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ELECTRIC VEHICLE QUARTERLY REPORT

FIRST QUARTER, 2024

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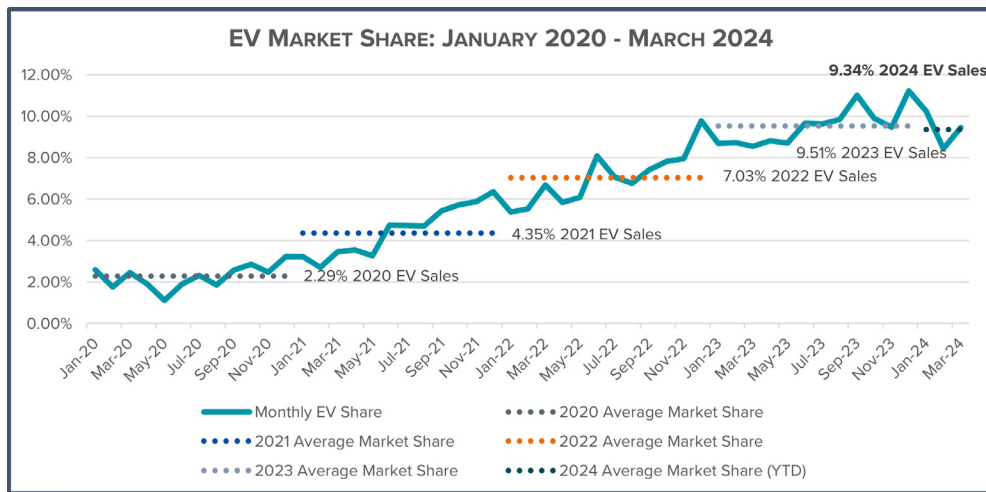
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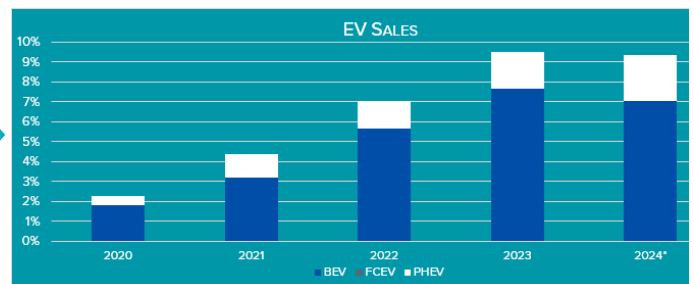
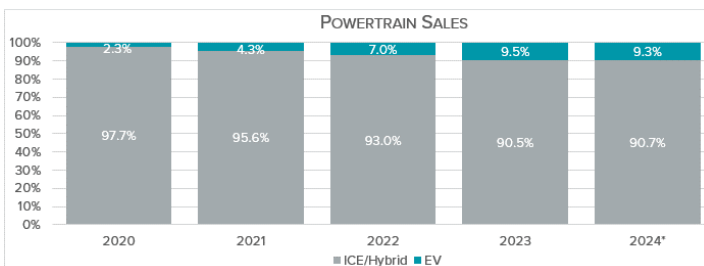
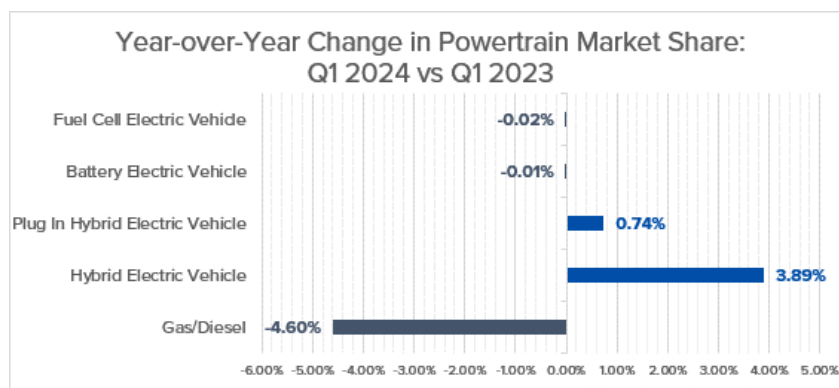
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ELECTRIC VEHICLE SALES OVERVIEW (Q1 2024)

In the first quarter of 2024, automakers sold about 344,000 electric vehicles (EVs), including battery, plug-in hybrid, and fuel cell electric vehicles) in the United States, representing 9.3 percent of overall light-duty vehicle sales. This represents a 0.9 percentage point (pp) market share decrease over the fourth quarter of 2023 and a decrease of about 33,000 vehicle sales.



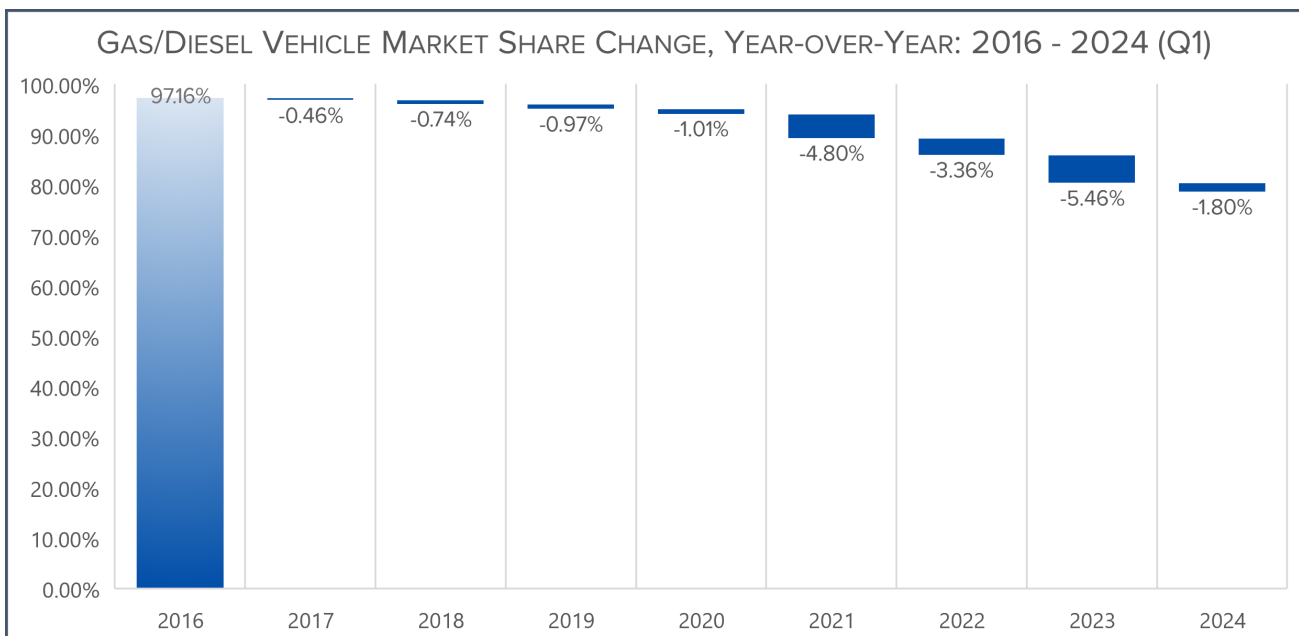
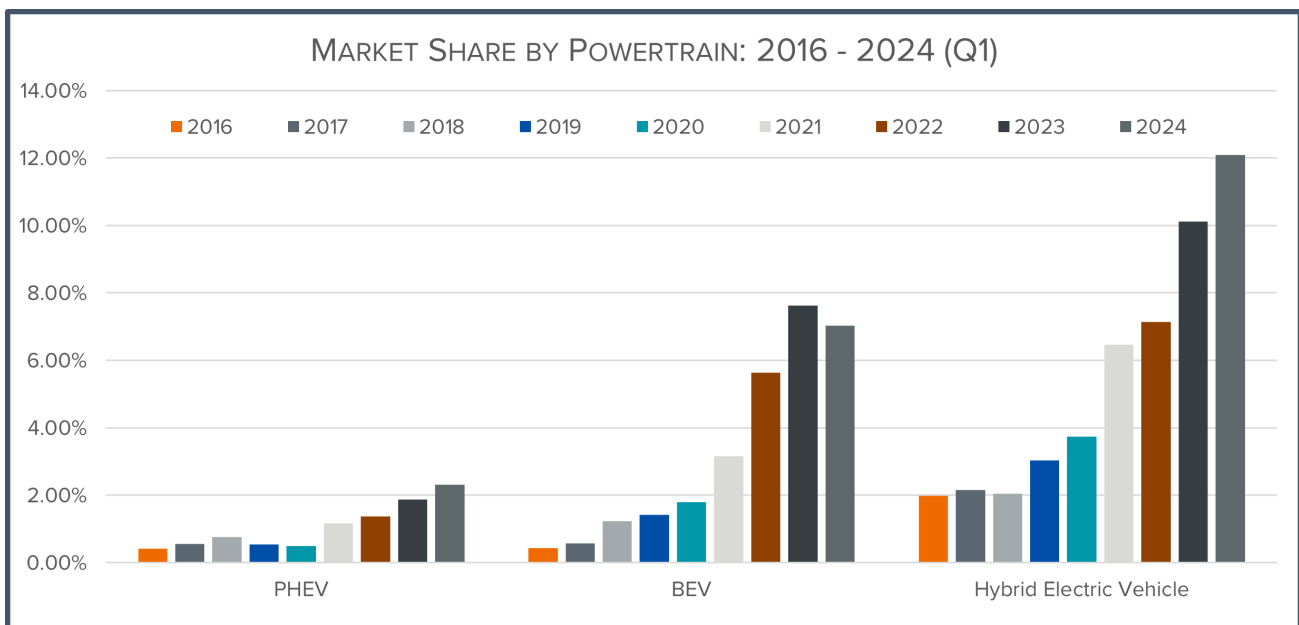
Year-over-year (YoY), market share increased 0.7 pp from the first quarter of 2023. The total volume of all light-duty sales in Q1 2024 was up 4.2 percent from Q1 2023, while the volume for EVs increased 13 percent (an increase of nearly 39,000 vehicles.) For comparison, internal combustion engine (ICE) vehicle market share decreased by 4.6 pp during Q1 2024 compared to the same period last year. Nearly all of ICE market share was displaced by gains of traditional hybrids and plug-in hybrid vehicles, offset slightly by market share losses from BEVs and FCEVs.



