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# ELECTRIC VEHICLE QUARTERLY REPORT



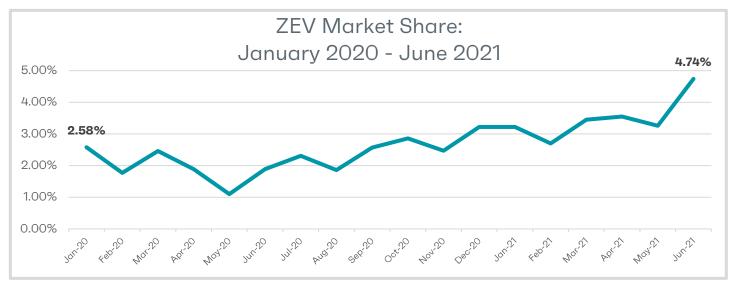
# SECOND QUARTER, 2021

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# Zero Emission Vehicle Sales Overview (2021)

More than 168,000 zero emission vehicles (battery, plug-in hybrid, and fuel cell electric vehicles, BEV, PHEV, and FCEV) were sold in the second quarter of 2021, a 33 percent increase over the first quarter and 122,000 units more than the same period in 2020¹. For the months April – June, ZEVs represented 3.8 percent of the overall market, the highest for any quarter to date. Year-to-date, ZEV sales average 3.5 percent.² For comparison, traditional internal combustion engine vehicle sales decreased by one percentage point during the second quarter compared to the first quarter and nearly 5 percent compared against the same quarter a year ago.



 $<sup>^{\</sup>rm 1}$  The later part of the first quarter of 2020 was the beginning of the COVID-19 pandemic.

<sup>&</sup>lt;sup>2</sup> For the full year 2020, ZEVs comprised just two percent, or roughly 320,000 of the nation's 14.5 million new vehicle sales.



## ZERO EMISSION VEHICLE ADOPTION BY SEGMENT

While passenger cars once dominated the ZEV market, as new models are introduced, especially in the crossover utility vehicle (CUV) and minivan market, other segments are starting to make gains. Monthly sales of BEV and PHEV CUVs have grown from less than 16% of ZEVs at the start of 2020 to 50% in the second quarter of 2021.

CUVs have accounted for as much as 58% of the ZEV market on a monthly basis and have averaged over a 50% share for the last six months – about 10% higher than their share of the overall vehicle market in 2020. Plug-in hybrid SUVs entered the market in 2019 and account for a relatively small share of ZEV sales. While there are currently no commercially available zero-emission pickup trucks, that is expected to change by the end of 2021.

MODEL AVAILABILITY
59 Vehicle Models Sold in Q2
2021:

#### 18 Battery Electric Vehicles

- 8 Cars
- 10 CUVs

#### 38 Plug-in Hybrid Vehicles

- 20 Cars
- 13 CUVs
- 4 SUVs
- 1 Van

#### 3 Fuel Cell Electric Vehicles

- 2 Cars
- 1CUV

See more information about **EV CHOICE HERE** 

## U.S. Public Charging Infrastructure

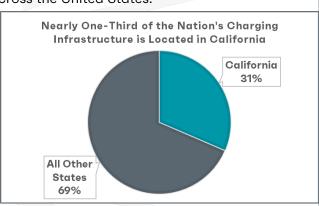
While the U.S. Department of Energy notes that roughly 80 percent of all electric vehicle charging occurs at home, reliable and convenient access to charging and refueling stations support customers that adopt ZEVs. Publicly available charging infrastructure not only eases perceived "range anxiety" concerns but also substantially increases consumer awareness of the technology. Here is a snapshot of current ZEV charging/refueling infrastructure across the United States:

