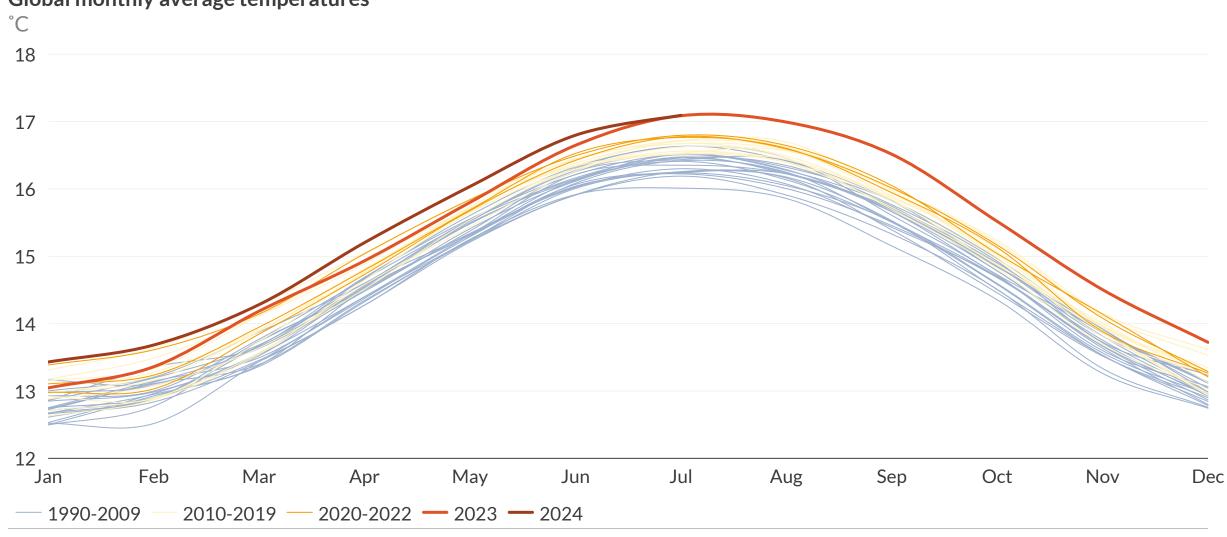


2024 has been the hottest year on record to date, up 1.5°C relative to preindustrial levels



