

Dear Treasurer Goldberg and members of the MSBA Board,

We are writing to encourage the MSBA to require that all school building projects funded by MSBA be fully electrified, and climate resilient.

The MSBA is to be commended for its track record of helping cities and towns replace or renovate school buildings in an environmentally sustainable manner.

As [your website](#) notes,

The MSBA's Green Schools Program provides incentives to a district to increase the energy efficiency and sustainability for new construction and major renovation/addition projects, by exceeding Massachusetts Energy base code by 20% for 2 additional reimbursement points. All projects are required to register for the most recent version of LEED-S or NE-CHPS and exceed Massachusetts Energy base code by 10%.

The MSBA's updated Accelerated Repair Program provides a new opportunity to apply sustainable standards to specific building systems such as roofs, boilers and window systems. The MSBA's green programs aim to encourage a high standard of sustainability for all MSBA-funded projects. **The MSBA continues to monitor the effectiveness of its sustainable policies and make recommendations for improvement, with an emphasis on energy and cost savings, resulting in direct operational savings for school districts.** [bold added]

As municipal leaders interested in speeding the transition away from fossil fuel dependency, we were particularly pleased to see the highlighted above, as it demonstrates an interest in continuous improvement in the area of sustainability and carbon emissions reduction. We are following up on your interest in improvement to encourage you to tie school building funding to the following requirements for all new or renovated schools:

- Heat and cooling should be supplied by clean all-electric heating and cooling systems, not oil, propane, or gas-fueled systems.
- Parking lots should offer electric vehicle (EV) charging stations for staff and/or visitors.
- Schools built on or near historic wetlands or in floodplains should take into account precipitation modeling for 2070 and beyond; this may entail a raised structure or building in an alternate location.

How do these recommendations fit into the Commonwealth's climate goals?

- Massachusetts has a greenhouse gas reduction mandate of 80% reduction of greenhouse gas emissions by 2050 and a commitment to be net zero by 2050; many cities and towns have more aggressive goals. The IPCC issued a report in 2018 noting that to keep global temperatures from rising more than 1.5 degrees Celsius -- a goal

of the [Paris climate agreement](#) -- anthropogenic carbon dioxide emissions would have to be on a [path](#) to fall by about 45 percent by around 2030.

- Massachusetts also has a goal of 300,000 EVs on the road by 2025.
- As HVAC systems are built to last for at least 20-30 years, that means we must act now to eliminate this significant source of fossil fuel energy.
- The National Climate Assessment projects that the Northeast will see dramatic increases in precipitation and flooding.

Why is all-electric the more environmentally beneficial choice? Under state law, the electric grid is powered by an increasing amount of renewable energy every year. In contrast, an oil or gas boiler is running on fossil fuels from day one until the day it is retired.

School building electrification is not a new concept. In fact, schools across the state are converting to 100% clean electricity to save money, improve air quality for students, teachers and staff, and advance climate goals.

- Lincoln is about to break ground on a Net Zero K-8 renovation school project.
- Wellesley has one net zero ready elementary school in the design phase and is in the feasibility phase of a second.
- Brookline passed a Warrant Article in May 2019 requiring that all new school buildings be fossil fuel free.
- Westborough has approved and is [moving forward](#) with a net-positive energy elementary school.
- Arlington is about to break ground on a new [all-electric high school](#) where heating and cooling systems will utilize heat pumps.
- Several Cambridge schools have been rebuilt all-electric: Martin Luther King School, King Open School and the Cambridge Street Upper School, as well as the Valente Branch Library and a new administrative building for the entire school department; the Tobin/Vassal-lane school will be rebuilt all-electric.
- Construction is underway on the new Belmont Middle and High School which will be net zero and all-electric with heating and cooling by a geothermal heat pump system.
- Amherst passed a bylaw in 2017 requiring zero energy new municipal and school buildings.
- Concord is at the end of Feasibility for a net zero design for a new middle school and expects to start Schematic Design in the next few months (there was a CV-related delay).
- Lexington's Select Board and School Committee adopted a building policy calling for construction of all-electric buildings, maximizing onsite renewable energy, and setting high standards for indoor air quality. Lexington's Hastings Elementary School and Lexington Children's Place pre-school are both expected to be net positive buildings when the solar energy systems that have been approved are completed later this year.

Energy efficient all electric schools are cost-effective to build and operate, while providing a healthier and safer learning environment for students and teachers alike.

Schools built on wetlands are more likely to suffer from mold and poor air quality, and need expensive repairs, especially as our region sees more frequent and intense rainfall.

Thank you for your consideration of our views. From the Green Communities Program to the Municipal Vulnerability Preparedness Program to the Complete Streets grants and more, we are so appreciative of the Commonwealth's partnership in supporting cities and towns efforts to advance our transition to a clean economy and make our communities more resilient as we face a changing climate. We would welcome the opportunity to speak with you in more detail about these recommendations and help you build support to enact them.

Sincerely,

Caroline Bays, Watertown Town Councilor
Will Mbah, Somerville City Councilor
Emily Norton, Newton City Councilor
Mehreen N. Butt, Wakefield Town Councilor
Michael Bettencourt, Winchester Board of Selectman (Chair)
Lise Olney, Wellesley Board of Selectmen
Mark Sandeen, Lexington Board of Selectmen
Robert Scherer, Ashland Board of Selectman
Mary Stucklen, Pittsfield Commissioner - Green Commission
Martha Simon, Burlington School Committee Member
Joseph A. Curro, Jr. Arlington Select Board Member
Adam Chapdelaine, Arlington Town Manager