

**EFFICIENCY MAINE**

**COMMERCIAL & INDUSTRIAL PRESCRIPTIVE PROGRAM**

**FUNDING OPPORTUNITY NOTICE (FON)**

**School Retrofits FON**

**FON-014-2024**

**Opening: October 26, 2023**

**Application Deadline: ~~April 30, 2024~~ **October 1, 2024****

**Project Completion Deadline: ~~January 31, 2025~~ **November 30, 2025****



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**SECTION 1: OVERVIEW AND INSTRUCTIONS**

## School Retrofits

### CIP FON-014-2024

#### 1.1 Purpose of Application Request

Through this Funding Opportunity Notice (FON or “opportunity”) Efficiency Maine is seeking applications for energy efficiency electrification projects involving whole-building heating, ventilation, and air conditioning (HVAC) projects in Maine schools that currently heat with oil or propane. This initiative falls under Efficiency Maine’s Commercial and Industrial Prescriptive Initiatives (CIPI). The program will refer to this opportunity as the School Retrofits Funding Opportunity Notice (or School Retrofits FON). This initiative offers higher incentives than typically provided under the CIPI, with the intent to accelerate the conversion to whole building high-efficiency air-source heat pump HVAC equipment in Maine schools

#### 1.2 Funding Description

This FON provides enhanced incentives for qualifying projects to upgrade HVAC systems in Maine schools. See the charts below for incentive information on the qualifying equipment and see section 2.6 for a description of the criteria that will be used to determine which equipment (or “measures”) qualifies for these incentives. HVAC measures below are intended to serve the whole building or whole heating zone.

Single- or Multi-Zone Heat Pumps			
Zone	Min. HSPF	Min. HSPF2	FON Incentive
1	12.5	9.5 ductless/8.1 ducted	\$1,800/unit
2	10.0	8.5	\$2,200/unit
3			\$2,600/unit
Heat pump retrofit projects must be sized and configured, informed by the current heating system capacity or a Manual J calculation. The heat pump must be configured as the primary heating system. Buildings that heat with natural gas are not eligible. <b>Incentives are capped at 85% of invoiced project cost.</b>			

Energy Recovery Ventilators (ERV)		
Measure Code	Sensible Heat Recovery	FON Incentive
ERV	≥ 55% to < 65%	\$2.25/CFM
	≥ 65% to < 75%	\$2.50/CFM
	≥ 75% to < 85%	\$2.75/CFM
	≥ 85%	\$3.00/CFM
CFM is Cubic Feet Per Minute. Incentives are capped at 90% of total material costs (without labor).		

Heat Pump Rooftop Units (Ventilation)			
Heating Section of Existing System (MBh)	Required Heat Pump RTU* Heating Capacity (MBh)	Minimum Required Efficiency Criteria (Heating)	Incentive per Unit
60-80	24	8.5 HSPF or 7.2 HSPF2	\$5,000
81-120	36		\$8,000
121-160	48	2.0 COP	\$10,000
161-200	60		\$15,000
201-300	90		\$20,000
301-400	120		\$25,000
401-450	132		\$25,000
Heat Pump Rooftop Units must be sized and configured to serve the whole building, or whole zone. *Heating Capacity at 17°F. RTU must be all electric including supplemental heat. <b>Incentives are capped at 85% of invoiced project cost.</b>			

#### Variable Refrigerant Flow (VRF) Systems

**School Retrofits**  
**CIP FON-014-2024**

Measure Code	Measure	Cooling Capacity Btu per Hour	Criteria (SEER, IEER or HSPF)	Incentive
VRF	Single-Phase VRF Air-Cooled Heat Pump	< 65,000	≥ 10 HSPF or 9 HSPF2	\$12.00/sq.ft.
	VRF Air-Cooled Heat Pump <u>without</u> Heat Recovery	≥ 65,000 and < 135,000	≥ 2.3 COP	\$15.00/sq.ft.
		≥ 135,000 and < 240,000	≥ 2.1 COP	
		≥ 240,000	≥ 2.1 COP	
	VRF Air-Cooled Heat Pump <u>with</u> Heat Recovery	≥ 65,000 and < 135,000	≥ 2.3 COP	\$18.00/sq.ft.
		≥ 135,000 and < 240,000	≥ 2.1 COP	
		≥ 240,000	≥ 2.1 COP	
	VRF system must be configured as the primary heating system and will meet the required building heating load. <b>Incentives are capped at 90% of invoiced project costs.</b>			

