

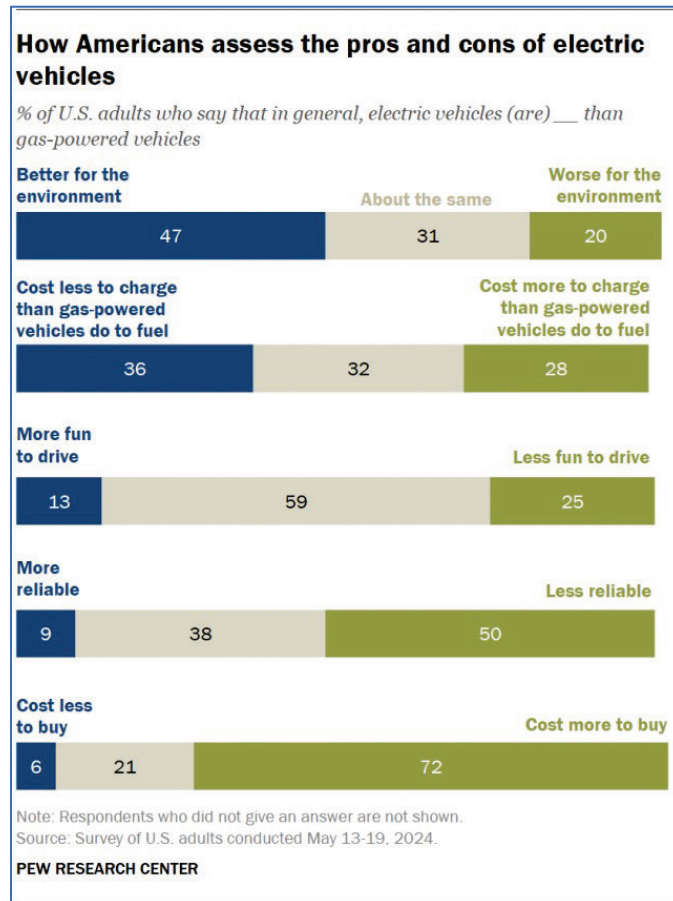
Jeffry Berner

Create an initiative for consumer product protection for EVs to address battery life and high maintenance cost perceptions to EV adoption, and to ensure that EVs have equal or better expected life to displace highest mileage ICE vehicles. See attached file for problem statement/solutions

ZEVergreen Initiative – EV Consumer Protection

Problem:

- Electrical Vehicles are perceived to require more maintenance than ICE vehicles. According to PEW Research Center, 50% of Americans have the opinion that EVs require more maintenance than ICE vehicles.¹



- EV battery life and degradation has been found to be significantly better than expected. However, should a battery fail the cost is excessive with replacement costs above \$10,000. Note: A Tesla Model 3 will have a replacement cost of \$13,000. This cost influences adoption and is also an equity issue for lower income individuals who would otherwise choose to continue driving an ICE vehicle due to cost of repairs.
- EVs need to have sufficient lifespan to replace the 10-20% of ICE vehicles that reach 200,000 miles. High component failure rates, high component costs, technical obsolescence, and spare part availability may cause EVs to be retired

¹ "About 3 in 10 Americans would seriously consider buying an electric vehicle" PEW Research Center, June 27, 2024. <https://www.pewresearch.org/short-reads/2024/06/27/about-3-in-10-americans-would-seriously-consider-buying-an-electric-vehicle/>

earlier than ICE cars which would jeopardize the state's Greenhouse Gas Emission goals.

As an example, my son-in-law just purchased a used 2023 Hyundai Ioniq 5 at the beginning of October. The vehicle is currently at the dealer after a flat-bed tow for replacement of the Integrated Charging Control Unit (ICCU). Out-of-warranty repair costs are over \$4000 for a vehicle with slightly more than 100,000 miles.



r/Ioniq5 • 7mo ago
Runa-Amberthorne



114k miles and ICCU finally gave up

Information

My 2022 has been going strong for 3 years, regular maintenance and recalls done as soon as possible. But now the ICCU failed and needs to be replaced. Can't charge my car at home and I had just installed a new ChargePoint charger at home (spent about \$900 with installation and for the charger).

At the dealership now and it's going to cost me \$4,600 to replace the ICCU.... 😞

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Solutions:

- Extend EV battery warranty beyond current 8 year/100,000 mile per federal law.
- Provide/mandate low cost extended warranty protection for EV vehicles.
- Subsidize extended warranties for low and moderate income EV owners thus ensuring that promised cost savings of EV ownership are met.
- Mandate OEMs maintain sufficient spare parts for necessary battery/display/charging electronic components 10 years after final manufacture.

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