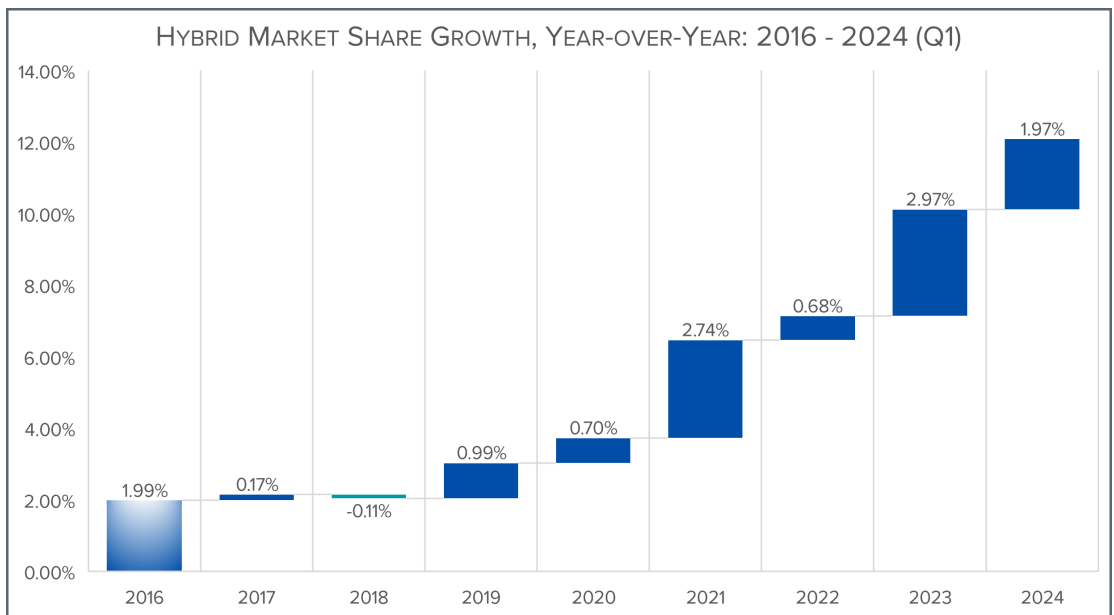
*Through Q1 2024

EVOLVING MARKET SHARE OF POWERTRAINS: 2016 - 2024

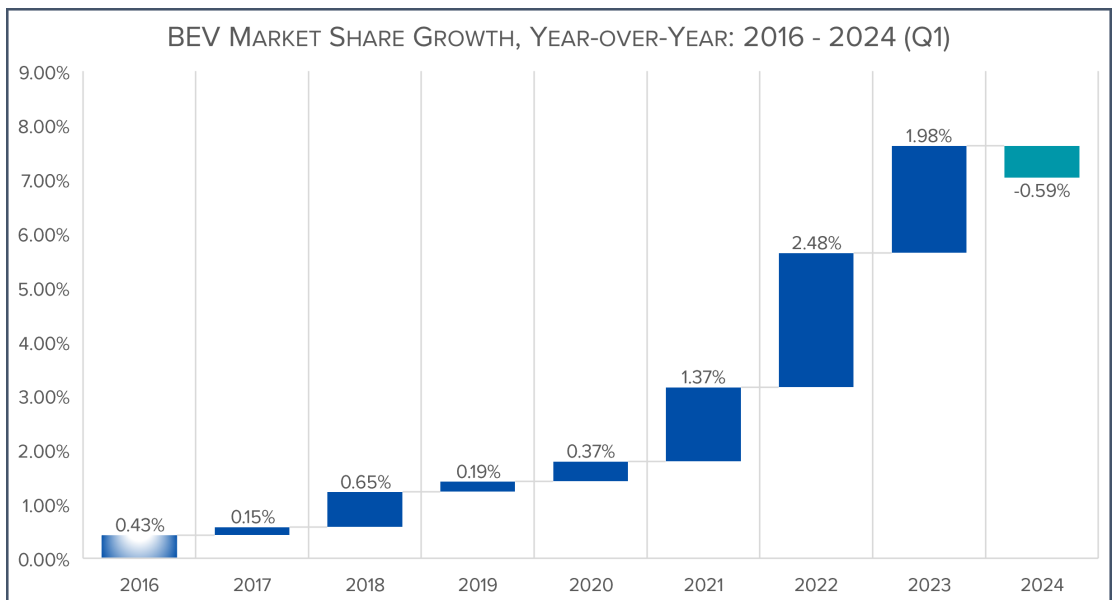
From 2016 through the first quarter of 2024, traditional internal combustion engine (ICE) market share has steadily declined. In 2016, ICE vehicles comprised more than 97 percent of all vehicle sales. In the first quarter of 2024, that share dropped to 78.6 percent for an overall loss of 18.6 pp. The ICE market share loss was replaced by increases in share of hybrids, BEVs, and PHEVs. Hybrids made up most of the alternative vehicle gains (+10.1 pp) followed by BEVs (+6.6 pp) and PHEVs (+1.9 pp) over the last eight years



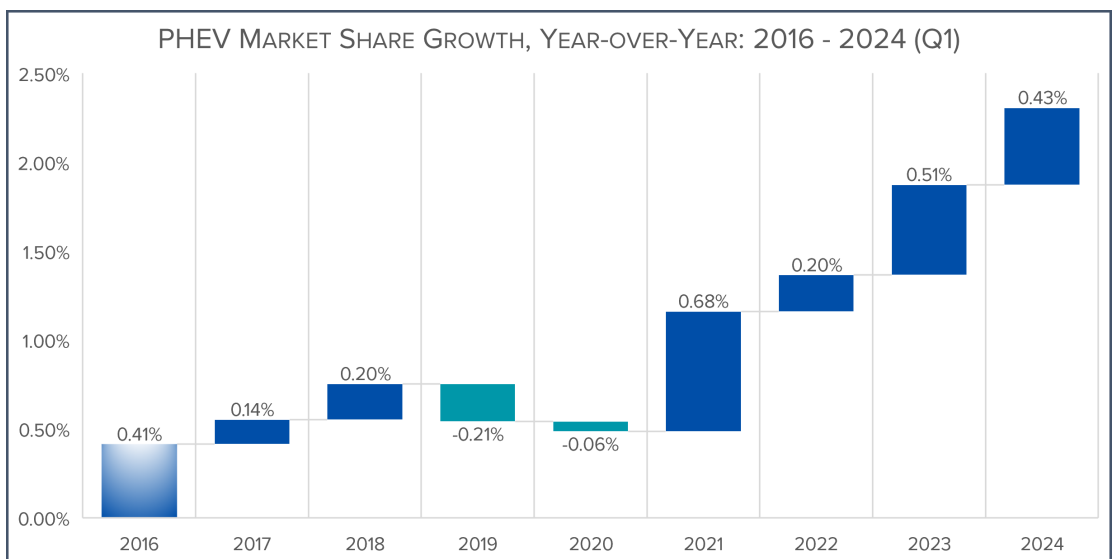
Hybrid market share grew from 2 percent in 2016 to 12.1 percent in Q1 2024 (+10.1 pp):



BEV market share grew from .43 percent in 2016 to 7.0 percent in Q1 2024 (+6.6 pp):



PHEV market share grew from .41 percent in 2016 to 2.3 percent in Q1 2024 (+1.89 pp):



[See Additional Historic Data on EV Sales](#)

ELECTRIC VEHICLE SALES BY SEGMENT

EV Model Availability

113 Vehicle Models Sold in Q1 2024:

66 Battery Electric Vehicles

- » 19 Cars
- » 36 Utility Vehicles
- » 5 Pickups
- » 6 Vans

45 Plug-in Hybrid Vehicles

- » 15 Cars
- » 29 Utility Vehicles
- » 1 Van

2 Fuel Cell Electric Vehicles

- » 1 Car
- » 1 Utility Vehicle

See more information about [EV CHOICE HERE](#)

For a list of EVs that qualify for the federal government's new clean vehicle tax credit of up to \$7,500 [CLICK HERE](#).