### 1.3 FON Schedule

Efficiency Maine will accept applications for the Schools Retrofits FON from October 26, 2023, through ~~April 30, 2024~~ **October 1, 2024**, *or until funding has been exhausted*. The CIP initiative team will review the applications and issue incentive offers in the form of a pre-approval offer email to applicants who meet the criteria within this FON, and as funding allows.

FON Schedule	
FON Issue Date:	October 26, 2023
Rolling Application Period:	October 26, 2023 – <del>April 30, 2024</del> <b>October 1, 2024</b>
Project Completion Deadline:	<del>January 31, 2025</del> <b>November 30, 2025</b>

### 1.4 FON Informational Webinars

Efficiency Maine will conduct three webinar presentations to inform interested parties on the specifics of this FON. It is not mandatory but recommended the applicant attend. The webinar schedule appears below and to participate in a webinar presentation, register using the link attached to your desired date.

- Tuesday, November 7, 2023, at 8:00 AM - [TO REGISTER, CLICK HERE](#)
- Thursday, November 9, 2023, at 12:00 PM - [TO REGISTER, CLICK HERE](#)
- Wednesday, November 15, 2023, at 12:00 PM - [TO REGISTER, CLICK HERE](#)

### **1.5 Project Development**

Efficiency Maine offers a virtual building consultation service if you're not sure what energy efficiency solutions may exist in your building. If you wish to take advantage of this no-cost, no obligation service, [click here](#) and we will contact you to set up a time to discussion solutions best suit for your building.

### **1.6 Design Guidance for Air-Source Heat Pump (ASHP) Systems**

Efficiency Maine requires all new ASHP systems to meet the whole-building heat load requirements. The following guidance is provided to assist in properly designing ASHP systems to ensure building occupants are comfortable through Maine's heating season. HVAC retrofit projects can also replace a whole heating zone.

Step One: Calculate the Manual J heating requirement for each building/zone OR determine the current heating system heating capacity. The whole building must be part of this calculation.

Step Two: Use the output of the Manual J or the current heating system heating capacity to design the new heat pump system:

- Single zone without Manual J: Must be a 1:1 zonal replacement designed at a heating capacity that matches 60% to 100% of the current heating system capacity.
- Single zone with Manual J: Use Manual J output to design a system at a heating capacity for single zones with 80% to 120% of Manual J design load.
- Multizone: Use Manual J output to design a system at a heating capacity for single zones with 80% to 120% of Manual J design load.
- For all configurations, data from the manufacturer's specification sheet will be used when comparing the proposed design load to the existing heating capacity or Manual J output. Manufacturer's specification sheets must show the heating capacity of the proposed system at 5 degrees F or at design temperature.

Step Three: Once you've determined an ASHP design that matches rated capacity to the capacity percent ranges, select ASHP equipment that meets the efficiency criteria as described in Section 2.6.

### **1.7 Municipal and School Financing**

The Municipal Lease from Efficiency Maine Green Bank is designed to help municipalities and schools afford the remaining project cost after an Efficiency Maine rebate. Participants can finance these co-pays through a non-debt finance vehicle known as a "municipal lease." The Efficiency Maine Green Bank pairs Efficiency Maine program participants with private, Maine-based lenders that provide this type of financing.

A municipal lease is an effective alternative to traditional debt financing (bonds, loans, etc.) because it allows a public organization to pay for energy upgrades by using money that is already set aside in its

annual utility budget. Essentially, the lessee uses utility bill savings to pay for the financing costs. For more information on municipal leases, please [click here](#).

