



The Commonwealth of Massachusetts
HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

JONATHAN HECHT
STATE REPRESENTATIVE
29TH MIDDLESEX DISTRICT
WATERTOWN • CAMBRIDGE

STATE HOUSE, ROOM 22

Committees:

Children, Families & Persons with Disabilities

Municipalities and Regional Government

Transportation

Public Health

TEL: (617) 722-2140
Jonathan.Hecht@MAhouse.gov

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Representative Thomas Golden, Jr.
House Chair, Joint Committee on Telecommunications, Utilities and Energy
State House, Room 473B
Boston, MA 02133

Senator Michael Barrett
Senate Chair, Joint Committee on Telecommunications, Utilities and Energy
State House, Room 416
Boston, MA 02133

Dear Chair Golden and Chair Barrett,

I am writing you today in support of three bills: H.2873 *An Act promoting zero-emission vehicles*; H.2872 *An Act to promote the transition to clean transportation fleets*, and H.2869 *An Act relative to a clean transportation future*. These three bills will spur the transition of our transportation sector away from greenhouse gas (GHG) emitting fuels by promoting adoption of zero emission vehicles (ZEVs).

As documented in the Massachusetts Comprehensive Energy Plan and the Future of Transportation Commission report (both released in December 2018), decarbonizing the transportation sector is critical to meeting our emissions targets under the Global Warming Solutions Act (GWSA). The transportation sector is the largest source of GHG emissions in Massachusetts, accounting for 30 million metric tons of carbon dioxide equivalents each year or nearly 44 percent of the state's total annual GHG emissions. Personal vehicle use generates nearly 60 percent of these transportation-related emissions, while fleets of large diesel buses are the source of much of our localized particulate matter air pollution.

To reduce vehicle emissions, the Commonwealth has committed to having 300,000 ZEVs on the road by 2025. The technology behind ZEVs has made significant advances in recent years. Virtually all of the major auto manufacturers now offer one or more zero emission models that compare favorably with traditional gas-powered vehicles. Many more zero emission SUVs, pickup trucks, and other medium and heavy-duty vehicles will be coming onto the market in the next several years.

As of July 2019, however, there were only 15,000 ZEVs registered in Massachusetts, well short of the 2025 goal and the numbers needed to achieve the necessary reduction in our transportation-sector emissions. These three bills are designed to spur ZEV adoption in multiple and complementary ways.

H.2873 An Act promoting zero-emission vehicles

H.2873 focuses on consumers, providing incentives and taking other steps to make it more likely they will adopt ZEVs.

First, the bill includes a provision to allow the Registrar of Motor Vehicles to share the addresses of newly-registered electric vehicle (EV) owners with the electric distribution companies, the Department of Public Utilities (DPU), and the Department of Energy Resources (DOER). With this information, distribution company can provide new EV owners materials regarding special programs and rates for plug-in vehicles. This will help EV owners take advantage of favorable utility-managed EV incentives, particularly opt-in Time-Of-Use (TOU) rates (required by Section 4 of the bill). Such rate structures will encourage energy conservation, good grid management, optimal and efficient use of resources, and equitable rates for consumers.

Second, the bill codifies the state's existing ZEV rebate program (MOR-EV), which has proven extremely helpful to consumers purchasing or leasing new battery electric vehicles (and soon hydrogen fuel cell vehicles). Although the cost of ZEVs has declined steeply in the last few years, they are still not quite at price-parity with traditional fossil-fueled vehicles. Codifying the rebate program will reduce uncertainty and signal the state's commitment to assisting consumers and auto manufacturers in growing the ZEV market.

Sections 3 and 5 of the bill build on Chapter 448 of the Acts of 2016 and other prior measures to expand ZEV charging infrastructure. Section 3 would require the Department of Energy Resources (DOER) to provide guidance to cities and towns on ways to improve access to curbside charging stations. This would make driving EVs a more viable option for consumers who do not have garages or other dedicated off-street parking. Section 5 calls for DOER and MassDOT to identify state and U.S. routes and interstate highways in Massachusetts that are

priorities for the installation of high-speed public charging stations so that ZEV drivers feel more confident taking longer trips.

Section 6 would alter rules regarding ZEV-specific license plates. Currently these distinctive plates are available to ZEV owners upon request. Section 6 would require the Registrar of Motor Vehicles to issue them for all ZEVs upon initial registration or registration renewal. There are two reasons to require this. First, because of the materials present in their batteries and fuel cells, ZEVs involved in crashes present unique and potentially dangerous challenges for first responders. ZEV-specific plates will enable first responders to assess the risks quickly and respond accordingly. Second, the use of these distinctive license plates increases the visibility of ZEVs on our roads, which will raise awareness and interest among consumers who may not yet know that reliable ZEVs exist.

Lastly, Section 7 directs the Board of Building Regulations and Standards (BBRS) to adopt EV-ready wiring standards in the state building code. Subsequent to the filing of this bill, the Board took a modest step in this direction by amending the code to require one EV-ready parking space at new commercial and large residential developments with 15 or more associated parking spaces. However, it failed to require adequate numbers of EV-ready spaces at very large developments (e.g., with hundreds of parking spots). In addition, the BBRS took no action on another proposal to require EV-ready wiring in new single or two-family residential construction. For a typical residential property, EV-ready wiring adds no more than \$300 to new construction costs per parking spot. That is less than 10% of what it typically costs to retrofit an existing parking spot to accommodate a charging station. I respectfully request that the Committee rewrite this section of the bill to direct the Board to further amend the code to address large commercial and residential developments and to include EV-ready wiring in new single and two-family residential construction.

