NEW YORK STATE OF OPPORTUNITY. | NYSERDA

Eligible Measures List & EmPCalc

March 8, 2022

Participating Contractors

Audio Connection

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   To test your microphone, select the desired device from the drop down and look for the green bars. To test your sound, select the desired speaker, click “Test your sound”. Click Ok.

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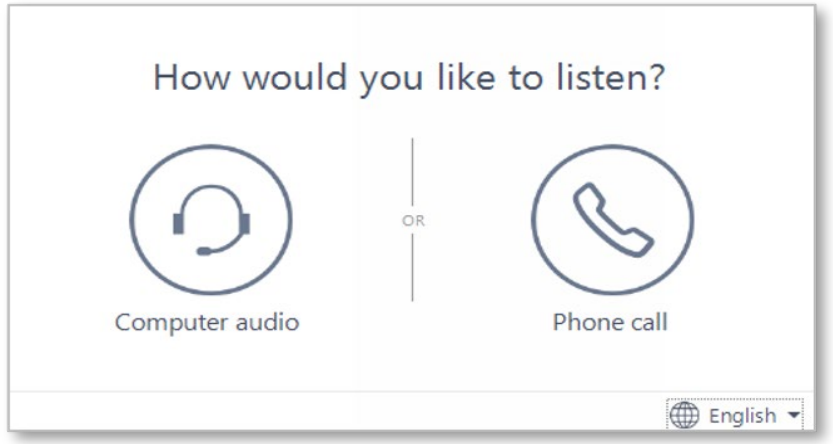

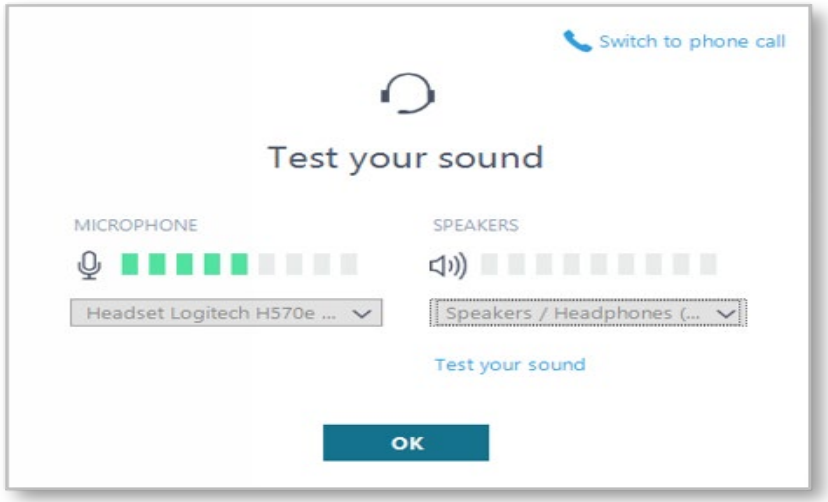

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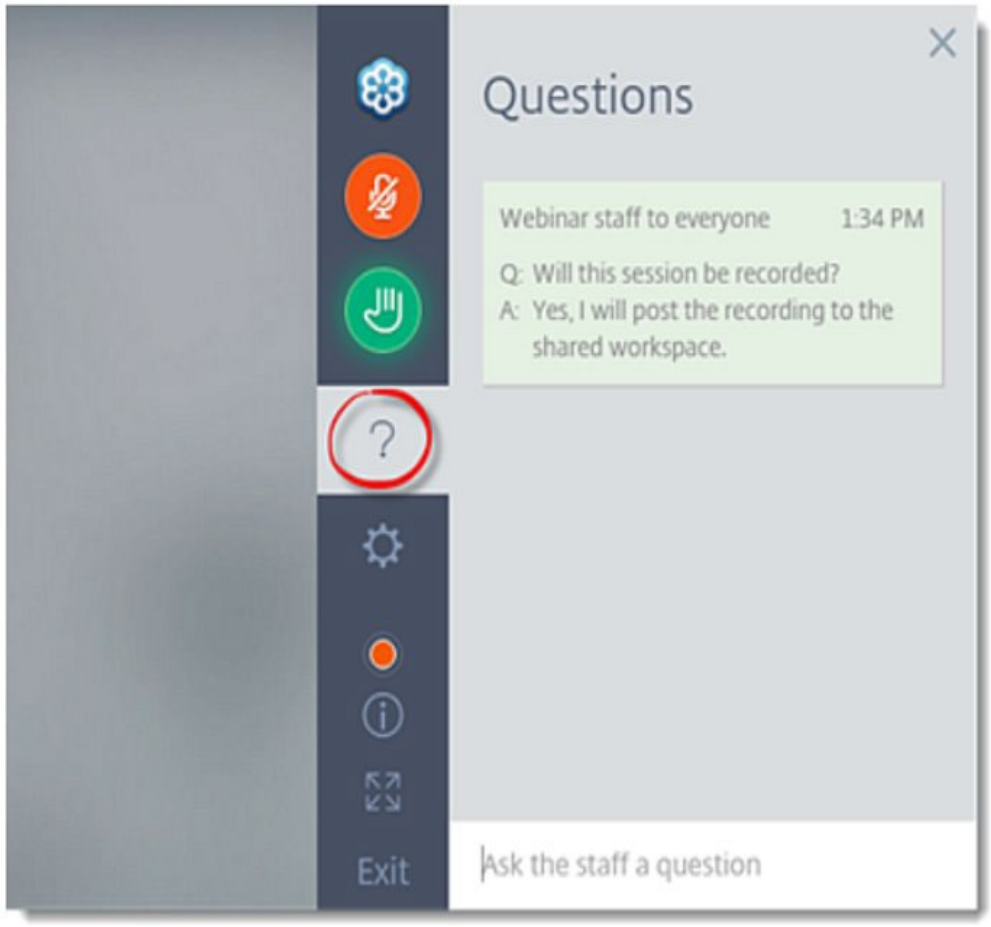
2. Enter your question in the text field at the bottom, then press Enter on your keyboard.

When your question is answered, it will appear in the Questions pane. You will also see the Question icon display an indicator that there is an unread message waiting for you.

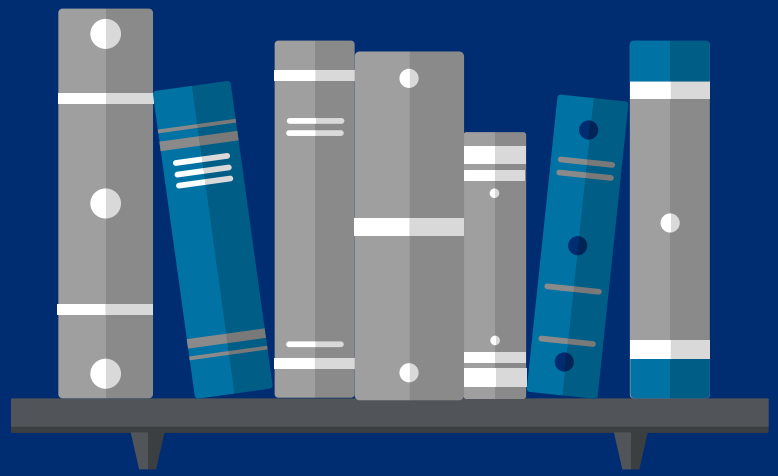


Objective

Understand how to use and interpret the new Eligible Measures List.

Understand how to use the redesigned EmPCalc and where additional information on the calculations can be found.

Eligible Measures List & EmPCalc



AGENDA

Impactful Program Updates

Training Schedule & Start Date

Eligible Measures List

Project Level Cost Effectiveness

EmPCalc Walkthrough

Next Steps/Action Items for Contractors

Q & A

Impactful Program Updates

Eligible Measures List & EmPCalc

Important information regarding changes to eligible measures:

- **Fossil fuel heating equipment**
  Ending incentives for propane, kerosene, and oil HVAC equipment*
- **Natural gas furnaces**
  Must include electric savings from ECM motors in workscope, be 96% efficient (95% for mobile homes), and replace a furnace that is 80% efficient or less.
- **Fossil fuel water heating equipment**
  Only heat pump water heater (HPWH), electric resistance and natural gas power vented domestic hot water equipment will be incentivized.
- **Caps on fossil fuel equipment incentives**
  Incentive caps: Tier 1-EmPower NY- $4,000 | Tier 3-Assisted Home Performance with ENERGY STAR® - $2,000.
- **Electric to Natural Gas Dryer Conversions**
  No longer eligible for incentives.
- **Air source heat pumps and heat pump water heaters**
  Will be prequalified for Tier 1-EmPower NY and Tier 3-Assisted Home Performance with ENERGY STAR® when replacing propane, oil, kerosene, electric resistance, & wood.
- **Spray Foam**
  No longer a prequalified measure. Will require project level cost effectiveness.
- **Project Level Cost Effectiveness**
  Tier 1-EmPower NY will begin using project level cost effectiveness (project costs evaluated against total savings of all measures).
- **Health & Safety caps for prequalified projects**
  Projects w/ Health & Safety amounts (Tier 1-EmPower NY: $1,000/Tier 3-Assisted Home Performance with ENERGY STAR®: $500) are approved w/out meeting project level cost effectiveness.

Training Schedule & Start Date

Training Schedule & Start Date

1	**Introduction & Overview** FEB-22 | 3:00 PM – 4:30 PM	☑
2	**Combined Residential Application Process** FEB-24 | 3:00 PM – 4:00 PM	☑
3	**Audit & Direct Install** MAR-01 | 3:00 PM – 4:30 PM	☑
4	**Eligible Measures List & EmPCalc** MAR-08 | 3:00 PM – 4:30 PM	
5	**Workscope Submission** MAR-10 | 3:00 PM – 4:30 PM	
6	**Final Project Submission & Payout** MAR-15 | 3:00 PM – 4:30 PM	

Q&A Sessions and Office Hours will be held to support the associated trainings:

Q & A Sessions

~~MAR-04 8:30 AM – 9:30AM \| Follow up to Trainings 1-3~~
MAR-17 3:00 PM – 4:00PM \| Follow up to Trainings 4-6
MAR-24 3:00 PM – 4:00PM \| Follow up to Trainings 1-6

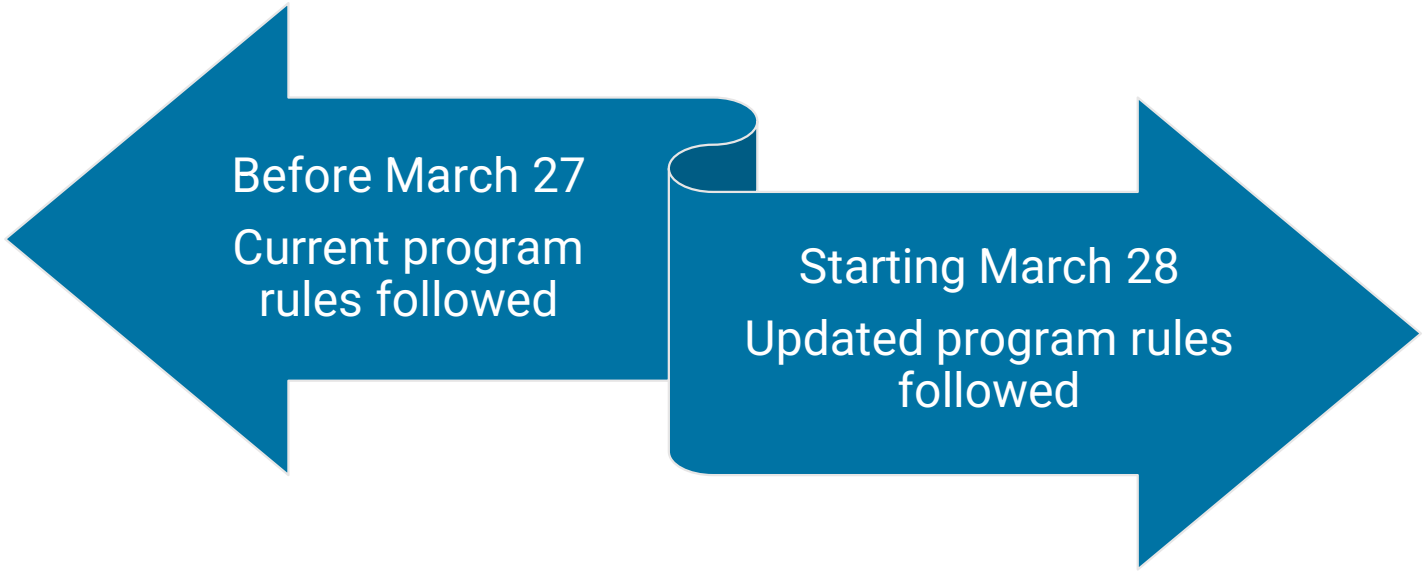
Office Hours Sessions

Session 1: APR-01 8:30 AM – 9:30AM
Session 2: APR-15 3:00 PM – 4:00PM
Session 3: APR-22 9:00 AM – 10:00AM

Training Schedule & Start Date

Combined Residential Application submission date determines how program rules are applied.

- Online (Submit button successfully clicked)
- Paper (Postmark on envelope)



Eligible Measures List

Eligible Measures List

With the alignment of the eligible measures in EmPower and Assisted Home Performance, some measures were discontinued, others scaled back, and some new measures were added.

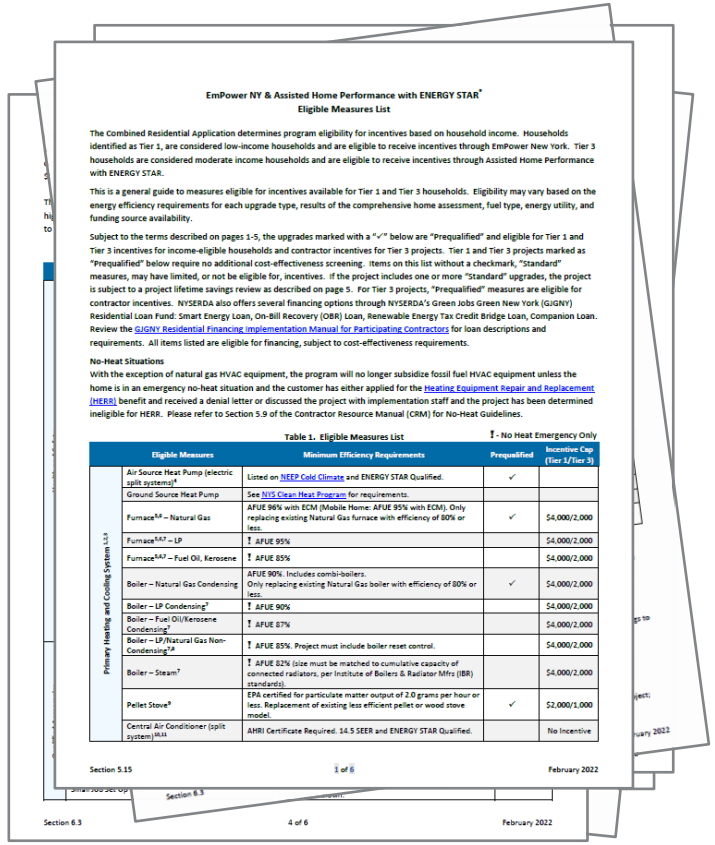
Measures are considered Standard or Prequalified. All measures listed are eligible for incentives unless specifically noted. It is vital to read and understand this information.

Standard

- May have limited, or not be eligible for incentives
- If a project includes one or more “Standard” measures, the project is subject to project level cost effectiveness review.

Prequalified

- No additional project level cost-effectiveness review is required on project containing **only** “Prequalified” measures
- On Tier 3-Assisted Home Performance projects, measures are eligible for up to $500 of contractor incentives.



EmPower NY & Assisted Home Performance with ENERGY STAR®
Eligible Measures List

The Combined Residential Application determines program eligibility for incentives based on household income. Households identified as Tier 1, are considered low-income households and are eligible to receive incentives through EmPower New York. Tier 3 households are considered moderate income households and are eligible to receive incentives through Assisted Home Performance with ENERGY STAR.

This is a general guide to measures eligible for incentives available for Tier 1 and Tier 3 households. Eligibility may vary based on the energy efficiency requirements for each upgrade type, results of the comprehensive home assessment, fuel type, energy utility, and funding source availability.

Subject to the terms described on pages 1-5, the upgrades marked with a "✓" below are "Prequalified" and eligible for Tier 1 and Tier 3 incentives for income-eligible households and contractor incentives for Tier 3 projects. Tier 1 and Tier 3 projects marked as "Prequalified" below require no additional cost-effectiveness screening. Items on this list without a checkmark, "Standard" measures, may have limited, or not be eligible for, incentives. If the project includes one or more "Standard" upgrades, the project is subject to a project lifetime savings review as described on page 5. For Tier 3 projects, "Prequalified" measures are eligible for contractor incentives. NYSERDA also offers several financing options through NYSERDA's Green Jobs Green New York (GJGNY) Residential Loan Fund: Smart Energy Loan, On-Bill Recovery (OBR) Loan, Renewable Energy Tax Credit Bridge Loan, Companion Loan. Review the GJGNY Residential Financing Implementation Manual for Participating Contractors for loan descriptions and requirements. All items listed are eligible for financing, subject to cost-effectiveness requirements.

No-Heat Situations
With the exception of natural gas HVAC equipment, the program will no longer subsidize fossil fuel HVAC equipment unless the home is in an emergency no-heat situation and the customer has either applied for the Heating Equipment Repair and Replacement (HERR) benefit and received a denial letter or discussed the project with implementation staff and the project has been determined ineligible for HERR. Please refer to Section 5.9 of the Contractor Resource Manual (CRM) for No-Heat Guidelines.

Table 1. Eligible Measures List

† - No Heat Emergency Only

	Eligible Measures	Minimum Efficiency Requirements	Prequalified	Incentive Cap (Tier 1/Tier 3)
Primary Heating and Cooling Systems[1,2,3]	Air Source Heat Pump (electric split systems)[4]	Listed on NEEP Cold Climate and ENERGY STAR Qualified.	✓	
	Ground Source Heat Pump	See NYS Clean Heat Program for requirements.		
	Furnace[5,6] – Natural Gas	AFUE 96% with ECM (Mobile Home: AFUE 95% with ECM). Only replacing existing Natural Gas furnace with efficiency of 80% or less.	✓	$4,000/2,000
	Furnace[5,6,7] – LP	† AFUE 95%		$4,000/2,000
	Furnace[5,6,7] – Fuel Oil, Kerosene	† AFUE 85%		$4,000/2,000
	Boiler – Natural Gas Condensing	AFUE 90%. Includes combi-boilers. Only replacing existing Natural Gas boiler with efficiency of 80% or less.	✓	$4,000/2,000
	Boiler – LP Condensing[7]	† AFUE 90%		$4,000/2,000
	Boiler – Fuel Oil/Kerosene Condensing[7]	† AFUE 87%		$4,000/2,000
	Boiler – LP/Natural Gas Non-Condensing[7,8]	† AFUE 85%. Project must include boiler reset control.		$4,000/2,000
	Boiler – Steam[7]	† AFUE 82% (size must be matched to cumulative capacity of connected radiators, per Institute of Boilers & Radiator Mfrs (IBR) standards).		$4,000/2,000
	Pellet Stove[9]	EPA certified for particulate matter output of 2.0 grams per hour or less. Replacement of existing less efficient pellet or wood stove model.	✓	$2,000/1,000
	Central Air Conditioner (split system)[10,11]	AHRI Certificate Required. 14.5 SEER and ENERGY STAR Qualified.		No Incentive

Section 5.15 — 3 of 6 — February 2022

Section 6.3 — 4 of 6 — February 2022

Eligible Measures List

Customer Incentives

- Tier 1-EmPower and Tier 3-Assisted Home Performance customers are offered a limited workscope incentive for single-family and 2 to 4-family homes. The balance of the project cost is the customer's responsibility and financing is available through a Smart Energy or On-Bill Recovery Loan for all Tiers.

