



Planet Pulse

**A rhythmic check-in on
climate issues**



Green shoots for green hydrogen

- Most industry watchers outside of the hydrogen sector agree that hydrogen won't be a mainstream component of the clean energy mix for decades.
- Still, hydrogen is being deployed in niche transportation applications including trains and marine vessels.
- Starting in January 2026, you'll be able to enjoy the Norwegian fiords on the world's largest green hydrogen-powered, zero-emission vessel.
- Designed by the Norwegian Ship Design Company, the ferries can carry 599 passengers and 120 cars.
- More importantly, they will reduce CO₂ emissions by 26,500 metric tons a year.



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A new meaning to hit the breaks

- Staying with the transportation theme, Caltrain is now getting an added return on the \$2.5 billion investment in its fleet of 37 electric trains.
- With that investment, the trains run solely on renewable energy, reducing yearly emissions by 250,000 metric tons - equal to removing 55,000 cars from the road.
- By deploying regenerative braking, each time a train breaks, about 23% of the power is fed back into the grid.
- Until recently, Caltrain wasn't receiving compensation. Now - like owners of rooftop systems - it will be paid for returning power to the grid.

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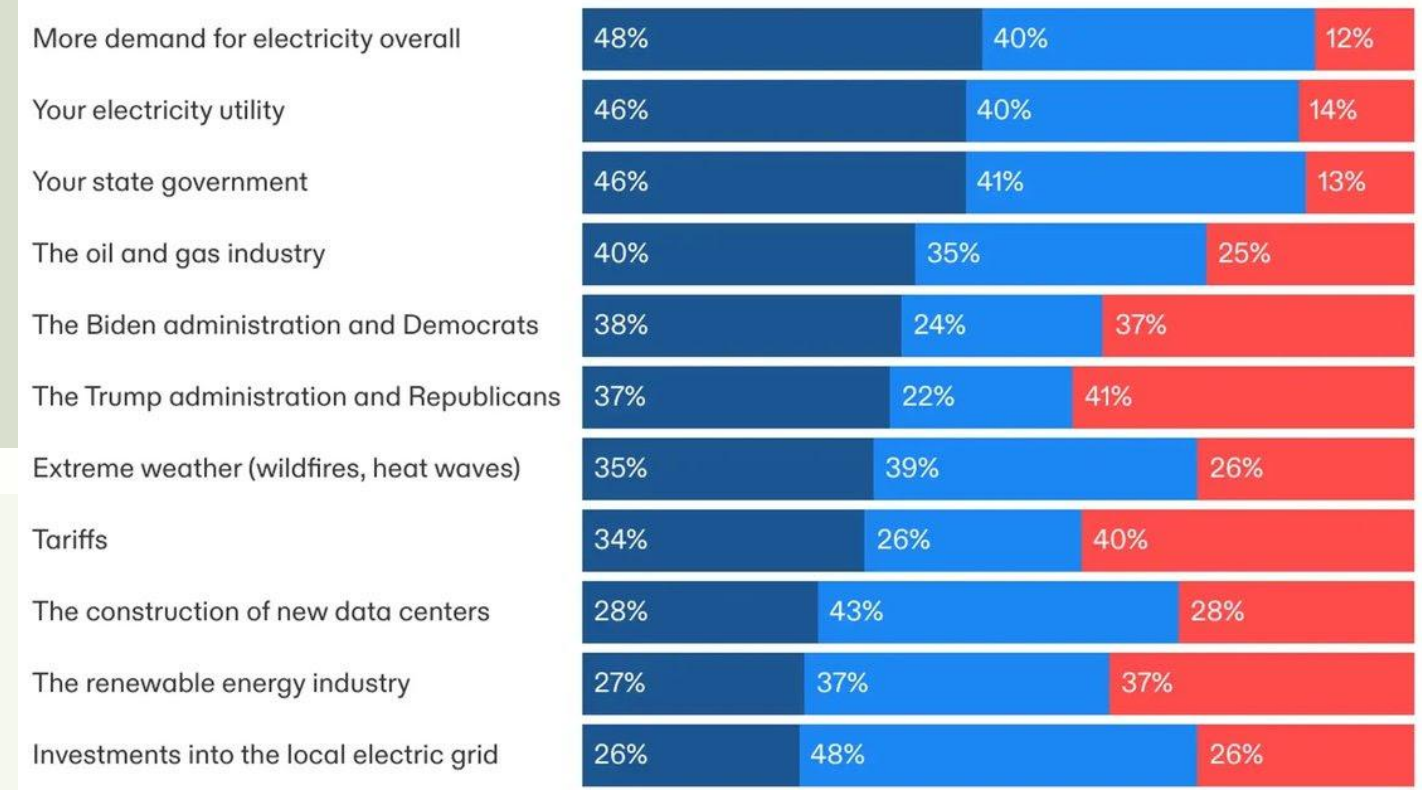
Who's to blame?