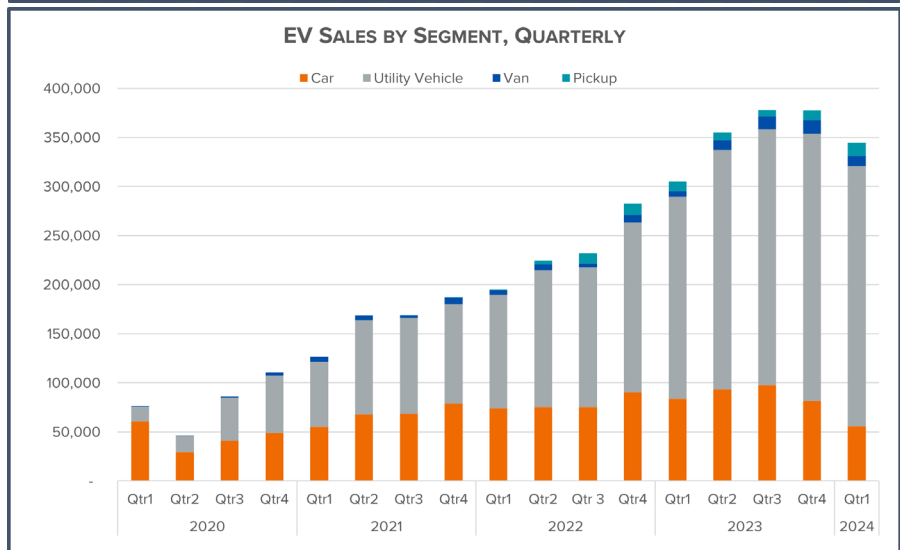
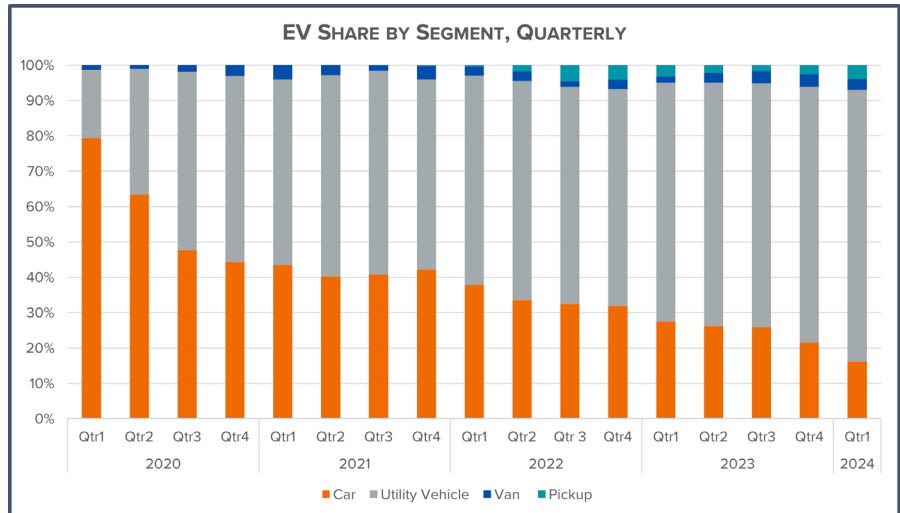
While passenger cars once dominated the EV market, manufacturers continue to introduce new models to satisfy a variety of consumer needs. Utility vehicle (UV) offerings continue to grow, and while electric pickup trucks are a relatively new entry to the market (making their commercial debut in September 2021), there are 5 models available now, with more expected soon. As a result, non-car segments are continuing to make gains, and in the first quarter of 2024, light truck (UVs, minivans, and pickups) sales comprised 84 percent of the EV market – an 11 pp increase over the first quarter of 2023.

Quarterly sales of BEV and PHEV UVs have grown from about 19 percent of EVs at the start of 2020 to 77 percent in the first quarter of 2024. Nearly 59,000 more electric UVs were sold in the first quarter of 2024 than the first quarter of 2023.

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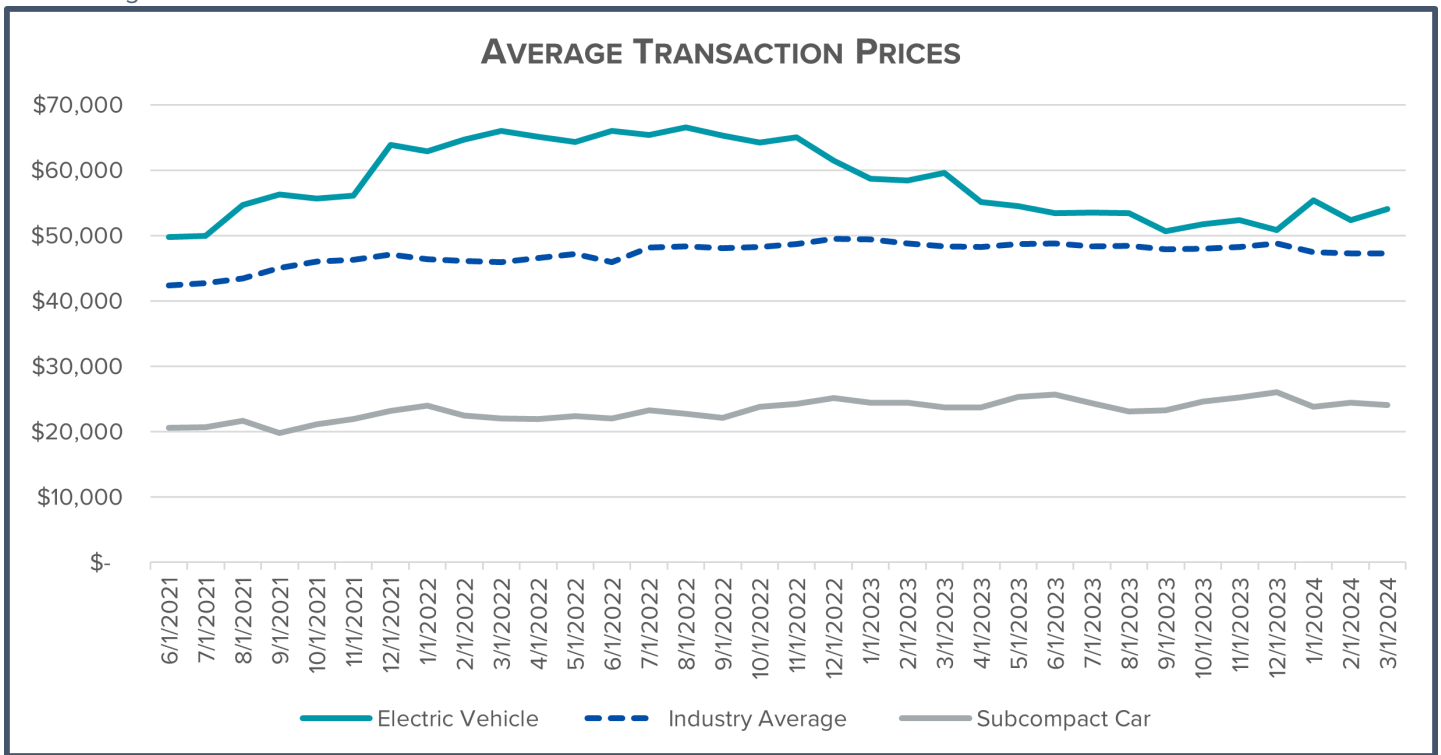
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EV INDEX
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Source: Figures compiled by Alliance for Automotive Innovation with new registrations for retail and fleet data provided by S&P Global Mobility covering January 1, 2020 – March 31, 2024

ELECTRIC VEHICLE TRANSACTION PRICES

“The average transaction price for a new EV in Q1 was \$55,167, a 9.0 percent decrease compared to Q1 2023 and down 3.8 percent quarter over quarter.”¹ While increased competition in the EV market has led to some price decreases, slowing sales paired with increased inventory and incentives are also playing a part in lower transaction prices. As noted by Cox Automotive, “Lower prices have supported EV sales volume in the U.S., particularly for key Tesla models... Tesla’s average transaction price was \$52,315 in Q1, down roughly 13.5 percent year over year. However, lower prices did not generate higher volume. Many automakers have followed Tesla’s lead and slashed prices. Incentive spending on EVs has increased notably in the past year, another sign of slowing demand.”



(Source: Compiled from Kelley Blue Book Press Releases, 6/2021 – 3/2024)

