



THE STATE OF ELECTRIC VEHICLES ON LONG ISLAND

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 DriveElectricLongIsland.org



Acknowledgements

Drive Electric Long Island is a coalition of stakeholders dedicated to encouraging and accelerating the adoption of electric vehicle usage and charging infrastructure on Long Island through advocacy, education and outreach efforts to local municipalities, companies, residents and industry stakeholders.

Led by the U.S. Green Building Council – Long Island Chapter (USGBC-LI), the coalition includes a broad range of electric vehicle (EV) stakeholders on Long Island including PSEG Long Island, Farmingdale State College, Suffolk County, Suffolk County Community College, Sustainability Institute at Molloy University, Sierra Club, NY League of Conservation Voters, Emerald Alternative Energy Solutions, Long Island EVs, Cameron Engineering, LI Regional Clean Energy Hub as well as other Long Island municipalities, automakers, car dealerships, industry associations, business leaders and EV enthusiasts.

This 2024 State of Electric Vehicles on Long Island is the result of the hard work of many people:

At the USGBC-LI, Rosemary Mascali, Chair of the Drive Electric Long Island Education and Outreach Subcommittee put together most of the report with the helpful ideas, comments and revisions of many other coalition members including Beth Fiteni, Jacob Kraniak, and Ron Gulmi.

This report could not have been created without the wealth of electric vehicle statistics and tools provided by New York State Energy Research and Development Authority (NYSERDA) including the Drive Clean Rebate Program dashboard and the EValueNY tool that compiles New York State statistics on electric vehicle registrations and charging infrastructure. Links to these sites can be found in Appendix D.

The State of Electric Vehicles on Long Island

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State of Electric Vehicles on Long Island

It is well known that Long Islanders are car dependent. According to the American Community Survey (ACS), 72% of Long Islanders drive alone to work – 66% in Nassau County and 78% in Suffolk County. It's also well known that this dependency comes at a cost in terms of long commute times due to traffic congestion, poor air quality due to high ozone levels, and high greenhouse gas emissions. Transportation is a major source of greenhouse gas emissions on Long Island. In fact, 28% of Long Island's carbon emissions are from transportation as identified in 2013 in the Cleaner, Greener Long Island Regional Sustainability Plan.

While increasing mobility options other than driving, such as mass transit, carpooling, bicycling, and walking are important strategies to reduce our overall car dependency, perhaps the most realistic strategy to reaching our air quality and greenhouse gas goals is to aggressively move to electrify transportation.

Drive Electric Long Island is a coalition of electric vehicle stakeholders formed in 2018 and dedicated to encouraging and accelerating the adoption of electric vehicle usage and charging infrastructure on Long Island through advocacy, education and outreach efforts to local municipalities, companies, residents, and industry stakeholders. Since our first report published in September 2019, EV registrations have quadrupled from 12,833 to 51,131 at year end 2023. On January 17, 2024, we celebrated reaching the milestone of 50,000 EVs on the road with an EV Parade from Melville to the Long Island Welcome Center.

This report details the current state of electric vehicles and supporting charging infrastructure adoption on Long Island including our findings based on detailed statistics on electric vehicle registrations and charging stations on Long Island. Appendix A includes Drive Electric Long Island's mission, goals, and planned strategies. Appendix B provides basic information on electric vehicles and charging stations to provide a base level of knowledge to understand our findings. Appendixes C and D provide information on available rebates and incentives for electric vehicles and charging stations, and other electric vehicle information resources.

I – Summary of Key Findings

1. **Long Island is New York State’s largest market for electric vehicles.**

Long Island has almost 3 million residents and one million households, with 2.2 million registered vehicles - 2.2 vehicles per household in Suffolk County and 2.1 vehicles per household in Nassau County. 21% of all light-duty vehicles in NYS are registered on Long Island.

2. **Long Island is a leader in electric vehicle adoption in New York State.**

With 51,332 electric vehicles registered as of 12/31/23, Long Island represents 28% of the NYS total of 197,358 electric vehicles, despite being only 15% of the state’s population. Registered electric vehicles on the road on Long Island grew 45% from 35,426 at year end 2022 to 51,131 at year end 2023. Among all registered electric vehicles, 62% are battery electric vehicles and 38% are plug-in hybrid vehicles.

3. **Battery Electric vehicle models continue to be the most popular on Long Island led by the Tesla Model Y and Tesla Model 3.**

The top two battery electric models on Long Island are the Tesla Model Y (10,746) and the Tesla Model 3 (8,152). The top two plug-in hybrid models are the Jeep Wrangler plug-in hybrid (3,272), and the Toyota Prius Prime (2,915). The most popular EV brands on Long Island are Tesla (44.5%), Toyota (11.2%) and Jeep (9.5%).

4. **EV Registrations in the last six months of 2023 rapidly accelerated in many Long Island communities.**

On Long Island, EV original registrations as a percent of total original registrations have grown significantly. While the percent of all registered light duty vehicles on the road today on Long Island that are electric powered is still modest at 2.32%, the percent of Long Island EV original registrations in the last six months of 2023 grew to almost 10%, with 20 Long Island communities exceeding 15%.

5. **Long Island dealers submitted 12,135 NYS Rebates in 2023, up 27% from 2022.**

Long Island dealers submitted 12,135 NYS rebate requests in 2023, 6,757 in Nassau County and 5,378 in Suffolk County, of which 66% were battery electric vehicles and 34% were plug-in hybrids.

6. In 2023, 70 electric vehicle models from 26 brands were sold on Long Island.

As measured by the number of NYS EV rebates submitted by electric vehicle manufacturers and dealers, in 2023, Tesla vehicles continued to be the most popular EVs sold on Long Island with 49% of all EV rebates submitted in 2023. Jeep plug-in hybrid vehicles were also popular on Long Island with 21% of all EV rebates submitted in 2023. The most popular EV models on Long Island were the Tesla Model Y, Tesla Model 3, the Jeep Wrangler and Jeep Grand Cherokee plug-in hybrids, the Toyota RAV4 Prime plug-in hybrid and Tesla Model X.

7. In 2023, non-Tesla dealer rebates requests on Long Island grew 84%, led by Jeep and Toyota dealers.

In 2023, rebate requests from non-Tesla dealers grew 84% from 3,366 in 2022 to 6,180 in 2023. Sales were dominated by Jeep Wrangler and Jeep Cherokee plug-in hybrid vehicles and Toyota Prius Prime and RAV4 Prime plug-in hybrids. Fourteen dealers submitted over 100 EV rebates requests for vehicles registered in Nassau and Suffolk.

The non-Tesla dealerships with greater than 100 rebates submitted included Westbury Jeep (484), Smith Haven Jeep (319), Garden City Jeep (240), Browns Jeep (234), Security Jeep (229), Atlantic Jeep (219), Town & Country Jeep (201), East Hills Jeep (194), Habberstad BMW of Bayshore (182), Smithtown Toyota (177), Sunrise Toyota (144), Millenium Toyota Scion (126), Riverhead Toyota (123) and 112 Hyundai (102).