Program	Income Qualification	Work Scope Incentive*	Incentive Amount
EmPower NY	< 60% State Median Income	100%	Up to $10,000
Assisted HPwES	60-80% Area Median Income	50%	Up to $5,000

**Unless limited by measure eligibility or price caps.*

Contractor Incentive

- Contractors can claim an Advanced Modeling Incentive (AMI) on Tier 3-Assisted Home Performance projects. The incentive is 5% of the total prequalified measure costs and is capped at $500.

Incentive Eligibility

- Workscope and Tier 3-Assisted Home Performance contractor incentives are available for customers in the following electric utility territories: Central Hudson, Con Edison, National Grid (NYC and Upstate), NYSEG, Orange & Rockland, and Rochester Gas and Electric.
- Limited Regional Greenhouse Gas Initiative (RGGI) funds are available for customers of municipal electric utilities.
- Customer incentives may be combined with other utility incentives but cannot exceed the measure's cost.
- PSEG Long Island customers not included in NYSERDA Programs and should utilize PSEG's home efficiency offerings.

Eligible Measures List

Table 1. Eligible Measures

1. No Heat Emergency ❗: Icon indicates measure can only be replaced in a no heat emergency with a like fuel type.
2. Eligible Measures: Name of the measure.
3. Minimum Efficiency Requirements: Minimum program requirements for program eligibility.
4. Prequalified ✓ : Icon indicates that the measure has no additional project level cost effectiveness review is required on project containing **only** "Prequalified" measures
5. Incentive Cap: Maximum funding levels for measure. Costs beyond caps are responsibility of customer.
6. Footnotes: Important additional information that may impact incentive eligibility.

Table 1. Eligible Measures List

① ❗ - No Heat Emergency Only

	② Eligible Measures	③ Minimum Efficiency Requirements	④ Prequalified	⑤ Incentive Cap (Tier 1/Tier 3)
	Air Source Heat Pump (electric split systems)[4] ⑥	Listed on NEEP Cold Climate and ENERGY STAR Qualified.		
	Ground Source Heat Pump	See NYS Clean Heat Program for requirements.		
	Furnace[5,6] – Natural Gas	AFUE 96% with ECM (Mobile Home: AFUE 95% with ECM). Only replacing existing Natural Gas furnace with efficiency of 80% or less.	✓	$4,000/2,000

Eligible Measures List

No-Heat Situations

A no-heat project is when the primary heating system fails or is determined unsafe to operate and is non-repairable, resulting in the need of a replacement primary heating source, during the heating season (defined as October 1 – May 31).

The following are NOT considered as eligible no-heat projects under this guidance and should follow the standard project submission and review process.

- The primary heating system has been disabled for 12 months or more and there is an alternative heating source in place.
- There is no immediate need for heat (*i.e.*, replacement request occurs outside of the heating season).
- There are no immediate health and safety concerns.
- Dwelling does not have an existing heating system.
- The home was purchased/rented without an operational heating system.
- Home is rental unit and landlord is not income eligible.
- The customer is a customer of National Fuel Gas (NFG).
    - NFG customers should reach out to NFG in the event of a “No-Heat” situation.

Eligible Measures List

No-Heat Situations

The program will no longer subsidize non-natural gas HVAC equipment unless the home is in a no-heat situation and the customer has applied for the Heating Equipment Repair and Replacement (HERR) benefit and received a denial letter or program has determined the project ineligible for HERR.

Tier 1-EmPower Households

- The household has applied to HERR and has provided a denial letter or
- The household is Tier 1-EmPower NY income eligible and meets one or more of the following criteria:
  - Applicant has lived in the home less than 12 months preceding the month of application.
  - Applicant has owned the home less than 12 months preceding the month of application.
  - Dwelling is a 3- or 4-unit home.
  - Heating equipment is inoperable due to flood, fire, or other natural disasters.

Tier 3-Assisted Home Performance Households

- The household meets the No-Heat Project Eligibility

Eligible Measures List

Primary Heating and Cooling Systems

Air Source Heat Pumps

- Project must have positive dollar savings.
- Project level cost effectiveness required when replacing natural gas.

Natural gas heating equipment:

- Furnaces must include electric savings from ECM motors in workscope, be 96% efficient (95% for mobile homes), and replace a furnace that is 80% efficient or less.
- Boiler replacement for current system that is 80% efficient or less. Includes combi-boilers.
- Ending incentives for propane, kerosene, and oil HVAC equipment (except No Heat Emergency).
- Fossil fuel equipment incentive caps:
  - Tier 1-EmPower - $4,000
  - Tier 3-Assisted Home Performance - $2,000

Cooling Systems

- No incentives for Central Air Conditions, however, energy savings can be included in project level cost effectiveness
- Room Air Conditioner must be a replacement

Table 1. Eligible Measures List

❗- No Heat Emergency Only

	Eligible Measures	Minimum Efficiency Requirements	Prequalified	Incentive Cap (Tier 1/Tier 3)
Primary Heating and Cooling System [1,2,3]	Air Source Heat Pump (electric split systems)[4]	Listed on NEEP Cold Climate and ENERGY STAR Qualified.		
	Ground Source Heat Pump	See NYS Clean Heat Program for requirements.		
	Furnace[5,6] – Natural Gas	AFUE 96% with ECM (Mobile Home: AFUE 95% with ECM). Only replacing existing Natural Gas furnace with efficiency of 80% or less.	✔	$4,000/2,000
	Furnace[5,6,7] – LP	❗ AFUE 95%		$4,000/2,000
	Furnace[5,6,7] – Fuel Oil, Kerosene	❗ AFUE 85%		$4,000/2,000
	Boiler – Natural Gas Condensing	AFUE 90%. Includes combi-boilers. Only replacing existing Natural Gas boiler with efficiency of 80% or less.	✔	$4,000/2,000
	Boiler – LP Condensing[7]	❗ AFUE 90%		$4,000/2,000
	Boiler – Fuel Oil/Kerosene Condensing[7]	❗ AFUE 87%		$4,000/2,000
	Boiler – LP/Natural Gas Non-Condensing[7,8]	❗ AFUE 85%. Project must include boiler reset control.		$4,000/2,000
	Boiler – Steam[7]	❗ AFUE 82% (size must be matched to cumulative capacity of connected radiators, per Institute of Boilers & Radiator Mfrs (IBR) standards).		$4,000/2,000
	Pellet Stove[9]	EPA certified for particulate matter output of 2.0 grams per hour or less. Replacement of existing less efficient pellet or wood stove model.	✔	$2,000/1,000
	Central Air Conditioner (split system)[10,11]	AHRI Certificate Required. 14.5 SEER and ENERGY STAR Qualified.		No Incentive
	Room Air Conditioner[12]	ENERGY STAR Qualified. Health & Safety only with a doctor's note.		$0/$250
	Clean & Tune (Gas, Oil)	As needed to correct high smoke or CO issues.	✔	
	Distribution Improvements[13]	Installed in accordance with all applicable state and local codes.		
	Heat Pipe Insulation	R-3	✔	
	Duct Sealing	UL 181B mastic or tape; use of "duct tape" is disallowed.		
	Duct Insulation	Installed in accordance with all applicable state and local codes.		
	Retrofit Electronically Commutated Motor (ECM)	Separate measure for blower fan replacement only. Installed in accordance with all applicable state and local codes.		

Eligible Measures List

Building Shell

Cellulose/Fiberglass

- See Table 1A for specific R-value requirements.

Spray Foam

- This is a Standard measure, projects containing this measure will require project level cost effectiveness review.
- Rim joists and cantilevers are considered Prequalified.

Table 1. Eligible Measures List

! - No Heat Emergency Only

	Eligible Measures	Minimum Efficiency Requirements	Prequalified	Incentive Cap (Tier 1/Tier 3)
Building Shell [14]	Insulation – Cellulose, Fiberglass	See Table 1A for specific R-value requirements. Must be accompanied by blower door assisted air sealing per BPI and program guidelines.	✓	
	Insulation – Spray foam, Foam board[15]	See Table 1A for specific R-value requirements. Must be accompanied by blower door assisted air sealing per BPI and program guidelines.		
	Air Sealing[16]	Supervised by professional; blower door assisted per BPI and program guidelines. Some measures not prequalified.	✓	
	Exterior Doors	ENERGY STAR Qualified. May be subject to SHPO review.		
	Replacement Windows	U Value 0.28, SHGC .032, Air Leakage ≤ 0.3 CFM/ft^2. Including Jalousie window. May be subject to SHPO review.		
	Movable Window Insulation	R-3		

Air Sealing

- Air sealing measures are Prequalified with the exception of the following Standard measures that the Program categorizes as air sealing:
  - Glass block windows
  - Basement hopper windows in unconditioned space
  - Window repairs
  - Incentives for these measures are capped in Tier 1-EmPower at $250 and Tier 3-Assisted Home Performance at $125 per window.
  - Projects containing these measures will require project level cost effectiveness review.

Windows

- Windows and exterior doors are Standard measures.

Eligible Measures List

Water Heaters

Heat Pump Water Heaters

- Project level cost effectiveness required when replacing natural gas.
- Project must have positive dollar savings.
- Incentives caps:
  - Tier 1-EmPower - $4,000
  - Tier 3-Assisted Home Performance - $2,000

Table 1. Eligible Measures List

! - No Heat Emergency Only

	Eligible Measures	Minimum Efficiency Requirements			Prequalified	Incentive Cap (Tier 1/Tier 3)
Water Heater [2,3,17,18]	Heat Pump Water Heaters[4,19]	ENERGY STAR Qualified.	≤ 55-gallon tank	> 55-gallon tank		$3,000/1,500
			UEF ≥ 2.0	UEF ≥ 2.2		
	Electric Resistance Tank	Replacement for Health & Safety only. As high an efficiency (UEF) as possible based on product availability. Mobile Homes (0.92 UEF, Mobile Home Rated)				$1,250/625 MH $2,000/0
	Natural Gas Power Vent	Exceptions only to correct Health & Safety issue in situations where a HPWH is not a feasible option.				
		Draw pattern dependent. ENERGY STAR Qualified.	≤ 55-gallons	> 55-gallons		
			≥ 0.64/0.68 UEF	≥ 0.78/0.80 UEF		

Replacement options for Health & Safety reasons only where a HPWH is not a feasible option

- Acceptable Health & Safety issues are limited to the following:
  - Non-operational.
  - Leaking.
  - Not passing BPI test procedures.
  - Burned out electric elements must be replaced with Heat Pump Water Heaters unless the space doesn't allow for one.
- Electric Resistance Tank: Highest efficiency available unit.
  - Mobile Homes (0.92 UEF, Mobile Home Rated)
- Power Vented Tank: Existing fuel type meeting ENERGY STAR requirements.
  - Mobile Homes (Mobile Rated Sealed Combustion, existing fuel type, not tankless)

Eligible Measures List

Appliances

Refrigerators and Freezers

- Incentives are capped at $400 for Tier 3-Assisted Home Performance customers.

Table 1. Eligible Measures List

! - No Heat Emergency Only

	Eligible Measures	Minimum Efficiency Requirements	Prequalified	Incentive Cap (Tier 1/Tier 3)
Appliances [2,3,20]	Refrigerator	Existing appliance greater than 10 years old. ENERGY STAR Qualified.	✓	NA/$400
	Freezer	Existing appliance greater than 10 years old. ENERGY STAR Qualified.	✓	NA/$400
	Dehumidifier	ENERGY STAR Qualified. Can only be installed in basement/crawlspace.	✓	$400/200
	Air Purifier[21]	Replacement of existing appliance or determined to be medically necessary (Doctor's note required). AHAM Verifide®. Follows EPA Guidance. ENERGY STAR Qualified.		$250/125

Dehumidifiers

- Incentives are capped $400 (Tier 1) and $200 (Tier 3).
- Total project cost, not per unit. If more dehumidification is needed, it would need to be addressed prior to the project moving forward. If that is not possible then the project would need to be deferred until the moisture issues were addressed.

Air Purifiers

- New Standard measure.
- Stand-alone unit replacement of existing appliance or determined to be medically necessary (Doctor's note required).
- Incentives are capped at $250 (Tier 1) and $125 (Tier 3).

Eligible Measures List

Direct Install

Measures eligible for Direct Install during an audit.

Advanced Power Strips

- New measure
- Limited to 2 replacements per dwelling with the listed requirements.
- Tier 1 Advanced Power Strip: $30
  - Reduces standby power by turning off controlled outlets when the control device is manually shut off
- Tier 2 Advanced Power Strip: $70
  - Reduces both active and standby power, turning off controlled outlets after inactivity is sensed

DHW Pressure Relief Valve Discharge Pipe

- New measure. Incentive capped at $25.
- Limit of 1 per dwelling.

Table 1. Eligible Measures List

! - No Heat Emergency Only

	Eligible Measures	Minimum Efficiency Requirements	Prequalified	Incentive Cap (Tier 1/Tier 3)
Direct Install [3,22]	LEDs	ENERGY STAR Qualified. Refer to Lighting Guidelines in CRM.	✓	
	DHW Pipe Insulation	R-3. 9' maximum length (3' Cold and 6' Hot) for Direct Install.	✓	NA/$500
	Low Flow Showerhead	EPA WaterSense: 2.0 gallons per minute. Aerating type showerheads not eligible. Limit one per household member.	✓	
	Advanced Power Strip[23]	Up to 2 Tier 1 or Tier 2 APS replacements that need to provide 1 primary and 3 secondary outlets with at least 1,000 joules of surge protection.	✓	
	DHW Pressure Relief Valve Discharge Pipe		✓	$25
	Door Sweep	Exterior doors (including to unconditioned spaces (*i.e.*, basement).	✓	NA/$500
	Weatherstrip	Exterior doors (including to unconditioned spaces (*i.e.*, basement).	✓	NA/$500
	Detectors - CO & Smoke	UL Listed. When one isn't already present. Limit one per dwelling.	✓	
	Furnace Filter		✓	
	Furnace Filter Slot Cover	When not present or malfunctioning.	✓	
	Programmable Thermostat	5+2 day programmable thermostat including smart thermostat. Limited to one thermostat installed per zone.	✓	

Eligible Measures List

Footnotes

It is important to carefully read footnotes. They provide additional context for measures that need further clarification.

[5] When ECM is part of a new furnace, savings must be included in that new unit.

[6] Furnace humidifier costs are required to be included in the new furnace installation costs.

[7] Only eligible for Tier 1 customers in no-heat emergency with Heating Equipment Repair or Replacement (HERR) denial or implementation staff has determined the project ineligible for HERR.

[8] In instances where venting conditions require the installation of a non-condensing boiler, boiler reset controls must be included in the project; tank-less coil DHW is not allowed.

[9] Pellet stove must supply a primary portion of heat. Listed on EPA-Certified Wood Stove Database or manufacturer documentation showing that the unit meets requirements.

[10] Not eligible for program incentives but measure savings can be used to determine project lifetime savings.

[11] Measure is only eligible when there is a replacement of an existing appliance or existing cooling system.

[12] Tier 1 customers must be referred to OTDA Cooling for assistance. If denied, full cost of unit may be covered.

[13] In instances where an area of a home lacks adequate distribution, installation of new distribution to serve the area is eligible. The area lacking adequate distribution must be located within the pre-existing thermal boundary.

[14] Moving objects on behalf of the customer costs are required to be included in the insulation installation costs.

[15] Rim joists and cantilever foam measures are Prequalified.

[16] The following air sealing measures are NOT Prequalified: Glass block, basement hopper windows in unconditioned space, window glass repair. Incentives for these measures have a per window cap at $250 for Tier 1 projects $125 for Tier 3 projects. Measures require project lifetime savings to be greater than the Program incentive.

[17] Use manufacturer's sizing guidelines or visit https://www.energy.gov/energysaver/water-heating/sizing-new-water-heater. For ENERGY STAR criteria, including UEF ratings and draw patterns, visit energystar.gov/products/water_heaters/residential_water_heaters_key_product_criteria

Eligible Measures List

Table 1A. Insulation Requirements

1. Insulation Measure: Location of insulation.
2. R-value: Minimum program requirements for total insulation value.
3. Cellulose / Fiberglass: Minimum program requirements for measures using this material.
4. Spray Foam / Foam board: Minimum requirements for measures using this material.

Table 1A. Insulation Requirements

① Insulation Measure	② R-Value	Minimum Efficiency Requirements ③ Cellulose / Fiberglass	④ Spray Foam / Foam board
Attic Entry – Hatch	R-20		Fireproofing when required.
Attic Entry – Pull Down Stairs	R-13		Fireproofing when required.
Attic Open	R-49		N/A
Attic Floored	Attic Average R-30	Maximum depth of cavity.	N/A
Attic Knee Wall	R-15	Dense packed with air barrier.	Fireproofing when required.
Attic Slopes	Attic Average R-30	Maximum depth of cavity.	Fireproofing when required.
Attic Gable End Walls	R-14	N/A	Fireproofing when required.

Eligible Measures List

Table 1A. Insulation Requirements

Attics

- Open floor requirements are R-49 with loose fill insulation.
- If there are space constraints (*i.e.,* devil's triangle, covered floor) when insulating other surfaces of an attic's thermal boundary the goal is to achieve an average R-30 for the attic.
- Floored areas need to be fully dense packed unless cavity is already filled with pre-existing insulation.

Foundation Walls

- Down to 2' below grade; Area is not heated, and/or finished as a living space, No Drywall; Fireproofing when required.

Mobile Home Belly

- Review specific technical guidance document.

Other

- Spray foam must be fireproofed when required.
- N/A indicates the insulation type is not eligible in the program.

Table 1A. Insulation Requirements

Insulation Measure	Minimum Efficiency Requirements		
	R-Value	Cellulose / Fiberglass	Spray Foam / Foam board
Attic Entry – Hatch	R-20		Fireproofing when required.
Attic Entry – Pull Down Stairs	R-13		Fireproofing when required.
Attic Open	R-49		N/A
Attic Floored	Attic Average R-30	Maximum depth of cavity.	N/A
Attic Knee Wall	R-15	Dense packed with air barrier.	Fireproofing when required.
Attic Slopes	Attic Average R-30	Maximum depth of cavity.	Fireproofing when required.
Attic Gable End Walls	R-14	N/A	Fireproofing when required.
Exterior Walls	R-14	Maximum depth of cavity.	
Band Joist	R-14	Maximum depth of cavity.	
Rim Joist	R-14	N/A	
Cantilever	R-21	Maximum depth of cavity.	Fireproofing when required.
Garage Ceiling	R-21	Maximum depth of cavity.	Fireproofing when required.
Crawl Space Ceiling	R-21	Maximum depth of cavity.	Crawlspace must not contain any mechanicals or distribution work. Space must be rendered inaccessible after insulation. Fireproofing when required.
Crawl Space Walls	R-14	N/A	Fireproofing when required.
Foundation (Basement) Walls	R-14	N/A	Down to 2' below grade; Area is not heated, and/or finished as a living space, No Drywall; Fireproofing when required.
Mobile Home Belly	R-21	See specific technical guidance document.	

Eligible Measures List

Table 2. Eligible Health & Safety Measures and Accessories

All Health and Safety Measures and Accessories must be itemized for the purposes of determining incentive eligibility and a project's cost effectiveness.

Costs associated with the installation of certain measures can be included in the related energy saving measure.

- Items such as high hat covers, weather stripping, and outlet gaskets can be included with air sealing.
- Baffles, insulation dams, and creating access to the attic can be included with attic insulation.

Table 2. Eligible Health & Safety Measures and Accessories

	Eligible Measures	Program Requirements	Prequalified
	Bath Fan: New, Replacement and Venting	Insulated duct in unconditioned space. Vent to exterior in all cases. Installation as needed by signs of moisture.	
	Dryer Vent Repair	Vent to exterior in all cases.	
	Combustion Appliance Zone (CAZ) Corrections: Measures to provide sufficient combustion air and prevent CAZ depressurization, spillage, or inadequate draft	Maximum incentives: EmPower $500, AHP $250.	

