GREEN SCHOOL WORKS

Round 2 Debrief

WEBINAR PURPOSE

- **Transparency** in how GSW award decisions were reached
- **Share** broader lessons that schools can take from the pool of applications
- **Support schools** in moving forward with projects by sharing current funding opportunities

ROUND 2 RESPONSE

61 Applications…

- 80 school buildings
- 26 HVAC Upgrades
- 45 heat pump
- 23 Solar PV

… worth $138M…

- $19M available
- Round 1: $160M in applications for $52M available

… to 9 schools

- Arlington
- Falmouth
- Lawrence
- Malden
- Methuen
- New Bedford
- Northampton
- Truro
- Worcester

SELECTION CRITERIA

LOW-INCOME

- Percentage as per DESE school profiles
- Not a requirement as per Round 1
- Scored as a decile of the overall applicant pool

IMPACT

- Use of recoverable grant
- Leveraging ITC
- GSW filling a need
- Benefits beyond BAU – changes outcome
- Needs beyond low-income

FEASIBILITY

- Team capacity
- Scope and risk
- Reasonable budget

INNOVATION

- Priority technologies
- Scalable and replicable for other schools
- Innovative structure or approach

IMPACT

What did strong applications show?

Project

- Urgent need for funding with scope that would put school on path towards fossil fuel free
    - End-of-life fossil fuel systems at risk of like-for-like replacement
    - Failing systems that were having material student, staff and teacher impact
    - A project beyond business-as-usual (BAU) maintenance
    - Typically retrofits rather than new construction (where code dictates many clean solutions)
- Leveraging ITC
- Recoverable grant
- Supporting underserved populations

FEASIBILITY

What did strong applications show?

Capacity

- A robust team in place, ideally a combination of the school, municipality, utility, and contractor
- Community support and local approvals e.g., letters of support from local leadership
- If leveraging ITC, an understanding of ITC and retention of a tax consultant

Budget

- Understanding of school's project financing and other options
    - Detailed financing stack (municipal funding, grants, loans, etc.)
    - Secured funding & plans to pursue other sources
    - Detail what Green School Works and other funding would support
    - Identified risks and contingencies

FEASIBILITY

What did strong applications show?

Scope

- Realistic timelines that are thoughtful to the project components
- Documentation (feasibility studies, planning reports, design documents)
- Comprehensive Building Assessment (CBA) or equivalent study
- Thoughtful integration into other works, and the long-term building plans e.g., phased approaches or roof replacement
- Discussion of alternative project options and both made / pending decisions
- Applicants considered their process for engaging contractor partners, identified appropriate procurement paths and/or found opportunities to streamline

INNOVATION

What did strong applications show?

Project

- Thoughtful planned additional benefits (community resilience planning, student learning)
- Less proven solutions like ground source heat pumps, storage, etc.
- Demonstrations that would enable replicability in other schools in MA
- Wholistic approaches that considered building science, renewables, grid integration, and other opportunities for impact
- Using existing infrastructure to optimize overall costs, building impact, project feasibility, etc.
    - Reusing ductwork
    - Avoiding demolition
- Innovation in financial approach – including use of tax credits and recoverable grant option

LEARNINGS

A short checklist to support your project

- ❑ Bring together your team early
  - ❑ School, District, Municipality, Utility, Contractors
  - ❑ Regular updates and decisions
  - ❑ Identify stakeholders' priorities
  - ❑ Talk to teachers/municipality about aligned opportunities
- ❑ Learn from peers
  - ❑ Discuss with neighboring municipalities/schools
  - ❑ Case studies and webinars
- ❑ Engage technical partners on innovation
- ❑ Embed into long-term building plans
  - ❑ Early due diligence of the options available – scope, budget, timelines
  - ❑ Order of upgrades: Efficiency > Electrification
  - ❑ Operational savings: Renewables / Advanced Systems (e.g. ground-source)
  - ❑ Document decision process for the future - a record of outstanding decisions, dependencies, and contingencies
- ❑ Think early about post-project needs of new systems
  - ❑ Commissioning
  - ❑ Staff/User Training
  - ❑ Documentation

OTHER FUNDING SOURCES

- **MassCEC**: Green School Works Technical Assistance program
- **MSBA**: Accelerated Repair Program and CORE programs
- **DOER**: Green Communities grants
- **Mass Save**: Utility incentives for school electrification

GSW: TECHNICAL ASSISTANCE

Eli Goldman, MassCEC

GSW TECHNICAL ASSISTANCE

$5M
Funding available

$156K
Awarded to date

45
Active enrolled projects

DESIGNED TO COMPLIMENT MASS SAVE

HELPING CITIES AND TOWNS TAKE THAT FIRST STEP TOWARDS:

