

January 10, 2024

Vermont Transportation Electrification

VEIC Updates for the Vermont House
Transportation Committee

David Roberts

Managing Consultant, Drive Electric Vermont, VEIC

About VEIC

VEIC is on a mission to generate the energy solutions the world needs.

The logo for VEIC, featuring the lowercase letters "veic" in a bold, orange, sans-serif font.

- Winooski-based nonprofit operates the Efficiency Vermont energy efficiency utility under an order of appointment with the Vermont Public Utility Commission
- VEIC also coordinates the Drive Electric Vermont program in partnership with the State and other stakeholders

The logo for Efficiency Vermont, with "Efficiency" in dark blue and "Vermont" in green, separated by a thin green arc.The logo for Drive Electric Vermont, with "Drive" and "Vermont" in green and "Electric" in purple, with a stylized purple plug icon to the right.

Industry Trends &
Federal Tax Incentives

Policies and Programs

Drive Electric Vermont

Efficiency Vermont
Programs

Future Considerations

Agenda

Auto Industry Trends

Automotive News

Market hits post-COVID high

Biggest sales year since 2019 wraps up with Hyundai group surpassing Stellantis, though there are more signs market is cooling.



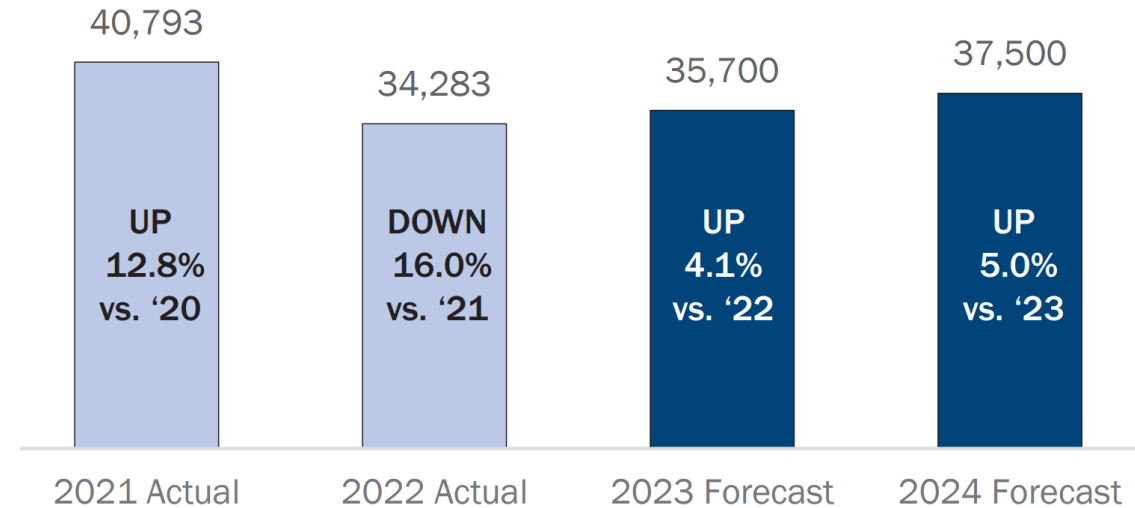
U.S. Light-Vehicle Inventory Ends 2023 at 3-Year High; Up 38% Year-Over-Year



Next year will be the best year to buy a new car since 2019, economist says

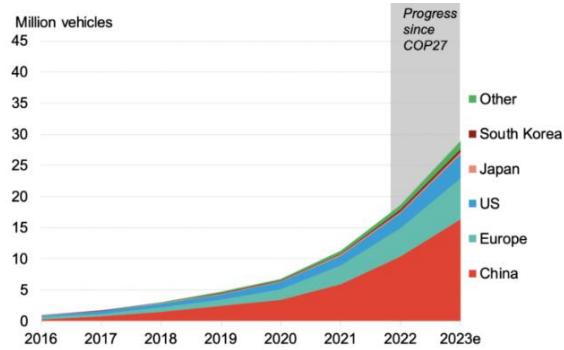
The U.S. new-vehicle average transaction price in November 2023 was \$48,247 down by 1.5% compared with November 2022

Vermont New Vehicle Registrations



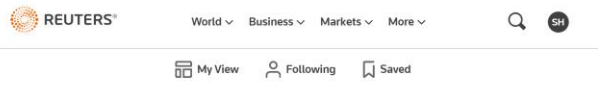
VT VADA Auto Outlook – Oct 2023

EV Industry Trends



EV Sales Growing Faster Than Expected — Charts

<https://cleantechnica.com/2023/12/09/ev-sales-growing-faster-than-expected/>



Autos & Transportation | Public Policy | Sustainable & EV Supply Chain | Regulatory & Policy | Transport Fuels

US EPA reviewing California 2035 electric vehicle sales mandate plan

By David Shepardson

January 5, 2024 4:58 PM EST · Updated 2 days ago



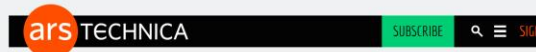
The New York Times

Tiny Electric Vehicles Pack a Bigger Climate Punch Than Cars

Two- and three-wheeled vehicles, used by billions of people, are moving away from fossil fuels to batteries faster than cars in countries that have made the energy transition a priority.



[Tiny Electric Vehicles Pack a Bigger Climate Punch Than Cars - nytimes.com](https://www.nytimes.com/2023/12/09/climate/electric-vehicles-climate-punch.html)



FORD F-150 YO-YO —

Ford kills some F-150 Lightning trims, raises prices on others

The price increase follows hefty price cutting six months ago.

JONATHAN M. GITLIN · 1/3/2024, 1:12 PM



Home > Personal Finance > Kelley Blue Book

Kelley Blue Book

How you can get this electric car for under \$20,000

Published: Jan. 8, 2024 at 5:00 a.m. ET

By Sean Tucker



With the help of the federal down payment, the Chevy Bolt EV now effectively starts under \$20,000 for most buyers.

<https://www.marketwatch.com/story/how-you-can-get-this-electric-car-for-under-20-000-e0ae0d16>

Bloomberg

Subscribe

Industries | Transportation

GM Misses EV Production Goal by Half While Production Woes Persist

- Majority of sales were Bolt models that will be discontinued
- GM, Ford offering incentives to make up for loss of tax credit

<https://www.bloomberg.com/news/articles/2024-01-03/gm-misses-ev-production-goal-by-half-as-production-woes-persist>

IRA EV Tax Credits for Consumers

New EVs as of April 2023

- All-electric or PHEV with battery of at least 7 kWh
- A vehicle is eligible for one-half of the total credit (\$3,750) if the vehicle has **battery components** that are manufactured or assembled in North America.
- To be eligible for the other \$3,750, a vehicle must have **critical minerals** that were extracted or processed in the U.S. or countries with which the U.S. has a free trade agreement, or use critical minerals that were recycled in North America.
- New EV price caps: cars under \$55,000; SUVs, vans, and pickup trucks under \$80,000
- New EV income caps: \$150,000 for single filers, \$225,000 for head of household and \$300,000 for joint filers

Used EV incentives started on Jan 1, 2023

- 30% of purchase price, up to \$4,000
- Used EV price cap: \$25,000
- Vehicle at least 2 years old and has not received a used credit previously
- Used EV income caps: \$75,000 for single filers, \$112,500 for head of household and \$150,000 for joint filers
- Consumer must not have had used EV credit in last 3 years

Consumer Tax Credit Changes for 2024

Newsletter Donate →

CANARY MEDIA

The US EV industry now faces a choice: Tax credits or Chinese batteries

Long-awaited rules from the Biden admin could make all EVs ineligible for the \$7,500 customer tax credit — unless the industry can source key supplies beyond China.

By Jeff St. John
6 December 2023



(CFOTO/Future Publishing/Getty Images)

<https://www.canarymedia.com/articles/clean-energy-supply-chain/the-us-ev-industry-now-faces-a-choice-tax-credits-or-chinese-batteries>

As of Jan 2024, auto dealers can pass through new or used credits at the point-of-sale, but the number of new EV models eligible **went from 25 to 13** due to increasingly stringent sourcing requirements.

Leasing is a workaround. Any leasing company can receive a \$7,500 commercial vehicle tax credit for an EV lease, which they can then opt to pass-through to the lessee.

Automaker supply chain restructuring should increase eligibility over the next few years.