Eligible Measures List

Health & Safety

Projects with only Prequalified measures other than H&S may include Standard H&S measures up to following caps:

- Tier 1-EmPower: $1,000
- Tier 3-Assisted Home Performance: $500
- Exceeding the cap triggers the project level cost effectiveness requirement

All other Health & Safety costs are eligible for incentives IF project level cost effectiveness has been met.

Combustion Appliance Zone (CAZ) Corrections are capped at the following limits:

- Tier 1-EmPower: $500
- Tier 3-Assisted Home Performance: $250

Lead and Radon Abatement

- Not incentivized.

Table 2. Eligible Health & Safety Measures and Accessories

	Eligible Measures	Program Requirements	Prequalified
Health and Safety	Bath Fan: New, Replacement and Venting	Insulated duct in unconditioned space. Vent to exterior in all cases. Installation as needed by signs of moisture.	
	Dryer Vent Repair	Vent to exterior in all cases.	
	Combustion Appliance Zone (CAZ) Corrections: Measures to provide sufficient combustion air and prevent CAZ depressurization, spillage, or inadequate draft	Maximum incentives: EmPower $500, AHP $250.	
	Fuel (gas/oil) Leak Repair	Gas leaks require confirmation with bubble solution.	
	Moisture Barriers, Crawlspace/Vapor Barrier	Required on dirt floors.	
	Heat/Energy Recovery Ventilator	ENERGY STAR Qualified.	
	Ventilation Fans	Make-up air needs to meet ventilation requirements. Whole house fans or similar attic exhaust fans are not eligible.	
	Knob and Tube Wiring Upgrade to install insulation	Performed by licensed electrician. Not cost prohibitive.	
	Chimney Liners and Caps	Only to correct Health & Safety issues.	
	Heating/DHW System Repairs/Upgrades (including power venting kits) to correct spillage, inadequate draft, carbon monoxide failures	Includes repairs only to exterior wood boilers, not upgrades.	
	Home Repairs: Due to water damage, molds and mildew, ice dams or other symptoms of poor building performance, if the cause(s) of building performance-related damage are addressed	Includes gutter repair/replacement and roof repair. Mold/mildew abatement must be completed according to New York State law and EPA guidelines.	
	Gas Oven Repair/Replacement	Only to correct Health & Safety issues (CO can't be corrected with a Clean & Tune). Costs beyond caps are responsibility of customer.	
	Oil Tank Removal or Replacement	EmPower Only. Removal or replacement only when required by Code or to solve a Health & Safety issue.	
	Sump Pump: New or Replacement	As needed by signs of moisture.	
	Asbestos Abatement	Work must be completed according to New York State law and EPA guidelines. Not cost prohibitive.	
	Lead Abatement	Work must be completed according to New York State law and EPA guidelines.	No Incentive
	Radon Abatement	Work must be completed according to New York State law and EPA guidelines.	No Incentive

Eligible Measures List

Qualified Accessories

All measures require project level cost effectiveness, unless otherwise noted.

Not defined as Health & Safety by Program.

Review and understand, updated limits.

Attic Storage Platform

- Storage platform limited to 64 ft^2. Additional square footage would be at the customer's expense

Electrical Service Upgrade

- Does not cover water heaters
- NEC Standard Electrical Load Calculation for Single Family Dwellings required to demonstrate upgrade need.

Table 2. Eligible Health & Safety Measures and Accessories

	Eligible Measures	Program Requirements	Prequalified
Qualified Accessories	Attic Access	Cutting access and patching or adding insulated hatch only (not stairs).	✔
	Attic Insulation Damming	All hatches where loose fill insulation will be installed, areas adjacent to chimneys, chases, storage and mechanical platforms.	✔
	Attic Ventilation: baffles, soffit, gable, or ridge vents	Installed in accordance with all applicable state and local codes.	✔
	Attic Storage Platform / Mechanical Access	Storage platform limited to two 8x4 sheets (64 ft^2).	
	Drywall Repairs	Includes reinforcing existing surface for dense packing.	
	Thermal Barriers for Spray Foam (drywall/intumescent paint)	Required if area is not permanently sealed or contains mechanicals.	
	Insulation/Debris Removal	As needed to insulate to Program minimum standards.	
	Small Job Set Up Fee	Only for project where a total of less than 500 sq ft of insulation is blown.	
	Electrical Service Upgrade necessary when installing a new heating/cooling unit and Repairs	Completed NEC worksheet required to demonstrate upgrade need. Repairs due to Health & Safety issues.	
	Furnace Humidifier		
	Fuel Conversion Accessories		
	Oil Burner Replacement	No heat emergency only.	
	Boiler Reset Controls	No heat emergency only. Programmed properly per manufacturer's specifications and site conditions.	
	Well Pump Replacement		

Eligible Measures List

Notable HVAC Updates

Price Caps (Tier 1/Tier 3)

- CAZ Safety – $500/$250
- Furnace/Boiler (Fossil fuel) – $4,000/$2,000
- HPWH – $3,000/$1,500
- DHW (Electric) – $1,250/$625 (H&S replacement only)
- DHW (Electric, Mobile Home Rated) – $2,000/No Incentive (H&S replacement only)
- Pellet Stove – $2,000/$1,000 (efficiency upgrade or wood stove replacement only)
- Central A/C – No Incentive (replacement only)

No Heat Emergency Only

- Furnace (Fuel Oil, Kerosene, LP)
- Boilers
  - Condensing (Fuel Oil, Kerosene, LP)
  - Non-condensing (LP, Natural Gas)
  - Steam
- Oil Burner Replacement
- Boiler Reset Controls

Exceptions

- Furnace (Natural Gas) - only replacing existing natural gas furnace of 80% efficiency or lower.
- DHW – Natural Gas Power Vent - only to correct Health & Safety issues or replacement of non-functioning water heater in situations where a HPWH or electric tank was not a feasible option.
- DHW (Natural Gas, Indirect Fired) – HPWH Replacement only
- Oil Tank Replacement – Tier 1-EmPower NY only - No Incentive (H&S replacement only)

Discontinued

- DHW (On-Demand only)
- Electric Baseboard Heater
- DHW Tank Insulation

Not Exhaustive – refer to the Eligible Measures List (CRM Section 5.15) for complete details.

Eligible Measures List

Other Notable Updates

Price Caps

Caps listed as Tier 1/Tier 3

- Air Purifiers – $250/$125 (replacement or Doctor's note required for new unit)
- Air Sealing – Glass Block/Basement Hopper Window $250/$125 per window (unconditioned space only)
- Dehumidifier – $400/$200
- DHW Repair – $250/$0
- Refrigerator – NA/$500
- Freezer – NA/$400
- Gas Oven – $500/$250 (H&S concern required)

Discontinued

- All other Audit types (*i.e.*, Electric Reduction)
- DHW (On-Demand only)
- Electric Baseboard Heater
- DHW Tank Insulation
- Light Fixtures
- Clothes Dryer
- Clothes Washer
- Dishwasher
- Fenestration - Storm Doors and Windows
- Germicidal UV Lights and UV HEPA Filters

Not Exhaustive – refer to the Eligible Measures List (CRM Section 5.15) for complete details.

Eligible Measures List

Projects with NYSERDA Residential Financing

In July 2021, financing was decoupled from the NY HP Portal workflow. Projects requiring financing need to utilize the ProForma worksheet that applies to their project type.

- ProFormas can be found on the Resources for Participating Contractors page of NYSERDA's website: https://www.nyserda.ny.gov/All-Programs/Become-a-Contractor/Become-a-Loan-offering-Contractor/Resources-for-Participating-Contractors
- Contractors should follow the instructions provided on the site and send ProFormas directly to Slipstream (formerly EFS) for Finance Only approval: Workscope@EnergyFinanceSolutions.com
- A Certificate of Completion and signed contract need to be sent to Slipstream to close-out the Loan.
- Since the NY HP Portal does not communicate with Slipstream, contractors must send a revised ProForma to Slipstream if there are any changes to a project's cost.

Project Level Cost Effectiveness

Project Level Cost Effectiveness

What is Project Level Cost Effectiveness?

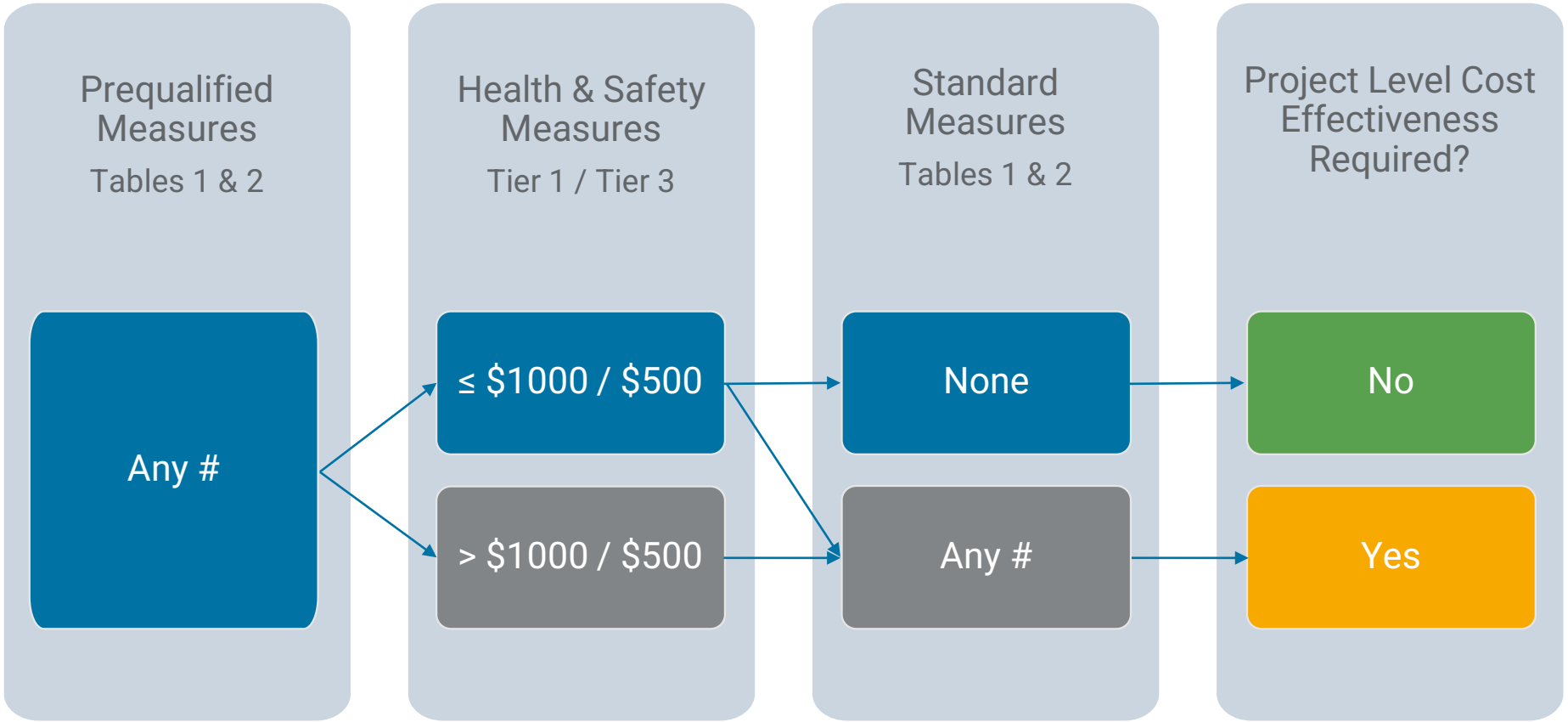
$$Sum\ of [Annual\ Energy\ (\$)\ Dollar\ Savings \times Effective\ Useful\ Life\ (EUL)] > NYSERDA\ Program\ Incentive$$

- Used to determine whether NYSERDA's investment in an energy efficiency project is cost effective.
- Annual Energy Savings and Effective Useful Life determined using calculations from the New York State Technical Resource Manual (TRM).
- Tier 1 and Tier 3 customers will need to contribute funds on their projects when
  - a proposed measure has a price cap, and that cap is exceeded OR
  - the project's lifetime savings is less than the NYSERDA program incentive being offered (*i.e.*, not meeting Project Level Cost Effectiveness).
- Options to decrease a customer contribution include the following:
  - Work with the regional Community Energy Advisor to find additional non-program funding.
  - Remove non-prequalified measures (*i.e.*, standard measures).
  - Increase the lifetime dollar savings of the project by proposing higher energy saving measures.
  - Do not exceed a measure's price caps.
  - Reduce the workscope and work with the customer to reapply when they are eligible again (3 years).
  - Reduce cost of measure.

Project Level Cost Effectiveness

When is Project Level Cost Effectiveness Required?

- Evaluation only required when a Standard measure is proposed, or when Health & Safety caps are exceeded.
- Project's lifetime dollar savings must be greater than the NYSERDA incentive provided.



Project Level Cost Effectiveness

Scenario 1: Direct Install, Insulation with high Health & Safety costs

	Measure	Cost $	Annual $ Savings	EUL	Lifetime $ Savings	Tier 1		Tier 3	
						Incentive	Customer	Incentive	Customer
Direct Install	Audit (w/Blower door, EE)	$ 355.00	$ -	n/a	$ -	$ 355.00	$ -	$ 355.00	$ -
	LEDs	$ 88.00	$ 33.66	15	$ 504.90	$ 88.00	$ -	$ 88.00	$ -
Workscope	Attic insulation (loose fill)	$ 2,500.00	$ 141.01	25	$ 3,525.25	$ 2,500.00	$ -	$ 1,250.00	$ 1,250.00
	Air sealing (attic)	$ 500.00	$ 55.60	15	$ 834.00	$ 500.00	$ -	$ 250.00	$ 250.00
	Rim Joist insulation	$ 450.00	$ 10.48	25	$ 262.00	$ 450.00	$ -	$ 225.00	$ 225.00
	Health & safety measure	$ 1,750.00	$ -	n/a	$ -	$ 1,750.00	$ -	$ 875.00	$ 875.00
	TOTALS	$ 5,200.00	-	-	$ 5,126.15	$ 5,200.00	$ -	$ 2,600.00	$ 2,600.00

Annual $ Savings X EUL = Measure Lifetime $ Savings
$33.66 X 15 = $504.90

Sum of All Annual $ Saving Measures = Project Lifetime $ Savings
$504.90 + 3,525.25 + 834.00 + 262.00 = $5,126.15

Project Lifetime $ Savings > NYSERDA Incentive (DI not included)
Tier 1 $5,126.15 NOT > $5,200. 00

NYSERDA incentive reduced to $5,126.15
Customer contribution = $73.85 (Project Level Cost Effectiveness not met)
Alternatively, the H&S measure cost could be reduced or additional high energy saving measures could be added.

Project Lifetime $ Savings > NYSERDA Incentive (DI not included)
Tier 3 $5,126.15 > $2,600. 00

Customer contribution = $2,600 (50%)

Project Level Cost Effectiveness

Scenario 1: Direct Install, Insulation with furnace and air conditioning

	Measure	Cost $	Annual $ Savings	EUL	Lifetime $ Savings	Tier 1		Tier 3	
						Incentive	Customer	Incentive	Customer
Direct Install	Audit (w/Blower door, EE)	$ 355.00	$ -	n/a	$ -	$ 355.00	$ -	$ 355.00	$ -
	LEDs	$ 88.00	$ 33.66	15	$ 504.90	$ 88.00	$ -	$ 88.00	$ -
	Low Flow Showerhead	$ 36.94	$ 29.91	10	$ 299.10	$ 36.94	$ -	$ 36.94	$ -
	Thermostat	$ 129.32	$ 60.70	11	$ 667.70	$ 129.32	$ -	$ 129.32	$ -
	Refrigerator	$ 825.00	$ 46.08	14	$ 645.12	$ 825.00	$ -	$ 400.00	$ 425.00
Workscope	Attic insulation (loose fill)	$ 2,500.00	$ 141.01	25	$ 3,525.25	$ 2,500.00	$ -	$ 1,250.00	$ 1,250.00
	Air sealing (attic)	$ 500.00	$ 55.60	15	$ 834.00	$ 500.00	$ -	$ 250.00	$ 250.00
	Rim Joist insulation	$ 450.00	$ 10.48	25	$ 262.00	$ 450.00	$ -	$ 225.00	$ 225.00
	Health & safety measure	$ 393.45	$ -	n/a	$ -	$ 393.45	$ -	$ 196.73	$ 196.73
	Central AC replacement	$ 4,100.00	$ 15.34	15	$ 230.10	$ -	$ 4,100.00	$ -	$ 4,100.00
	Fossil fuel furnace/boiler	$ 5,200.00	$ 203.06	22	$ 4,467.32	$ 4,000.00	$ 1,200.00	$ 2,000.00	$ 3,200.00
	TOTALS	$ 14,577.71	-	-	$ 11,435.49	$ 7,843.45	$ 5,300.00	$ 4,321.73	$ 9,646.73

Annual $ Savings X EUL = Measure Lifetime $ Savings

$33.66 X 15 = $504.90

Sum of All Annual $ Saving Measures = Project Lifetime $ Savings

$504.90 + 299.10 + 667.10 + 645.12 + 3,525.25 + 834.00 + 262.00 + 230.10 + 4,467.32 = $11,435.19

Project Lifetime $ Savings > NYSERDA Incentive (DI not included)

Tier 1 $11,435.49 > $7,843.45

Customer contribution = $5,300.00 (cap overages)

Project Lifetime $ Savings > NYSERDA Incentive (DI not included)

Tier 3 $11,435.49 > $4,321.73

Customer contribution = $9,646.73 (50% + cap overages)

Project Level Cost Effectiveness

Scenario 3: Direct Install, Insulation with ASHP

	Measure	Cost $	Annual $ Savings	EUL	Lifetime $ Savings	Tier 1		Tier 3	
						Incentive	Customer	Incentive	Customer
Direct Install	Audit (w/Blower door, EE)	$ 355.00	$ -	n/a	$ -	$ 355.00	$ -	$ 355.00	$ -
	LEDs	$ 88.00	$ 33.66	15	$ 504.90	$ 88.00	$ -	$ 88.00	$ -
	Thermostat	$ 129.32	$ 60.70	11	$ 667.70	$ 129.32	$ -	$ 129.32	$ -
Workscope	Air sealing	$ 500.00	$ 55.60	15	$ 834.00	$ 500.00	$ -	$ 250.00	$ 250.00
	Rim Joist insulation	$ 450.00	$ 10.48	25	$ 262.00	$ 450.00	$ -	$ 225.00	$ 225.00
	Health & safety measure	$ 393.45	$ -	n/a	$ -	$ 393.45	$ -	$ 196.73	$ 196.73
	Air Source Heat Pump (60k Btu)	$ 18,000.00	$ 893.06	15	$ 13,395.90	$ 13,500.00	$ 4,500.00	$ 4,328.27	$ 13,671.73
	TOTALS	$ 19,343.45	-	-	$ 15,664.50	$ 14,843.45	$ 4,500.00	$ 5,000.00	$ 14,343.46

Annual $ Savings X EUL = Measure Lifetime $ Savings
$33.66 X 15 = $504.90

Sum of All Annual $ Saving Measures = Project Lifetime $ Savings
$504.90 + 667.70 + 834.00 + 262.00 + 13,395.90 = $15,664.50

Project Lifetime $ Savings		>	NYSERDA Incentive (DI not included)
Tier 1 (OTDA)	$15,664.50	>	$14,843.45
Customer contribution		**=**	***$4,500.00***
Utility/3rd party Incentives		=	*$4,500.00 (utility, HeatSmart)*
Final customer contribution		=	*$0.00*

Project Lifetime $ Savings		>	NYSERDA Incentive (DI not included)
Tier 3	$15,664.50	>	$5,000 (max reached)
Customer contribution		**=**	***$14,343.46 (50% + cap overages)***
Utility/3rd party Incentives		=	*$4,500.00 (utility, HeatSmart)*
Final customer contribution		=	*$9,843.46*

EmPCalc Walkthrough

EmPCalc Walkthrough

Impacts of Program Changes

Program changes required significant updates to EmPCalc and created an opportunity for a redesign of the tool.

