



IT'S TIME TO ELECTRIFY OUR SCHOOLS

HVAC systems are critical to supporting student health and safety. The decades-old systems still operating in so many of our schools are not up to the job of protecting our children from the threat of airborne illness, the reality of extreme heat, or the air pollution that places a disproportionate burden on our environmental justice communities. In fact, the overwhelming majority of schools in Massachusetts still burn oil or fossil gas to provide heat. Schools shouldn't be polluters.

Thanks to new federal and utility incentives, Massachusetts schools have a chance to embrace modern HVAC systems. Now is the time for Massachusetts schools to electrify!

WHAT IS A HEAT PUMP?

Heat pumps are a modern, all-electric technology that *moves* heat rather than burning fossil fuels to *make* heat. Refrigerators and air conditioners are essentially heat pumps. Heat pumps can move heat from the air, the ground, or water into our homes, businesses, and schools to keep them warm. And in the summer, they can do the reverse, keeping our buildings comfortable even on the hottest days. Ground-source heat pumps are typically the most efficient option and are the HVAC system of choice for a majority of net-zero schools in Massachusetts.



BY THE NUMBERS

3-6X

The efficiency of a ground source heat pump compared to a gas boiler

91

of MA schools that has a gas leak at the property in 2021

2X

Increase in number of extreme heats days in Boston by 2030

5%

Gap in standardized tests scores between students of color and their white counterparts attributable to "heat days"

6 WAYS THAT HEAT PUMPS BENEFIT OUR SCHOOLS

1. Adapt to New Cooling Needs
2. Improve Air Quality & Eliminates Combustion Pollution
3. Enhance Efficiency
4. Minimize Health & Safety Concerns
5. Build Community Resilience
6. Mitigate Climate Change



NEW FEDERAL & UTILITY INCENTIVES CHANGE THE GAME

While heat pumps have been available for some time, the incremental upfront cost to install this technology has put them out of reach for most schools. The Inflation Reduction Act, signed into law in August 2022, will defray 30-50% of the upfront cost of installing ground-source heat pumps. Districts will receive a direct cash payment from the IRS. Funding is non-competitive, uncapped, and available through 2033. Additional details will be provided by the US Treasury in early 2023.

In addition, the Mass Save program recently enhanced its incentives for heat pumps of various kinds and is based on the size of the system as measured in tons. Utility incentives are available for new construction and retrofit projects with different requirements. Districts should contact their utility company to learn more about the incentives available and to receive technical assistance.

Taken together, the federal and utility incentives may make the most efficient option - ground-source heat pumps - also the most affordable option to install.

ADDITIONAL RESOURCES FOR YOUR DISTRICT

Energy CLASS

Federal grants to establish & train energy managers in schools.

Renew America's Schools

Federal grants for projects that improve energy efficiency and deploy clean energy.



NEW REPORT COMING SOON!

Sign-up to receive "HVAC Choices for Student Health and Learning: What Policymakers, School Leaders, and Advocates Need to Know" Forthcoming in early 2023.