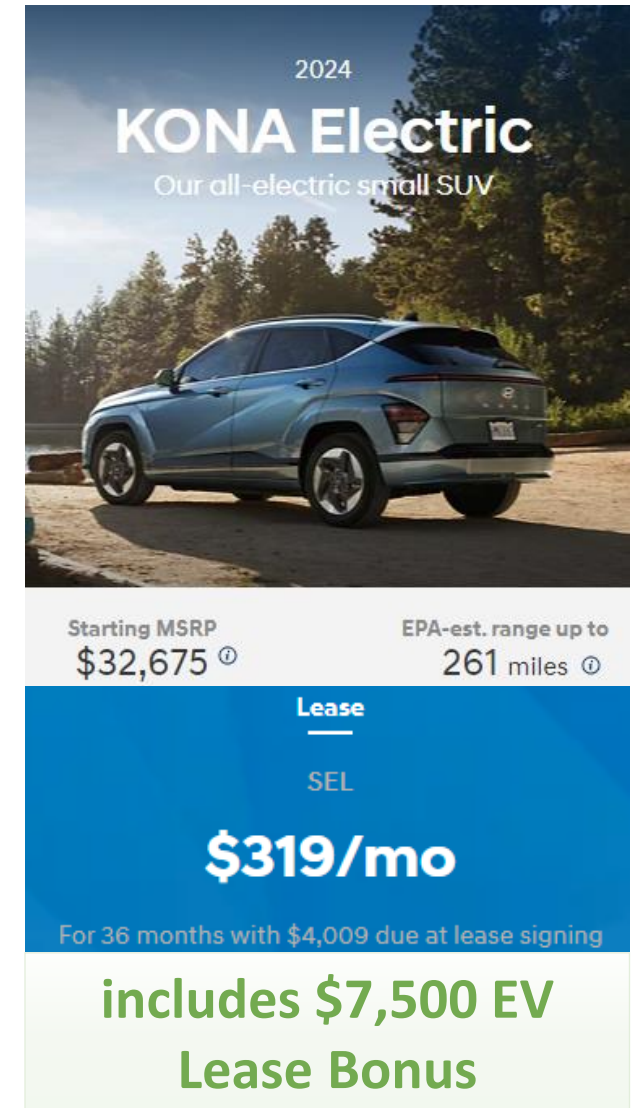
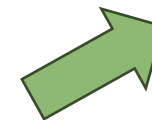
New EV Tax Credit Eligibility *as of 1/8/2024*

Make / Model	Electric Range (miles)	Base Price (MSRP)	Federal Tax Credit
Chevrolet Bolt	259	\$26,500	\$ 7,500
Chevrolet Bolt EUV	247	\$27,800	\$ 7,500
Ford F-150 Lightning	230-320	\$49,995	\$ 7,500
Rivian R1T	289-328	\$73,000	\$ 3,750
Rivian R1S	289-321	\$78,000	\$ 3,750
Tesla Model 3	272-333	\$38,990	\$ 0-7,500
Tesla Model X	335	\$79,990	\$ 0-7,500
Tesla Model Y	260-310	\$43,990	\$ 7,500
Chrysler Pacifica Hybrid	32	\$51,095	\$ 7,500
Ford Escape PHEV	37	\$40,500	\$ 3,750
Jeep Grand Cherokee 4xe	26	\$60,460	\$ 3,750
Jeep Wrangler 4xe	22	\$50,695	\$ 3,750
Lincoln Corsair PHEV	28	\$53,295	\$ 3,750

<https://www.fueleconomy.gov/feg/taxcenter.shtml>

IRA Commercial Vehicle Credit

- No production or battery sourcing requirements like the consumer tax credit
- Credit equal to the lesser of 30% of the price, or the incremental cost of such vehicle
- The incremental cost of any qualified commercial clean vehicle is an amount equal to the excess of the purchase price for such vehicle over such price of a comparable vehicle
- The amounts shall not exceed \$7,500 in the case of a vehicle which has a gross vehicle weight rating of less than 14,000 pounds, and \$40,000 in the case of a vehicle more than 14,000 pounds
- Tax-exempt entities can qualify to receive direct payments
- Consumer light duty vehicle leases can qualify for a \$7,500 credit for the leasing company, which they can opt to pass through



2024
KONA Electric
Our all-electric small SUV

Starting MSRP
\$32,675 ⓘ

EPA-est. range up to
261 miles ⓘ

Lease
SEL

\$319/mo

For 36 months with \$4,009 due at lease signing

includes \$7,500 EV Lease Bonus

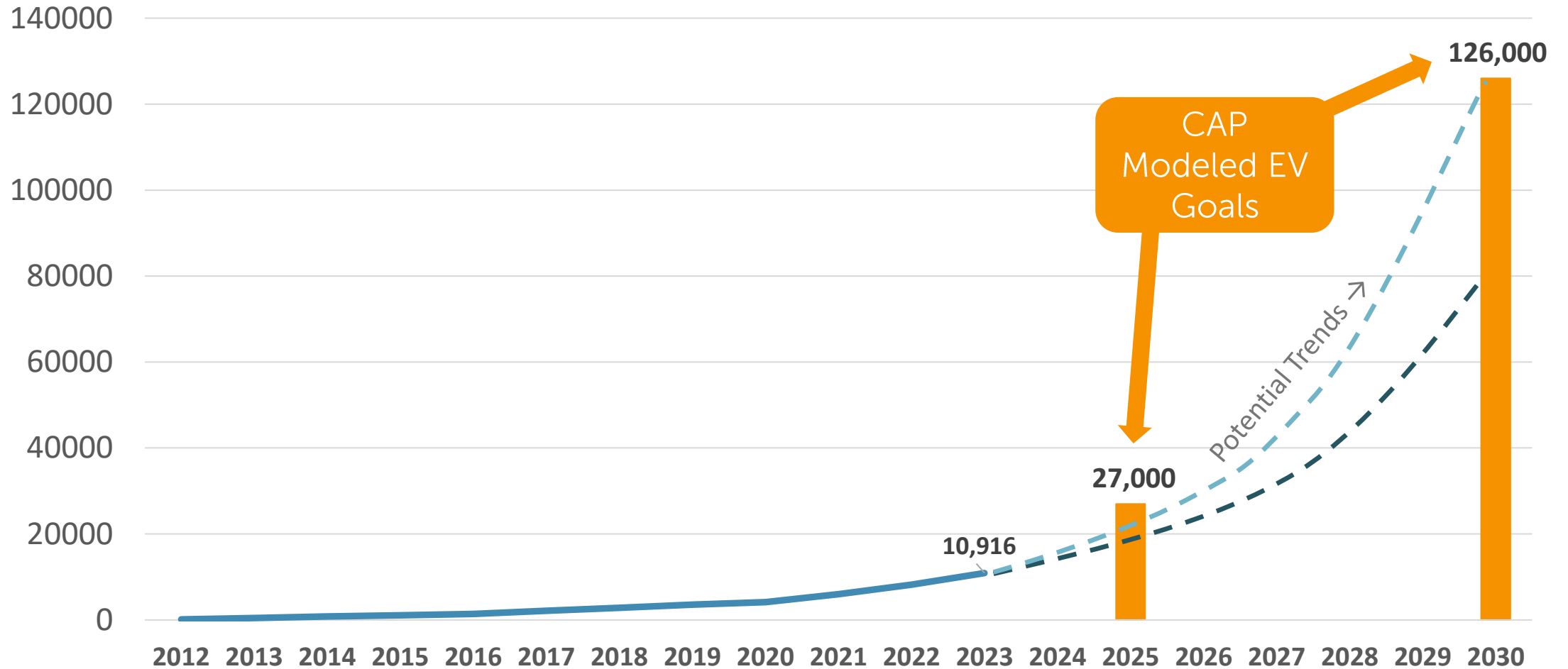
[2024 Kona Electric Hyundai USA](#)

IRA EVSE Tax Credit

- Extended through end of 2022, new requirements in 2023
- Commercial property - 30% of the cost, not to exceed \$100,000
- Consumers – 30%, up to \$1,000
- Bi-directional charging equipment included
- Eligible fueling equipment must be installed in locations that meet the following census tract requirements:
 - A population census tract where the poverty rate is at least 20%; or
 - Metropolitan and non-metropolitan area census tract where the median family income is less than 80% of the state medium family income level.
 - Eligible projects must also meet apprenticeships and prevailing wage requirements

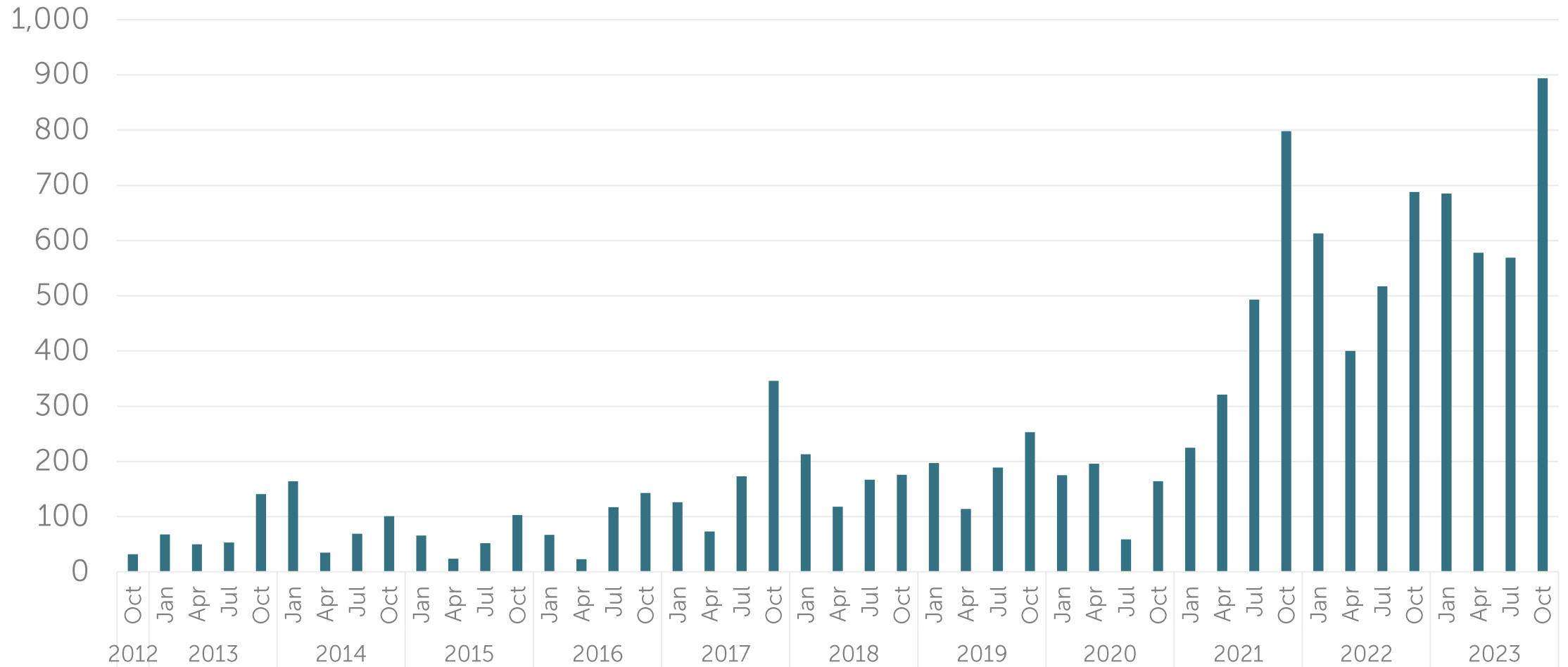
<https://afdc.energy.gov/laws/10513>

How many vehicles does Vermont need to electrify?