8. Public DC Fast Charge and Type 2 electric vehicle charging ports have been expanding on Long Island.

There has been a continued steady increase in the availability of both Type 2 and DC Fast Charge public electric vehicle charging infrastructure on Long Island. Significantly, the announcement by all manufacturers to support the Tesla NACS charging standard will greatly increase access to public charging for non-Tesla electric vehicles on Long Island.

Overall, the state of electric vehicles on Long Island continues to be very promising. The increased variety of electric vehicle models, attractive incentives, increased awareness of the benefits of electric vehicles and expanding EV infrastructure all point to another high growth year in 2024.

II. Electric Vehicle Statistics for Long Island and NYS

Using data from the New York State Department of Motor Vehicles (DMV), NYSERDA developed the tool EValuateNY that compiles statistics on the electric car market, including where vehicles are registered and which make and models are most popular. EValuateNY also incorporates additional data from U.S. Department of Energy, U.S. Census Bureau, and other sources to provide information about demographics of communities with high electric car ownership and where charging stations are located. In addition, NYSERDA's Drive Clean Rebate program dashboard includes aggregated information on which models and technologies are most popular in the program, when New Yorkers claimed their rebates, and which car dealers are making the most sales, among other statistics.

This section includes statistics that were largely derived from the use of the above tools:

1. Long Island and NYS population and vehicle registrations
2. Long Island and NYS annual electric vehicle registrations
3. Long Island electric vehicles on the road by model
4. Long Island EV Registrations as a percent of total registrations
5. Long Island electric vehicle 2023 NYS rebates
6. Long Island electric vehicle 2023 NYS rebates by model
7. Long Island top EV dealerships submitting NYS rebates in 2023
8. Long Island Public EV Charging Infrastructure

1. Long Island and NYS Population and Vehicle Registrations

Long Island has almost 3 million residents living in almost one million households. These households collectively have 2.2 million registered vehicles – an average of 2.4 vehicles per household in Suffolk County and 2.2 vehicles per household in Nassau County compared to only 1.4 per household in New York State. As such, Long Island represents the largest market for electric vehicles in New York State. In fact, 21% of all light-duty vehicles in New York State are registered on Long Island.

Vehicle Registrations

YE 2023	NYS	Nassau	Suffolk	Total LI	% of NYS
Light-Duty Vehicles	10,385,730	992,223	1,206,613	2,198,836	21%

Population, Households, Cars per person and Cars per household

2023	NYS	Nassau	Suffolk	Total LI	% of NYS
Population	19.57 million	1.37 million	1.52 million	2.89 million	15%
Households	7.60 million	.45 million	.51 million	.96 million	14%
Cars per person	.53	.72	.79	.76	143%
Cars per household	1.4	2.2	2.4	2.3	164%

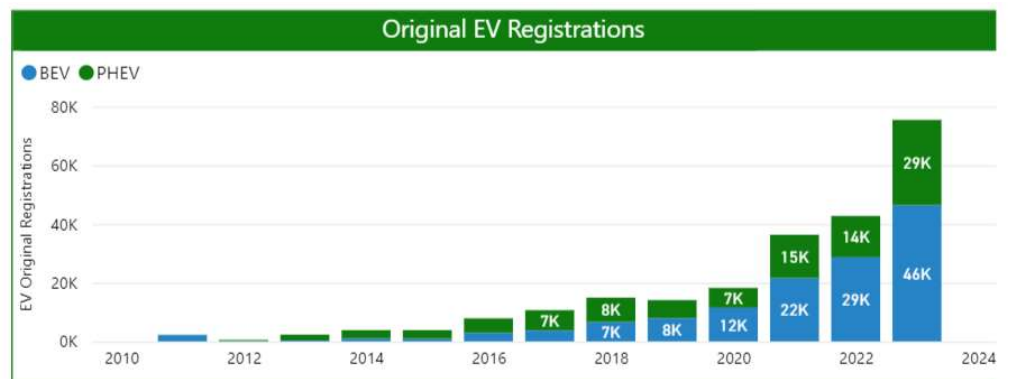
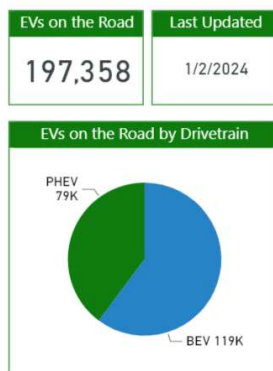
Beyond the sheer number of light-duty passenger vehicles and the average number of 2.3 vehicles per household, several other unique characteristics make Long Island a good market for electric vehicles, including 82% single-family homes allowing for convenient and economical home charging. In addition, 80% of Long Islanders live and work on Long Island and because Long Island is geographically compact, the average distance travelled is less than 50 miles per day, a range that is easily handled by today’s electric vehicles.

2. Long Island and New York State Annual Electric Vehicle Registrations

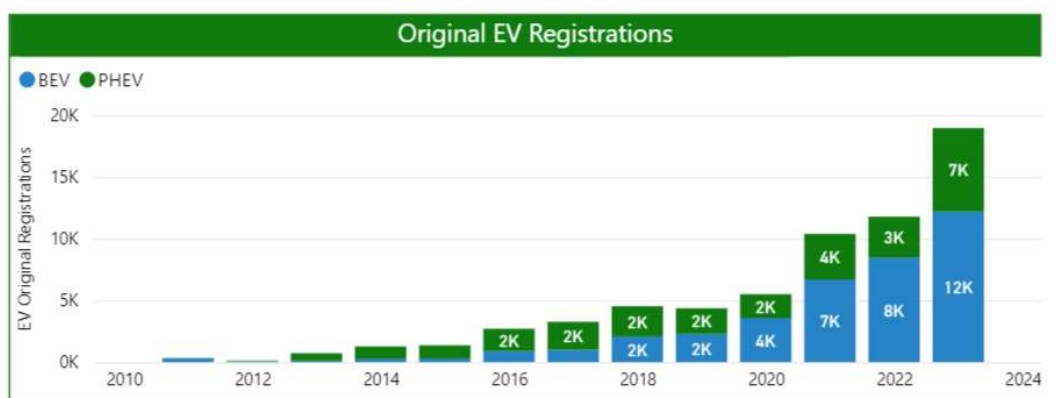
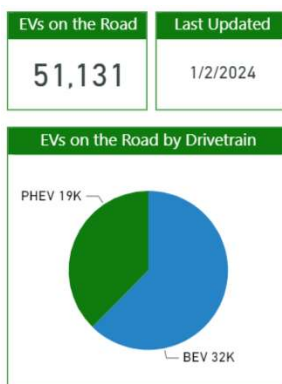
Long Island has been a leader in electric vehicle adoption in New York State, with electric vehicles registrations showing steady growth since 2012. With a total of 51,131 electric vehicles registered as of 12/31/23, Long Island represents 26% of the New York State total of 197,358 electric vehicle registrations, despite being only 15% of the state’s population, and having 21% of the state’s registered light-duty vehicles. Both Long Island and New York State experienced significant growth in EVs original registrations in 2023.