- Speaking of the electric grid, Democrats hope to make the rising cost of electricity an election issue.
- They may want to rethink that strategy.
- As recently as late August, more people blamed the Biden administration than the Trump administration.
- That could easily shift, but by a significant margin, the three most widely cited culprits are increased demand, the utilities, and state governments.
- More problematic is that politicians on both sides of the aisle are pointing the finger at the proliferation of data centers.
- The real answer could be an aging grid, but that's ironically last on the list of reasons cited by ratepayers.

Who Do Americans Blame for Rising Electricity Prices?

"Electricity costs are rising in many areas. How much, if at all, do you blame the following for the increase?"

A lot A little Not at all



Poll of 3,741 American registered voters conducted via text-to-web responses from August 22 to 29, 2025. The survey included interviews with Americans in all 50 states and Washington, D.C. The margin of sampling error is plus or minus 1.7 percentage points.

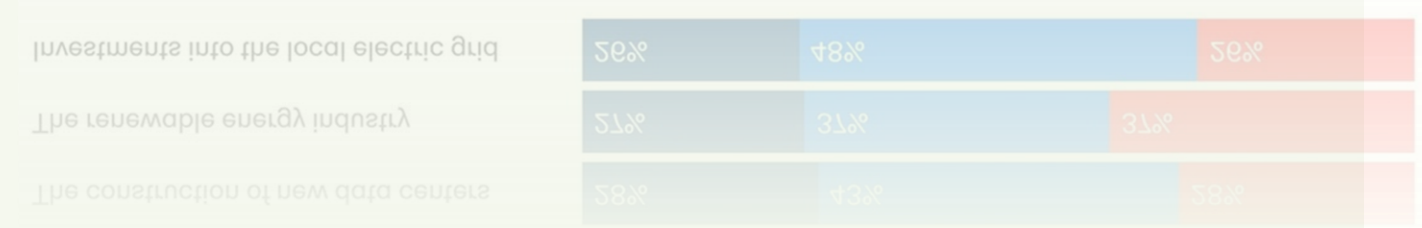
Source: Heatmap Pro Poll, from Embold Research



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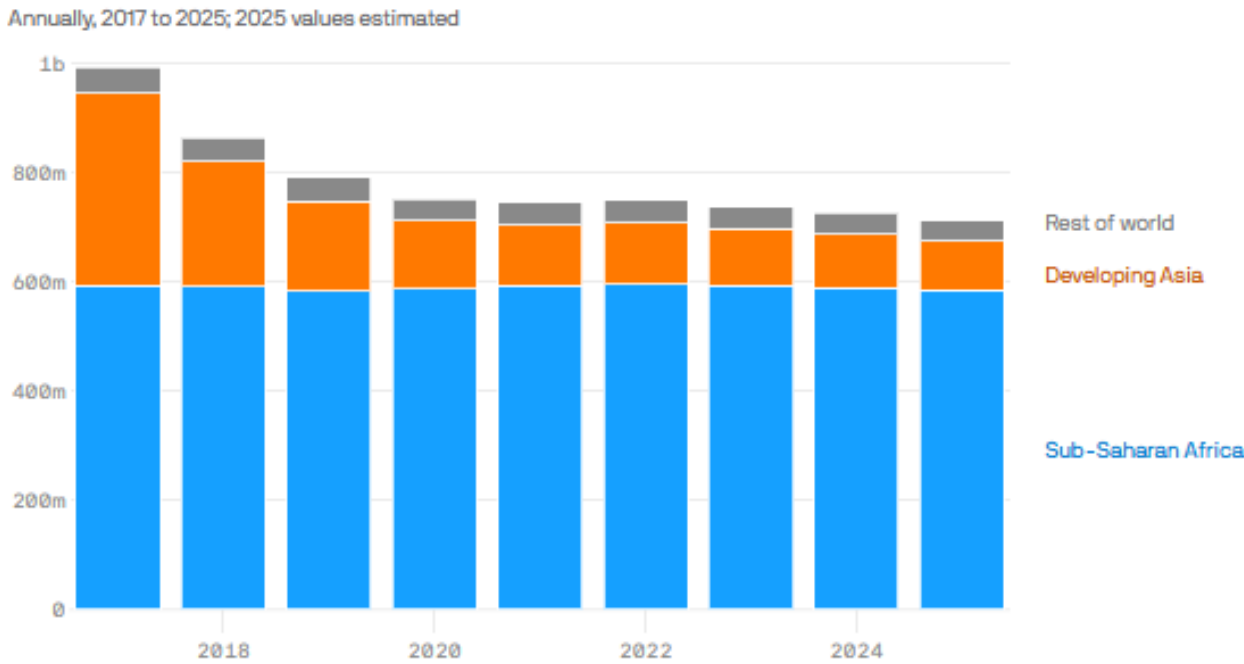
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At least we have power