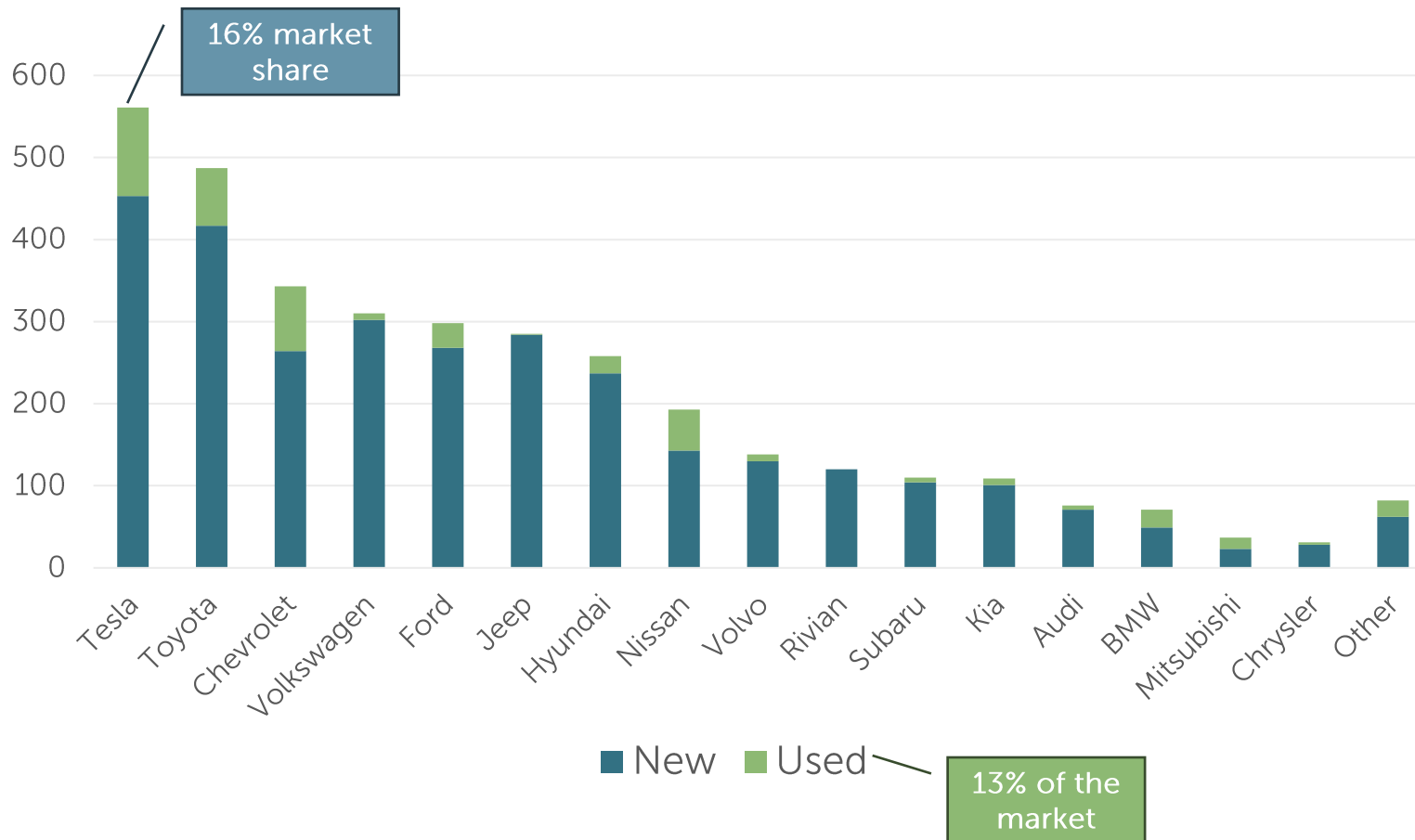
Vermont EV Adoption is Growing

Vermont EV Registrations - Quarterly Net Increase



Vermont EV Growth in the Past Year

VT EV Registrations by Make Oct 2022 – Sept 2023

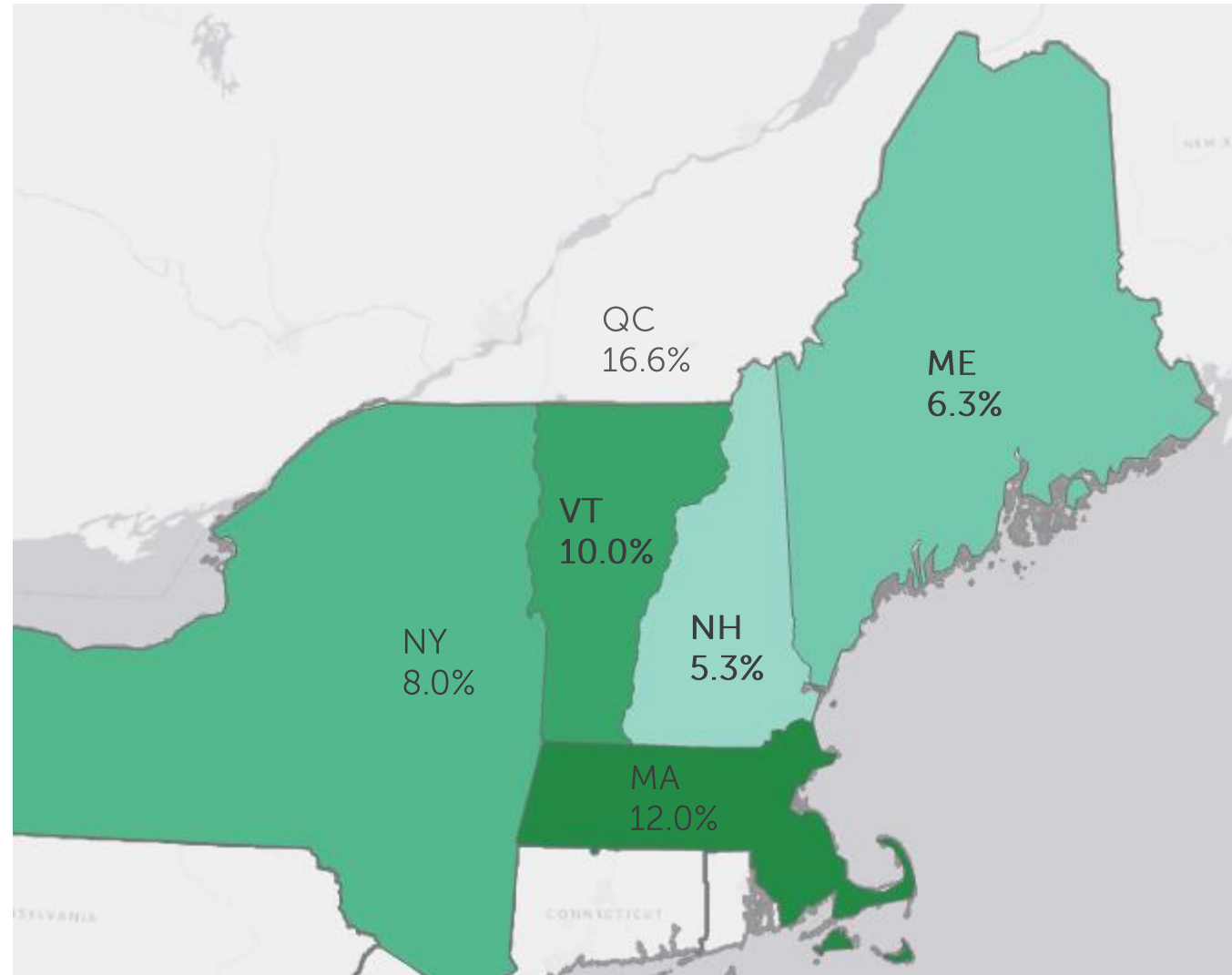


Top 15 Models

Make	Model	New	Used	Total
Tesla	Model Y	317	21	338
Toyota	RAV4 Prime	298	15	313
VW	ID.4	302	3	305
Chevrolet	Bolt / Bolt EUV	264	38	302
Jeep	Wrangler 4xe	205	1	206
Nissan	LEAF	124	50	174
Tesla	Model 3	101	55	156
Ford	F-150 Lightning	155	0	155
Toyota	Prius Prime	88	44	132
Hyundai	Ioniq 5	108	0	108
Rivian	R1T	80	0	80
Jeep	Grand Cherokee	79	0	79
Subaru	Solterra	78	0	78
Ford	Mustang Mach-E	68	6	74
Hyundai	Kona	59	9	68