- Project scoping and budgeting
- Comprehensive Building Assessments
- Portfolio Decarbonization Roadmaps
- Renewable energy and storage feasibility
- Renewable Energy Certificate (REC) analysis
- Ground source heat pump feasibility

ENROLLING NOW

Available Regardless of Mass Save Eligibility – Schools with at least 40% low-income students
Services available at low to no cost to eligible schools

TECHNICAL ASSISTANCE: NEXT STEPS

1. **School representative completes enrollment form**
2. **MassCEC contacts you** to understand project goals, the school then selects a prequalified vendor and kicks off scoping
3. **MassCEC contracts with vendor to begin work** on the agreed scope
4. **Vendor submits a draft report,** MassCEC will review and provide feedback
5. **Final report is delivered** to school staff

https://www.masscec.com/program/green-school-works-technical-assistance-services

For any questions, reach out to greenschools@masscec.com

MSBA: ARP AND CORE

Mike McGurl, MSBA

Massachusetts School Building Authority

Deborah B. Goldberg
State Treasurer and Receiver-General
Chair

James A. MacDonald
Chief Executive Officer

Mary L. Pichetti
Executive Director/Deputy CEO

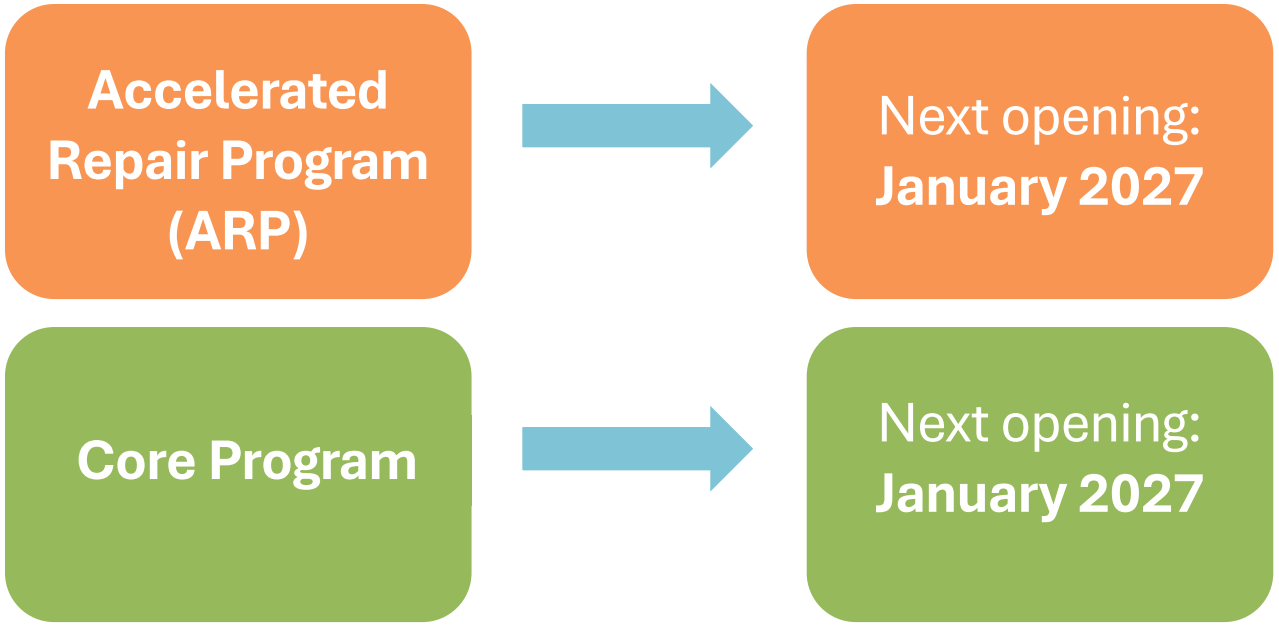
Massachusetts School Building Authority (MSBA)

Our Mission

Partnering with Massachusetts communities to support the design and construction of educationally-appropriate, flexible, sustainable, and cost-effective public school facilities.

School Districts Looking to Update or Build a School with the MSBA?

