



MASSACHUSETTS
Department of Elementary
and Secondary Education

Report to the Legislature on the Progress of the Green School Works Program

Pursuant to Outside Section 35 of the fiscal year 2024 GAA Budget, which amended Chapter 69 by adding Section 37: “(c) Annually, not later than July 15, the commissioner shall report to the clerks of the house of representatives and the senate, the joint committee on education, the joint committee on telecommunications, utilities and energy and the house and senate committees on ways and means on the grants awarded during the previous fiscal year, including the grant amount, grant recipient, a description of the project for which the grant was awarded and any progress on completion of the project..”

November 2024

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November 12, 2024

Dear Members of the General Court:

I am pleased to submit the fiscal year 2024 *Annual Report to the Legislature on the Progress of Green School Works Program* pursuant to Outside Section 35 of the fiscal year 2024 GAA Budget, which amended Chapter 69 by adding Section 37(c).

Any questions may be directed to Jessica Leitz via email Jessica.Leitz@mass.gov.

Sincerely,

Russell D. Johnston
Acting Commissioner

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Introduction

The Department of Elementary and Secondary Education respectfully submits this Report to the Legislature: *fiscal year 2024 Annual Report to the Legislature on the Progress of Green School Works Program* pursuant to Outside Section 35 of the fiscal year 2024 GAA Budget, which amended Chapter 69 by adding Section 37(c):

SECTION 35

Section 35 Green School Works

Said Chapter 69 is hereby further amended by adding the following section:-

Section 37. (a)(1) There shall be a competitive grant program, known as Green School Works, to provide financial support to eligible K-12 public schools or districts for projects to install or maintain clean energy infrastructure. The program shall be administered by the department, in consultation with the Massachusetts clean energy technology center, established by section 2 of Chapter 23J. Grants shall be made available to address the costs of installation, operation or upgrades of clean energy infrastructure that improves energy efficiency, reduces carbon emissions, or mitigates impacts of climate change, including school rooftop construction or repair costs necessary for a clean energy infrastructure project to be safely installed; provided, that such installation, operation or upgrades shall be conducted in compliance with any relevant procurement laws, including, but not limited to, Chapter 149 and all state and local building codes.

(2) Grants awarded by the department shall maximize the total number of projects that shall be undertaken by public schools or districts.

(b) The department, in consultation with the Massachusetts clean energy technology center, shall establish eligibility and selection criteria for the program. The department may give preference to grant applications from schools serving low-income and environmental justice populations.

(c) Annually, not later than July 15, the commissioner shall report to the clerks of the house of representatives and the senate, the joint committee on education, the joint committee on telecommunications, utilities and energy and the house and senate committees on ways and means on the grants awarded during the previous fiscal year, including the grant amount, grant recipient, a description of the project for which the grant was awarded and any progress on completion of the project.

(d) The department, in consultation with the Massachusetts clean energy technology center and the Massachusetts School Building Authority, established by section 1A of Chapter 70B, shall promulgate regulations to implement this section.

Created as part of the state's fiscal year 24 budget, the goal of the Green School Works program (the "Program") is to provide financial support to "K-12 public schools or districts for projects to install or maintain clean energy infrastructure." The \$50 million program is

meant to address “the costs of installation, operation, or upgrades of clean energy infrastructure that improves energy efficiency, reduces carbon emissions, or mitigates the impacts of climate change, including school rooftop construction or repair costs necessary for a clean energy infrastructure project to be safely installed.” The enabling legislation additionally sets as objectives maximizing the total number of projects undertaken by public schools or districts and giving preference to projects for schools serving low-income and environmental justice populations.

The Massachusetts Department of Elementary and Secondary Education (DESE) convened a working group (hereafter referred to as the “Green Schools Working Group”) of clean energy and school building experts from the Massachusetts School Building Authority (MSBA), the Massachusetts Office of Climate Innovation and Resilience (OCIR), and the Massachusetts Clean Energy Center (MassCEC) and began meeting on a regular basis soon after the law was enacted. The cross-agency team, led by DESE, reviewed the legislative charge, shared information on current clean energy infrastructure schools work and building electrification and decarbonization planning work, and workshopped program structure.

The Green Schools Working Group identified initial challenges with respect to the timeline, specifically because capital projects often span multiple fiscal years and involve extensive planning and procurement phases prior to the implementation/construction phases. Running a competitive grant program and having school districts procure, plan for, execute, and complete capital improvements on school buildings by the end of the state fiscal year (June 30, 2024) risked having potential district grantees run out of time with no ability to complete their projects. Further challenges were identified with respect to DESE’s expertise and capacity to run a program involving specialized capital projects, as green energy building technology continues to evolve and involves specific subject matter expertise, and DESE does not typically manage or oversee school infrastructure programs.

Working together to determine the best and most efficient way to use these public dollars to benefit our schools, the Green Schools Working Group proposed that DESE transfer the funds to MassCEC to run the program, but that DESE maintain oversight for the program (reporting, regulating, etc.) as specified in the budget language.