The goal was for the tool to better meet Program needs and make participant use easier.

Significant Updates

- Energy Savings Calculations
- Project Level Cost Effectiveness
- Single Eligible Measures List

Redesign

- Navigation
- Data Inputs
- Summary Tabs

EmPCalc Walkthrough

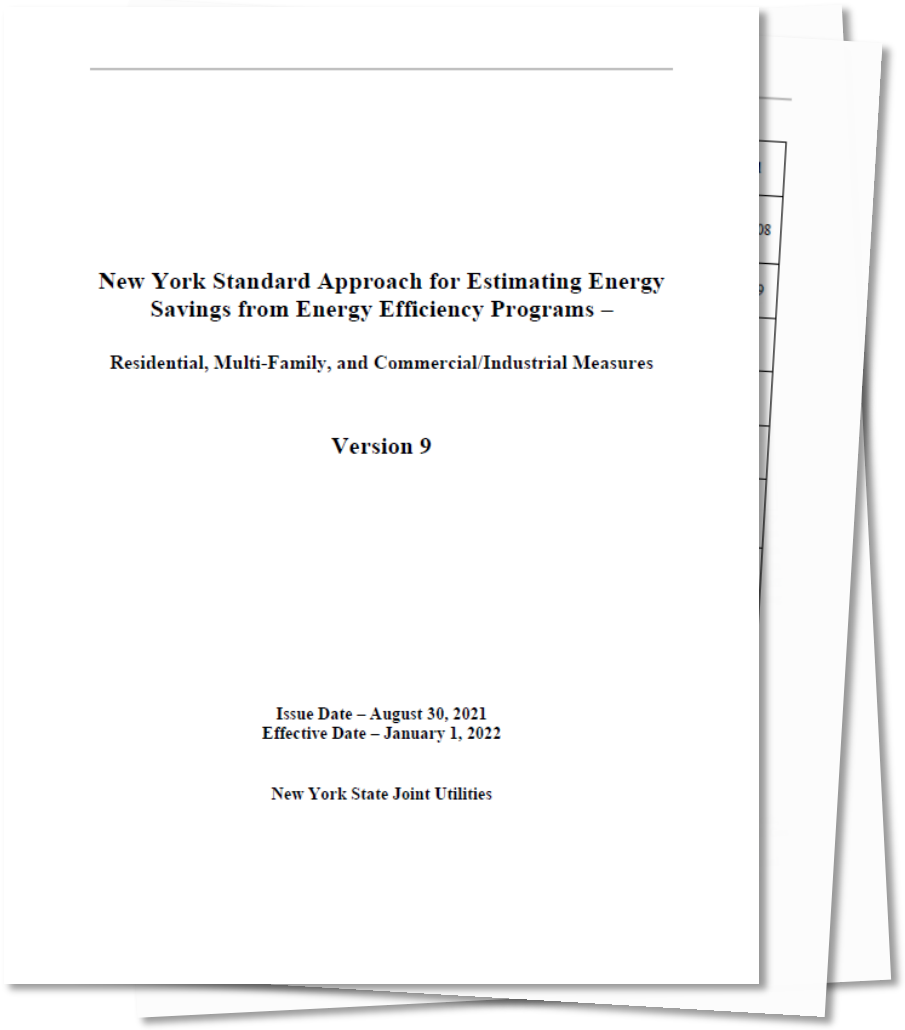
Energy Savings Calculations

Program baseline and savings calculations need to conform to the *New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs - Residential, Multi-Family, and Commercial/Industrial*, known as the Technical Resource Manual (TRM).

> *The TRM provides a standardized, fair, and transparent approach for measuring program energy savings across New York State's energy efficiency programs. To do so, the TRM provides standardized energy savings calculations and assumptions at the measure level for estimating energy and demand savings.*

The TRM is updated periodically by the TRM Management Committee that includes representatives from the Department of Public Service, each of New York's major electric and gas utilities, LIPA, and NYSERDA.

Updates to the TRM will be incorporated into future EmPCalc versions.



EmPCalc Walkthrough

Data Input Tabs

Project Information: Details on Program, Company, Customer, Project, Utility, Dwelling Type and Existing Insulation, Water Heater and Heating/Cooling Systems

Direct Install Audit Only: Inputs/Links for Direct Install measures

Energy Efficiency Upgrades: Inputs/Links for energy saving measures

Non-Energy Upgrades: Inputs for health & safety and qualified accessory measures

Pilots: Inputs for associated Pilot programs (*i.e.,* Healthy Homes)

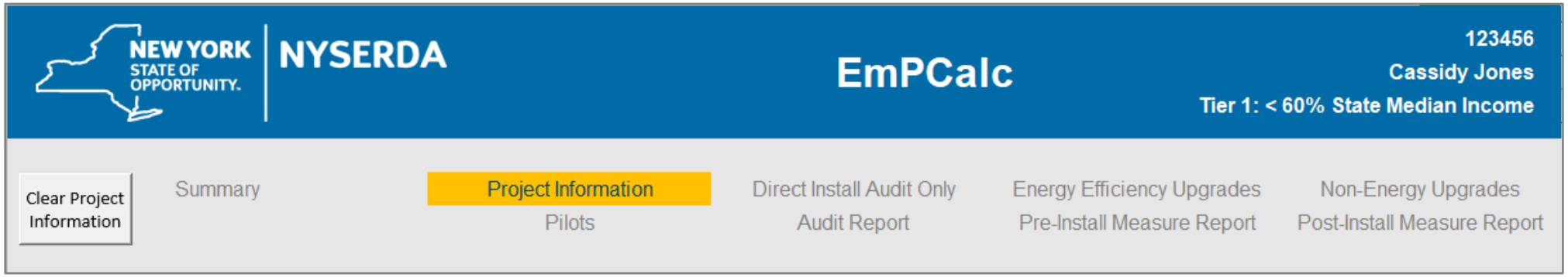
Summary Tabs

Summary: List of targeted measures, energy and dollar savings, user inputs for utility and third-party grants, project level cost effectiveness calculation and determination

Audit Report: Customizable and printable customer facing audit report (Unchanged from previous EmPCalc version)

Pre-Install Measure Report: Customer facing project summary to obtain a customer's acceptance of the workscope

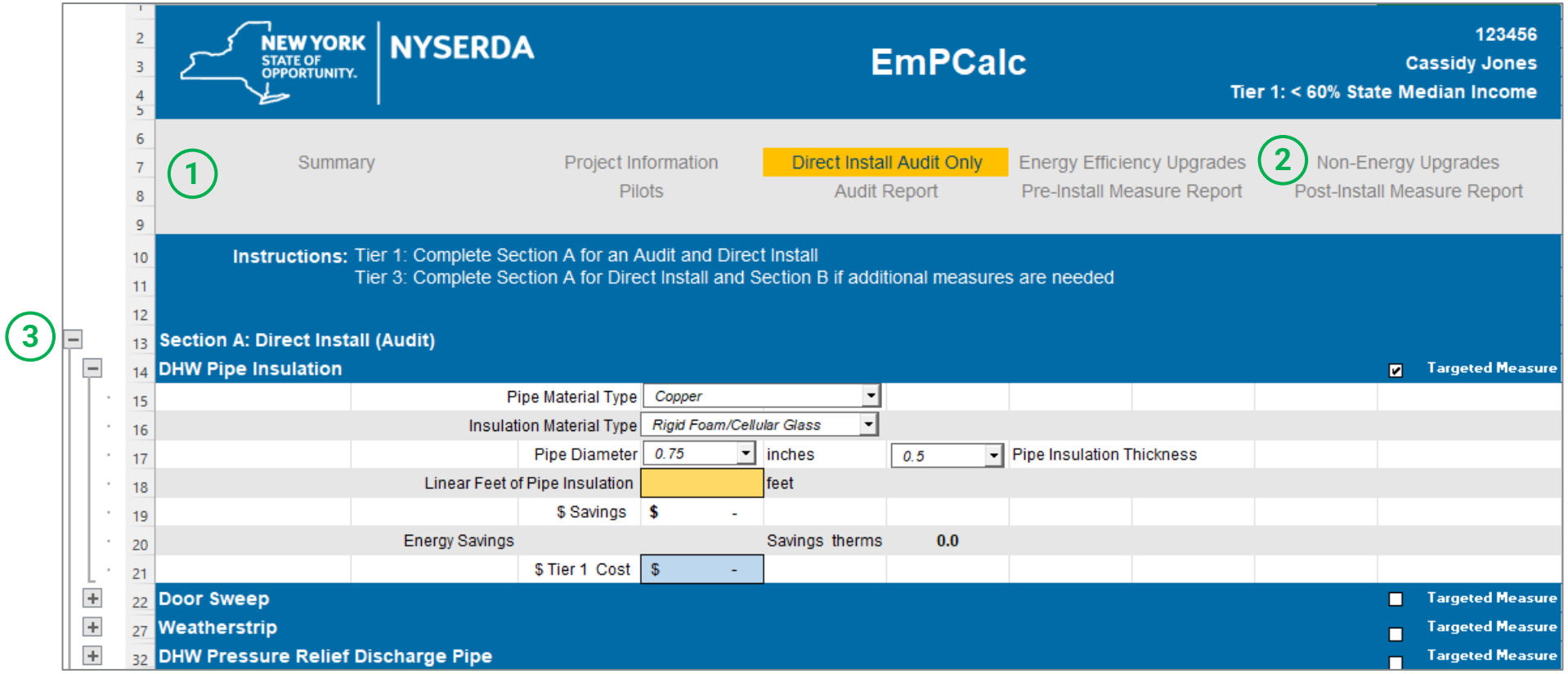
Post-Install Measure Report: Customer facing project summary to obtain a customer's signoff of the completed workscope (*i.e.,* Certificate of Completion)



EmPCalc Walkthrough

Navigation

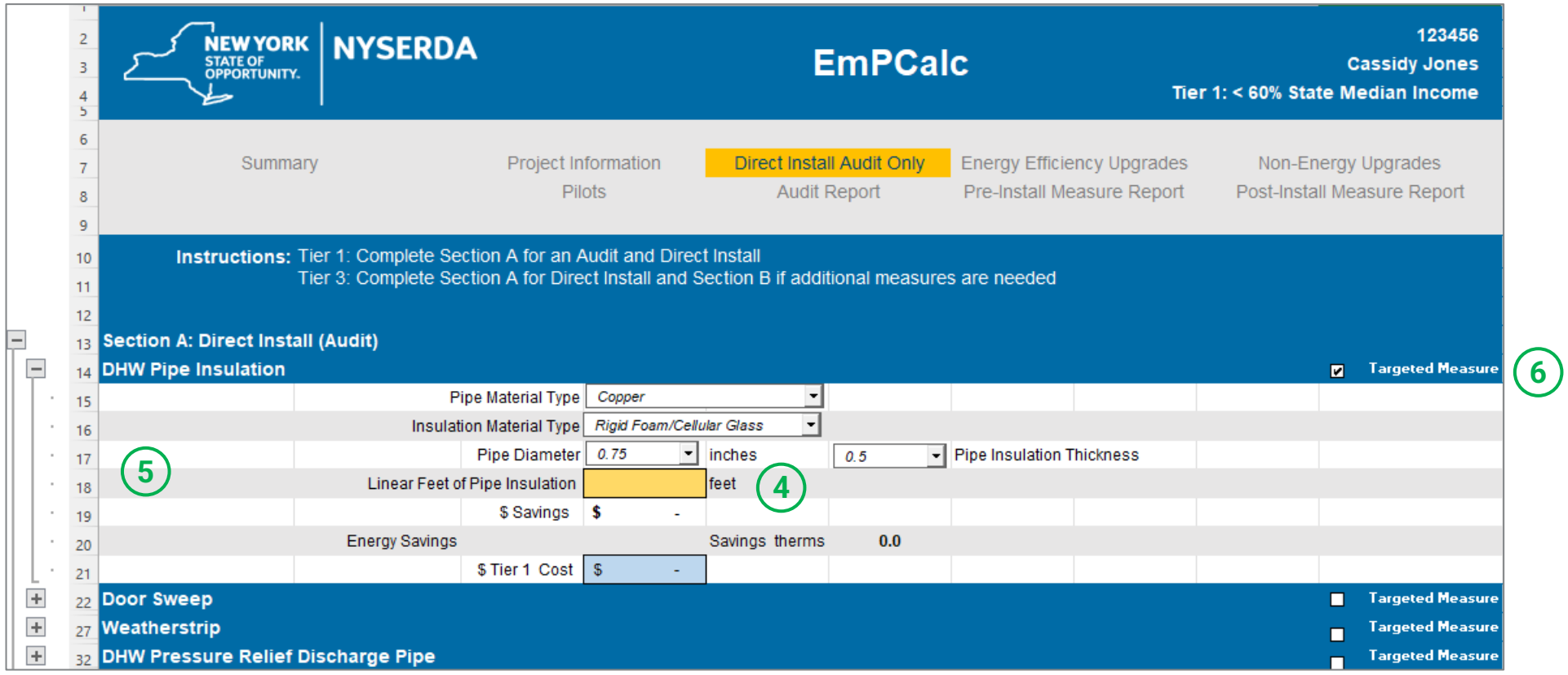
1. Added navigation bar to the top of each page (still can use tabs at bottom of page)
2. Eliminated measure specific tabs, grouped measures by energy efficiency
3. Expand/Collapse to show/hide measures



EmPCalc Walkthrough

Navigation

4. Color indicators for fields missing a necessary input
5. Cleaner, more efficient data entry
6. Easier identification of targeted measures



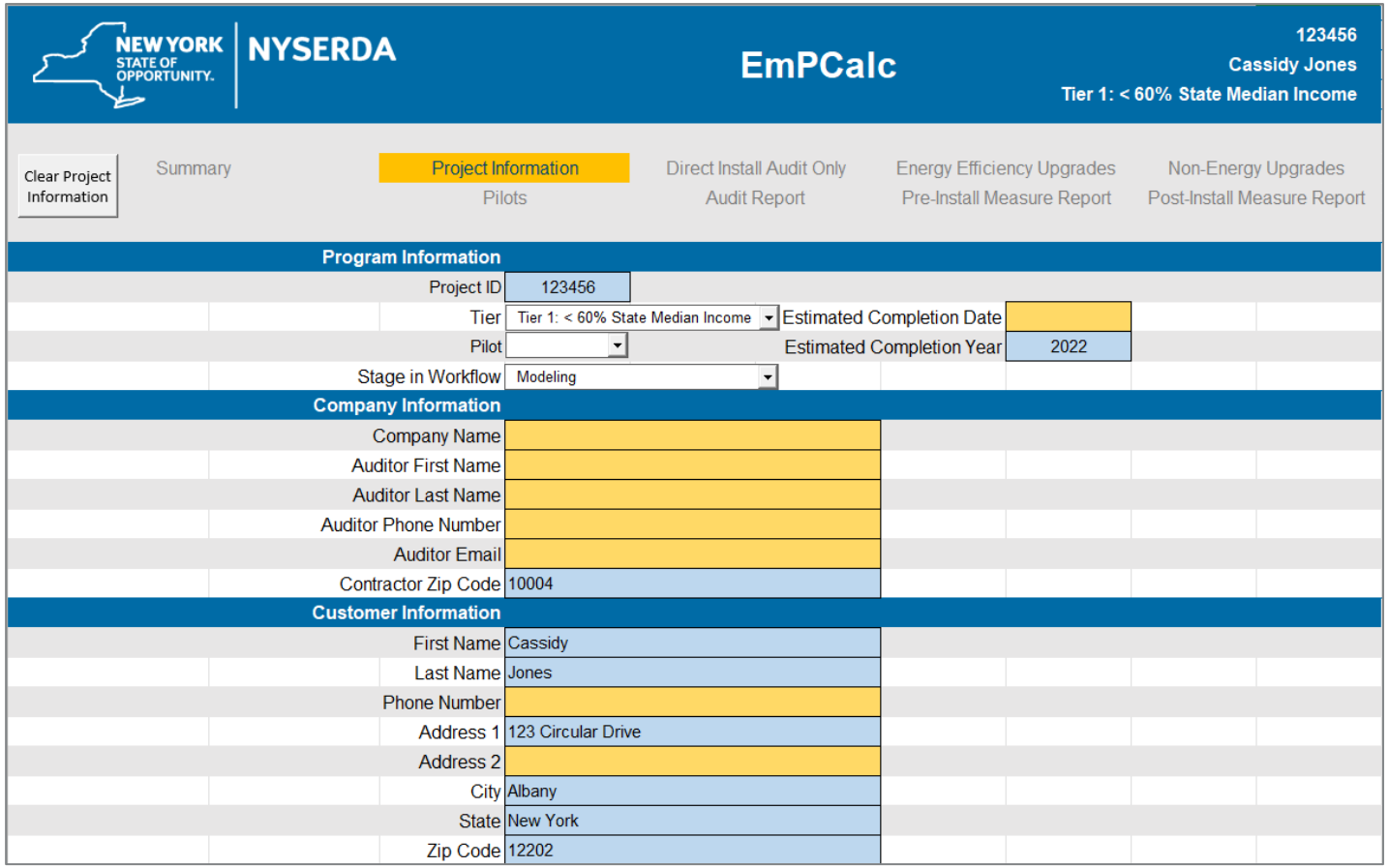
EmPCalc Walkthrough

Project Information

EmPCalc Walkthrough

Project Information

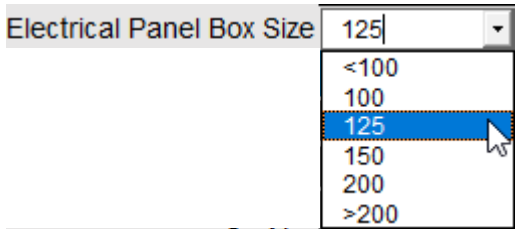
- Program Information
  - Project ID – Must match the NY HP Portal
  - Tier – Drives the cost calculations
  - Stage in Workflow – Modeling/Workscope and Final Project
- Company Information
  - Information will aid in populating other tabs
- Customer Information



EmPCalc Walkthrough

Project Information

- Project Location
  - Physical project location
- Audit Information
  - Energy Education
  - Mileage
- Fuel Information
  - Delivered fuel costs need to also have a price
  - Electric Panel Box Size (new)



- Dwelling Information
  - Owner/Renter
  - Dwelling type
  - Conditioned square footage

Project Location						
Same as Customer Information	☐ Check if the project location is the same as the customer address.					
Address 1						
Address 2						
City						
State						
Zip Code						
Region	Binghamton					
Audit Information						
Audit Type						
Energy Education						
Mileage						
Additional Fee Type		*Pre-approval Required*				
Additional Fee Amount		*Pre-approval Required*				
Other Additional Fee Note						
Fuel Information						
Electric Utility Company	*Public Service Enterprise Group Long Island*					
Gas Utility Company	*KeySpan Energy Delivery - LI*					
Delivered Fuel	Propane	$ Cost	$ 3.24	Per Gallon		
Annual Electric Usage		kWh	Annual Natural Gas Usage		therms	
Electrical Panel Box Size	125	amps	Annual Propane Usage	800	Gallons	
Dwelling Information						
Owner or Renter	Owner					
Dwelling Type	Single Family					
Exterior Siding Type	Wood Shingle					
Number of Units	1					
Year Built	1948					
Stories Above Grade	2					
Wind Exposure	Normal					
Basement Type	Basement					
Square Footage (Conditioned)	2000					
Number of Bedrooms	3					
Number in Household	2					

