



Rodney's Take

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What Were We Thinking? All Your Power Are Belong to Us

I've wanted a Tesla since the first one hit the streets, but it was not the battery pack that caught my eye. History buffs will remember that the very first Tesla in production was the Roadster, essentially a Lotus Elise with an electric drive train. I'd still like to have one because, as I mentioned, it's a torqued-up Lotus Elise ('nuf said).

But while I was waiting for someone to gift me that car, Elon Musk went on to build millions of EVs, perfecting battery-powered transportation and showing the world what is possible with batteries. Seemingly, you can do everything around the house just by switching out batteries!

There's only one catch. You can't.

We moved into a smaller home with a smaller yard in the first week of February. I thought, "I'm free of gas and oil!" I went to Home Depot and bought the whole shebang: mower, trimmer, etc. The worker there told me the (big) battery for the mower should be plenty, but if it wasn't enough to mow the whole yard when the grass was very high, I could use the smaller battery from the trimmer to finish off whatever was left. The problem is, I couldn't.

I bought two huge batteries for the mower, and now that the weather's heated up, both still die before I've finished mowing the lawn. The manufacturer should tell you the mower won't work all that well when it is warm or damp outside—or for the entire summer in the Southeast, because

it's both damp and hot. I don't have consumer dissonance because I bought something, I have consumer anger because it doesn't work as it should. The trimmer was so bad I returned it twice and then bought a new brand. But, hope springs eternal. Just as I was going to put all I'd bought onto Facebook Marketplace for 50% off, Brook said she'd rather keep it, just in case. I'm sure that the tools will work well under perfect conditions, but that's my point.

When it has been raining for 10 days and the grass and weeds are two feet high is not the time to find out that "truth in advertising" is printed at the bottom of the instructions in six-point font, if it's there at all.

But I digress.

For those of you who don't recognize the headline reference, it's a take on a [mistranslated quote](#), "All your base are belong to us," from a 1989 Japanese video game. It's a meme that means "we own you." In this case, the ownership is of power, and it's proving just as awkward as that bad translation.

After years of telling us to turn down our home air conditioners and regulating our appliances to ensure they don't use too much electricity, the government now wants to make sure that electricity is the only source of power we can use. EVs are supposed to make up 50% of all new car sales by 2030. They've offered incentives like tax credits to those who buy EVs, but consumers started asking questions (Where can I plug it in?), and then EV sales puked.

In 2021, the Biden administration set aside \$7.5B in federal and local grants to build 500,000 EV charging stations by 2030. Under recent Environmental Protection Agency rules, 56% of new vehicles will have to be EVs by 2030-2032; new tailpipe emission standards say 67% of all light vehicles sold after 2032 will have to be hybrids or EVs.

The National Electric Vehicle Infrastructure (NEVI) program for charging station rollouts got off to a rough start; only eight NEVI DC fast charging stations have been built so far. That's in total: eight. Potential EV charging

station builders must comply with diversity, equity, and inclusion (DEI) requirements to qualify for a federal grant, including hosting block parties, engaging in outreach in underserved neighborhoods, and meeting stringent reporting requirements. In the ever-changing world of DEI, it would be easy to misstep and end up fined, sued, or denied, yet EV charging station construction is too expensive to do without government funds. The government has helped by classifying certain areas, including parts of Martha's Vineyard, Cape Cod, Nantucket, and San Francisco, as low-income and thus eligible for subsidies.

As mentioned, meanwhile Americans started to look at EVs with a jaundiced eye. A recent McKinsey and Co. report found that 46% of people who own an EV would purchase a gasoline-powered car the next time around, 44% would delay buying an EV, and 58% planned to hang onto their existing fossil fuel vehicles longer than they might have otherwise. In a June poll from the Associated Press and the Energy Policy Report of Chicago, 46% of those surveyed said were unlikely to buy an EV. While EV sales grew 47% in 2023, they grew just 2.7% in the first quarter of 2024. That is sales falling off the proverbial cliff.

EV sales are dropping in Europe as well, even though the EU has banned sales of new gas cars by 2035. Investment researcher Jeffries says Europeans now are set to buy two million fewer EVs by 2030 than previously predicted. UBS bank predicted a few months ago that between 2024 and 2030, Europeans would buy nine million fewer EVs than expected.

Some people apparently believe their lyin' eyes about EV costs, lack of charging infrastructure, wait times for battery charging, and car resale, given battery life over time. Maybe it's more concerns over whether their EV can be charged at home as needed if their area suffers brownouts, or maybe it's a rational assessment of how EV batteries perform in extreme cold or wet conditions.

Maybe we're just fed up with the whole thing. Maybe it's a growing pain, as with everything new. Batteries keep improving, but there are kinks in the

system. EV battery life can be [shorter in cold weather](#); driving range can begin to drop at 40°F, according to *Consumer Reports*. AAA found that EVs can lose 41% of their range when temps fall by 20°F and the car heater is running. In an EV, there isn't a lot of extra, "waste" heat to warm up the inside of the car: 90% of the vehicle's energy is used for forward momentum; in a gas car, it's just 10%.

According to a study by Recurrent, EVs also can lose up to 31% of their range in hot weather. Add to that a line at the charging station and perhaps an aging battery (which, like your phone battery, won't charge as well), and an EV owner could have a problem. That doesn't even take into account the tendency of a small number of EV batteries to catch fire when wet, like perhaps in flood conditions—although in a hurricane, the bigger danger might be that lack of charging stations, if you need to evacuate quickly.

Chances are, many of the issues with batteries and charging will shake out, over time. It's just not today, and people have noticed.

As for me, I'm looking into using an old Tesla as a riding mower. Until then, I'm throwing in the towel and paying our local guy, who uses a rather impressive-looking gas-powered, stand-on mower. It's dirty, not environmentally friendly, and noisy. But it works every time, and the yard is mown in less than ten minutes.

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Got a question or comment? You can contact us at info@hsdent.com