



BERDO REVIEW BOARD MEETING

September 29, 2025



BERDO REVIEW BOARD



Jessica Boatright
Board Chair



Gabriela Coletta Zapata
City Councilor



Stephen Ellis
Board Member



Hessann Farooqi
Board Member



Lori Ferriss
Board Member



Gail Latimore
Board Member



Reginald Stovell Jr.
Board Member

City of Boston Staff



**Hannah
Payne**

*Director,
Carbon Neutrality*



**Diana
Vasquez**

*BERDO Review
Board Manager*



**Claudia
Diezmartinez,
Ph.D.**

*Policy and Equity
Advisor*



**Zengel
"Ziggy" Chin**

*BERDO Review Board
Assistant*

Agenda

Today's Meeting



Public Meeting

1. *Approval of Meeting Minutes*
2. *Administrative Updates*
3. *Presentations from Equitable Emissions Investment Fund 2025 Application Cycle Finalists*
 1. *Morville House Apartments*
 2. *Roxbury Tenants of Harvard*
 3. *Allston Brighton CDC*
 4. *Boston Medical Center*
 5. *Urban Edge Housing Corporation*
 6. *Boys & Girls Club of Dorchester*
4. *Adjournment*

A night-time photograph of a city street, likely in a historic district, decorated with festive lights. The scene is dimly lit with a blue tint. In the background, a building with a prominent dome is visible. The street is lined with trees and buildings, some of which are illuminated with warm lights. People are walking on the sidewalk, and a street lamp is visible in the foreground. The overall atmosphere is festive and urban.

Approval of Meeting Minutes


Board votes on approving previous meeting's minutes

Administrative Updates

Staff presents administrative updates

Review Board Upcoming Timeline



A nighttime photograph of a city street, likely in New Orleans, featuring a prominent building with a dome and a street lamp with multiple globes. The scene is illuminated by warm streetlights and festive string lights, with people walking in the foreground. The image has a dark blue overlay.

Board Questions

Admin Updates

The background of the slide is a dark blue wireframe illustration of a cityscape, showing various building footprints and structures from an aerial perspective. The lines are light blue and create a sense of depth and urban density.

Equitable Emissions Investment Fund Finalists

2025 Application Cycle



Application Review

2025 Application Cycle



Process Review

- We received **22 applications** total this year
- The BERDO team is did an initial review with the City's Legal and Grants teams for eligibility of the projects.
- The BERDO team shared application deemed eligible with accompanying cover pages with each Review Board member
 - *Each Board member received an individual project evaluation criteria*
- On **September 8** the Review Board voted on **6 finalists** to present today

Draft Evaluation Form

Criteria	Highly Advantageous	Advantageous	Not Advantageous	Not Present	Need more information
Emissions reductions	<i>Building emissions reductions are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Building Emissions reductions are mentioned, but timeline and scale are unclear or results are moderate emissions reductions.</i>	<i>Building emissions reductions are limited.</i>	<i>Not eligible for funding.</i>	<i>Need more information regarding building emissions reductions.</i>
Benefits to affordable housing	<i>Affordable housing benefits are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Affordable housing benefits are mentioned, but timeline and scale are unclear or are not a main focus.</i>	<i>Affordable housing benefits are limited.</i>	<i>Affordable housing benefits are not mentioned.</i>	<i>Need more information regarding benefits to affordable housing.</i>
Benefits to tenants	<i>Tenant protections are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Tenant protections are mentioned, but timeline and scale are unclear or are not a main focus.</i>	<i>Tenant protections are limited.</i>	<i>Tenant protections are not mentioned.</i>	<i>Need more information regarding benefits to tenants.</i>
Benefits to labor and workforce development	<i>Labor benefits and workforce development benefits are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Labor benefits and workforce development benefits are mentioned, but timeline and scale are unclear or not a main focus.</i>	<i>Labor benefits and workforce development are limited.</i>	<i>Labor benefits and workforce development are not mentioned.</i>	<i>Need more information regarding benefits to labor and workforce development.</i>
Benefits to outdoor air quality	<i>Outdoor air quality benefits are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Outdoor air quality benefits are mentioned, but timeline and scale are unclear or not a main focus.</i>	<i>Outdoor air quality benefits are limited.</i>	<i>Outdoor air quality benefits are not mentioned.</i>	<i>Need more information regarding benefits to outdoor quality.</i>
Benefits to indoor air quality and quality of life	<i>Benefits to indoor air quality and quality of life are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Benefits to indoor air quality and quality of life are mentioned, but timeline and scale are unclear or not a main focus.</i>	<i>Benefits to indoor air quality and quality of life are limited.</i>	<i>Benefits to indoor air quality and quality of life are not mentioned.</i>	<i>Need more information regarding benefits to indoor air quality and quality of life.</i>
Climate resilience benefits	<i>Climate resilience benefits are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Climate resilience benefits are mentioned, but timeline and scale are unclear or not a main focus.</i>	<i>Climate resilience benefits are limited.</i>	<i>Climate resilience benefits are not mentioned.</i>	<i>Need more information regarding climate resilience benefits.</i>
Energy justice benefits	<i>Energy justice benefits are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Energy justice benefits are mentioned, but timeline and scale are unclear or not a main focus.</i>	<i>Energy justice benefits are limited.</i>	<i>Energy justice benefits are not mentioned.</i>	<i>Need more information regarding energy justice benefits.</i>
Other benefits	<i>Other benefits included in the proposal are clearly defined, expected timeline and scale are clearly outlined, and are realistic.</i>	<i>Other benefits are included in the proposal, but timeline and scale are unclear or not a main focus.</i>	<i>Other benefits included in the proposal are limited.</i>	<i>Other benefits are not mentioned.</i>	<i>Need more information regarding other benefits.</i>

Equitable Emissions Investment Fund Finalists

2025 Application Cycle



Procedure for today:

1. We're allocating **20 minutes** per presentation
 - **10 minutes** for applicants to present on their project proposals
 - **10 minutes** for Review Board members to ask relevant questions
 - City staff will keep time and provide a 1 minute warning

Next Steps:

2. We will request each board member's recommended funding decision via email
3. The Review Board will vote on the awards during the October 14 hearing

Presentation Order

2025 Application Cycle



1. **Morville House Apartments** – 100 Norway St Decarbonization Project
2. **Roxbury Tenants of Harvard** – Levinson Tower: Heat Pump & Exhaust Heat Recovery System
3. **Allston Brighton Community Development Corporation** – Hano Homes Deep Energy Retrofit (DER)
4. **Boston Medical Center Health System** – Power to the People: Expanding Boston Medical Center’s Clean Power Prescription program with a new solar facility to benefit residents of the City of Boston
5. **Urban Edge Housing Corporation** – Theroch Deep Energy Retrofit (DER) Project
6. **Boys & Girls Club of Dorchester** – Marr HVAC Renovation

The background of the slide is a dark blue aerial wireframe map of a city, showing the outlines of buildings, streets, and parks. The map is centered on the location of the Morville House Apartments.

Morville House Apartments

100 Norway St. Decarbonization Project





MORVILLE HOUSE APARTMENTS
An Episcopal City Mission Affordable Housing Site

Decarbonization Project





EPISCOPAL CITY MISSION



Episcopal City Mission

Boston Born, Mission Driven

- 1844 Founded on serving Boston's poor.
- 1960s-1970s – Shift from direct service to tackling root cause of economic injustice.
- Morville House was constructed in 1972 with the intention to develop and rehabilitate affordable housing in Boston.

ECM's Guiding Policy Today

ECM is committed to shrinking the racial wealth gap. We will partner with BIPOC-led movements and solidarity economies in Massachusetts to build just, sustainable models that redistribute resources and power-laying the groundwork for reparations and lasting solidarity.

Morville House Apartments

Who and How we serve.

100%
affordable

Serves the
elderly and
disabled

Diverse
community

On-site staff and
resident services
professionals

Strong capital needs plans
with emphasis on long-term
health and efficiency.

Trusted relationship with
leading managing agent
In affordable housing.



Project Overview

47.7 kW-DC Solar array

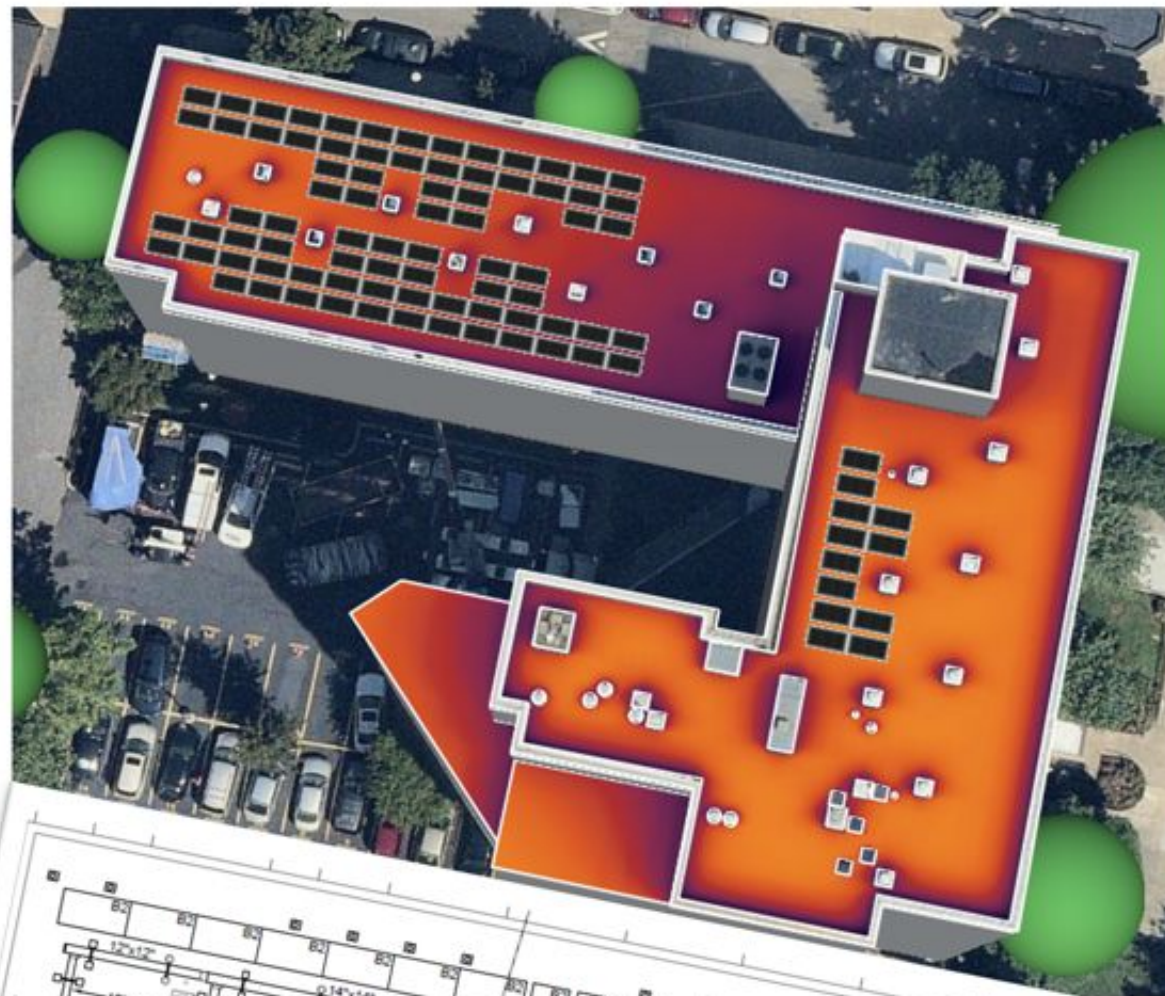
Total Lifetime Savings to Nonprofit Developer:
\$376,562