EmPCalc Walkthrough

Project Information

- Existing Building Insulation & Systems
  - Base Insulation levels
    - Attic average R-value
    - Wall Insulation
    - Access point R-values
    - Rim Joist
    - Mobile Home Belly (if applicable)
  - Heating System details and location
    - Include Secondary system, if present
  - Water Heater System details and location
  - Cooling System details

Existing Building Insulation & Systems		
Attic Insulation (Average)	38	R-Value
Wall Insulation	19	R-Value
Attic Hatches		R-Value
Pull-down Stairs		R-Value
Rim Joist		R-Value
Mobile Home Belly (if applicable)		R-Value
Heating System Primary	Forced Air Furnace	
Heating Fuel Type Primary	Propane	
Heating Efficiency Primary	9.5	**AFUE or % Enter as Decimal Value**
Heating System Location Primary	basement - unconditioned	
Heating System Capacity (BTUh) Primary	64000	
Heating System Secondary (if applicable)		
Heating Fuel Type Secondary (if applicable)		
Heating Efficiency Secondary (if applicable)		
Heating System Location Secondary (if applicable)		
Heating System Capacity (BTUh) Secondary (if applicable)		
Water Heater System (Existing)	Standard DHW Tank	
Water Heater Fuel Type	Propane	
Tank Volume	40	
Heating Capacity (BTUh)	36000	
Water Heater Efficiency (UEF)	0.88	
Water Heater Location	other interior	
Water Heater Temperature Setpoint	140	
Central AC System Installed	Yes	
Cooling System	None	
Cooling Efficiency (unit type based on cooling type)	80	
Cooling Capacity	1500	Btu/h

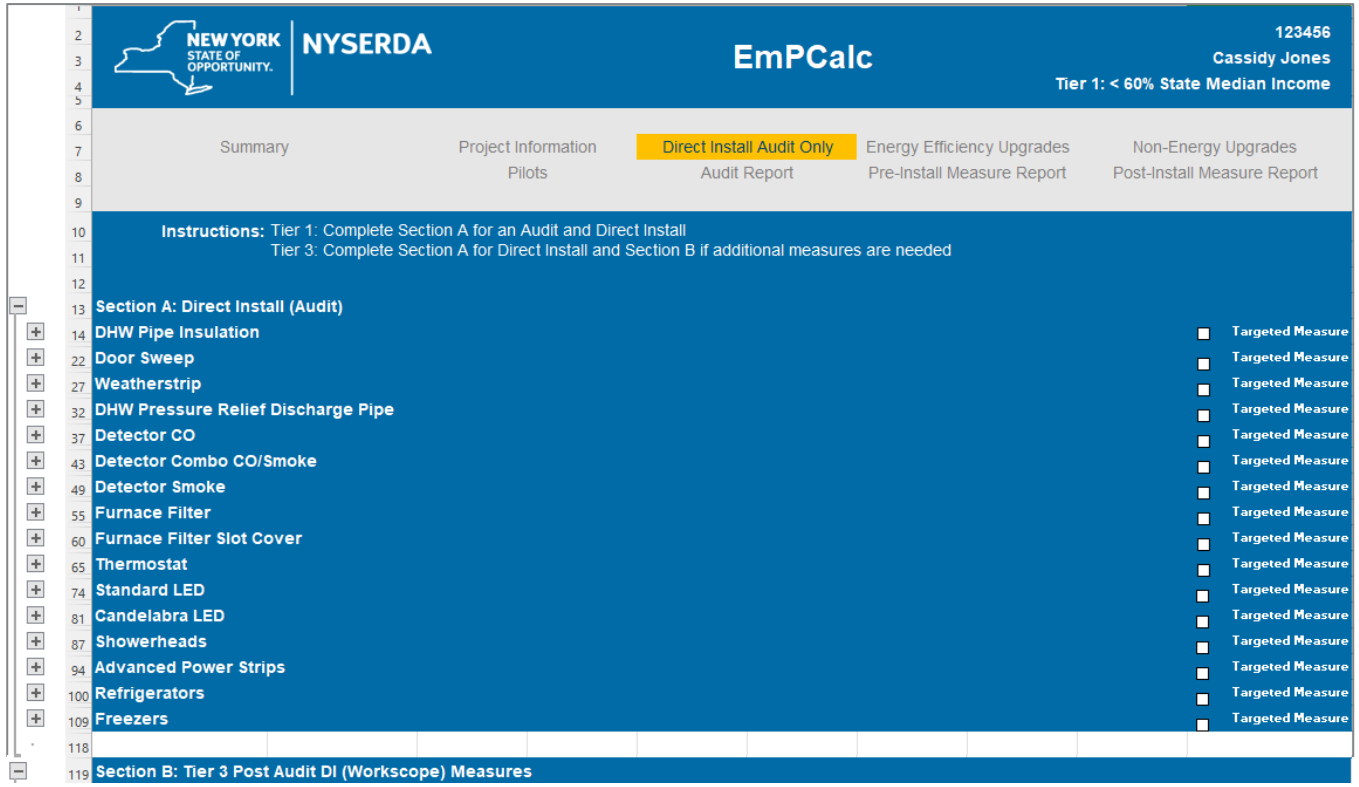
EmPCalc Walkthrough

Direct Install Audit Only

EmPCalc Walkthrough

Direct Install Audit Only

- Reminder: DI is mandatory for all audits.
- Program determined pricing for both Tier 1 and Tier 3 customers can be found in CRM Section 7.7 EmPower NY Pricing.
- All Direct Install measures and inputs are included on this tab.
- Two sections (A/B) to account for HP Portal workflow processes.
  - Section A: Needs to be completed for all Direct Install projects.
    - Tier 1: Submitted in EmPower workflow.
    - Tier 3: Submitted in Express Audit workflow.
  - Section B: Only complete if a measure needs to be added to the Tier 3 contracted project.
- Use the expand/collapse feature to input the information.
- Check the Targeted Measures box for any installed measures.



EmPCalc Walkthrough

Direct Install Audit Only

DHW Pipe Insulation

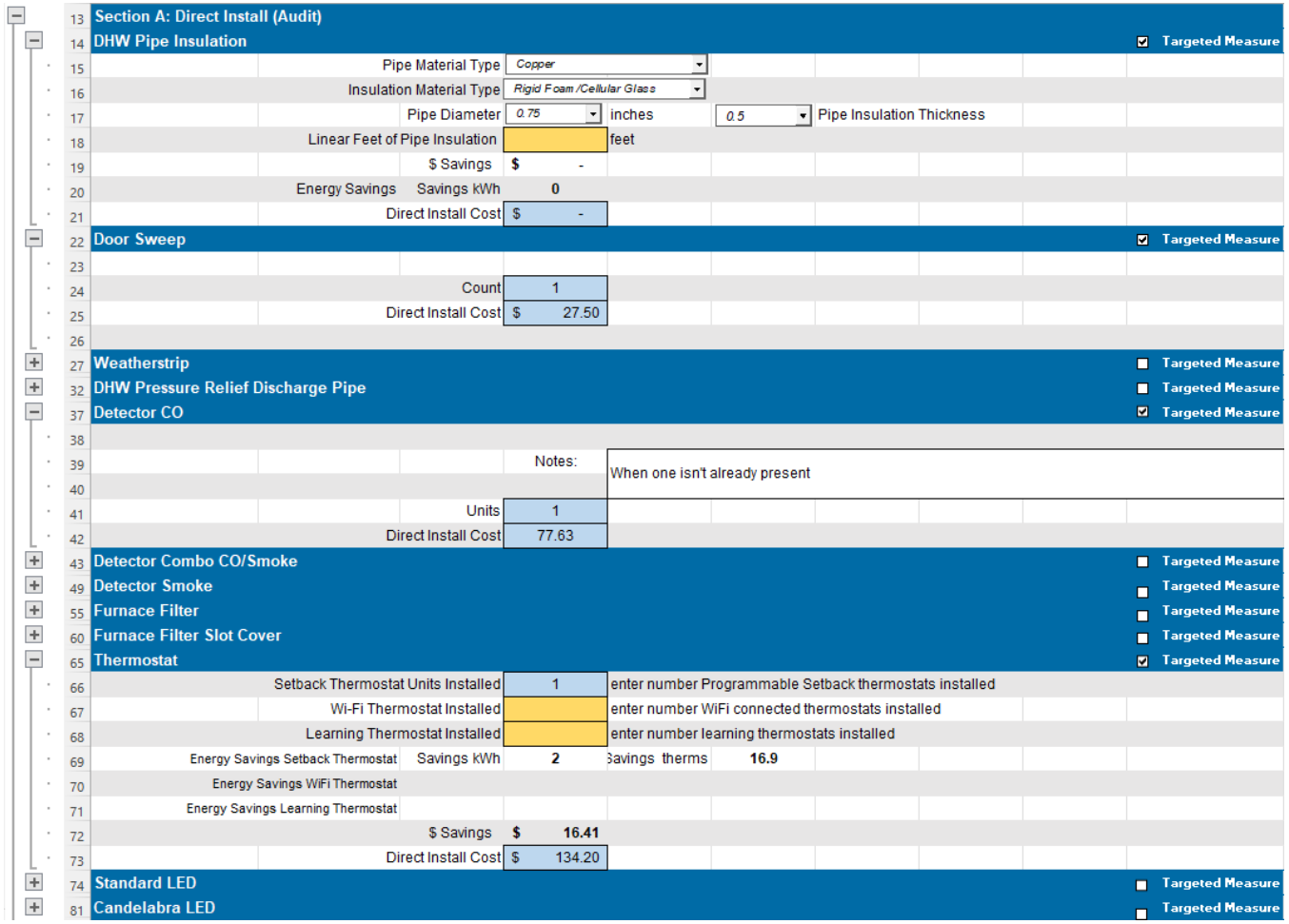
- Pipe Material and Diameter
- Insulation Material and Thickness
- Length of Pipe Insulation

Measures with Counts (# installed)

- Door Sweep & Weatherstrip
- DHW Pressure Relief Discharge Pipe
- Furnace Filter & Slot Cover
- Thermostat
- LEDs

Detectors (CO, Smoke, Combination)

- # Installed
- Notes can be added, if needed.



EmPCalc Walkthrough

Direct Install Audit Only

Showerheads

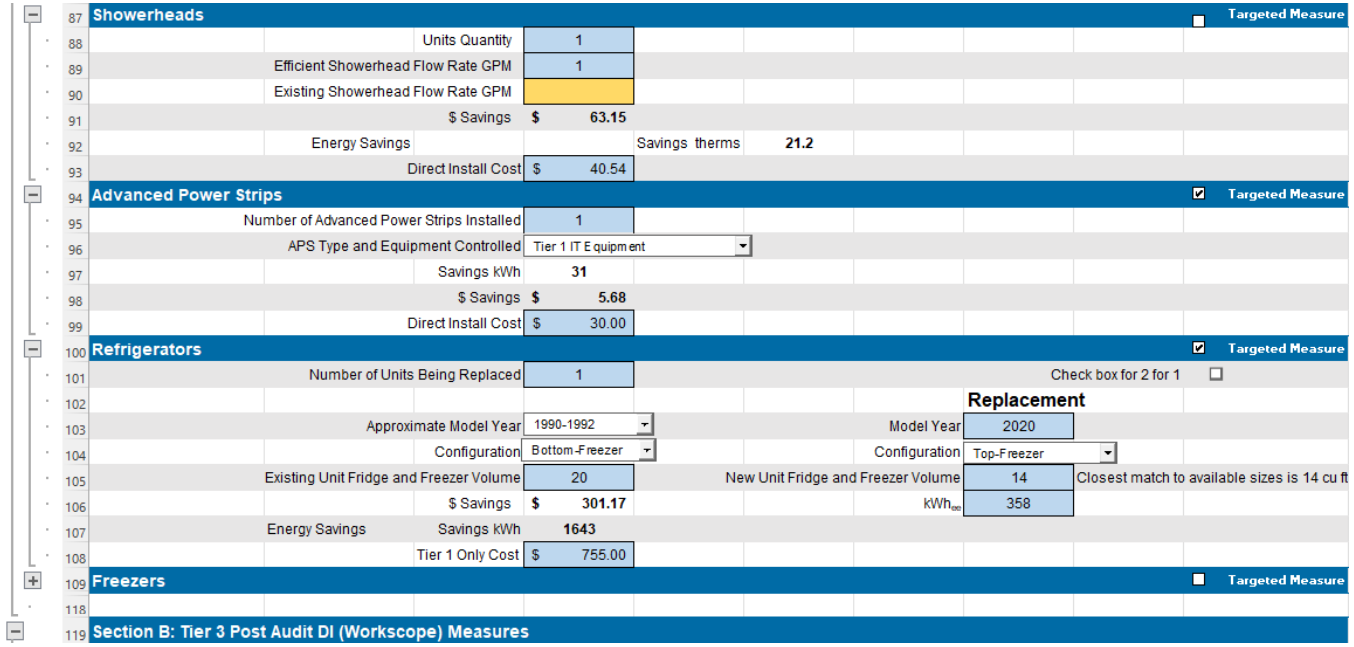
- Quantity
- Pre/Post Efficiency Flow Rates

Advanced Power Strips

- Quantity
- APS Type (Tier 1/Tier 2)

Refrigerators & Freezers (Tier 1 only)

- Existing kWh estimated based on:
  - Quantity
  - Age range
  - Unit configuration
  - Existing unit volume
- Use checkbox for 2 for 1 replacements
  - Age & Configuration
    - Input data on larger unit.
  - Volume
    - Use two-unit average.
      - Example: (22 + 16) ≈ 19 cu^3
- Use Section B for Tier 3 Refrigerators

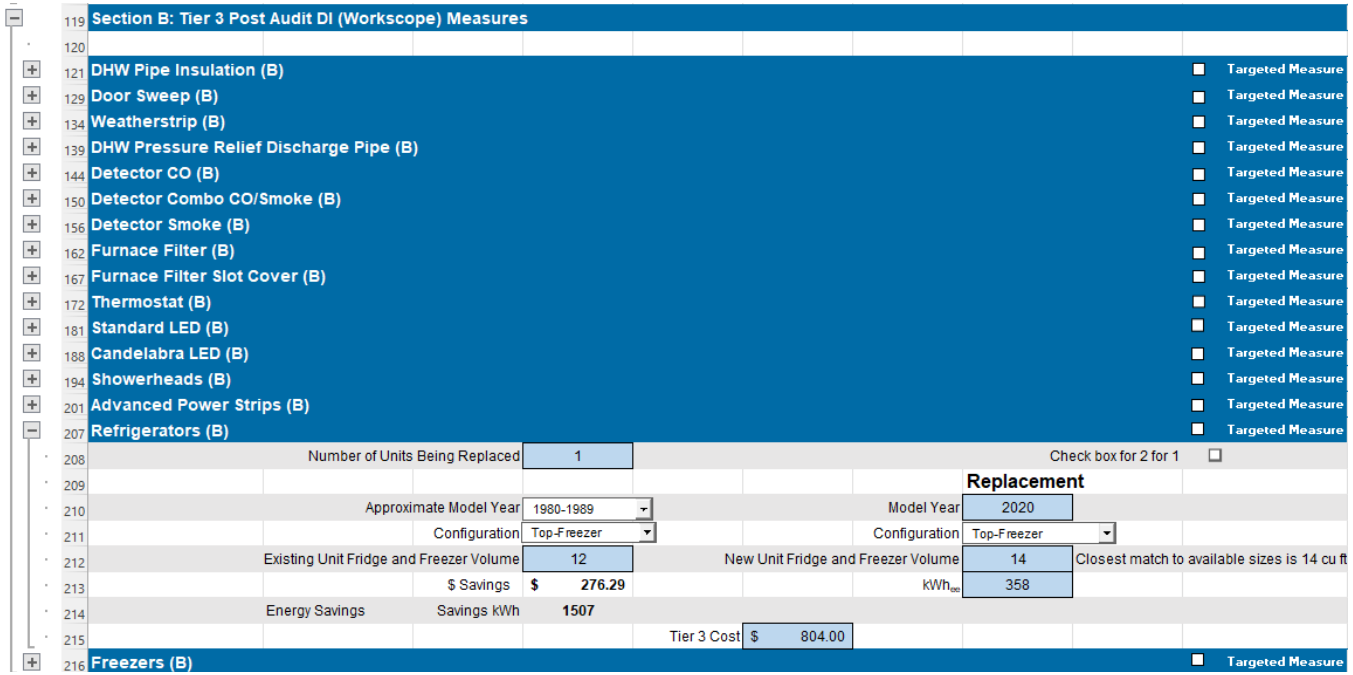


EmPCalc Walkthrough

Direct Install Audit Only

Section B: Tier 3 Post Audit DI (Workscope) Measures

- Only complete if a measure needs to be added to the Tier 3 contracted project.
- There are two workflows for Tier 3 projects: Express Audit and Express Contract. Section B ensures that measures are not counted twice.
- Refrigerators and Freezers for Tier 3 projects must use Section B.



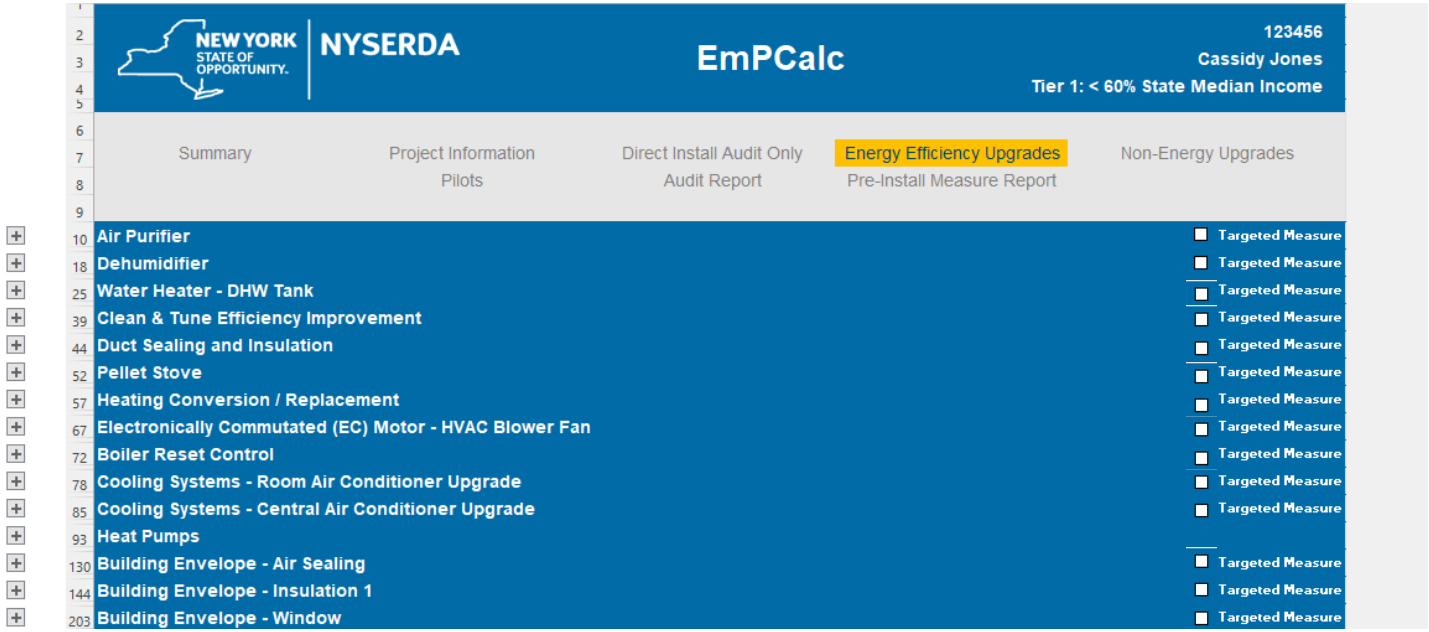
EmPCalc Walkthrough

Energy Efficiency Upgrades

EmPCalc Walkthrough

Energy Efficiency Upgrades

- Lists eligible program measures with energy savings.
- Reminder use the Expand/Contract buttons to open and close individual measure sections.
- Proposed measures need to be targeted for savings to appear.
- Inputs based on NYS Technical Resource Manual (TRM) version 9.



