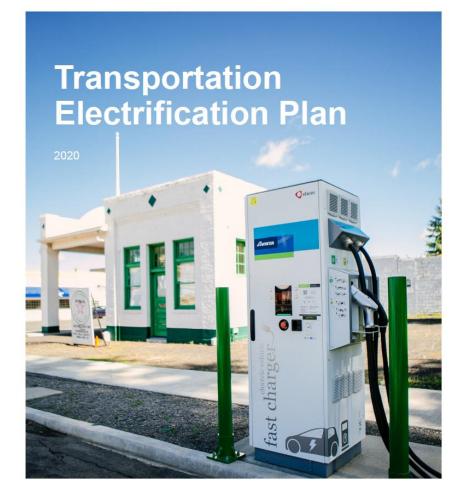


UTC EV Policy Workshop #2

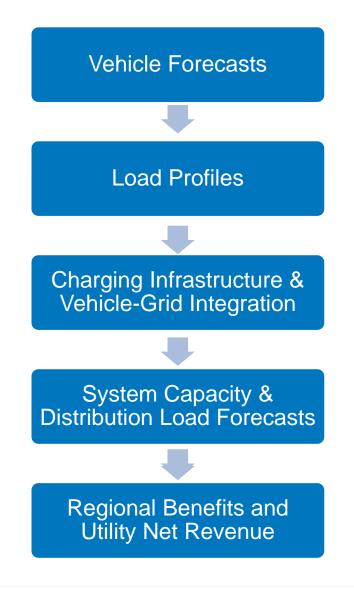
- Forecasting and Modeling
- CFS Credits and Monetization
- Rate Recovery Considerations

Rendall Farley, P.E. – Manager of Clean Energy Solutions January 15th, 2024

Forecasting and Modeling



Check it out at: myavista.com/transportation

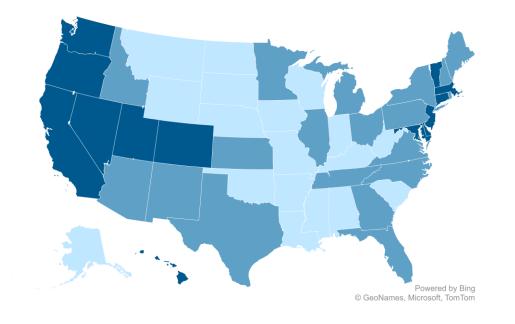




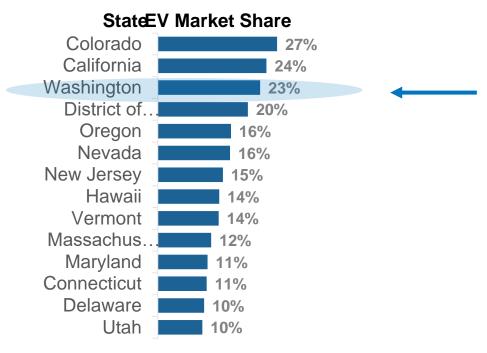
14 States Exceed 10% EV Market Share

State EV Market Share

• 1% to 4% • 5% to 9% • 10% to 27%



States Over 10% (Q3 2024)



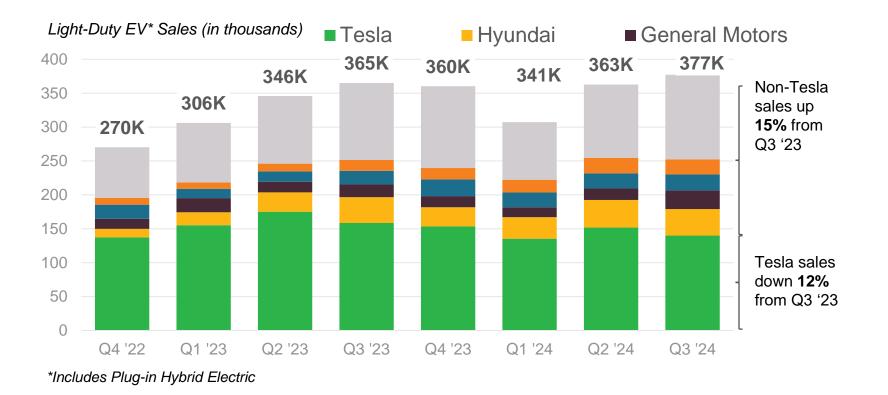
*Light-duty sales, includes Plug-in Hybrid Electric Vehicles

Note: Historical data has changed slightly from previous quarterly reviews due to a change in the underlying data source.

Source: EV Market Dashboard - Atlas EV Hub



377k EVs Sold in Q3 2024

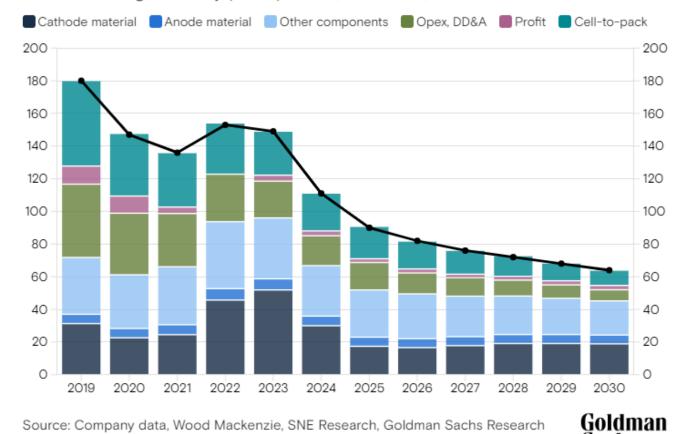


Note: Historical data has changed slightly from previous quarterly reviews due to a change in the underlying data source.