6.5% of common area electricity use covered

System utilizes Basler zero export system to
comply with utility Area Network

- Innovative approach for solar and affordable housing,
useful for BERDO/BUEDO compliance

**Alternative Compliance Payments for Morville:
\$28,000-\$98,000 per year**



FUNDING SOURCES

TOTAL PROJECT COST: **\$242,759**

50% Federal Tax Credit
Secured

\$121,379

Remaining Cost

\$121,380

Requested from EEIF: **\$125,000**

Funding from EEIF will fully cover the solar installation costs and a small amount of ECM and Maloney's staff time to manage the project

Tenant Participation



- All energy from this system will be used to offset common-area electricity
- Per the Low-Income Bonus Tax Credit, ECM is required to equitably distribute a portion of the energy output to tenants
 - In order to comply, ECM will be contributing **\$8,209** to the buildings operating reserves
- Morville House Resident Counsel routinely updated on project goals and construction timelines. Very supportive group.
- Upon completion of the project, ECM and Resonant Energy will provide an educational presentation to tenants about the decarbonization improvements

Contracting

- ECM has contracted with Resonant Energy to develop this project
- Resonant will use reasonable efforts to hire install crews that are as diverse as possible while having previous experience in this kind of project



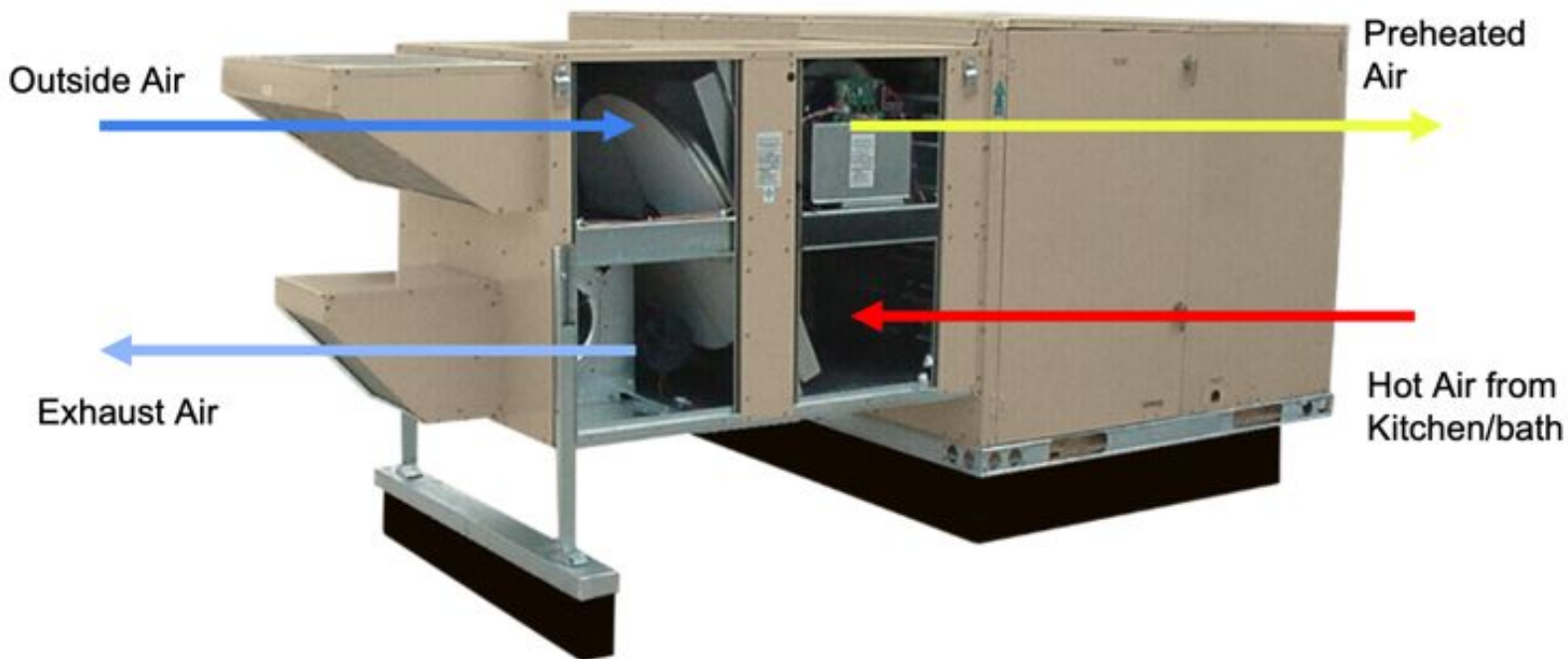
30%

- Since 2015, Morville House has spent 30% of total expenditures to WMBE Businesses.
- ECM, Morville House, and Maloney Properties, LLC make significant efforts to ensure that WMBE businesses are provided opportunities to bid on all projects related to the building.

Complementary Scope - ERV

Ventilation project to reduce and then electrify ventilation energy is in process. 90% engineering design is complete for:

- Sealing kitchen and bathroom ventilation exhaust shafts for efficiency and waste reduction.
- Specification of new energy efficient exhaust fans to reduce electrical power consumption.
- Specification of new energy recovery air handlers that will capture waste heat from exhaust and preheat make up air. Supplemental heating of make-up air will be by heat pump technology.
- The energy recovery and heat pump technology is contained in three specified air handlers on roof.
- Project will eliminate existing natural gas heating of winter make up air.
- Project submitted and accepted into LEAN program which is in process..



The porous wheel rotates to warm in exhaust air to rotate into cold fresh air to preheat between kitchen and bathroom exhaust and cold make up air to preheat air in winter. Heat pump provides required supplemental heating. 100% electrification of make up air to building.

Project Status

- Low Income Bonus Tax Credit: **Awarded**
- Interconnection Service Agreement: **Received from Eversource**
On schedule for a Spring/Summer 2026 installation



Thank you for your consideration.



Chris Raynor, Sr. Property Manager
Managing Agent for Episcopal City Mission
Maloney Properties, LLC
craynor@maloneyproperties.com



Roxbury Tenants of Harvard

Levinson Tower: Heat Pump & Exhaust Heat Recovery System



Levinson Tower: Heat Pump and Exhaust Heat Recovery System



WHO WE ARE

- Roxbury Tenants of Harvard (“RTH”) is one of the oldest grassroots, tenant organizations in the country, and is dedicated to defending the rights to quality, affordable housing for people of all races and cultures.
- Roxbury Tenants of Harvard is a nonprofit managing diverse communities that have provided affordable housing to low- and moderate-income families and individuals for almost 50 years. We have 1,114 apartments, townhomes, and multi-family homes that serve the needs of our tenants as their living needs change and evolve.
- Our largest community is Mission Park with 775 apartments located on Mission Hill in Boston.
- The Mission Park community is composed of ~1,500 low- and moderate-income residents whose average household income is under \$25,000 per year.



THE BUILDINGS

- Mission Park has three mid-rises and one high-rise plus 147 apartments in 18 townhouse structures.
- All 22 buildings are heated from a central natural gas boiler room in the 27-story **Levinson building**.



Townhouses



Flynn



Neville



Duggan

COMMITMENT TO DECARBONIZATION

- Completed a Deep Energy Retrofit (DER) study in spring 2025 motivated in part by BERDO.
- Supported by GreenerU, Elevated Design, and Building Evolution, we are also working on a pilot townhouse decarbonization, using heat pumps to take a first group of apartments off the campus heating / cooling loop.
- The DER study has:



Assisted in identifying and analyzing energy and emissions projects



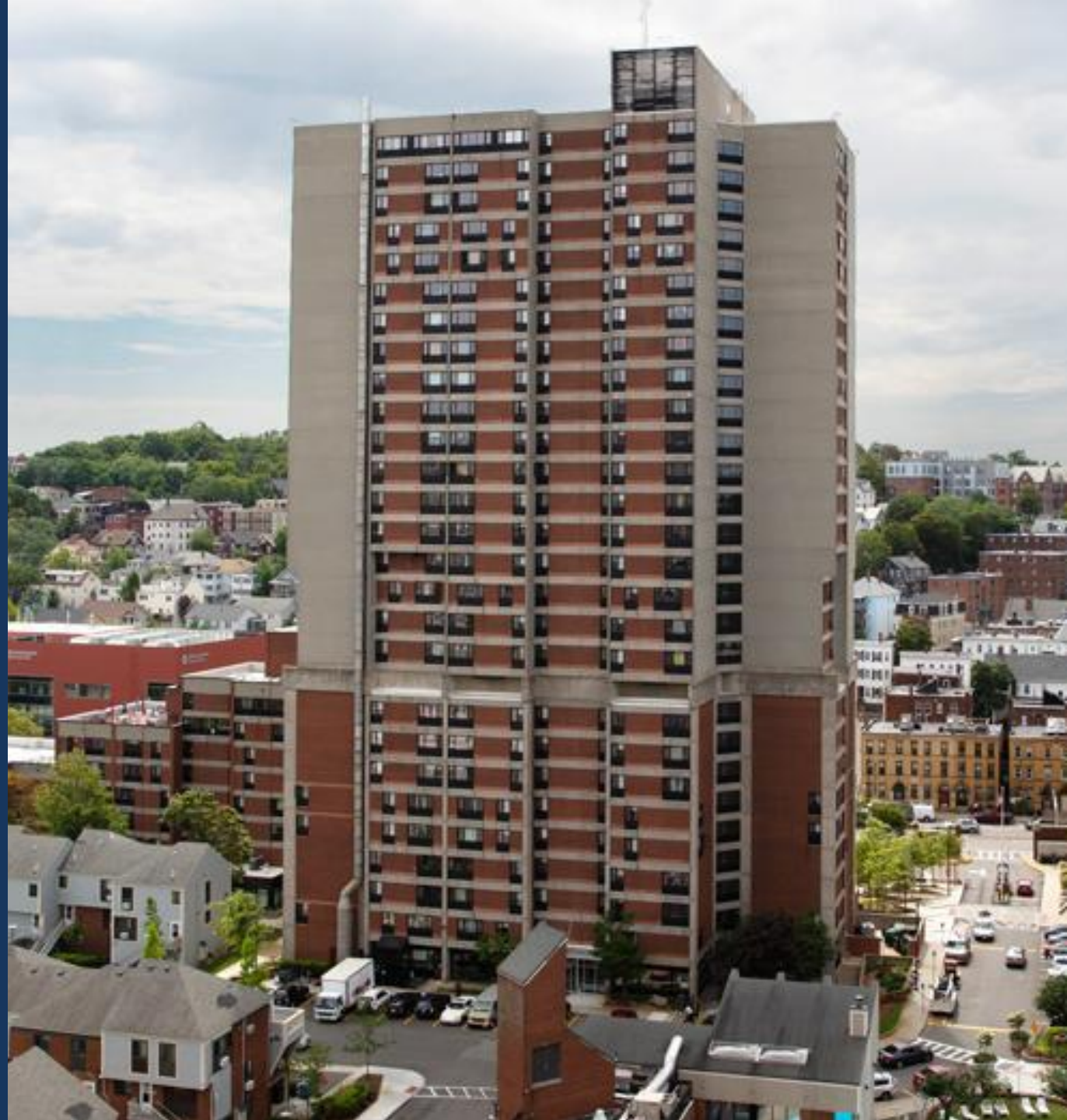
Provided the opportunity to plan for decarbonization strategically