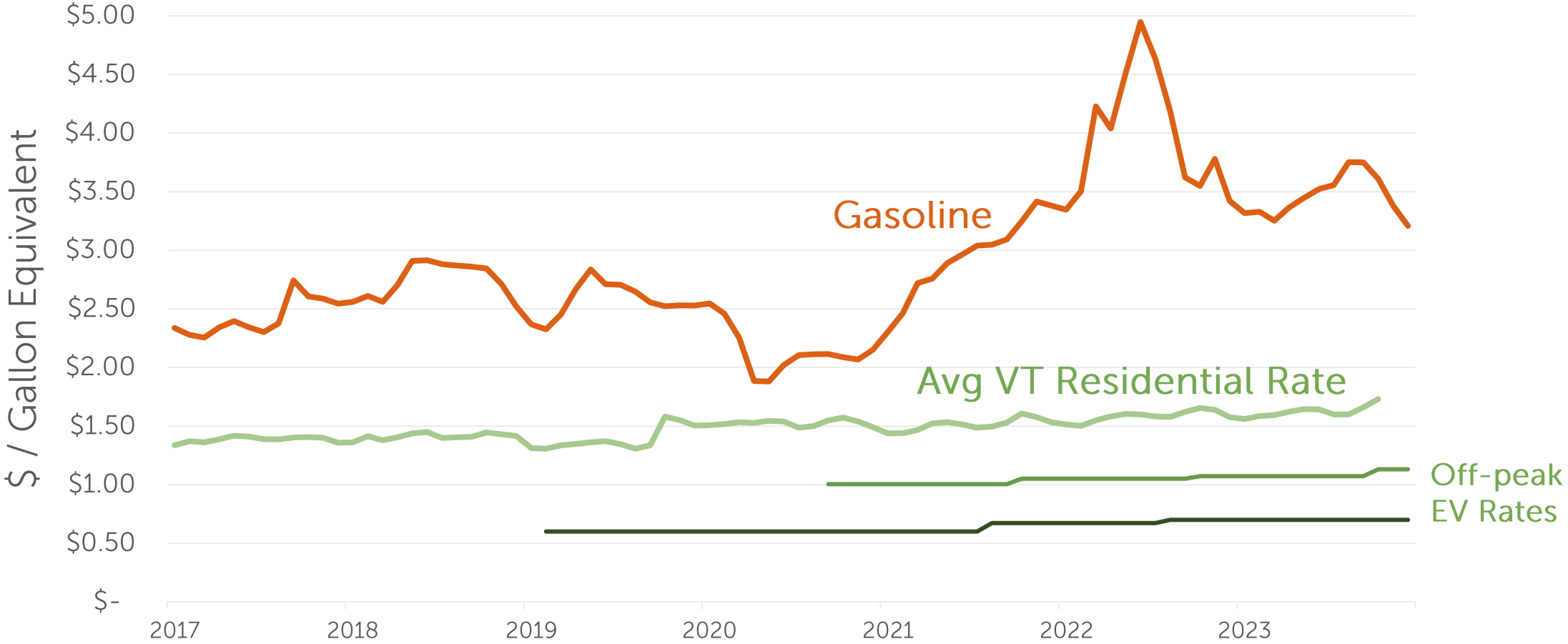
90 unique EV models registered

EV Market Share in Nearby States – Oct 2022-Sept 2023



Sources:
Alliance for Automotive Innovation, 2024
Statistics Canada, 2024

Home EV Charging – Potential Savings

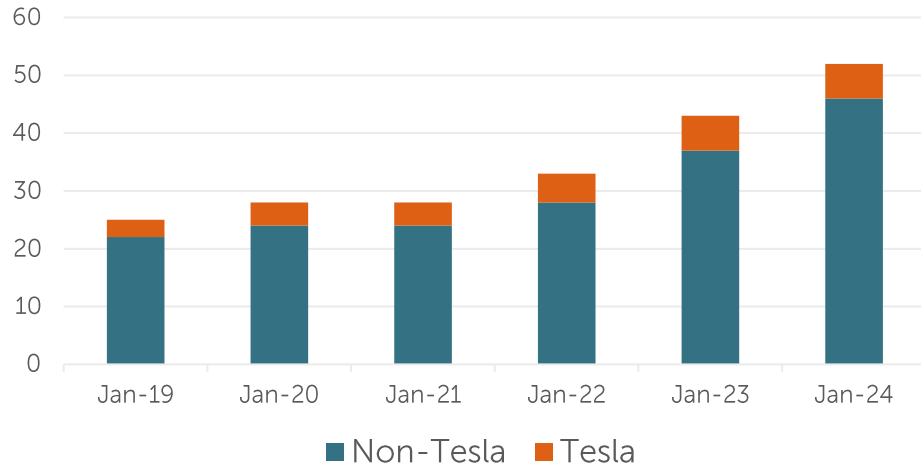


— Gasoline
 — Home Charging Equivalent
 — GMP Off-Peak EV Rate
 — BED Off-Peak Rate

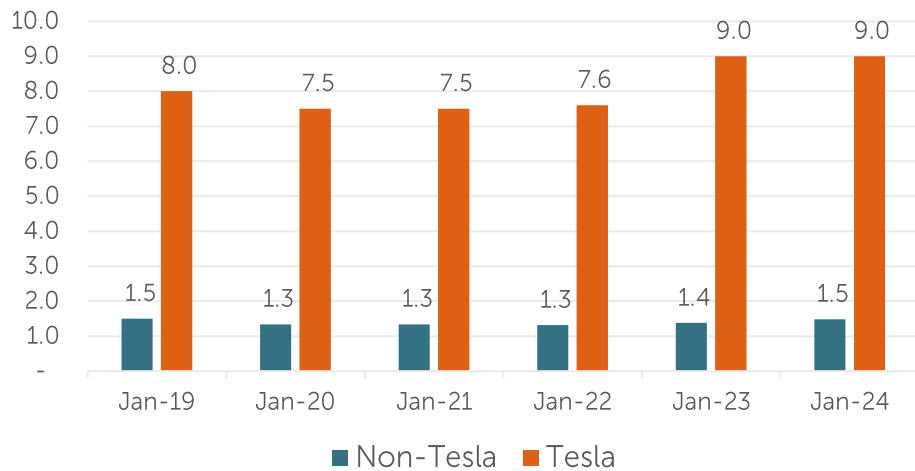
Sources:
 US EIA / VEIC
 GMP / BED / VT PUC