¹ Cox Automotive, Press Release, “EV Sales Growth Slows,” 4/11/2024



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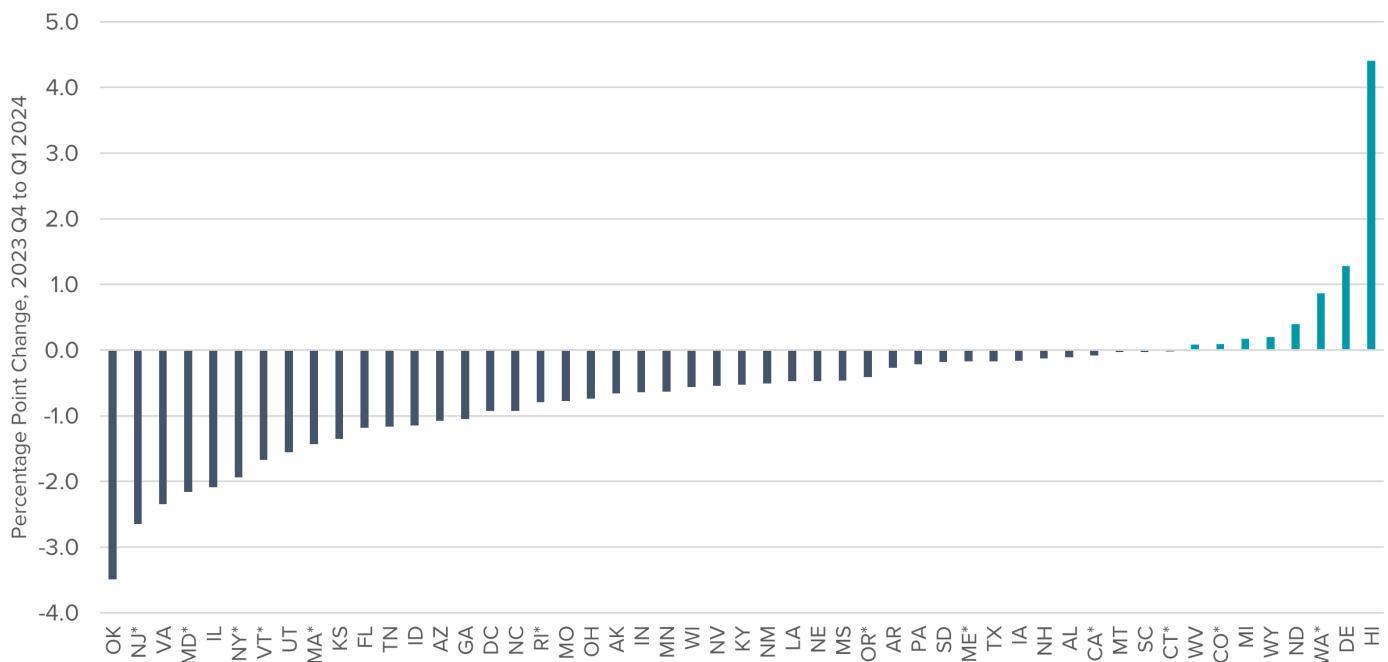
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ELECTRIC VEHICLE SALES BY STATE

California continued to lead the nation in EV sales, with BEVs, PHEVs and FCEVs making up 25 percent of new light-duty vehicle registrations in the first quarter of 2024. There are currently eleven additional states² and the District of Columbia with new vehicle EV registrations above 10 percent. However, only eight states³ saw an increase in market share from the fourth quarter of 2023. Forty-two states and DC lost market share from the fourth quarter. Decreasing the most were Oklahoma⁴ (-3.3 pp), New Jersey (-2.7 pp), Virginia (-2.3 pp), Maryland (-2.2 pp) and Illinois (-2.1 pp).

MARKET SHARE CHANGE Q4 2023 TO Q1 2024



For the first quarter of 2024 vs the first quarter of 2023, the market share of new EVs registered increased in all but thirteen states⁵. Seven states witnessed an increased market share of EVs by 2 pp or more. Making the largest increases were Colorado⁷ (6.0 pp), Oklahoma⁸ (4.8 pp), Hawaii (4.1 pp), Washington (3.3pp), and New York (3.1 pp).

In the first quarter of 2024, twelve states and the District of Columbia had an EV market share above 10 percent while four states had an EV market share under 2 percent; California and Washington⁹ were the only states above 20 percent.¹⁰

² States with more than a 10 percent market share of EVs: California, Washington, District of Columbia, Colorado, Hawaii, Oregon, Nevada, New Jersey, Maryland, Massachusetts, Connecticut, Vermont, and Delaware

³ The eight states are: West Virginia, Colorado, Michigan, Wyoming, North Dakota, Washington, Delaware, and Hawaii

⁴ Oklahoma is an outlier state due to fluctuating fleet vehicle registrations.

⁵ *Denotes states that have adopted California's ZEV program; Oklahoma is an outlier state due to fluctuating fleet vehicle registrations.

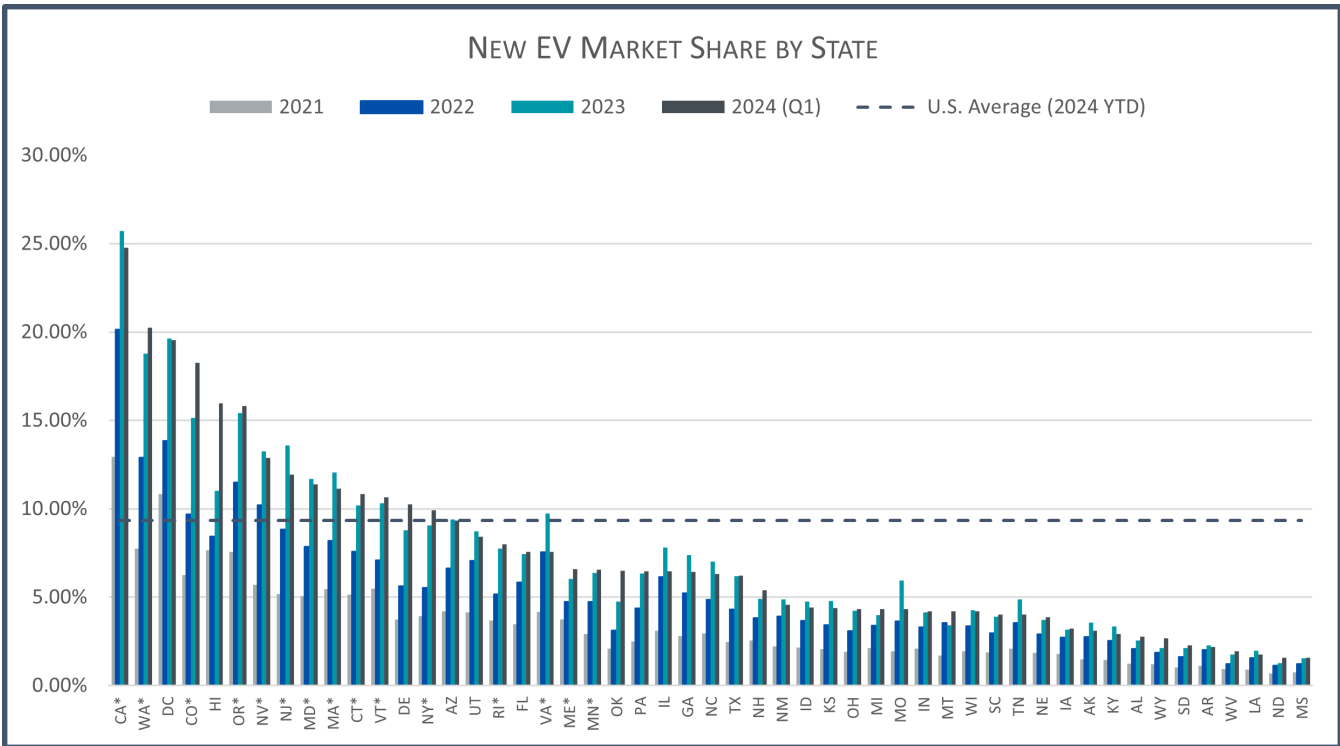
⁶ The thirteen states are: Virginia, Nevada, Tennessee, Alaska, Illinois, North Carolina, District of Columbia, Utah, Georgia, Louisiana, Kentucky, Oregon, New Mexico, Missouri

⁷ [Colorado taxpayers](#) are eligible for a state tax credit of \$5,000 for the purchase or lease of a new EV on or after July 1, 2023 with a manufacturer's suggested retail price (MSRP) up to \$80,000. Lease agreements must have an initial term of at least two years. Beginning January 1, 2024, Coloradans purchasing an EV with an MSRP up to \$35,000 will be eligible for an additional \$2,500 tax credit.

⁸ Oklahoma is an outlier state due to fluctuating fleet vehicle registrations.

⁹ This is the first time Washington has been above 20 percent

¹⁰ Figures compiled by Alliance for Automotive Innovation with new registrations for retail and fleet data provided by S&P Global Mobility covering January 1, 2021 – March 31, 2024



2024 New EV Market Share by State (Through Q1)**														
1	CA*	24.78%	11	CT*	10.84%	21	MN*	6.55%	31	KS	4.39%	41	IA	3.23%
2	WA*	20.24%	12	VT*	10.66%	22	OK	6.50%	32	OH	4.33%	42	AK	3.09%
3	DC	19.54%	13	DE	10.26%	23	PA	6.47%	33	MI	4.33%	43	KY	2.92%
4	CO*	18.25%	14	NY*	9.92%	24	IL	6.46%	34	MO	4.32%	44	AL	2.76%
5	HI	15.98%	15	AZ	9.33%	25	GA	6.45%	35	IN	4.20%	45	WY	2.69%
6	OR*	15.83%	16	UT	8.41%	26	NC	6.30%	36	MT	4.20%	46	SD	2.29%
7	NV*	12.89%	17	RI*	8.00%	27	TX	6.22%	37	WI	4.20%	47	AR	2.20%
8	NJ*	11.93%	18	FL	7.57%	28	NH	5.39%	38	SC	4.02%	48	WV	1.96%
9	MD*	11.40%	19	VA*	7.56%	29	NM	4.59%	39	TN	4.02%	49	LA	1.77%
10	MA*	11.15%	20	ME*	6.60%	30	ID	4.41%	40	NE	3.85%	50	ND	1.58%
												51	MS	1.56%

