

# KEEP ZEV INCENTIVES FOR CALIFORNIA

# Consumer Incentives are Critical to California Meeting its Zero Emissions Vehicle (ZEV) Sales Goals

Automakers have invested tens of billions of dollars to develop and deliver plug-in hybrid electric vehicles (PHEV), battery electric vehicles (BEV), and hydrogen fuel cell vehicles (FCV). Today, 13 different battery electric vehicles (e.g. Ford Focus Electric), 8 plug-in hybrid electric vehicles (e.g. Chevy Volt), and two fuel cell vehicles (e.g. Toyota Mirai - available later this year) are available in California. All qualify as zero emission vehicles (ZEVs) under state regulations (note that hybrid electric vehicles - for example, the Toyota Prius - will not qualify as ZEVs in 2018).

These vehicles offer a compelling mix of well-reviewed products, with automakers providing extensive, focused marketing and media coverage, and very competitive pricing. While ZEV sales only account for 0.72% of total vehicle sales nationwide, California's robust consumer incentive programs have helped significantly increase ZEV sales compared to other states across the country.

## **CA ZEV INCENTIVES**

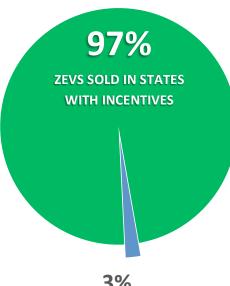
**High Occupancy Vehicle lane access** (HOV)

**Clean Vehicle Rebate Program** (CVRP) for consumers

**Development of alternative** refueling infrastructure, including those serving hydrogen fuel cell powered vehicles.

## Consumer Incentives: California and Automakers' Effective Partnership

**Do Incentives Matter?** 



ZEVS SOLD WITHOUT INCENTIVES

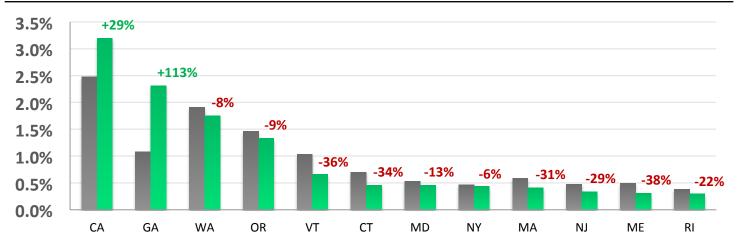
Aggregated sales data suggests that incentives help increase ZEV sales. In fact, 97% of total nationwide sales of ZEVs occur in states that offer consumer incentives, including HOV lane access, rebates, and tax credits.

California alone makes up one half of all ZEV sales nationwide, with ZEVs accounting for 3.2% of all vehicles sold in the state. This is a sign of progress, but in order to meet the current ZEV regulations, California ZEV sales must increase by 500% by 2025. Alarmingly, with ZEV regulation benchmarks fast approaching, California's consumer incentive programs are being phased out.

California and Georgia are key examples of how effective incentive programs are helping to motivate consumer purchases. Both states offer substantial financial incentives (\$2,500 in CA and \$5,000 in GA for BEVs) combined with HOV lane access, and most notably, California and Georgia are also the only ZEV states to show ZEV market share sales growth -California ZEV sales increased by 30% and Georgia's sales increased by 114%.



#### **ZEV Sales 2014 vs. 2013\***



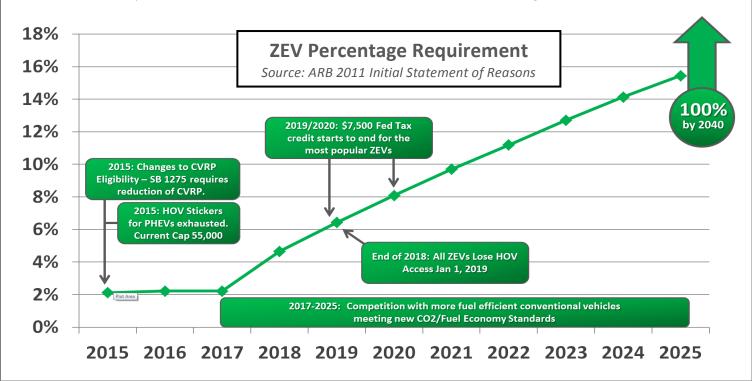
Sales increased 113% in Georgia, which offers \$5,000 and HOV lane access. Sales increased 29% in California, which offers \$2,500 and HOV lane access. Other states did not offer significant incentives.

## **ZEV Regulations in California**

The California ZEV rule was adopted as part of the 1990 Low Emission Vehicle Program regulated by the California Air Resources Board (CARB). Originally, the ZEV rule required that 2% of the vehicles produced by large manufacturers for sale in California would be ZEVs by 1998, increasing to 5% in 2001 and 10% in 2003.