While most electric vehicles on the road on Long Island continue to be battery electric vehicles, in 2023, the percentage of plug-in hybrid vehicle original registrations grew from 27% in 2022 to 37% in 2023.

New York State Electric Vehicle on the Road by Technology and Original EV Registrations by Year



Long Island Electric Vehicle on the road by Technology and Original Registrations by Year

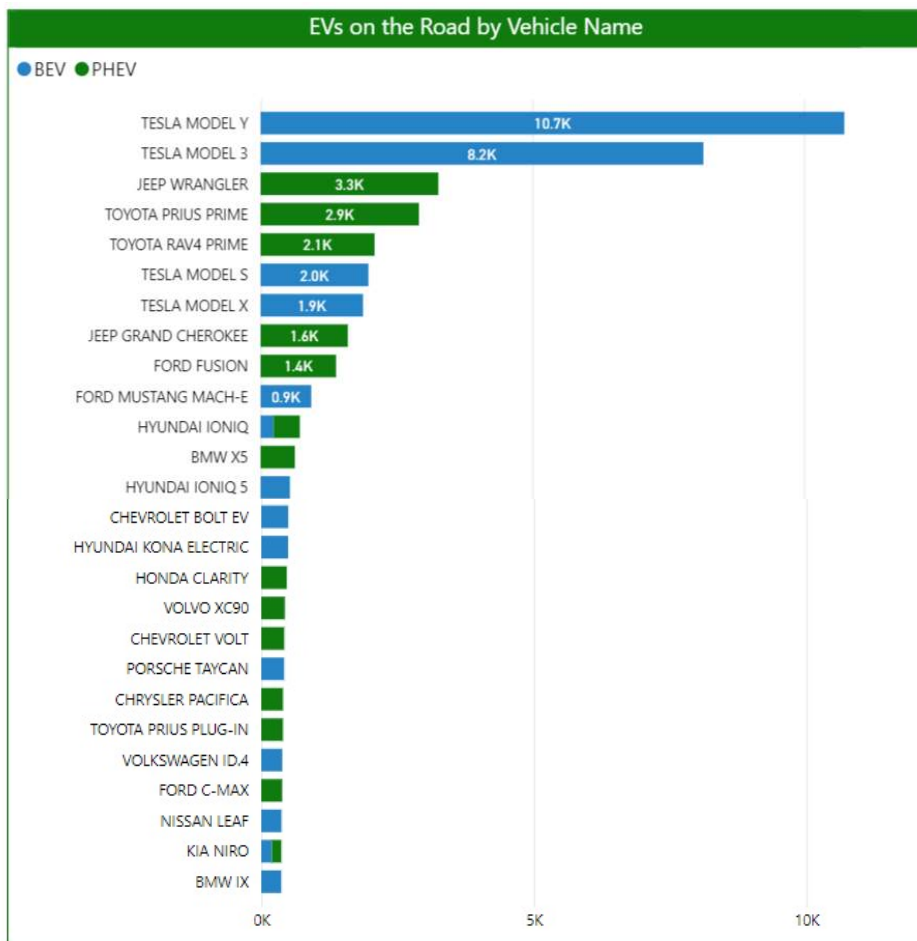


3. Long Island Electric Vehicles on the Road by Model

The top two battery electric models on Long Island are the Tesla Model Y (10,746) and the Tesla Model 3 (8,152). The top two plug-in hybrid models are the Jeep Wrangler plug-in hybrid (3,272), and the Toyota Prius Prime (2,915).

The most popular EV brands on Long Island are Tesla (44.5%), Toyota (11.2%) and Jeep (9.5%).

Long Island EVs on the Road



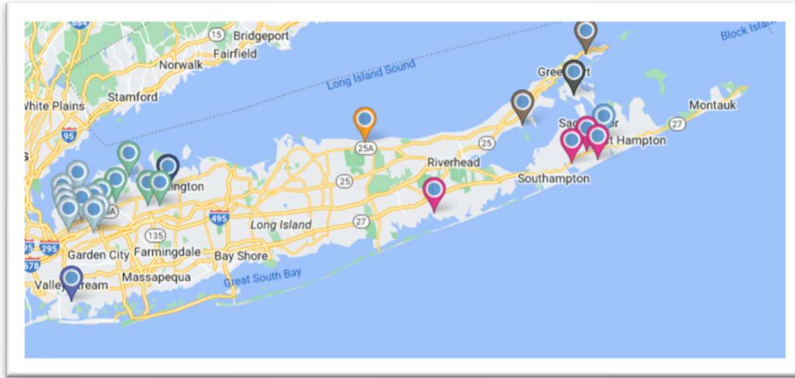
4. EV Registrations on Long Island as a percent of Total Registrations

On Long Island, EV registrations as a percent of total registrations have grown significantly. While EV market share is still modest at 2.32%, it grew over 40% in 2023.

Following is a list of Long Island towns and cities ranked by percent of EVs on the road. The Long Island towns with the highest EV market share are North Hempstead, Shelter Island, Huntington, East Hampton, and Oyster Bay.

	Town	EVs on the Road	Light-Duty Vehicles on the Road	% EVs on Road	YTY Growth in EV Market Share
1	North Hempstead	7,510	177,882	4.2%	47.2%
2	Shelter Island	107	2,888	3.7%	47.6%
3	Huntington	5,310	162,178	3.3%	35.9%
4	East Hampton	842	26,210	3.2%	29.2%
5	Oyster Bay	7,833	245,494	3.2%	44.7%
6	Southampton	1,863	63,406	2.9%	28.1%
7	Southold	531	18,776	2.8%	21.4%
8	Smithtown	2,623	105,973	2.5%	37.7%
9	Brookhaven	7,366	352,583	2.1%	24.3%
10	Hempstead	9,931	524,421	1.9%	57.5%
11	Riverhead	745	40,925	1.8%	20.8%
12	City of Glen Cove	378	20,871	1.8%	48.1%
13	City of Long Beach	373	22,442	1.7%	55.4%
14	Islip	3,751	275,156	1.4%	34.3%
15	Babylon	1,948	158,308	1.2%	47.6%
	Total Long Island	51,131	2,198,836	2.32%	40.18%

The growth of electric vehicles on Long Island is accelerating. In the last six months of 2023, EV original registrations on Long Island have grown to almost 10% of all total original registrations, with 20 Long Island communities exceeding 15% of total original registrations.



