

Commercial & Industrial Heat Pump Overview

Aslam Kolia, Eversource Jonathan Bronke, Avangrid Michael Doucette, Avangrid Ryan Willingham, Eversource

Heat Pump Energy Optimization Overview:

- Equipment must be used as the primary source of heating (cooling-only units do not qualify for this incentive)
- Equipment must replace existing oil, propane, natural gas, or electric resistance (existing heat pump change-outs do not qualify for this incentive)
- If an existing oil, propane, or natural gas system will continue to be used, customers must install an integrated control (must be listed on the QPL) or certify that a building management system is capable of automatically switching between heat pump & fossil fuel heat, both cases requiring a pre-set outdoor temperature set below 30°F.
- Equipment must be installed by a contractor participating in the <u>Energize CT Heat Pump</u> <u>Installer Network</u>.
- Projects larger than 20 Tons or exceeding \$30,000 in rebates require preapproval: Commercial HPRebates@ri-message.com

New Construction & Major Renovation

Please note: The incentive structure for New Construction or Major Renovations projects is different than that of Commercial Rebates

More information is available at the New Construction and Major Renovation session.





Increase comfort



Optimize energy usage



Reduce greenhouse gas emissions



Ensure proper sizing and operation

Commercial & Municipal Energy Assessments: Energy Assesments



Heat Pumps + Weatherization

Full Displacement

The equipment must meet <u>at least one</u> of the following requirements to be considered Fully Displaced:

- Pre-existing heating system has been removed & a new fossil fuel heating system is not being installed
- Pre-existing heating system has been disconnected from the panel (i.e., wire terminated outside of the circuit panel and no longer energized).
- Pre-existing thermostat(s) have been disconnected from both the system board and walls.
- Pre-existing fuel line has been disconnected and capped.

Partial Displacement

The equipment must meet the following requirements to be considered Partially Displaced:

- Existing Fossil Fuel such as oil, propane natural gas or electric resistance is to remain on site
- New Heat Pump will be the main source of heating, switchover at or below 30F outdoor air temperature
- Integrated Controller from QPL is installed or existing BMS system is used (Documentation of control sequence may be required)



Manufacturers

Technical requirements

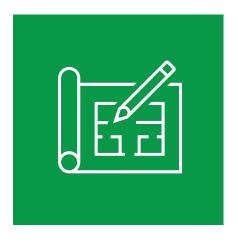
Industry partner resources



Distributors

Collaborative trainings

Supply chain / inventory insight



Contractors

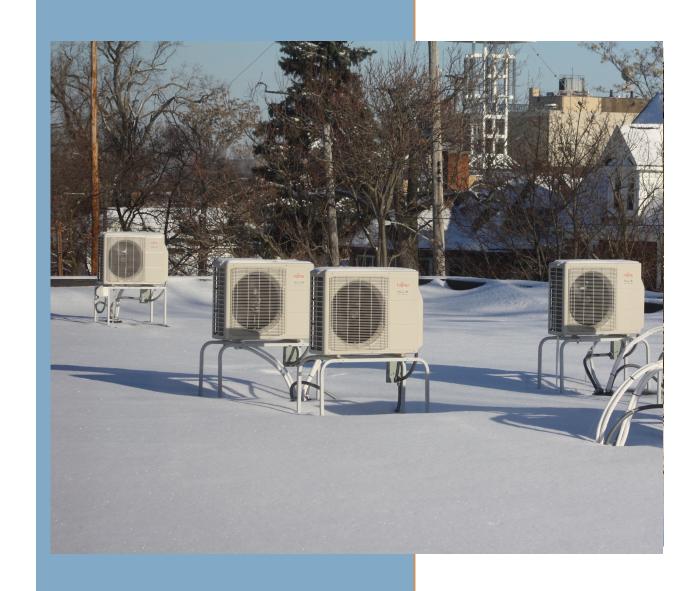
Quality assurance
Best practices

Customer resources

Channel Support & Engagement

Heat Pump Equipment Types

- Air Source Heat Pumps
 - Mini-splits
 - Central/ducted
- Variable Refrigerant Flow (VRF) Heat Pumps
- Ground Source Heat Pumps
 - Brine to Air
 - Brine to Water



Energy Optimization Claim Options

1

Submit application to CommercialHPRebates@rimessage.com for pre-approval

2

Submit a completed Heat Pump Rebate Form via email or mail

3

Work with your utility to include in an LOA, or utilize Small Business pathway

Required Documentation:

IRS W9 Form (For Payee)
Contractor Invoice including:
Contractor Information
Equipment Manufacturer and Model
Numbers
Integrated Control Model Numbers (if
applicable)
Installation Date
Installation Address
Total Install Cost
Marked Paid in Full

Documentation of control sequence (if applicable)

Indication of removal or disconnection of pre-existing system (If Full Displacement)

Large Commercial & Industrial Retrofits

Contact your electric utility for:

