

COVID-19 Impacts on the ZEV Market

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First Public Workshop on the Fiscal Year 2022-23 Update to the Three-Year Plan for Light-Duty Vehicles and Clean Transportation Equity Investments 2/10/2022

UCDAVIS PLUG-IN HYBRID & ELECTRIC VEHICLE RESEARCH CENTER



Travel Demand impact

- Employment
- Commute
- Land-use changes
- Transit resistance and use change
- TNC resistance and price change
- Secondary effect higher gas price

Higher demand for privately owned vehicles





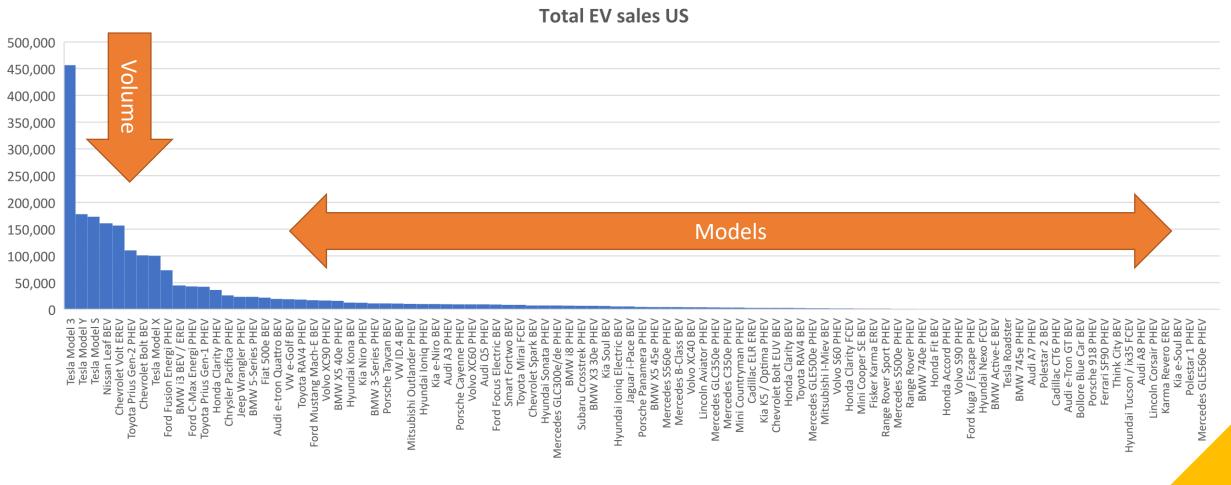
External Factors

- Climate change awareness
- Political change
- Global EV market growth
- New EV models, electric pickup trucks
- Demand shift to larger vehicles
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US Market Moving away from One OEM and one market segment?