Global population without electricity access



Adapted from [IEA](#); Chart: Axios Visuals

Americans might not like that the cost of electricity is increasing well beyond the rate of inflation.

What we sometimes forget is how lucky we are to have a reliable source of power.

When our electric bills go up, it's annoying, but most of us have the ability to absorb the increase.

That's not so in other parts of the world.



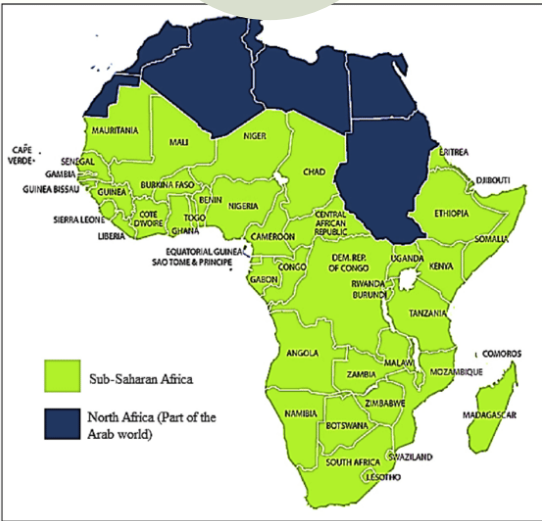
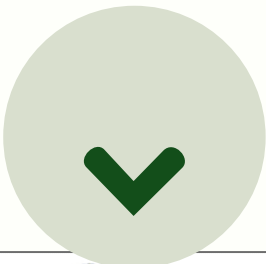
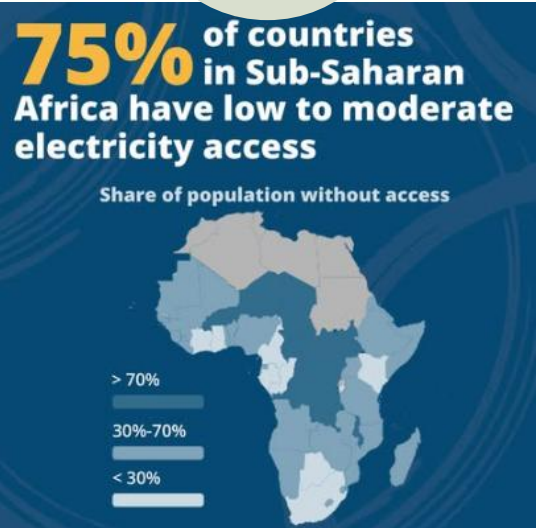
Since 2020 the number of people with access to electricity has stagnated.



Although still the largest population without power, access to electricity in Sub-Sahara Africa has increased from 30% in 2012 to 50% in 2024.



But because increases in electric tariffs have outpaced income, average household consumption has declined over that same period.



Unbiased and Unfiltered

An honest assessment of the cleantech industry and the effort to stem climate change.