**Level 2:** 39,779 Locations, 87,802 Charging Outlets **DC Fast:** 5,409 Locations, 19841 Charging Outlets

Hydrogen Refueling: 53 Stations

U.S. Total: 50,127 Locations, 120,958 Charging Outlets

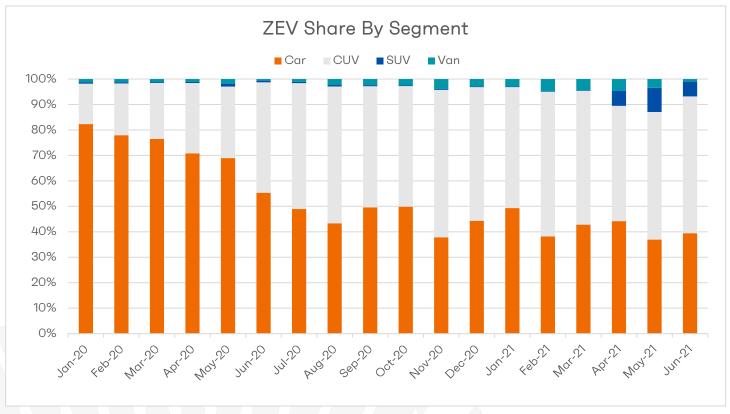
See more about state-by-state charging infrastructure on page 5

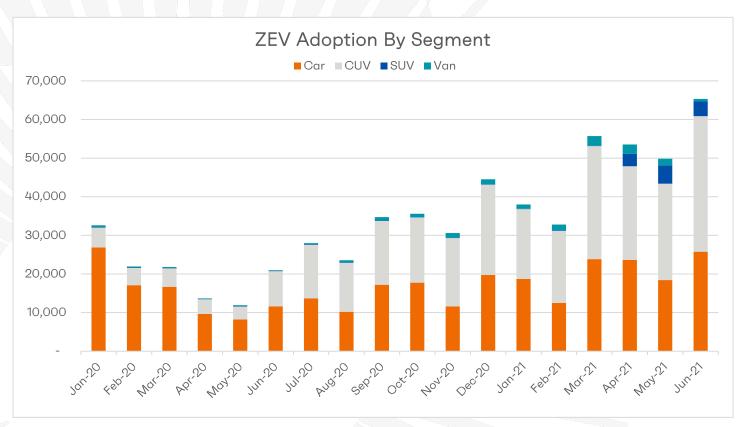


California has 41% of all registered ZEVs









Source: Figures compiled by Alliance for Automotive Innovation with new registrations for retail and fleet data provided by IHS Markit covering January 1, 2020 - March 31, 2021



## ZERO EMISSION VEHICLE ADOPTION BY STATE

#### For the Second Quarter:

California continues to lead the nation in ZEV adoption, with more than 11 percent of new light-duty vehicle registrations in the second quarter of 2021 comprising battery electric, plug-in hybrid electric, or fuel cell electric vehicles. There are currently six additional states (Hawaii, Oregon, Washington, Vermont, Massachusetts, Colorado) and the District of Columbia with new vehicle ZEV registrations above 5 percent and an additional ten states with new vehicle ZEV registrations above 3 percent. Nationally, ZEV new vehicle registrations in April 2021 – June 2021 was 3.82 percent, a 2.2 percentage point (pp) improvement from the second quarter of 2020.

All states increased their shares of new ZEV vehicles registered, year-over-year, in the second quarter of 2021. Sixteen states increased their market share of ZEVs by 2 pp or more. Seven states had more than a 3-pp increase. Making the largest increases were California (5.74 pp), the District of Columbia (4.39 pp), Oregon (4 pp), Vermont (3.79 pp), and Maine (3.38 pp). The national average increased by 2.2 pp (from 1.6 percent to 3.8 percent.)

#### For the First Half of the Year:

Through the first half of the year, ZEV sales represented 3.5 percent of the market – a 1.6 pp improvement over the first half of 2020. More than 11 percent of sales in California were ZEV, but making the biggest moves in market share was the District of Columbia, which improved its year-over-year standing by over 4 pp. Following D.C., the states with the largest market share gains were California (3.6 pp), Hawaii (2.8), Oregon (2.4), and Colorado (2.3). Twelve states in total improved their year-over-year ZEV market share by 2 pp or more. Twenty states improved by less than 1 pp.