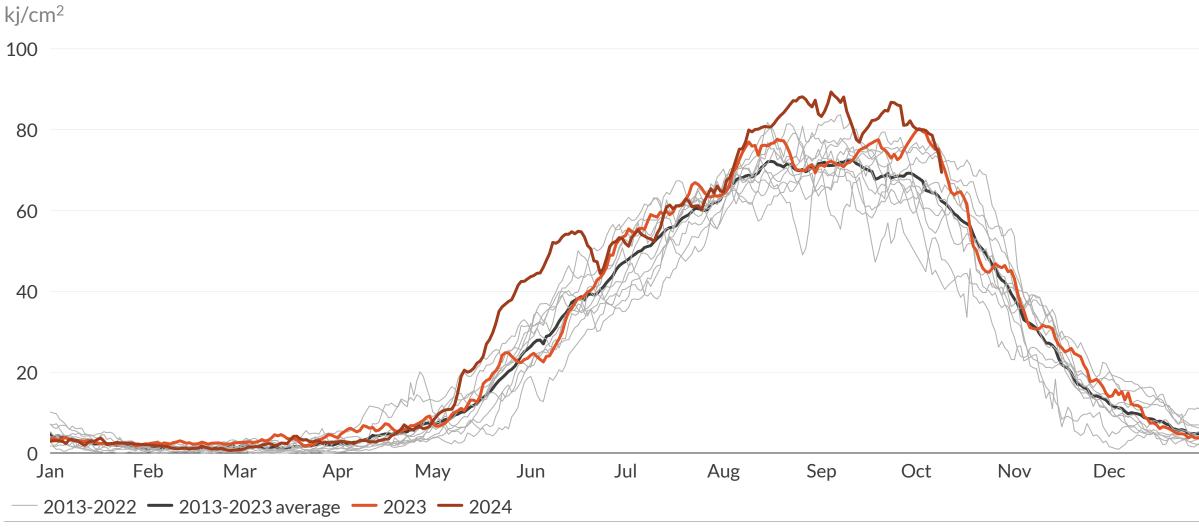
Global monthly average temperatures



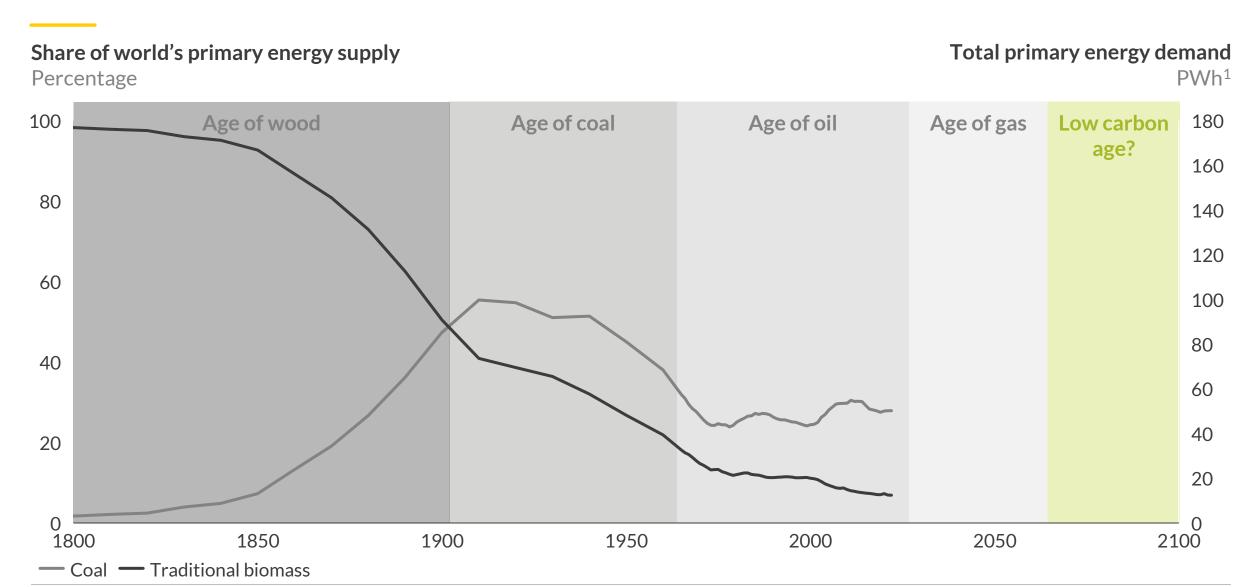
Rising ocean temperatures risk intensifying storms with more rainfall and stronger winds, including in the Gulf



