

Is Electric Vehicle Growth Ready to Accelerate?

A tipping point is a juncture at which small changes are significant enough to cause larger, more important changes. A current example is global transportation that pivots away from internal combustion engine vehicles to electric vehicles (EV).

The United States is the latest country to pass an identified EV tipping point: five percent of new car sales powered *only* by batteries (Figure 1).

If the US follows the 18 countries that preceded it in crossing the five percent tipping point, national EV sales could rapidly increase as EV sales impediments diminish. Current US EV sales impediments include: 1) lack of a built-out EV charging network, 2) expensive EV sticker prices, and 3) lack of consumer awareness.

The five percent threshold is the level where these impediments give way.¹ Recent changes illustrate how federal policies plus mass media exposure may accelerate EV growth by removing impediments.

1. The Federal Highway Administration will spend \$1.5 billion to build out EV chargers covering 75,000 highway miles during fiscal years 2022 and 2023.²
2. The Inflation Reduction Act qualifies most EVs for a \$7,500 credit beginning January 1, 2023, mitigating sticker price shock.³
3. American consumer awareness spiked when eight EV companies ran 2022 Super Bowl commercials during the most watched national sports event.

Did Utah EV sales also cross the five percent EV tipping point? Yes, Utah hit five percent EV sales in the last quarter of 2021 (Figure 2).

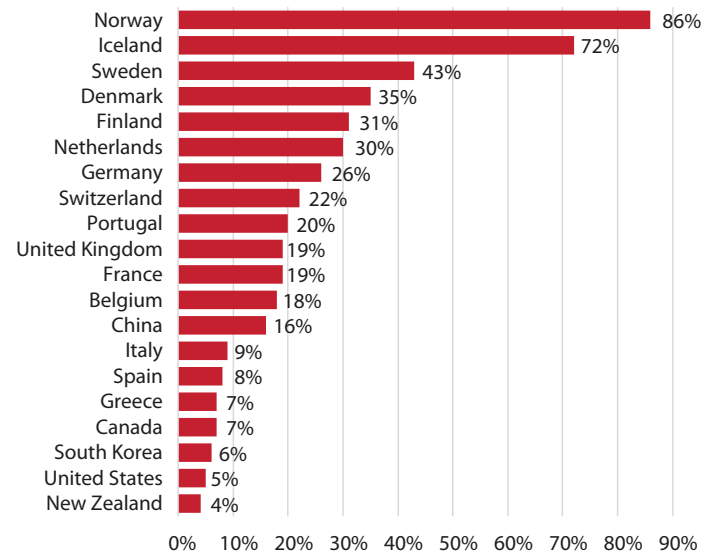
Although the EV adoption rate in the US currently lags Europe, US federal policies of infrastructure build-out and EV credits are poised to close the gap.

Endnotes

- 1 "Clean Energy has a Tipping Point, and 87 Countries Have Reached It". Bloomberg Green.
- 2 "EV Charging Network Plans Approved for All 50 states". UtilityDive.
- 3 "Here's Every Electric Vehicle that Qualifies for the Current and Upcoming US Federal Tax Credit". Electrek.

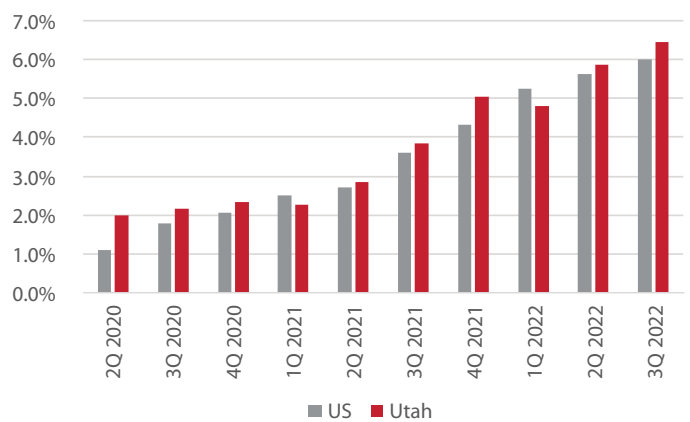
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Figure 1: Top 20 Countries for EV Sales as a Percent of Total Car Sales, 2022



Source: International Energy Administration's Global EV Outlook 2022

Figure 2: New EV Sales as a Percent of Total Car Sales



Source: Utah State Tax Commission, New Motor Vehicle Sales; Kelley Blue Book Electrified Light-Vehicle Sales Report.