Some states continue to have strong new vehicle ZEV sales, like California (11.1 percent), D.C. (9.3 percent), Hawaii (6.8 percent), Washington (6.3 percent), Oregon (6.3 percent) and Colorado (5.1 percent), however 25 states had new ZEV registrations of less than 2 percent. All states had a market share above .5 percent.

SEE ADDITIONAL HISTORIC DATA ON ZEV SALES HERE





Seco	nd Quarter :			Vehicle			are (2021 Q2		
	Registro	ations By Po	owertrain	New Light-Duty Vehicle Registrations Powertrain					
State			in Market Sho		Advanced Powertrain Market Share				
	PHEV	BEV	FCEV	ZEV	PHEV	BEV	FCEV	ZEV	
ΑK	0.47%	1.07%	0.00%	1.55%	0.42%	0.74%	0.00%	1.16	
٩L	0.41%	0.65%	0.00%	1.05%	0.33%	0.25%	0.00%	0.58	
AR	0.38%	0.63%	0.00%	1.00%	0.33%	0.46%	0.00%	0.80	
٩Z	0.93%	2.71%	0.00%	3.64%	0.72%	1.04%	0.00%	1.75	
CA*	3.57%	7.64%	0.17%	11.38%	2.28%	3.34%	0.13%	5.74	
00*	1.60%	3.57%	0.00%	5.17%	0.96%	1.48%	0.00%	2.44	
DT*	2.12%	2.51%	0.00%	4.63%	1.70%	1.27%	0.00%	2.9	
OC	4.10%	5.75%	0.00%	9.85%	2.16%	2.23%	0.00%	4.39	
DE	1.13%	2.64%	0.00%	3.78%	0.85%	1.85%	0.00%	2.7	
L	0.68%	2.21%	0.00%	2.89%	0.53%	1.03%	0.00%	1.50	
βA	0.58%	1.74%	0.00%	2.33%	0.43%	0.96%	0.00%	1.39	
11	1.28%	5.78%	0.01%	7.07%	0.55%	1.65%	-0.01%	2.20	
4	0.80%	0.98%	0.00%	1.78%	0.70%	0.60%	0.00%	1.30	
)	0.94%	1.35%	0.00%	2.29%	0.75%	0.73%	0.00%	1.4	
	0.91%	2.05%	0.00%	2.96%	0.74%	0.83%	0.00%	1.5	
V	0.76%	1.22%	0.00%	1.97%	0.65%	0.64%	0.00%	1.29	
S	0.74%	1.38%	0.00%	2.12%	0.54%	0.62%	0.00%	1.10	
Υ	0.51%	0.83%	0.00%	1.34%	0.42%	0.55%	0.00%	0.9	
Α	0.28%	0.46%	0.00%	0.74%	0.24%	0.27%	0.00%	0.5	
1A*	2.46%	2.78%	0.00%	5.24%	1.92%	1.21%	0.00%	3.1	