- Submitting an SOI is the critical first step in the MSBA's program for school building construction, addition, and/or renovation or repair grants
- Allows districts to inform the MSBA about deficiencies that may exist in a local school facility and how those deficiencies inhibit the delivery of the district's educational program
- More information about filing an SOI can be found on the MSBA website:
  - Statements of Interest | Massachusetts School Building Authority (massschoolbuildings.org)



Accelerated Repair Program - Updates

- After a temporary, one-year pause to the ARP in 2023, the MSBA Board of Directors voted to reopen the Program in 2024 with ***an increased estimated budget*** following the approval of the Commonwealth's FY 24 Budget, which provides that grant amounts related to the ARP shall not be calculated as part of the MSBA's Annual Cap limit

- Commencing in January 2025, the ARP opened as a ***biennial*** Statement of Interest ("SOI") opening (every two years)

- The MSBA believes that a biennial opening will provide more predictability and flexibility for district officials who are administering facilities improvements in their districts

Accelerated Repair Program - Updates

The ARP program has been updated as follows:

- ARP applications will be accepted biennially (every two years).
- First application period opened in January 2025 and the next application period will open in January 2027.
- ARP expanded budgets offering Windows and Roofs as well as Heat Pump Conversion.
- Additional information included in the 2025 Statement of Interest Overview:

Category	Notes
Window & Roof Restoration/Replacement	- $300 million budget - Existing windows must be over 30 years old - Existing roof must be over 20 years old
Heat Pump Conversion **(NEW)**	- $250 million budget - Existing windows must be less than 30 years old, - Existing building must not have been opened or renovated (including existing HVAC system) after 2010 - Existing mechanical heating distribution is not supported by steam piping

Accelerated Repair Program – Heat Pump Study

- Inform development of re-vamped Accelerated Repair Program for conversion of heating and cooling systems from direct fossil fuel dependency to electric heat pumps
    - Determine potential scope of heat pump conversion projects
    - Assess cost factors and operational impacts for heat pump conversion
    - Add cooling & mechanical ventilation in all classrooms to improve indoor air quality
- Technologies Analyzed
    - Ground Source Heat Pumps – "Geothermal"
    - Air Source Heat Pumps – Pulling Heat from the Air
    - Hybrid systems – Heat Pumps plus supplemental Gas Boilers for peaking
- More information about the Study can be found on the MSBA website:
    - Accelerated Repair Program | Massachusetts School Building Authority

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DOER:
GREEN COMMUNITIES

Mark Rabinsky, DOER

Green Communities Funding Opportunities

Green Communities Grants

- $205M+ awarded in designation and competitive grants
- Projects include building efficiency, LED streetlights, heat pump systems, electric vehicles
- 1,159 grants complete to date (278 designation, 881 competitive)

Designation Grants

- Initial funding for newly designated Green Communities
- Grants based on $125K base plus a population/per capita income formula.
- Range $126,430 to $1M

Competitive Grants

- Awards up to $250K
- Communities over $1M in prior awards face limits
- Decarbonization projects - larger, more complex projects; up to $500K with local match
- Prescriptive projects - simplified review for LED lighting, windows, EV charging, and similar measures
- Energy efficiency projects - envelope, controls, retro-commissioning, heat pumps
- No funding for new fossil fuel-fired heating equipment
- See the full Program Opportunity Notice (PON) for details (PON-ENE-2026-001)

Green Communities Funding Opportunities, Continued

Climate Leader Communities Grants

- To qualify for Climate Leader Community certification, municipalities must meet six requirements. See the Massachusetts Climate Leader Communities overview website [1] for details.

Decarbonization Technical Support

- Up to $150k for studies/designs for Climate Leader roadmap projects.
- One award per community, supports planning for projects such as heat pumps, solar thermal, solar PV, energy storage, and resiliency measures, with applications accepted on a rolling basis.
- See the full Program Opportunity Notice (PON) for details (PON-ENE-2025-014)

Decarbonization Accelerator

- Up to $1M per community for project implementation.
- One award per community; covers projects like heat pumps, PV, storage, and electrification.
- See the full Program Opportunity Notice (PON) for details (PON-ENE-2025-013)

[1] https://www.mass.gov/info-details/climate-leader-communities#climate-leader-communities-overview

Green Communities Funding Opportunities, Continued

Municipal Energy Technical Assistance

- META grants fund third-party technical assistance for municipalities, regional school districts, and water/wastewater districts.
- Eligible work includes HVAC studies, retro-commissioning, owner's agent services, and solar PV plus battery storage design.
- Awards are capped at $15,000, or $25,000 if engineering documents are included.
- The next application deadline is June 4, 2027, at 4:00 PM (Block 2)
- See the full Program Opportunity Notice (PON) for details (PON-ENE-2026-022)