EmPCalc Walkthrough

Energy Efficiency Upgrades

Air Purifier

- Resources
  - AHAM Verified
  - ENERGY STAR Certified Air Purifiers
- Standby Power: (ENERGY STAR) Partial on Mode Power (Watts)
- CADR Clean Air Delivery Rate (CFM): (ENERGY STAR) Smoke-Free Clean Air Delivery Rate (cfm)
- CADR/Watt: (ENERGY STAR) Smoke-Free Clean Air Delivery Rate per Watt
- Cost: Tier 1 ($250) / Tier 3 ($125)

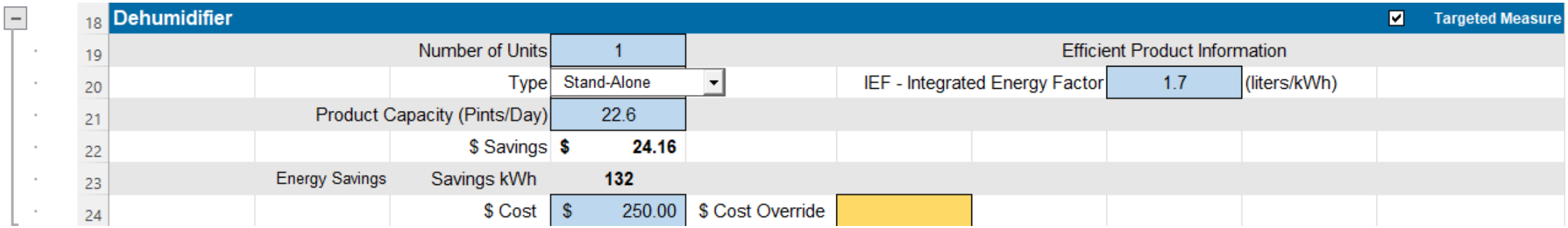
10	**Air Purifier**				☑ Targeted Measure
11		Number of Units	1	The compliance condition is an ENERGY STAR® qualified room air purifier with minimum efficiency established per the table below.	
12		Standby Power	1.9		
13	CADR Clean Air Delivery Rate (CFM)		226		**Minimum Smoke CADR/W**
14		CADR/Watt	**6.10**	30 ≤ CADR < 100	1.9
15		$ Savings	**$ 137.14**	100 ≤ CADR < 150	2.4
16	Energy Savings	Savings kWh	**1306**	CADR ≥150	
17		$ Cost	$ 250.00		

EmPCalc Walkthrough

Energy Efficiency Upgrades

Dehumidifier

- Resources
  - ENERGY STAR Certified Dehumidifiers
- Product Type
  - Stand-Alone, Whole-House
- Product Capacity
  - Pints/Day: Dehumidifier Water Removal Capacity
  - Ft3: Whole-home Dehumidifier Case Volume
- IEF Integrated Energy Factor (L/kWh): Dehumidifier efficiency



EmPCalc Walkthrough

Energy Efficiency Upgrades

Water Heater – DWH Tank

- Resources
  - AHRI Directory of Certified Product Performance
- Use AHRI Certificate to input Replacement Water Heater values.
- Mobile Home Rated?

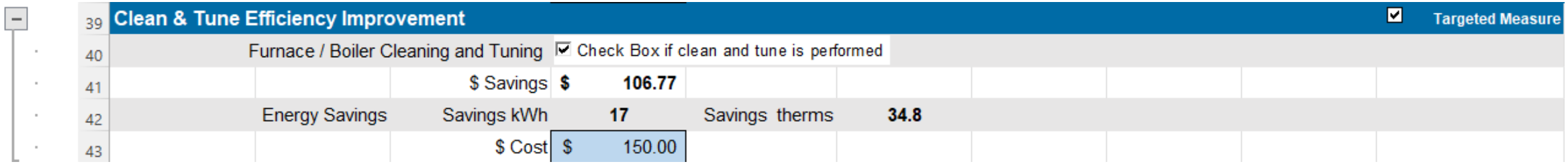
25	**Water Heater - DHW Tank**								☑	Targeted Measure
26			Make	A.O. Smith						
27			Model #	HPTU-66DR 1						
28			Replacement Water Heater Efficiency (UEF)	3.45			Mobile Home Rated?			
29			Replacement Water Heater Fuel Type	Electric			No			
30			Replacement Water Heater System	Heat Pump Water Heater						
31			Replacement Tank Volume	67	Gallons					
32			Replacement Heating Capacity (Btu/h)	1500						
33			Recovery Efficiency (%)	265						
34			Water Heater Location	other interior			*Autopopulated from Project Information*			
35			Water Temp (° F)	120						
36			$ Savings	**$ 322.01**						
37		Energy Savings	Savings kWh	**1757**	Savings therms	**0**				
38			$ Cost	$ 2,000.00						

EmPCalc Walkthrough

Energy Efficiency Upgrades

Clean & Tune Efficiency Improvement

- Check box if a clean and tune is to be completed.
- Cost

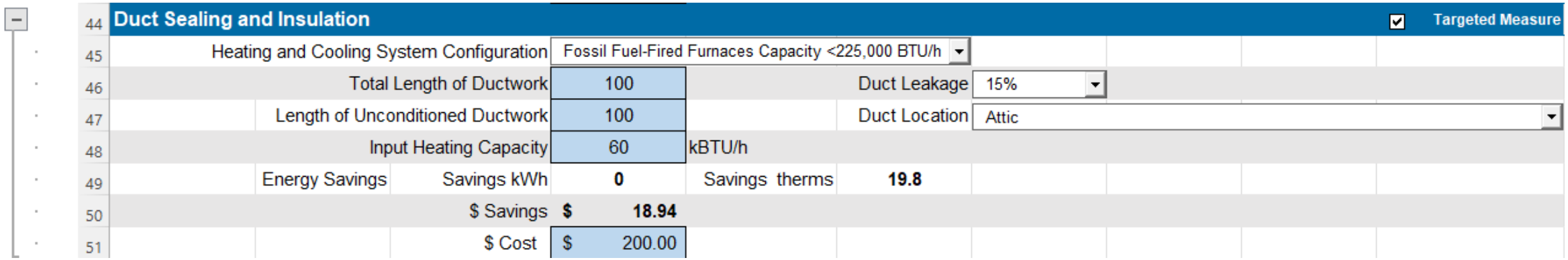


EmPCalc Walkthrough

Energy Efficiency Upgrades

Duct Sealing & Insulation

- Heating and Cooling System Configuration
  - AC/Heat Pump, Electric Furnace, Fossil Fuel-Fired Furnace
- Total Ductwork Length and Length in Unconditioned Space
- Duct Leakage: As determined by a duct blaster
- Duct Location: Location of majority of ductwork
  - Attic, Garage, Crawlspace, Basement, Under-slab
- Input Heating Capacity: Use AHRI Input Rating (MBTUH)
- Cost



44	**Duct Sealing and Insulation**								☑	Targeted Measure
45		Heating and Cooling System Configuration		Fossil Fuel-Fired Furnaces Capacity <225,000 BTU/h						
46			Total Length of Ductwork	100			Duct Leakage	15%		
47		Length of Unconditioned Ductwork		100			Duct Location	Attic		
48			Input Heating Capacity	60	kBTU/h					
49		Energy Savings	Savings kWh	**0**		Savings therms	**19.8**			
50			$ Savings	**$ 18.94**						
51			$ Cost	$ 200.00						

EmPCalc Walkthrough

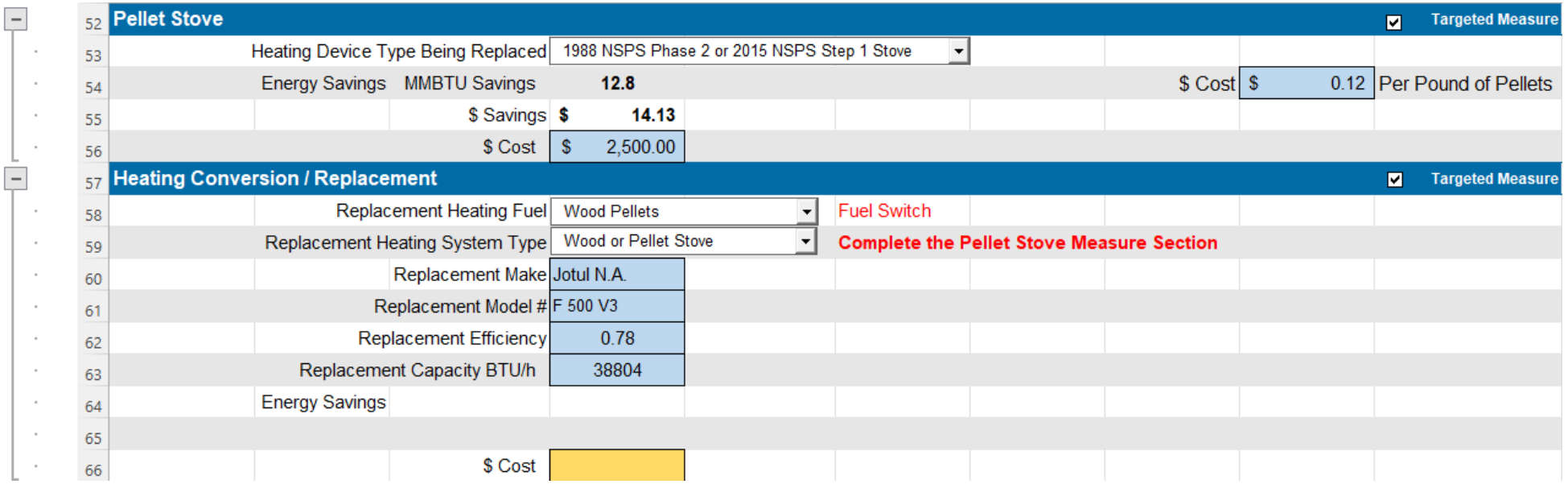
Energy Efficiency Upgrades

Pellet Stove

- Heating Device Type Being Replaced
- Cost per lb. of pellets: $
- Cost: Leave blank

Heating Conversion / Replacement

- Replacement Heating Fuel: Wood Pellets
- Replacement Heating System Type: Wood or Pellet Stove
- Replacement Make/Model
- Replacement Efficiency: Input as decimal
- Replacement Capacity BTU/h: Input Heating Capacity
- Cost: Leave blank



EmPCalc Walkthrough

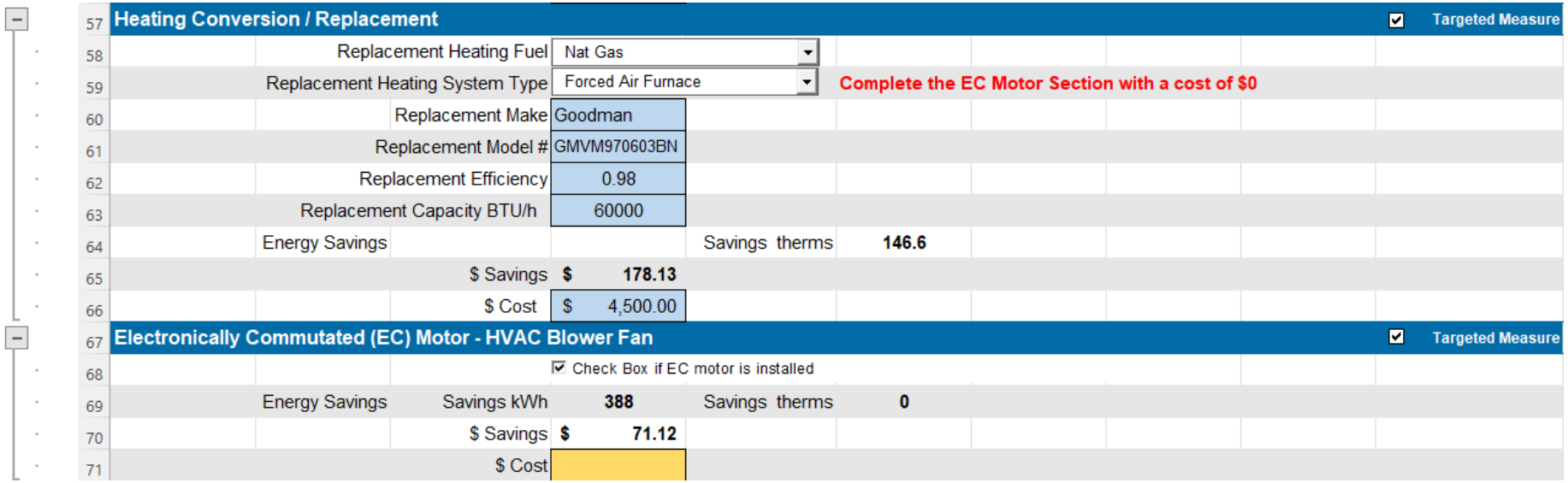
Energy Efficiency Upgrades

Heating Conversion / Replacement

- Replacement Heating Fuel: Natural Gas
- Replacement Heating System Type: Furnace
- Replacement Make/Model
- Replacement Efficiency: Input as decimal.
- Replacement Capacity BTU/h: Input Heating Capacity.
- Cost: Input measure cost

Electronically Commutated (EC) Motor – HVAC Blower Fan

- Needs to be included on units with ECM to capture electric savings.
- Check box if EC Motor was installed.
- Cost: Leave blank.

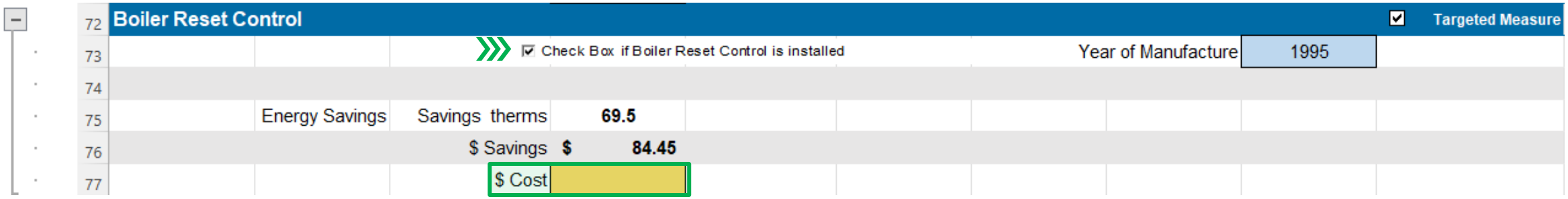


EmPCalc Walkthrough

Energy Efficiency Upgrades

Boiler Reset Control

- Included in new Boiler install
  - Heating Conversion / Replacement needs to be completed with this section.
  - Cost: Leave blank.
- Stand-alone measure
  - Check box if Boiler Reset Control is installed.
  - Year unit was manufactured.
  - Cost: Input measure cost.



EmPCalc Walkthrough

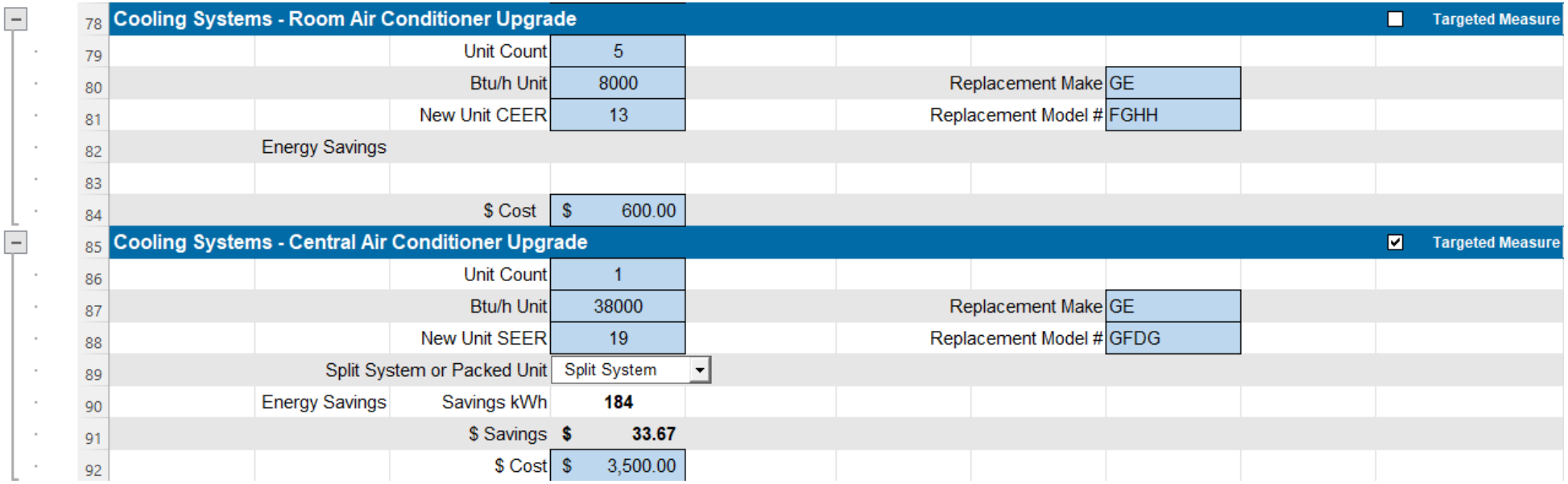
Energy Efficiency Upgrades

Cooling Systems – Room Air Conditioner Upgrade

- Unit Count
- Btu/h Unit
- Replacement CEER
- Make/Model
- Cost

Cooling Systems – Central Air Conditioner Upgrade

- Unit Count
- Btu/h Unit
- Replacement CEER
- Split System or Packaged: Split System
- Make/Model
- Cost

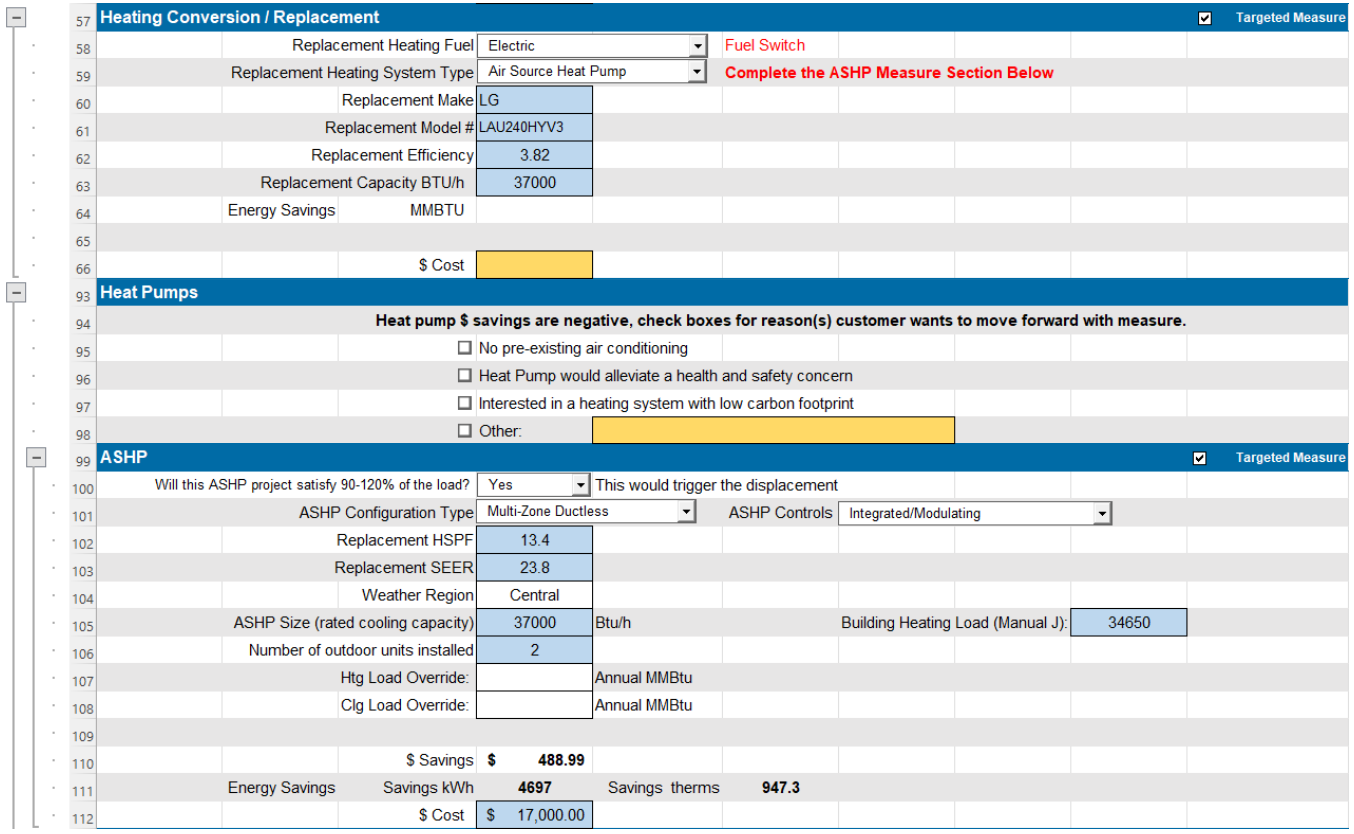


EmPCalc Walkthrough

Energy Efficiency Upgrades

Air Source Heat Pump (ASHP)