## **SECTION 2: PROJECT ELIGIBILITY**

### **2.1 Eligible Schools**

2.1.1 Eligible schools will be limited to PreK-12 public school buildings in Maine that currently heat with ***oil or propane fuel***. Retrofit projects in qualifying schools must serve the whole building, or a whole heating zone served by the existing heating system.

Other schools that are not eligible may qualify for incentives offered through Efficiency Maine Prescriptive Initiatives. See <https://www efficiencymaine.com/at-work/education/> for more information.

2.1.2 Eligible Building Spaces will be limited to:

- Classrooms/Hallways/stairways
- Lobbies/Entryways
- Auditorium
- Library
- Cafeteria/Kitchens
- Restrooms/Locker rooms
- Open and Closed offices
- Gymnasium

2.1.3 Ineligible Buildings & Spaces

- Concession stands/dugouts
- Storage buildings
- Bus garages
- Portable classrooms

### **2.2 Eligible High-Performance Heat Pump Projects**

An eligible heat pump retrofit project is limited to the heat pump solutions listed in section 2.6 for high-efficiency heat pumps. Heat pumps must meet the specified energy efficiency criteria, which an Efficiency Maine Qualified Partner (QP) can determine. Efficiency Maine will confirm eligibility during a review of an application. The heat pumps must be installed and configured as the primary heating system and the existing system may be configured for supplemental heating, if necessary. Projects must be completed by a QP. A Qualified Partner can be found by using the locator at <https://www efficiencymaine.com/at-work/qualified-partners/>. To use the locator simply enter your ZIP code and desired radius before selecting “Heat Pumps and Cooling Solutions” in the “Services” menu.

### **2.3 Eligible Variable Refrigerant Flow (VRF) System Projects**

An eligible VRF system retrofit project is limited to one of the systems listed in section 2.6. VRF projects must meet the specified energy efficiency criteria, which a QP can determine. Efficiency Maine will

confirm eligibility during a review of an application. **The installed VRF system must be installed and configured as the primary heating system for the whole building.** Project incentives for this category will cover a portion of the project cost. Projects must be completed by a QP. A Qualified Partner can be found by using the locator at <https://www.energymaine.com/at-work/qualified-partners/>. To use the locator simply enter your ZIP code and desired radius before selecting “Heat Pumps and Cooling Solutions” in the “Services” menu.


## 2.4 Eligible Heat Pump Rooftop Units (RTUs)

An eligible RTU system retrofit project is limited to one of the systems listed in section 2.6. Replacing existing rooftop units (RTUs) with heat pump systems can significantly lower energy consumption while providing building ventilation, heating, air conditioning, and dehumidification. Project incentives for this category will cover a portion of the equipment cost. The replacement RTU must be all electric including the RTUs back-up heat. In addition, projects must be completed by a QP. A Qualified Partner can be found by using the locator at <https://www.energymaine.com/at-work/qualified-partners/>. To use the locator simply enter your ZIP code and desired radius before selecting “Heat Pumps and Cooling Solutions” in the “Services” menu.


## 2.5 Eligible Energy Recovery Ventilator (ERV) Projects


ERVs are often used to condition outside air that ventilates into a building, taking the load off a heating or cooling system and making them more efficient. For this FON, an eligible project is limited to the ERV solution and criteria listed in section 2.6. ERV projects must meet the specified energy efficiency criteria, which a QP can determine. Efficiency Maine will confirm eligibility during a review of an application. In addition, projects must be completed by a QP. A Qualified Partner can be found by using the locator at <https://www.energymaine.com/at-work/qualified-partners/>. To use the locator simply enter your ZIP code and desired radius before selecting “Heat Pumps and Cooling Solutions” in the “Services” menu.