1D*	1.73%	2.92%	0.00%	4.64%	1.36%	1.56%	0.00%	2.9	
1E*	2.64%	1.88%	0.00%	4.51%	2.05%	1.33%	0.00%	3.3	
/II	0.95%	1.34%	0.00%	2.29%	0.86%	0.83%	0.00%	1.6	
1N	0.87%	2.07%	0.00%	2.94%	0.64%	1.18%	0.00%	1.8	
10	0.62%	1.08%	0.00%	1.70%	0.46%	0.52%	0.00%	0.9	
1S	0.27%	0.38%	0.00%	0.66%	0.24%	0.24%	0.00%	0.4	
/IT	0.54%	0.74%	0.00%	1.28%	0.44%	0.37%	0.00%	0.8	
IC	0.83%	1.77%	0.00%	2.60%	0.66%	0.84%	0.00%	1.50	
ID	0.35%	0.38%	0.00%	0.73%	0.30%	0.25%	0.00%	0.5	
ΙE	0.90%	0.95%	0.00%	1.84%	0.77%	0.54%	0.00%	1.3	
JH	1.23%	1.39%	0.00%	2.61%	0.98%	0.78%	0.00%	1.7	
IJ*	1.26%	2.20%	0.00%	3.46%	0.97%	0.77%	0.00%	1.7	
IM	0.74%	1.22%	0.00%	1.96%	0.52%	0.62%	0.00%	1.1	
IV	1.17%	3.38%	0.00%	4.55%	0.96%	1.74%	0.00%	2.7	
IY*	1.81%	2.13%	0.00%	3.94%	1,27%	1.05%	0.00%	2.3	
Н	0.66%	1.26%	0.00%	1.92%	0.54%	0.81%	0.00%	1.3	
K	0.26%	1.01%	0.00%	1.27%	0.23%	0.81%	0.00%	1.0	
R*	2.82%	3.99%	0.00%	6.81%	1.96%	2.04%	0.00%	4.00	
Α	0.89%	1.45%	0.00%	2.34%	0.70%	0.64%	0.00%	1.3	
l*	1.72%	1.88%	0.00%	3.60%	1.09%	1.19%	0.00%	2.28	
С	0.61%	0.98%	0.00%	1.59%	0.53%	0.51%	0.00%	1.0	
D	0.60%	0.49%	0.00%	1.09%	0.54%	0.42%	0.00%	0.9	
N	0.53%	1.29%	0.00%	1.82%	0.43%	0.62%	0.00%	1.0	
X	0.52%	1.54%	0.00%	2.06%	0.41%	0.99%	0.00%	1.40	
IT	0.93%	2.02%	0.00%	2.95%	0.64%	0.35%	0.00%	0.98	
Ά	1.21%	2.49%	0.00%	3.69%	0.96%	1.38%	0.00%	2.3	
T*	2.65%	3.02%	0.00%	5.68%	1.80%	1.99%	0.00%	3.7	
VA*	1.58%	5.03%	0.00%	<mark>6</mark> .61%	0.99%	2.32%	0.00%	3.3	
VI	0.66%	1.23%	0.00%	1.89%	0.50%	0.73%	0.00%	1.2	
VV	0.36%	0.39%	0.00%	0.75%	0.30%	0.31%	0.00%	0.6	
VY	0.61%	0.59%	0.00%	1.20%	0.57%	0.46%	0.00%	1.03	
J.S.	1.26%	2.54%	0.02%	3.82%	0.93%	1.28%	0.01%	2.22	