Charging Infrastructure Development

DC Fast Charging Locations in VT



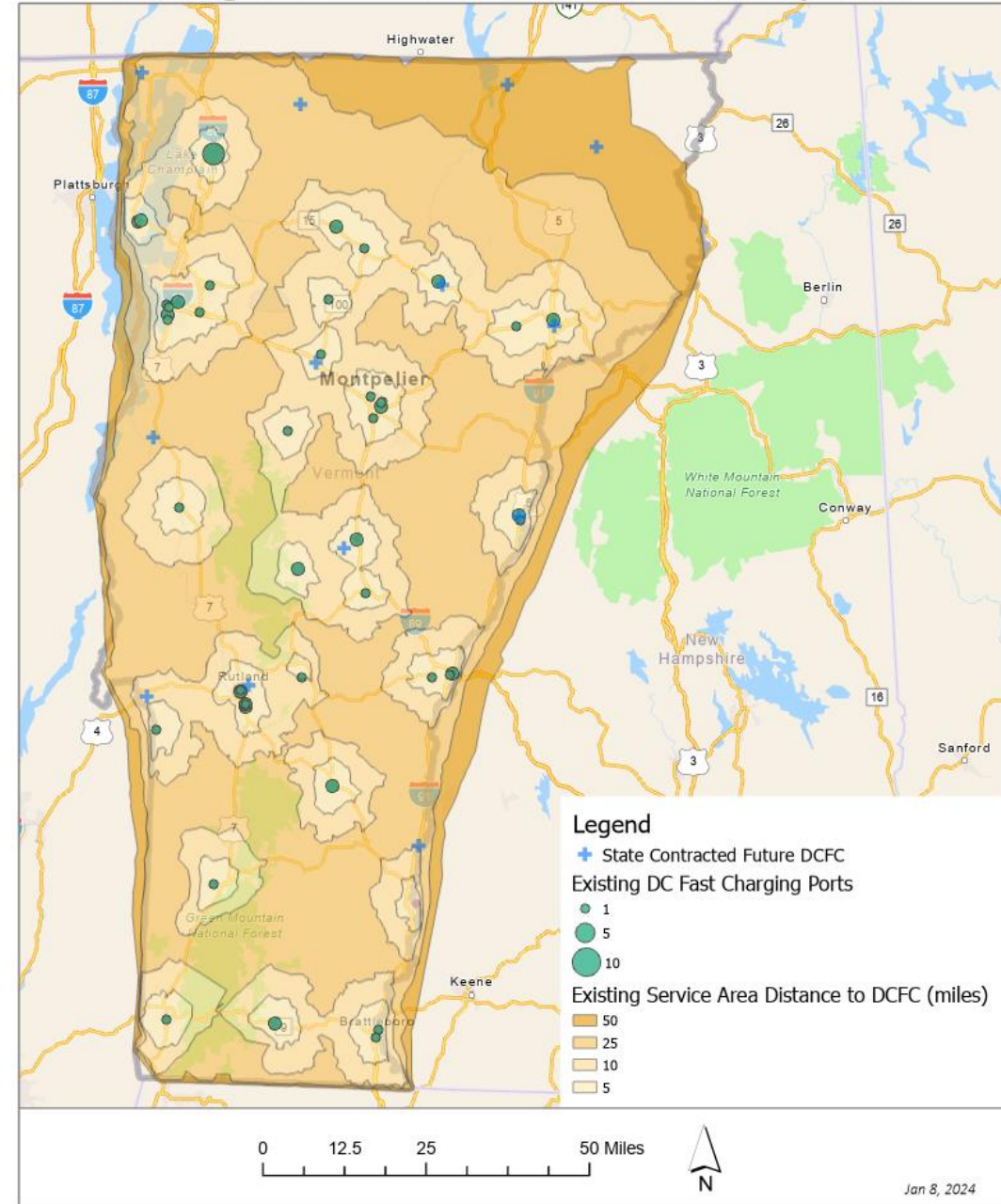
Average DCFC Ports per Location



Sources:
US DOE AFDC / VEIC

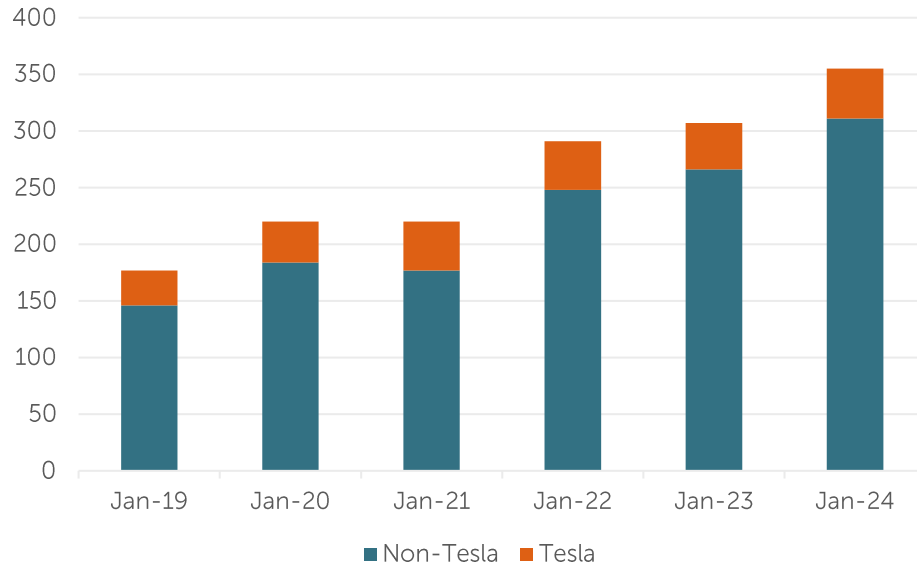
Distance to Fast Charging

Existing non-Tesla Locations as of January 2024



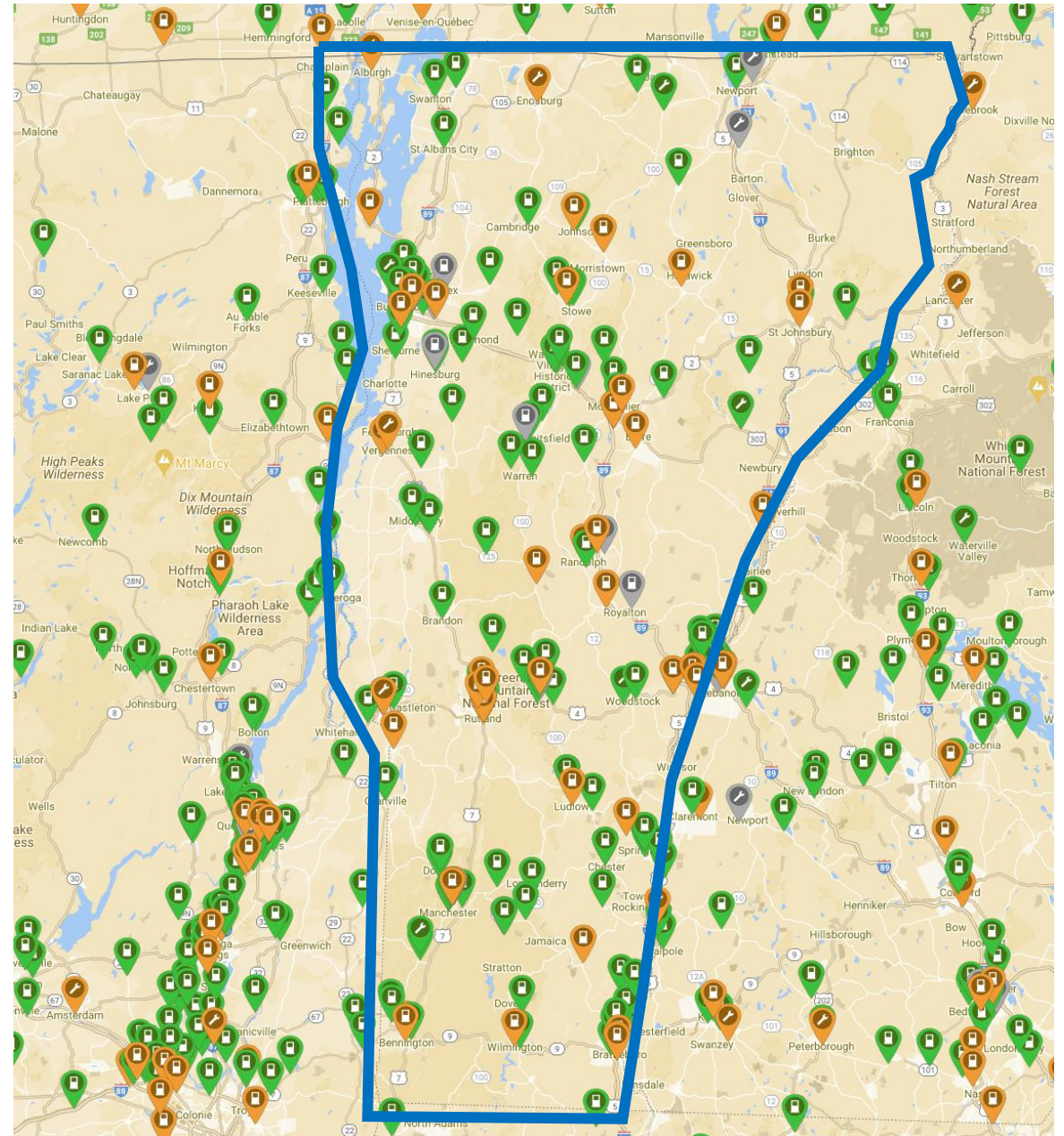
Other Charging Availability

Level 2 Charging Locations in VT



Sources:
US DOE AFDC / VEIC / PlugShare.com

PlugShare.com Charging Map



NACS (Tesla) Charging Port Transition

- Ford announced switch from CCS to North American Charging Standard (NACS) in May 2023
- Toyota, GM, VW, Nissan, Hyundai, Kia, Honda, Mercedes-Benz, Polestar, Rivian, Volvo and other also switching
- Stellantis still considering
- Adapters anticipated in 2024 for many existing vehicles
 - Uncertain future for Nissan Leaf EVs with CHAdeMO plug
- New vehicle deliveries with NACS to start in 2025
- No change to federal requirements (yet?)



EV Industry Trends

Policies and Programs

Drive Electric Vermont

Efficiency Vermont
Programs

Future Considerations

Vermont Vehicle Electrification: Policies and Programs

Vermont Transportation Electrification Programs

An Evolving Framework of Support

Light Duty EV Incentives

- State of Vermont (personal and business vehicles)
- MileageSmart
- Replace Your Ride
- Electric utilities (Tier III)
- Federal EV tax credit (new and used)
- Automaker incentives

Medium & Heavy Duty EV Incentives

- Federal Low/No Emission bus grants
- Federal / VT ANR DERA grants
- VW Environmental Mitigation Funds
- Electric utilities (Tier III)
- EPA Clean School Bus program
- Federal Commercial Clean Vehicle Tax Credit

E-bikes and motorcycle

- State of Vermont
- Replace Your Ride
- Electric utilities (Tier III)
- Local Motion / VBike / Vital Communities programs

EV Charging

- VW Environmental Mitigation Funds
- Federal sources (NEVI, ARPA, CFI funding)
- State funds (via ACCD/GMP)
- Electric utilities (Tier III)
- Energy Efficiency Modernization Act – EEMA (at dealers)
- Agency of Ag weights & measures consumer protection

Supply Chain Development

- Efficiency Vermont EV dealer network
- Incentive program dealer training and coordination

Consumer Awareness and Education

- Efficiency Vermont marketing campaign activities
- Drive Electric Vermont
- Electric utilities
- Local advocates
- Auto manufacturers
- Auto dealers

EV Industry Trends

Policies and Programs

Drive Electric Vermont

Efficiency Vermont
Programs

Future Considerations

**Drive Electric
Vermont:
Trusted
Information
for Vermont
consumers**

About Drive Electric Vermont

- Drive Electric Vermont is a public-private partnership established in 2012 by VEIC and the State of Vermont
- Working to advance transportation electrification through:
 - Stakeholder convening and support
 - Consumer education and outreach
 - State incentive program support and dealer engagement
 - EV charging planning and support
 - Business and municipal fleet support
 - EV experience and equity activities
 - eBike program support