Daily ocean heat content in the Gulf of Mexico

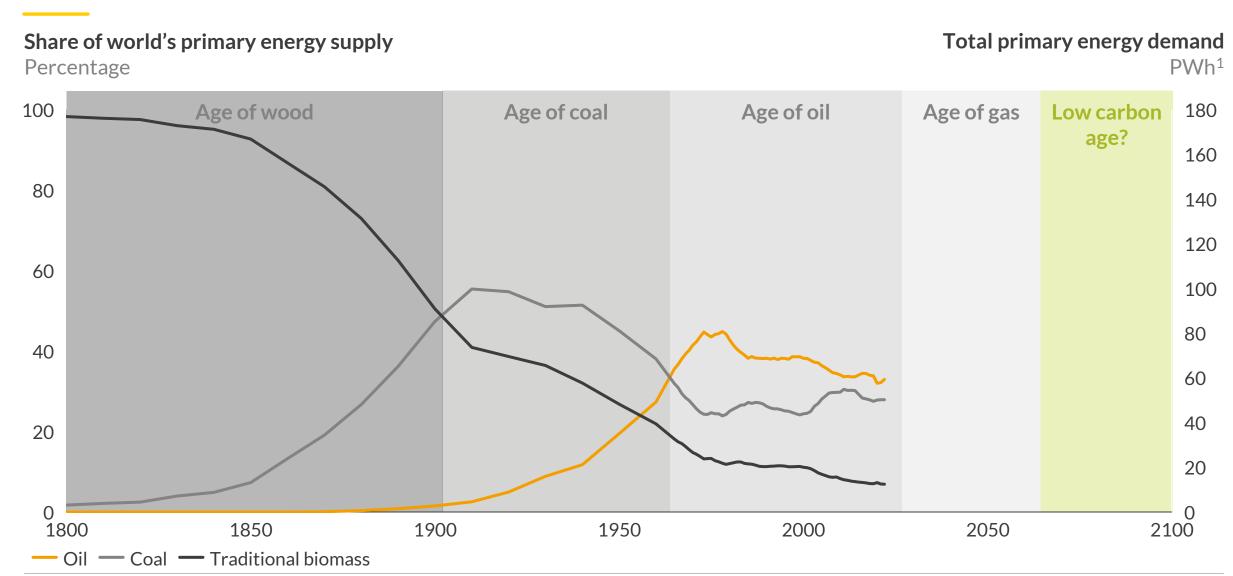






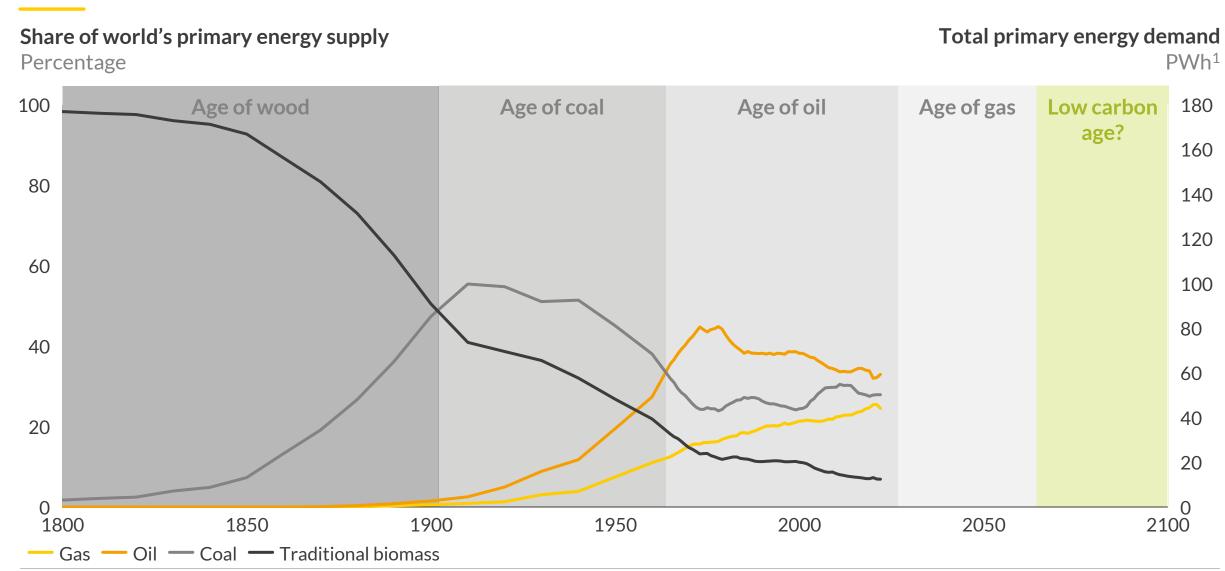
¹⁾ PWh = 1000 TWh 2) Includes nuclear, hydro, wind, solar, biofuels, and geothermal