Laid groundwork for short-, medium-, and long-term decarbonization pathways

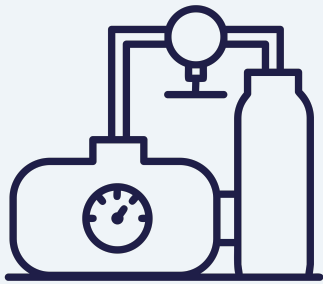
THE LEVINSON PROJECT

(AND THE PROBLEMS IT SOLVES)

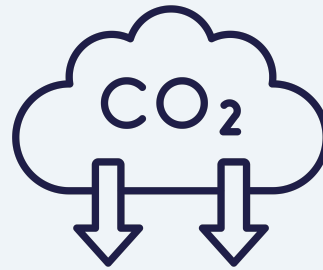


THE OPPORTUNITY

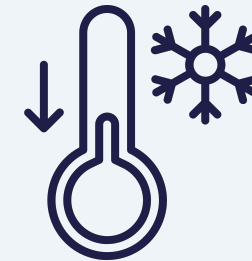
- Heat from the kitchen and bathroom ventilation stacks is currently released vs. being reused.
- Recapturing and using this **waste heat** would have the following impacts:



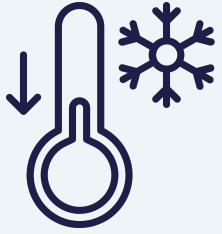
**10% lower boiler
combustion**



**Emissions
reductions**



**Improved tenant
health and comfort**



TENANT COMFORT AND HEALTH

- 1 Inadequate heat:**
During cold snaps, tenants call for more heat than central gas boiler plant can provide.
- 2 Challenges with ventilation and drafts:**
To generate adequate heat during cold spells, incoming make-up air is reduced, reducing fresh-air ventilation and pulling drafts into apartments.

THE PROPOSED PROJECT

1 Recover low-grade heat from **bathroom and kitchen exhaust stacks on the Levinson tower roof** and use a **water-to-water heat pump** to increase its temperature.

