

2H 2024 US Clean Energy Market Outlook

Solid footing limits elections uncertainty

BNEF US analysts

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Executive summary

The US is on track to see over 25% growth in annual clean energy installations this year, hitting an all-time high of 65 gigawatts despite persistent structural hurdles like permitting and grid connections. Growth should continue into 2025 as lower interest and inflation rates provide relief to developers. Uncertainty around the elections and import tariffs, however, pose some risk to the US's subsidy-fueled expansion.

- Annual clean energy installations are set to average 102GW over the next 11 years – quadruple the 26GW average over the past 11 years. Almost four times more solar than wind will come online over 2024-2035. Cheaper economics across most regions, and the relative ease for permitting and building solar, makes it more attractive to developers than wind.
- The start of an interest rate cut cycle should help reduce the pressure on developers' equity return expectations. However, a retreat in power price forward curves compared to a year ago, growing grid congestion and increasing occurrences of negative power prices may dent returns.
- Project costs for onshore wind and solar have largely stabilized since a year ago. Cooling inflation has eased some of the cost pressures for solar and wind developers since 1H 2024. Falling solar equipment prices and relatively stable metal prices for wind developers have also helped. But the threat of additional import tariffs, tight electrical component supply chains and volatile shipping prices due to rising tensions in the Middle East may keep prices at high levels for longer.
- The fast-moving political landscape in the run-up to the elections has ramped up policy risk. Potential threats to tax credits and other Inflation Reduction Act (IRA) provisions – several of which remain unsettled, without final guidance two years after Biden signed the IRA into law – has investors worried. BNEF's modeling of a worst-case, yet unlikely, scenario of an immediate tax credit repeal suggests a 17% drop in cumulative wind, solar and energy storage capacity additions over 2025-2035, with 927GW of total build compared to 1,118GW in our base case forecast. This implies that even a sudden tax credit withdrawal may not bring a total halt to US clean energy installations.

755GW

Projected 2024-2035 US solar build vs cumulative US solar capacity of 178GW in 2023

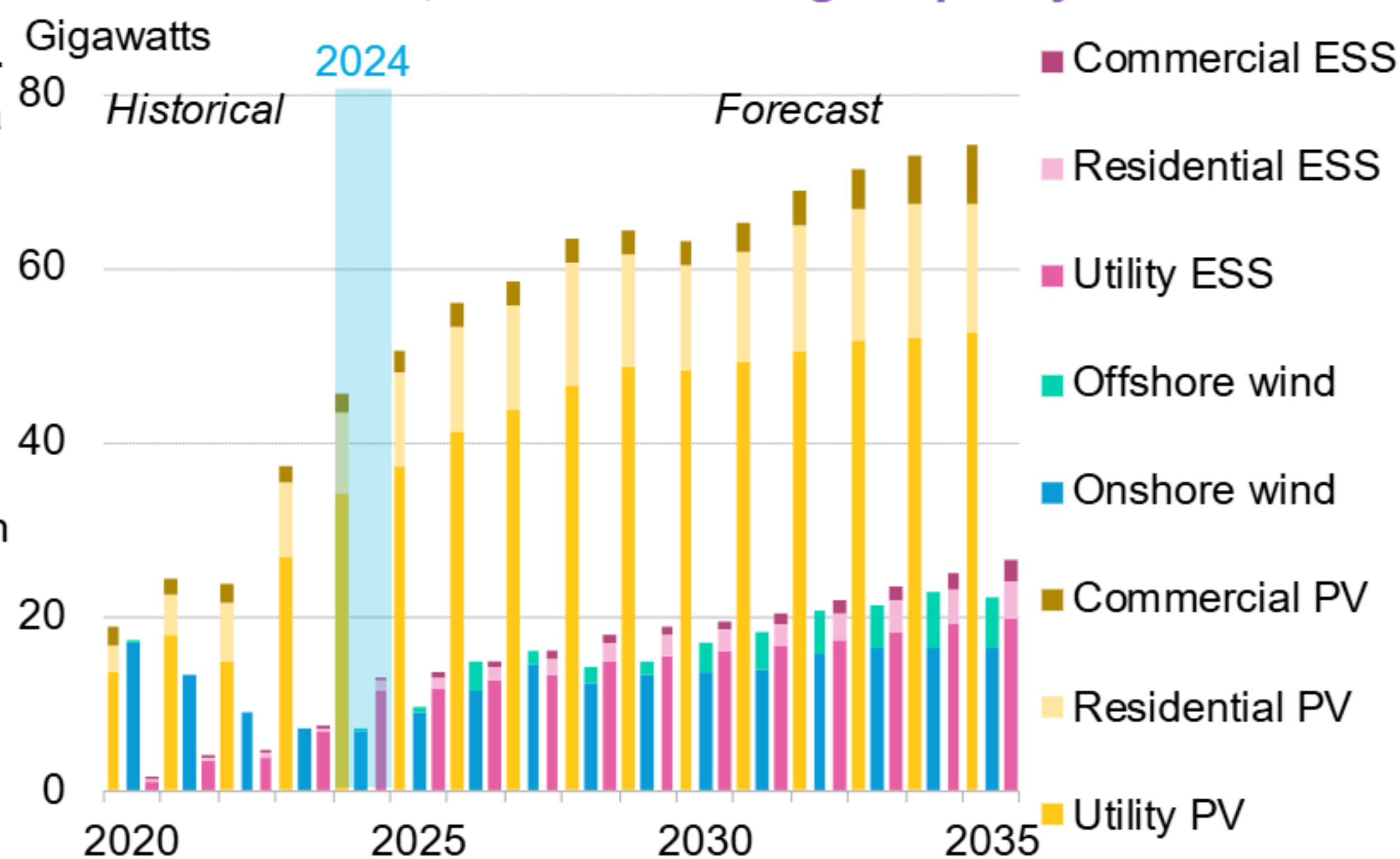
198GW

Projected 2024-2035 US wind build vs cumulative US wind capacity of 154GW in 2023

231GW/
925GWh

Projected 2024-2035 US battery storage build vs cumulative US storage capacity of 19GW in 2023

Annual US wind, solar and storage capacity additions



Source: BloombergNEF. Note: ESS refers to energy storage systems. PV refers to photovoltaic. Solar capacity expressed in direct current (DC) terms.