Regional School District

- Grants to electrify existing facilities at Massachusetts Regional School Districts
- Funding supports space heating, water heating, battery-powered maintenance equipment, and commercial kitchen equipment.
- Maximum award is $250,000 per applicant; next deadline is September 4, 2026, at 4:00 PM (Block 3)
- See the full Program Opportunity Notice (PON) for details (PON-ENE-2025-032)

MASS SAVE

Lori Timmerman, National Grid

June 2026

Energy Efficiency and Decarbonization in K-12 Schools

WE ARE MASS SAVE®:

Berkshire Gas
An Avangrid company

Cape Light Compact

EVERSOURCE

Liberty

nationalgrid

Unitil

Benchmarking/ Prioritization

Portfolio Prioritization Plan (PPP)

Identify *buildings with greatest potential; capture building data*

Measure Identification

Comprehensive Building Assessment (CBA)

Scope *opportunities for energy efficiency + electrification*

Investment Decision

Focused Study

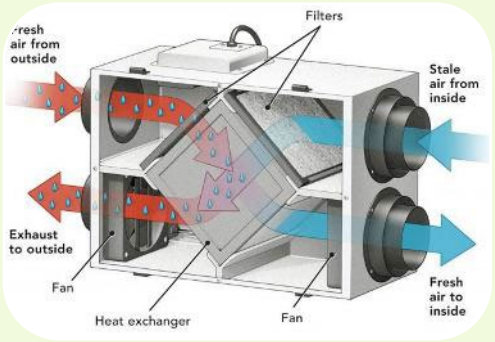
Detailed, ***actionable*** *project estimates*

Implementation

INCENTIVE OFFER

Incentives for Getting Electrification-Ready

Weatherization

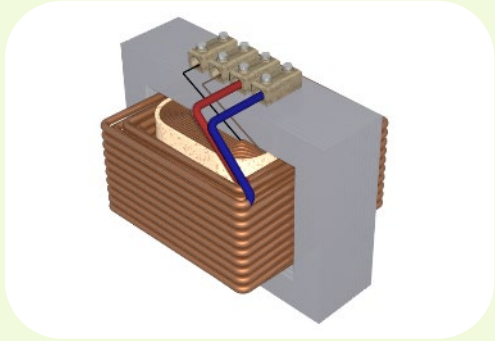


Ventilation

Controls

Hydronics

Variable Frequency Drives



Transformers

Compressed Air

Lighting Controls

https://www.masssave.com/en/business/rebates-offers-services

Weatherization Program

- Benefits include reduced heating load and improving occupant comfort
- Includes insulation, air-sealing, weatherstripping

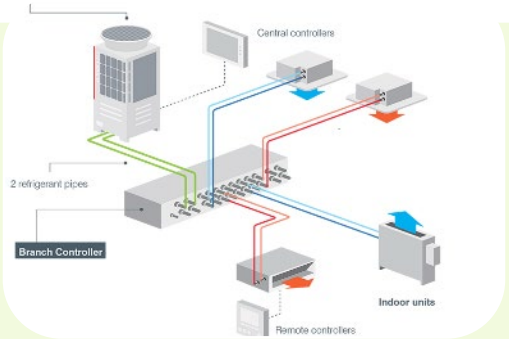
Incentives

- Prescriptive rebate for buildings <20,000 sq ft
  - Based on R-value added per sq ft
- Custom incentive for buildings >20,000 sq ft
  - Requires a benefit cost analysis
  - Incentive based on energy savings

