

Environmental Justice Council

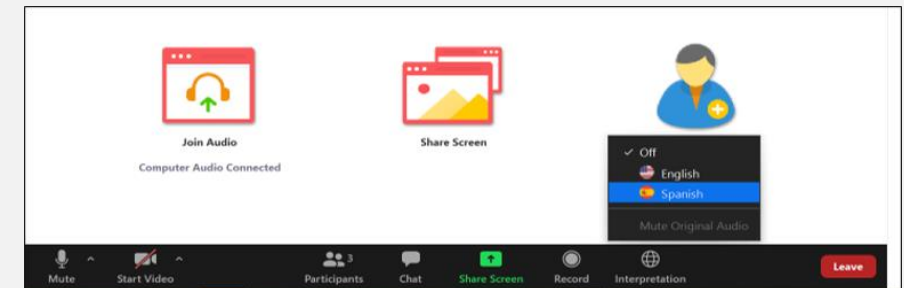
Meeting #19 • March 13, 2025 • 6:30 pm



LOGISTICS

- ➔ Language Interpretation is being offered in: Español, Kreyòl ayisyen, 普通话, Português, Tiếng Việt, and American Sign Language (ASL)
 - To participate in English, click the “Interpretation” icon and select English.
 - Para entrar no canal em português, clique no ícone “Interpretation” e selecione “Portuguese”
 - Si alguien desea interpretación en español, haga clic en “Interpretation” y seleccione “Spanish”
 - Pou rantre nan chanèl kreyòl ayisyen an, klike sou ikòn “Interpretation” an epi chwazi “Haitian Creole”
 - 要以普通话参加会议，请单击口语图标并选择 “Chinese”.
 - Để vào kênh bằng tiếng Việt, hãy nhấp vào biểu tượng “Interpretation” và chọn “Vietnamese”.

- ➔ Please speak slowly.
- ➔ All attendees must select a language channel, even if viewing the presentation in English.



- ➔ If you would like a translated version of the slides, please go to the EJC website at: <https://www.mass.gov/service-details/environmental-justice-council-ejc-meetings>

THIS MEETING IS BEING RECORDED



Environmental Justice Council

Meeting #19

Thursday, March 13 2025, 6:30 pm

In Person location: Framingham, MA

Framingham Public Library, Costin Room

49 Lexington St, Framingham, MA 01702



Logistics and Agenda

Logistics

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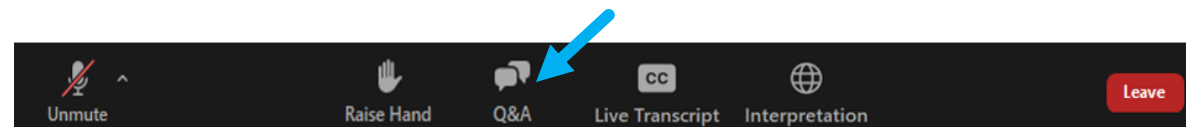


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➡ All lines will be muted during the presentations.

➡ The line will be open for oral comments after the presentations.

➡ If you have a clarifying question or a logistical or technical issue during the presentations, please type it into the Q&A box.



➡ Contact the ERG webinar lead **Kecil John** at meetings@erg.com with any technical issues or questions.



THIS MEETING IS BEING RECORDED

Agenda

	<u>Approximate Time</u>
▪ Overview of Meeting, Logistics and Agenda	6:30 PM
▪ Roll Call and Approval of Prior EJC Meeting Minutes	6:35 PM
▪ Questions and Comments from the Public	6:40 PM
▪ Eversource: Geothermal Project	6:50 pm
▪ Eversource: Rates 101	7:20 PM
▪ Questions and Comments from the Public	7:50 PM
▪ Response to Comments (when appropriate)	(if time allows)
▪ Next Steps and Adjourn	8:00 PM

Approval of January 9, 2025, Meeting Minutes & Roll Call: EJ Council Members

- Kalila Barnett
- Madeline Fraser Cook
- Melissa Harding-Ferretti
- Cheryll Holley
- Caroline Hon
- Lydia Lowe
- Marcos Luna
- Peter Maathey
- María Belén Power
- Sofia Owen
- Jen Salinetti
- Patricia Spence
- Ari Zorn
- Miles Gresham

Public Comments and Questions

*Please limit each comment to two minutes to
allow time for others to speak*

Eversource: Geothermal Project

Eversource Geothermal Pilot

Project Background

- Initial pilot proposed in a 2019 gas rate case
- Massachusetts regulators approved a mixed-use project case with an approximate total load of 375 tons of heating / cooling
- Feasibility and site selection work took place to establish Framingham as host community
- Specific neighborhoods were identified with balanced loads that met the proposal requirements
- Detailed design work was performed to determine loads, pipe routing, and borefield requirements



Pilot Loop Overview

- Project work began in 2021 with site selection.
- Design work completed through 2022 and finalized in early 2023
- One pipe system design of approximately 1 mile of main
- 37 buildings with 140 individual customers throughout
- 5 commercial customers including large school building
- 90 boreholes to provide capacity of approximately 375 tons of load



Canvassing – The Process



- Initial canvassing to gauge interest in the neighborhood
- Canvassing script developed
- All canvassers received extensive training
- PPE and ID available, along with letter of support from the city.

Note: The actual canvassing process took 1 ½ weeks with an 85% participation rate.

Canvassing Materials – Some Examples



We're building a green neighborhood.

Join us!

Be a part of this innovative, community-minded, environmentally friendly pilot project that is happening in your neighborhood. Eversource is working with the Massachusetts Department of Public Utilities to build a geothermal project that is the first of its kind in New England using networked geothermal technology. You'll be part of a group sharing a geothermal network in your neighborhood.

Learn more about this three-year pilot that uses geothermal technology, which works by transferring heat to and from underground wells into your home using heat pumps. A geothermal system is very efficient, cost-effective, and is the most environmentally friendly way to heat and cool your home.