## 2.6 Eligible Solutions


Single or Multi-Zone Heat Pumps			
Zone(s)	Minimum HSPF/HSPF2	Description	Example Image
1 to 3 Indoor Units	12.5/9.5 ductless and 8.1 ducted for single-zone 10.0/8.5 for multi-zone	<b>Mini-Split Heat Pump Systems</b> <ul style="list-style-type: none"> <li>• Incentives are capped at 85% of invoiced project cost.</li> <li>• System must serve as the primary heating and cooling system.</li> <li>• Heat pump retrofits must be sized and configured as a whole building system or be used in conjunction with a VRF system.</li> <li>• Heat pumps used as single space heating systems are not eligible for incentives.</li> </ul>	Mini-split heat pump outdoor unit. 

Heat pump retrofit projects must be configured as the primary heating and cooling system, informed by the current heating system capacity or a Manual J calculation. Buildings that heat with natural gas are not eligible. Incentives are capped at 85% of invoiced project cost.

Energy Recovery Ventilators	
Sensible Heat Recovery	Example Image
$\geq 55\%$	
Sensible heat recovery unit transfers heat from exhaust to new supply coming in (heat needed to raise temperature). Incentives are capped at 90% of total material costs (without labor).	

Heat Pump Rooftop Units (Ventilation)				
Heating Section of Existing System (MBh)	Required Heat Pump RTU* Heating Capacity (MBh)	Minimum HSPF/Heating COP at 17°F	Minimum Required Efficiency Criteria (Cooling)	Example Image
60-80	24	8.5 HSPF/7.2 HSPF2	15 SEER	
81-120	36	8.5 HSPF/7.2 HSPF2	15 SEER	
121-160	48	2.0 COP	12 EER	
161-200	60	2.0 COP	12 EER	
201-300	90	2.0 COP	11 EER	
301-400	120	2.0 COP	11 EER	
401-450	132	2.0 COP	11 EER	
HSPF is Heating Seasonal Performance Factor, COP is the Coefficient of Performance. <b>Incentives are capped at 85% of invoiced project cost.</b>				



Variable Refrigerant Flow Systems				
Measure Code	Measure	Heating Capacity Btu per Hour	Criteria (SEER, IEER or HSPF)	Example Image
VRF	Single-Phase VRF Air-Cooled Heat Pump with or <u>without</u> Heat Recovery	< 65,000	≥ 10 HSPF or 9 HSPF2	
	VRF Air-Cooled Heat Pump <u>without</u> Heat Recovery	≥ 65,000 and < 135,000	≥ 2.3 COP	
		≥ 135,000 and < 240,000	≥ 2.1 COP	
		≥ 240,000	≥ 2.1 COP	
	VRF Air-Cooled Heat Pump <u>with</u> Heat Recovery	≥ 65,000 and < 135,000	≥ 2.3 COP	
		≥ 135,000 and < 240,000	≥ 2.1 COP	
		≥ 240,000	≥ 2.1 COP	
	VRF system must be used as the primary heating system and provide heat to the whole building. <b>Incentives are capped at 90% of invoiced project cost.</b>			

### SECTION 3: APPLICATION REQUIREMENTS

Each applicant must submit the documentation listed below to be considered for incentives under this opportunity. Note that this documentation must include a material price quote obtained by the applicant from a Qualified Partner. Material quotes must include the make and model of each product used in the energy efficiency solution, the quantity of each and represent the costs to the customer. If multiple school buildings within a school district wish to participate in the FON, each building will be considered a separate project and therefore each building would require its own application and be subject to these requirements. The list of required documentation follows:

#### HVAC Projects:

- ☐ Attachment A: FON HVAC Project Application and Commitment Form
- ☐ Qualified Partner Material Price Quote to Customer

#### Additional documents for HVAC project applications:

- ☐ Installation design and proposed HVAC system layout
- ☐ Building layout or floor plan documentation with square footage
- ☐ Selection report (for ERV projects)
- ☐ Piping diagram or selection report (for VRF application)

*\*Efficiency Maine reserves the right to request additional information as needed prior to project approval.*

**Applications that are incomplete will not be accepted by Efficiency Maine and will be returned to the applicant via email.**

## **SECTION 4: SUBMITTAL INSTRUCTIONS**

Project applications must include all materials (appropriate attachments) as requested in Section 3 and are to be emailed to [CIP@efficiencymaine.com](mailto:CIP@efficiencymaine.com) by the program applicant. The email subject line must include "CIPI FON-014-2024".