**Denotes states that have adopted California's ZEV program

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First Quarter 2024, New Light-Duty Vehicle Registrations By Powertrain					Change In Market Share (2024 Q1 vs 2023 Q1), New Light-Duty Vehicle Registrations Powertrain				
State	Advanced Powertrain Market Share				Advanced Powertrain Market Share (Percentage Point Change)				
	PHEV	BEV	FCEV	EV Total	PHEV	BEV	FCEV	EV Total	
AK	0.58%	2.51%	0.00%	3.09%	-0.35	-0.53	0.00		-0.88
AL	0.61%	2.15%	0.00%	2.76%	0.13	0.21	0.00		0.34
AR	0.44%	1.76%	0.00%	2.20%	-0.07	0.12	0.00		0.04
AZ	1.78%	7.55%	0.00%	9.33%	0.71	-0.02	0.00		0.69
CA*	3.78%	20.95%	0.05%	24.78%	0.31	0.69	-0.13		0.86
CO*	6.94%	11.32%	0.00%	18.25%	3.39	2.59	0.00		5.98
CT*	4.11%	6.73%	0.00%	10.84%	1.39	0.17	0.00		1.56
DC	4.37%	15.16%	0.00%	19.54%	0.09	-0.69	0.00		-0.61
DE	2.37%	7.90%	0.00%	10.26%	0.60	2.19	0.00		2.79
FL	1.00%	6.58%	0.00%	7.57%	0.08	0.92	0.00		1.00
GA	0.99%	5.46%	0.00%	6.45%	0.27	-0.66	0.00		-0.40
HI	6.54%	9.44%	0.00%	15.98%	5.53	-1.44	0.00		4.09
IA	1.01%	2.22%	0.00%	3.23%	0.21	0.08	0.00		0.29
ID	1.55%	2.86%	0.00%	4.41%	0.37	-0.09	0.00		0.28
IL	1.41%	5.05%	0.00%	6.46%	0.29	-1.13	0.00		-0.84
IN	1.14%	3.07%	0.00%	4.20%	0.29	0.11	0.00		0.40
KS	1.24%	3.15%	0.00%	4.39%	0.48	-0.08	0.00		0.40
KY	0.65%	2.26%	0.00%	2.92%	-0.06	-0.20	0.00		-0.26
LA	0.65%	1.12%	0.00%	1.77%	0.19	-0.55	0.00		-0.36
MA*	4.24%	6.91%	0.00%	11.15%	1.19	-0.31	0.00		0.88
MD*	3.03%	8.37%	0.00%	11.40%	0.92	0.57	0.00		1.48
ME*	3.52%	3.08%	0.00%	6.60%	1.24	-0.14	0.00		1.11
MI	1.04%	3.29%	0.00%	4.33%	-0.06	0.51	0.00		0.45
MN*	1.66%	4.88%	0.00%	6.55%	0.42	0.37	0.00		0.78
MO	0.88%	3.45%	0.00%	4.32%	-0.18	0.09	0.00		-0.09
MS	0.44%	1.12%	0.00%	1.56%	0.15	0.10	0.00		0.25
MT	1.37%	2.84%	0.00%	4.20%	0.33	0.51	0.00		0.84
NC	1.06%	5.24%	0.00%	6.30%	-0.01	-0.61	0.00		-0.62
ND	0.59%	0.99%	0.00%	1.58%	-0.09	0.27	0.00		0.18
NE	1.34%	2.52%	0.00%	3.85%	0.32	0.35	0.00		0.67
NH	2.47%	2.92%	0.00%	5.39%	0.95	-0.24	0.00		0.70
NJ*	3.01%	8.93%	0.00%	11.93%	0.98	-0.77	0.00		0.21
NM	1.04%	3.55%	0.00%	4.59%	-0.12	-0.02	0.00		-0.13
NV*	1.72%	11.18%	0.00%	12.89%	0.12	-2.15	0.00		-2.03
NY*	5.25%	4.66%	0.00%	9.92%	2.52	0.59	0.00		3.11
OH	1.26%	3.07%	0.00%	4.33%	0.38	0.33	0.00		0.71
OK	5.56%	0.94%	0.00%	6.50%	5.03	-0.24	0.00		4.78
OR*	4.97%	10.86%	0.00%	15.83%	1.60	-1.78	0.00		-0.17
PA	2.81%	3.66%	0.00%	6.47%	1.36	-0.02	0.00		1.33
RI*	3.90%	4.09%	0.00%	8.00%	1.58	0.31	0.00		1.89
SC	0.96%	3.06%	0.00%	4.02%	0.15	0.25	0.00		0.41
SD	0.77%	1.52%	0.00%	2.29%	-0.08	0.19	0.00		0.11
TN	0.58%	3.44%	0.00%	4.02%	-0.10	-1.80	0.00		-1.90
TX	0.97%	5.25%	0.00%	6.22%	0.27	-0.12	0.00		0.16
UT	1.61%	6.80%	0.00%	8.41%	0.16	-0.76	0.00		-0.60
VA*	1.39%	6.17%	0.00%	7.56%	0.17	-2.30	0.00		-2.13
VT*	4.21%	6.45%	0.00%	10.66%	1.43	0.87	0.00		2.29
WA*	3.71%	16.52%	0.00%	20.24%	0.83	2.47	0.00		3.30
WI	0.83%	3.37%	0.00%	4.20%	-0.04	0.55	0.00		0.51
WV	0.62%	1.33%	0.00%	1.96%	0.08	0.30	0.00		0.38
WY	0.96%	1.73%	0.00%	2.69%	0.18	0.73	0.00		0.91
U.S.	2.30%	7.03%	0.01%	9.34%	0.74	-0.02	-0.02		0.70

*Denotes states that have adopted California's ZEV program

Source: Figures compiled by Alliance for Automotive Innovation with new registrations for retail and fleet data provided by S&P Global Mobility covering January 1 – March 31, 2023, and January 1 – March 31, 2024

BENCHMARK EVENTS

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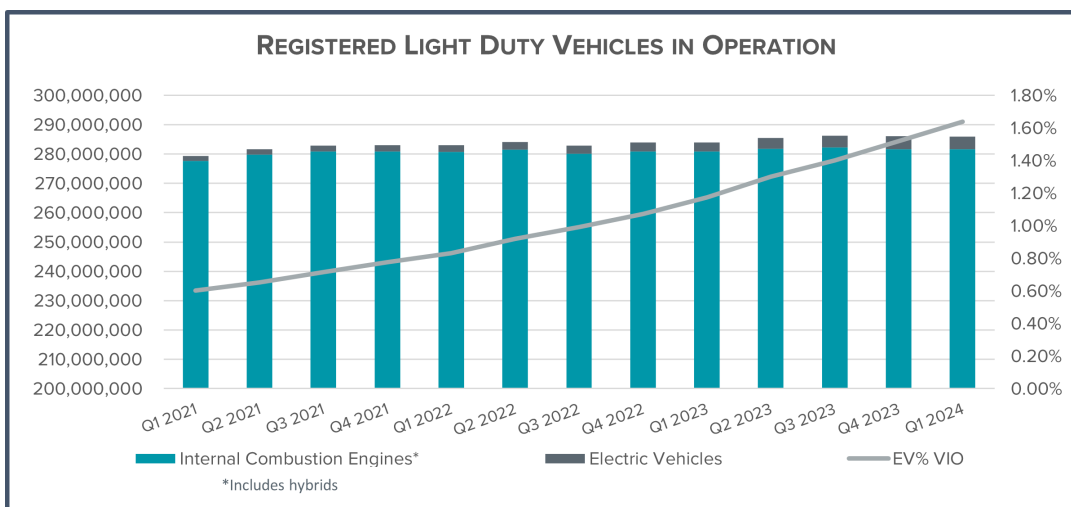
New York
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REGISTRATIONS AND INFRASTRUCTURE

Share of Registered EVs In U.S. Light-Duty Fleet Continues to Increase Incrementally. As sales of EVs increase, so does the total number of EVs operating on U.S. roads. There are now nearly 4.7 million EVs in operation in the United States (1.64 percent of all light vehicles in operation). EVs represented more than 1 percent of total vehicles in operation (VIO) for the first time at the end of 2022. The electric vehicles in operation (E-VIO) of 1.6 percent is an increase of 0.5 pp since the first quarter of 2023 and more than two and a half times the E-VIO from the first quarter in 2021 (0.60 percent).¹²



U.S. Public Charging Infrastructure: Overview

While the U.S. Department of Energy notes that roughly 80 percent of all EV charging occurs at home, reliable and convenient access to workplace and public charging and refueling stations help to support customers that purchase EVs or are considering purchasing an EV. Workplace and public charging infrastructure not only eases perceived “range anxiety” concerns but also increases consumer awareness of the technology. In addition, achieving EV market share envisioned by state and/or federal regulators will require moving beyond customers that have access to charging via privately-owned single-family dwellings.

The bipartisan Infrastructure Investment and Jobs Act (IIJA) signed into law in November 2021 includes \$5 billion in funding for states to establish a nationwide EV charging network (NEVI) along highway corridors and \$2.5 billion in competitive grants to deploy publicly available EV charging and other alternative fuel stations through 2026. NEVI funding provides funding to states to strategically deploy charging infrastructure and to establish an interconnected network of publicly available charging.

Here is a snapshot of publicly available EV charging and refueling infrastructure available across the United States at the end of the first quarter of 2024¹³:

How is NEVI Funding Going?

“There are eight stations in six states with 33 public charging ports in operation supported by NEVI funding. A total of 36 states have released at least their first round of solicitations. Of these states, 23 have issued conditional awards or put agreements in place for more than 550 charging station locations that will each have at least four fast charging ports. Five states—Maine, Pennsylvania, Colorado, Ohio, and Kentucky—have released their second round of conditional awards.”

