Who will pay for all the electric car chargers? Pretty much everyone

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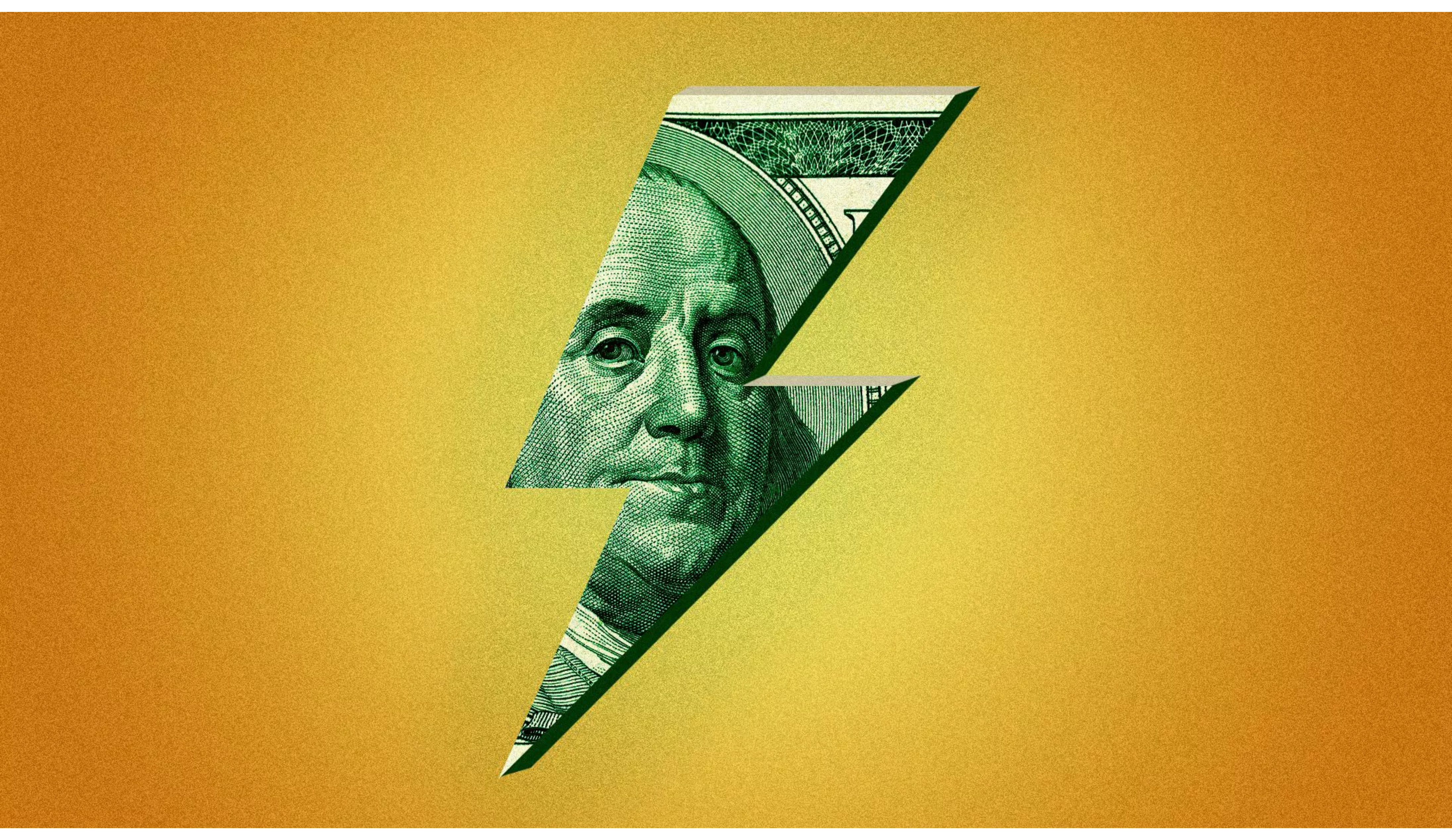

Illustration: Aïda Amer/Axios

Americans nationwide will likely face higher electric bills to pay for the next stage of the country's electric vehicle (EV) charger buildout — even if they don't drive an EV.

Why it matters: The U.S. will need a massive investment in public charging infrastructure to match the anticipated spike in EV demand. But such capital outlays don't make economic sense for many companies until there are more EVs on the road — which won't happen until there are more chargers.

- It's a classic chicken-and-egg scenario that, in the near term, is likely to be solved by regulated public utilities that can pass on the investment burden to their customers over many years.

What's happening: Power utilities across the country are planning to build extensive EV charging networks across their service areas.

- Minnesota-based Xcel Energy, for instance, last week announced perhaps the boldest such proposal: It plans to spend $170 million for about 750 fast-charging stations in Minnesota and Wisconsin over the next four years, part of a broader $300 million EV initiative.
- The states' public utility commissions need to approve the plan, which would ultimately be covered by Xcel ratepayers.
- Xcel says the plan would encourage more of its customers to buy EVs by offering them a steep discount on electricity at its charging stations.
- But for everyone else — including those who can't afford an EV — it just means steeper electricity bills, given that many communities only have a single utility.

The big picture: Virtually every state is confronting thorny economic and policy issues associated with the EV transition.

- Who will build and maintain the required charging stations? Who will profit from them? And importantly, who will pay for them?

The intrigue: There's a battle emerging between utilities and gas stations, convenience stores and other private businesses also trying to get into the vehicle-charging game.

- Stores and gas stations offering EV charging may wind up competing with the very same utilities they're paying for the power flowing into customers' cars.

Yes, but: Retailers say the way they're billed for power leaves them at a disadvantage.

- Utilities apply so-called "demand charges" based on the maximum amount of power commercial ratepayers use at any point during their billing cycle.

- So if just one customer plugs their EV into a 150-kWh fast-charger for 30 minutes, causing power demand to spike, a store would be billed at the peak demand level for the entire month.
- "I'm terrified of getting hit with an EV demand charge," says Raina Shoemaker, who operates a family-run truck stop in Lincoln, Nebraska.

Context: This long-simmering fight comes as the federal government prepares to begin doling out $5 billion allocated in last year's bipartisan infrastructure bill so states can seed a coast-to-coast network of fast-charging stations.

- Government guidelines say the taxpayer-funded chargers should be accessible to travelers, just off the interstate and have amenities like food and restrooms — which sounds a lot like existing gas stations and convenience stores.

What to watch: Retailers want regulators to establish a fixed wholesale price for electricity to level the playing field.

What's next: Private businesses — not regulated utilities — will eventually own and operate most of the EV charging network because they know how to compete on things like price, service and amenities, says Mark Boyadjis, global technology lead at S&P Global Mobility.

- But for now, utilities could have a head start, and electricity customers will pay.