Can't wait to hear more?
Contact Marisol Burgos at 860-665-6255. Call today!

Eversource.com

See benefits on back.

Networked Geothermal Systems INSTALLATION PROCESS

1

Eversource team surveys each building and identifies changes needed to install networked geothermal system.

2

Team prepares installation plans and permits for property owner and city review.

3

Team constructs vertical ground loops and distribution mains.

4

Service lines brought into customer's property with valves at the curb to isolate property from distribution mains.

5

Team restores disturbed areas outside of building by leveling the work area to the existing property and placing loam and seed.

6

Team installs the system (ductwork, heat exchanger, circulators, and geothermal heat pump) inside building.

7

Eversource starts up the system and confirms functionality.

8

Eversource supports building owner with monitoring and maintenance of all in-home geothermal equipment.

9

Property owner provides periodic feedback on in-home geothermal equipment operation.

Illustrative Example

Actual geothermal system layout is currently in progress.

We're building a green neighborhood.

Join us!

Be a part of this innovative, community-minded, environmentally friendly pilot project that is happening in your neighborhood. As the largest utility provider in New England, Eversource has the responsibility to provide energy using the best methods possible for customers and the environment.

Eversource is working with the Massachusetts Department of Public Utilities to build a **geothermal** project that is the first of its kind in New England using networked geothermal technology. You'll be a part of a group sharing a geothermal network in your community.

Learn more about this three-year pilot that uses geothermal technology, which works by transferring heat to and from underground wells into your home using heat pumps. A geothermal system is cost-effective, efficient, and is the most environmentally friendly way to **heat and cool** your home.

Benefits to Those Who Participate in the Program

- Geothermal heating and cooling equipment installed in your home that will provide both heating and central air conditioning (\$30,000 value)
- New ductwork installed, if needed, in your home (\$15,000 value)
- Energy-efficiency measures such as insulation and air sealing for your home (up to a \$4,000 value in addition to existing Mass Save® incentives)
- Energy savings up to 40% on heating your home
- Full restoration of the affected areas of your lawn, if needed, after geothermal line from the street is installed
- System looks like a conventional heating system and is installed where your existing system is located
- System is quieter and long-lasting

How will this affect my heating and cooling costs?

- Your alternate fuel (oil, propane, natural gas) bill is reduced because you are no longer using this fuel to heat your home.
- Since the system is run with electricity, your electric costs will increase.
- Monthly budget billing will make your electric bills consistent throughout the year during the winter heating and summer cooling seasons.
- Bonus to keep in mind: If you are currently cooling your home with window units, instead of individual rooms being cooled, your entire house will be cool and comfortable.
- Nominal fee to participate in this program.

Reduce your carbon emissions.

Because geothermal heat pumps don't require combustion of fossil fuels or fuel storage, installing geothermal is the single biggest way a homeowner can reduce their carbon (CO2) emissions. According to the U.S. Environmental Protection Agency (EPA), geothermal heat pumps are the most energy efficient, environmentally clean, and cost-effective systems for heating and cooling buildings.

Comfort now, value later.

With this system, you'll have consistent heating and cooling, regardless of the season. A geothermal system is very energy-efficient because it uses the earth's stable temperature. According to the EPA, for every unit of electricity used in operating the system, the geothermal heat pump can deliver as much as four times the energy. Geothermal heat pumps are efficient because they don't create heat — they just transfer it, making it the most energy-efficient home heating and cooling system on Earth. And energy efficiency measures implemented with this program may increase the value of your home.

Can't wait to hear more?
Contact Marisol Burgos at 860-665-6255. Call today!

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Eversource.com

MSBP 12-11

How it works

A geothermal system uses the Earth as a heat source during the winter and a place to get rid of unwanted indoor heat during the summer. The system circulates a fluid through a buried piping network known as a "ground loop," which carries the heat and exchanges it between a building and the ground.

When the building needs heating in winter months, the ground loop absorbs heat from the warmer soil, rock, or groundwater around it and carries it indoors where it is concentrated by a geothermal heat pump and delivered to indoor spaces. In warm months when the building needs cooling, unwanted heat from the building is collected and the ground loop deposits it back into the ground. The Earth acts like a thermal battery by storing summertime waste heat for the following winter heating needs.

OTHER BURIED UTILITIES

- Cable
- Electric
- Gas
- Storm sewer
- Water

GEOTHERMAL SYSTEM COMPONENTS

- 1 Geothermal closed-loop piping
- 2 Distribution piping network
- 3 Circulation pump
- 4 Tie-ins to building
- 5 Connection piping from pump to distribution piping

TEMPERATURE REMAINS 45°-50°F ALL YEAR ROUND

Figure for illustrative purposes only. Actual geothermal system layout design is currently in progress.

Landlords & Tenants

Because this pilot requires installing new equipment and infrastructure on the customer's property, tenants must have written consent of the property owner or landlord to participate in the geothermal pilot program. Eversource will work with landlords and tenants to help them understand what is needed to be part of the program.