– Joint Office of Energy and Transportation, [Q2 Update](#)

¹² Registered vehicles in operation compiled by Alliance for Automotive Innovation with data provided by S&P Global Mobility as of March 31, 2024
¹³ Charging information from U.S. Department of Energy Alternative Fuels Data Center, stations in operation as of March 31, 2024

Level 2: 54,332 Locations, 126,630 EVSE Ports
DC Fast: 9,619 Locations, 40,583 EVSE Ports
Hydrogen Refueling: 56 Stations (55 are in California)
U.S. Total: 62,760 ¹⁴ Locations, 167,213 EVSE Ports

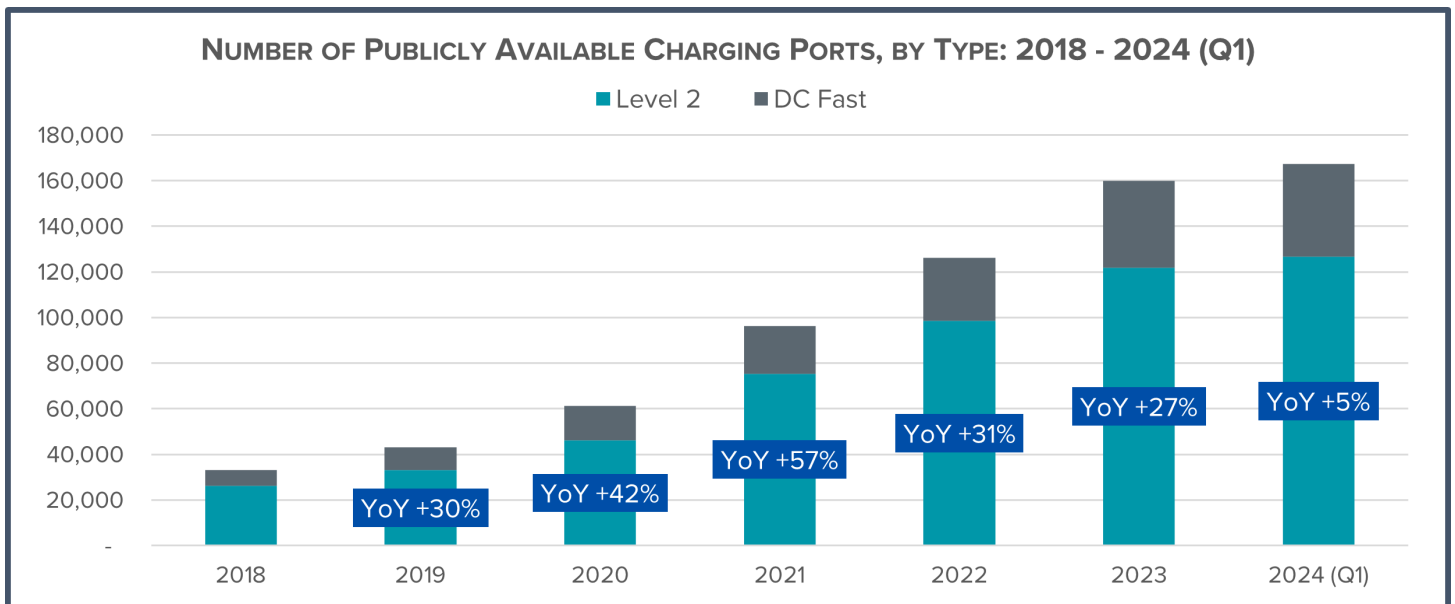
[See Recommended Attributes for EV Charging Stations](#)

Level 2 Chargers and DC Fast Chargers. Both Level 2 and DC Fast charging play important roles in electrifying the light-duty vehicle fleet. However, the key difference between Level 2 and DC Fast chargers is how quickly each will charge an EV’s battery. Level 2 equipment is common for home, workplace, and public charging with longer dwell times. Level 2 chargers can fully charge a BEV from empty in 4-10 hours and a PHEV from empty in 1-2 hours. DC Fast charging equipment enables rapid charging of BEVs in 20 minutes to 1 hour along heavy-traffic corridors, in city centers, at transportation hubs, and fleet depots. Wider installation of both Level 2 chargers, DC Fast chargers, and hydrogen fueling will be necessary to support wider-scale adoption of EVs. The number of public Level 2 charging increased 4 percent at the end of the first quarter of 2024 over the end of the fourth quarter of 2023. DC Fast chargers increased 7 percent. Total charging ports increased 5 percent from the end of 2023. ¹⁵ (For context, E-VIO increased 8 percent from the end of 2023 to the end of the first quarter of 2024.)

Through May 29, 2024, more than 60 percent of installed DC Fast charging ports were Tesla (North American Charging Standard) ¹⁶:

DC Fast Chargers Installed		
Type	Ports	%Total
Tesla (NACS)	25,830	61%
CCS Combo	16,187	39%
Total	42,017	100%

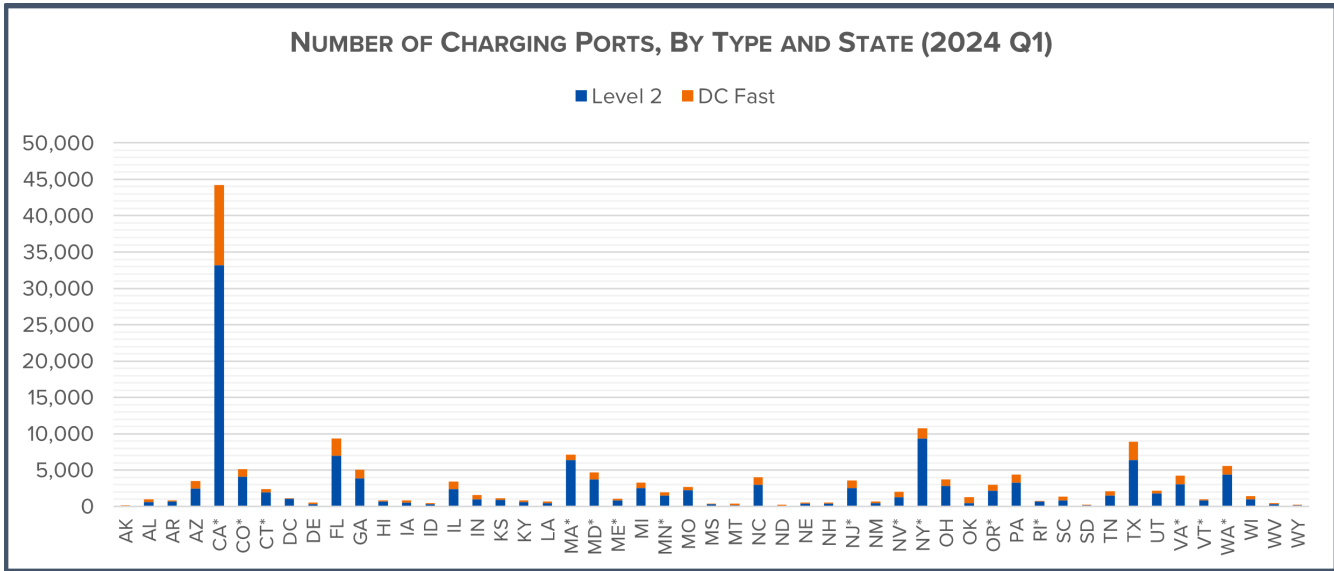
After Tesla opened their previously proprietary chargers (in November 2022), at least 18 EV manufacturers have announced that they will move to Tesla’s North America Charging Standard.



¹⁴ Some station locations have both Level 2 and DC Fast installed.

¹⁵ Charging information from U.S. Department of Energy Alternative Fuels Data Center, stations in operation as of 3/31/2024

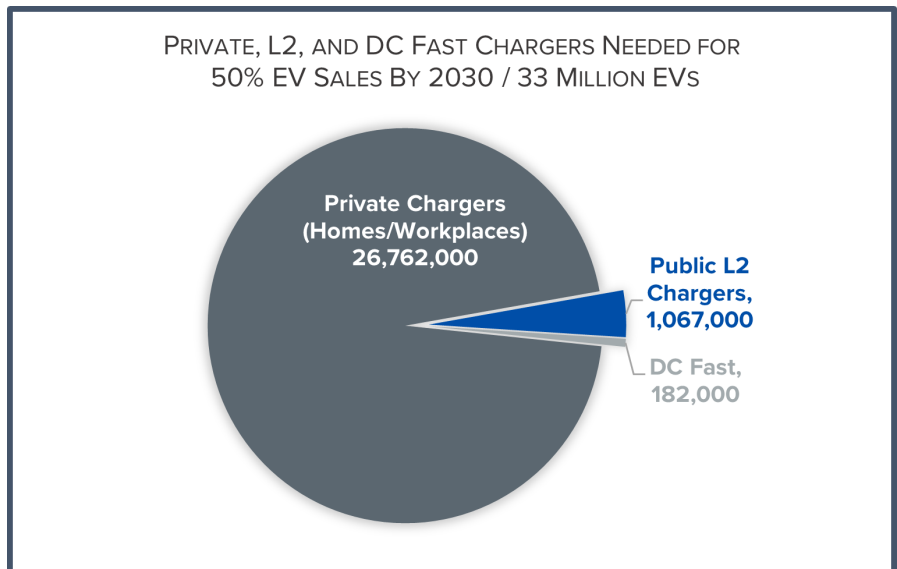
¹⁶ Charging information from U.S. Department of Energy Alternative Fuels Data Center, 5/29/2024; does not include J1772 or CHAdeMO connectors



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Infrastructure Investment Necessary

An assessment by the U.S. National Renewable Energy Laboratory (NREL) released in June 2023 estimated that a network of 28 million charging ports would be necessary to support 50 percent EV sales by 2030 (and 33 million EVs on the road).¹⁸ NREL estimates that 96 percent of those charging ports would be privately accessible L1 and L2 chargers located at single-family homes, multifamily properties, and workplaces. The remaining 4 percent (1,249,000 ports) would be split between public L2 and high-speed DC Fast charging ports, with L2 making up 85 percent of those public chargers.