Proposed Program Design

The Green Schools Working Group’s proposed program, which will kick off in fiscal year 2025, is intended to meet the requirements outlined in the law and simultaneously enable districts to determine their current baseline and their pathway forward for converting their old inefficient building systems into newer, cleaner systems. The draft program concept proposes a combination of grants of technical services, implementation grants, and implementation loans to support the planning and implementation of clean energy,

electrification, and decarbonization projects in school buildings across the Commonwealth, while prioritizing school buildings serving Environmental Justice and low-income populations. The proposed program is divided into three components, described further below: portfolio planning, project planning, and implementation.

Portfolio Planning

Via stakeholder consultation, the Green Schools Working Group learned that many districts could benefit from technical support in selecting a clean energy project. Some questions that came up during consultation included: “What kind of clean energy project would be most beneficial?” and “Which buildings would be prime candidates for such a project?” High-level, district-wide decarbonization planning is for many school districts a necessary first step towards a 2050-ready, zero-emissions building portfolio. Because this type of portfolio planning is a high-level analysis, the cost per school building is relatively low.

This portfolio planning component will allow MassCEC to complement existing and planned portfolio electrification prioritization plans offered by Mass Save through third-party vendors to the extent feasible to efficiently provide a large number of public school districts with the high-level roadmap that’s required to begin planning clean energy infrastructure projects, and enabling those districts to prioritize their buildings and projects in an informed manner.

Project Planning

For districts that have completed portfolio planning and prioritization, either through the portfolio planning process described above or independently, individual building decarbonization assessment and planning follows the high-level portfolio planning work. This project-level planning includes more rigorous energy use and emissions analysis, energy modeling and engineering calculations, and on-site assessment. It is roughly an order of magnitude more intensive and costly than high-level desktop analysis. However, it is still a relatively small scope of work compared to the total value of the work procured; and MassCEC is proposing to create a grant of services under this program component to provide dozens of schools serving Environmental Justice and low-income populations with a single building decarbonization assessment and plan. This work represents the final step in planning before an implementation project can be designed, financed, and constructed when conducted partnership with other capital planning coordination. MassCEC will endeavor to provide grants of services that complement and build off of existing and planned MassSave decarbonization and electrification plans.

Implementation

A wide variety of projects can contribute to decarbonizing school facilities, including but not limited to:

- electrifying heating and hot water,
- insulating and air-sealing building envelopes,
- enhancing building ventilation,
- providing onsite clean energy,
- deploying electric school bus and personal vehicle charging, and
- integrating resilient clean backup power sources.

There is currently a far more favorable incentive and funding environment for these projects than in the past for school districts with the capacity to tap into new and expanded funding resources. For example:

- Mass Save commercial incentives for air-source and ground-source heat pumps have recently been increased;
- The Inflation Reduction Act (IRA) created large tax credits available to non-taxable entities for solar PV and ground-source heat pump systems; and
- The MSBA has recently proposed creating a new heat pump funding program to potentially begin operating in 2025.

With these new and increased funding sources and potential funding sources, school electrification, decarbonization, and clean energy projects will, in many cases, be much less costly for school districts to implement.

MassCEC proposes awarding a certain number of school districts with implementation funding that may be in the form of a bridge loan, grant, or combination of the two for eligible decarbonization project hard costs, plus design, capacity, and technical assistance grants to support soft costs for eligible projects. A bridge loan would allow schools to capture up-front IRA tax credit funding for eligible projects at the beginning of construction, and to repay the bridge loan at the time the tax credit is received. Projects intending to maximize IRA tax credit funding may be given priority in the selection process.

Eligible Implementation Project Types

The Green Schools Working Group is proposing the following list of eligible electrification, decarbonization, and clean energy project types:

- Investment Tax Credit (ITC)-eligible
- Ground-source heat pumps (GSHP)
- Solar PV (rooftop, ground mount, and parking canopy)
- Solar PV with island-able battery storage systems

Non-ITC-eligible but enabling work for ITC-eligible systems, e.g.

- Building electrification readiness (e.g. high-performance building envelope improvements, high-efficiency energy recovery ventilation with ASHP-tempered makeup air, conversion of heating and cooling distribution systems such as steam to hot water conversions, electrical service and system upgrades to enable full building electrification)
- Roof repair
- Window replacement

Non-ITC-eligible

- Air-source heat pumps (ASHP)
- Electrification of other building systems (e.g. domestic hot water, kitchen equipment)
- EVSE for electric school buses and personal vehicles
- Other electrification, decarbonization, and clean energy projects to be reviewed on a case-by-case basis.

Fiscal Year 25 Activities

As MassCEC, DESE, and their partners implement the program, there will be continued stakeholder outreach and engagement, including to school districts; followed by finalization of the program design, and then program launch.

Additional information about the program can be found here:

<https://www.masscec.com/program/green-school-works>