H.2872 An Act to promote the transition to clean transportation fleets

H. 2872 mandates decarbonization of public and private motor vehicle fleets by 2035 with enforceable interim targets. Like H.2873, this bill seeks to identify and overcome obstacles to ZEV adoption, but it puts more emphasis on targets and enforcement. These more prescriptive rules are appropriate for fleet owners -- defined as persons or entities with at least 25 motor vehicles registered in the Commonwealth -- in light of their greater capacity and responsibility to make the transition to ZEVs.

Public fleets covered by the bill include vehicles owned or leased by the Commonwealth, municipalities, and quasi-public agencies and vehicles used for public transportation. It is important that the public sector lead by example by rapidly transitioning these fleets to ZEVs.

These fleets are also ideal targets for decarbonization because they often have predictable ranges and routes (i.e., transit and school buses and vans). Moreover, many of these vehicles currently run on diesel and have major impacts on air quality and public health. By prioritizing electrification of public fleet vehicles designated as medium and high priority pursuant to Section 6 of Chapter 448 of the Acts of 2016 and their deployment in locations serving environmental justice populations, the bill seeks to ensure that communities that have fewer mobility options or experience disproportionately high rates of exposure to environmental risk will see the greatest benefits from fleet decarbonization in the shortest period of time.

Private fleets covered by the bill include commercial motor carriers, freight services, limousine services and taxis registered to operate within Massachusetts as well as privately-owned and operated passenger vehicles used at least in part for commercial ride-sharing or ride-hailing. Regulating these fleets raises issues of federal law and may require creative solutions. However, it is imperative that we find a way to advance decarbonization of these fleets, which account for a large and growing percentage of vehicle miles traveled in the Commonwealth. Their impact is particularly large in urban, often low-income areas already suffering from poor air quality and related health problems.

H.2869 An Act relative to a clean transportation future

This third bill requires that all new motor vehicles registered in Massachusetts after 2038 be zero-emission vehicles. Taking into account the typical life-span of a motor vehicle, this means that within 8 to 12 years after that date -- by 2050 -- the Commonwealth will largely complete the phase-out of fossil-fueled vehicles. This target date is consistent with the December 2018 report of the Governor's Commission on the Future of Transportation, which determined that the decarbonization of all cars, light-duty trucks and buses in the state is essential to achieving net zero emissions by 2050.

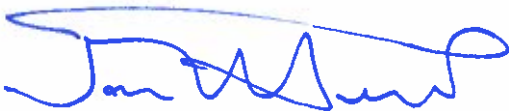
A number of jurisdictions around the world are adopting similar targets. British Columbia recently passed legislation requiring 10% of all new vehicles (cars and trucks) sold by 2025 be ZEVs and 100% by 2040. Copenhagen, Paris, Madrid, Athens, Mexico City, and Rome have all made commitments to eliminate diesel cars and vans by 2025, while France, Spain, and the United Kingdom intend to end the sale of gas and diesel cars and vans by 2040. Here in the United States, the California Air Resources Board is considering a similar proposal, and Los Angeles Mayor Eric Garcetti has called for 100% of the vehicles operating on that city's streets to be ZEVs by 2050. Legislation has been introduced in the U.S. House of Representatives and the U.S. Senate to amend the Clean Air Act to require that 50% of all vehicles sold in the U.S. be zero emission by 2030, increasing 5% per year thereafter to 100% by 2040.

These efforts reflect the broad consensus, echoed in the Future of Transportation Commission report, that ending the use of fossil-fueled vehicles is absolutely necessary to achieve net zero emissions. It is also entirely realistic given the rapid development of ZEV technology, which is widely expected to lead to a robust market for affordable new and used ZEVs in the next two decades. The major auto manufacturers are committed to joining this emerging market. Among them, Ford is investing \$4.5 billion in order to offer 13 new EVs and hybrids by 2020, including an electric SUV with a 300+ mile range. Volkswagen intends to have 80 EV models across its brands by 2025 and electrify all 300 of its models by 2030. Honda expects EVs and plug-in hybrids to account for two-thirds of its global sales by 2030. Toyota will exclusively produce ZEVs by 2050. In coming years, other ZEV technologies such as hydrogen fuel cell vehicles are also expected to become major elements of the ZEV marketplace, along with a significant build-out of charging and refueling infrastructure.

Viewed in the context of the state's overall effort to promote adoption of ZEVs, H.2869 also serves as an appropriate backstop to the incentives and mandates established in H.2873 and 2872. Having established incentives and mandates to facilitate the transition to ZEVs, adoption of a target date for the phase-out of fossil-fueled vehicles in MA would send an unambiguous signal that the Commonwealth intends to meet its Global Warming Solutions Act obligations in the transportation sector and would reinforce the auto manufacturers' commitment to a zero-emission future.

Decarbonizing the transportation sector is one of the most important challenges of our time. The combination of incentives, mandates, and targets contained in these three bills can make a major contribution to addressing it. I thank you and your Committee for considering these multiple approaches and look forward to working with you to advance these bills.

Sincerely,



Jonathan Hecht
State Representative
29th Middlesex