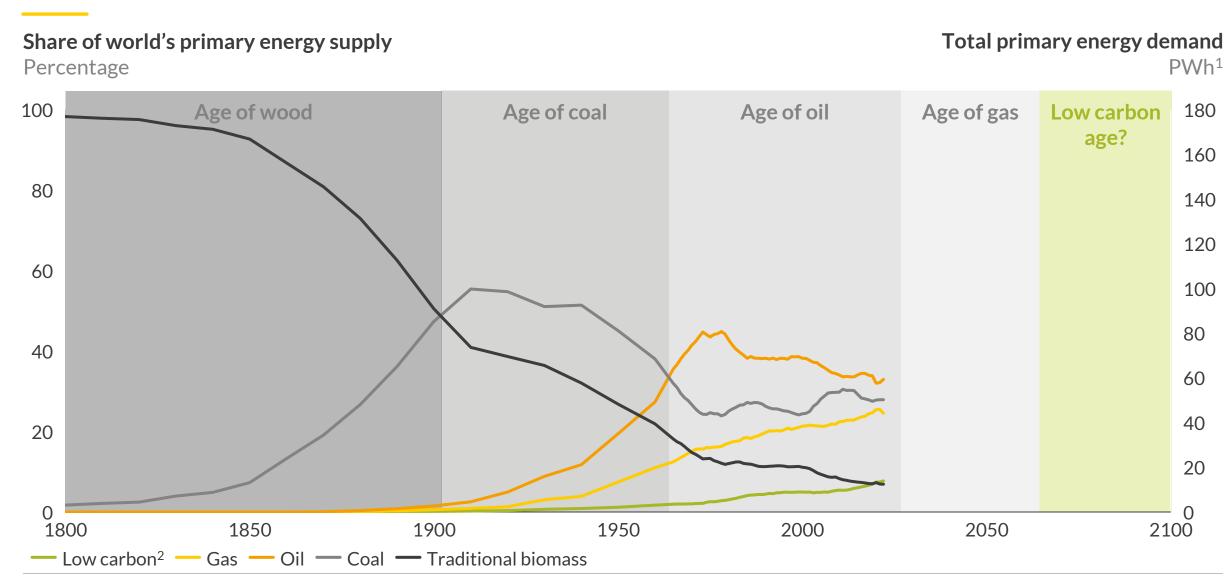
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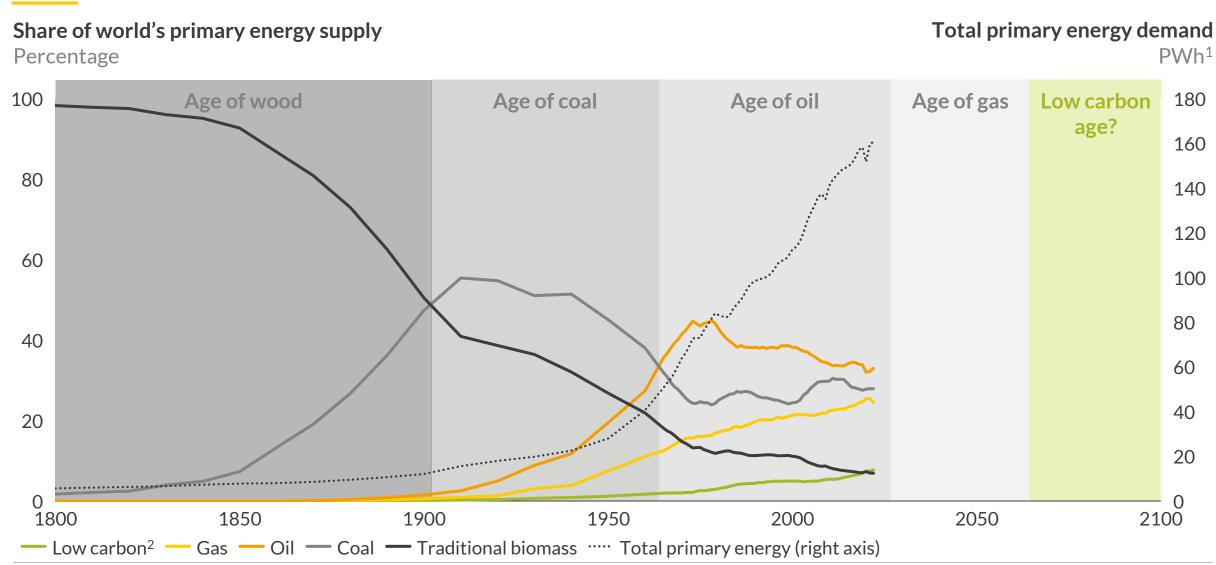
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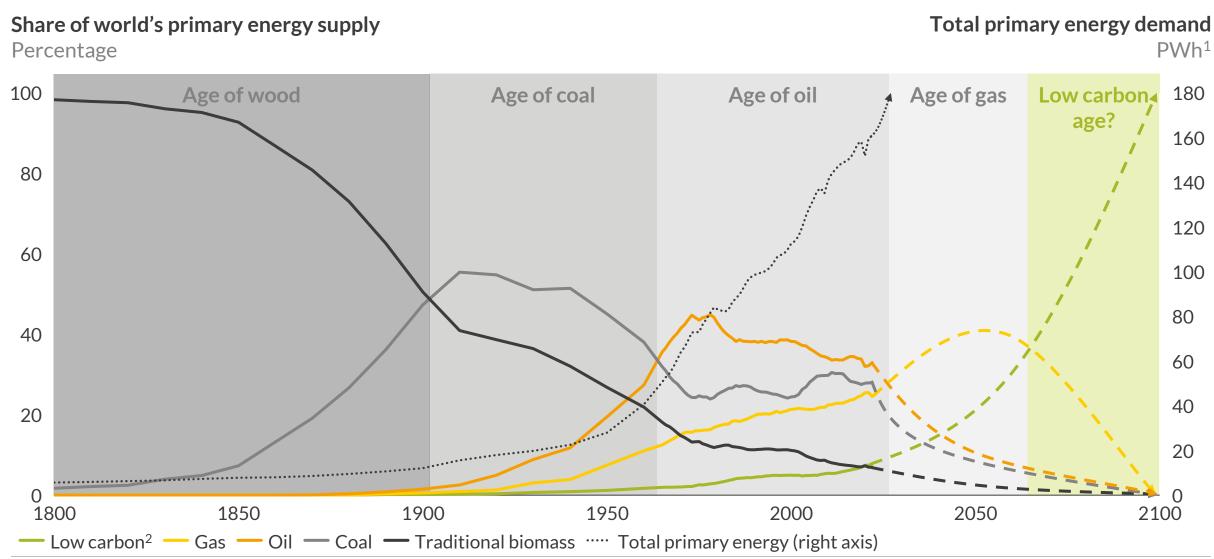
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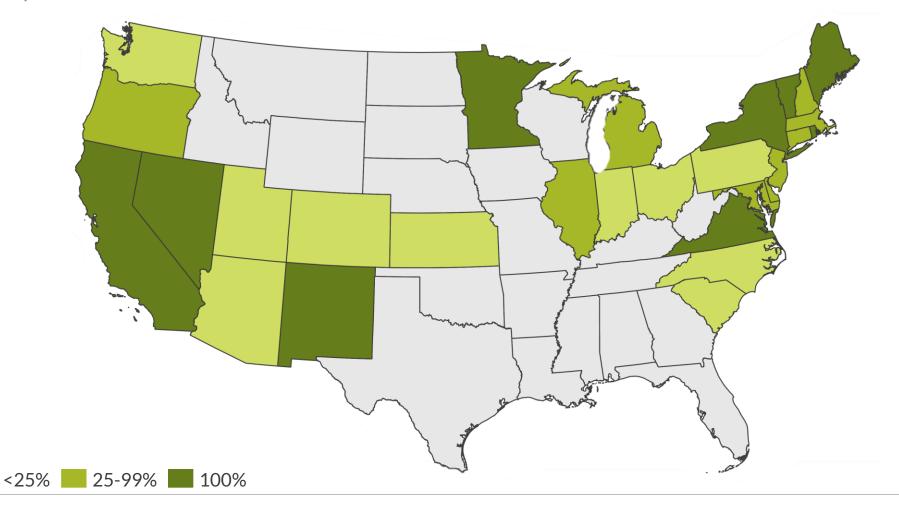
¹⁾ PWh = 1000 TWh 2) Includes nuclear, hydro, wind, solar, biofuels, and geothermal

