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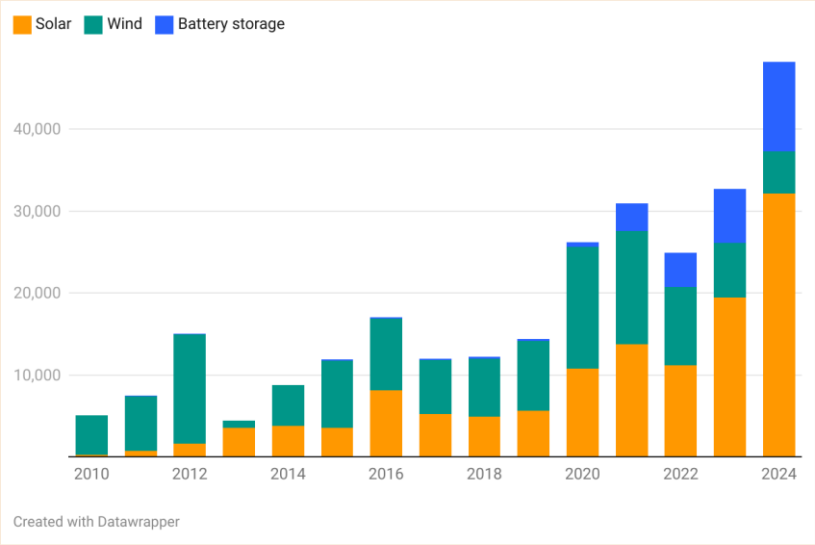
How Good was 2024 for Clean Energy in the US?

And what will 2025 bring?

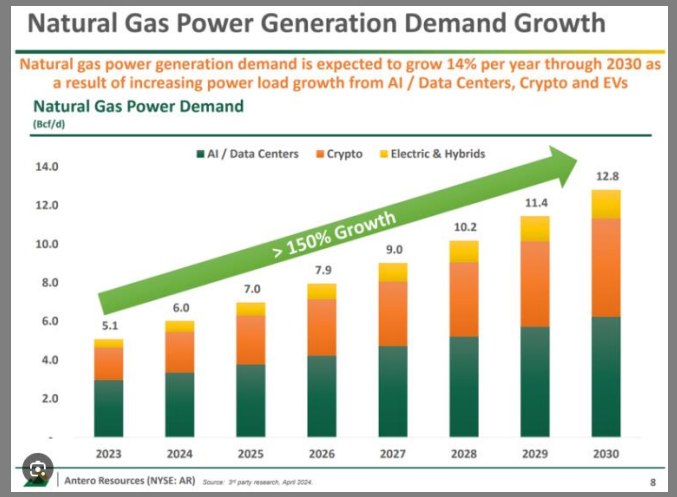
The data presented here is from the Cleanview report titled: *The State of Clean Energy Deployment in 2025 – Tracking America's clean energy progress.*

Cleanview is an energy data company that provides services to the renewable energy sector.

No surprise – solar soars



- In all, the U.S. added over 48 gigawatts of utility-scale solar, wind, and battery storage in 2024- a 47% increase over 2023.
- After three years of ups and down solar had a banner 2024 in the U.S. Growth in 2025 is expected to slow, but that isn't surprising given the spike that occurred in 2024.
- Wind was a different story. It only accounted for 11% of new capacity. Struggling before President Trump declared "war" on the technology, 2025 shapes up as a bad year for wind.
- Battery storage - which is essential to the continued proliferation of renewables - showed the kind of growth you'd expect from a nascent market.



It's all about the big 3

Energy source	2024 additions (MW)	2024 share	Y/Y growth
Solar	32,145	62%	65%
Batteries	10,884	21%	65%
Wind	5,133	10%	-23%
Natural gas	2,421	5%	-75%
Nuclear	1,114	2%	0%
Geothermal	29	0%	-76%
Hydro	5	0%	-78%
Other	74	0%	-19%