Individually labeled OEMs are top 5 by EV sales Source: EV Market Dashboard - Atlas EV Hub



Battery Prices Forecast to Continue to Fall



Global: average battery pack prices (US\$/kWh)

Source: Company data, Wood Mackenzie, SNE Research, Goldman Sachs Research 2024-2030 are forecasts

> Electric vehicle battery prices are expected to fall almost 50% by 2026 | Goldman Sachs



Sachs

Light-duty EV Adoption

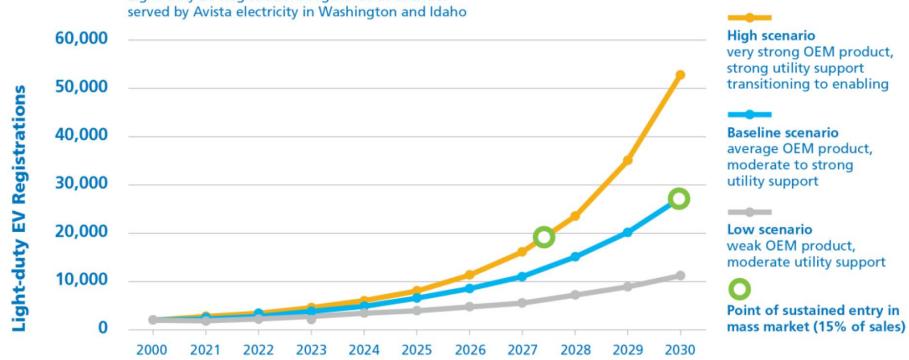


Figure 4: Light duty EV adoption forecasts for registered light-duty vehicles in Avista's service territory; sources include Washington and Idaho registration data; Bloomberg New Energy Finance Electric Vehicle Outlook, 2019; "Economic & Grid Impacts of Electric Vehicle Adoption in Washington & Oregon." Energy and Environmental Economics (2017).

Light-duty EV Registrations registered in counties served by Avista electricity in Washington and Idaho

VISTA

DER Study – Final Report

Table E-1. Year 2030 Electric Vehicle Results Summary, High-Incentive Scenario

Vehicle Weight Class	Total Vehicles	% Electrified	EVs	Peak Load Impact (MW)	Annual Consumption (MWh)
LDV	519,499	20%	104,838	26.4	284,418
MDV	16,087	3%	436	3.0	25,913
HDV	10,348	3%	350	2.2	15,646
Total	545,934	19%	105,624	31.6	325,977

Table E-2. Year 2045 Electric Vehicle Results Summary, High-Incentive Scenario

Vehicle Weight Class	Total Vehicles	% Electrified	EVs	Peak Load Impact (MW)	Annual Consumption (MWh)
LDV	573,839	74%	426,534	97.8	1,389,054
MDV	17,855	30%	5,434	15.0	286,129
HDV	12,603	37%	4,662	19.3	381,437
Total	604,297	72%	436,630	132.1	2,056,621

AEG

codeo VERDANT Date: June 17, 2024

Distributed Energy Resources Potential Study Final Report Prepared For: Avista Utiliti By: Applied Energy Group, Inc Cadeo Group, and Verdant Ast

AEG Key Contact: Eli Morris



Clean Fuel Standard (CFS)

- Funding for Community EV Programs

- Unpredictable CFS funding requires flexible programs that utilize it, more easily scaled up or down
- Supplements and amplifies programs under the TE Plan
- Community EV Program example provide EVs and tailored charging through a competitive proposal and selection process
- 14 active partners to date
- EVSE maintenance a good future candidate if/when increased CFS funding is realized

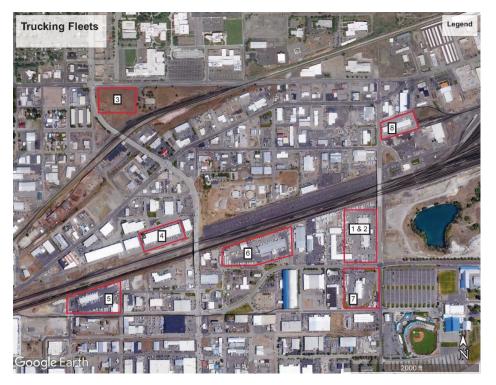


ZEV Co-op Public Carshare Vehicle at Gonzaga University's Office of Sustainability (2024)



Rate Recovery

- TE programs under Tariff 77 are recovered through General Rate Cases
- Electricity for chargers is billed through traditional rate schedules or optional Commercial EV TOU rate schedules, and there are user fees for DCFC chargers
- A tracker mechanism for O&M similar to PSE could help expand programs
- Major MHD investments in feeders and substations will be needed – when is a prudent time to invest and construct for future / anticipated TE load?
- Proactive investment policy proceedings in NY, CA and elsewhere provides examples for WA



E. Spokane Commercial-Industrial Area



Questions & Discussion

In this photo a man in Seattle charges his Gremlin at one of the few public electric outlets provided for that purpose.



ANVISTA'