- Heating Conversion / Replacement section needs to be completed.
- When ASHP is selected a note appears informing user that GSHP measure section needs to be completed.
- When heat pump savings are negative complete the check boxes.
- Complete inputs using inputs from:
  - Manual J
  - NEEP ccASHP List
  - Manufacturer Specifications

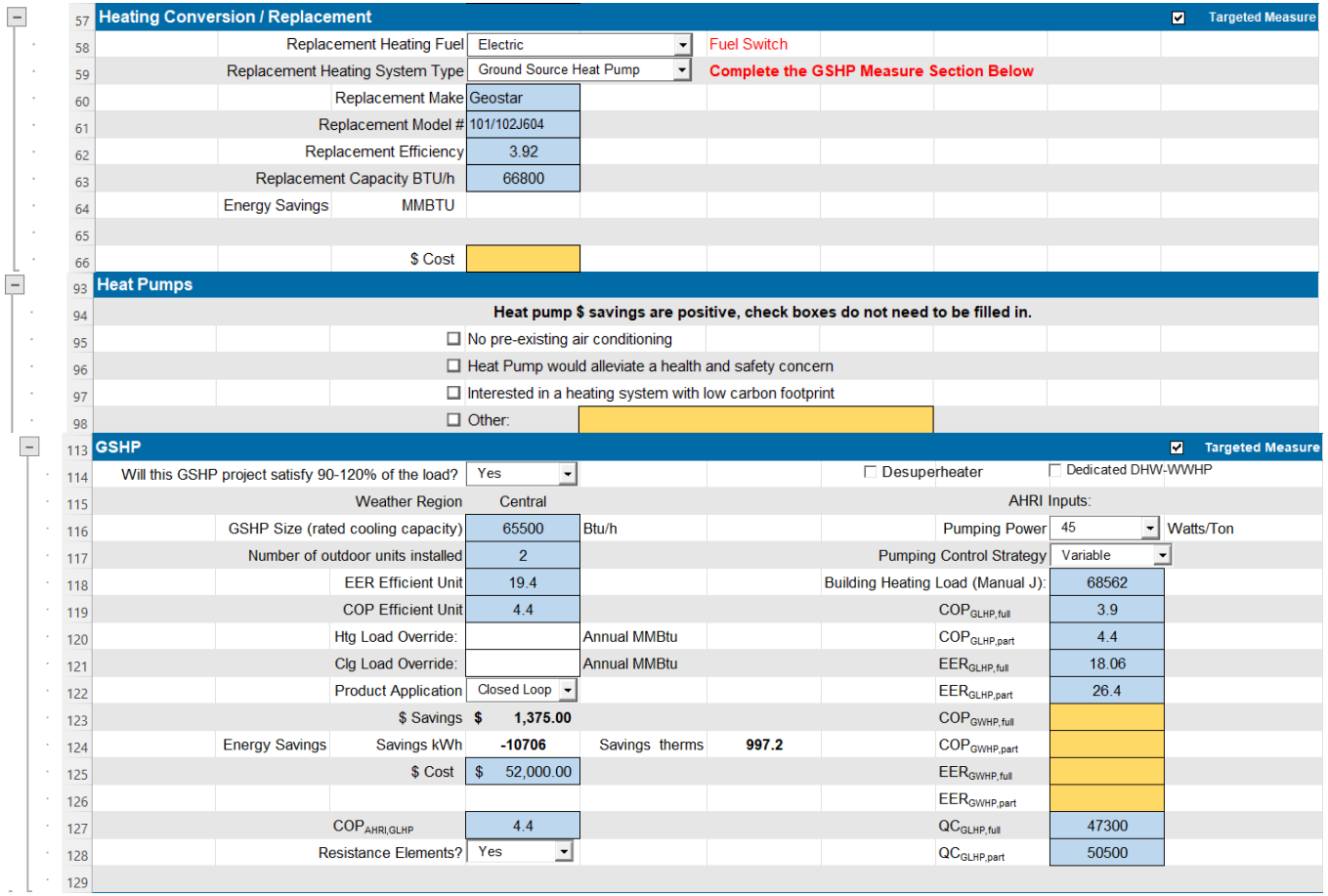


EmPCalc Walkthrough

Energy Efficiency Upgrades

Ground Source Heat Pump (GSHP)

- Heating Conversion / Replacement section needs to be completed.
- When GSHP is selected a note appears informing user that GSHP measure section needs to be completed.
- When heat pump savings are negative complete the check boxes.
- Complete inputs using inputs from:
  - Manual J
  - AHRI Certificate
  - Manufacturer Specifications



EmPCalc Walkthrough

Energy Efficiency Upgrades

Building Envelope – Air Sealing

- Pre/Post CFM50
- Check boxes as to where air sealing will be completed
  - Glass block & Hopper windows include counts and dollar amount per installation
- Labor: # hours air sealing
- Materials: Total Cost

130	**Building Envelope - Air Sealing**								☑	Targeted Measure
131			Number of Stories above Grade	1						
132			Number of Bedrooms	3						
133			Exposure To Wind	Normal		Blower Door Test	Yes			
134			Pre-Air Sealing Air Infiltration (CFM50)	2700		Pre-Air Sealing Air Infiltration (ACH)				
135			Post-Air Sealing Air Infiltration (CFM50)	2200		Post-Air Sealing Air Infiltration (ACH)				
136									Count	$ Cost per installation
137		Attic Plane ☑			Electrical Penetrations ☑			Glass Block ☑	2	$ 150.00
138		Basement ☑			Knee Wall ☐			Hopper (Basement) Window ☐		
139		Canned/Recessed Lighting ☑			Living Space ☐			Plexis Glass Skylight ☐		
140		Cantilever ☑			Plumbing Penetrations ☑			Window Glass Repair ☐		
141		Energy Savings	Savings kWh	**32**	Savings Therms	**63.2**				
142	Hours	Materials	$ Savings	**$ 3.29**						
143	10	$56.99	$ Tier 1 Cost	$ 1,123.59	$ Cost Override					

EmPCalc Walkthrough

Energy Efficiency Upgrades

Building Envelope – Insulation

- Complete existing insulation information
  - Location: Added cantilever, garage ceiling
- Tier 1 Cost will be calculated based on pricing list
- Tier 3 Cost will “override” the Tier 1 cost
- Savings are simplified
  - MMBTU: whole number
  - Therms: single decimal
- Up to 6 insulation entries

144	**Building Envelope - Insulation 1**							☑	**Targeted Measure**
145	Insulation Location	Attic Open							
146	Existing Insulation Type	Fiberglass-Batts							
147	Existing Insulation Depth	4.0							
148	Insulation Area	1,147							
149	New Insulation Type	Cellulose			MMBTU	1		Savings therms	0.0
150	New Insulation Depth	14	Enter existing and proposed conditions		$ Savings	$ 47.82		Insulation Condition	fair
151		$ Tier 1 Cost	$ 2,970.73	$ Tier 3 Cost				New Insulation R Value	47.6

EmPCalc Walkthrough

Energy Efficiency Upgrades

Building Envelope – Additional Measures

- Top section are “Standard” measures
  - Input cost and counts as appropriate
- Attic Specific measures are “Prequalified”
  - Input cost and counts as appropriate

192	**Building Envelope - Additional Measures**								
193		**$ Cost per installation**	Count			**$ Cost per installation**	Count		
194	Insulation/Debris Removal				Install from Interior				
195	Moving Objects	$ 200.00	1		Underbelly Membrane			Sq. ft	
196	Thermal Barriers for Spray Foam			Sq. ft	Lead Safe Charge			Sq. ft	
197	Drywall Repairs				Set-Up Fee				
198	**Additional Measures - Attic Specific**								
199		**$ Cost per installation**	Count			**$ Cost per installation**	Count		
200	Attic Access	$ 250.00	1		Attic Insulation: Gable			# of Vents	
201	Attic Insulation: Damming				Attic Insulation: Ridge Vents			Linear ft	
202	Attic Insulation: Baffles	$ 5.51	45	# of Baffles	Attic Insulation: Soffit			# of Vents	

EmPCalc Walkthrough

Energy Efficiency Upgrades

Building Envelope – Window

- Total window square footage being installed
- Window type being replaced
- Cost

203	**Building Envelope - Window**								☑ Targeted Measure
204		Square Feet of Windows Installed		30					
205		Existing Window Type Being Replaced		Single-Pane					
206		Energy Savings	Savings kWh	**0**					
207			$ Savings	**$** -					
208			$ Cost	$ 500.00					

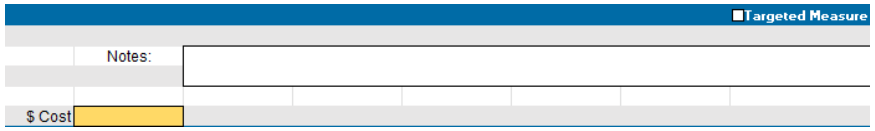
EmPCalc Walkthrough

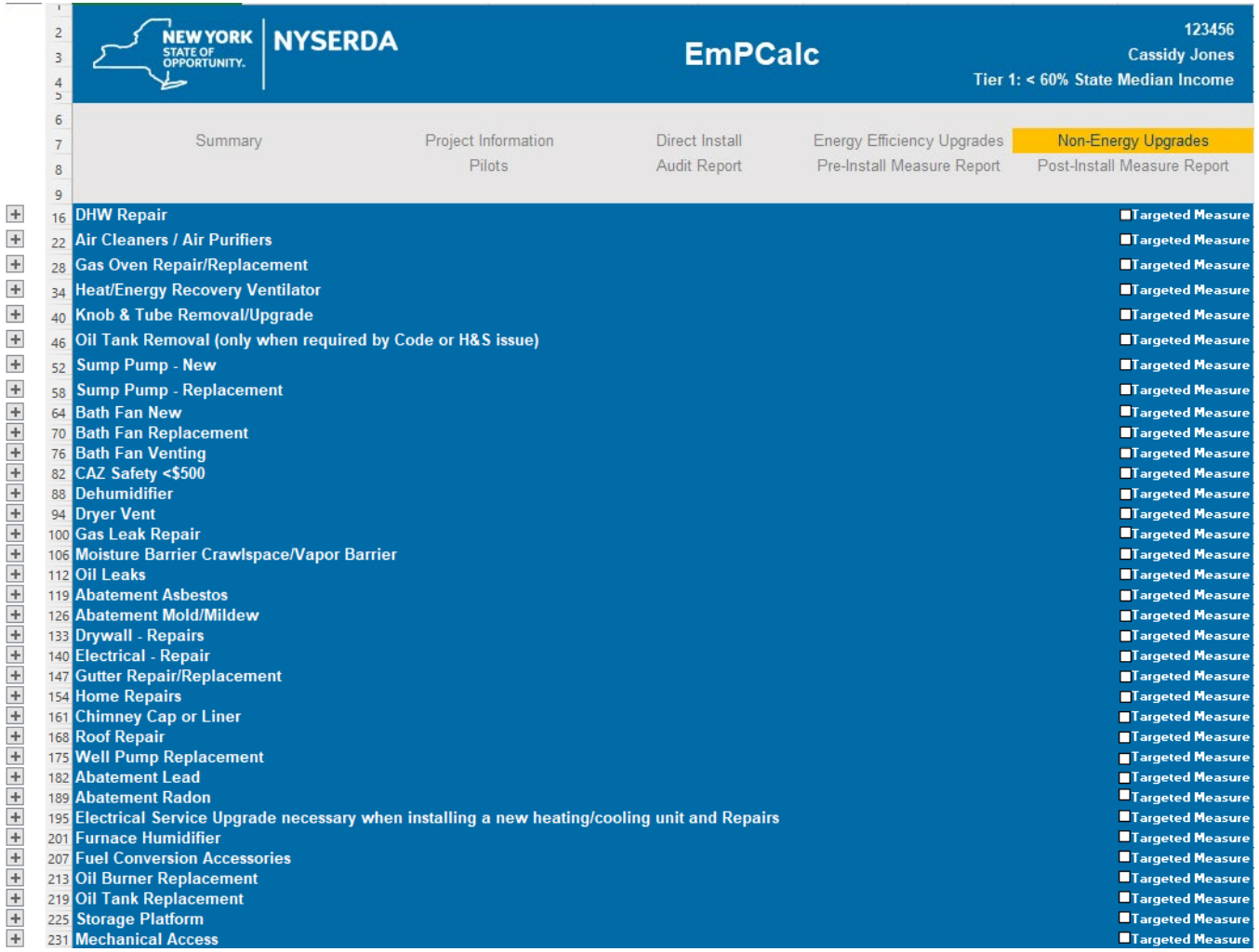
Non-Energy Upgrades

EmPCalc Walkthrough

Non-Energy Upgrades

- Lists eligible non-energy program measures.
- Each measure requires a reason for inclusion and a cost.
- Proposed measures need to be targeted.





EmPCalc Walkthrough

Pilots

EmPCalc Walkthrough

Pilots

- Dedicated page for Pilots programs or measures.
- Currently only used for Healthy Homes Pilot.

NEW YORK STATE OF OPPORTUNITY. NYSERDA

EmPCalc

123456
Cassidy Jones
Tier 1: < 60% State Median Income

Summary | Project Information | Pilots | Direct Install Audit Only | Audit Report | Energy Efficiency Upgrades | Pre-Install Measure Report | Non-Energy Upgrades | Post-Install Measure Report

ID	Measure Category	Measure Name			
1	2 -Assessment - Healthy Homes	Energy and Environmental Assessment for Healthy Homes Pilot	Cost		☐ Targeted Measure
		KITCHEN			
2	5 - Environmental Trigger - Healthy Homes	Range Stove - Clean and Tune-up	Cost		☐ Targeted Measure
3	5 - Environmental Trigger - Healthy Homes	Range Stove - Replacement Installation	Cost		☐ Targeted Measure
4	5 - Environmental Trigger - Healthy Homes	Kitchen Exhaust Fan	Cost		☐ Targeted Measure
		BATHROOM			
5	6 - Injury Prevention - Healthy Homes	Shower Seat with Feet Grips	Cost		☐ Targeted Measure
6	5 - Environmental Trigger - Healthy Homes	Bathroom Exhaust Fan	Cost		☐ Targeted Measure
7	6 - Injury Prevention - Healthy Homes	Tub/Shower Safety Grab Bar and Installation	Cost		☐ Targeted Measure
8	6 - Injury Prevention - Healthy Homes	Toilet Safety Grab Bar and Installation	Cost		☐ Targeted Measure
9	6 - Injury Prevention - Healthy Homes	Grip Strips for Bathtub	Cost		☐ Targeted Measure
10	6 - Injury Prevention - Healthy Homes	Toilet Safety Frame	Cost		☐ Targeted Measure
		HVAC			
11	5 - Environmental Trigger - Healthy Homes	Replacement of Forced-air Furnace Filter and Provision of Six Additional Filters	Cost		☐ Targeted Measure
12	5 - Environmental Trigger - Healthy Homes	Window Air Conditioner and Installation	Cost		☐ Targeted Measure
13	5 - Environmental Trigger - Healthy Homes	Dehumidifier (with Built-in Pump) and Installation - Basement/ Central	Cost		☐ Targeted Measure
14		Room Dehumidifier and Installation	Cost		☐ Targeted Measure
15	5 - Environmental Trigger - Healthy Homes	Room Humidifier and Installation	Cost		☐ Targeted Measure
16	5 - Environmental Trigger - Healthy Homes	Ventilation System	Cost		☐ Targeted Measure
17	5 - Environmental Trigger - Healthy Homes	Repairs to Condensate Drain	Cost		☐ Targeted Measure
18	5 - Environmental Trigger - Healthy Homes	Repairs to Steam System	Cost		☐ Targeted Measure
		SAFETY			
19	6 - Injury Prevention - Healthy Homes	Stair Gripper Treads, Non-slip, and Installation	Cost		☐ Targeted Measure
20	6 - Injury Prevention - Healthy Homes	Tip Resistant Furniture Anchors and Installation	Cost		☐ Targeted Measure
21	6 - Injury Prevention - Healthy Homes	Exterior Motion Sensor LED Lights and Installation	Cost		☐ Targeted Measure
22	6 - Injury Prevention - Healthy Homes	Indoor LED Nightlights with Day/ Night Sensors and Installation	Cost		☐ Targeted Measure
23	6 - Injury Prevention - Healthy Homes	Child Safety Gates (permanently Fixed Only)	Cost		☐ Targeted Measure
24	6 - Injury Prevention - Healthy Homes	Child Safety Self Closing Electrical Outlet Covers	Cost		☐ Targeted Measure
25	6 - Injury Prevention - Healthy Homes	Cabinet Safety Latches and Installation	Cost		☐ Targeted Measure
26	6 - Injury Prevention - Healthy Homes	Bump Guards for Tables	Cost		☐ Targeted Measure
27	6 - Injury Prevention - Healthy Homes	Anti-scalding Device	Cost		☐ Targeted Measure
28	6 - Injury Prevention - Healthy Homes	Electrical Hazard Mediation - Cords under Carpets, Exposed Wires, etc.	Cost		☐ Targeted Measure

EmPCalc Walkthrough

Summary & Reports

EmPCalc Walkthrough

Summary

Contractor view of the project summary.

Customer and Contractor Information

- Customer and measure information is pulled from the previously completed inputs.