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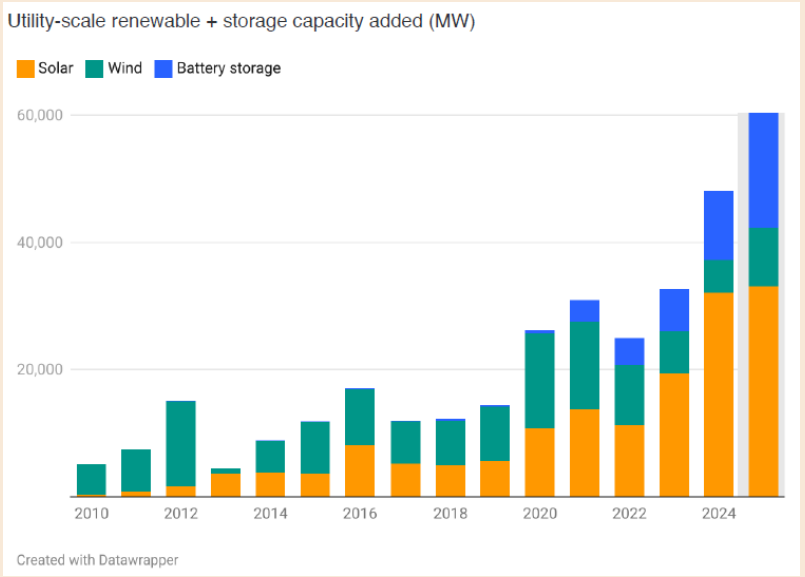
The big question is how the quest for power from AI data centers and cryptocurrencies will change these dynamics?

Specifically, will natural gas make a resurgence?

Expect natural gas to play a somewhat larger role, but a resurgence is unlikely.

- Alternatives to solar, storage, and wind remained footnotes to new clean power generation in 2024.
- Expect geothermal to start showing signs of life. In the not-too-distant future geothermal capacity may surpass wind.
- Nuclear capacity will begin growing significantly, but not in the near term. We're at least five to seven years away from any appreciable new nuclear.
- Although natural gas ranked fourth in new capacity, the good news is that its year-over-year growth dropped precipitously.

The forecast for 2025



Surprisingly, Cleanview expects wind to pick up steam in 2025.

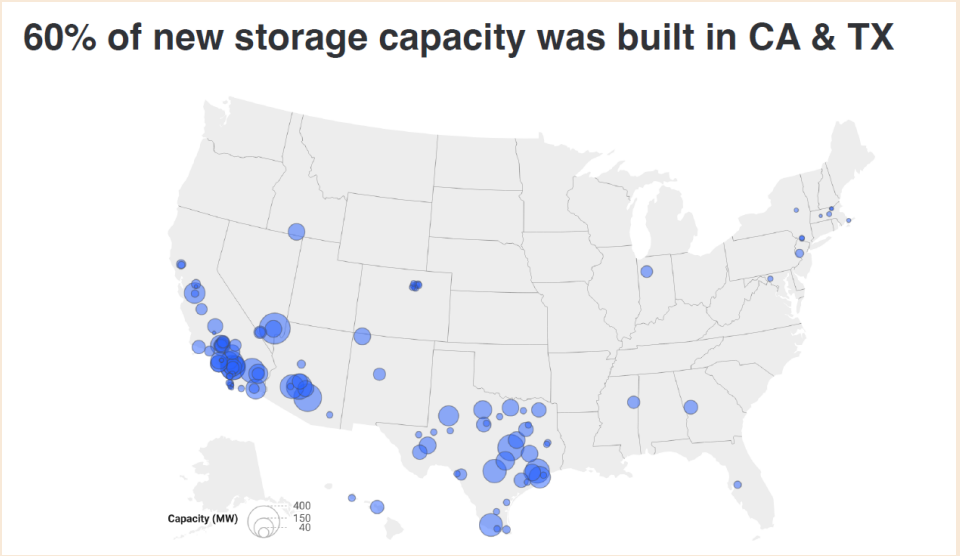
That's because 6.1 GW is already under construction and developers expect to build 9.2 GW.

Permitted or not, I'd be shocked if new wind capacity comes close to the projected 9 gigawatts.

- Given 2024 was such a big year, it's no surprise that 2025 may not be as robust. Cleanview is projecting 60 gigawatts of new clean energy capacity this year.
- If accurate, it will equate to a 26% growth rate versus the 47% growth rate we saw in 2024.
- The company expects new solar capacity to generally tread water. If that's accurate, 2025 could be a tough year for new clean energy capacity.