Communities with the fastest growth in electric vehicles registrations over the last six months of 2023

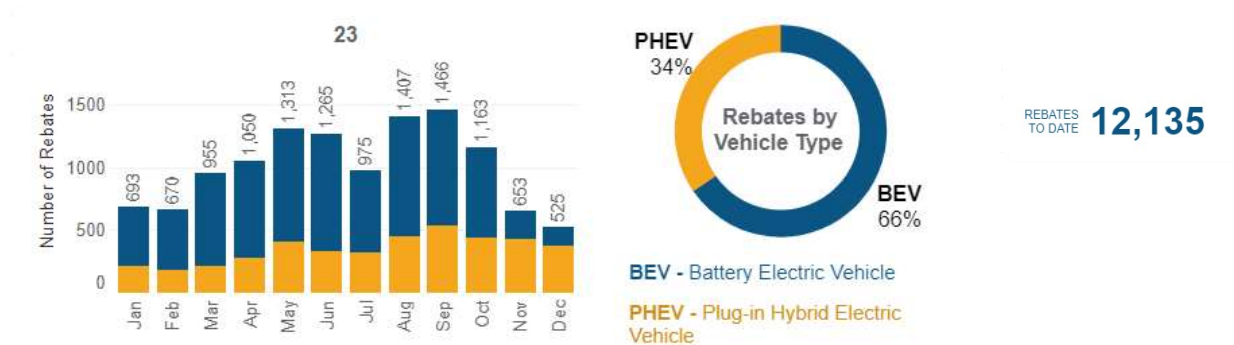
Community	EV share in last 6 months of 2023
Mill Neck	25.64%
Kings Point	24.93%
Great Neck Village	22.97%
Woodbury	20.36%
Lake Success	20.00%
Roslyn	19.98%
Water Mill	19.39%
Syosset	19.31%
Cold Spring Harbor	19.18%
Roslyn Heights	18.82%
New Suffolk	18.18%
Greenvale	17.78%
Sagaponack	17.78%
Bridgehampton	17.44%
Manhasset	17.02%
Wainscott	17.02%
Remsenburg	16.67%
Brookville	16.36%
Shoreham	16.08%
Great Neck Plaza	15.98%
Albertson	15.73%
Orient	15.38%
Shelter Island	15.38%
Port Washington	15.36%
Woodmere	15.15%

5. Long Island Electric Vehicle 2023 NYS Rebates

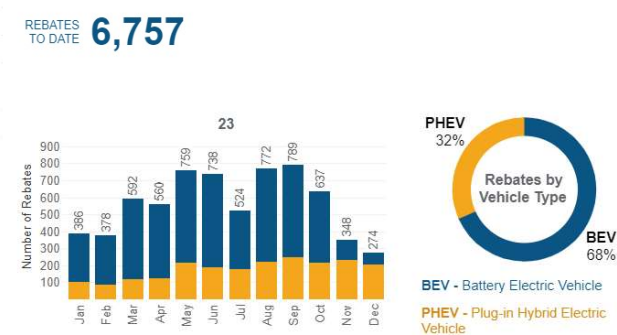
Long Island dealers submitted 12,135 NYS rebate requests in 2023, 6,757 in Nassau County and 5,378 in Suffolk County, of which 66% were for battery electric vehicles and 34% for plug-in hybrids. In Nassau County, 68% of the rebates were for battery electric vehicles slightly more than in Suffolk County where 62% of the rebates were for battery electric vehicles.

(Note: As of the date of this report, Tesla had not submitted their rebate requests for the months of November and December of 2023 resulting in an estimated undercount of about 1,200 rebates for Long Island: 700 in Nassau County and 500 in Suffolk County. The following graphs do not account for this undercount.)

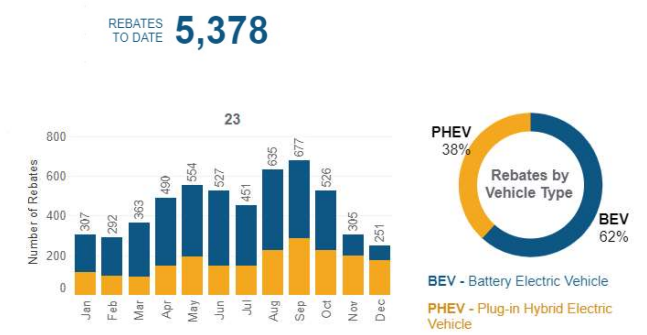
Total Long Island 2023 EV Rebates



Nassau County 2023 EV Rebates



Suffolk County 2023 EV Rebates



6. Long Island Electric Vehicle 2023 NYS Rebates by Model

In 2023, 70 electric vehicle models from 26 brands were sold on Long Island. As measured by the number of NYS EV rebates submitted by electric vehicle manufacturers and dealers, Tesla vehicles continued to be the most popular EVs sold on Long Island with 49% of all EV rebates submitted in 2023. Jeep plug-in hybrid vehicles were also popular on Long Island with 21% of all EV rebates submitted in 2023. The most popular EV models on Long Island were the Tesla Model Y, Tesla Model 3, the Jeep Wrangler and Jeep Grand Cherokee plug-in hybrids, the Toyota RAV4 Prime plug-in hybrid and the Tesla Model X.

Rebates by Make and Model		
Tesla	Model Y	3,722
	Model 3	1,749
	Model X	304
	Model S	180
Jeep	Wrangler	1,571
	Grand Cherokee	951
Toyota	RAV4 Prime	696
	Prius Prime	209
	bZ4X	152
BMW	BMW i4	184
	BMW iX	176
	X5	112
	330e	47
	530e	30
	i7	22
	i5	11
	XM	11
Hyundai	Hyundai Ioniq 5 ..	184
	Santa Fe	96
	Ioniq 6	73
	Kona Electric	59
	Tucson	55
	GV70	12
	Genesis Electrifi..	3
	Hyundai Ioniq 5 ..	3
Kia	Niro	104
	Kia EV6	52
	Sportage	38
	Sorento	20
Ford	Mustang Mach-E	133
	F-150 Lightning	40
	F-150 Lightning ..	17
	Escape	15
Chevrolet	Bolt	191
	Blazer	2
Volkswagen	ID.4	163
Audi	Audi Q4 e-tron	47
	e-tron	30
	Q5	26
	e-tron S Sportba..	5
	e-tron S	1

Rebates by Make and Model		
Volvo	XC40	27
	XC60 T8	24
	Volvo C40	20
	XC90 T8	20
	S60	15
	V60	1
Mercedes-Benz	EQE	37
	Mercedes EQS	27
	EQB	18
	S580e 4M	1
Lexus	Lexus NX450h+	41
	RZ 450e	33
Chrysler	Pacifica	54
Nissan	ARIYA	32
	LEAF	20
Genesis	GV60	48
Subaru	Solterra	32
	Crosstrek PHEV	13
Cadillac	Lyriq	29
Mitsubishi	Outlander	26
Alfa Romeo	Tonale	24
MINI	Cooper	24
Dodge	Hornet	23
Mazda	CX-90	17
Lincoln	Lincoln Corsair ..	10
	Aviator	2
Polestar	Polestar 2	11
Porsche	Taycan	9
	Cayenne E-Hybri..	1
Grand Total		12,135

7. Long Island Top EV Dealerships Submitting NYS Rebates in 2023

In 2023, rebate requests from non-Telsa dealers grew 84% from 3,366 in 2022 to 6,180 in 2023. Over 80 dealers on Long Island sold at least 10 electric vehicles, reflecting the wider availability of electric vehicle models and the growing demand.

