

Vehicle-to-Everything Demonstration Projects Program FAQ

Updated as of February 7, 2025

What is the MassCEC Vehicle-to-Everything (V2X) Program?

This Program seeks to identify and implement a set of electric vehicle (EV) charging demonstration projects across the state of Massachusetts that will allow for vehicle-to-home (V2H) and/or vehicle-to-grid (V2G) capabilities and the development of guidance for V2X deployment for different use cases.

What is V2X?

For this Program, V2X describes the bi-directional power flow between an EV and an external load, such as the utility grid, a building, or a home. This includes V2H and V2G. EVs can also power smaller loads like refrigerators or power tools and while these vehicle-to-load (V2L) use cases can also fall under the term V2X, vehicles that are solely capable of V2L are not eligible for this Program.

What is a bi-directional EV or EV charging station (EVSE) system?

Until recently, EVs have only been capable of uni-directional power flow from the electric grid to their batteries to charge. New technology in both EV and EVSEs has introduced bi-directional power flow to unlock additional functionality. Bi-directional means that EVs and EVSEs now allow power to flow both from the grid or home to charge an EV, and to discharge from the EV to the grid or home. This technology can be used to power buildings during power outages, offset electrical bills by powering buildings during times of high electricity prices, and send energy back to the grid for compensation.

Is the Program open for applications now?

No. At this time, we invite all who may be eligible for the program, or all who want to get updates on the program, to submit an Expression of Interest. We anticipate we will be reaching out in April 2025 to all those interested in the Program with additional information on eligibility and an invitation to apply, with the goal of finalizing cohorts by the end of June 2025. This information will also be published on this website.

Who is eligible to apply for the Program?

Applicants must have an EV capable of bi-directional power flow and live in Massachusetts. This means that the EV must be capable of V2G and/or V2H. Vehicles that are only capable of V2L are <u>not</u> eligible. The Program is looking for residential, commercial,



and school district participants. Not-for-profits and municipalities with fleets can apply under the Commercial Program. A full list of eligibility requirements will be provided in April 2025. Not all those who express interest in the Program will be able to participate. Participants will be selected to ensure the Program is able to provide guidance on a wide variety of use cases. Applicants in low income or Environmental Justice neighborhoods are encouraged to apply.

How do I know if my vehicle is capable of bi-directional charging?

The list of bi-directional EVs on the market capable of V2H or V2G continues to grow as auto manufacturers announce new products. The most common light-duty EVs available today are:

Car	Model Name	Starting Model Year
Maker		Eligibility
Nissan	Leaf	2013
Ford	Ford F-150	2022
Kia	Kia EV 9	2022
Tesla	Cybertruck	2024
Chevrolet	Silverado EV RST	2024
Chevrolet	Equinox	2024
Chevrolet	Blazer	2024
Cadillac	LYRIQ	2024
GMC	Sierra EV Denali	2024
Cadillac	EACALADE IQ	2025
Cadillac	OPTIQ	2025

Additionally, the following manufacturers have produced electric school buses capable of bi-directional power: BlueBird, Lion Electric, Thomas Built, IC Bus, Green Power Motors, Phoenix Motorcars.

If you have a vehicle capable of bi-directional charging that is not on the above list, you are still encouraged submit an Expression of Interest because of the ever-evolving nature of this technology. Please note that while the Program is aiming to include a variety of vehicles, restrictions put in place by some automotive and/or charging station equipment manufacturers may limit the final eligibility of some vehicles.



What if I already have an EV charger installed which does not allow for bi-directional charging. Can I still apply?

Yes, you can still apply. We will work with you during the application process to better understand the equipment already installed and electrical infrastructure on-site to determine eligibility.

What if I have already installed equipment for bi-directional charging? Could I still apply?

Potentially. If you are looking to add new equipment to allow for additional capacity (for example, for a school district or a fleet), your site may be eligible. Please submit an Expression of Interest so that you are notified when applications are open, and our team will work with you to better understand your situation.

What technologies will be installed as part of the Program?

The exact technology will depend on your site and vehicle but will include turn-key installation of bi-directional charger(s) and any related infrastructure required for successful installation. These items will be purchased, installed, and verified at no cost to the participant.

Will I get to keep my equipment after the Program ends?

Yes. You will retain full ownership of any equipment installed during the Program.

What data will I need to share as part of the Program, and for what duration?

During the Program period, data from any charging equipment installed as part of the Program, as well as applicant experiences, maintenance, and operation logs, will be collected and analyzed to inform a V2X Guidebook. This data will be collected through December 31, 2026.

I've heard of other EV programs like ConnectedSolutions from my utility. Is this Program related?

This Program is not related to other EV programs. However, you can earn additional compensation by enrolling in programs like ConnectedSolutions, which pays participants for reducing their energy usage. You can use your bi-directional charger to discharge power to your home or building (which reduces your energy usage) or you can discharge energy to the grid during ConnectedSolutions events. Program vendor The Mobility House will provide more information if you're interested in signing up.



How long will the Program operate?

The program will take place between January 2025 and December 2026. Within that time:

- The Program accept Expressions of Interest until the full list of Application Requirements is published in April 2025.
- The Program will accept Applications from April 2025 through July 2025.
- On-site assessments will be carried out for eligible applicants by December 2025.
- All installations must be complete by September 2026.
- Data collection will end by December 2026.

Who is implementing this Program and who can I reach out to for questions?

The MassCEC V2X Program is being implemented by Resource Innovations, MassCEC's approved Implementation Contractor. All questions about the Program can be emailed to MassCECV2X@resource-innovations.com

Resource Innovations is working with The Mobility House, B2Q, and Voltrek on project identification and deployment, and Converge Strategies and the Vehicle Grid Integration Council on identification of V2X Guidance.