Despite the 1990 regulatory requirements, the battery technology and costs did not match CARB's estimate improvements. Consequently, ZEV regulations have undergone significant modifications over the years. Through each modification, the state and automakers have partnered to support consumer incentive programs such has high occupancy vehicle lane (HOV) access, consumer rebates (CVRP), consumer tax credits, and dedicated resources to alternative refueling infrastructure.

In 2012, CARB adopted updated regulations requiring 15% of all new vehicle sales are zero emissions vehicles by 2025 – a 500% increase over today's sales. Moreover, CARB estimates that by 2040 all new vehicles sold in California must either be a Battery Electric or Fuel Cell vehicle<sup>1</sup> to meet its GHG emissions reduction goal.



<sup>\*\*</sup>Neither Georgia nor Washington have the ZEV regulation. All other states in the graph have adopted CA's ZEV regulations.

## Zero Emission Vehicle Sales

State	PHEV	BEV	ZEV	Total LDVs	PHEV %	BEV %	Total
ALABAMA	127	105	232	202,968	0.06%	0.05%	0.11%
ALASKA	39	11	50	30,158	0.13%	0.04%	0.17%
ARIZONA	922	803	1,725	354,606	0.26%	0.23%	0.49%
ARKANSAS	75	48	123	134,790	0.06%	0.04%	0.09%
CALIFORNIA	28,788	29,199	57,987	1,812,060	1.59%	1.61%	3.20%
COLORADO	701	829	1,530	261,065	0.27%	0.32%	0.59%
CONNECTICUT	474	322	796	174,580	0.27%	0.18%	0.46%
DELAWARE	99	45	144	49,599	0.20%	0.09%	0.29%
DISTRICT OF COLUMBIA	117	77	194	35,230	0.33%	0.22%	0.55%
FLORIDA	2,082	2,210	4,292	1,215,469	0.17%	0.18%	0.35%
GEORGIA	560	9,982	10,542	456,407	0.12%	2.19%	2.31%
HAWAII	238	874	1,112	72,287	0.33%	1.21%	1.54%
IDAHO	101	53	154	54,575	0.19%	0.10%	0.28%
ILLINOISE	1,004	1,040	2,044	651,273	0.15%	0.16%	0.31%
INDIANA	395	299	694	240,595	0.16%	0.12%	0.29%
IOWA	163	69	232	134,212	0.12%	0.05%	0.17%
KANSAS	135	65	200	110,973	0.12%	0.06%	0.18%
KENTUCKY	139	65	204	143,503	0.10%	0.05%	0.14%
LOUISIANA	78	94	172	225,389	0.03%	0.04%	0.08%
MAINE	133	61	194	62,709	0.21%	0.10%	0.31%
MARYLAND	913	563	1,476	318,372	0.29%	0.18%	0.46%
MASSACHUSETTS	698	755	1,453	354,545	0.20%	0.21%	0.41%
MICHIGAN	2,608	273	2,881	558,880	0.47%	0.05%	0.52%
MINNESOTA	329	265	594	252,277	0.13%	0.11%	0.24%
MISSISSIPPI	23	19	42	104,478	0.02%	0.02%	0.04%
MISSOURI	419	263	682	285,101	0.15%	0.09%	0.24%
MONTANA	50	31	81	61,467	0.08%	0.05%	0.13%
NEBRASKA	128	63	191	84,811	0.08%	0.07%	0.23%
NEVADA	249	272	521	133,975	0.19%	0.20%	0.39%
NEW HAMPSHIRE	128	84	212	90,986	0.14%	0.20%	0.23%
NEW JERSEY	984	877	1,861	551,786	0.14%	0.16%	0.23%
NEW MEXICO	149	104	253	91,270	0.16%	0.11%	0.28%
NEW YORK	3,226	1,043	4,269	960,047	0.34%	0.11%	0.44%
NORTH CAROLINA	559	672	1,231	415,274	0.13%	0.16%	0.30%
NORTH DAKOTA	19	6	25	45,084	0.13%	0.10%	0.06%
OHIO	809	446	1,255	596,159	0.14%	0.01%	0.21%
OKLAHOMA	132	110	242	737,033	0.14%	0.07%	0.03%
OREGON	744	1,295	2,039	153,577	0.48%	0.84%	1.33%
PENNSYLVANIA	893	549	1,442	646,489	0.48%	0.08%	0.22%
RHODE ISLAND	95	52	1,442	49,393	0.14%	0.03%	0.30%
SOUTH CAROLINA	197	129	326	207,092	0.19%	0.11%	0.16%
SOUTH CAROLINA SOUTH DAKOTA	35		49	39,345	0.10%	0.06%	0.18%
		14		239,586	0.09%		
TENNESSEE	250	393	643	,		0.16%	0.27%
TEXAS UTAH	1,400 218	2,292	3,692 699	1,560,895 122,060	0.09%	0.15% 0.39%	0.24% 0.57%
VERMONT	199	481 81	280	42,431	0.18%	0.39%	0.66%
VIRGINIA	749	543	1,292	375,667	0.47%	0.19%	0.34%
			-			1.29%	
WASHINGTON	1,200	3,370	4,570	261,190	0.46%		1.75%
WEST VIRGINIA	43	11	54	85,068	0.05%	0.01%	0.06%
WISCONSIN	412	205	617	242,127	0.17%	0.08%	0.25%
WYOMING	17	6	23	28,520	0.06%	0.02%	0.08%
TOTAL	54,245	61,518	115,763	16,117,431	0.34%	0.38%	0.72%