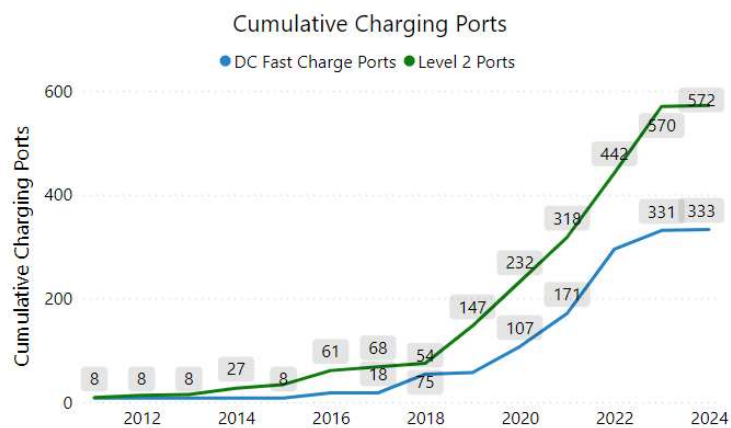
Non-Tesla sales were dominated by Jeep Wrangler and Jeep Cherokee plug-in hybrid vehicles and Toyota Prius Prime and RAV4 Prime plug-in hybrids. Fourteen dealers submitted over 100 EV rebates requests for vehicles registered in Nassau and Suffolk.

The non-Tesla dealerships with greater than 100 rebates submitted included Westbury Jeep (484), Smith Haven Jeep (319), Garden City Jeep (240), Browns Jeep (234), Security Jeep (229), Atlantic Jeep (219), Town & Country Jeep (201), East Hills Jeep (194), Habberstad BMW of Bayshore (182), Smithtown Toyota (177), Sunrise Toyota (144), Millenium Toyota Scion (126), Riverhead Toyota (123) and 112 Hyundai (102).

2023 Rebates by Dealer		
Tesla Motors New York LLC	5,955	
Westbury Jeep Chrysler Dodg..	484	
Smith Haven Chrysler Jeep Do..	319	
Garden City Jeep Chrysler Do..	240	
Browns Jeep Eagle Chrysler P..	234	
Security Dodge Chrysler Jeep ..	229	
Atlantic Chrysler Jeep Dodge ..	219	
Town & Country Jeep Chrysler..	201	
East Hills Chrysler Jeep Dodge	194	
Habberstad BMW of Bay Shore	182	
Merrick Jeep Chrysler Dodge ..	182	
Rallye BMW	180	
Smithtown Toyota	177	
Sunrise Toyota	144	
Millennium Toyota Scion	126	
Riverhead Toyota	123	
112 Mazda Nesenger, Mazda 1..	102	
Westbury Toyota	90	
BMW of Freeport	89	
Advantage Hyundai	84	
Toyota of Massapequa	82	
Atlantic Hyundai	78	
Brooklyn Chrysler Jeep Dodge..	78	
Centereach Hyundai	65	
Mercedes-Benz of Huntington	65	
Huntington Jeep Chrysler, Inc	62	
Millennium Hyundai	61	
Penn Toyota	57	
South Shore Kia	57	
Atlantic Toyota	55	
South Shore Chrysler Jeep Do..	54	
Competition BMW of Smithtown	51	
North Shore Chevrolet of Smit..	50	
Huntington Toyota	49	
Sunrise Toyota North	49	
Smithtown Kia	45	
Kia of Huntington	44	
Advantage Toyota	42	
Volkswagen Of Huntington	42	
BMW of Bayside	41	
Central Avenue Chrysler	39	
Audi of Huntington	38	
Route 110 Hyundai Route 110 ..	38	
Hassett Ford Lincoln Mercury L..	36	
Empire Volvo Cars Smithtown	35	
Riverhead Bay Motors	34	
Audi of Smithtown	33	
South Shore Hyundai	33	
Riverhead Nissan	21	
Stoler Lexus	21	
Ray Catena BMW of Westches..	20	
Volvo Cars of Queens	18	
Westbury Imports LLC	17	
Chevrolet of Huntington	16	
Rallye Motors	16	
Atlantic Kia	15	
Ford of Smithtown	15	
Millennium Chevrolet	15	
Competition Subaru of Smith..	14	
East Hills Volkswagen of Sayvi..	14	
Paul Conte Cadillac	14	
Huntington Ford Lincoln	13	
Platinum Volkswagen LLC	13	
Sunrise Volkswagen	13	
Volvo Cars of Huntington	13	
Audi Great Neck	12	
Chrysler Dodge Jeep Ram of C..	12	
Mercedes-Benz of Rockville C..	12	
Otis Ford Inc	12	
Porsche Amityville	12	
Sayville Ford	12	
United CDJR LLC	12	
Crown Ford Inc.	11	
Eagle Chevrolet of Riverhead	11	
Habberstad MINI	11	
Porsche Manhattan	11	
Arnold Chevrolet Buick	10	
Autoworld Kia	10	
Empire Chevrolet Of Hicksville	10	
MINI of Freeport	10	
Porsche of Southampton	10	
Riverhead Ford Lincoln Buick ..	10	
Hillside Toyota	9	
Nissan Of Garden City	9	
Bayside Volkswagen	8	
Generation Kia	8	
Lexus of Southampton	8	
Nissan 112 Sales Corp	8	
Nissan of Westbury	7	
Star Toyota of Bayside	7	
BMW of Mamaroneck	6	
East Hills Chevrolet of Freeport	6	
Ford Lincoln of Queens Boule..	6	
John Starks Kia	6	
Lucas Ford Lincoln Mercury Inc	6	
Orange County BMW	6	