Electrification in Existing Buildings

Air Source Heat Pumps

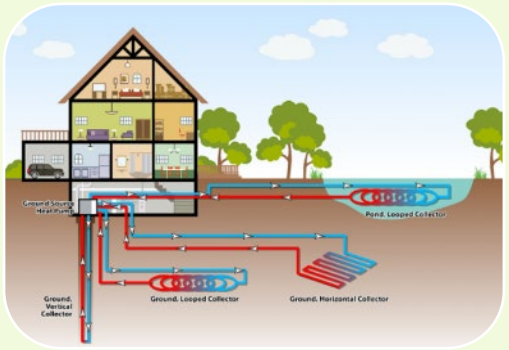
Heat Pump Rooftop Units



Variable Refrigerant Flow

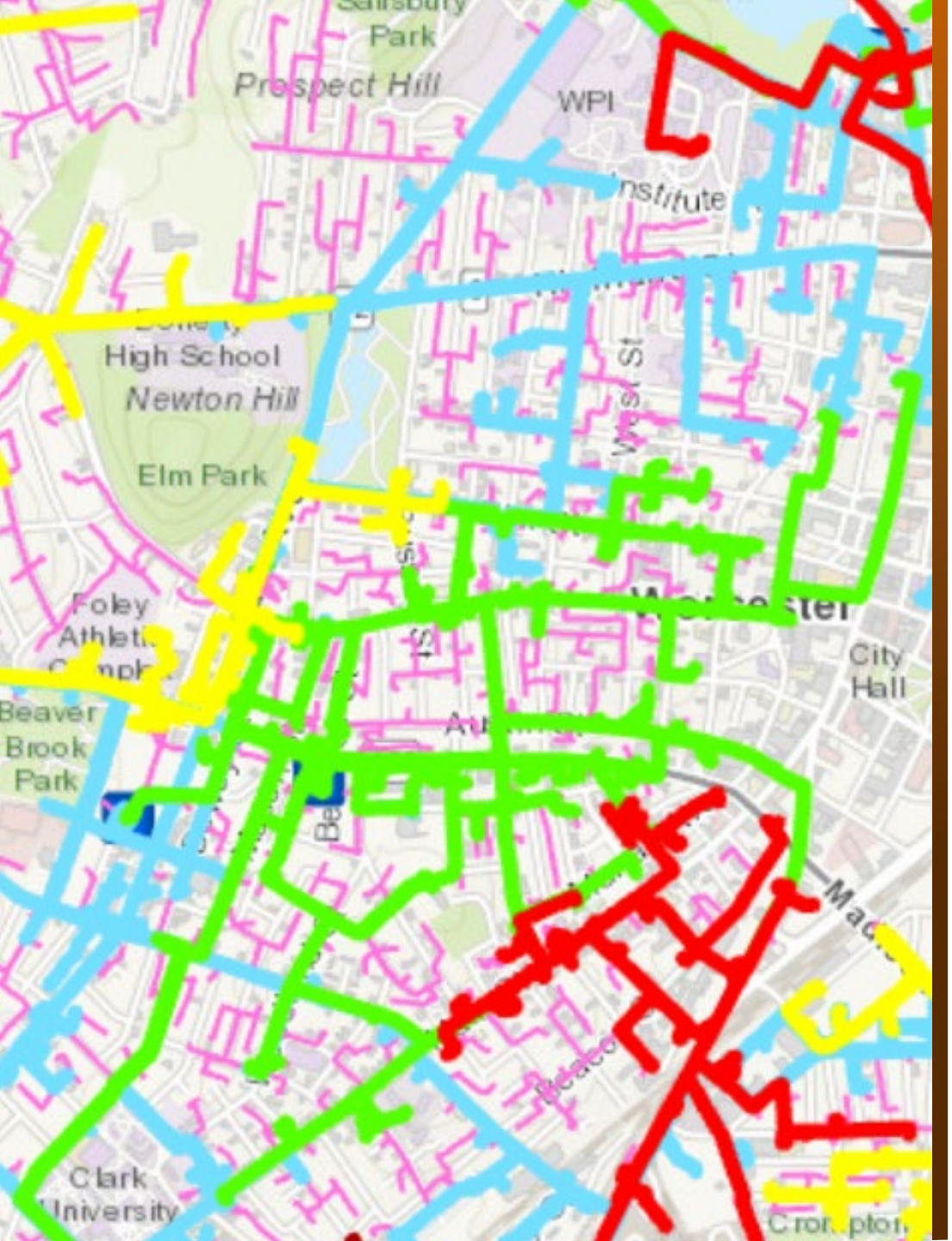
LEV Kits

Heat Pump Chiller/Air to Water



Ground Source Heat Pumps

[Qualified Products List]



Some of the Barriers to Electrification

- Economic viability
- Existing building electrical infrastructure
- Existing grid capacity
- Utilizing existing heating distribution systems
- Timing with other projects in this building
  - roofs, other failing equipment, etc.

Help with Overcoming Challenges

- Studies
- Incentive funding
- On Bill Repayment/Financing Options
- Electrification engineers
- Project Expeditors (NGRID) / Muni Vendors (Eversource) or
- Utility contracted vendors
- Mass Save incentives for training
  - Building Operator Certification (BOC)

Talk to us *early*, talk to us *often*

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BREAKING NEWS!

- Last week, the Governor approved a further **$25M** from the MA Legislature for Green School Works!

- More information to follow over the coming months

MASS
CLEAN ENERGY CENTER

THANK YOU

- **Specific questions or feedback on the Green School Works program can be sent to greenschools@masscec.com.**
- **Share feedback on Green School Works via survey (link to follow)**