



Mid-priced ICE vehicle fueling costs up over \$1.30 per 100 miles in Q1 2022

Cost to fuel a mid-priced EV up less than \$0.10 over 2021 prices

East Lansing, MI—May 11, 2022: The cost of fueling a traditional Internal Combustion Engine (ICE) vehicle grew by more than \$1.30 per 100 miles in the first quarter, driven by the high cost of gas. In the same period, the cost to fuel a comparable Electric Vehicle (EV) grew by less than \$0.10.

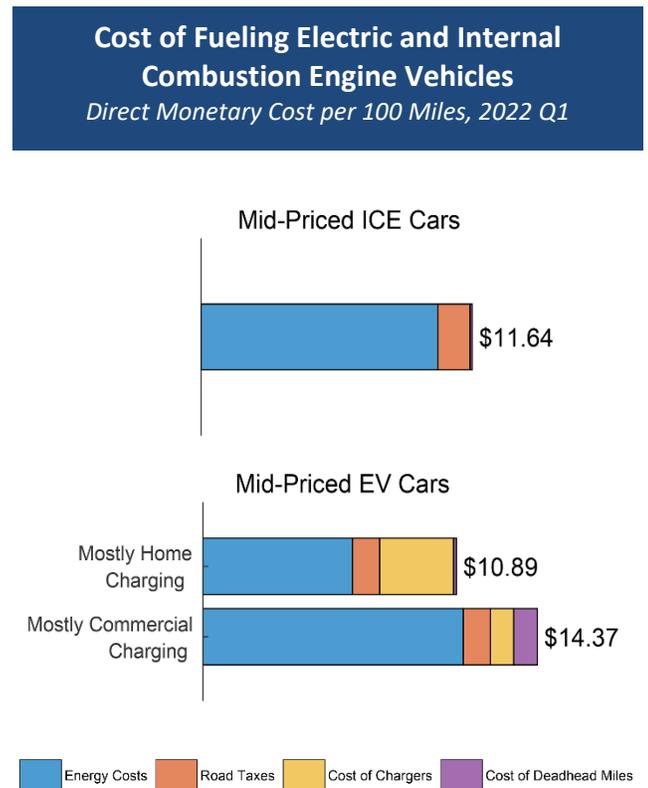
This conclusion is the result of Anderson Economic Group’s Q1 2022 analysis of the real-world costs of operating both types of vehicles based upon prices in the first three months of 2022.

FINDINGS

Q1 data show increases in both electricity and fuel prices, but gas and diesel have increased more severely. “As a result of higher gas prices, electric vehicles became a better value proposition in 2021 than in prior years,” said Patrick Anderson, AEG’s Principal and CEO.

Key findings for the four major vehicle segments are as follows:

- *Mid-priced cars*—ICE vehicle drivers still enjoy a fueling cost advantage over EV drivers who use mostly commercial charging. However, that cost advantage has dipped by \$1.27 since 2021. Mid-priced EVs charged mostly at home now cost about \$0.75 less to fuel than their ICE counterparts. In 2021, mid-priced EVs cost \$0.45 more.
- *Luxury cars*—Drivers of more expensive cars continued to see an EV cost advantage. Counting all four categories of costs, luxury car drivers needed over \$20 to fuel ICE vehicles for 100 miles in Q1, but less than \$12 to fuel a luxury electric car (assuming mostly home charging). Even luxury EV drivers more reliant upon commercial chargers enjoyed a cost advantage of more than \$4 per 100 miles.



Source: Anderson Economic Group research (May 2022).

Note: Methodology described in “Approach” on the following page.

Approach

Anderson Economic Group calculates all four categories of costs for fueling EVs and ICE vehicles across benchmarks representing real-world U.S. driving conditions, including:

1. The cost of underlying energy (gas, diesel, electric)
2. State excise taxes charged for road maintenance
3. The cost to operate a pump or charger
4. The cost to drive to a fueling station (deadhead miles)

All use cases reflect 12,000 miles/year, with the cost of residential charging equipment amortized over five years. Calculations are based on energy prices and taxes in the state of Michigan. Benchmarks for ICE vehicle drivers assume the use of commercial gas stations. For EV drivers, we consider both drivers who routinely charge at home and those who rely primarily on commercial chargers.

For more on methodology, see the study's 2nd edition: AndersonEconomicGroup.com/second-edition-real-world-cost-of-fueling-evs-and-ice-vehicles-2/

- *Pickup trucks, entry-priced cars*—In Q1 2022, there were still insufficient EVs to meaningfully evaluate these two segments. Notably, we continue to see *no* electric cars on the market with an entry-level purchase price.

Obtaining AEG's report on the cost of fueling EVs and ICE vehicles:

The study's 2nd edition (2021) is available at: AndersonEconomicGroup.com/second-edition-real-world-cost-of-fueling-evs-and-ice-vehicles

Related content and a FAQ are also available at: AndersonEconomicGroup.com/real-world-electric-vehicle-fueling-costs-may-surprise-new-ev-drivers

Also see the company's *Automotive Dashboard*, which tracks auto industry and other economic metrics: AndersonEconomicGroup.com/auto-dashboard

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