Project Information and Proposed Measures

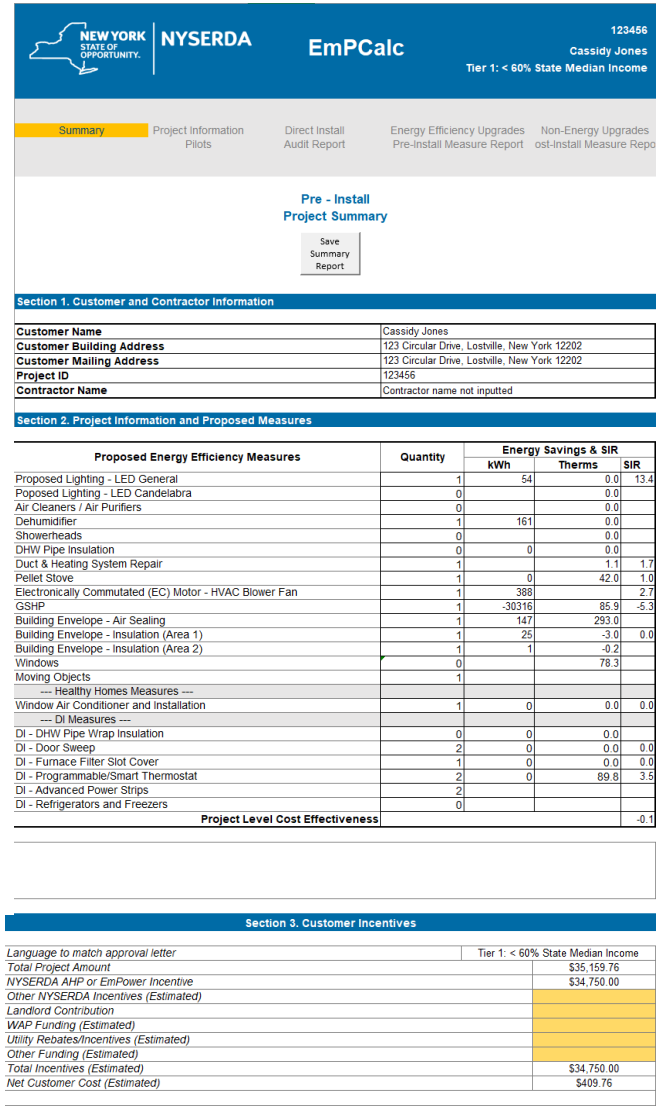
- List of all targeted measures.
- Pilot measures are included, when applicable.

Customer Incentives

- Project costs/totals based on data inputs.
- Contractor is responsible for inputting additional non-program funding. Inputs will impact Net Customer Cost.
- All calculated amounts are estimates and should not be considered approved until the project is submitted in the NY HP Portal and approved by Program Implementation staff.

Exports

- NY HP workflows (EmPower, Express Audit & Contract)
- Program Forms – future enhancement



NEW YORK STATE OF OPPORTUNITY. NYSERDA EmPCalc

123456
Cassidy Jones
Tier 1: < 60% State Median Income

Summary | Project Information Pilots | Direct Install Audit Report | Energy Efficiency Upgrades Pre-Install Measure Report | Non-Energy Upgrades ost-Install Measure Repo

Pre - Install
Project Summary

Save Summary Report

Section 1. Customer and Contractor Information

Customer Name	Cassidy Jones
Customer Building Address	123 Circular Drive, Lostville, New York 12202
Customer Mailing Address	123 Circular Drive, Lostville, New York 12202
Project ID	123456
Contractor Name	Contractor name not inputted

Section 2. Project Information and Proposed Measures

Proposed Energy Efficiency Measures	Quantity	Energy Savings & SIR		
		kWh	Therms	SIR
Proposed Lighting - LED General	1	54	0.0	13.4
Poposed Lighting - LED Candelabra	0		0.0	
Air Cleaners / Air Purifiers	0		0.0	
Dehumidifier	1	161	0.0	
Showerheads	0		0.0	
DHW Pipe Insulation	0	0	0.0	
Duct & Heating System Repair	1		1.1	1.7
Pellet Stove	1	0	42.0	1.0
Electronically Commutated (EC) Motor - HVAC Blower Fan	1	388		2.7
GSHP	1	-30316	85.9	-5.3
Building Envelope - Air Sealing	1	147	293.0	
Building Envelope - Insulation (Area 1)	1	25	-3.0	0.0
Building Envelope - Insulation (Area 2)	1	1	-0.2	
Windows	0		78.3	
Moving Objects	1			
--- Healthy Homes Measures ---				
Window Air Conditioner and Installation	1	0	0.0	0.0
--- DI Measures ---				
DI - DHW Pipe Wrap Insulation	0	0	0.0	
DI - Door Sweep	2	0	0.0	0.0
DI - Furnace Filter Slot Cover	1	0	0.0	0.0
DI - Programmable/Smart Thermostat	2	0	89.8	3.5
DI - Advanced Power Strips	2			
DI - Refrigerators and Freezers	0			
Project Level Cost Effectiveness				-0.1

Section 3. Customer Incentives

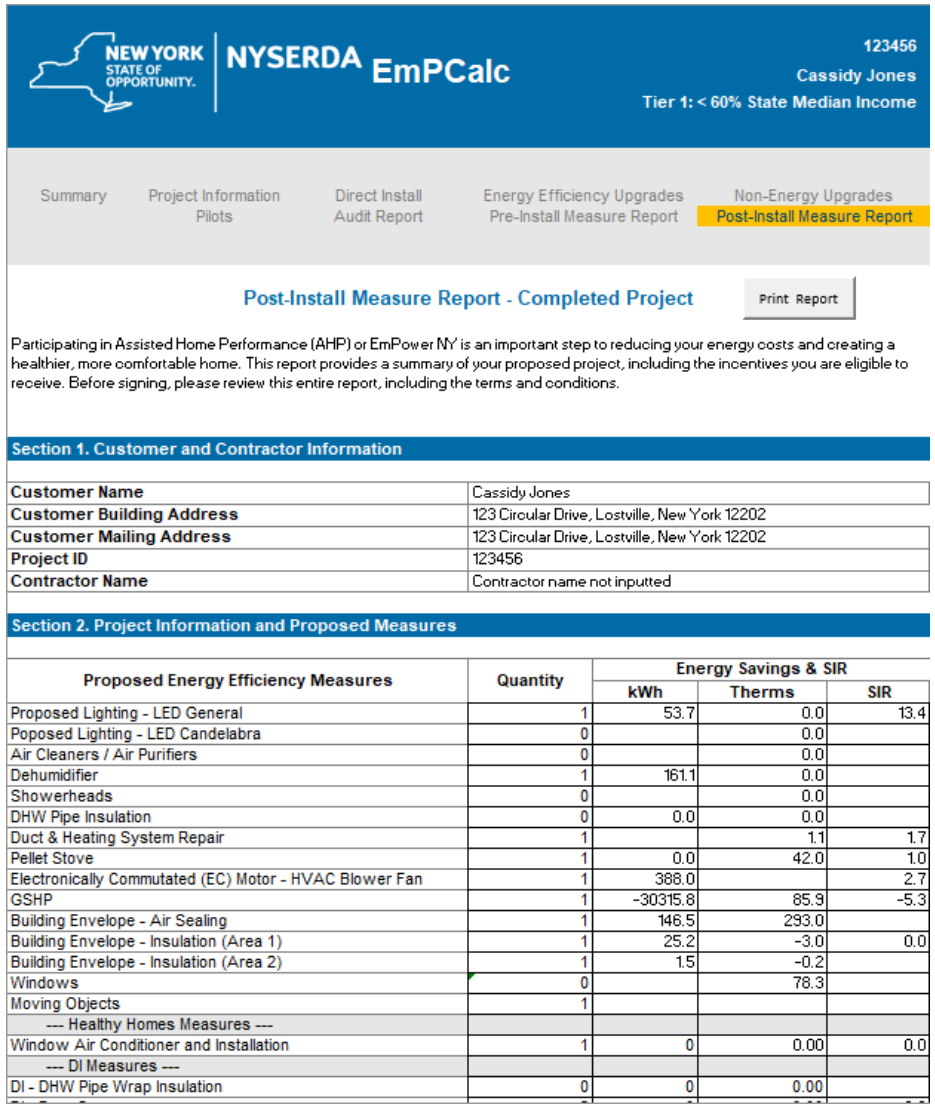
Language to match approval letter	Tier 1: < 60% State Median Income
Total Project Amount	$35,159.76
NYSERDA AHP or EmPower Incentive	$34,750.00
Other NYSERDA Incentives (Estimated)	
Landlord Contribution	
WAP Funding (Estimated)	
Utility Rebates/Incentives (Estimated)	
Other Funding (Estimated)	
Total Incentives (Estimated)	$34,750.00
Net Customer Cost (Estimated)	$409.76

EmPCalc Walkthrough

Pre/Post Install Measure Reports

Customer facing project summaries (PDF)

- Customer and Contractor Information
- Project Information and Proposed/Installed Measures
  - Quantities
  - Savings
  - Measure Cost (Tier 3 only)
  - Measure SIR (for prioritization only)
- Customer Incentives
  - Overall Project Cost (Tier 1 and Tier 3)
  - NYSERDA incentive
  - Utility incentives
  - 3rd Party Grants
  - Customer/Landlord Contributions
- Customer Affirmation
  - Customer signature required prior to work starting/completion
  - Submission of bott reports at project completion



NEW YORK STATE OF OPPORTUNITY. | NYSERDA EmPCalc

123456
Cassidy Jones
Tier 1: < 60% State Median Income

Summary | Project Information Pilots | Direct Install Audit Report | Energy Efficiency Upgrades Pre-Install Measure Report | Non-Energy Upgrades Post-Install Measure Report

Post-Install Measure Report - Completed Project Print Report

Participating in Assisted Home Performance (AHP) or EmPower NY is an important step to reducing your energy costs and creating a healthier, more comfortable home. This report provides a summary of your proposed project, including the incentives you are eligible to receive. Before signing, please review this entire report, including the terms and conditions.

Section 1. Customer and Contractor Information

Customer Name	Cassidy Jones
Customer Building Address	123 Circular Drive, Lostville, New York 12202
Customer Mailing Address	123 Circular Drive, Lostville, New York 12202
Project ID	123456
Contractor Name	Contractor name not inputted

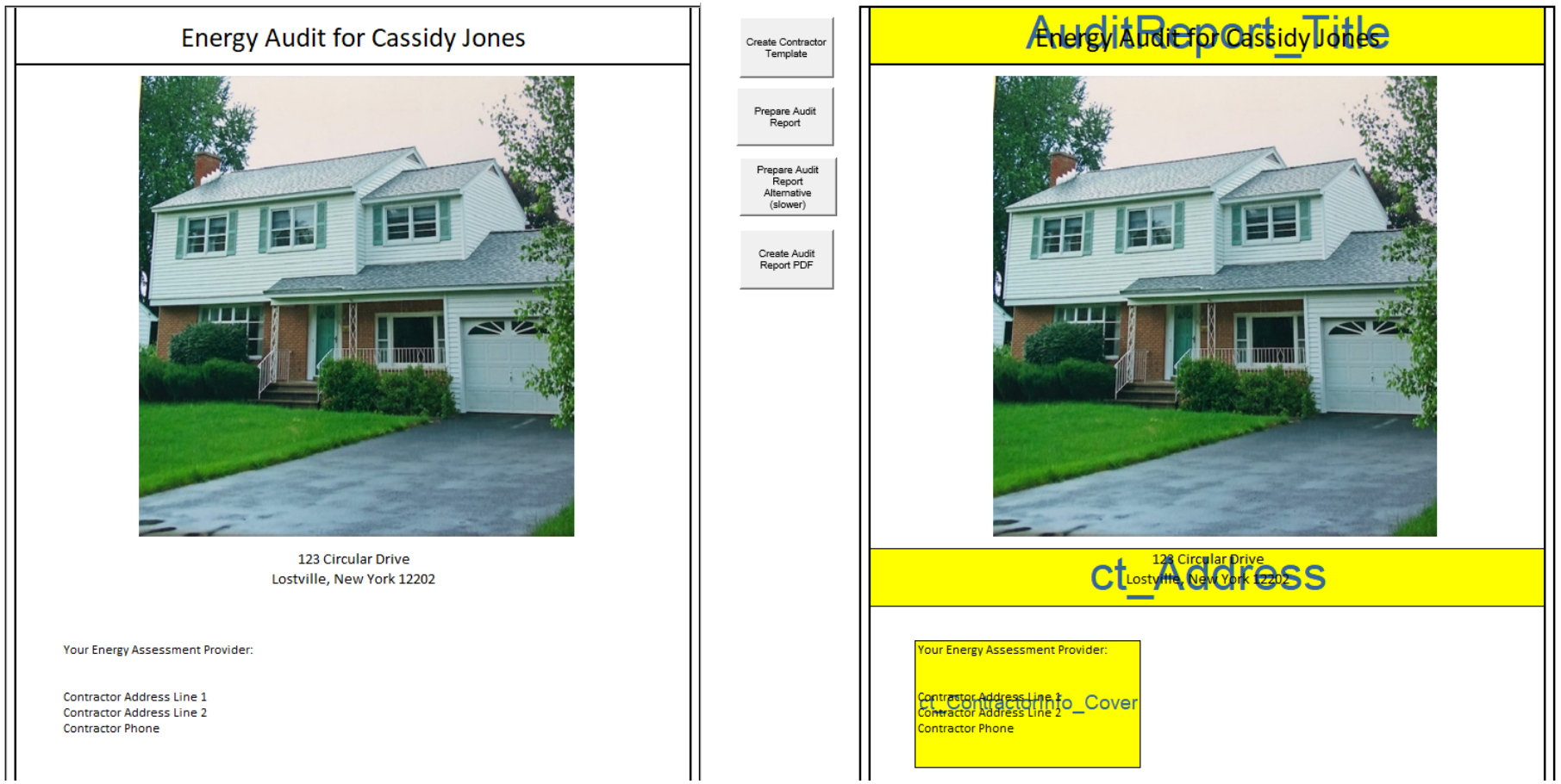
Section 2. Project Information and Proposed Measures

Proposed Energy Efficiency Measures	Quantity	Energy Savings & SIR		
		kWh	Therms	SIR
Proposed Lighting - LED General	1	53.7	0.0	13.4
Poposed Lighting - LED Candelabra	0		0.0	
Air Cleaners / Air Purifiers	0		0.0	
Dehumidifier	1	161.1	0.0	
Showerheads	0		0.0	
DHW Pipe Insulation	0	0.0	0.0	
Duct & Heating System Repair	1		1.1	1.7
Pellet Stove	1	0.0	42.0	1.0
Electronically Commutated (EC) Motor - HVAC Blower Fan	1	388.0		2.7
GSHP	1	-30315.8	85.9	-5.3
Building Envelope - Air Sealing	1	146.5	293.0	
Building Envelope - Insulation (Area 1)	1	25.2	-3.0	0.0
Building Envelope - Insulation (Area 2)	1	1.5	-0.2	
Windows	0		78.3	
Moving Objects	1			
--- Healthy Homes Measures ---				
Window Air Conditioner and Installation	1	0	0.00	0.0
--- DI Measures ---				
DI - DHW Pipe Wrap Insulation	0	0	0.00	

EmPCalc Walkthrough

Audit Report

- Customizable and printable customer facing audit report (Unchanged from previous EmPCalc version)



Next Steps/ Action Items for Contractors

Next Steps/Action Items for Contractors

Prepare for Program Updates to Launch

- Review the latest Residential Program Announcement newsletter.
- Review the Training Session Overview & timeline of events.
- Have relevant staff register for the upcoming training webinars.
- Visit the NYSERDA Knowledge Base and review the Combined Application Process.
- Create a reference sheet of data inputs for measures that your company installs.
- Contact your Account Manager with any questions or submit them to support.residential@nyserda.ny.gov.

Stay up-to-date with Program

- Subscribe to receive Program Announcements and Updates.
- Visit the Contractor Support Website to review the latest versions of the Contractor Resource Manual, download forms and EmPCalc.
- Review your NY HP Portal Users, add or remove as needed.
- Review your NYSERDA Portal (Salesforce) Users, add or remove as needed.
- Review and update your company, insurance and payment information as needed.

Q & A

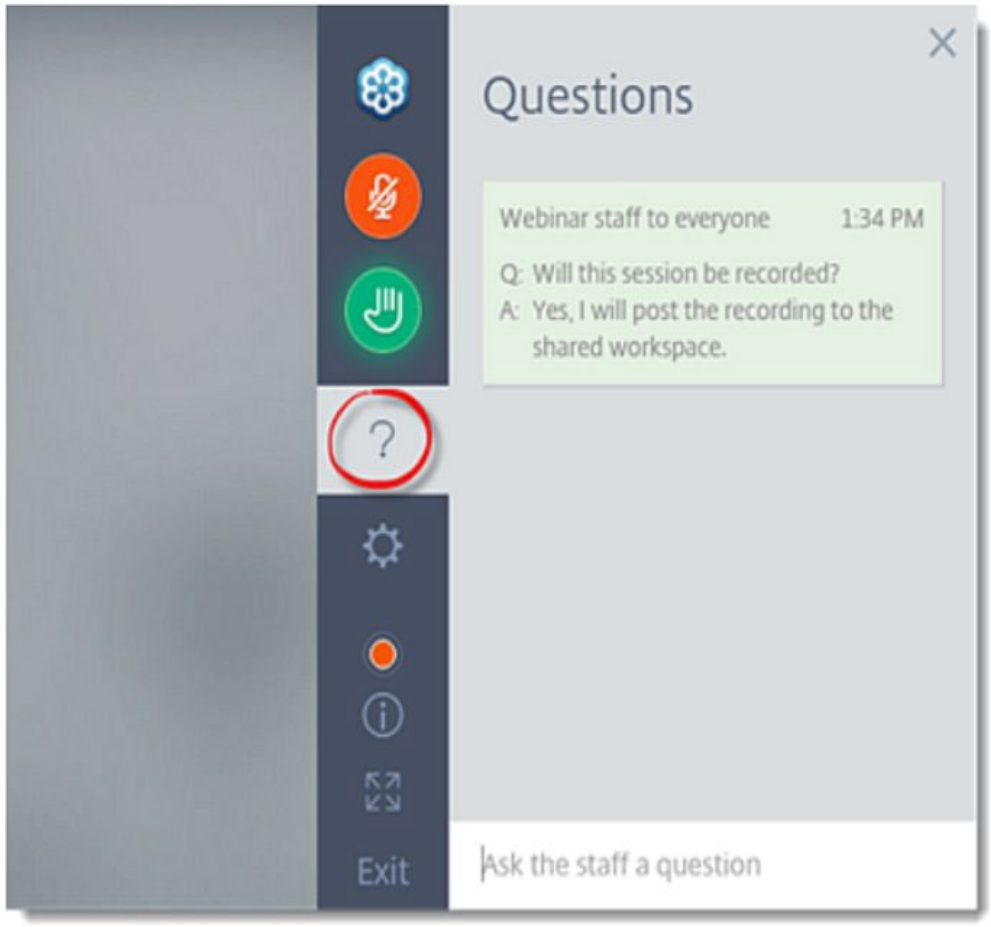
Questions

To ask a question:

1. Click the ? Icon in the toolbar.

2. Enter your question in the text field at the bottom, then press Enter on your keyboard.

When your question is answered, it will appear in the Questions pane. You will also see the Question icon display an indicator that there is an unread message waiting for you.



Training Schedule & Resources

1	**Introduction & Overview** FEB-22 | 3:00 PM – 4:30 PM	☑
2	**Combined Residential Application Process** FEB-24 | 3:00 PM – 4:00 PM	☑
3	**Audit & Direct Install** MAR-01 | 3:00 PM – 4:30 PM	☑
4	**Eligible Measures List & EmPCalc** MAR-08 | 3:00 PM – 4:30 PM	☑
5	**Workscope Submission** MAR-10 | 3:00 PM – 4:30 PM	
6	**Final Project Submission & Payout** MAR-15 | 3:00 PM – 4:30 PM	

Q&A Sessions and Office Hours will be held to support the associated trainings:

Q & A Sessions

~~MAR-04 8:30 AM – 9:30AM \| Follow up to Trainings 1-3~~
MAR-17 3:00 PM – 4:00PM \| Follow up to Trainings 4-6
MAR-24 3:00 PM – 4:00PM \| Follow up to Trainings 1-6

Office Hours Sessions

Session 1: APR-01 8:30 AM – 9:30AM
Session 2: APR-15 3:00 PM – 4:00PM
Session 3: APR-22 9:00 AM – 10:00AM