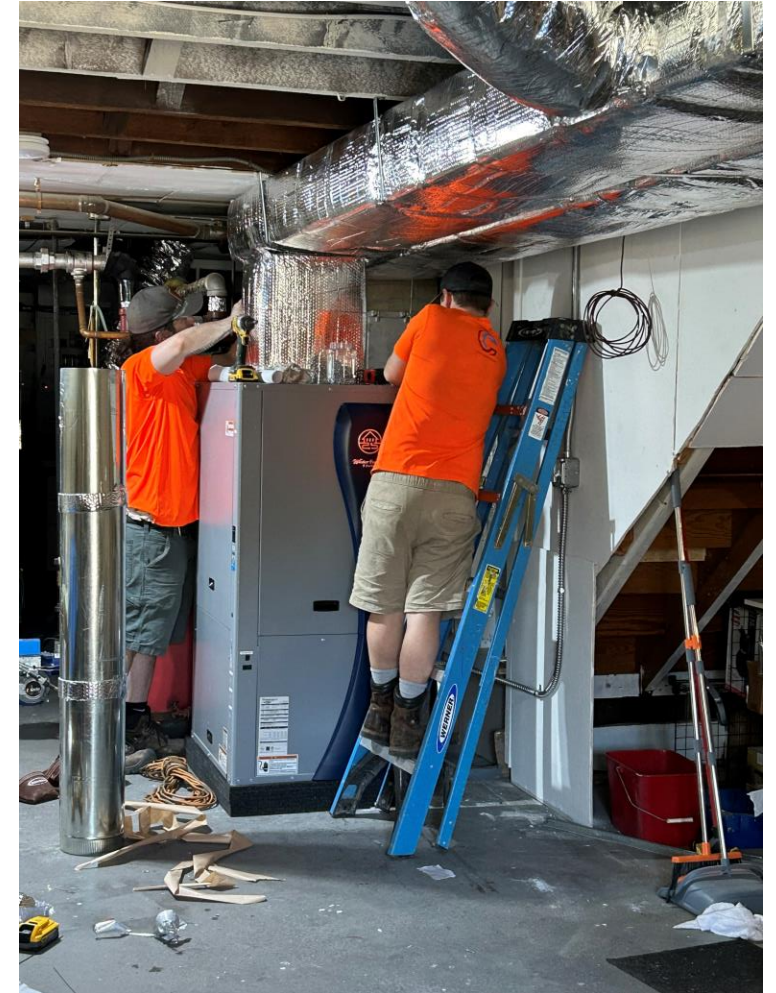
Want More Information?
Call Marisol Burgos at (860) 665-6255.

SUMMER - COOLING MODE
The geothermal heat pump takes heat from the building and transfers it to the ground.

WINTER - HEATING MODE
The system operates in reverse, taking natural heat from the ground and moving it to the building.

Project Construction

- Three main workstreams: Loop, Drilling, and Conversion work
- HDPE pipe was used for the distribution loop, fittings, and valves
- Three borefields drilled throughout the neighborhood
- Conversions required heat pumps, ducting, electrical work



Dedicated Geothermal Community Partner

EVERSOURCE



- Attended all in-home visits
- In the field during construction and available to customers
- Responds immediately to all customer concerns
- One point of contact allows customers to have a direct line to Eversource.

Geothermal Information Tent



- Staffed by community partner and geothermal project team
- July 2023-October 2023 (Every Wednesday from 3 pm to 6 pm)
- In the Geothermal Neighborhood
- Customers, city officials, and anyone interested in learning about the project were encouraged to stop by with their questions

Current Status

- Loop construction and drilling were completed in early 2024
- Pump house installation, instrumentation, and building conversions took place through the summer / early fall
- Pumps were turned on in June with loads on the system in early September
- Data collection began in January with heating season
- Final restoration and optimization ongoing



What Does Success Look Like?

Success Factors	Data Points to Collect
Validated installation and operating costs	<ul style="list-style-type: none">• System installation costs• Ongoing O&M costs
Customer acceptance of technology	<ul style="list-style-type: none">• Customer Satisfaction surveys• Customer comfort
Environmental Benefits	<ul style="list-style-type: none">• Emission reductions• System efficiency
Technology performance	<ul style="list-style-type: none">• System performance• Changes in customer energy consumption
Cost savings	<ul style="list-style-type: none">• Changes in customer heating and cooling costs