Many states have established targets for the renewable generation of electricity



State renewable portfolio standards (RPS) targets

% of generation by 2050



Sources: Aurora Energy Research, EIA

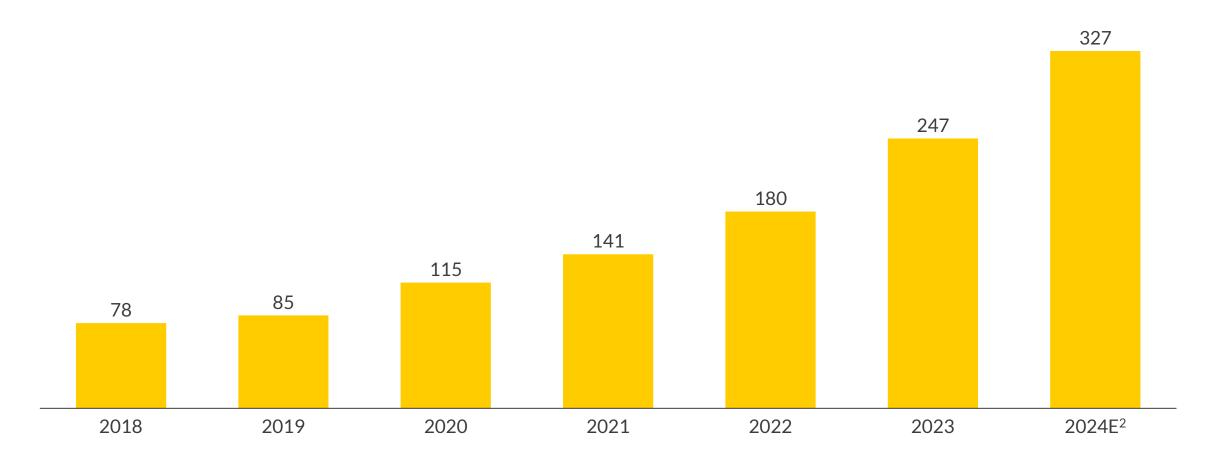
No RPS

Clean tech is booming in North America, supercharged by the **Inflation Reduction Act**