Storage follows solar

	State	Capacity additions (MW)	Energy capacity additions (MWh)
1	CA	3,152	11,237
2	TX	2,832	4,536
3	AZ	976	3,837
4	NV	565	742
5	ID	280	320

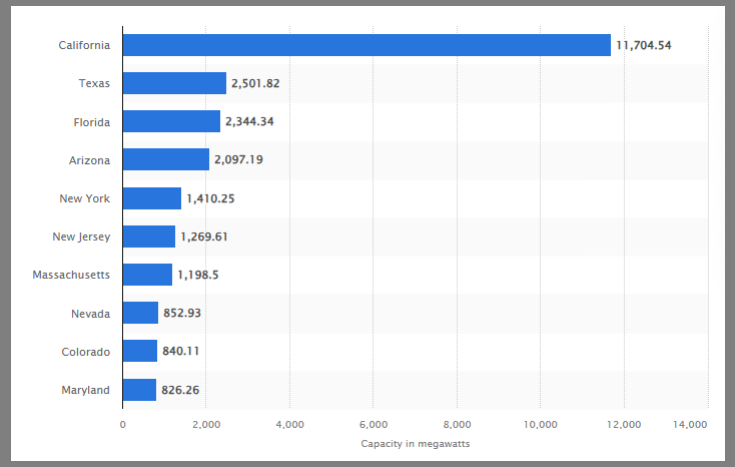


In total, almost 11 gigawatts of utility-scale storage was added in 2024 – a 65% increase over 2023.

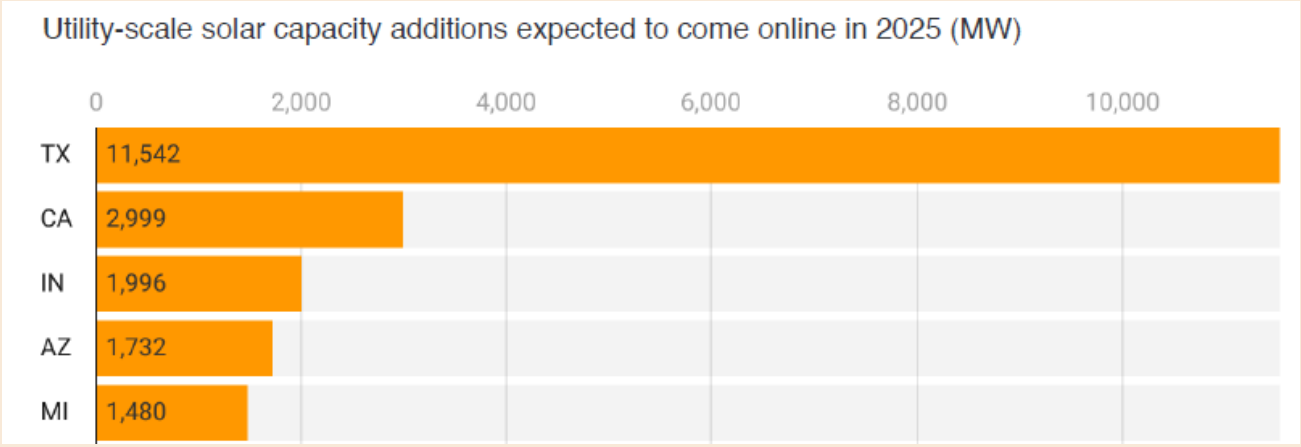
In the near term, expect storage to continue to set records, but the sector needs to make progress with long duration technology to maintain long-term momentum.

- California incentives have had the desired effect: the state added over 3 gigawatts in 2024 - the most storage capacity of any state.
- Texas wasn't far behind with 2.8 gigawatts.
- Arizona didn't install as much capacity, but it focused on the most critical storage sector – long duration energy systems.

An unexpected state cracks the top 3



Data from Statista



California will remain dominant in deploying residential solar.

However, Texas' widening lead in utility-scale deployment will result in it becoming the undisputed leader in overall solar deployment, a position that the state may never relinquish.

- Surprisingly, Indiana is expected to add almost 2 gigawatts of new solar capacity. If that comes to fruition, it will move from 9th to 3rd in annual additions.
- Not surprisingly, with a projected 30% increase in capacity over 2024, Texas blows past California.

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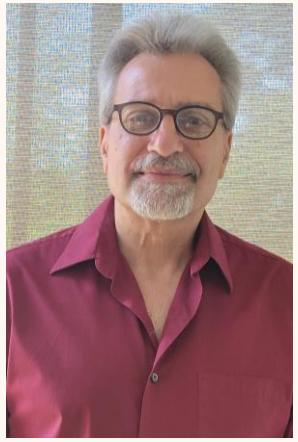

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Unbiased and Unfiltered

- An honest assessment of the climate change effort.
- I cover what's working – but more important - the issues/roadblocks that the industry would prefer to ignore.
- A must-read for anyone with a desire to understand what's really going on with renewable energy and climate change.

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