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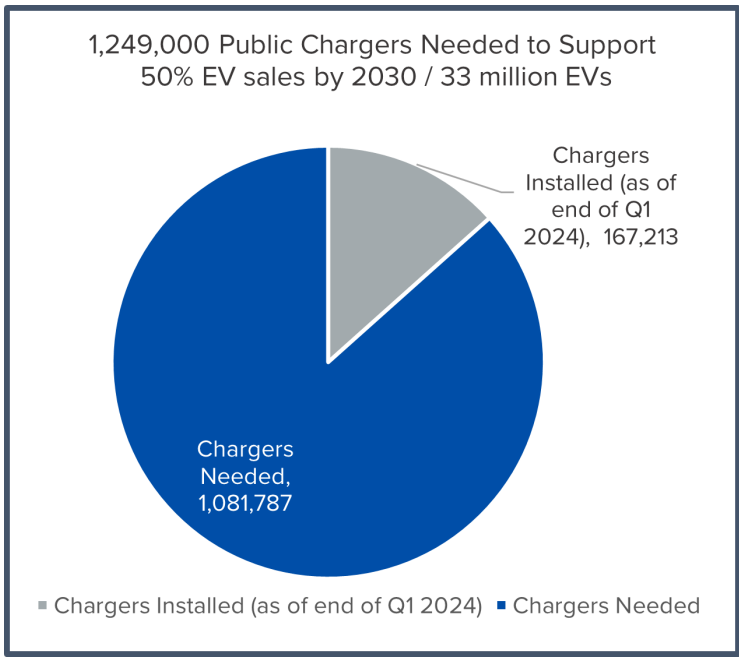
At the end of Q1 2024, there were about 167,000 public charging ports across the country and 4.7 million EVs on the road. Total installed public charging ports are about 13 percent of the needed estimate to support EV penetration by 2030.

More than 1 million additional public chargers (940,370 L2 and 141,417 DC Fast) will need to be installed to satisfy the necessary infrastructure estimate by 2030. This means that between the end of Q1 2024 and December 31, 2030, 438 chargers need to be installed every day, for the next 6.75 years. Or 3 chargers every 10 minutes through the end of 2030.

¹⁷ Charging information from U.S. Department of Energy Alternative Fuels Data Center, stations in operation as of 12/31/2023; *Denotes states that have adopted California's ZEV program.

¹⁸ National Renewable Energy Laboratory, "The 2030 National Charging Network: Estimating U.S. Light-Duty Demand for Electric Vehicle Charging Infrastructure," June 2023

¹⁹ National Renewable Energy Laboratory, "The 2030 National Charging Network: Estimating U.S. Light-Duty Demand for Electric Vehicle Charging Infrastructure," June 2023



Between the end of 2023 and December 31, 2030, 438 chargers need to be installed every day, for the next 7 years. Or 3 chargers every 10 minutes through the end of 2030

The Cost of This Substantial Infrastructure Necessity Will Largely Fall on Consumers and Commercial Real Estate Owners as They Install Home and Workplace Charging.

According to NREL a national capital investment of \$53–\$127 billion in charging infrastructure is needed by 2030 (including as much as \$72 billion for private residential charging) to support 33 million EVs. The

²⁰ charging) to support 33 million EVs. The

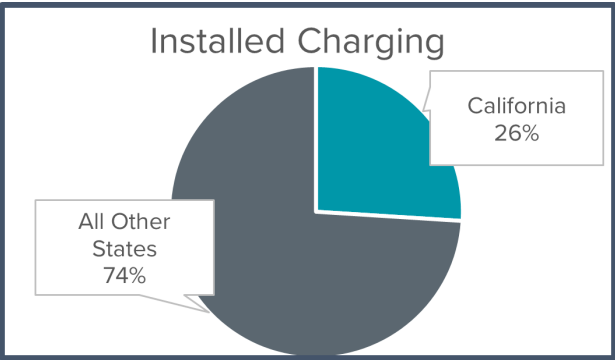
large range of potential costs is a result of variable and evolving equipment and installation costs across charging networks, locations, and site designs²¹. Notably, the estimates exclude the cost of grid upgrades and distributed energy resources. The estimated cumulative capital investment includes²²:

- » \$22–\$72 billion for privately accessible Level 1 and Level 2 charging ports
- » \$27–\$44 billion for publicly accessible fast charging ports
- » \$5–\$11 billion for publicly accessible Level 2 charging ports

Infrastructure Disparities by Geography

Geographic disparities in charging infrastructure are pervasive. At the end of Q1 2024, more than a quarter of all public charging infrastructure was in California, which had 34 percent of all registered EVs.

Alliance for Automotive Innovation participates in EV policy development at the federal and state level via the Joint Office of Energy and Transportation’s [Electric Vehicle Working Group](#), through its [lithium-ion battery recycling policy framework](#), [recommendations for attributes of EV charging stations](#), and implementation of the Inflation Reduction Act’s EV tax credits²³.



²⁰ National Renewable Energy Laboratory, “[The 2030 National Charging Network: Estimating U.S. Light-Duty Demand for Electric Vehicle Charging Infrastructure](#),” June 2023

²¹ Various state and federal incentives are available to consumers or businesses that install EV charging infrastructure, including from power utilities.

²² National Renewable Energy Laboratory, “[The 2030 National Charging Network: Estimating U.S. Light-Duty Demand for Electric Vehicle Charging Infrastructure](#),” June 2023

²³ Alliance for Automotive Innovation, Blog, [What We Know \(and Don’t Know\) About the New EV Tax Credit Rules](#), 12/20/2022; Alliance for Automotive Innovation, Blog, [Foreign Entity of Concern: Finally... Some Clarity](#), 12/1/2023

Vehicles in Operation and Charging by State

Public Charging Outlets And Registered EVs (as of 3/31/2024)								
	EV Level 2	EV DC Fast	H2** Fueling	Total	Percent EVs of Total VIO***	Share of Registered EVs****	EVs Per Charger	EVs Per 10K Residents
AK	85	34	-	119	0.61%	0.07%	29	47.35
AL	581	382	-	963	0.34%	0.38%	18	36.04
AR	679	137	-	816	0.33%	0.19%	11	29.99
AZ	2,441	1,040	-	3,481	1.71%	2.52%	34	164.69
CA*	33,197	10,990	55	44,242	5.16%	34.33%	36	406.77
CO*	4,093	1,013	-	5,106	2.25%	2.62%	24	215.96
CT*	1,922	449	-	2,371	1.56%	1.03%	20	135.01
DC	1,044	61	-	1,105	3.42%	0.25%	11	165.95
DE	311	214	-	525	1.34%	0.26%	23	126.31
FL	6,996	2,369	-	9,365	1.56%	6.39%	32	140.62
GA	3,839	1,187	-	5,026	1.13%	2.28%	21	101.72
HI	705	82	1	788	2.85%	0.69%	41	228.47
IA	515	328	-	843	0.45%	0.31%	17	46.07
ID	300	152	-	452	0.67%	0.28%	29	75.56
IL	2,350	1,036	-	3,386	1.28%	2.74%	38	100.63
IN	983	557	-	1,540	0.60%	0.79%	24	55.49
KS	906	227	-	1,133	0.57%	0.36%	15	57.48
KY	578	228	-	806	0.38%	0.32%	19	33.95
LA	433	235	-	668	0.32%	0.25%	18	25.55
MA*	6,367	761	-	7,128	2.05%	2.41%	16	163.82
MD*	3,726	964	-	4,690	1.95%	2.13%	21	164.87
ME*	815	240	-	1,055	1.11%	0.32%	14	111.05
MI	2,524	735	-	3,259	0.82%	1.49%	21	69.75
MN*	1,455	472	-	1,927	0.98%	1.09%	26	90.84
MO	2,196	488	-	2,684	0.66%	0.81%	14	61.85
MS	283	119	-	402	0.18%	0.12%	14	18.29
MT	186	193	-	379	0.42%	0.15%	18	65.28
NC	2,947	1,071	-	4,018	0.97%	2.01%	23	90.79
ND	117	88	-	205	0.20%	0.03%	8	21.54
NE	400	160	-	560	0.50%	0.22%	19	54.45
NH	373	179	-	552	1.16%	0.33%	28	113.97
NJ*	2,521	1,069	-	3,590	2.24%	3.53%	46	185.84
NM	444	250	-	694	0.73%	0.32%	21	70.55
NV*	1,253	739	-	1,992	2.37%	1.27%	30	196.90
NY*	9,325	1,404	-	10,729	1.84%	4.51%	20	108.20
OH	2,837	844	-	3,681	0.69%	1.56%	20	62.62
OK	459	834	-	1,293	1.20%	1.18%	43	140.25
OR*	2,182	816	-	2,998	2.38%	1.96%	31	218.90
PA	3,274	1,080	-	4,354	0.98%	2.30%	25	84.23
RI*	689	92	-	781	1.27%	0.23%	14	104.11
SC	857	494	-	1,351	0.52%	0.60%	21	55.60
SD	124	111	-	235	0.29%	0.06%	12	32.53
TN	1,507	539	-	2,046	0.64%	0.94%	22	65.40
TX	6,354	2,564	-	8,918	1.11%	5.82%	31	94.96
UT	1,814	377	-	2,191	1.68%	1.09%	23	161.82
VA*	3,059	1,143	-	4,202	1.37%	2.25%	25	123.57
VT*	805	132	-	937	2.35%	0.28%	14	207.28
WA*	4,402	1,198	-	5,600	2.70%	4.01%	34	249.50
WI	957	441	-	1,398	0.66%	0.76%	25	61.29
WV	288	150	-	438	0.28%	0.09%	10	24.31
WY	132	115	-	247	0.29%	0.04%	8	32.99
U.S.	126,630	40,583	56	167,269	1.64%	100.00%	28	143.25

REGISTRATIONS

EV registrations as a share of all registered light-duty vehicles are 1.6 percent (as of March 31, 2024). There are about 286 million registered light-duty vehicles in the U.S.