AUR 😂 RA

US clean energy investment¹

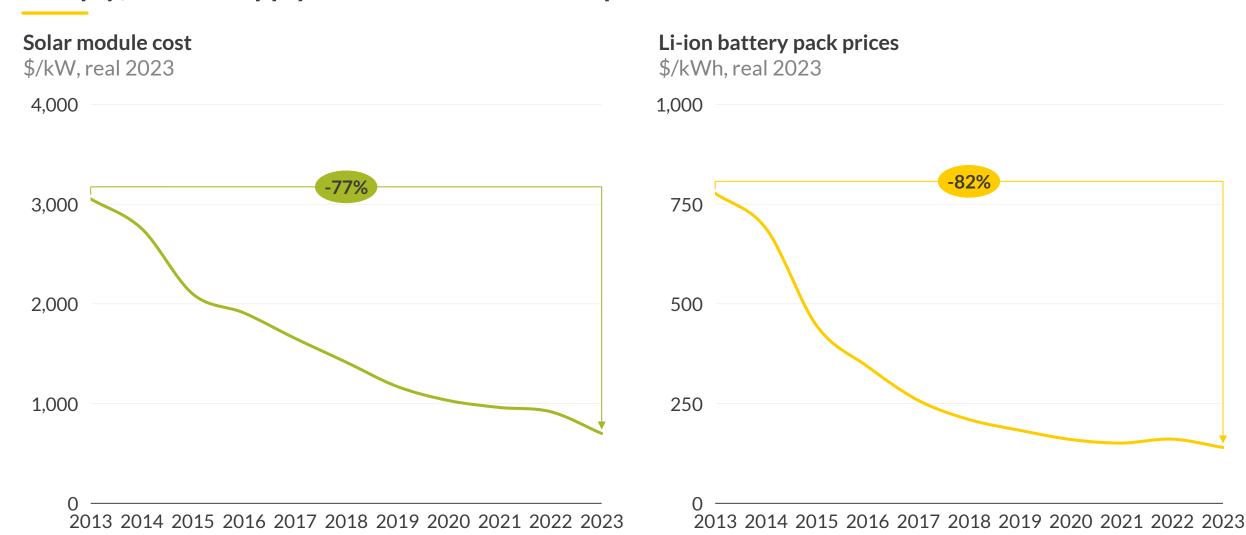
\$ billion



¹⁾ Public and private investment. 2) 2024 through end of Q2. 3) Potential 2024 investment is based on the 2023 ratio of Q3/Q4 to Q1/Q2 investments applied to Q1/Q2 2024 investments.

Rapid global deployment has driven down technology input costs sharply; recent supply chain issues were a blip...