<https://www.driveelectricvt.com/>

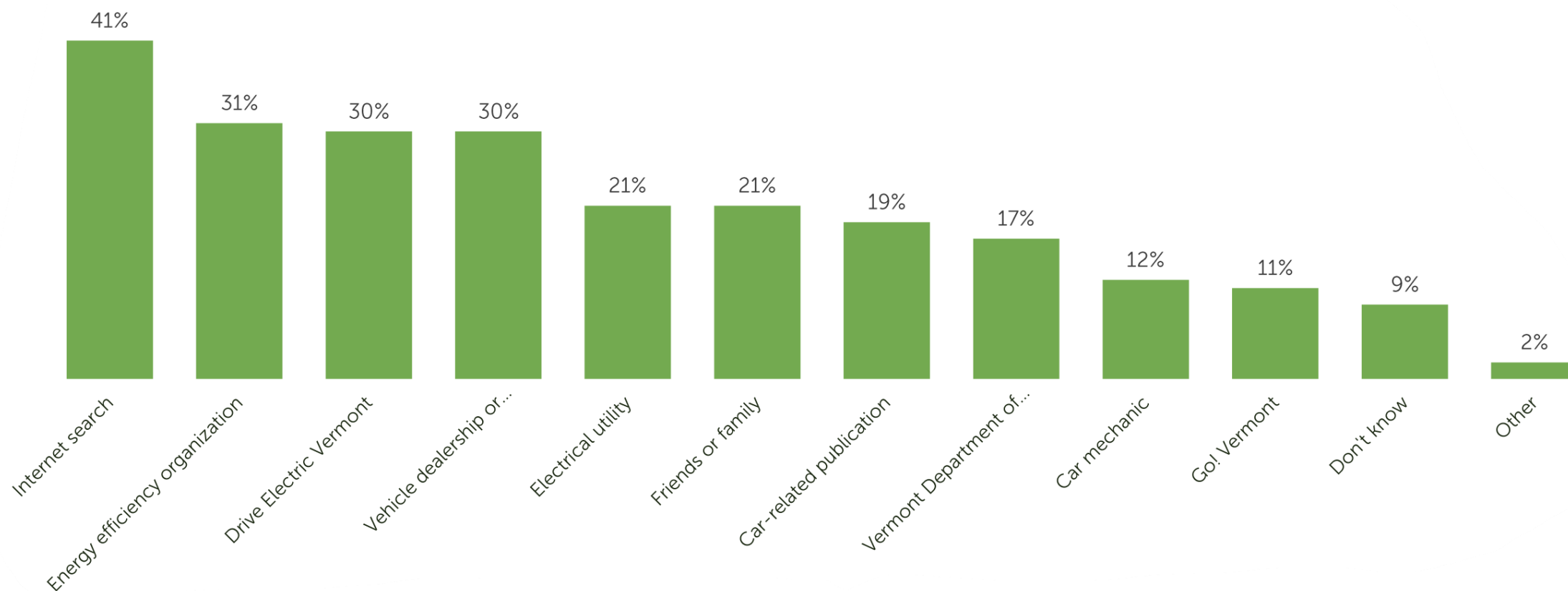
DEV Outreach and Education

- Most consumers aware of EV technology, but aren't sure about a purchase
 - 20% ready to purchase for next vehicle
 - **60% uncertain**
 - 20% not interested
- Firsthand experience increases consideration
 - Just riding in an EV doubled interest
- Resources and tactics
 - DEV website – 2024 redesign underway
 - Incentive tools
 - Customer support
 - Marketing campaigns (Efficiency Vermont through EEMA)
 - Equity-focused research and program development
 - In-person and virtual events

**About 1/3 of EV
"non-considerers" cite
lack of information as a
barrier**

How would VTers research EV Incentives

Appearing high on search rankings is important for influencing EV shoppers.
Relative to research for vehicles in general, local resources may be more popular.



Q: If you were considering buying an electric vehicle or plug-in hybrid, what resources would you use to research them, or any rebates/incentives available? Please select all that apply.

<https://www.energycvermont.com/online-trainings/are-vermonters-ready-to-drive-electric>

DEV Partner Resources

Electric Vehicle Incentives in Vermont

Several incentives are available to help Vermonters drive electric, including a federal tax credit, electric utility programs and incentives for the purchase of an electric vehicle by our calculator tool to help Vermonters.

Federal Tax Credit

New plug-in electric vehicles are eligible for the federal tax credit to get the full benefit, unless they pass through a lease discount website for current information on.

Vermont Electric Utility

Burlington Electric Department

- \$2,300 rebate for purchase or lease of a PHEV priced at \$50,000 or less.
- \$1,300 rebate for purchase of used AEV
- Model-year incentive customers are eligible for a \$700 incentive.
- \$900 rebate toward a qualifying level 2 brought within 60 days of EV purchase.
- Discounted EV charging rate of 8 cents/kWh for the month occur between 10 pm and 6 am BED-approved charger.

Stowe Electric Department

- \$750 rebate for the purchase of a new AEV or PHEV.
- Income-qualified customers are also eligible for an additional \$300 incentive on a new or used EV.

Vermont Public Power Supply

- \$1,000 rebate for the purchase or lease of a PHEV - available to customers of the electric utilities, Barton Village, Village of Hardwick Electric Department, Village of Johnson, Ludlow Electric Light Department, Montpelier Water and Light Electric Department, Village of Colchester.
- Additional \$400 incentive for low-income new AEV or PHEV.
- Up to \$500 rebate for a pre-owned EV.
- Free level 2 240V charging equipment.

Green Mountain

- Rebate of 2,200 VEE neuf ou de 1,500 de 750 \$ pour les clients à revenu bénéficiaire d'une sur un VEE neuf/Équipement de recharge de pointes

Stowe Electric Dept

- Remise de 1,500 \$ ou de 750 \$ pour les clients à revenu bénéficiaire d'une sur un VEE neuf/Équipement de recharge de pointes

佛蒙特州公共供电商 (Supply Authority)

- 1,000 美元的补贴用于购买或租赁插电式混合动力汽车 (PHEV)。
- 1,300 美元的补贴用于购买二手插电式混合动力汽车 (PHEV)。
- 900 美元的补贴用于符合条件的二级充电桩。
- 对于符合条件的客户，电动汽车的充电费率将降至每千瓦时 8 美分。

Véhicule Electrique Incitations au Vermont

Puisieurs mesures incitatives sont disponibles pour aider les habitants du Vermont à rouler à l'électricité, notamment un crédit d'impôt fédéral, des programmes de services publics d'électricité et des mesures incitatives de l'Etat du Vermont. Ces mesures peuvent être combinées pour réduire le prix initial d'un Véhicule électrique.

Crédit d'impôt

Les nouveaux véhicules électriques sont éligibles pour le crédit d'impôt fédéral de 7,500 \$ de consommation, à condition qu'ils soient achetés à un prix inférieur à 50,000 \$ et qu'ils soient achetés à un moment donné.

Incitations

Burlington Electric

- Remise de 2,300 \$ pour l'achat ou la location d'un PHEV à moins de 50,000 \$.
- Remise de 1,300 \$ pour l'achat d'un VEE utilisé.
- Remise de 700 \$ pour les clients à revenu bénéficiaire d'une sur un VEE neuf/Équipement de recharge de pointes

Stowe Electric Dept

- Remise de 1,500 \$ ou de 750 \$ pour les clients à revenu bénéficiaire d'une sur un VEE neuf/Équipement de recharge de pointes

佛蒙特州电力公司

- 2,300 美元的补贴用于购买或租赁插电式混合动力汽车 (PHEV)。
- 1,300 美元的补贴用于购买二手插电式混合动力汽车 (PHEV)。
- 900 美元的补贴用于符合条件的二级充电桩。
- 对于符合条件的客户，电动汽车的充电费率将降至每千瓦时 8 美分。

佛蒙特州的激励措施

佛蒙特州提供了几项激励措施，以帮助佛蒙特州人采用电动汽车。这些措施包括联邦税收抵免、电力公用事业计划和佛蒙特州政府的激励措施。这些措施可以结合起来，以降低电动汽车的初始价格。

联邦税收抵免

新的插电式混合动力汽车符合资格享受 7,500 美元的联邦消费信贷抵免，前提是购买价格低于 50,000 美元。

佛蒙特州电力公司

- 2,300 美元的补贴用于购买或租赁插电式混合动力汽车 (PHEV)。
- 1,300 美元的补贴用于购买二手插电式混合动力汽车 (PHEV)。
- 900 美元的补贴用于符合条件的二级充电桩。
- 对于符合条件的客户，电动汽车的充电费率将降至每千瓦时 8 美分。

佛蒙特州公共供电商

- 1,000 美元的补贴用于购买或租赁插电式混合动力汽车 (PHEV)。
- 1,300 美元的补贴用于购买二手插电式混合动力汽车 (PHEV)。
- 900 美元的补贴用于符合条件的二级充电桩。
- 对于符合条件的客户，电动汽车的充电费率将降至每千瓦时 8 美分。

[Ver reverse for information sobre incentive del estado de Vermont](#)

https://www.driveelectricvt.com/find-your-ev/co... Translated to Spanish Show original

Incentivos - Acerca de los vehículos eléctricos - Encuentra tu vehículo eléctrico - Blog

Comparar modelos

¿Quieres comparar un vehículo eléctrico pero no sabes por dónde empezar? A continuación se muestra una lista de todos los modelos de automóviles eléctricos disponibles actualmente en Vermont junto con detalles sobre su autonomía eléctrica, capacidad de carga, precio y más. Nuestra [hoja informativa](#) también incluye una práctica tabla comparativa de los modelos más populares.

Junto con nuestra herramienta a continuación, aquí hay varias fuentes excelentes en línea para obtener información sobre vehículos enchufables:

- [Drive Electric EE. UU.](#)
- [Informes de coches ecológicos](#)
- [Informes de los consumidores](#)
- [Dentro de los vehículos eléctricos](#)
- [EconomíaCombustible.gov](#)

Autos enchufables disponibles en Vermont

Tipo de vehículo:	Rango eléctrico ↑ :	Todas las ruedas motrices:	PVP básico:
<input type="text" value="Todo eléctrico"/>	<input type="text" value="Mostrar todo"/>	<input type="text" value="Mostrar todo"/>	<input type="text" value="\$30K - \$39,999"/>
Numero de asientos:	Incentivo de Vermont:		
<input type="text" value="Mostrar todo"/>	<input type="text" value="Mostrar todo"/>		

Hyundai Kona Eléctrico

Todo eléctrico (cruzado)
Alcance eléctrico: 200 millas
Incentivo de Vermont elegible

Kia Niro EV

Todo eléctrico (cruzado)
Alcance eléctrico: 253 millas
Incentivo de Vermont elegible

Mini Cooper SE Eléctrico

Todo eléctrico (hatchback)
Alcance eléctrico: 114 millas
Incentivo de Vermont elegible

Social Media Assets

Help spread the word about Vermont's EV incentives by sharing the posts below.