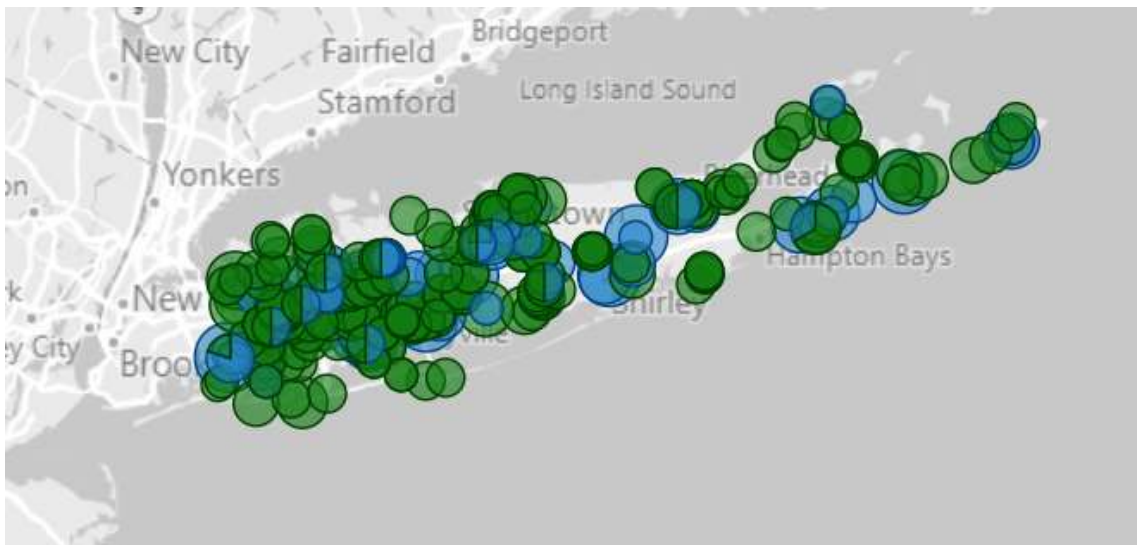
8. Long Island Public EV Charging Infrastructure

There has been a continued increase in the availability of both Type 2 and DC Fast Charge public electric vehicle charging infrastructure on Long Island. In addition, the adoption of the Tesla NACS standard by virtually all electric vehicle manufacturers will open the Tesla DCFC locations to all types of electric vehicles, greatly expanding the availability of DC Fast Charge ports to owners of non-Tesla vehicles. This will be particularly important for residents of multi-family dwellings without easy access to home charging.



Source: <https://atlaspolicy.com/evaluateny/>

Public Electric Vehicle Charging Stations on Long Island



Source: <https://atlaspolicy.com/evaluateny/>

Charging Level ● DC Fast Charge Ports ● Level 2 Ports

Electric Vehicle Charging Stations on Long Island by County and Type

	Level 2 Ports	Level 2 Locations	DC Fast Charge Ports	DC Fast Charge Locations
Nassau County	213	87	117	21
Suffolk County	359	172	216	49
Long Island	572	259	333	70

Electric Vehicle Charging Station Density on Long Island and New York State

Type	NYS Charging Station Density	Long Island Charging Station Density
EVs per Level 2 Port	21.86	92.63
BEVs per DC Fast Charge Port	91.16	99.78

Charging for Multi-Unit Dwellings

Long Island’s one million housing units are predominantly single-family dwellings with 82% of housing units being single family homes. Charging electric vehicles for these households is both convenient and inexpensive as EV owners can either charge with a Type 1 120V outlet or a Type 2 208V/240V charger and take advantage of PSEG LI Time of Use Rate plans for deeply discounted off peak electricity rates (as part of the Whole Home Time of Use Rate).

Despite this predominance of single-family homes, 180,000 households on Long Island are multi-unit dwellings without easy access to EV charging. These units include co-ops, condos and apartment rental properties.

To address the needs of this important market segment, Drive Electric LI recommends a multi-tiered charging strategy including the installation Community Direct-Current Fast Charger (DCFC) locations for fast charge capability, complemented with Type 1 and Type 2 charging on premise at condo, coop and rental property locations. This approach could minimize the cost of

installation and ongoing electricity using Type 1 and Type 2 charging for appropriate use cases yet providing easy access to DCFC fast charging when needed.

Drive Electric Long Island performed an in-depth analysis using census data and DMV vehicle registration data to identify Long Island communities with a higher percentage of multi-unit dwellings where gaps in DCFC service exist. The following ten communities were identified that would benefit from community DCFC stations to meet the future charging needs of their multi-family dwelling residents.

	Community	Town/City	% Single Family Homes	Estimated Number of Vehicles in Multi-Unit Dwellings
1	Patchogue / East Patchogue	Brookhaven	62%	13,000
2	City of Long Beach	Long Beach	44%	12,500
3	Huntington Station	Huntington	80%	10,300
4	City of Glen Cove	Glen Cove	57%	8,700
5	Rockville Centre	Hempstead	63%	6,700
6	North Amityville / Amityville	Babylon	68%	6,200
7	Uniondale	Hempstead	75%	4,200
8	Great Neck Plaza	North Hempstead	67%	3,700
9	Middle Island	Brookhaven	63%	3,700
10	Oakdale	Islip	71%	2,200

APPENDIX A - Drive Electric Long Island Mission and Goals

Goals

Drive Electric Long Island is a coalition of electric vehicle stakeholders dedicated to accelerating the adoption of electric vehicles and EV charging infrastructure on Long Island. The coalition goals are to:

- Support the goals of the Climate Leadership & Community Protection Act to reduce greenhouse gas emissions from 1990 levels by 40 percent by 2030, and no less than an 85 percent reduction by 2050, through the acceleration of the electric vehicle market toward the goal of 100% light duty zero-emission vehicle sales by 2035.
- Support the Multi-State ZEV Action Plan and enable New York State to meet the Zero-Emission Vehicle (ZEV) objective of 850,000 new ZEVs by 2025, which includes 178,500 new ZEVs for Long Island.

Mission

Drive Electric Long Island is dedicated to encouraging and accelerating the adoption of electric vehicle usage and charging infrastructure on Long Island through advocacy, education and outreach efforts to local municipalities, companies, residents, and industry stakeholders.

Led by the U.S. Green Building Council – Long Island Chapter (USGBC-LI), the coalition includes a broad range of electric vehicle (EV) stakeholders on Long Island including PSEG Long Island, Farmingdale State College, Suffolk County, Suffolk County Community College, Sustainability Institute at Molloy University, Sierra Club, NY League of Conservation Voters, Emerald Alternative Energy Solutions, Long Island EVs, Cameron Engineering, as well as other Long Island municipalities, automakers, car dealerships, industry associations, business leaders and EV enthusiasts. Our vision is to accelerate the adoption of electric vehicles and infrastructure on Long Island, both consumer and commercial, by addressing the key barriers to widespread adoption, including awareness, charging infrastructure and cost.

Strategies

Key priorities of the coalition include consumer outreach and education, increased public and workplace EV infrastructure, conversion of commercial fleets, and advocacy for EV friendly policy. The Coalition accomplishes this through the following activities:

- Regular meetings of the steering committee and subcommittees of key stakeholders including municipal administrators, local car dealerships, business leaders, PSEG Long Island, infrastructure providers, current EV owners and educational institutions, to offer ideas, provide demonstration vehicles, make introductions within the community and monitor progress.
- Evaluate existing codes, policies, and regulations to determine what is already in place to support EV adoption on Long Island, how these policies can be leveraged, and which new ones should be implemented.
- Build awareness by conducting EV 101 events and Ride and Drives to promote EV adoption, with each event type targeting a different group of participants.
- Establish strong relationships with local and regional dealerships.
- Coordinate with village, town and county planners and building departments to produce high impact EV infrastructure policies. Support the adoption of codes and standards for building codes that will accelerate infrastructure development.
- Collaborate with infrastructure manufacturers and network/software solutions to assist in promoting the various alternatives available.
- Function as a resource to educate and inform stakeholders regarding the different technologies, incentives, rebates and funding for infrastructure. Conduct informational sessions at existing infrastructure to increase awareness and understanding about the various infrastructure solutions.