Discussion & Questions



<http://eversource.com/geothermal>
<https://youtu.be/Hu3lOLfgMiM>

Eversource: Understanding Your Winter Natural Gas Bill



Understanding Your Winter Natural Gas Bill

What to know and resources available to help

March 2025

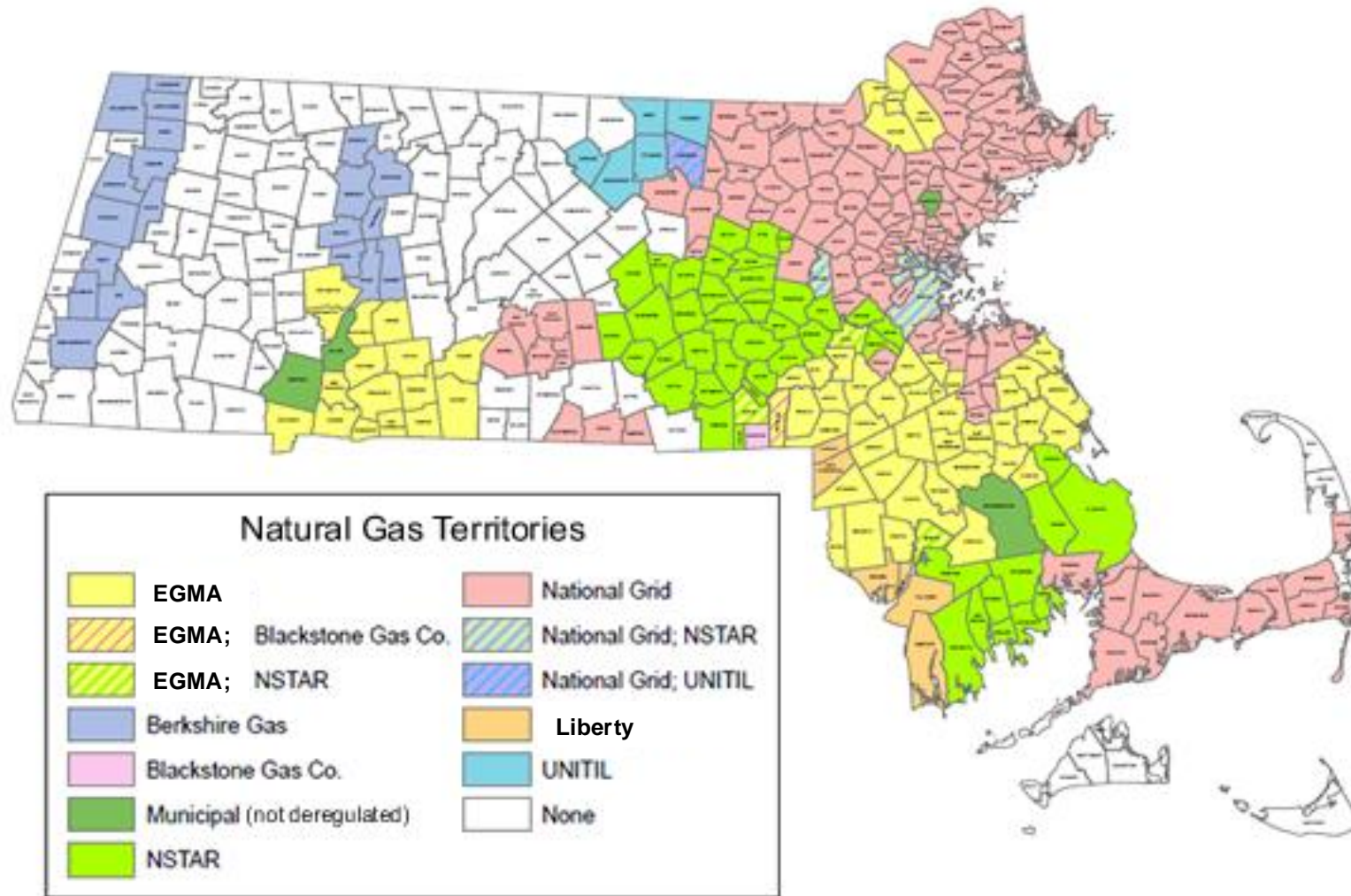


Components of Your Natural Gas Bill: Supply and Delivery

Eversource's Service Territory

Eversource serves two different service territories, known as **NSTAR** and **EGMA**.

EGMA is the former Columbia Gas territory.



Components of Your Gas Bill

EVERSOURCE

Account Number: 0000 000 0000

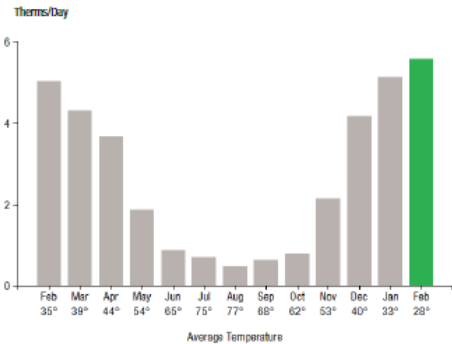
Statement Date: 02/11/25

Service Provided To:
JOHN J. CUSTOMER

Total Amount Due
by 03/08/25 **\$429.96**

Amount Due On 02/07/25	\$387.34
Last Payment Received On 01/22/25	-\$387.34
Balance Forward	\$0.00
Total Current Charges	\$429.96

Gas Usage History - Therms



Gas Usage Summary

This month your average daily gas use was **5.6 Therms**

This month you used **12.0% more** than at the same time last year



Current Charges for Gas

Supply

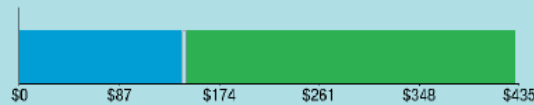
\$141.39

Cost of gas from Eversource

Delivery

\$288.57

Cost to deliver gas from Eversource



Your gas supplier is

Eversource
247 Station Drive
Westwood, MA 02090

News For You

Due to higher gas costs from our suppliers, Eversource has filed for an increase to the Gas Cost component of your bill effective February 1, 2025. This request is being reviewed by the state. Any approved rate adjustments and information about our programs to help are available at [Eversource.com/gas-programs](https://www.eversource.com/gas-programs).

Customer bills are broken into two main categories regardless of service territory:

- **Supply** - Cost of gas from Eversource or your third-party supplier. The price we pay is the price you pay. Eversource makes no profit off supply.
- **Delivery** - Costs to ensure the gas heating your home is provided safely while meeting state regulations, such as the costs for energy efficiency programs, and the costs to provide rate assistance to income eligible customers.

How You Are Charged:

- Your **usage** is measured in therms.
- The **therms you use** during your billing cycle impact both your **supply** and **delivery** charge.

Supply rate x therms (usage) = **Supply charge**

Delivery rate x therms (usage) = **Delivery charge**

What is the Delivery Charge?

Four delivery charges are itemized on the bill:

1. Customer Charge
 2. Distribution
 3. Revenue Decoupling
 4. Distribution Adjustment
- Items 1 – 3 pay for the investment in the pipes, facilities, and labor required to provide safe, reliable gas service.
 - **Distribution Adjustment Charge** consists of several items of which, Energy Efficiency, Gas System Enhancement Program (GSEP), and Low-Income Programs are the most significant.