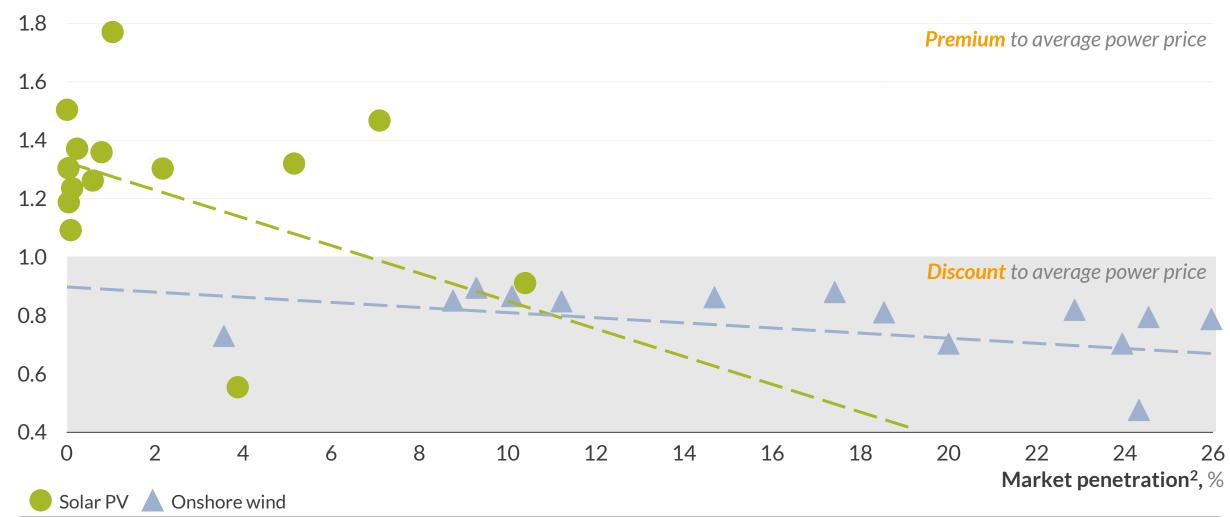


Sources: Aurora Energy Research CONFIDENTIAL 12

...but wind and solar are starting to "eat their own lunch" as market penetration grows





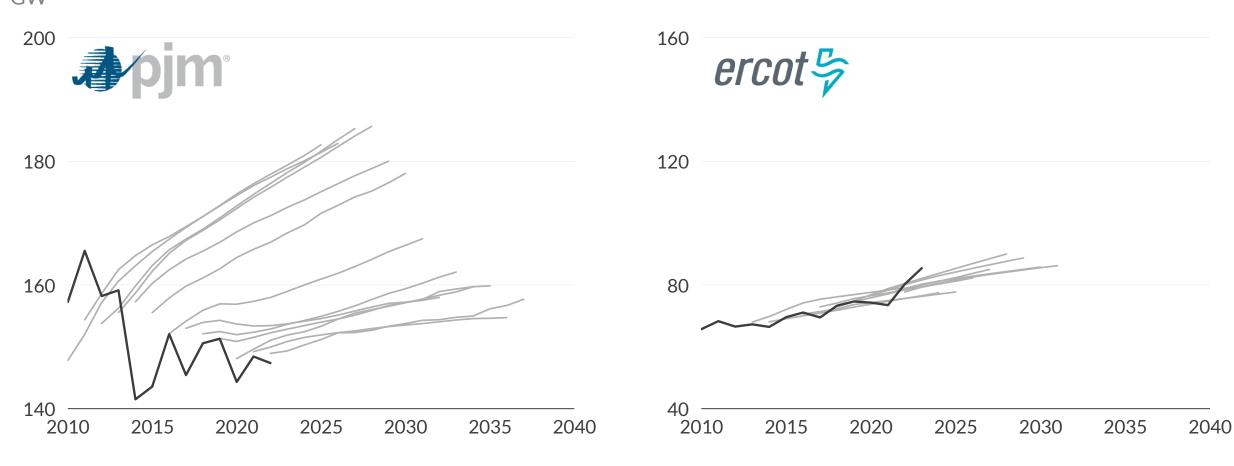


1) GWA price / ATC price. 2024 data through August 2024. GWA is generation-weighted average price (also called capture price). ATC is around-the-clock price, a simple average of power price across all hours (also called the baseload price). 2) Generation / load. 2024 data through August 2024

For over a decade, load growth has tended to fall short of more bullish ISO forecasts...



Historical peak load and peak load forecasts for PJM and ERCOT GW



[—] Historical peak load — ISO forecasts through 2022

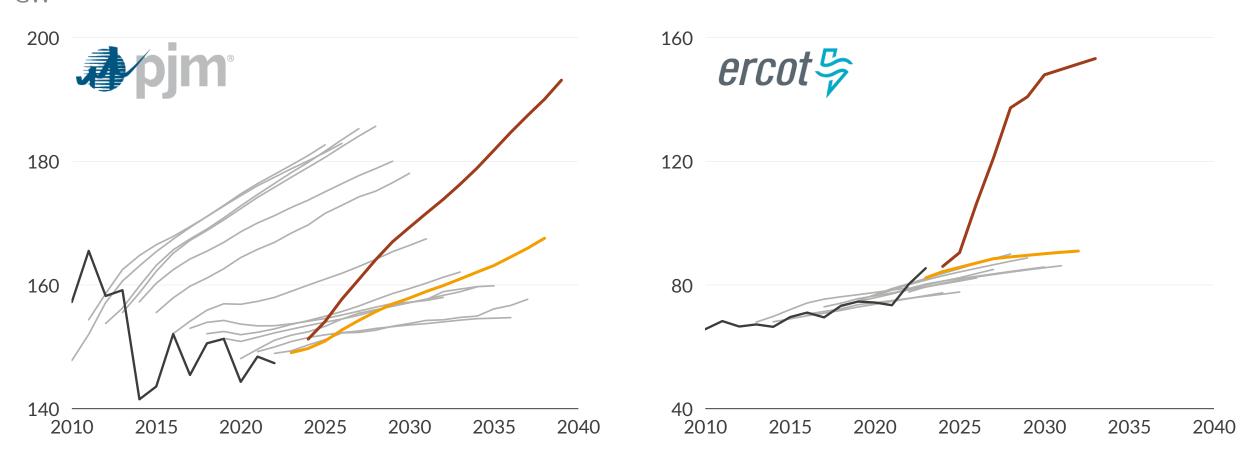
Sources: Aurora Energy Research, PJM, ERCOT