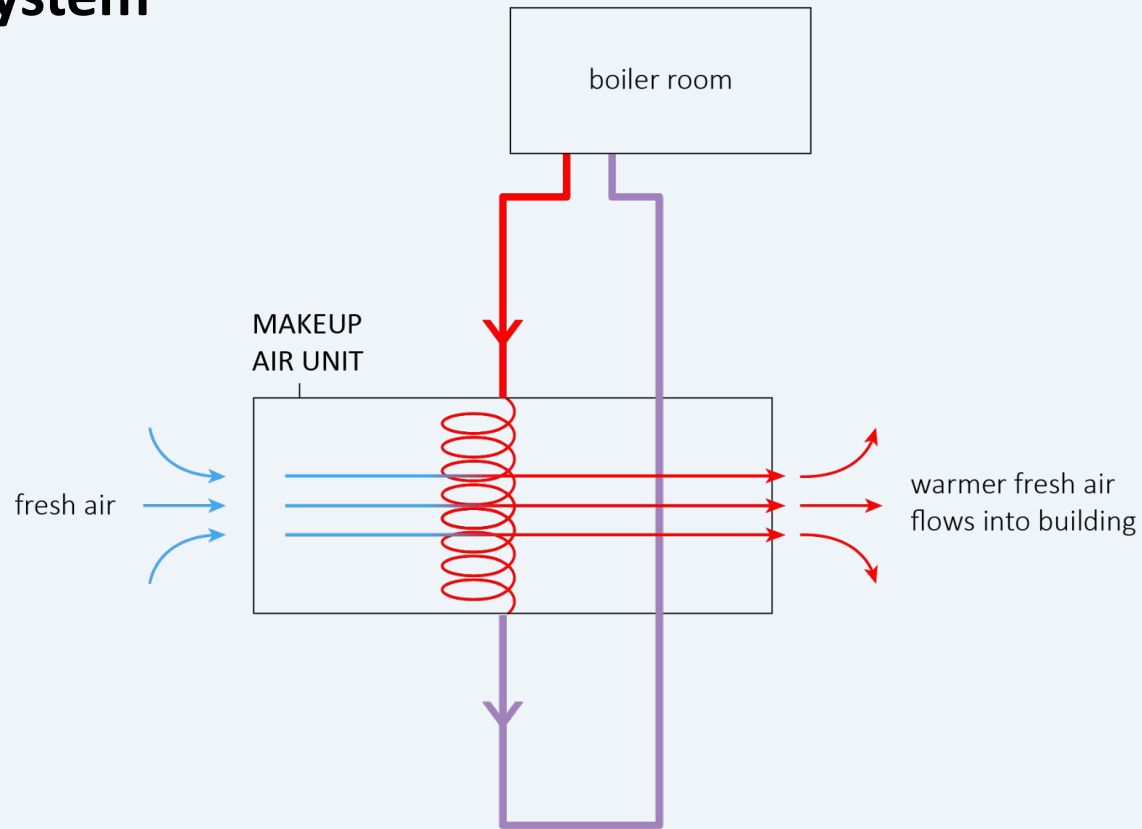


2 Feed recovered heat back into central heating loop using a **heat recovery / heat pump system**



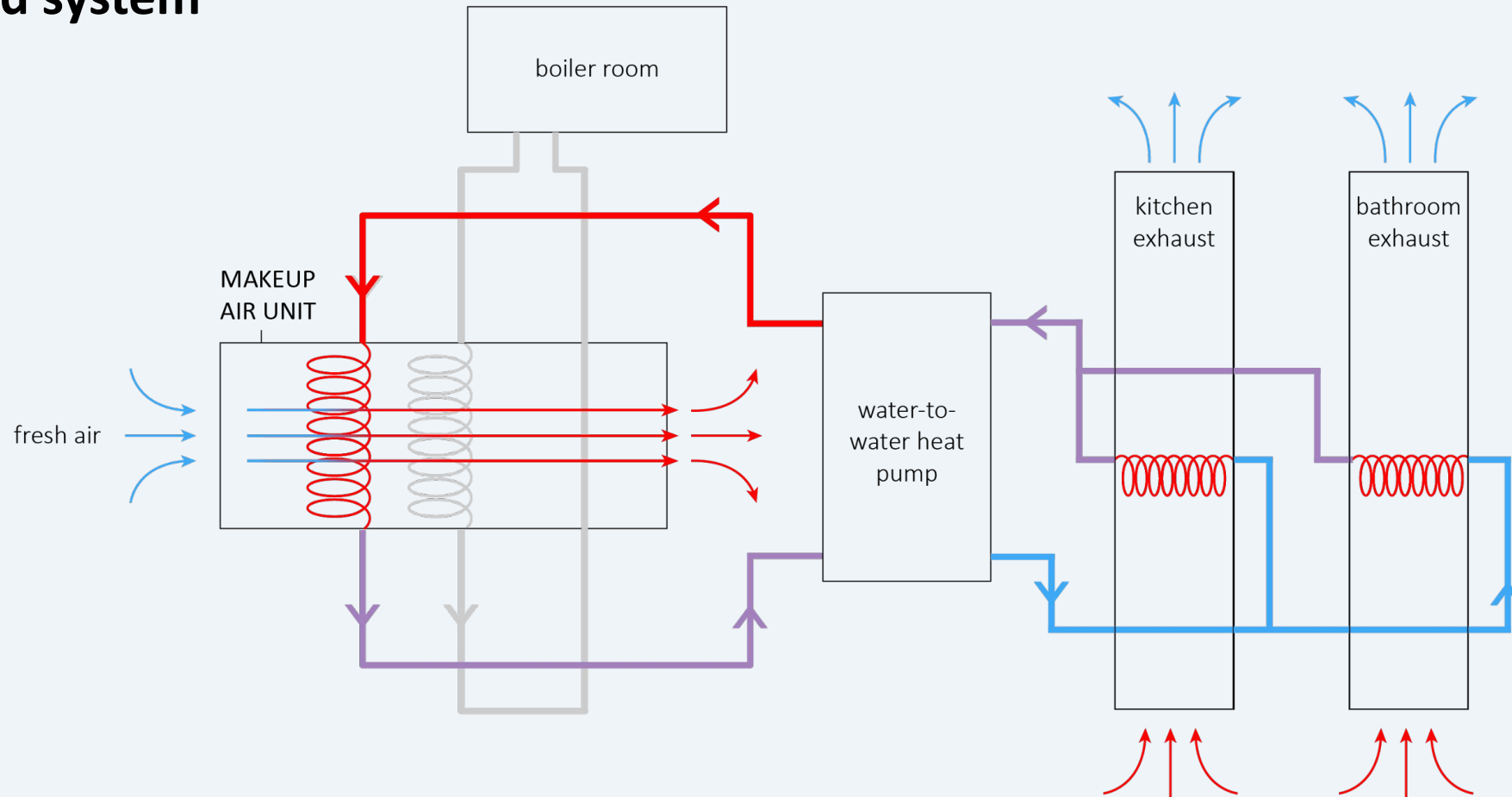
THE PROPOSED PROJECT

Current system



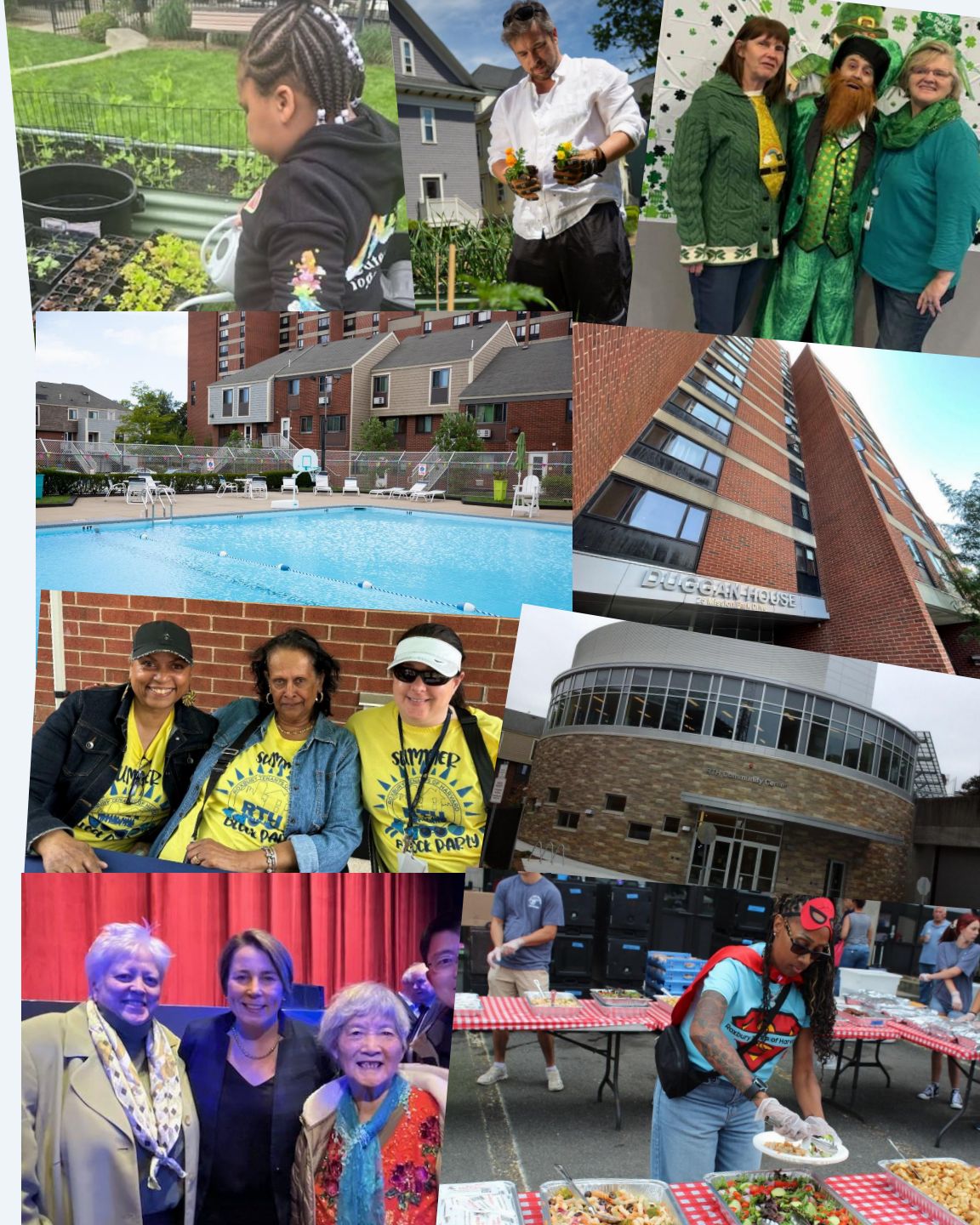
THE PROPOSED PROJECT

Proposed system



DECARBONIZATION BENEFITS

- The system supports our **long-term** zero-over-time (ZOT) strategy while having a large **immediate impact**.
- Can be easily incorporated into a **future ASHP or GSHP central heating system** which we are now studying.



UPDATED EMISSIONS REDUCTIONS AND ROI

	Proposal	Updated
Gas saved	19,320 therms	101,862 therms
CO2 saved	102,000 kgCO ₂ e	537,781 kgCO ₂ e
Gas bill savings	\$25,100/year	\$132,336/year
Gross project cost	\$650,000	\$1,215,000
Simple payback	26 years	9.2 years
Emissions reduction per \$ of grant	0.68 kgCO ₂ e/\$	3.59 kgCO ₂ e/\$
Grant request	\$150,000	\$150,000
Utility incentive (est.)	\$118,000	\$236,000

TENANT PARTICIPATION

- RTH takes tenant participation seriously and promotes tenant empowerment through active participation in leadership and development.
- Our 100% resident board meets monthly to review all capital plans, directing staff and property manager on priorities and providing resident perspectives on design and implementation.
- Board organizes periodic resident information and feedback sessions typically attracting 50-100 tenants. This will be the forum for planning and implementing the proposed project.

For the Levinson heat recovery project, the impacts to tenants are expected to be 100% positive since work takes place on the roof and in the boiler room and not in apartments.



PROCUREMENT

- Our design-build partner GreenerU will procure subcontractors using a transparent bid process and has a track record of successful projects working with M/WBE subcontractors in Boston.
- Together we will set a W/MBE policy and utilization goal based on a percentage of subcontracted value and commit to reporting on the procurement process and W/MBE participation to the Review Board.





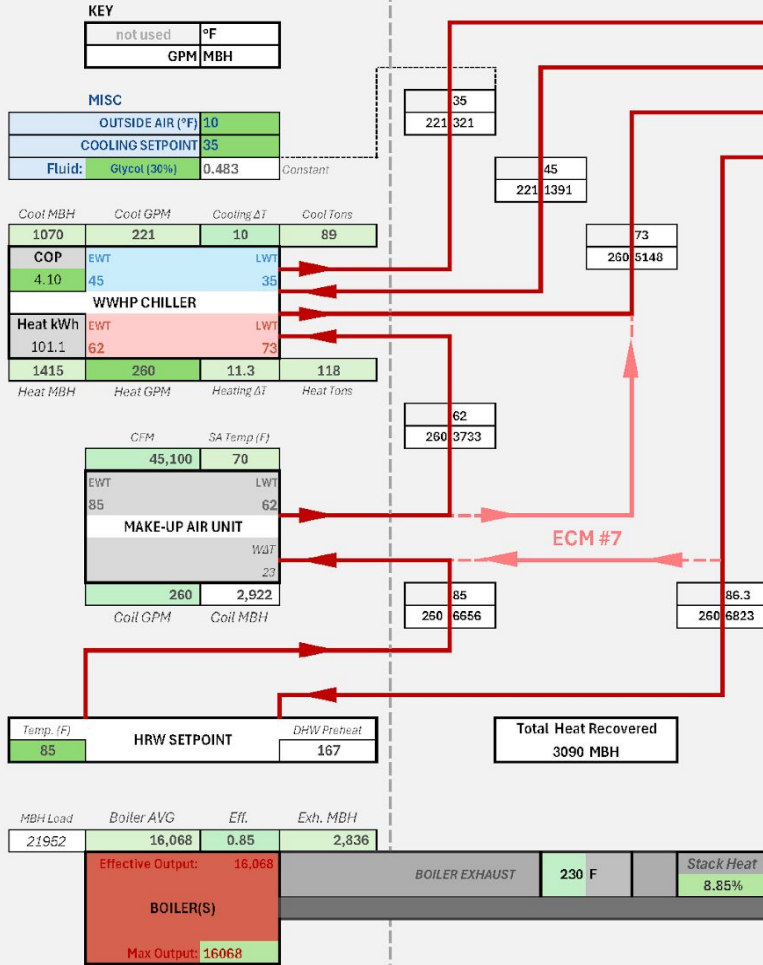
THANK YOU FOR YOUR TIME! Q&A



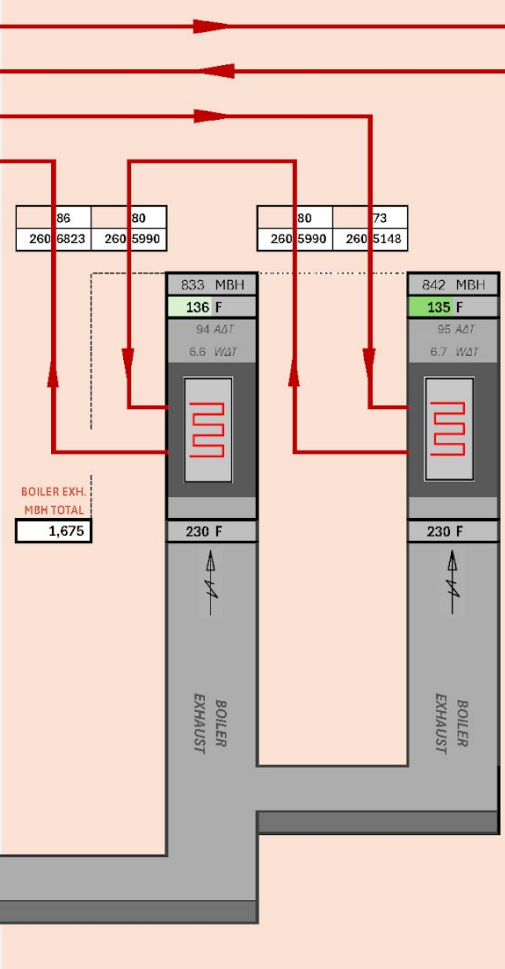
ECM #8 - ENERGY RECOVERY SYSTEM DIAGRAM

Mission Park - Levinson Building

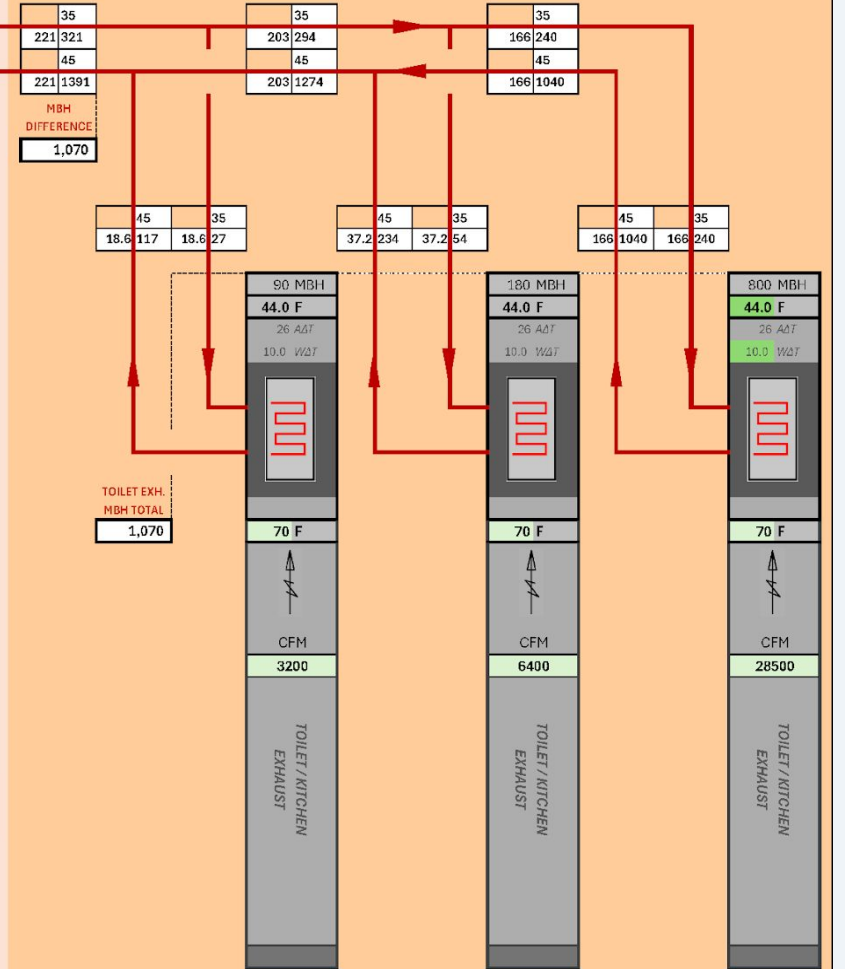
HEATING EQUIPMENT & SYSTEMS



BOILER FLUE RECOVERY



BUILDING EXHAUST RISER RECOVERY



APPENDIX



The background is a dark blue aerial wireframe illustration of a city, showing the outlines of buildings, streets, and infrastructure. The perspective is from a high angle, looking down on the city.