EV Incentives, General

Copy: Did you know you can get thousands of dollars in incentives on the purchase or lease of a new or used EV? Find out how much you can get.

Link: [driveelectricvt.com/incentives](https://www.driveelectricvt.com/incentives)

New Plug-in Electric Vehicle Incentives

Copy: The State of Vermont is offering up to \$5,000 in incentives when you buy or lease a new EV. You can even get that price taken off directly at the point of sale or lease at participating dealerships!

Link: [driveelectricvt.com/incentives/vermont-state-incentives#new](https://www.driveelectricvt.com/incentives/vermont-state-incentives#new)

Mileagesmart Incentive Program

Copy: Have you heard about the MileageSmart incentive program? Income-eligible Vermonters can get up to \$5,000 off a used high-efficiency vehicle.

Link: [driveelectricvt.com/incentives/vermont-state-incentives#mileagesmart](https://www.driveelectricvt.com/incentives/vermont-state-incentives#mileagesmart)

eBike Incentives

Copy: In the market for an eBike? The State of Vermont has incentives up to \$800 for eligible electric bicycles.

Link: [driveelectricvt.com/incentives/vermont-state-incentives#ebikes](https://www.driveelectricvt.com/incentives/vermont-state-incentives#ebikes)

Replace Your Ride Incentive Program

Copy: Got a dunker? Get up to \$5,000 when you trade in your eligible old, gas-powered car for a new or used EV or prepaid debit card to use on clean transportation.

Link: [driveelectricvt.com/incentives/vermont-state-incentives#rvt](https://www.driveelectricvt.com/incentives/vermont-state-incentives#rvt)

Translated materials

Stacked Incentive Example

	New 2023 Chevrolet Bolt 259 Mile Range	
	Standard Incentive	< \$60k Income Incentive
Starting Price	\$26,500	\$26,500
Federal Tax Credit	-\$7,500	-\$7,500
State EV Incentive	-\$2,500	-\$5,000
State Replace Your Ride	-\$2,500	-\$5,000
Utility Incentive (varies)	-\$2,200	-\$3,200
Price after Incentives	\$11,800	\$5,800

Dealer point-of-sale now option available

Requires scrapping a 10+ year old vehicle

DEV Incentive Calculator

Your Utility

Vehicle Type

Car Make

Tax Filing Status

Adjusted Gross Income [†]

[†] Adjusted Gross Income can be fo

- Select one --
- 0 - \$60,000
- \$60,001 - \$75,000
- \$75,001 - \$90,000**
- \$90,001 - \$100,000
- \$100,001 - \$112,500
- \$112,501 - \$125,000
- \$125,001 - \$150,000
- \$150,001 - \$225,000
- \$225,001 - \$300,000
- \$300,001 +

Estimated Utility Incentive: **\$750 - 1,050 ***

** Bonus of \$300 available to income-qualified purchasers. Check your utility's website to see if you are eligible.*

Estimated State Incentive: **\$5,000**

Estimated Federal Incentive: **\$7,500**

Estimated Total Incentive: **\$13,250 - 13,550**

Additional automaker or dealership incentives may be available. Check with your dealership to learn more.

Trading in your old car? Get an additional incentive up to \$5,000 through the Replace Your Ride incentive program.

Reflects current amounts and eligibility

Reflects IRA income eligibility

DEV Technical Assistance

- Consumers
 - Incentive advice and support
 - EV charging information
- Businesses and municipalities
 - EV charging support
 - Fleet vehicle transitions
 - Coordination with electric utilities
- Multifamily charging
 - Supporting State of Vermont funding programs
- Federal funding opportunities
 - Assisted VTrans in developing NEVI fast charging plan for designated highway corridors and CFI grant application
 - Additional State EV charging planning activities anticipated in 2024 to support additional federal grant applications



Electrification of Transit Vehicles

- VEIC provides consultative services to VTrans' Public Transit Section to support implementation of the VTrans Zero-Emission Transit Plan
- Technical assistance provided to VTrans and VT transit providers includes:
 - Grant writing
 - Planning for EV chargers & support for installation
 - Equipment procurement support
 - Vendor engagement
 - Managed charging strategies
 - Coordination with VT utilities
 - Evaluation of vehicle performance



Photo credit: VTrans

Transportation Emission
Sources and EV Trends

Policies and Programs

Drive Electric Vermont

**Efficiency Vermont
Programs**

Future Considerations

Energy Efficiency Modernization Act

Energy Efficiency Modernization Act

Act 151 of 2020 and
Act 44 of 2023



EVT Transportation Background

2020 legislation enabled Efficiency Vermont transportation pilot

- Allows Efficiency Vermont and Burlington Electric Department to implement programs, measures, and services that **reduce GHG emissions** in the **thermal energy or transportation sectors**, or both
 - Up to **\$2 million*** per year
 - Must have nexus with **electricity** usage
 - Must be **additive/complementary** to existing efforts
 - Initial pilot **2021-2023**
- Efficiency Vermont EEMA **Transportation Market Transformation** program focus areas:
 - **EV supply chain development**
 - **EV consumer awareness and education**
- Plan was approved by VT Public Utilities Commission and launched in late 2021
- *Act 44 (passed in 2023) extended pilot another 3 years, PUC currently considering proposed 2024-2026 budgets and activities*

**Transportation program comprises ~50% of overall EEMA budget, with the remainder supporting a low-income thermal electrification pilot*

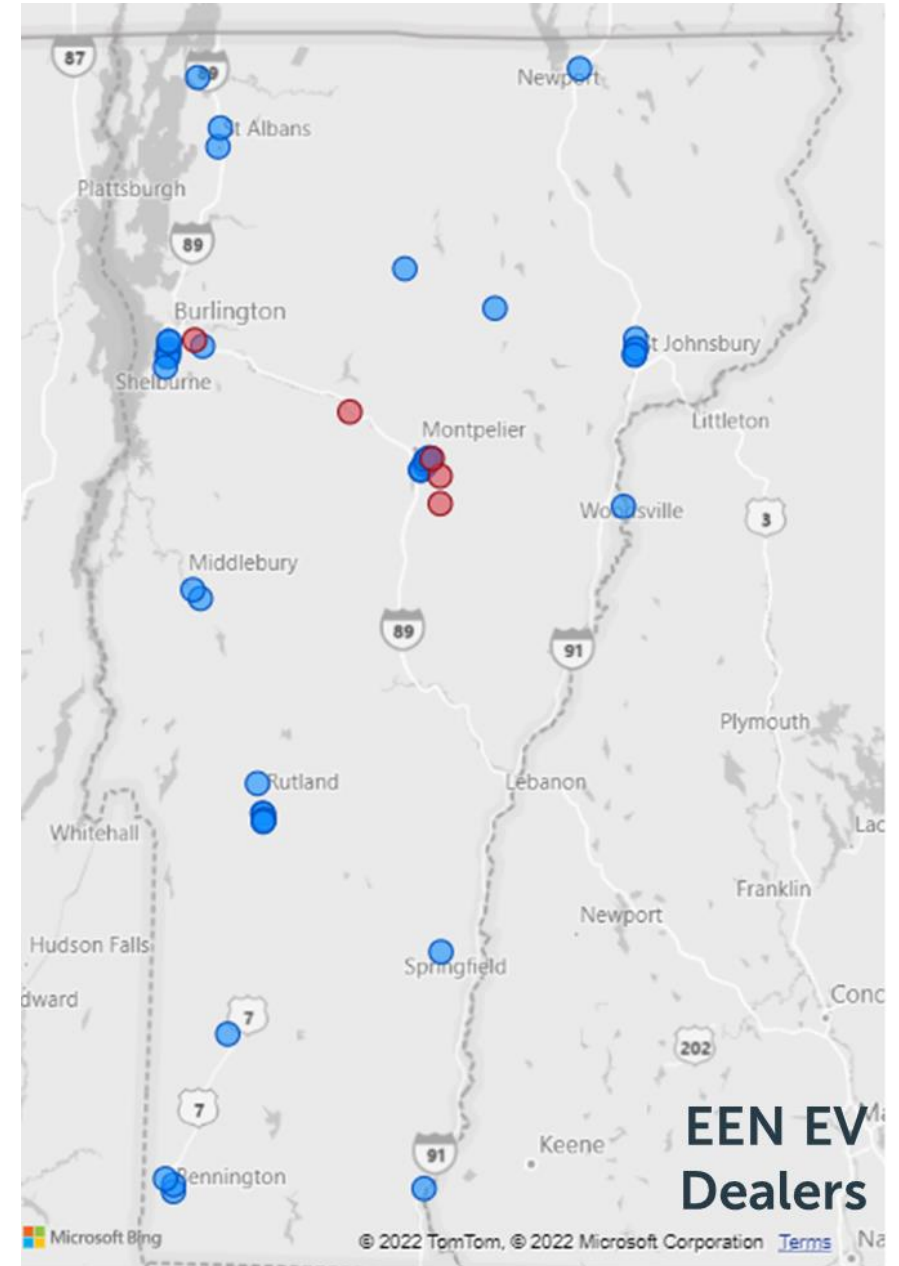
<https://legislature.vermont.gov/bill/status/2024/S.137>



EV Dealer Program

Support the adoption of plug-in EVs across Vermont by creating a network of new and used car dealers committed to EV promotion & consumer education

