# **Action Implementation Blueprints**



## ACTION NAME Accelerate adoption of electric vehicles.

DESCRIPTION OF Action	Transportation contributes almost 40% of Concord's GHG emissions. Electric vehicles reduce emissions by more than 50% and produce no tailpipe emissions. As the electricity supply is decarbonized, the emissions reductions from driving electric are even greater. This action is to accelerate transportation electrification by supporting the deployment of Electric Vehicle Supply Equipment (EVSE), providing incentives for EV adoption, and educational programming.
CHAMPION	Concord Municipal Light Plant (CMLP), Sustainability Division, and EV Working Group

	PLANNING CONSIDERATIONS	
	TIME FRAME	KEY PARTNERS
<ol> <li>Analyze existing public deployments of EVSE infrastructure and identify gaps in level 2 EVSE coverage, need for level 3 EVSE and number of stations needed to support a strong adoption rate.</li> <li>a. Consider need for additional public charging stations and consider EV charging infrastructure integration with Complete Streets upgrades.</li> <li>b. Collaborate with Multi-Dwelling Units (MDUs) and business community to host charging stations with peak demand controls.</li> <li>c. Continue rebates for single family home EVSE installations.</li> </ol>	2020-2022	<ul> <li>CMLP</li> <li>EV Working Group</li> <li>Property Owners</li> <li>Commercial Tenants</li> <li>Public Works</li> <li>Multi-Dwelling Units</li> </ul>
<ol> <li>Continue to provide and explore new incentives for EV charging.</li> <li>a. Ensure that as time-of-use electric rates are designed they make EV ownership attractive, and incentivize EV charging at optimal times for CMLP operations.</li> <li>b. Maintain EV Miles (off-peak charging incentive) program until new TOU rates are established.</li> <li>c. Explore incentives for residents and businesses to install installation of smart charging (or V2G) infrastructure that can respond to utility signals.</li> </ol>	2020-2025	<ul> <li>CMLP</li> <li>Municipal Light Board</li> <li>Town Manager</li> <li>Property owners</li> <li>Commercial tenants</li> <li>Homeowners</li> </ul>
3. Provide and/or make available financial incentives to residents and businesses to purchase new and used electric vehicles.	2020-2025	<ul> <li>CMLP</li> <li>Municipal Light Board</li> <li>Green Energy Consumer's Alliance</li> <li>State MOR-EV program</li> </ul>
4. Engage community on the benefits of driving electric vehicles with a wide variety of online, community, and EV sector engagement. For example, town website, EV help line, tabling at local events and, an annual ride and drive.	2020-2025	<ul> <li>CSEC</li> <li>EV Working Group</li> <li>Clean Energy Stakeholders</li> <li>Residents</li> <li>Car Dealers</li> <li>CMLP</li> <li>Energy New England</li> </ul>

### Accelerate adoption of electric vehicles.



### FINANCING RESOURCES AND MECHANISMS

#### • CMLP

• U.S. Department of Energy and Massachusetts Offers Rebates for Electric Vehicles (MOR-EV) program

TRADEOFFS (CHALLENGES/BARRIERS)	EQUITY CONSIDERATIONS		
<ul> <li>Wide-spread adoption will require planning to manage electricity load.</li> <li>Public perception barriers to EV adoption, include perceived upfront cost, range anxiety, lack of familiarity with EV performance and with vehicle options on the market.</li> </ul>	<ul> <li>Ensure that EV infrastructure is deployed throughout the community</li> <li>Purchasing new vehicles may be out of reach for some residents. Make residents aware of the growing used EV market and potentially offer incentives for used EV purchases</li> </ul>		
TRACKING SUCCESS	ENGAGING THE COMMUNITY		
Outputs: • EV charging incentive programs • EV education online activities • EV awareness events	<ul> <li>Infrastructure deployment helps to serve existing EV drivers as well as raise awareness among future EV purchasers.</li> <li>EV displays at a range of community events help to reach new audiences.</li> </ul>		
<ul> <li>Outcomes:</li> <li>Increased deployments of EV charging infrastructure</li> <li>Increased adoption of electric vehicles as a % of registered vehicles</li> <li>Charging profile that benefits CMLP</li> </ul>	<ul> <li>Ride &amp; Drive Events the provide test drive opportunities help to increase adoption rate.</li> <li>Online engagement and resources for EV promotion including website, webinars, social media, etc. raise community awareness and demonstrate town support for electric vehicles.</li> </ul>		
<ul><li>Reduced GHG emissions from the transportation sector</li><li>Improved air quality</li></ul>	<ul> <li>Town committees and community groups with sustainability missions can help to build community support.</li> </ul>		