Allston Brighton CDC

Hano Homes Deep Energy Retrofit (DER)





Hano Homes

Deep Energy Retrofit

1 - 39 Hano St.
Allston, MA

Presented by:

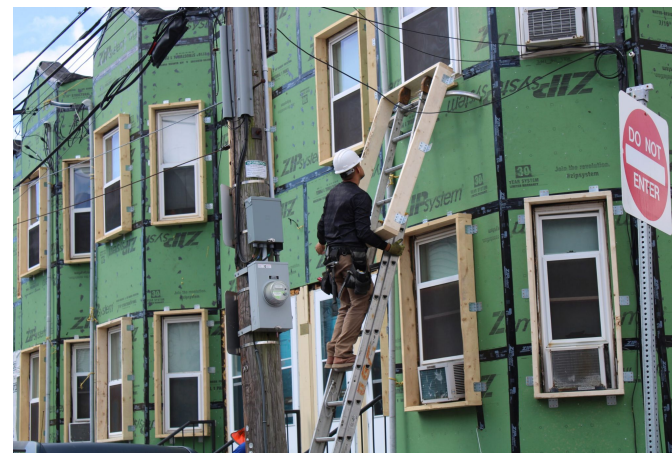
Caitlin Robillard
Director of Real Estate Development

September 29, 2025



ABCDC: Committed to decarbonization

- **GOAL:**
 - Decarbonize all 553 units across 12 properties by 2040
- **WHY:**
 - Climate crisis
 - Resident health & comfort
 - Normalize DERs
- **HOW:**
 - Data, e.g. ASHRAE
 - Strong partners
 - Green funding, e.g. Climate Ready Housing
 - Building technology advancements
 - Public Policy and Regulations, e.g. BERDO



Introduction to Hano Homes:

Building Typology:

- 10 adjoining townhomes; built 1888
- Gas heat + gas DHW
- 20 units: 75% income-restricted

Unit Breakdown:

	30% AMI	50% AMI	60% AMI	Market Rate	TOTAL
2-BD	1	3	5	1	10
3-BD	1	3	2	4	10
TOTAL	2	6	7	5	20



Project Goals:

- 1) Fully electrify and increase energy efficiency
- 2) Minimize resident disruption/maximize benefits
- 3) Contribute to growing decarb industry and learning

Goal #1: Electrify / Increase Energy Efficiency

- Super insulated envelope
 - ◆ (carbon storing wood fiber insulation!)
- Heat pumps (HVAC + DHW)
- Fresh air ventilation
- Rooftop solar PV panels

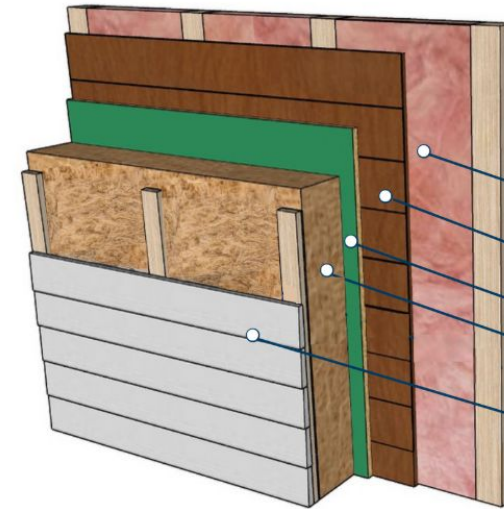


Diagram courtesy of
RMI

- Existing wood stud frame with old fiberglass insulation
- Layers of exterior siding stripped down to existing wood sheathing
- New structural ZIP sheathing with integral AB/WRB
- 5.5" R-20 carbon-storing wood fiber continuous insulation
- New rain screen with furring strips and siding

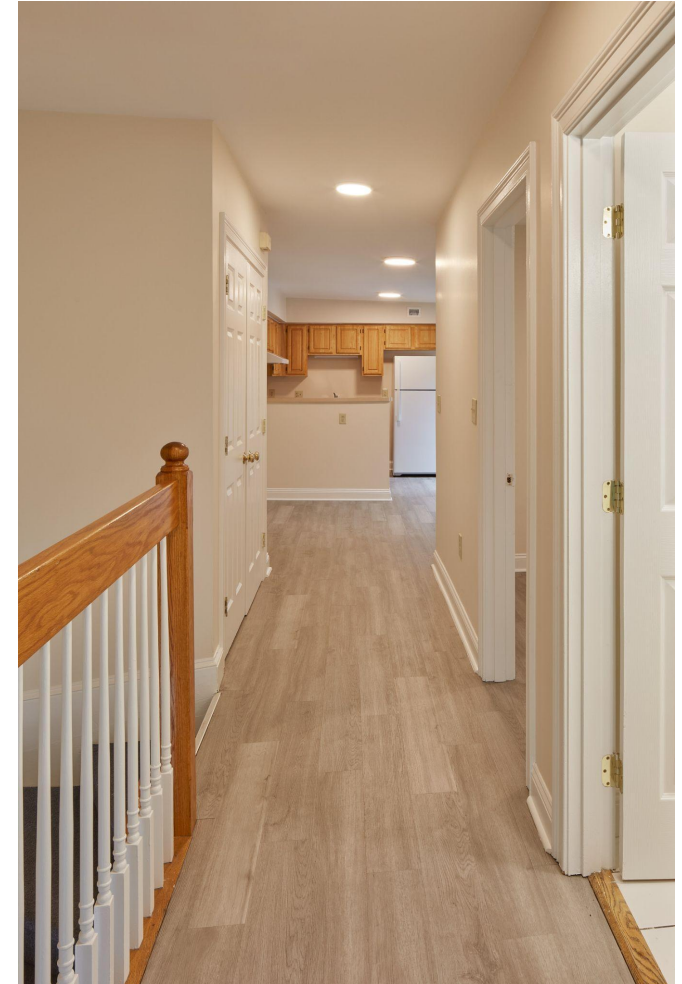
Energy use reduction:
81%!

Emissions reduction:
74%!



Goal #2: Minimize Disruption / Maximize Benefits to Residents

- Relocation
 - 10-month occupied rehab
 - 2-week turn-around for interior work
- Environmental Health
 - Air and noise pollution
 - Thermal comfort
 - Climate adaptation
- Tenant Engagement
 - System use education
 - Resident feedback



Goal #3: Advance decarbonization in affordable housing

- Local jobs and training in sustainable development
- Minority and/or Women Business Enterprise (MWBE)
- Sharing information
 - Presentations
 - Tours
 - Case Studies



Watch a
Hano Homes
Look & Learn!



Project Budget

		AMOUNT	STATUS
SOURCES	Permanent Loan from MHP's Green Financing Program	2,750,000	APPROVED
	Climate Ready Housing Program	1,350,000	APPROVED
	City of Boston Retrofit Fund	1,000,000	APPROVED
	DOER Decarbonization Program	800,000	APPROVED
	HER (Inflation Reduction Act's electrification rebate program)	-	CLAWED BACK
	LEAN Incentive	338,000	APPROVED
	EEIF Grant	250,000	REQUEST PENDING
	Solar Tax Credits	151,000	APPROVED
	MassCEC Empower Grant	150,000	APPROVED
	Capitalized Reserves	131,458	APPROVED
	Eastern Bank Foundation	120,000	APPROVED
	Mass DEP Solar Energy Gap Grant	90,000	APPROVED
	MHP Reimbursement for Commissioning	15,000	APPROVED
	Liberty Mutual Grant	15,000	APPROVED
	MassSave PH Modeling Funds	10,000	APPROVED
Deferred Developer Fee	373,736	APPROVED	
TOTAL SOURCES:		7,544,194	

		AMOUNT
USES	Hard Costs	4,934,222
	Soft Costs	1,438,514
	Operating Reserves	331,458
	Developer Overhead/Fee	840,000
TOTAL USES:		7,544,194

Hano Homes DER Team:



Mayor's Office
of Housing



Maloney
PROPERTIES



TIERNEY DEVELOPMENT SERVICES LLC



Questions?
THANK YOU!

The background of the entire slide is a dark blue wireframe map of Boston, showing the outlines of buildings and streets in a 3D perspective.

Boston Medical Center

Power to the People: Expanding Boston Medical Center's Clean Power Prescription program with a new solar facility to benefit residents of the City of Boston





Clean Power Prescription at BMC Health System

Anna Goldman MD, MPA, MPH, Medical Director of Sustainability

Boston Medical Center
HEALTH SYSTEM

Boston Medical Center was the first city hospital in the U.S.

- Opened in 1864 as a safety-net hospital in the South End
 - Provided care for patient with tuberculosis, typhoid and other infectious diseases
- Today we still serve the same fundamental mission
 - Over 70% of our patients identify as people of color
 - Over 70% have public insurance

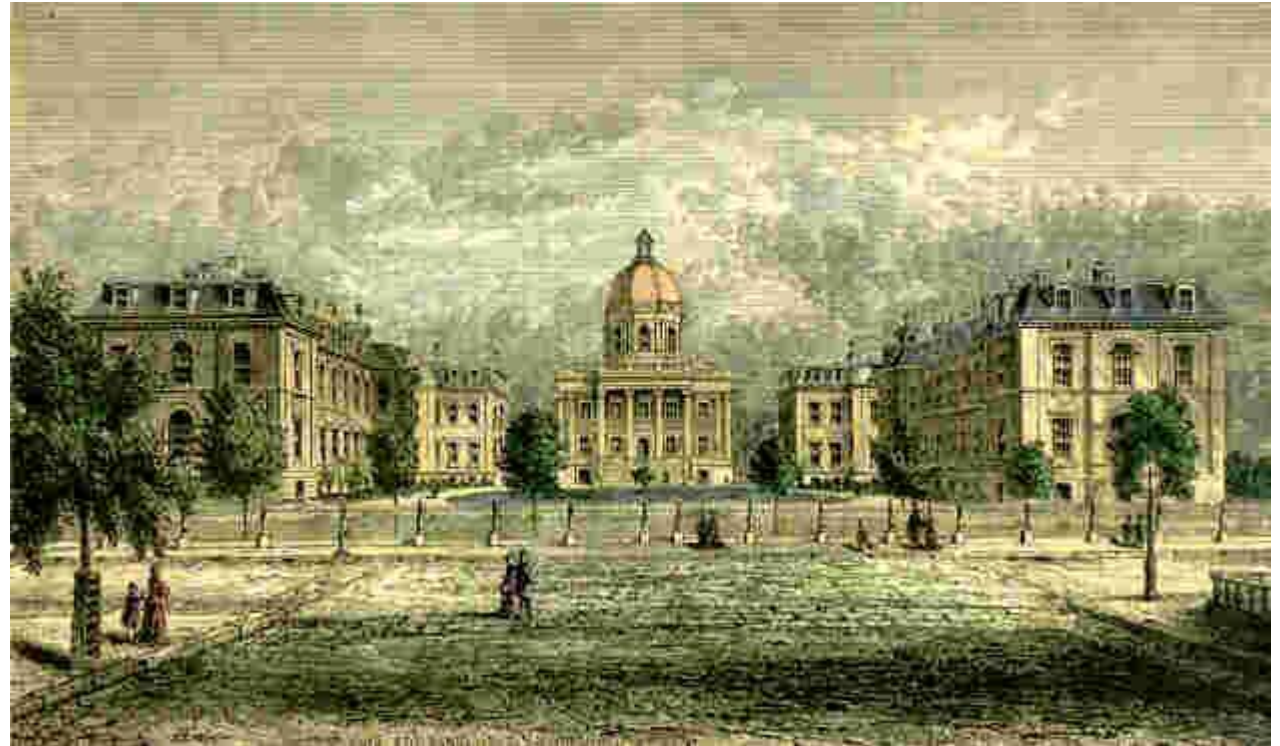


Image source: <https://www.bumc.bu.edu/id/fellowship-training-program/fellowship-training-program/our-history/>

Why do we focus on Climate Justice at Boston Medical Center?

