

**December 1, 2016**

Honorable Stephanie Pollack  
Secretary and Chief Executive Officer of the Department of Transportation  
Commonwealth of Massachusetts  
10 Park Plaza, Suite 4160  
Boston, MA 02116

Dear Secretary Pollack:

Thank you for your leadership in establishing climate change and pollution reduction as central to the Commonwealth's transportation efforts. We, the undersigned, urge you to accelerate the integration of zero emission buses into our state transit fleets as a key strategy to achieve reductions in carbon pollution from the transportation sector.

**Zero emission buses emit no tailpipe emissions.** Diesel exhaust contains more than forty toxic air contaminants that can cause and/or worsen diseases such as asthma and cancer. Air pollution disproportionately impacts low-income neighborhoods and communities of color in urban areas of our state.

**Zero emission buses reduce carbon emissions** up to 170,000 pounds per year<sup>1</sup> compared to diesel and compressed natural gas (CNG) buses. Electrifying our bus fleets will help the Commonwealth meet its 2020 and 2050 climate goals.

**Zero Emission buses save money.** Even with higher upfront purchase costs of around \$300,000 over diesel buses, electric buses can save operators approximately \$400,000 on fuel and maintenance costs in its lifetime<sup>2</sup>. These substantial savings can be used by transit agencies to expand their EV fleet. In addition, all electric buses have fuel efficiencies four times greater than diesel and CNG buses.<sup>3</sup>

Adding Zero Emission Buses to our transit fleets is **consistent with our stated commitment to electrification of the transportation fleet.**

- The 2015 update of the Massachusetts Clean Energy and Climate Plan<sup>4</sup> notes "... the only viable path to deep reductions in GHG emissions is through a combination of reduced energy consumption (through increased energy efficiency in vehicles and buildings), expanded availability of clean electricity, and **electrification of the transportation** and heating **sectors.**"
- Massachusetts is a signatory to the 8 state Memorandum of Understanding, which commits to 3.3 million EVs on the road by 2025. That translates to 300,000 EVs on Massachusetts roads by 2025.
- Governor Baker in his September 2016 Executive Order, "Establishing an Integrated Climate Change Strategy for the Commonwealth" mandates a reduction in GHG emissions from the transportation sector, including the Commonwealth's vehicle fleet, consistent with meeting the Global Warming Solution Act's 2050 and interim emission limits.

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<sup>1</sup><http://www.ucsusa.org/sites/default/files/attach/2016/10/UCS-Electric-Buses-Report.pdf>

<sup>2</sup> <http://www.ucsusa.org/sites/default/files/attach/2016/10/UCS-Electric-Buses-Report.pdf>

<sup>3</sup> <https://www.transportation.gov/r2ze/benefits-of-ZEBs>

<sup>4</sup> <http://www.mass.gov/eea/docs/eea/energy/cecp-for-2020.pdf>

Zero Emission Buses will **improve quality of life** in our urban neighborhoods – they are not only cleaner and lower in pollutants that worsen conditions such as asthma, but are also quieter.

**Zero emission buses have lower lifetime fueling and maintenance costs.** They can be hundreds of thousands of dollars less expensive to fuel and repair over their lifetime than diesel and CNG buses.

**Zero emission buses reduce oil consumption.** They rely on electricity from domestic sources of energy and keep the energy-related profits and jobs here in the US.

As you know, the Massachusetts Bay Transportation Authority (MBTA), Worcester Regional Transit Authority (RTA), and the Pioneer Valley Transit Authority (PVTA) have incorporated or will soon incorporate a few ZEBs into their fleets. But much more can be done.

- Antelope Valley Transit Agency (AVTA) in California, has committed to become the nation's first fully electric fleet by 2018 and is buying up to 85 new electric buses over the next three years.
- Southeastern Pennsylvania Transportation Authority (SEPTA) is adding 25 zero emission electric buses to its fleet.
- Miami-Dade County is acquiring 30 electric buses with plans to add up to 75 more.

We urge the Department of Transportation (DOT) to commit this year (2017) to:

- By 2019: 100 ZEBs incorporated into state transit bus fleet, 50% of new non-revenue transit fleet passenger vehicles purchased are EVs
- By 2025: 50% new bus purchases are ZEBs
- By 2030: 100% new bus purchases are ZEBs

While upfront purchase or lease costs of ZEBs are higher than conventional buses, total cost of ownership and operation are often less expensive over the life of the vehicles. Incentive funding is available through federal grant programs such as the [FAST Act](#), [CMAQ Program](#), [Low or No Emission Vehicle Program](#) and [TIGER Discretionary Grants](#). Also, Massachusetts is set to be awarded \$69M in Volkswagen settlement funds. That funding could be used to help transit agencies and school districts apply additional resources for electrification of their transit and school bus fleets. Matching funds from EPA through the DERA program could make these resources go even further. These incentives, coupled with lower fueling and maintenance costs, make electric buses a smart financial investment.

According to the [U.S Department of Transportation Federal Transit Administration](#), the MBTA was to receive over \$4,000,000 in federal funding to replace 5 Silver Line buses with 60-foot articulated battery-electric models from ZEB-manufacturer New Flyer. We look forward to an early completion of the project. While this is a start, we believe excellent opportunities exist for further and much more significant integration of ZEBs not only within the MBTA but also at other RTAs and Massport.

Thank you for your attention regarding this important and timely community issue. We would welcome the opportunity to speak with you in more detail on how Zero Emission Buses can be integrated as quickly as possible into our regional and state bus fleets.

Sincerely,



Emily Norton  
Chapter Director, Massachusetts Sierra Club

List of co-signing organizations

Mark LeBel, Acadia Center  
Casey Harvell, American Lung Association in Massachusetts  
Craig S. Altemose, Better Future Project  
Rafael Mares, Conservation Law Foundation  
Cindy Luppi, Clean Water Action  
Mark Renburke, Drive Electric Cars New England  
Berl Hartman, Environmental Entrepreneurs  
Eric Wilkinson, Environmental League of Massachusetts  
Cornelia van der Zeil, Greater Boston Physicians for Social Responsibility  
Bill Ravanesi, Health Care Without Harm  
Joe Casey, International Brotherhood of Electric Workers  
Emily Kirkland, 350 Mass  
Carol Oldham, Mass Climate Action Network  
Larry Chretien, Mass Energy Consumers Alliance  
Ken Hartlage, Nashoba Conservation Trust  
Elena Letona, Neighbor to Neighbor  
Katherine Stainken, Plug in America  
Tedd Saunders, Saunders Hotel Group  
Craig Foley, Sustainable Real Estate Consulting Services  
Claire Miller, Toxics Action Center  
Daniel Gatti, Union of Concerned Scientists

CC:

Honorable Charlie Baker, Governor, Commonwealth of Massachusetts  
Matthew Beaton, Secretary, Executive Office of Energy and Environmental Affairs  
Ned Bartlett, Undersecretary of Energy and Environmental Affairs  
Martin Suuberg, Commissioner, Department of Environment Protection  
Judith Judson, Commissioner, Department of Environmental Resources  
Jeannette Orsino, Executive Director, Massachusetts Association of Regional Transit Authorities  
Brian Shortsleeve, Chief Administrator and Acting General Manager, Massachusetts Bay Transit Authority