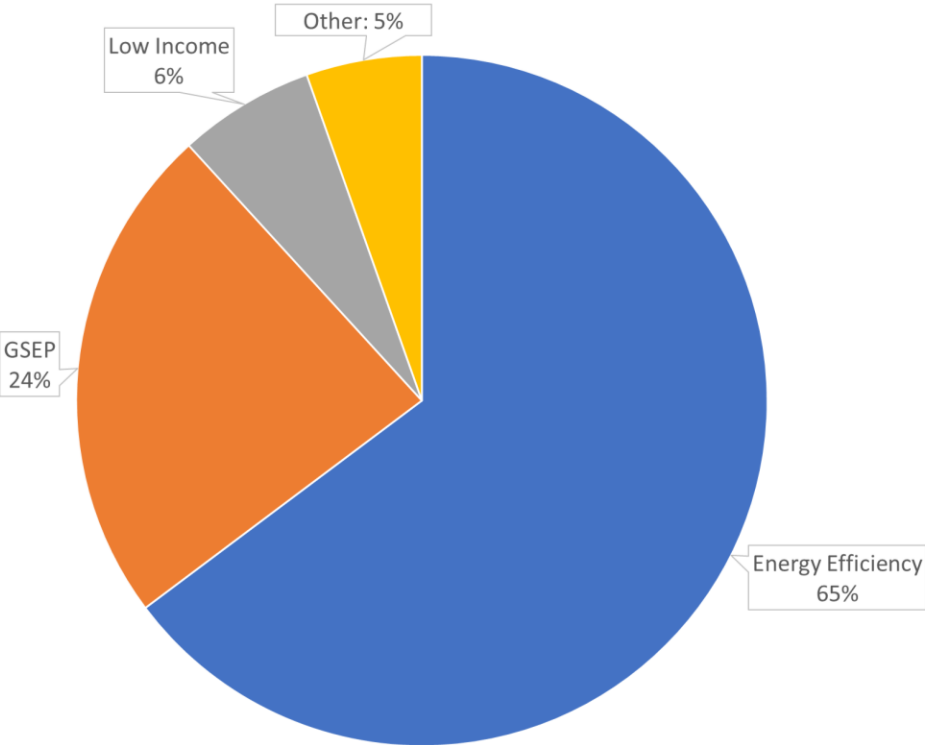


Delivery		John J. Customer Jan 2025 Bill
R3-Residential Heating		
Meter		
Customer Charge		\$10.00
Distribution Charge	173 Therms X .67550	\$116.86
Revenue Decoupling Charge	173 Therms X .05790	\$10.02
Distribution Adjustment Charge	173 Therms X .87680	\$151.69
Subtotal Delivery Services		\$288.57

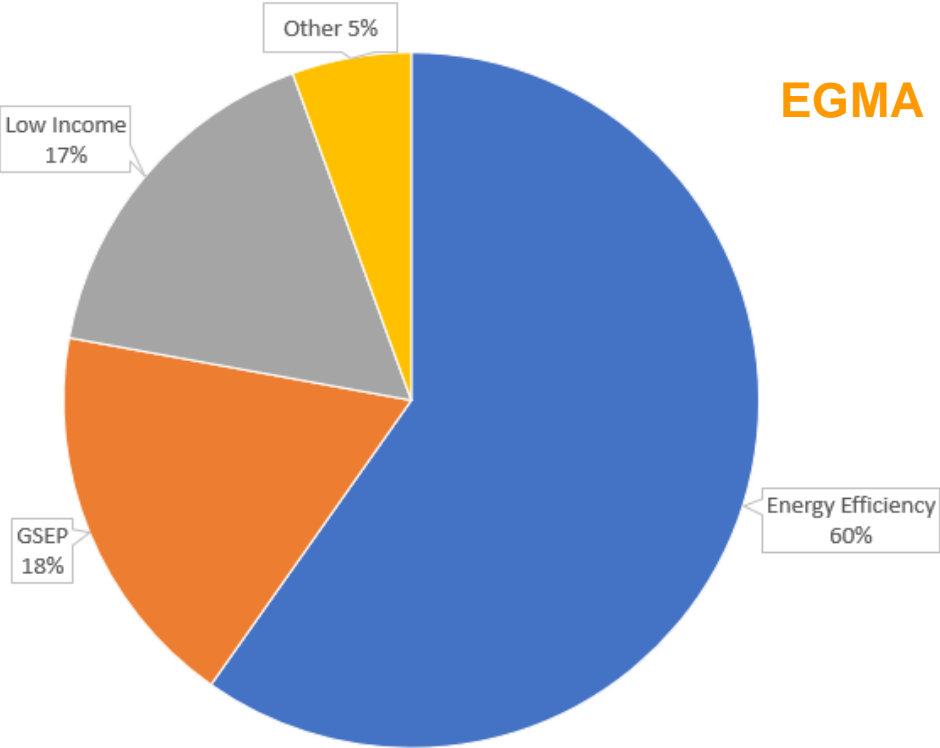
*Example of a customer with usage of 173 therms that month.

Components of the Distribution Adjustment Charge

NSTAR



EGMA



- **Energy Efficiency** includes costs for Mass Save® programs. These programs, offered by Eversource, enable residents, businesses, and communities to make energy-efficient upgrades through a range of services, including rebates.
- **Gas System Enhancement Program (GSEP)** is a program that requires gas companies to replace aging and leak prone infrastructure with new pipe to enhance public safety.
- **Income-Eligible Programs** support the funding of discounts for income-eligible households, helping them afford their energy needs and reduce financial stress.



Winter Natural Gas Usage and Rate Adjustments

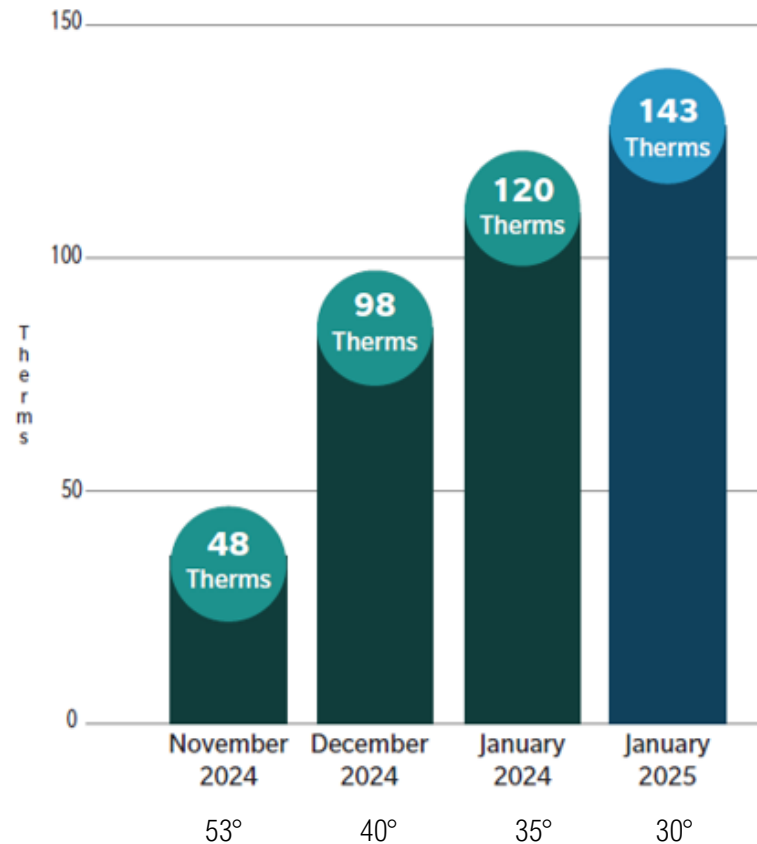
Winter Natural Gas Usage

No, it's not your imagination — this winter has been a reality check in New England