- BMC's vision is to “**make Boston the healthiest urban population in the world**”
- Most of our patients live in communities that are **disproportionately vulnerable to the effects of climate change**.
- We can help create a more **just energy transition** by connecting our patients to climate-related opportunities
- Programs like Clean Power Prescription and our two rooftop farms engage patients in the fight against climate change.



Image Credit:
<https://www.phipps.conservatory.org/blog/detail/environmental-justice-an-introduction>

What are "Social Determinants of Health?"



Place Patient Sticker Here

Thrive Screening

Please fill this form out and bring it to the exam room. You don't have to answer these questions but your answers will help us take better care of you. Thank you!

Please circle your answers:		
	Do you currently live in a shelter or have no steady place to sleep at night?	Yes / No
	Do you think you are at risk of becoming homeless?	Yes / No
	Within the past 12 months, the food you bought just didn't last and you didn't have money to get more.	Often true / Sometimes true / Never true
	Within the past 12 months, you worried whether your food would run out before you got money to buy more.	Often true / Sometimes true / Never true
	Is this an emergency, do you need food for tonight?	Yes / No
	Do you have trouble paying for medicines?	Yes / No
	Do you have trouble getting transportation to medical appointments?	Yes / No
	Do you have trouble paying your heating or electricity bill?	Yes / No
	Do you have trouble taking care of a child, family member or friend?	Yes / No
	Are you currently unemployed and looking for a job?	Yes / No
	Are you interested in more education?	Yes / No

↳ Would you like help connecting to resources? Please circle below.

Housing / Shelter	Food	Paying for Medicines	Transportation to medical appointments	Utilities	Child care / Daycare	Care for Elder or disabled	Job Search / Training	Education

What's the connection between energy and health?

- Medical devices such as nebulizers, home oxygen, home dialysis machines, and electric hospital beds. In Massachusetts, it costs between \$300-500 extra to run a home oxygen machine.
- Air conditioning in the summer
- Refrigerators are essential for preserving healthy, fresh food
- When energy is too expensive, people often pay utility bills and forgo other critical needs like food or medicine
- You can't stay healthy if you can't keep the lights on



Image Source: <https://www.caasomerville.org/housing-advocacy-program>

Clean Power Prescription

- 356 kW rooftop solar array at BMC sends renewable energy to the local electric grid
 - **This array was built by a certified minority business enterprise (MBE)**
- Eversource credits BMC's electric account for the amount of electricity produced by the solar array
- BMC then directs Eversource to transfer the solar credits from BMC's account directly to patients' electric bills



Clean Power Prescription: Program Details

- Enrolled households receive \$600 in credits over 12-15 months
- Patient eligibility criteria:
 - Reports difficulty affording utility payments
 - Has Eversource as electricity provider
- 960 Mass Ave solar array can support 80 households

MENU |  | WATCH: GLOBE | WELCOME, A TODAY'S PAPER |  | [Help Globe Santa Deliver Joy This Season Give Now!](#)

Boston Medical Center writing prescriptions for electricity

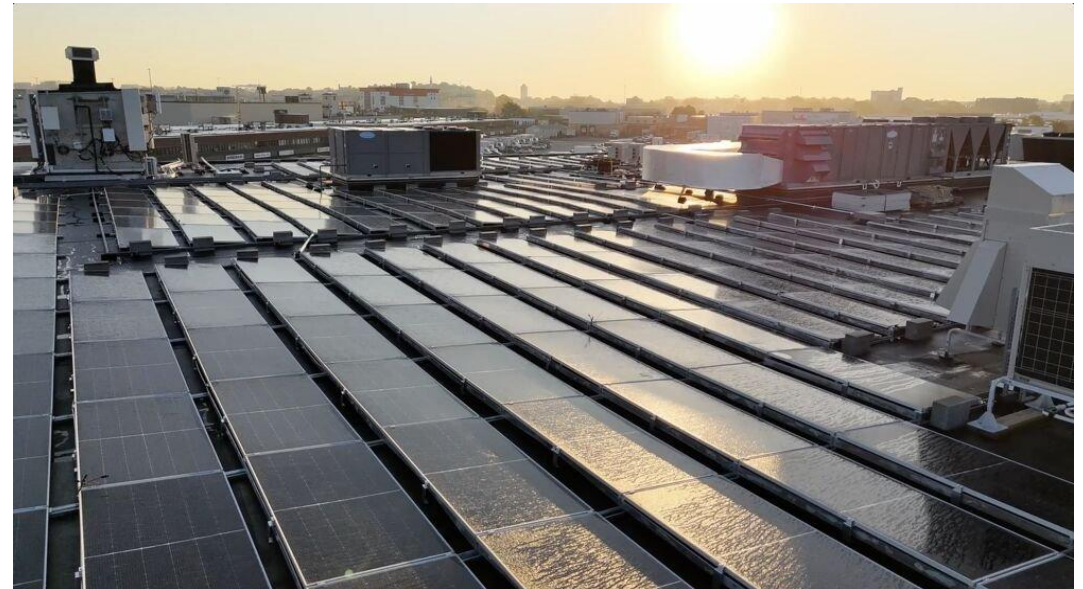
By [Jessica Bartlett](#) Globe Staff,
Updated October 16, 2023, 2:39 p.m.

      4



Clean Power Prescription: Additional Information

- The planned solar facility is projected to avert 872,791 KgCO₂e over the 30-year lifespan of the array
- Energy produced by the new solar array will **offset the emissions of residents throughout Boston** when they participate in Clean Power Prescription.
 - The solar energy will not reduce BERDO-reported emissions for BMC because 100% of the power is directed towards patient households.
- We are surveying current participants to understand their experience of energy insecurity and their experience in the Clean Power Prescription program.
- We plan to break ground on the project before Dec. 31, 2025 to ensure that the project will be eligible for **Inflation Reduction Act tax credits** before they sundown in 2026.



Sustainability is Core to Our Mission

**SUSTAINABILITY
IS ~~NOT~~
HEALTHCARE**

***REWRITING* HEALTHCARE**





Questions?

The background of the slide is a dark blue aerial wireframe map of a city, showing the outlines of buildings, streets, and parks. The lines are light blue and create a complex, geometric pattern.

Urban Edge Housing Corporation

Theroch Deep Energy Retrofit (DER) Project



THEROCH APARTMENTS DEEP ENERGY RETROFIT (DER) PROJECT

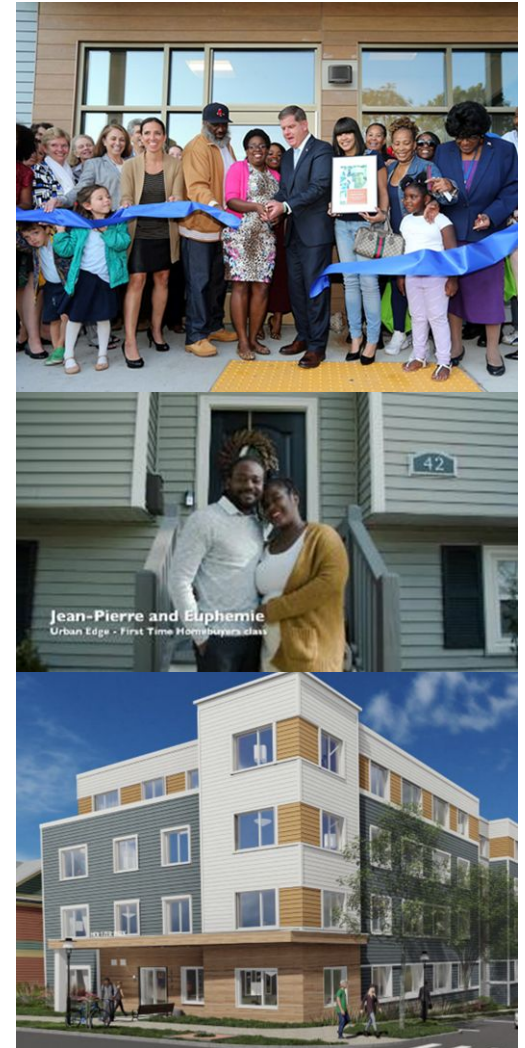
SEPTEMBER 29, 2025

BERDO EEIF PRESENTATION

ABOUT URBAN EDGE

A non-profit Community Development Corporation (CDC) founded in 1974 serving the Jamaica Plain, Roxbury, Dorchester, and Mattapan communities of Boston

- **Our Mission:** Urban Edge is dedicated to strengthening communities and families. Together, we build affordable housing and vibrant, prosperous neighborhoods.
- **Three Focus Areas:**
 - Construction of affordable housing
 - Resident support services & community engagement
 - Wealth building for families through homeownership education and counseling
- **Families Served:**
 - 92% are Black, Indigenous, and People Of Color (BIPOC), immigrants
 - 85% are Low-to-moderate income (LMI)
- **Outcomes Include:**
 - Ownership of 1,400+ affordable rental homes
 - Have helped 2,000 households purchase homes
 - Filed 4,000 tax returns, returning \$8M+ to families and local economy



THEROCH APARTMENTS DEEP ENERGY RETROFIT (DER) PROJECT OVERVIEW

- 36 apartments across 5 buildings in Roxbury & Dorchester
- Located within a state designated environmental justice population
- Four walk-up style masonry buildings + one wood framed townhouse
- Brick buildings built in 1920s, wood-framed building built in 1990s
- All apartments to remain affordable at 50% Area Median Income



Theroch Apartments building locations. The DER Project building locations are specifically outlined in red.
Source: Google Maps

THEROCH APARTMENTS DER PROJECT OVERVIEW

32 ELLINGTON ST.



36 ELLINGTON ST.



47-49 GLENWAY ST.

47 NAZING ST.



266 SEAVER ST.

THEROCH APARTMENTS DER PROJECT TEAM



Project Sponsor



Architect



*Sustainability
Consultant*



Solar Consultant



TIERNEY DEVELOPMENT SERVICES LLC

Owner's Project Manager

THEROCH APARTMENTS DER PROJECT APPROACH

What We Strive For:

To deliver healthier and more efficient buildings **that residents will still be proud to call home**, that are aesthetically pleasing, and that maintain housing stability.