- Larger products / systems
- Projects with complex internal distribution layouts
- Comprehensiveness
- Relationship with customer
- Equipment is not on the QPL but meets efficiency requirements (same with integrated controller)



2023 CT C&I Heat Pump Energy Optimization Results

Gas
Displacement
Savings

168,567 Therms

2,036,289 pounds of CO2 reduced

2 million miles driven for a car

Propane
Displacement
Savings

31,230 Gallons - 395,059 pounds of CO2 reduced

Oil Displacement Savings

50,232 Gallons

(Eversource and UI combined)



Incentives & Eligibility

EnergizeCT.com/HeatPump



Efficiency requirements for heat pumps < 5.4 tons updated to align with the **new federal standards**



A complete list
of eligible units will
continue to be
maintained and available
at EnergizeCT.com

Please Note: Equipment ENERGY STAR® 6.1 Cold Climate Certified and IRA Tax Credits eligibility have different criteria

Air Source Heat Pump Efficiency Requirements (< 5.4 Tons)

Air Source Heat Pumps

Air Source Heat Pumps < 5.4 Tons

Rebates Available to Residential and Commercial Customers

Minimum Efficiency Requirements ¹			HSPF2 ²	SEER2 ³	HCR @5°F ⁴	COP ⁵ @5°F
Ductless	Mini-Split	Single-Zone	8.5	15.2	70%	1.75
Ductless	Mini-Split	Multi-Zone				
Ducted	Mini-Split	Single-Zone				
Ducted	Mini-Split	Multi-Zone	8.1	15.2	70%	1.75
Ducted	Central					

<u>Air Source Heat Pumps > 5.4 Tons</u> Rebates Available to Commercial Customers

Equipment Capacity		Minimum Efficiency Requirements		
Tons	Btu / Hr	EER	IEER	COP @47F
≥ 5.4 to < 11.25 Tons	≥ 65,000 to < 135,000 BTUs	11.8	15.4	3.5
≥ 11.25 to < 20 Tons	≥ 135,000 to < 240,000 BTUs	10.9	14.6	3.4
≥ 20 to < 30 Tons	≥ 240,000 to < 375,000 BTUs	10.3	13	3.3

¹ Aligns with ENERGY STAR 6.1 Cold-Climate Specification

- 2 Heating Season Performance Factor
- 3 Seasonal Energy Efficiency Ratio
- 4 Heating Capacity Ratio, calculated by dividing "Heating Capacity at 5°F as calculated by M1" by "Heating Capacity (H1Full) Single or High Stage (47F), btuh"
- 5 Coefficient of Performance, "Heating COP at 5°F as calculated by M1"

Variable Refrigerant Flow (VRF) Heat Pumps Rebates Available to Commercial Customers

Equipment Capacity		Minimum Efficiency Requirements		
Tons	Btu / Hr	EER	IEER	COP @47F
≥ 5.4 to < 11.25 Tons	≥ 65,000 to < 135,000 BTUs	11.3	18.9	3.4
≥ 11.25 to < 20 Tons	≥ 135,000 to < 240,000 BTUs	10.9	18	3.3
≥ 20 Tons	≥ 240,000 BTUs	9.6	16.4	3.25

Ground Source Heat Pumps

Rebates Available to Commercial Customers

Equipment Capacity ⁶		Minimum Efficiency Requirements ⁶			
Tons	Btu / Hr	Туре	EER	COP @47F	
< 11.25 Tons	< 135,000 BTUs	Brine-to-Air	17.1	3.6	
< 5.4 Tons	< 65,000 BTUs	Brine-to-Water	16.1	3.1	
≥ 5.4 to < 11.25 Tons	≥ 65,000 to < 135,000 BTUs	Brine-to-Water	16.1	3	

6 The qualifying EER, COP and BTUs are based on the equipment's Ground-Loop Heat Pump "GLHP" ratings listed by AHRI regardless of the install type

2024 Energize CT Heat Pump Rebates for Commercial Projects

Equipment Type	Minimum Efficiency Requirements	Commercial Mail-In Rebate	
Air Source Heat Pump		\$1,500/ton	
Variable Refrigerant Flow (VRF)	Refer to EnergizeCT.com/HPQPL	\$2,100/ton	
Ground Source Heat Pump		\$4,000/ton	

Projects totaling over 20 tons or \$30,000 will require pre-approval.

Reach out to CommercialHPRebates@ri-message.com to get started.





Resources & Support

EnergizeCT.com/HPIN

Heat Pump Installer Monthly Newsletter

- Announcements
- Incentive highlights
- Available resources
- Reminders
- Upcoming industry trainings
- Contact information

EnergizeCT@AbodeEM.com

ENERGIZE CONNECTICUT[™] HEAT PUMP MONTHLY REPORT

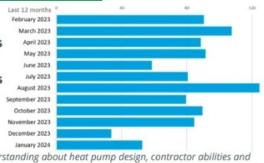


January 2024

Customer Consultations

855 Completed Consultations Through Program

51 Completed Consultations in January



"Matt confirmed my research and expanded my understanding about heat pump design, contractor abilities and rebates and incentives. Once I get auotes I will definitely be contacting him for comparisons. Great service thanks."