Drive Electric Long Island will accelerate the growth of the electric vehicle market on Long Island by simultaneously leveraging and strategically coordinating all the components of success, resulting in improved air quality, reduced greenhouse gases, reduced transportation costs, and a strengthened utility grid.

APPENDIX B - Electric Vehicle and Charging Basics

Battery Electric Vehicles (BEVs)

Battery electric vehicles use batteries to store the energy that powers the motor. The batteries are charged by plugging the vehicle into an electric power source. In addition, BEVs are charged in part by regenerative braking, which generates electricity from some of the energy normally lost when braking.

The mainstream EV range target is approximately 250-300 miles on a fully charged battery, although some BEVs can reach ranges of over 400 miles. The range depends on size of the battery, driving conditions and driver habits, among other factors. The time required for charging depleted batteries – which can range from 15 minutes to over full day – depends on the size and type of the batteries, as well as the type of charging equipment used.

Plug-In Hybrid Electric Vehicles (PHEVs)

PHEVs use batteries to power an electric motor and also use an internal combustion engine (ICE) powered by gasoline. Powering the vehicle with electricity from the grid reduces operating costs, cuts petroleum consumption and reduces tailpipe emissions compared with conventional vehicles. When driving distances are longer than the all-electric range, PHEVs perform like traditional hybrid vehicles, consuming less fuel and producing fewer emissions than similar conventional vehicles.

The PHEVs battery pack gives an all-electric driving range of about 10-80 miles. This enables the vehicle to travel a moderate distance without using its ICE. The ICE powers the vehicle when needed, such as when the battery is mostly depleted, during rapid acceleration, or when

Key Acronyms

EVs (all-electric vehicles) are powered by one or more electric motors. They receive electricity by plugging into the grid and store it in batteries. They consume no petroleum-based fuel and produce no tailpipe emissions. EVs are also referred to as battery-electric vehicles (BEVs).

EVSE (electric vehicle supply equipment) delivers electrical energy from an electricity source to charge a vehicle's batteries. EVSE communicates with the PEV to ensure that an appropriate and safe flow of electricity is supplied.

HEVs (hybrid electric vehicles) combine an ICE or other propulsion source with batteries, regenerative braking, and an electric motor to provide high fuel economy. HEVs rely on a petroleum-based or alternative fuel for power and are not plugged in to charge. HEV batteries are charged by the ICE and during regenerative braking.

ICES (internal combustion engines) generate mechanical power by burning a liquid fuel (such as gasoline, diesel, or a biofuel) or a gaseous fuel (such as compressed natural gas). They are the dominant power source for on-road vehicles today.

PEVs (plug-in electric vehicles) derive all or part of their power from electricity supplied by the electric grid. They include EVs and PHEVs.





PHEVs (plug-in hybrid electric vehicles) use batteries to power an electric motor, plug into the electric grid to charge, and use a petroleum-based or alternative fuel to power the ICE. Some types of PHEVs are also called extended-range electric vehicles (EREVs).

using the heating/air conditioning. Like the BEV, the PHEV is charged by plugging into the grid and also captures some energy from regenerative braking. Compared to the BEV, the PHEV takes less time to reach a full charge because of its smaller battery pack.

WHY BUY ELECTRIC?

The technology-rich experience that an electric car presents is hard to beat. Electric cars deliver fast and smooth acceleration, they are quiet, and they offer an unmatched level of responsiveness. Electric cars also save time and money. Electric motors don't need oil changes and have many fewer parts, so they require less maintenance than conventional gas cars. The cost of fuel is about half that of ICE vehicles. Electric car owners make fewer or no trips to the gas station.

HOW CLEAN IS YOUR RIDE? CARS ARE POWERED IN MANY DIFFERENT WAYS.

 CONVENTIONAL GAS	 CONVENTIONAL HYBRID	 PLUG-IN HYBRID	 BATTERY-POWERED
POWERED BY Gas engine	POWERED BY Gas engine & electric motor	POWERED BY Electric motor & gas engine	POWERED BY Electric motor
BATTERY TRAVEL None	BATTERY TRAVEL Short distances	BATTERY TRAVEL Medium distances	BATTERY TRAVEL Long distances
FUEL SOURCE Gas	FUEL SOURCE Gas	FUEL SOURCE Electricity & Gas	FUEL SOURCE Electricity

TYPES OF CHARGING EQUIPMENT

Electric Vehicle Supply Equipment deliver electrical energy from an electricity source to charge a vehicle's batteries. There are several types of charging equipment:

LEVEL 1 Charging

- Cord and Plug connected, single-phase 110V/120V, up to 16A (1.9 kW)
- 8-20+ hours for a full charge

LEVEL 2 Charging

- Wired to individual branch circuit, single-phase 208V/240V, up to 80A (19.2kW)
- 4-8 hours for a full charge

DC Fast Charging

- 400-900V DC, up to 200 A (15-350 kW); 15-45 minutes for a full charge
- Tesla Supercharging – V3 Chargers charge at a rate of 250kW – approximately 75 miles in 5 minutes.

EV CHARGING INFRASTRUCTURE

DC FAST CHARGE

- 30 MINUTES CHARGE TIME
- Direct Current (DC) provided at 40-100 kW
- 80% charge in 20 minutes
- Requires 480V supply at 80-200Amps
- J1772 Combo, CHAdeMO, or Tesla connector

AC LEVEL 2

- 4-8 HOURS CHARGE TIME
- Alternating Current (AC) provided at 3.3-19.2 kW (6.6 kW most common)
- 10-20 electric miles per hour
- Requires 208/240V supply at 20-80 Amps
- J1772 or Tesla connector

AC LEVEL 1

- 8-20+ HOURS CHARGE TIME
- Alternating Current (AC) provided at 1.4-1.9 kW
- 2-5 electric miles per hour
- Requires 120V supply at 12-16Amps
- J1772 or Tesla connector