<sup>\*</sup>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 IHS Markit covering April 1, 2020 – June 30, 2020 and April 1, 2021 – June 30, 2021





Yec 	or to Date 20 Registro	021, New Ligations By Pe		Change In Market Share (2021 YTD vs 2020 YTD New Light-Duty Vehicle Registrations Powertrain					
State	Advan	ced Powertra	in Market Sho	ıre	Advanced Powertrain Market Share				
	PHEV	BEV	FCEV	ZEV	PHEV	BEV	FCEV	ZEV	
AK	0.39%	1.01%	0.00%	1.39%	0.34%	0.61%	0.00%	0.96	
AL.	0.32%	0.61%	0.00%	0.93%	0.25%	0.29%	0.00%	0.54	
AR	0.31%	0.57%	0.00%	0.87%	0.26%	0.38%	0.00%	0.65	
Z	0.71%	2.62%	0.00%	3.33%	0.44%	1.65%	0.00%	2.08	
A*	3.14%	7.74%	0.19%	11.07%	1.61%	1.86%	0.13%	3.6	
O*	1.32%	3.72%	0.00%	5.05%	0.82%	1.49%	0.00%	2.3	
T*	1.69%	2.38%	0.00%	4.08%	1.14%	1.00%	0.00%	2.14	
C	3.30%	6.01%	0.00%	9.31 <mark>%</mark>	1.21%	2.93%	0.00%	4.14	
)E	0.91%	2.24%	0.00%	3.15%	0.58%	1.17%	0.00%	1.70	
L	0.53%	2.22%	0.00%	2.75%	0.39%	0.97%	0.00%	1.35	
βA	0.48%	1.69%	0.00%	2.18%	0.34%	0.82%	0.00%	1.10	
11	1.17%	5.64%	0.01%	<mark>6.</mark> 81%	0.52%	2.25%	0.00%	2.77	
4	0.60%	0.82%	0.00%	1.42%	0.52%	0.51%	0.00%	1.02	
)	0.70%	1.19%	0.00%	1.88%	0.55%	0.60%	0.00%	1.19	
	0.73%	1.84%	0.00%	2.57%	0.56%	0.78%	0.00%	1.34	
V	0.58%	1.15%	0.00%	1.73%	0.47%	0.59%	0.00%	1.00	
(S	0.56%	1.25%	0.00%	1.81%	0.41%	0.60%	0.00%	1.0°	
Υ	0.39%	0.75%	0.00%	1.13%	0.28%	0.38%	0.00%	0.66	
A	0.22%	0.44%	0.00%	0.66%	0.18%	0.24%	0.00%	0.43	
//A*	1.89%	2.70%	0.00%	4.59%	1.16%	1.03%	0.00%	2.19	
ND*	1.39%	2.70%	0.00%	4.09%	0.93%	1.00%	0.00%	1.93	
∕IE*	2.07%	1.48%	0.00%	3.55%	1.30%	0.80%	0.00%	2.10	
ΛI	0.72%	1.18%	0.00%	1.90%	0.58%	0.72%	0.00%	1.30	
ΛN	0.71%	1.80%	0.00%	2.50%	0.48%	0.95%	0.00%	1.44	
//O	0.45%	1.05%	0.00%	1.51%	0.31%	0.52%	0.00%	0.83	
/IS	0.21%	0.31%	0.00%	0.53%	0.17%	0.15%	0.00%	0.33	
ΛT	0.40%	0.68%	0.00%	1.08%	0.28%	0.31%	0.00%	0.60	
1C	0.65%	1.73%	0.00%	2.38%	0.48%	0.82%	0.00%	1.30	
1D	0.23%	0.31%	0.00%	0.54%	0.18%	0.20%	0.00%	0.38	
JE	0.64%	0.94%	0.00%	1.58%	0.53%	0.56%	0.00%	1.09	
1H	0.96%	1.23%	0.00%	2.19%	0.68%	0.67%	0.00%	1.3	
1J*	1.02%	2.70%	0.00%	3.72%	0.60%	1.29%	0.00%	1.89	
IM	0.60%	1.20%	0.00%	1.80%	0.41%	0.58%	0.00%	0.99	
1V	0.88%	3.35%	0.00%	4.23%	0.65%	1.49%	0.00%	2.14	
IY*	1.46%	1.91%	0.00%	3.37%	0.76%	1.04%	0.00%	1.80	
Н	0.49%	1.09%	0.00%	1.59%	0.38%	0.48%	0.00%	0.80	
K	0.14%	0.49%	0.00%	0.63%	0.13%	0.39%	0.00%	0.52	
PR*	2.21%	4.07%	0.00%	<mark>6</mark> .28%	1.28%	1.07%	0.00%	2.35	
PΑ	0.68%	1.36%	0.00%	2.04%	0.45%	0.41%	0.00%	0.80	
!!*	1.30%	1.77%	0.00%	3.07%	0.47%	0.89%	0.00%	1.30	
С	0.49%	0.97%	0.00%	1.46%	0.40%	0.48%	0.00%	0.88	
D	0.41%	0.47%	0.00%	0.88%	0.30%	0.31%	0.00%	0.6	
N	0.41%	1.17%	0.00%	1.58%	0.32%	0.48%	0.00%	0.80	
X	0.40%	1.47%	0.00%	1.87%	0.30%	0.65%	0.00%	0.95	
IT	0.76%	2.15%	0.00%	2.91%	0.50%	0.59%	0.00%	1.09	
Ά	0.95%	2.32%	0.00%	3.27%	0.66%	1.17%	0.00%	1.83	
T*	2.17%	2.65%	0.00%	4.82%	1.19%	1.01%	0.00%	2.19	
VA*	1.32%	5.01%	0.00%	<mark>6</mark> .33%	0.75%	1.35%	0.00%	2.10	
VI	0.53%	1.13%	0.00%	1.66%	0.37%	0.61%	0.00%	0.98	
VV	0.28%	0.40%	0.00%	0.67%	0.21%	0.22%	0.00%	0.43	
۷Y	0.47%	0.55%	0.00%	1.02%	0.41%	0.34%	0.00%	0.75	
J.S.	1.02%	2.46%	0.02%	3.50%	0.64%	0.95%	0.02%	1.60	