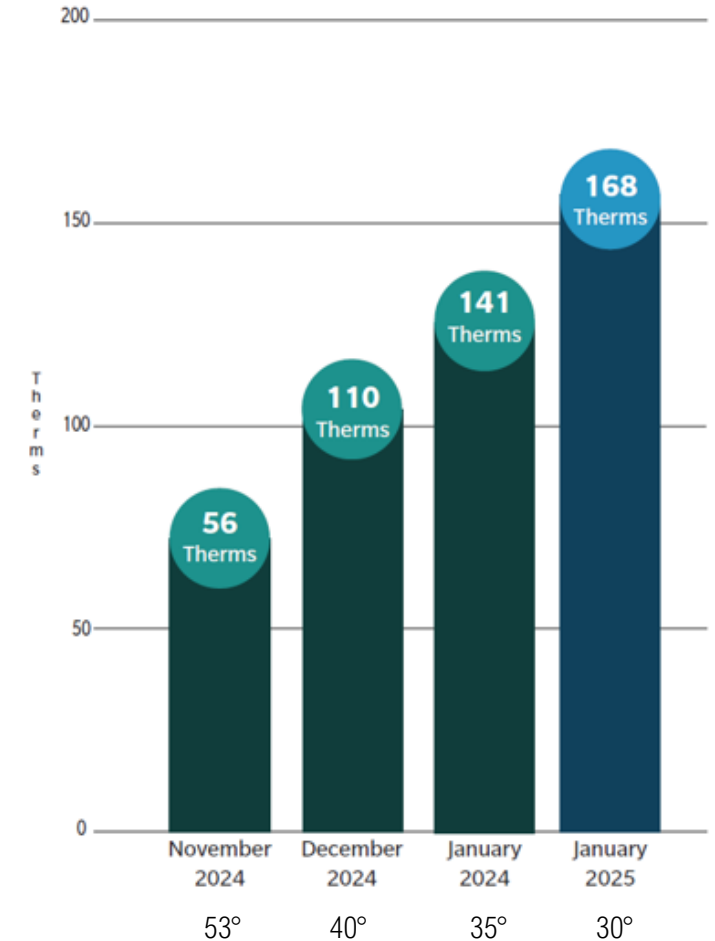
This has been the coldest winter since 2015, and so far we've gotten nearly three times the amount of snowfall as we did last winter- NBC

- January was 15% colder than December and 10% colder than January 2024.
- Even if you do not raise your thermostat, more energy is used to maintain the same temperature setting during colder weather.

NSTAR GAS
Average Therms Usage



EGMA
Average Therms Usage



How much energy you use impacts both the **supply** and **delivery** portions of your bill.

Winter Rate Adjustments

Massachusetts gas rates are typically adjusted on May 1 and November 1 each year.

Supply Rate Drivers

- Eversource purchases gas supply on behalf of customers and makes no profit.
- Seasonal increase in natural gas supply prices during the winter months (peak heating season) occur on November 1 every year.
- On **November 1, 2024**, NSTAR Gas **peak season supply rate** was 9% higher than last winter, while EGMA's was 20% higher.
- Greater demand for natural gas for heating during the winter generally means less supply and higher costs, especially when it is a **colder winter**.
- When gas supply costs change by 5% or more, then gas supply rates must be adjusted.
- This year, due to colder temperatures an **additional supply rate adjustment took effect on February 1, 2025** increasing the supply rate by an additional 20% or about \$18/month.

Delivery Rate Drivers

- **Growth in energy efficiency programs**, which are available to help all customers manage their energy usage.
- **Investments in safety and reliability** projects to strengthen and improve service especially for EGMA customers as the former **Columbia Gas system required significant upgrades** to bring the system up to standards to ensure safe, reliable service for customers.
- Prioritizing **replacement of leak-prone pipe** to improve public safety and reduce emissions from gas leaks.