The Problem

- Theroch's aged buildings have older, inefficient systems that:
 - Emit considerable emissions
 - Do not meet city & state energy standards

The Proposed Solution

- Electrify building systems to reduce reliance on carbon
- Reduce of energy consumption
- Improve building air quality

Why EEIF Funding is Needed

- To help achieve the project decarbonization plan
- Sets the foundation for how Urban Edge carries out future portfolio energy retrofit

THEROCH APARTMENTS DER PROJECT – SCOPE OF WORK

Targeted Results: 50%+ Energy Use Intensity (EUI) reduction from baseline

Building Envelope Improvements

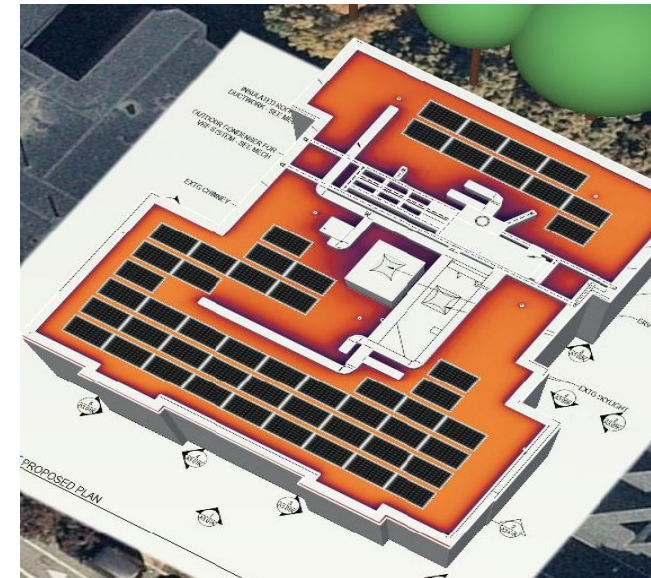
- Exterior Wall Insulation System
- Interior Wall insulation
- New triple glazed windows
- Basement Wall insulation

New Mechanical & HVAC System

- All electric heat pump water heaters
- New all electric central variable refrigerant flow (VRF) system
- New energy recovery ventilation (ERV) system

Renewable Energy Production

- Rooftop solar
- Estimated Total Annual Output: 79,428 kWh

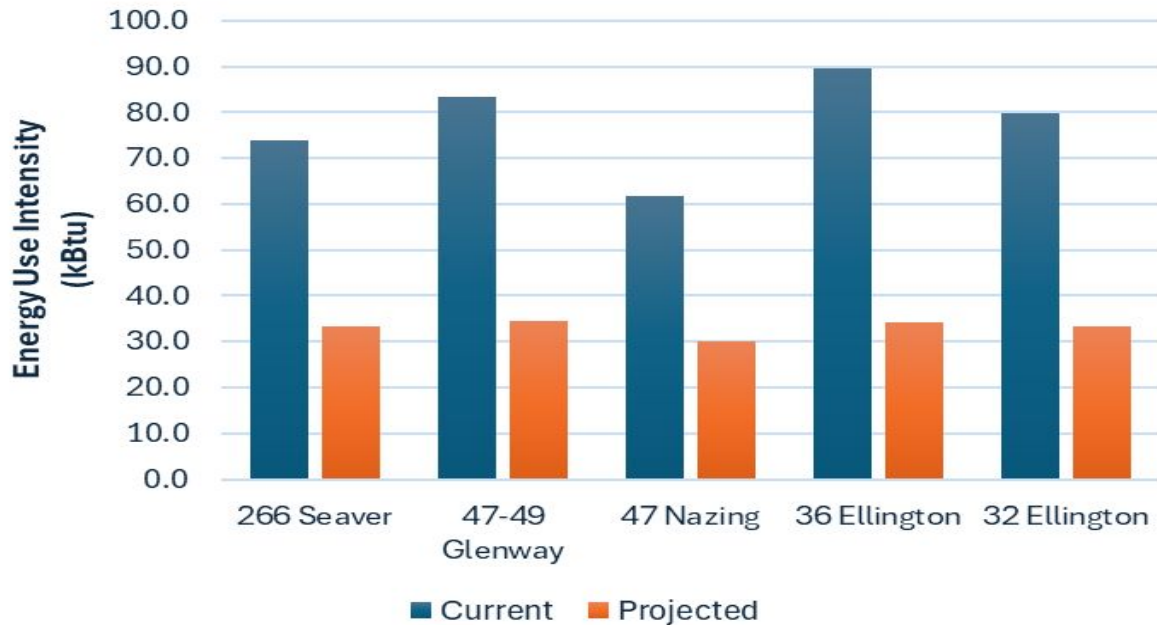


Sample Solar Layout at 266 Seaver St.
Credit: Resonant Energy

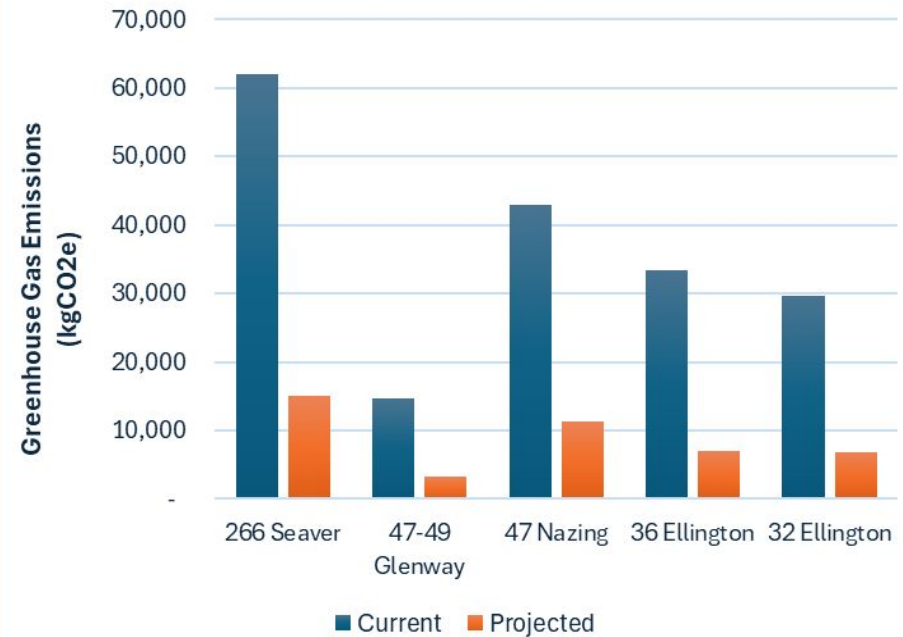
THEROCH APARTMENTS DER PROJECT – EMISSIONS REDUCTIONS

Targeted Results: 50%+ Energy Use Intensity (EUI) reduction from baseline

**Theroch DER Energy Use Intensity Projections
Current vs. Post-Decarbonization
(without solar)**



**Theroch DER Greenhouse Gas Emissions
Current vs. Post-Decarbonization
(without solar)**



Even without solar, a **57%** EUI reduction and a **76%** emissions reduction is expected for all buildings combined!

THEROCH APARTMENTS DER PROJECT RESIDENT ENGAGEMENT

Theroch Tenant Association is 49% owner of Theroch Apartments

Current Engagement:

- Monthly Updates with Theroch Tenant Association (TTA) Board
- Resident Surveys
- Quarterly Resident Meetings
- Occasional Coffee Hours with Residents

Future Engagement

- In-house educational discussions led by the Urban Edge Community Engagement team
 - Dedicated staff
 - Support from TTA Board
 - Utilization of lessons learned from similar projects



Theroch residents engaging with the architect during a Quarterly Resident Meeting



Urban Edge Community Engagement staff at a neighborhood block party

Theroch Apartments DER Project Contracting Approach

Theroch DER Project Contracting Approach

- General Contractor bid package to include goals and diversity statements
- Monthly hiring reports to be reviewed during construction

Urban Edge Past Project Performance

Project	Description	Year Complete	Minority Business Enterprises	Women Business Enterprises
URBAN EDGE GOALS:			30%	10%
Betty Greene Apartments	New Construction 65 units	2025	44%	20%
Bancroft-Dixwell	Rehabilitation 78 units	2024	55%	14%
Holtzer Park	New Construction 62 units	2022	39%	7%
Wilshire Westminster	Rehabilitation	2019	44%	30%
Walker Park	New Construction 49 units	2019	46%	22%
Cleaves Dimock Bragdon	Rehabilitation 90 units	2017	35%	1%
Walnut Washington	Rehabilitation 64 units	2015	39%	12%
Jackson Commons	New Construction 37 units	2015	48%	7%



THANK YOU FOR YOUR SUPPORT!

Theroch Redevelopment
Core Project Team
Urban Edge

Bill Brauner
Director of Real Estate
bbrauner@urbanedge.org

Johanna Romy
Associate Director of Real Estate
jromy@urbanedge.org

Juwanna Brown
Project Manager
jbrown@urbanedge.org

The background of the entire slide is a dark blue wireframe illustration of a cityscape, showing various building footprints and streets from an aerial perspective.

Boys & Girls Club of Dorchester

Marr HVAC Renovation





BOYS & GIRLS CLUBS
OF DORCHESTER

Energy Efficient/ Carbon Reductions HVAC Renovation Project

*at the Colonel Daniel Marr
Clubhouse*

#WeAreDorchester





BGCD Background

Our mission is to always welcome and connect young people and families to opportunities that embrace diversity, nurture growth, and inspire success.

Founded in 1974 as a single facility, we have since expanded to **three Clubhouses in Dorchester.**

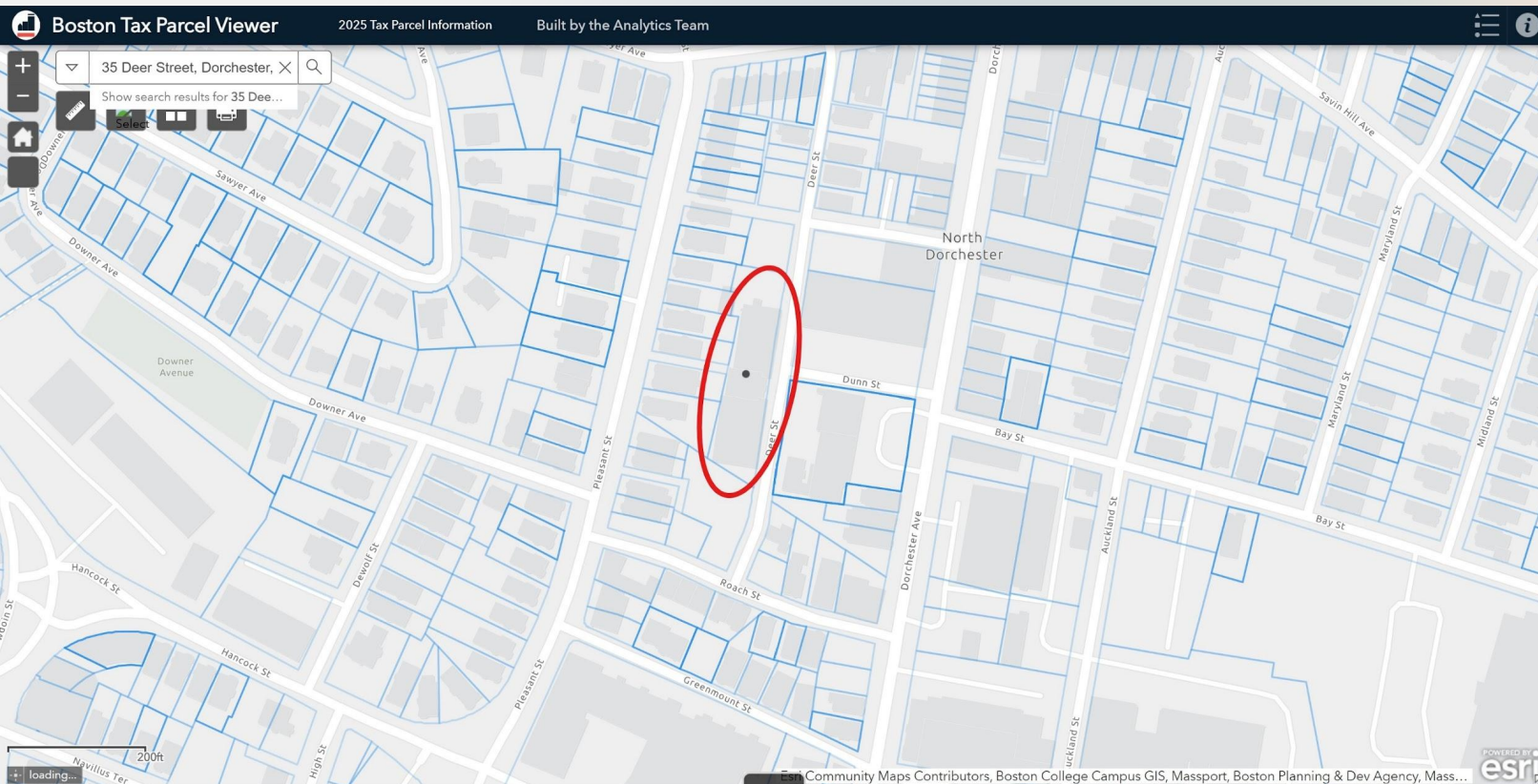
We serve approximately 4,000 individuals every year and **offer over 200 programs** for youth ages two months to 18+ years.