### 2013 - Zero Emission Vehicle Sales

State	BEV	PHEV	LDV Sales	BEV%	PHEV%	TOTAL
Alabama	81	134	197,024	0.04%	0.07%	0.11%
Alaska	17	33	29,341	0.06%	0.11%	0.17%
Arizona	714	616	345,177	0.21%	0.18%	0.39%
Arkansas	24	87	130,093	0.02%	0.07%	0.09%
California	21,063	20,450	1,677,845	1.26%	1.22%	2.47%
Colorado^	801	732	244,094	0.33%	0.30%	0.63%
Connecticut	402	774	168,065	0.24%	0.46%	0.70%
D.C.	36	83	19,681	0.18%	0.42%	0.60%
Delaware	102	139	47,370	0.22%	0.29%	0.51%
Florida	1,890	1,593	1,090,352	0.17%	0.15%	0.32%
Georgia^	4,075	552	427,633	0.95%	0.13%	1.08%
Hawaii	802	233	66,870	1.20%	0.35%	1.55%
Idaho	48	70	48,650	0.10%	0.14%	0.24%
Illinois	1,509	1,214	601,173	0.25%	0.20%	0.45%
Indiana	209	386	228,011	0.09%	0.17%	0.26%
lowa	81	259	132,995	0.06%	0.19%	0.26%
Kansas	96	164	108,592	0.09%	0.15%	0.24%
Kentucky	53	154	137,997	0.04%	0.11%	0.15%
Louisiana	79	91	219,307	0.04%	0.04%	0.08%
Maine	48	229	55,617	0.09%	0.41%	0.50%
Maryland	576	1,077	314,455	0.18%	0.34%	0.53%
Massachusetts	598	1,336	330,021	0.18%	0.40%	0.59%
Michigan	380	2,397	510,043	0.07%	0.47%	0.54%
Minnesota	276	599	242,960	0.11%	0.25%	0.36%
Mississippi	12	44	106,597	0.01%	0.23%	0.05%
Missouri	294	363	270,385	0.11%	0.13%	0.24%
Montana	33	80	57,775	0.06%	0.14%	0.20%
Nebraska	59	126	84,138	0.00%	0.15%	0.22%
Nevada	243	214	119,068	0.20%	0.13%	0.38%
New Hampshire	102	201	82,119	0.12%	0.24%	0.37%
New Jersey	898	1,665	537,118	0.17%	0.24%	0.48%
New Mexico	75	114	85,494	0.09%	0.13%	0.22%
New York	1,121	3,173	917,009	0.12%	0.35%	0.47%
North Carolina	666	578	397,636	0.12%	0.15%	0.31%
North Dakota	6	20	43,385	0.01%	0.05%	0.06%
Ohio	343	837	563,304	0.06%	0.15%	0.21%
Oklahoma	206	123	697,017	0.03%	0.02%	0.05%
Oregon	1,256	857	144,433	0.87%	0.59%	1.46%
Pennsylvania	655	968	615,451	0.11%	0.16%	0.26%
Rhode Island	31	148	46,584	0.11%	0.10%	0.38%
South Carolina	145	164	195,732	0.07%	0.08%	0.16%
South Dakota	9	44	38,538	0.07%	0.03%	0.14%
Tennessee	580	243	257,196	0.02%	0.11%	0.14%
Texas	1,827	1,249	1,412,434	0.23%	0.09%	0.32%
Utah	354	181	114,991	0.13%	0.03%	0.22%
Vermont	69	331	38,785	0.31%	0.10%	1.03%
Virginia^	582	764	371,439	0.16%	0.83%	0.36%
Washington^	3,507	1,211	247,420	1.42%	0.49%	1.91%
West Virginia	28	85	83,706	0.03%	0.49%	0.13%
Wisconsin	209	509	230,849	0.03%	0.10%	0.13%
Wyoming	9	11	26,484	0.03%	0.22%	0.08%
Total	47,279	47,705	15,158,453	0.03%	0.04%	0.63%
Total	71,213	47,703	13,130,433	0.31/6	0.31/0	0.03/6