For questions throughout the process, applicants are encouraged to speak with a Qualified Partner (using the locator tool described in Section 2) or to contact the Program Team at (207) 213-6247 or [CIP@efficiencymaine.com](mailto:CIP@efficiencymaine.com).

## **SECTION 5: PROJECT APPROVAL AND INCENTIVE OFFER PROCESS**

The process to apply for a project incentive starts with obtaining pre-approval. This must be done prior to ordering, procuring, or installing any equipment or materials. By applying, the applicant is making a representation to Efficiency Maine that all information provided in connection with the application is complete and accurate at the time of submission. The intentional provision of any false or misleading information, or the intentional omission of material information, will result in the application being deemed ineligible. Efficiency Maine recognizes that, depending on the nature of a proposed project, third-party vendor, installer, or energy service companies (ESCOs) may assist in the preparation, submittal, and processing of an application on behalf of a customer. Notwithstanding the participation of a third-party vendor, installer or ESCO, Efficiency Maine considers the customer to be the FONs Applicant and requires the customer to be a direct party to the application. Efficiency Maine requires direct communication with the customer as necessary for review and evaluation of an application. Because no project approval or incentive award is guaranteed, no third-party vendor, installer or ESCO should make any firm commitment of incentive award funds in advance of a final notice of award to the customer.

For applications received and accepted by the deadline listed in section 1.3, Efficiency Maine will review the data submitted to ensure accuracy. Efficiency Maine reserves the right to conduct pre-inspections at project sites and/or to request additional information during the review process. A representative from Efficiency Maine may schedule site inspection visits through the point of contact listed in the FON HVAC Project Application and Commitment Form (Attachment A), during the pre-approval period.

Once Efficiency Maine completes its review, it will make a formal incentive pre-approval offer through an "Approved Scope of Work" emailed to the applicant and the installer. The Approved Scope of Work and Terms and Conditions will be sent to the applicant and will indicate the approved scope of work and project financials including costs and estimated payback and the approved project incentive pending project completion. Incentives received by the applicant may be taxable by the federal, state, and local government. A W9 will be sent with the Approved Scope of Work to ensure correct tax information of the applicant. If the applicant wishes to accept this incentive offer, the applicant, and the installer (QP)

must sign the Approved Scope of Work and Terms and Conditions and return them with the completed W9 for the applicant via email to the contact listed in Section 4.

Efficiency Maine will confirm receipt of an applicant's acceptance of the pre-approval incentive offer via email to the contacts listed on the HVAC Project Application and Commitment Form (Attachment A) and include the Customer Project Acceptance Form detailing the scope of work. Only at this point may the applicant proceed with material ordering/purchasing and installation in accordance with the Approved Scope of Work.

## **SECTION 6: PROJECT COMPLETION PROCESS**

Upon completion of all work as outlined in the Approved Scope of Work (see section 1.3 for project completion deadline), the applicant and the installing contractor must sign and return the Customer Project Acceptance Form along with any material invoices to the email address listed in Section 4. Efficiency Maine will conduct a final project review and process the applicant's incentive(s). Once the final project review has been completed, payment will be processed to the customer. Efficiency Maine reserves the right to conduct a post-installation inspection during the final project review. A representative from Efficiency Maine will schedule site inspection visits through the point of contact listed in the FON HVAC Project Application and Commitment Form (Attachment A). Efficiency Maine will conclude all approved incentive payments by ~~December 15, 2024~~ **December 31, 2025**.