

Financing Options for EV Charging Infrastructure: A US Case Study

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Why Electrify Transportation?

Financing
Options for EV
Charging
Infrastructure

Dominion
Energy SCIP: A
US Case Study

Why Electrify Transportation?



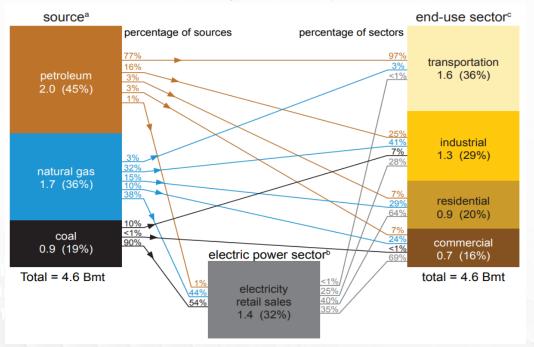
Drivers of Transportation Electrification



Geopolitics

- Energy Security
- Reduce Dependence on Oil
- Reduce Impact of Oil Price Volatility

U.S. CO² emissions from energy consumption by source and sector, 2020

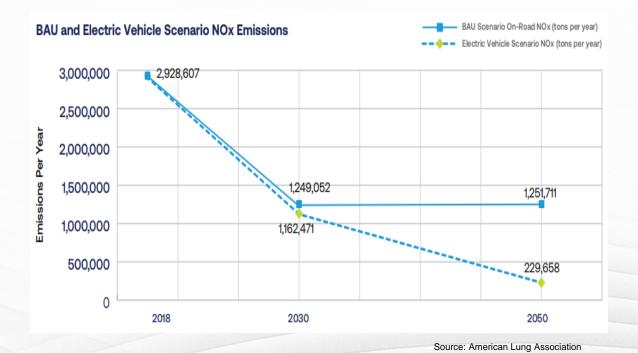


Source: U.S. Energy Information Administration (EIA), Monthly Energy Review (April 2021)

Environment

- Climate Change Policy
- Improve Air Quality

Comparison of On-Road Emissions Between Baseline and Electric Vehicle Case



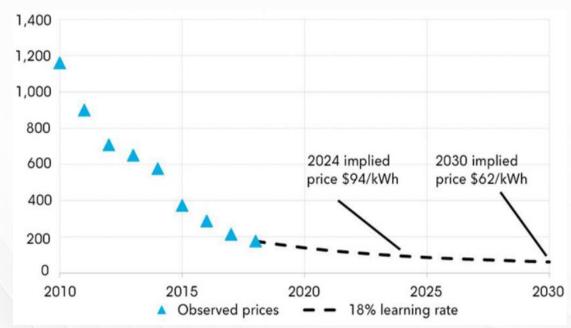
Drivers of Transportation Electrification



Technology

- Advances in Battery Technology
- Advances in Charging Technology
- Economies of Scale



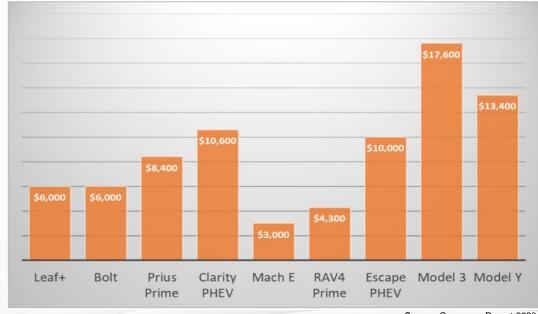


Source: BloombergNEF

Consumer

- Lower Operating Cost
- Increasing Driving Range
- Decreasing Prices of EVs

Lifetime Savings From EVs vs. Best-Selling ICE Vehicles in Class



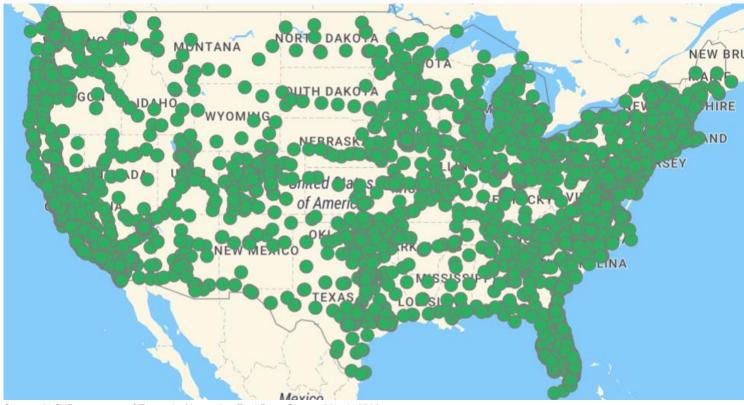
Source: Consumer Report 2020

EV Charging Infrastructure is Critical

Federal government has:

- a goal 50% of all new passenger cars and light trucks sold in 2030 be zero-emission vehicles
- a goal of 500,000 new chargers
- allocated \$7.5 billion over 5 years to states for EV charging stations

Public Electric Vehicle Charging Stations in US



Source: U.S. Department of Energy's Alternative Fuel Data Center, March 2022



Financing Options for EV Charging Infrastructure

Financing Options for EV Charging Infrastructure





Federal Programs

- •Grants such as Low or No Emission Vehicle Grants, Alternative Fuel Corridor Grants, Surface Transportation Block Grant
- ■Loans such as Improved Energy Technology Loans
- ■Tax Credits such as Alternative Fuel Vehicle Refueling Property Credit
- ■Tax Exemptions such as Plug-In Electric Vehicle Weight Exemption



State Programs

- ■EVSE Grants in AR, CA, CO, DE, MA, MD, NJ, OK, PA and TN
- ■EVSE Loan Program in CA and FL
- ■EVSE Tax Credit in GA, OK, NY, DC and NM
- ■EVSE Tax Exemption in OK



Utility Incentives

- Commercial EVSE rebate by **Dominion Energy**, LADWP, PG&E, SDG&E,
 TEP, CEA, PWP, NHEC, Consumers Energy and Hawaii Energy
- ■School EVSE rebate by PG&E, NV Energy and Duke Energy
- ■EVSE Leasing Program by OUC in FL and MGE in WI



Private Investments

- Investments by Automakers such as Tesla, Nissan, Ford, BMW
- Investments by EV Charging Companies such as EVGo, Blink Charging, Electrify America
- Investments by Oil Companies like Shell, BP and Chevron

Dominion Energy Virginia's Smart Charging Infrastructure Program

A US Case Study



Dominion Energy Virginia's Smart Charging Infrastructure Pilot Program



In 2020, Guidehouse and Dominion Energy Virginia partnered to develop and launch a new Smart Charging Infrastructure Pilot (or "SCIP") Program

- Program was approved by the VA State Corporation Commission as part of Dominion's 10-year Grid Transformation Plan
- Program offers rebates to incent EV charging stations for multi-family communities, workplaces, transit bus depots and fast-charging locations
- Rebates cover infrastructure, chargers and network fees – range from \$2,000 to \$50,000 per project.

The data driven insights will help shape future EV customer offerings (including the design of potential managed charging programs)

Program Objectives and Expected Outcomes

- Achieve target installation goals for each targeted segment through focused and effective marketing channels
- Maximize customer engagement and satisfaction and quantify positive impacts
- Leverage data to better understand customers and develop programs that address future EV charging opportunities
- Bolster innovation for new technologies, programs, network applications and services



- Accelerate EV adoption to drive down GHG emissions – and prove it
- Collect data and report for continuous improvement, tracking and regulatory purposes
- Accurately quantify reductions in emissions for site installations
- Shape regulatory outcomes with a fact-based account of program success
- Establish groundwork for managed charging programs in other segments
- Minimize impact that new EVSEs have on the distribution grid



Rebate Program Customer Segments

	Multi Family	Workplace	DCFC	Transit
Utility Infrastructure (per site)	\$-	\$-	\$35,000	\$35,000
Customer Infrastructure (per site)	\$9,000	\$9,000	\$33,000	\$33,000
Network Fee (per charger)	\$2,000	\$2,000	\$5,000	\$5,000
Equipment (per charger)	\$4,000	\$2,700	\$36,000	\$53,000
Chargers per Site	Min = 1, Max =4	Min = 1, Max = 10	Min = 2, Max = 4	Min = 1, Max = 6
Program Limit	25 Stations	400 Stations	30 Stations	60 Stations



Program Rollout Snapshot & Success

Design Phase Kickoff June 2020 SCIP Publicly Launched Oct 2020 First
Application
Nov 2020

Qualifying Vendor List

First Rebate Payment Feb 2021 Program
Conclusion
Dec 2022



Dominion Energy Programs Accelerate Electric Vehicle Adoption in Virginia

New program provides rebates for electric vehicle charging stations and installation

- Upcoming electric school buses and autonomous electric shuttle will reduce public transportation emissions Initiatives help meet Dominion Energy's commitment to net zero carbon and methane emissions by 2050, as well as Commissions and the service of the serv

Marketing & Outreach
Collateral



Program Highlights

- End-to-end program stood up within 5 months and rebates paid within 8 months
- IT Platform to manage end-to-end customer journey (e.g., application, rebate processing, data collection and analytics)
- Marketing and Outreach campaign drove program interest
- End-to-end customer service and support for program information with dedicated call center
- DCFC and Multi-family rebate segments now fully subscribed (as of March 2021).
- Data collection and reporting implemented to support program evaluation and regulatory reporting



The press release from Dominion: https://news.dominionenergy.com/2020-09-29-Dominion-Energy-Programs-Accelerate-Electric-Vehicle-Adoption-in-Virginia



Thank you!

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