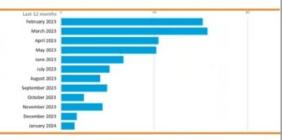
Heat Pump Installer Network

622

Contractors Enrolled In Program

5

Contractors Enrolled In January



Customer Outreach Summary

1 Events Last Month

Upcoming & Planning

- · North Hartford Partnership Resi HP 101 2/27
- North Hartford Partnership C&I HP 101 2/27
- HEDCO Webinar 2/28
- Operation Fuel HP Workshop 2/28

Contractor Outreach Summary

1 Events Last Month

Upcoming & Planning

- HBRA Home Show 2/9
- Lennox Counter Day 2/22
- CHCC Cooling the Future Conference 2/29
- HBRA Trade Show 4/9/24
- PHCC Trade Show 4/20/24



Energy optimization rebates (for fuel-switching projects)



Listing on EnergizeCT.com



Marketing materials



Technical resources and support

Heat Pump Installer Network (HPIN)

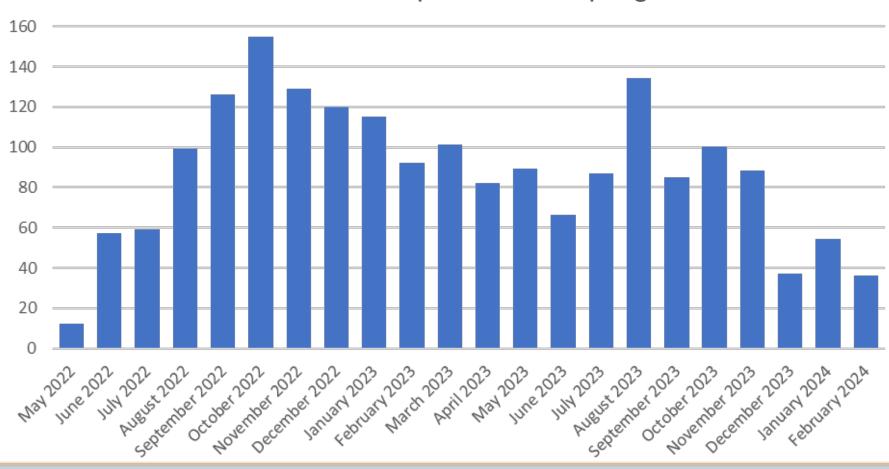
Requirements to Join

- Signed Participation Agreement
- HVAC or Electrical Contractor License
- Certificate of Comprehensive General Liability Insurance
- EPA Section 608 Certification
- Certification of relevant training:
 - Air Source Heat Pump installers:
 Certification of installation training provided by a heat pump manufacturer
 - Ground Source Heat Pump installers: International Ground-Source Heat Pump Association (IGSHPA) Installer OR GeoExchange Designer certificate



Consultation Totals

1857 consultations completed since program launch



Post-Consultation Surveys

- 12% response rate (190 responses)
- 100% Satisfaction
- Do you plan to install heat pumps in the next 6 months?
 - o Yes 62%
 - Not sure 34%
 - 。 No 3%

"I was provided with answers to all of my questions by a very knowledgeable representative. I was also given access to resources that will be very valuable going forward. I was thoroughly impressed with the scope of multi-topic knowledge that Melanie had to offer."

"Matt did a wonderful job of explaining heat pumps, how they work, their efficiency, and what I need to know to properly plan my system. Without Matt's assistance I would not have felt confident enough to move forward or make a decision on installing a heat pump system."

New & Upcoming in 2024

- New Rebate Submission for Heat Pump Program: Apply through the Energize CT Commercial Online Rebate portal
- New Learning Portal with optimized courses, email EiQ@evergreen-efficiency.com for technical issues
- Networking Events
- Packaged Terminal Heat Pumps

Aslam G Kolia

Eversource, Channel Delivery Aslam.kolia@eversource.com

Jonathan Bronke

Avangrid, C&I Rebate Program Manager Jonathan.Bronke@uinet.com

Michael Doucette

Principal Engineer – C&I Energy Services
Michael.Doucette@uinet.com

Thank you

Contractor Support Team
EnergizeCT@AbodeEM.com
(339) 707-0918

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Online Resources

- Heat Pump Solutions Page
- Air Source Heat Pump Incentives
- Ground Source Heat Pump Incentives
- Commercial Energy Optimization Rebate Form
- Heat Pump Installer Network
- Qualified Products List
- <u>Learning Center</u>

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Aslam G Kolia

Eversource, Channel Delivery Aslam.kolia@eversource.com

Jonathan Bronke

Avangrid, C&I Rebate Program Manager Jonathan.Bronke@uinet.com

Michael Doucette

Principal Engineer – C&I Energy Services Michael.Doucette@uinet.com

Thank you

Contractor Support Team

EnergizeCT@AbodeEM.com (339) 707-0918

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