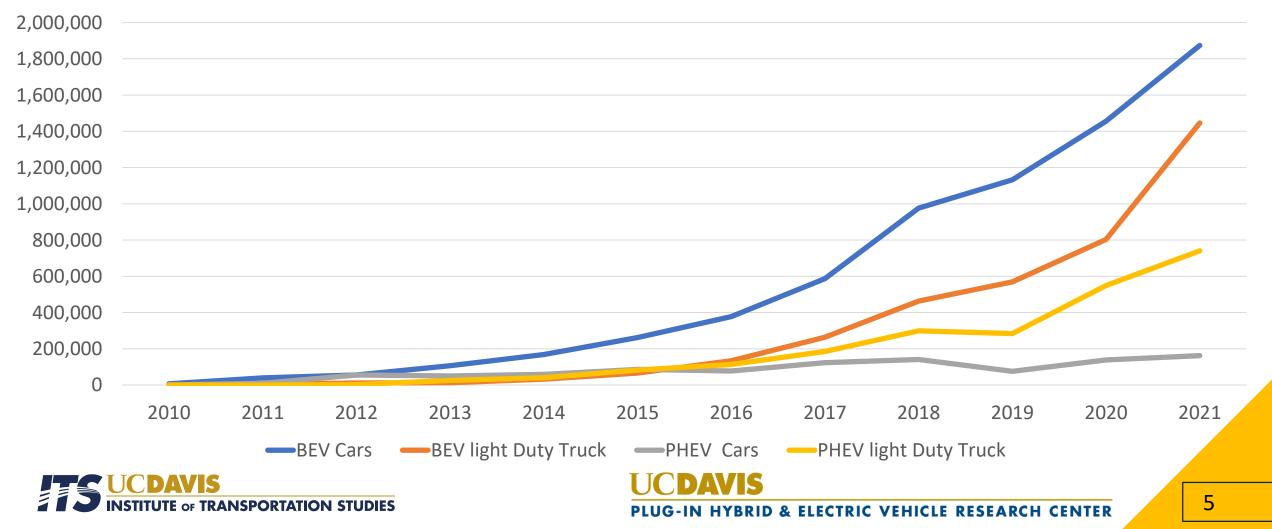




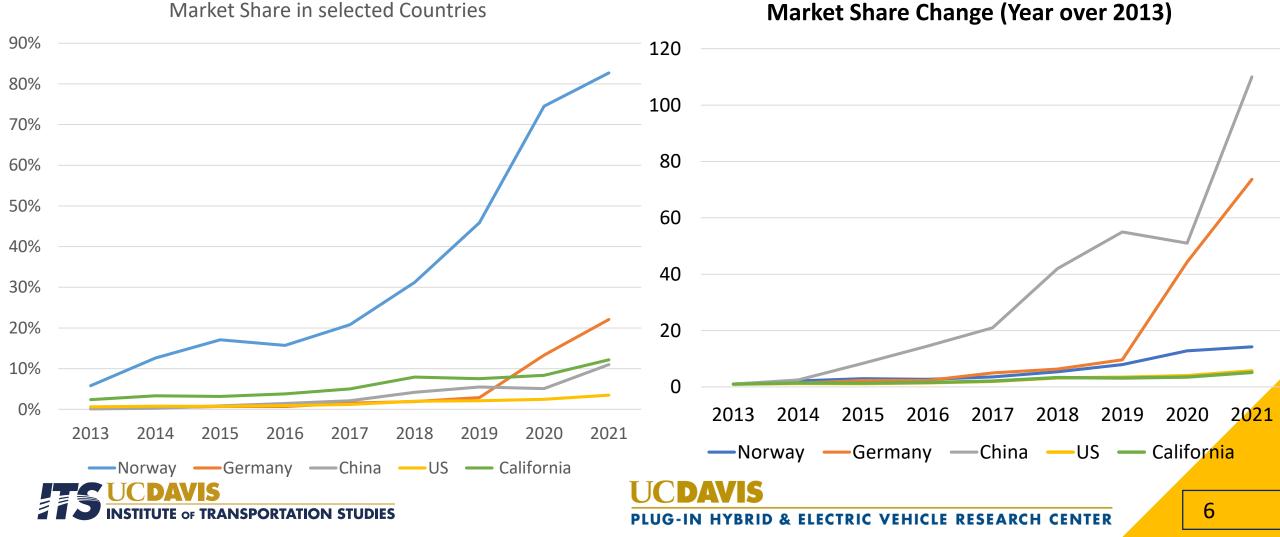


More than 3 Million ZEV Sold in 2020 around 6 Million in 2021.

Global ZEV sales by Propulation and Segment

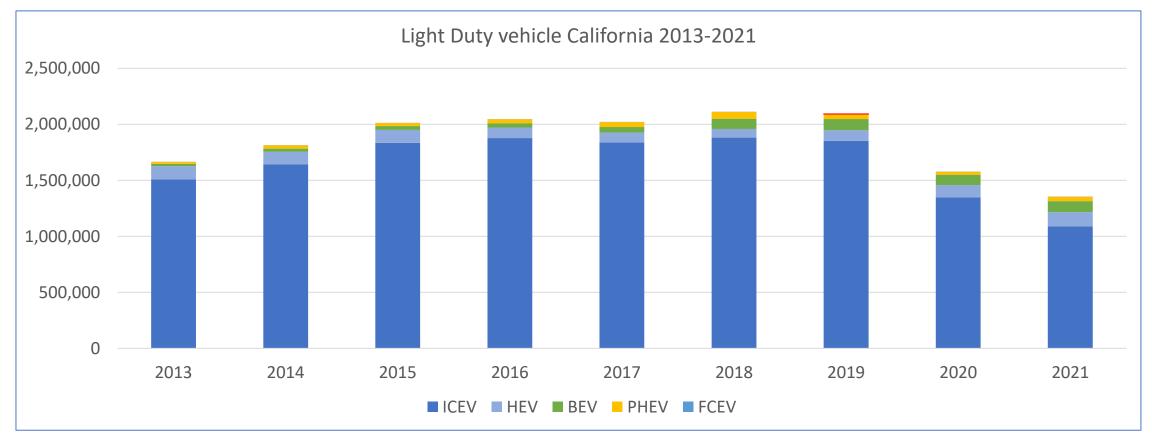


Market Share in the US is still around 3% while Norway is Pushing to 100% and the global market share is almost 10%



Supply Chain and market impact of COVID

- Total car sales dropped
- OEMs are focused on luxury segments and light-duty trucks





The transition to 100% market share and 100% clean fleet will required new policies, technologies and research and is only starting now

ICEV

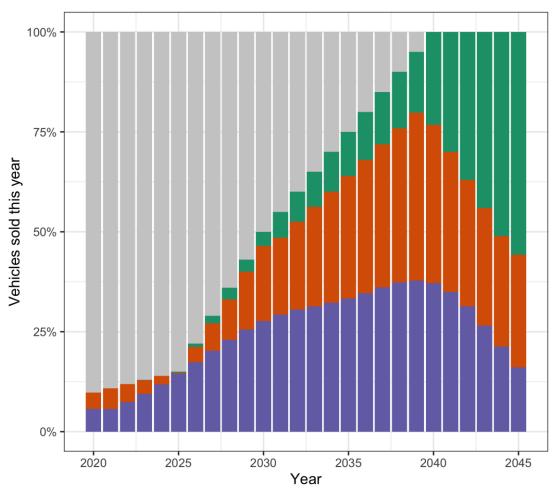
Replace existing ZEV

Add second+ ZEV to household

Add first ZEV to household

California full LDV transition scenario

- The market show high demand even with COVID
- EVs for TNC will wait for new supply
- New federal incentives will change the market
- Electrifying trucks
- Electrifying second car in the household will grow before MUDs



Thank You!

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