At the end of Q1 2024, California accounted for 34 percent of all registered light-duty EVs in the U.S.

States with highest portion of total EVs registered:

1. CA* (1,609,058, 5.16%)
2. DC (11,657, 3.42%)
3. HI (32,454, 2.85%)
4. WA* (188,016, 2.70%)
5. OR* (91,734, 2.38%)
6. NV* (59,747, 2.37%)
7. VT* (12,982, 2.35%)
8. CO* (123,003, 2.25%)
9. NJ* (165,552, 2.24%)
10. MA* (113,070, 2.05%)

States with worst ratio of registered EVs per public charger:

1. NJ*
2. OK
3. HI
4. IL
5. CA*
6. AZ
7. WA*
8. FL
9. OR*
10. TX

Read more about automaker plans for an [ELECTRIC FUTURE HERE](#)

*Denotes states that have adopted California's ZEV program; **Hydrogen count denotes stations
 *** VIO is vehicles in operation; **** State share of U.S. Total

Source: Figures compiled by Alliance for Automotive Innovation with registered vehicle data provided by S&P Global Mobility as of March 31, 2024; Charging information from U.S. Department of Energy Alternative Fuels Data Center, as of 3/31/2024

SPOTLIGHT ON: ELECTRIC VEHICLE TAX CREDITS AND MODEL AVAILABILITY

EV tax credits, first established in 2010, were instituted to incentivize consumers by offsetting the cost premium on qualified EVs. Initially, the Federal 30D tax credit provided up to \$7,500 (based on minimum battery capacity) for consumers purchasing a new EV. After a manufacturer sold 200,000 EVs, the credit would begin to phase out and that manufacturer's vehicles would no longer qualify for a consumer to claim the credit.

The Inflation Reduction Act of 2022 (IRA) instituted new vehicle and consumer requirements to qualify for the tax credit. Immediately following the law's enactment, a new North America assembly requirement kicked in. Before the law's enactment, roughly 92 percent of EVs for sale in the United States qualified for the credit. Enactment of the IRA (August 2022) lowered that number to 35 percent (or 25 out of 72 models sold in the U.S.)

On January 1, 2023, more provisions of the IRA took effect, further limiting availability of the credit. Those provisions included limits on manufacturer's suggested retail price (MSRP) and consumer's adjusted gross income (AGI). At this time, the 200,000-vehicle cap on manufacturers was also lifted. Upon being applicable at the start of 2023, the new requirements further lowered the number of qualified vehicle models to 21 out of 86 (24 percent). That said, a technical adjustment to vehicle classifications in February 2023 added five more vehicles back to the eligibility list that had previously been ineligible for the credit.

In April 2023, new critical mineral and battery component rules were instituted, splitting the \$7,500 EV tax credit in two and based eligibility on EVs meeting certain requirements related to the origin and valuation of the battery's critical minerals and components:

1. To be eligible for half of the incentive (\$3,750), 50 percent (increasing to 100 percent by 2029) of the value of the battery components must be manufactured or assembled in North America.
2. To be eligible for the other half of the incentive (\$3,750), 40 percent of the value of critical minerals (increasing to 80 percent by 2027) in the EV battery must be extracted or processed in the U.S. – or in a country with a U.S. free trade agreement – or recycled in North America.

These provisions removed more previously eligible models from the qualifying tax credit list. As a result, only 17 out of 91 models (19 percent) were eligible for half or all of the federal tax credit.

After December 31, 2023, a vehicle did not qualify for any of the credit if any "components" contained in its battery are "manufactured or assembled by a foreign entity of concern."²⁴ Additionally, beginning in 2024, the critical mineral component requirement increased to 50 percent, while the battery component requirement increased to 60 percent.

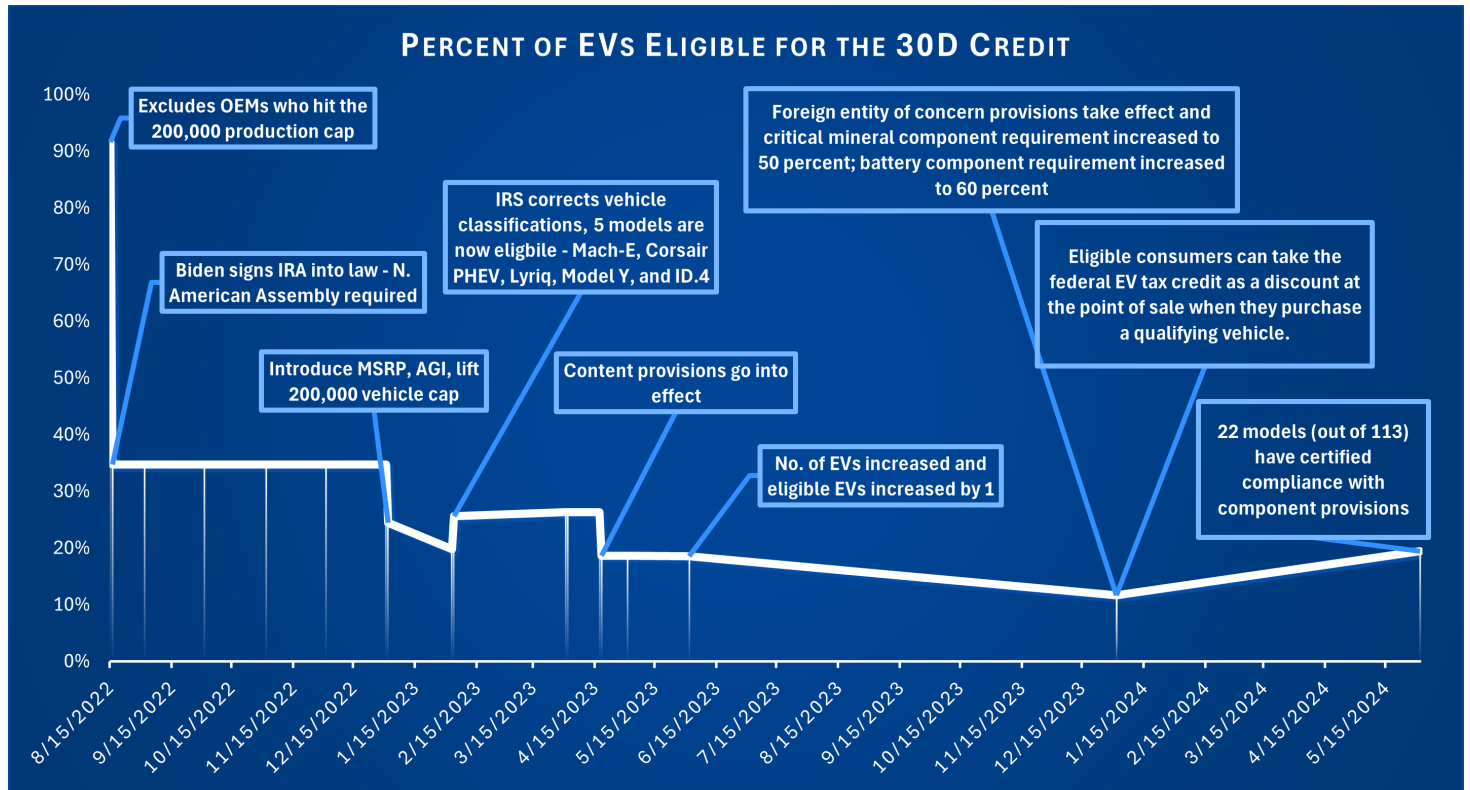
There are currently 113 available EV models for sale in the U.S. market, but only 22 (19 percent) are eligible for any part of the tax credit:

- 13 models fully eligible (\$7500).
- 9 models partially eligible (\$3750).

²⁴ Benchmark Minerals, Report, Q1 2023

The ability of automakers to certify that certain vehicles qualify for the revised tax credit will largely hinge on meeting the increasing critical mineral and battery component cost thresholds, not to mention the foreign entity of concern requirements for both battery components (January 2024) and critical minerals (January 2025) – presuming a buyer is otherwise eligible to claim the corresponding tax credit.

For a list of EVs that qualify for the federal government’s new clean vehicle tax credit of up to \$7,500 [click here](#).



²⁵ Note: eligible vehicles under 30D also require an eligible buyers adjusted gross income under \$300,000 for married couples filing jointly, \$225,000 for heads of households, and \$150,000 for all other filers; MSRP below \$80,000 for vans, sport utility vehicles and pickup trucks and \$55,000 for other vehicles. Additional restrictions apply. View qualifications here: <https://fueleconomy.gov/feq/tax2023.shtml#requirements>

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