

OTDA Funding for Heat Pump Projects

Background

NYSERDA is pleased to announce that the Office of Temporary and Disability Assistance (OTDA) has released \$26.7 million in funding to be available immediately to help Home Energy Assistance Program (HEAP) customers move their homes towards Beneficial Electrification. This additional funding will allow for eligible HEAP households statewide to participate in EmPower, New York (EmPower) with work scopes up to \$20,000 per home for insulation, air sealing and the installation of heat pump technology. Projects must be completed by September 15, 2023. As a supplement to this guidance, a frequently asked questions [\(FAQ\) document](#) has been drafted to provide additional information.

Contractor Requirements

This offering is open to EmPower participating contractors. The installer of the heat pump must be a NYS Clean Heat participating contractor. A contractor that participates in both EmPower and the NYS Clean Heat program can apply for utility incentives, submit the project to NYSERDA, and install the heat pump. Otherwise, the participating EmPower contractor can utilize a sub-contractor who participates in the NYS Clean Heat program to install the heat pump equipment.

Customer Requirements

To be eligible, customers will need to be EmPower eligible and have a valid HEAP award letter (dated October 1, 2021, or later) with a Customer Identification Number (CIN) or Case Number. If a HEAP award letter is not available, a copy of the HEAP Guarantee of Payment Letter (for Program Year 2021-2022) may be submitted providing the Case Number is referenced on the letter. The Case Number is found in the “Applicant Information” section.

When processing Combined Residential Applications, CLEAResult will include a note when a customer is approved and is eligible for this funding. The note will appear in the NY HP Portal and the Participating Contractor will see it in the notes field when accepting the project. This offering is available for Long Island and municipal electric customers as well as those regularly served by EmPower. Municipal electric customers must check with their provider to ensure they are able to install electric heating equipment, which could lead to increased electric load of the home.

Project Requirements

Heating Systems

Under this offering, heat pumps will be pre-qualified measures for households heating with oil, propane, kerosene, electric, or wood but the entire project would still need to show positive bill savings for the customer.

1. For natural gas heating homes, the efficiency of the equipment being replaced cannot exceed 80% and the total project for a natural gas heated home must have positive bill savings.

2. For heating equipment, the proposed heat pump(s) must cover 90-120% of the building load. The existing heating system may remain; however, these funds do not support hybrid systems with fossil fuel furnaces and heat pumps combined. Cases where the existing heating system can remain include:
 - a. Installing ASHP split system in a home with hydronic heat where radiator and boiler removal is cost prohibitive.
 - b. A situation in which the heat pump can cover at least 90% of the load of the home but for technical reasons cannot attain 100%. In these cases the contractor should verify the project appropriateness with the program and outline steps taken so the existing system will only be used in emergency situations.
3. Below are the minimum requirements for heat pump equipment installed through this offering:
 - a. Air Source Heat Pump- NEEP Cold Climate Rated
 - b. Ground Source Heat Pump- ENERGY STAR certified

Insulation Requirements

To ensure the efficiency of the heat pump equipment, the project home must meet the following minimum insulation levels by the end of the project:

Area	Required Insulation Level
Walls	R-14¹
Attic	R-30 Average²
Attic Hatches	R-20
Pull-Down Stairs	R-13
Air Tightness	7 ACH³
Mobile Home Walls	R-6
Mobile Home Attic	R-24
Mobile Home Belly	R-21

¹ 2x4 Cavity filled to capacity.

² Average insulation of total attic area- some areas might have less than R-30 if the total average of the combined attics is R-30.

³ Houses should be tightened to at least 7 ACH to ensure proper heating from heat pumps. If the contractors cannot perform a blower door test, they must use EmPCalc to estimate the air leakage.

Distribution System/Panel Boxes

Any additional work needed for panel box upgrades or distribution systems should be itemized and included in the workscope proposal for the heat pumps.

The current distribution system should be considered when selecting a system. In some homes, major distribution improvements will have to be made. Incentives will have to be balanced with the overall system cost (for instance, it may be more economical to install mini splits rather than a central system

with duct improvements). In addition, the homeowner's preference should be considered when making these decisions.

As the program moves to electrify older homes, installers will encounter older panel boxes with insufficient amperage for heat pumps when coupled with existing electric stoves and dryers. Preliminary information indicates that panel boxes 100 Amps and smaller should be upgraded. If an existing panel box is ≤ 100 Amps, it is prequalified for replacement through the program. If the home requires greater than 100 Amp service, then a NEC worksheet must be completed indicating the need for the larger service. Project submission documentation must provide a photo of the pre-existing panel box and an invoice for the replacement panel box. Panel box work may include risers and other measures associated with the main electrical supply, including permits. Individual supply lines and boxes for the heat pump should be included in the cost of the heat pump.

Heat Pump Water Heating

Heat Pump Hot Water Heaters should be installed in an unconditioned space, such as a basement, as long as space allows in accordance with manufacturer's installation guidelines. In some homes, such as slab on grade and mobile homes, this may not be possible at this time. Electric resistance water heaters should only be installed when the current system is non-functioning and installation of a HPWH is not possible. Heat Pumps must meet the following minimum requirements:

1. Heat Pump Water Heater ≤ 55 Gallon UEF >2.0 , > 55 Gallon UEF ≥ 2.2

Cooling

With more extreme weather from climate change there is also a large health benefit in preventable heat related illness with heat pumps. One of the main benefits of adding heat pumps to a home is the addition of highly efficient cooling. There may be operating cost increases for homes with no cooling, which the Participating Contractor should educate the customer on. In most cases there will be economic and health benefits in replacing old window unit air conditioners with heat pumps. Mandatory recycling to EPA guidelines of existing window units is required when installing heat pumps.