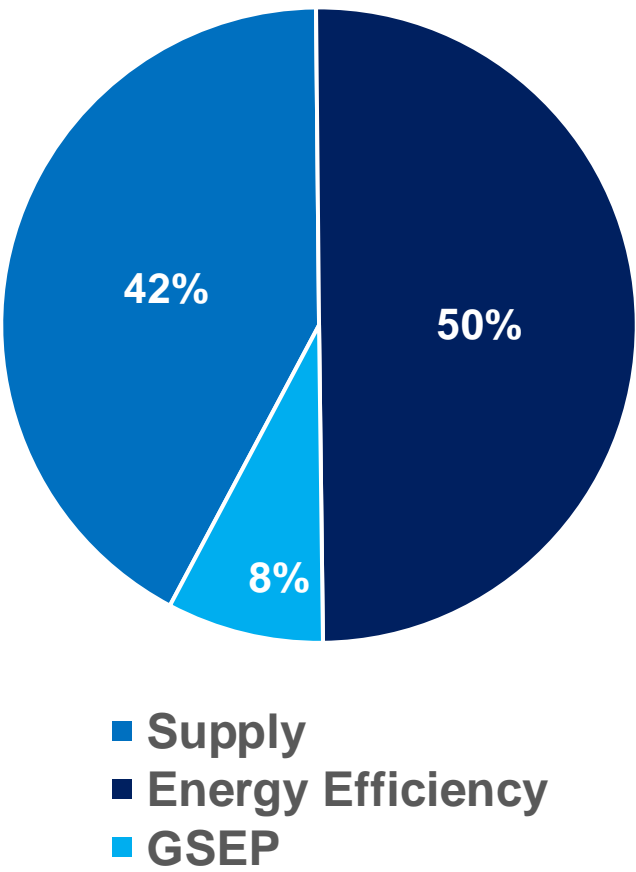
NSTAR Winter Feb Bill Comparisons

An average NSTAR Gas residential heating customer using 143 therms a month

Granular Bill Breakdown



Driver of Increases



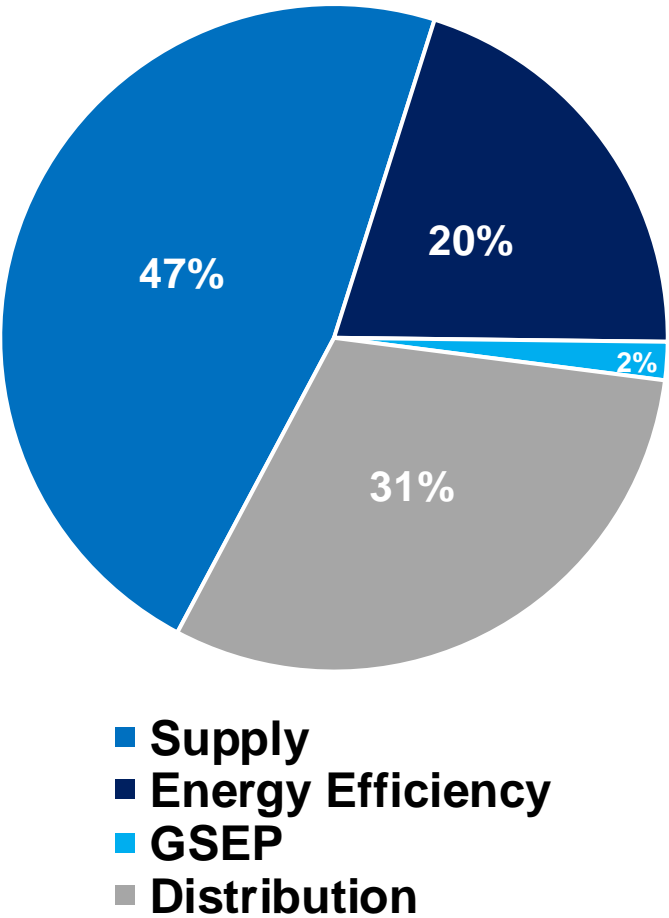
EGMA Winter Feb Bill Comparisons

An average EGMA Gas residential heating customer using 168 therms a month

Granular Bill Breakdown



Driver of Increases



Delivery



Customer Assistance Programs

We're Here to Help

EVERSOURCE

Help is Available

Even if you have never needed assistance before, please consider taking advantage of services that can help you manage your bill and your usage, such as:



Home Energy Assistance Program provides payment toward your winter heating bill.
www.mass.gov/Info-details/learn-about-home-energy-assistance-heap#how-to-apply



Budget billing, which smooths out seasonal spikes by setting a predictable bill amount each month based on your average annual energy use.



For income-eligible customers, our **discount rate** can help reduce your bill.



Our **Residential Arrearage Management Program (RAMP)** can help eliminate an outstanding balance in as little as 12 months if you make on-time monthly payments.



If you have a past due amount, our **Flexible Payment Plan** can also help you catch up and is available to all customers regardless of income.



The **Good Neighbor Energy Fund** provides additional assistance for overdue utility bills.



You can also take advantage of **energy efficiency measures** like home weatherization, which can save you energy and money.

Visit eversource.com/gas-programs to learn more about our programs and payment plans or call 866-861-6225.

Customer Engagement and Outreach

Customer Assistance Events



We're here to help.
Manage your energy use and bill.

Meet with our team for one-on-one support:

Friday, March 7 from 10 a.m. - 1 p.m.
Pembroke Council on Aging | 144 Center Street, Pembroke

Saturday, March 8 from 2 - 3 p.m.
Randolph Turner Library | 2 North Main Street, Randolph

Tuesday, March 11 from 10 a.m. - 2 p.m.
Attleboro Library | 74 North Main Street, Attleboro

Tuesday, March 18 from 1 - 3 p.m.
Raymond A Jordan Senior Center | 1476 Roosevelt Avenue, Springfield

Wednesday, March 19 from 10:30 a.m. - 1:30 p.m.
Uxbridge Senior Center | 36 South Main Street, Uxbridge

Wednesday, March 19 at 6:30 p.m.
Plymouth North High School | 41 Obery Street, Plymouth