- Pilot program offered in conjunction with statewide EV education campaign
- 51 participating dealers representing 12 counties
 - 46 new car dealerships (NCD)
 - 5 used car dealerships (UCD)
- Program benefits include funding for EV infrastructure (charging, tools), dealer/salesperson incentives, training and education, point of sale/marketing materials and promotional support



Dealer Type ● NCD ● UCD

2021-2023 Program Results

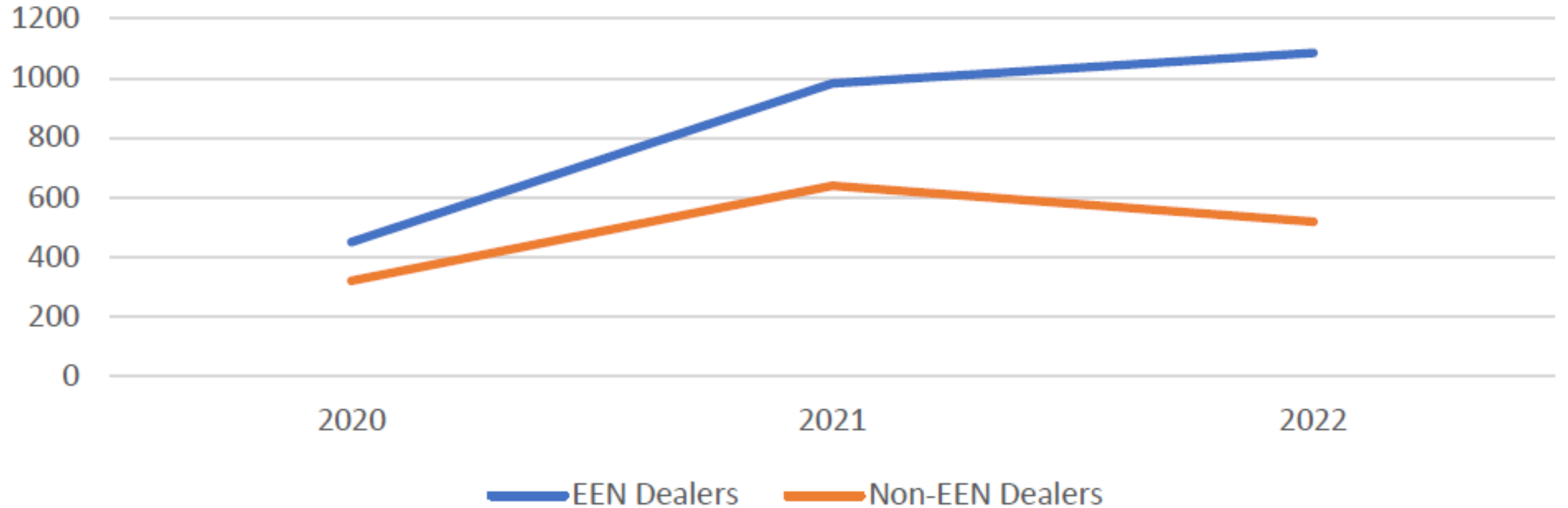
- **51** EEN EV Dealers
- **112** sales staff trained
 - 41 EEN EV Dealers represented
 - 18 EV Sales Training sessions offered (in-person and virtual)
- **40** dealers have accessed program sales incentives
- **30** EV readiness (infrastructure) projects supported
 - 21 charging station projects
 - 7 EV service tools & equipment projects
 - 2 OEM EV certification project
- **1,246** EVs supported



DCFC at an EEN EV Dealership

EV Sales at EEN Dealers

Annual EV Sales in Vermont



EV Consumer Awareness Campaign

Statewide, multi-channel campaign (2020-2023) promoting Drive Electric Vermont

Key Activities

- Ads tailored to every step of an EV consumer's journey, from awareness to consideration and decision-making (TV, radio, community news, digital, streaming, social, bus wraps)
- Dealer Point of Sale materials
- Educational blogs & website tools
 - [EV comparison tool](#) – compare fuel efficiency, available incentives, and total cost of ownership
- [EV Research](#) on awareness, car-shopping behaviors and preferences



Campaign Performance

- Website Users: 171% increase since start of campaign
 - Sessions: 172% increase
 - Pageviews: 174% increase
 - Traffic Sources: 57% advertising (incl. Point of sale materials), 30% organic search, 7% partners/referrals, 6% social media

Drive
Electric
Vermont

EVT – 2024 and Beyond

EEMA 2024-2026 Proposal focuses on filling gaps in the market

- Shift Consumer Awareness away from broad channels (such as TV) to targeted digital advertising and direct in-person engagement, especially in low-EV adoption areas
- Understand and help support the unique needs of Used Car Dealerships and bolster the supply chain for used EVs
- Support current participating dealerships in complying with new state and federal requirements
- EVT would continue to devote ~50% (\$1M/year) of the overall EEMA budget to Transportation Market Transformation programs

The PUC is currently reviewing EEMA proposals from EVT and Burlington Electric Dept, with a ruling expected by the end of January 2024

Transportation Emission
Sources and EV Trends

Policies and Programs

Drive Electric Vermont

Efficiency Vermont
Programs

Future Considerations

**What's next to
drive progress**

Summary / Next Steps

1. Vehicle market is changing rapidly. EV supply is increasing, but affordability remains challenging.
2. California emission programs may be impacted by 2024 elections or other legal issues.
3. Energy Efficiency Modernization Act supports EV market growth in two key areas. Consistent engagement with the supply chain is critical to maintaining momentum and building consumer confidence.
4. Medium and heavy duty EVs are still nascent in the marketplace.
5. Growing opportunities for EVs to support climate resiliency.
6. While most Vermont EV drivers charge at home, more public charging is needed and reliability must improve.



**2024 Chevy Blazer EV
doesn't offer home
power backup yet, but
it's ready**



https://www.greencarreports.com/news/1141819_2024-chevy-blazer-ev-v2h-home-power-backup-gm-energy

Questions?



Dave Roberts

Managing Consultant, Drive Electric Vermont, VEIC

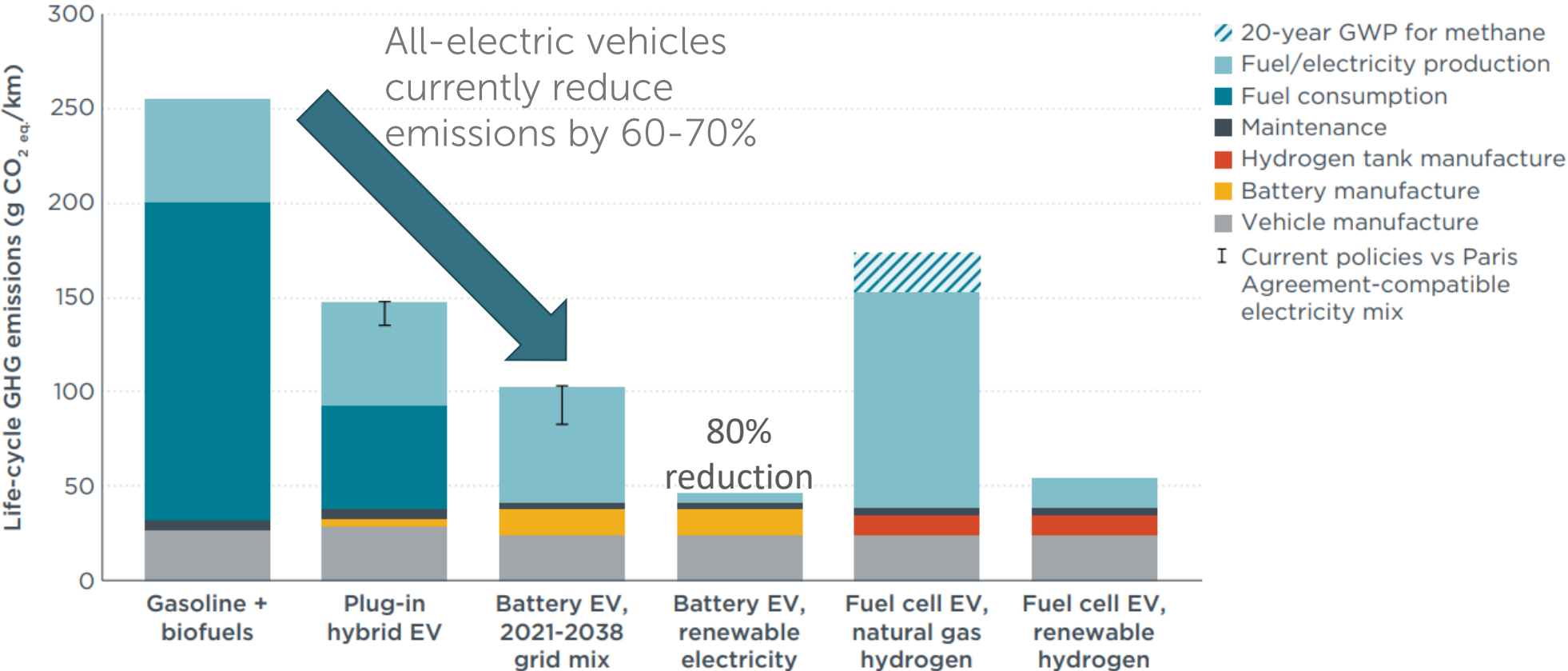
droberts@veic.org

20 Winooski Falls Rd, 5th Floor

Winooski, VT 05404

EV Emission Reductions

ICCT: 2021 Life-cycle GHG emissions of passenger cars registered in the United States



https://theicct.org/wp-content/uploads/2021/12/Global-LCA-passenger-cars-jul2021_0.pdf