Importance of Incentives

California Study Mission 2022

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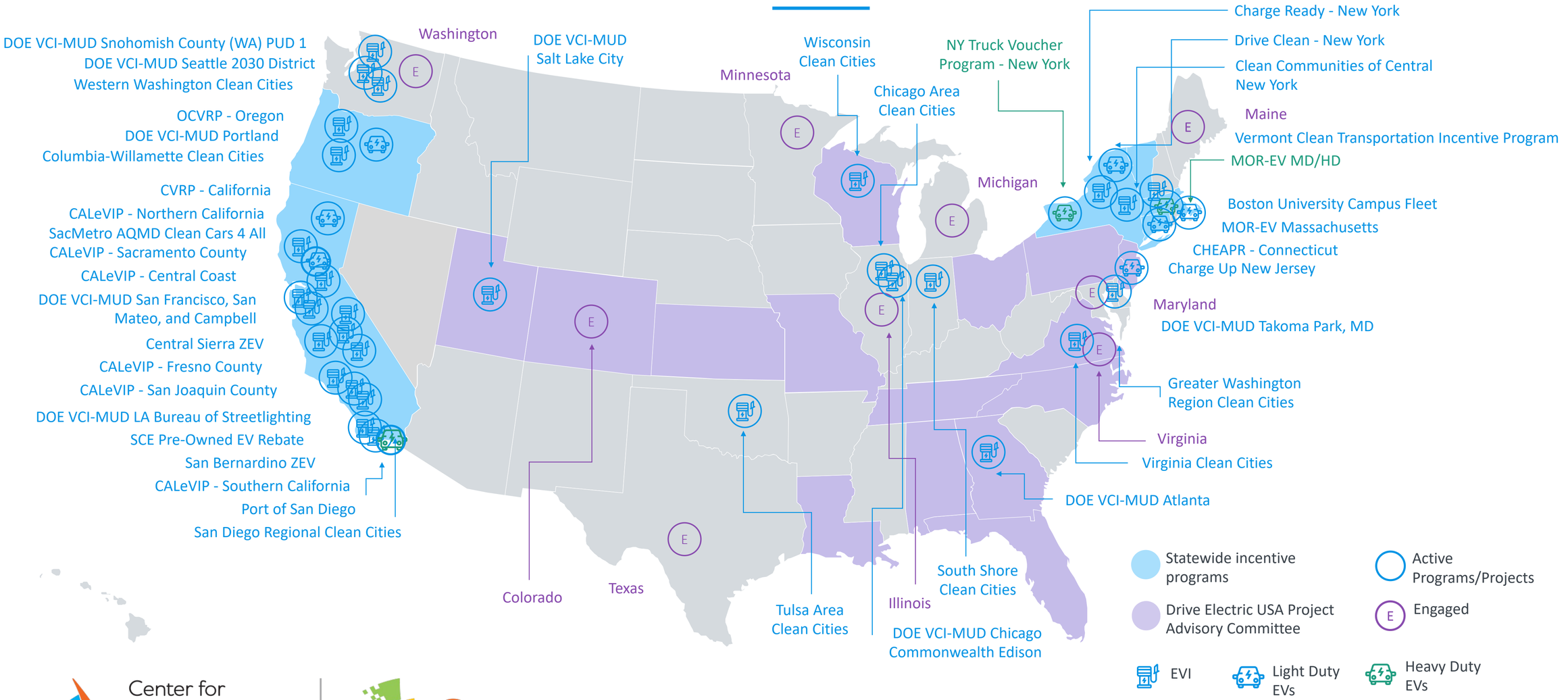
Center for Sustainable Energy®

One simple mission —

DECARBONIZE.®

Our vision is a future with sustainable, equitable and resilient transportation, buildings and communities.

Transportation Programs Covering 80 Million Americans



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By the Numbers: EVs in WA

4th	Most EV sales between 2011-2021 (Autos Innovate)	Mostly indicative of how poor other states are doing
7.8%	Of new passenger vehicle sales in 2021 were EVs (EPRI)	Sales need to be 31% by the end of 2023 to be on track
1.3%	Of all passenger vehicles on the road are EVs (EPRI)	There are 76x more gas & diesel vehicles than EVs

Recent WA trends are encouraging but fall well short of the progress needed to meet the 2030 goal

Incentives Accelerate the Market

China (Incentives since 2009)

China has spent over $200 billion on EV incentives since 2009 (China Briefing)
In 2021, electric cars accounted for 16% of new car sales (IEA)

Norway (Incentives since 1990)

The global leader, new EV sales totaled 84% in March 2022. Plug-in EVs (BEV + PHEV) accounted for 23.1% of the passenger vehicles. (Clean Technica)

California (Incentives since 2010)

In Q1 2022, EVs were 16.32% of the new light-duty market. By the end of 2021, EVs represented 2.8% of the registered light-duty vehicles (CEC)

Strategic Segmentation

Existing Adopters: Market Acceleration

Characterize existing, generally enthusiastic and pre-adapted consumers, to target similar consumers who have the highest likelihood of adoption and maximize scale

"Rebate Essential" Consumers: Minimizing Free Ridership

Characterize adopters most highly influenced by supportive resources to join the EV market, to improve the cost-effectiveness of outreach and program design

"EV Converts": Moving Mainstream

Characterize EV consumers with low initial interest in EVs, to look for additional opportunities to expand into the mainstream

Priority Populations: Increasing Equity

1. Characterize adoption by priority populations, to understand & reinforce adoption that is successfully overcoming hurdles
2. Identify and break down barriers, to further diversity and expand access

CVRP 2020 Data Brief: Consumer Characteristics

Iterative Implementation

Define: The Problem(s) and/or Goals

- Increase access for priority populations to EVs
- Reduce transportation GHG emissions
- Increase reliance on domestic energy resources

Design: The Solution(s)

- Income tiers and/or caps; MSRP vs. purchase price cap
- Vehicle types (i.e., fuel cells); battery capacity/range
- New and/or Used; point-of-sale vs. post-purchase

Refine: Measure, Analyze, Calibrate

- Collect and analyze participant and general market data and demographics
- Visualize and report program results and research findings
- Incorporate results and findings into ongoing design and funding discussions

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