**BOYS & GIRLS CLUBS
OF DORCHESTER**

Project Location

Colonel Daniel Marr Clubhouse:
35 Deer Street, Dorchester, MA 02125



The Marr, as most members and staff refer to the Clubhouse, is our oldest facility—specifically, the building is **over 50 years old**.



**BOYS & GIRLS CLUBS
OF DORCHESTER**



Community Engagement

The Marr is independently managed by BGCD. All of its services are **available to youth of all abilities and backgrounds**. Afterschool membership is available at the low cost of **\$5/year for membership, a fee that we often waive** due to families' financial situations.

Our organization is deeply connected to our community. **Among our staff members, 42% are Club alums, 52% live in Dorchester, and 60% identify as BIPOC**. Many of our board members and volunteers have ties to the youth and families we serve, maintaining relationships as their neighbors, relatives, and friends.



BOYS & GIRLS CLUBS
OF DORCHESTER





Project Goal

In compliance with the City of Boston's BERDO requirements, we aim to **reduce our carbon emissions while addressing climate-related risks** facing our building. This will enable our organization to **remain as an anchor within our community** and **set a positive example to our kids** that we must protect the environment.



In December 2023, BGCD engaged Power Options to deliver **a plan to reduce carbon emissions and improve energy efficiency** at the Marr Clubhouse by 2030. We hope to **utilize funding to procure two new energy efficient HVAC units**, as two of our current units are 30 years old.





Income Sources		
	This Request <i>(amount applying for)</i>	Other Funding Sources
	\$136,151.11	\$125,000.00
Total Project Budget		\$261,151.11

Programmatic Expenses		
	From the Fund	From Other Funding Sources
Salaries and wages (can add additional details on the second tab)	\$0.00	\$0.00
Fringe and other benefits	\$0.00	\$0.00
Equipment	\$0.00	\$0.00
Supplies and/or Materials	\$136,151.11	\$125,000.00
Transportation	\$0.00	\$0.00
Advertising and Publicity	\$0.00	\$0.00
Admin/Overhead Cost	\$0.00	\$0.00
Other Direct Costs	\$0.00	\$0.00
	\$0.00	\$0.00
	\$0.00	\$0.00
Total Expenses	\$136,151.11	\$125,000.00

Project Budget

Funding for our project will be completely covered by funds from BERDO and an incentive through Massachusetts Commercial Rebates.

(The currently offered incentive is \$2,500/ton for 50 tons, granting us \$125,000 for this project.)

Funds will not be spent on anything beyond the direct costs of purchasing and installing our new HVAC units.



**BOYS & GIRLS CLUBS
OF DORCHESTER**



RN Model	Cabinet	Configuration	Air-Cooled IEER	Air-Cooled EER	Nominal cfm	Width*	Height*	Length*
RN-006	A	Vertical	Up to 22.5	Up to 14.0	2,000	79	44	82
RN-007					2,500			
RN-008					2,650			
RN-010					3,000			
RN-009	B		Up to 20.4	Up to 14.9	3,400	96	50	88
RN-011					3,600			
RN-013					3,800			
RN-015					4,200			
RN-014	C		Up to 22.5	Up to 13.7	5,200	101	60	110
RN-016					6,400			
RN-018					6,800			
RN-020					7,000			
RN-025		9,000						
RN-030		10,500						
RNA-011	C	Horizontal	Up to 22.5	Up to 13.7	3,600	101	60	138
RNA-013					3,800			
RNA-016					6,400			
RNA-018					6,800			
RNA-020					7,000			
RNA-025					9,000			
RNA-030					10,500			

Scope of Work

HVAC Unit Details

The two new HVAC units will be 25-ton AAON Heat Pump RTUs. Their long-term value and maximized operation will be ensured through ongoing maintenance contracts we have on our mechanicals.

Up-to-date HVAC units will help us increase energy-efficiency, avert potentially disruptive situations, and provide a higher quality facility for our young members. Our new units will be hybrid dual-fuel heat pumps that switch to gas until 30 degrees.



**BOYS & GIRLS CLUBS
OF DORCHESTER**



Scope of Work

Project Management

This is a simple, turnkey project that only involves the removal of our outdated HVAC units and installation of the two new ones. It will be overseen by members of our Executive Leadership and Facilities Teams. This includes Mike Joyce, Senior Vice President of Operations, who has 45 years of experience at BGCD, and Dawan Sawyer, Facilities Director, who has 20 years of experience.

The renovation will be directly led by World Energy Services, with assistance from DVM Industries. These are industry leaders who are specialized in renewable technology and other cutting-edge energy solutions. They are focused on improving our overall energy efficiency while decreasing our carbon footprint.



BOYS & GIRLS CLUBS
OF DORCHESTER





General Contractor

World Energy Services

World Energy is a trusted source for the installation of today's most efficient and environmentally responsible heating and cooling sources. They provide a full host of commercial building energy efficiency solutions and have the expertise to take full advantage of the many incentives available through government and local utilities.

Boys & Girls Club of Dorchester and World Energy have worked together on multiple comprehensive energy efficiency and electrification projects since 2018. These projects include LED lighting upgrades, retrofitting VFDs to existing equipment, and solar design.

World Energy is *not* a registered Minority and Women-owned Business Enterprise (W/MBE), but they do have a Minority owner. They are more than willing to consider engaging W/MBE tradespeople to carry out the work required for this project.



BOYS & GIRLS CLUBS
OF DORCHESTER

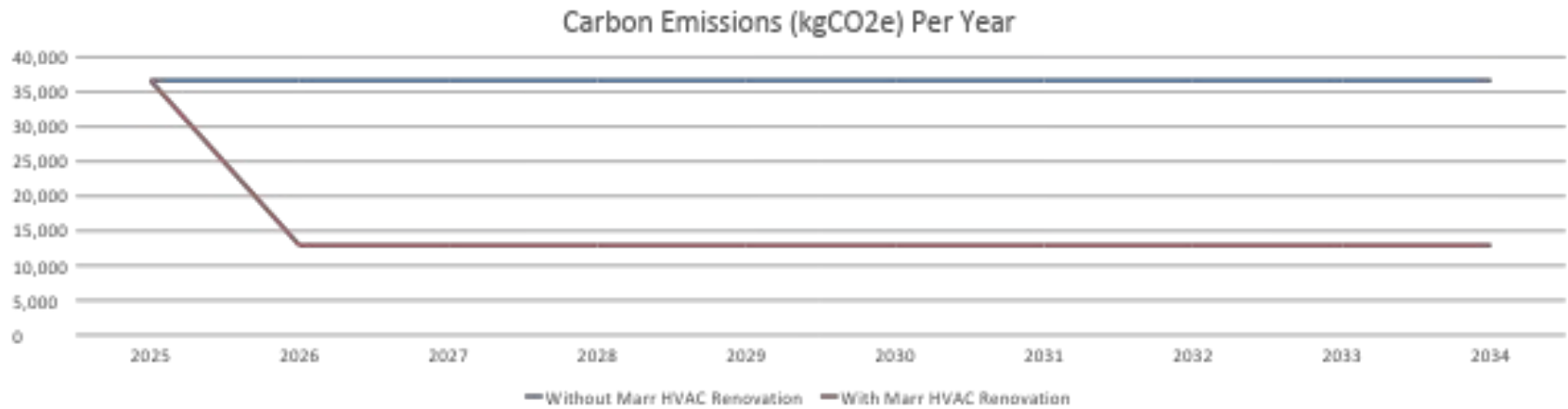




Carbon Emission Reductions

World Energy Services utilized the specifications of the current HVAC systems at the Marr to estimate **the facility's current annual emissions at roughly 36,632 kgCO₂e**. Then, using the specifications of the two new AAON Heat Pump RTUs, World Energy Services estimated that **the facility's annual emissions will be roughly 12,929 kgCO₂e** once this project is complete. This due to a **446,282 kbtu per year decrease in natural gas input energy**.

Thus, the Marr HVAC Renovation project will lead to a reduction in 23,702 KgCO₂e per year.





Rebate & Reduction Calculations Reliability

The Mass Save Commercial Heat Pump Rebate that we are planning on applying for is based on tons of cooling capacity; the associated per-ton carbon emissions reduction figure is based on the AHRI certified IEER efficiency rating of the existing unit vs. our proposed heat pump unit.

Using these efficiency ratings, our calculations are based on standard modeling assumptions, regional weather averages, and general occupancy patterns. While we do not expect a significant delta from our figure to the actual performance once installed, we will be prepared to monitor and adjust our controllable parameters to meet the emissions reduction figure provided if necessary.



BOYS & GIRLS CLUBS
OF DORCHESTER





Potential Risks

- Changes and fluctuations in the supply chain can affect our ability to secure materials and our timeline
 - *Note: We currently aim to finish our project in late Winter 2026*
- Based on our current timeline, weather may cause complications.
- The only relevant finding from a Phase I Environmental Site Assessment that we conducted last year was a report of mold at the roof access point above one part of the Marr
 - *Note: The mold is not present where the old HVAC units are being removed or the new HVAC units are being installed; additionally, we expect this issue to be remediated as part of a separate roof replacement project.*



BOYS & GIRLS CLUBS
OF DORCHESTER





BOYS & GIRLS CLUBS
OF DORCHESTER

Thank you!

Questions?

[#WeAreDorchester](#)

The background of the slide is a dark blue wireframe illustration of a city skyline, viewed from an elevated perspective. The buildings are represented by white and light blue outlines, creating a complex, geometric pattern. The overall aesthetic is modern and architectural.

Next Steps

2025 Equitable Emissions Investment Fund



Equitable Emissions Investment Fund Finalists

2025 Application Cycle



Next Steps:

1. We will request each board member's recommended funding decision via email
2. The Review Board will vote on the awards during the October 14 hearing

Adjourn

Thank you! A recording and slide deck for this meeting will be available at boston.gov/berdo-review-board.