Health and Safety

All health and safety measures should be presented for review and will be included toward the \$20,000 project cap

Incentive Structure

It is expected that the project will take advantage of NY Clean Heat funding in addition to the EmPower/OTDA funding. These projects are not eligible for the Assisted Home Performance with ENERGY STAR® subsidy.

In the event that costs exceed established caps, the contractor should consider the viability of the project upgrade to heat pump technology. NYSERDA incentives will cover projects up to 60,000 Btu/heating and can be used in conjunction with utility incentives through NY Clean Heat program



but cannot be greater than the total project cost.

NYSERDA incentives will be paid to the EmPower participating contractor. Below is a table of incentive caps, based upon location, equipment installed, and program type. For EmPower measures not listed below, standard pricing and program requirements apply.

Description	Incentive Type	EmPower
Upstate/Downstate ASHP	\$/10,000 btu	\$3,000
Upstate/Downstate GSHP	\$/10,000 btu	\$3,800
HPWH	\$/unit	\$3,000
Ancillary Service-	Panel Box Upgrade/ Distribution Improvement	\$2,000

Downstate Counties: New York, Bronx, Kings, Queens, Richmond, Orange, Rockland, Westchester, Putnam, Sullivan, Dutchess, and Ulster

Project Submission

In addition to the standard EmPower project completion paperwork, projects must also include the following required documents as part of the project submission process:

- Heat Pump Installation Acknowledgement Form (Attachment 1)
- LMI Heat Pump Certificate of Completion (Attachment 2)
- Panel Box Photo (Required if Panel Box Upgraded)
- Panel Box Invoice (Required if Panel Box Upgraded)
- Heat Pump Equipment Invoice(s)
- NEC calculation sheet if panel box being upgraded is >100 Amps (Attachment 3)

Additional Information

For additional information on this offering including a webinar and Frequent Asked Questions documentation, please visit <https://hpwescontractorsupport.com/otda-heat-pump-funding/>.



ATTACHMENT 1

Heat Pump Installation Acknowledgement Form



ATTACHMENT 2

LMI Heat Pump Certificate of Completion

Certificate of Completion

OTDA Heat Pump Funding

EmPower New York

Customer Name: _____ Contractor Name: _____

EmPower ID#: _____

Contractor: I, _____ attest that all measures completed by my company for EmPower New York adhere to current standards defined by the Building Performance Institute (BPI) and the current EmPower New York Program Guidelines. I further attest that for all Home Performance designated projects, I have conducted the appropriate Combustion Appliance Zone (CAZ) testing and left the home in a safe condition as per BPI Standards.

I attest that I have educated the customer on the use of their heat pumps and any effect they may have on their utility bills. The customer has signed the NYSERDA Heat Pump Installation Acknowledgement Form, and it will be completed in project completion paperwork.

I attest that this project adheres to the [NY Clean Heat program Guidelines](#), that a Manual J has been performed for this home, and that I or the NYS Clean Heat contractor will be applying for a reimbursement from the NY Clean for a utility heat pump rebate.

I attest that my company is responsible for collecting the utility rebate for this project and I will not hold the customer responsible for the contractor's failure to collect these funds. I will also not place a lien on the customer's property for outstanding funds that were promised as a utility rebate.

Company Authorized Signatory: _____ Date: _____



ATTACHMENT 3
NEC Calculations Sheet



**NEC Standard Electrical Load Calculation for Single Family Dwellings
(Only for Service Ratings of 120/240V, 225 Amps Max)**

Owner: _____ Location: _____

Total Floor Area of Dwelling(NEC 220.12) _____ SQFT.

Factor	Quantity	Volt Amperes(VA)	
“General Lighting”			
1. General Lighting (SQFT X 3 VA/SQ FT (Table 220.12))	3 X sqft.		
2. Small Appliance Circuits (1500 VA per circuit) (NEC 220.52(A)) (minimum 2)	1500 X		
3. Laundry Circuit (1500 VA per circuit) (NEC 220.52(B))	1500 X		
4. Total General Lighting Load (Add lines 1, 2 & 3):			
5. First 3000 VA @ 100%:		3000	
6. Total General Lighting Load – 3000 = _____ @ 35%=			
7. Net General Lighting Load (Per NEC 220.42) (Add lines 5 & 6):			
*Fixed Appliances(if insufficient space, use back):	YES	NO	
• Garbage Disposal			
• Bathroom Fan			
• Microwave			
• Dishwasher			
• Other:			
• Other:			
	Total		
8. 3 or less Appliances, Total Appliance VA; 4 or more Appliances, 75% of Total Appliance VA (NEC 220.53):			
*Other Loads (including motors, EV charger(s), etc.)	YES	NO	Nameplate Rating(VA)
9. Electric Range (8000VA or Nameplate)**			
10. HVAC			
11. Electric Oven			
12. Electric Dryer (5000 VA minimum)**			
13. Electric Vehicle Charger	✓		
14. Other:			
15. Other:			
16. 25% of largest motor (NEC 430.24)			
Total Service Load Volt-Amperes (VA) (Add lines 7, 8 & 9 thru 16) =			
Total Service Load Volt-Amperes / 240-volts = Amperes			
***Service Rating (Amperes)=			

- * For every “YES” answer, indicate VA rating of equipment
- ** Nameplate rating must be used if larger
- *** Service Rating shall be greater than or equal to the Service load

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request will provide reasonable accommodation to ensure equal access to its programs, services and activities.