Tuesday, March 25 from 6 - 8 p.m.
Pulaski School | 1097 Braley Road, New Bedford

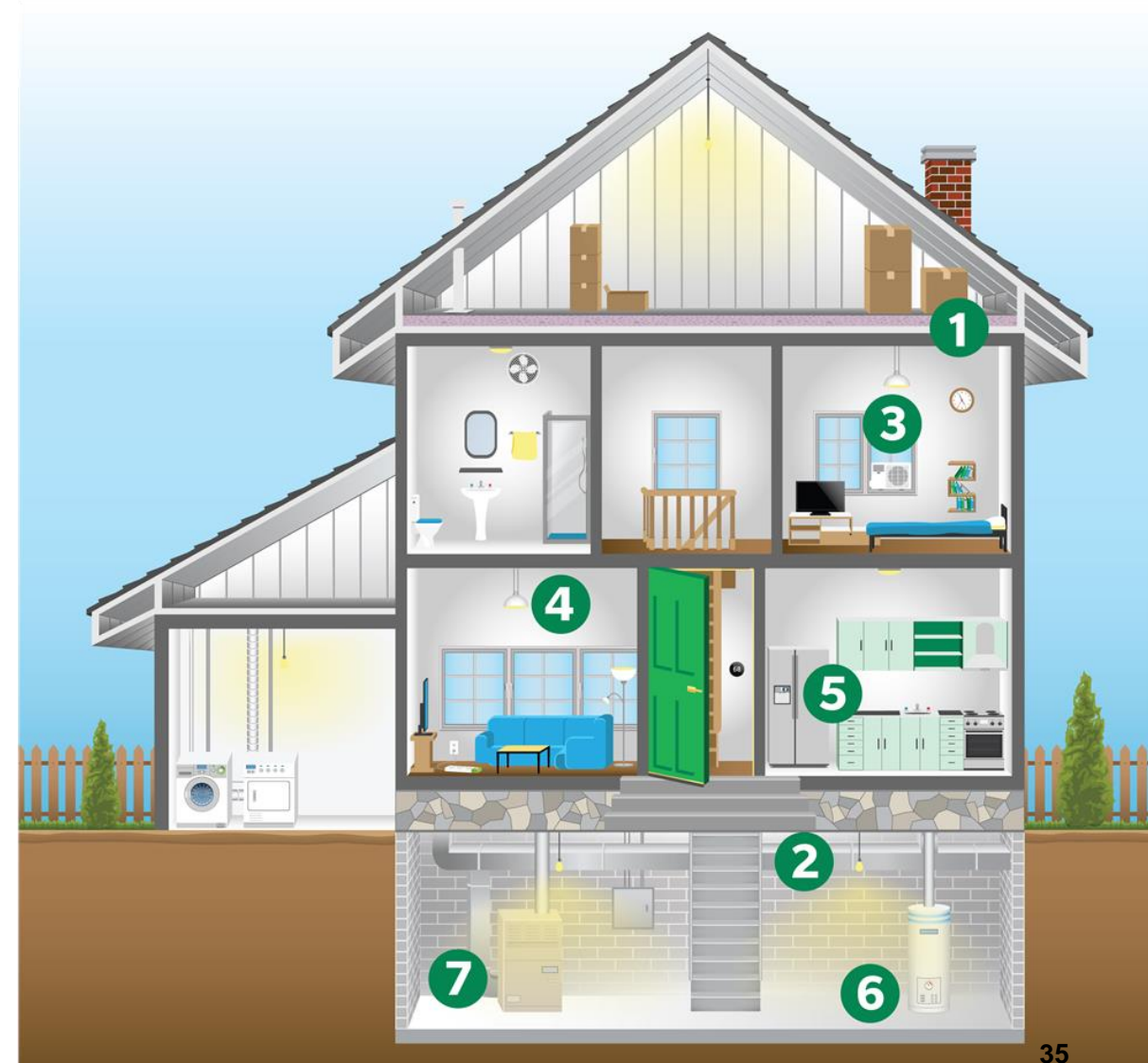
Thursday, March 27 from noon - 3 p.m.
Merrimack Valley Event - The Center | 155 Haverhill Street, Lawrence

EVERSOURCE

- **Customer letter** sent in fall from Chief Customer Officer.
- **Customer email** sent in February on ways to save, customer assistance programs available, and webinar links
- Hosted **webinars** for customers to explain winter gas rates
- **Press Release** issued promoting customer assistance events and payment assistance programs
- Holding **customer assistance events** across the state in February and March with payment assistance program experts onsite to help customers enroll in eligible programs. Strategically located where our most vulnerable customers live and work.

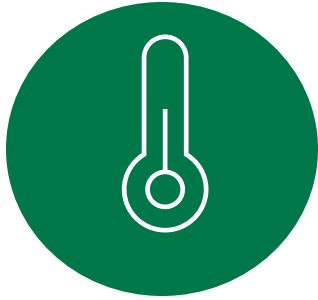
Energy Efficiency Opportunities

1. Inadequate insulation
2. Leaky ducts
3. Inefficient cooling
4. Incandescent light bulbs
5. Inefficient appliances
6. Storage tank water heater
7. Inefficient furnace



Tips to Reduce Energy Use at Home

EVERSOURCE



Thermostat

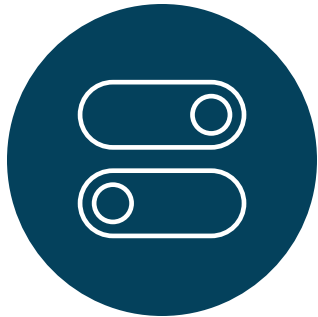
Below 68°F in winter, at or
above 75°F in summer



ENERGY STAR certified LED bulbs



Warm sunshine and heavy drapes



Turn off lights & electronics and stop phantom power



Wash in cold water



Change furnace filters

Increased Incentives

# of Household Members	Income Eligible	Enhanced Incentives*
1	< \$49,196	\$49,197 - \$65,595
2	< \$64,333	\$64,334 - \$85,778
3	< \$79,470	\$79,471 - \$105,960
4	< \$94,608	\$94,609 - \$126,144
5	< \$109,745	\$109,746 - \$146,327
6	< \$124,882	\$124,883 - \$166,510

*Visit [MassSave.com/Income](https://masssave.com/Income) and type in your zip code to find the household income limits specific to your area.

Energy efficiency is the use of less energy to perform the same task or produce the same result.

Enhanced incentives

- Increased insulation and heating system incentives
- Schedule a no-cost Home Energy Assessment to see if you qualify

Income-eligible Program (1 – 4 units)

- No-cost upgrades: weatherization, heating and water heating, appliances, and more
- Mass Save partners with you your local [Community Action Partner \(CAP\)](#) agencies and [LEAN](#) to help customer access programs and heating assistance.

Learn More

Eversource.com/home-savings

866-527-SAVE

MassSave.com (for homeowners)

MassSave.com/renters (for renters)





Thank You for Your Valuable Time

Public Comments and Questions

*Please limit each comment to two minutes to
allow time for others to speak*



WHAT'S
NEXT?

Next Steps & Adjourn

Information on the EJC and its meetings can be found at

<https://www.mass.gov/orgs/environmental-justice-council-ejc>