wholesale electricity prices are becoming more common



In some markets such as South Australia, prices have been negative for about 20% of the time since 2023. Despite that, negative prices have so far been in a moderate range, with extremely low prices occurring rarely.

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#### Negative prices commonly occur during sunlight hours



The duration of negative price events also tends to increase when there is a higher solar PV share in supply. Solar PV is increasingly facing price cannibalisation.

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## Thank you!

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### Clean energy sources will set new records through 2025



Total renewable generation poised to overtake coal-fired electricity output by 2025. Global nuclear generation is on track to reach a new high in 2025, surpassing its previous record in 2021.

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