¹⁾ ERCOT includes an outdated 2024 forecast, released in January 2024 and revised in July. The January 2024 forecast is represented by the red dotted line.

For over a decade, load growth has tended to fall short of more bullish ISO forecasts... is this time different?



Historical peak load and peak load forecasts for PJM and ERCOT GW

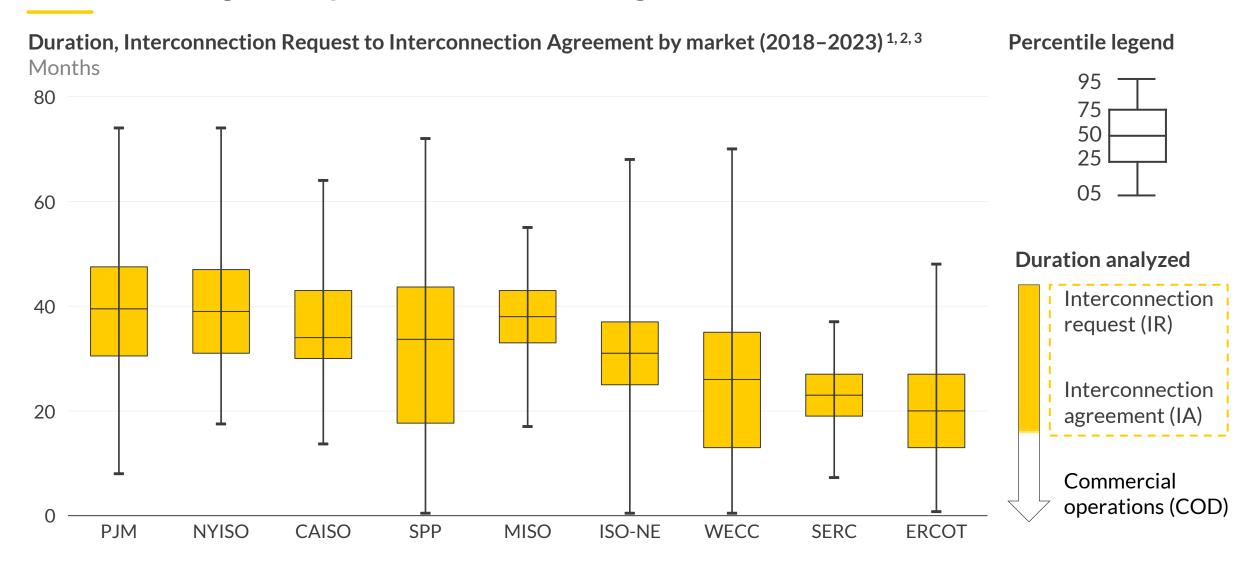


[—] Historical peak load — ISO forecasts through 2022 — ISO forecast 2023 — ISO forecast 2024

¹⁾ ERCOT includes an outdated 2024 forecast, released in January 2024 and revised in July. The January 2024 forecast is represented by the red dotted line.

Projects are spending longer in the interconnection queues across US ISOs, increasing development costs and slowing buildout





¹⁾ Sample includes 3,864 projects from seven ISO/RTOs and five non-ISO balancing areas with executed interconnection agreements since 2005. 2) Not all data used in this analysis are publicly available. 3) Date of IA execution for projects with IA agreement completed in 2023 was not accessible in database format from SPP and PJM (though 160 IAs were executed in PJM in 2023).



Dan Patrick says Texas will build new natural gas power plants itself if private sector doesn't



Pennsylvania state senator to propose loan fund to spur new power plants



Alberta to study forming its own power company in fight with PM Trudeau

Decarbonization and reliability must be balanced with affordability - rising costs risk consumer backlash



Average retail electricity price by state

Cents/kWh, 2023 real