<sup>\*</sup>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 IHS Markit covering April 1, 2020 – June 30, 2020 and April 1, 2021 – June 30, 2021





# REGISTRATIONS AND INFRASTRUCTURE

	Public Charging Outlets And Registerd EVs										
	EV Level 2	EV DC Fast	H2* Fueling	Total	Percent ZEVs of Total VIO**	Share of Registered ZEVs***	ZEV's Per Charger	Additional Chargers Needed to Support 25%	ZEV's Per 10K Residents		
AK	62	4	-	4.6	0.26%	0.08%	23.09	ZEV VIO****	20.67		
AL	380	94	_	66 474	0.20%	1	12.62	20,576	20.67 12.24		
AR	346	66	-	414	0.12%	0.33%	6.91	98,083	9.45		
AZ	1,538	409	_	1.947	0.69%	-	23.90	240.604	64.87		
CA*	27,682	6,091	47	33,820	2.39%		22.39	1,098,996	191.44		
CO*	2,758	500	-	3,258	0.77%		12.43	184,247	71.09		
CT*	909	286	_	1,195	0.60%	0.98%	15.07	106,563	50.40		
DC	605	39	-	644	1.46%	0.26%	7.54	11,261	69.11		
DE	178	81	-	259	0.45%	0.22%	15.71	32,032	42.08		
FL	4,540	1,051	-	5,591	0.55%	_	17.68	640,007	46.41		
GA	2,995	554	-	3,549	0.41%	2.07%	10.68	327,532	36.05		
HI	656	84	1	741	1.32%	0.84%	20.87	41,126	108.84		
IA	341	157		498	0.18%	0.32%	11.65	112,991	18.39		
ID	181	80	-	261	0.26%	0.28%	<b>19</b> .41	68,164	28.88		
IL	1,781	452	-	2,233	0.44%	2.4%	20.03	361,653	35.10		
IN	586	241	-	827	0.23%	0.78%	17.34	217,725	21.43		
KS	821	110	-	931	0.23%	0.36%	7.11	101,398	22.73		
KY	310	83	-	393	0.14%	0.32%	14.78	145,594	13.00		
LA	254	81	-	335	0.10%	0.21%	11.37	136,397	8.17		
MA*	3,710	356	-	4,066	0.78%	2.3%	10.57	191,751	62.27		
MD*	2,277	497	-	2,774	0.73%	1.98%	13.12	175,771	60.21		
ME*	404	127	-	531	0.44%	0.32%	10.93	46,760	43.37		
MI	1,228	388	-	1,616	0.31%	1.45%	16.47	301,154	26.63		
MN	952	206	-	1,158	0.36%	1.02%	16.10	181,812	33.22		
MO	1,818	215	-	2,033	0.24%	0.75%	6.80	200,294	22.58		
MS	211	70	-	281	0.06%	0.10%	6.60	106,460	6.21		
MT	99	102	-	201	0.14%	0.11%	9.78	51,422	18.50		
NC	1,818	410	-	2,228	0.33%	1.72%	14.14	335,316	30.35		
ND	73	61	1	134	0.07%	0.03%	4.26	28,202	7.51		
NE	256	74	-	330	0.18%	0.21%	11.56	74,060	19.77		
NH	209	89	)-	298	0.44%	0.32%	19.76	47,406	43.41		
NJ*	1,079	503	-	1,582	0.68%		30.73	251,942	54.56		
NM	262	125	-	387	0.28%	0.29%	13.88	69,356	25.64		
NV	908	299	-	1,207	0.76%	1.01%	<b>1</b> 5.39	85,619	61.20		
NY*	5,731	730	-	6,461	0.67%		12.16	411,398	40.21		
ОН	1,435	333	-	1,768	0.27%		<b>1</b> 6.27	379,709	24.61		
OK	315	654	-	969	0.15%	0.35%	6.62	153,253	16.27		
OR*	1,644	418	-	2,062	1.06%	-	18.97	129,960	93.33		
PA	1,964	456		2,420	0.33%			397,733			
RI*	442	35	-	477	0.43%		7.65	29,704	34.53		
SC	599	155	-	754	0.17%		11.99	184,213			
SD	80 1.1/12	63	-	143	0.11%		7.47	34,936			
TN	1,143	212	-	1,355	0.23%	_	11.35	233,804			
TX	4,099	790	-	4,889	0.35% 0.65%		16.69	826,056	28.44		
UT VA	1,560	195	-	1,755			10.72	101,940	59.51		
	1,778	670	_	2,448	0.47%		14.52	266,184	41.72		
VT* WA*	688	74 700	-	762	0.91% 1.10%		6.62 20.98	19,068 247,357	80.52 102.57		
WI	2,985 654	140	-	3,685 794	0.26%		17.42	188,233	23.79		
WV	196	61	_	257	0.26%		6.28	55,379	8.94		
WY	90	75		165	0.10%		4.47	23,085	8.94 12.77		
U.S.	<b>87,630</b>	19,746	49	107,425	0.65%		17.09	9,951,963.64	56.12		