Appendix C - Rebates and Incentives Available for EVs and Charging Stations

Rebates and Incentives for Electric Vehicles

- **Federal Tax Credit: New Clean Vehicle - up to \$7,500**
 - A federal IRS tax credit of up to \$7,500 per new EV purchased for use in the U.S. Eligibility and size of the tax credit depends on the sourcing of its battery components and its critical minerals, where the vehicle was assembled, its suggested retail price and the buyer's income. Buyers can claim this tax credit as a point-of-sale discount. (Also see opportunity below for reduced EV leasing costs with Qualified Commercial Clean Vehicles tax credit.) <https://www.irs.gov/credits-deductions/credits-for-new-clean-vehicles-purchased-in-2023-or-after>
- **Federal Tax Credit: Used Clean Vehicle – up to \$4,000**
 - A federal IRS tax credit of 30% of the sales price up to \$4,000. Must meet eligibility requirements including income limits, a sales price of \$25,000 or less, and purchase from a dealer. Buyers can claim this tax credit as a point-of-sale discount. <https://www.irs.gov/credits-deductions/used-clean-vehicle-credit>
- **Federal Tax Credit: Qualified Commercial Clean Vehicles – up to \$40,000**
 - Businesses and tax-exempt organizations that buy a qualified commercial clean vehicle may qualify for a federal clean vehicle tax credit of up to \$40,000, with a maximum credit of \$7,500 for vehicles under 14,000 pounds. Leasing companies can claim this credit for vehicles they purchase to lease to consumers, regardless of where they were assembled or how much they cost. Many leasing companies are passing this credit to consumers in the form of lower lease payments. <https://www.irs.gov/credits-deductions/commercial-clean-vehicle-credit>
- **New York State Drive Clean Rebate: Up to \$2,000**
 - Open to all New York State residents, the Drive Clean Rebate offers a point-of-sale rebate of up to \$2,000 towards the purchase or lease of a new electric car. The amount of rebate depends on all electric range and suggested retail price of vehicle. <https://www.nyserda.ny.gov/All-Programs/Drive-Clean-Rebate-For-Electric-Cars-Program/How-it-Works>

- **New York Clean Pass Program**

Allows eligible low-emission, energy efficient vehicles to use LIE/HOV lanes regardless of number of occupants in the vehicle.

<https://www.dot.ny.gov/programs/clean-pass>

Rebates and Incentives for Charging Stations

- **New York State Charge Ready 2.0**

➤ Charge Ready NY 2.0 offers incentives to public, private and not-for-profit organizations that install Level 2 EV charging stations at workplaces, multi-unit dwellings (MUD's) or public facilities that are owned and operated by municipal or state government entities. NYSERDA provides incentives on a per-port basis at varying amounts, based on location type and whether is it located within a Disadvantaged Community (DAC):

- \$4,000 per charging port installed at a *public facility* (must be located within a DAC)
- \$2,000 per charging port installed at a *workplace* or *multi-unit dwelling* location.

<https://www.nyserda.ny.gov/All-Programs/ChargeNY/Charge-Electric/Charging-Station-Programs/Charge-Ready-NY>

- **New York State Tax Credit for Public and Workplace Charging**

➤ Businesses and employers can receive an income tax credit of up to \$5000 for the purchase and installation of an electric vehicle charging station through the end of 2025.

https://www.tax.ny.gov/pit/credits/alt_fuels_elec_vehicles.htm

- **Federal IRS Alternate Fuel Infrastructure Tax Credit up to \$100,000**

➤ Federal tax credit in designated rural or low-income census tracts. EV chargers are eligible for a tax credit of 30% of the cost, not to exceed \$100,000. Consumers who purchase qualified residential chargers may receive a tax credit of up to \$1,000.

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

PSEG Long Island Residential Charger Rebate

- Qualified PSEG Long Island customers can receive a \$200 rebate off a qualified ENERGY STAR® Certified Level 2 EV charger. Customers located in Disadvantaged Communities (DAC) can receive an additional \$100 – totaling \$300 in rebates.
<https://www.psegliny.com/saveenergyandmoney/greenenergy/ev/chargerrebate>

- **PSEG Long Island Make Ready Program and DC Fast Charging Credit for Businesses**
 - The EV Make Ready Program offers incentives for the infrastructure needed to power Level 2 and DCFC across Long Island. This program is available for all commercial customers including Multi-Unit Dwellings, Retail/Offices, Parking Facilities/Lots, and more.
<https://www.psegliny.com/saveenergyandmoney/greenenergy/ev/makeready>

 - The Fast Charge incentive program offers an annual per-plug declining incentive to owner/operators of DCFC for public use on Long Island and in the Rockaways.
<https://www.psegliny.com/saveenergyandmoney/greenenergy/ev/dcfc>

- **NYS Department of Environmental Conservation (DEC) Municipal ZEV Vehicle Rebate and Infrastructure Grant Programs**
 - Provides rebates and grants to cities, towns, villages, and counties for costs associated with the purchase or lease of eligible clean vehicles, and installation of eligible infrastructure that supports public use of clean vehicles. (Current funding round closed but new round expected.)
<https://www.dec.ny.gov/energy/109181.html>

- **US Department of Transportation Charging and Fueling Infrastructure (CFI) Discretionary Grant Program**
 - Established by the Bipartisan Infrastructure Law, will provide \$2.5 billion over five years in competitive grants to a wide range of applicants, including cities, counties, local governments, and Tribes to strategically deploy EV charging and other alternative vehicle-fueling infrastructure projects in publicly accessible locations in urban and rural communities as well as along designated Alternative Fuel Corridors.
<https://www.fhwa.dot.gov/environment/cfi/>

Appendix D - Electric Vehicle Information Resources

1. Compare Electric Cars and Plug-in Hybrids by Features, Price, Range
<https://plugstar.com/>
2. Convenient charging options
<https://www.nyserra.ny.gov/All-Programs/Programs/Drive-Clean-Rebate/Charging-Options>
3. US Department of Energy (DOE) Alternative Fuels Data Center (AFDC) – Alternative Fuels Station Locator
<https://afdc.energy.gov/stations/#/find/nearest?fuel=ELEC>
4. Electric Vehicle Charger Finder Apps – available on Google Play and the Apple App Store
 - PlugShare – <https://www.plugshare.com>
 - Chargeway – <https://www.chargeway.net>
5. US Department of Energy (DOE) Alternative Fuels Data Center (AFDC) – Electricity
<https://afdc.energy.gov/fuels/electricity.html>
6. Used Electric Vehicle Buyers Guide
<https://www.nyserra.ny.gov/Featured-Stories/Used-Electric-Vehicle-Buyers-Guide>
7. Drive Clean Rebate Program Dashboard
<https://www.nyserra.ny.gov/All-Programs/Drive-Clean-Rebate-For-Electric-Cars-Program/Rebate-Data/Rebate-Stats>
8. NYSERDA Electric Vehicle Registration Map and EValuateNY tool that compiles NYS statistics on the electric vehicle registrations and charging infrastructure.
<https://www.nyserra.ny.gov/All-Programs/ChargeNY/Support-Electric/Map-of-EV-Registrations>



LONG ISLAND Drive Electric



About Drive Electric Long Island

The Drive Electric Long Island electric vehicle coalition is dedicated to encouraging and accelerating the adoption of electric vehicle usage and charging infrastructure on Long Island, through advocacy, education and outreach efforts to local municipalities, companies, residents and industry stakeholders.

For more information about the coalition or to download a copy of this report, visit our website at DriveElectricLongIsland.org