# REGISTRATIONS

ZEV registrations as a share of overall light-duty vehicles stands at .65 percent of all registered vehicles in the U.S. (as of July 1, 2021)

At the end of the first half of 2021, California accounted for 41% of all registered light-duty ZEVs in the United States.

States with highest portion of total ZEVs registered in the U.S.:

- 1. CA (41%)
- 2. FL (5.4%)
- 3. TX (4.4%)
- 4. NY (4.3%)
- 5. WA (4.2%)
- 6. NJ (2.6%)
- 7. AZ (2.5%)
- 8. IL (2.4%)9. MA (2.3%)
- 10. CO (2.1%)

States with highest share of registered ZEVs per 10,000 residents:

- 1. CA
- о ш
- 3. WA
- 4. OR
- 5. VT
- 6. CO
- 7. DC
- 8. AZ
- 9. MA
- 10. NV

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Source: Figures compiled by Alliance for Automotive Innovation with registered vehicle data provided by IHS Markit as of July 1, 2021; Charging information from U.S. Department of Energy Alternative Fuels Data Center, as of 9/21/2021

<sup>\*</sup>Hydrogen count denotes stations

<sup>\*\*</sup> VIO is vehicles in operation

<sup>\*\*\*</sup> Denotes states that have adopted California's ZEV program

<sup>\*\*\*\*</sup>Calculated at 1:7 ratio at 25 percent of the existing state fleet. Ratio derived from <u>CEC AB 2127 Report</u> of July 14, 2021