







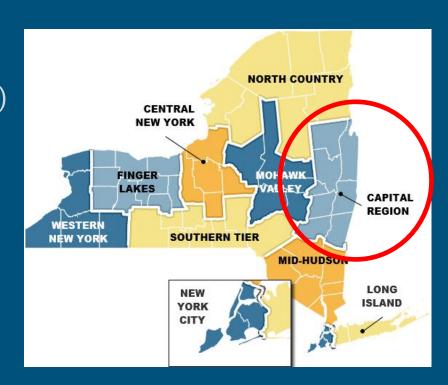
#### What is the Capital Region Clean Energy Hub?

#### **Consists of:**

- Capital Region (8 counties)
- Community Energy Advisors (CEA)
- Clean Energy Information Source

#### Mission to:

- Educate and inform
  - Community solar/solar panels
  - Heat Pumps
- Assist in applying for energy efficiency and savings programs
- Help develop Clean Energy Workforce







- Regional Assessment and Barriers Analysis (RABA)
- Workforce development
- Increase participation by low income communities in clean energy projects

\*Changes to the programs can be made based on findings of the RABA pending NYSERDA approval



### NYSERDA Residential Programs

- 1. Home Energy Audits and Assessments
- 2. EmPower
- 3. Assisted Home Performance w/Energy Star
- 4. Comfort Home
- 5. Financing
- 6. Heat Pump Rebates
- 7. Low/No Cost Measures



### Home Energy Assessments and Audits

- A NYSERDA-approved Energy Auditor recommends energy saving improvements specific to a home.
- There is no obligation to go forward with the project
- You must work with a contractor to ensure the energy savings are high compared to the costs for NYSERDA funding and financing.

See chart to find a contractor in your area to schedule your free home energy audit.





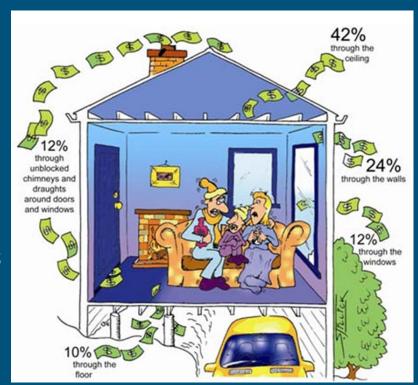
### Types of Home Energy Assessments and Audits

Service Segment	Insulation Estimate	Residential Energy Assessment	Comprehensive Energy Audit
Insulation Review	Yes	Yes	Yes
HVAC System Review	No	Yes	Yes
Electrical Usage/Meter Testing	No	No	No
Blower Door Testing ( As long as no Health Safety Blocks)	No	Not Included	Yes
HVAC Testing (checks for gas leaks, draft, efficiency, etc.)	No	Not Included	Yes
Type of Report Included	No report: Estimate only	Click Here for Example Residential Audit Summary Report	Click Here for Example Comprehensive Report
Typical Site Visit Duration	30 mins.	1 hour	2 hours
Required to use NYSERDA Incentives	No	Only If using NYSERDA loan	Yes, for loan or incentives

#### Chart provided by True Building performance

### Typical Recommended Energy-Saving Measures

- Air sealing
- Insulation
- High efficiency heating equipment
- Programmable thermostats
- Heat pump hot water heaters
- LED lighting



https://www.nyserda.ny.gov/residents-and-homeowners/at-home/energy-saving-tips

### No Cost Energy Saving Measures

- Make sure storm windows are down and windows locked; remove window air conditioners in winter.
- Reduce hot water use wash clothes in cold water, address water leaks, set hot water temperature at 120 degrees.
- Use appliances when full dishwasher, washing machine. Keep freezer filled!
- Check to see that registers aren't blocked by furniture or other items



### **Low Cost** Energy Saving Measures

- Switch to LED Lightbulbs and nightlights
- Purchase a programmable thermostat reduce heat below 70 degrees and lower at night.
- Use a power strip/smart power strip to reduce "phantom loads" from electronics
- Install plastic over the inside of windows
- Install door sweeps





### NYSERDA Financial Assistance Programs

See which program you qualify for here!

**EmPower** 

<u>Assisted Home</u> Performance

Comfort Home



#### EmPower New York

This program covers 100% of the costs for energy efficiency upgrades like air sealing and insulation, up to \$10,000, for households that are at 60% or less of the state median income.

Sign up for HEAP

https://www.nyserda.ny.gov/All-Programs/Programs/EmPower-New-York

Household Size	Maximum Gross Monthly Income	Maximum Gross Annual Income
1	\$2,852	\$34,224
2	\$3,730	\$44,760
3	\$4,608	\$55,296
4	\$5,485	\$65,820
5	\$6,363	\$76,356
6	\$7,241	\$86,892
7	\$7,405	\$88,860
8	\$7,570	\$90,840
9	\$7,734	\$92,808
10	\$7,899	\$94,788



#### Assisted Home Performance with Energy Star

This program pays for 50% of the costs of energy efficiency upgrades, up to \$5000, for households that are at 80% or less of the area median income.

https://www.nyserda.ny.gov/All-Programs/Programs/Assisted-Home-Performance-with-ENERGY-STAR

	Income Limits by Household Size				
Home Performance by County:	1-person	2-person	3-person	4-person	5-person
Albany/Rensselaer/Saratoga/Schenectady	\$59,400	\$67,850	\$76,350	\$87,670	\$101,808
Warren & Washington	\$48,350	\$59,680	\$73,728	\$87,760	\$101,808
Columbia	\$49,700	\$59,680	\$73,728	\$87,760	\$101,808
Greene	\$45,632	\$59,680	\$73,728	\$87,760	\$101,808
EmPower All NYS	\$34,224	\$44,760	\$55,296	\$65,820	\$86,892

### Market Rate- Available for Everyone







### Market Rate "Comfort Home" program

#### Comfort Home Contractors by County

#### Comfort Home Load-Reduction Packages

The home must meet conditions of the entire package to be eligible for the incentive.

Good	Better	Best
Seal and Insulate Attic and Rim Joist	Seal and Insulate Attic and Rim Joist and Insulate Walls and Floors	Seal and Insulate Attic and Rim Joist, Insulate Walls and Floors, and Retrofit Windows to ENERGY STAR
Incentive: \$1,000*	Incentive: \$2,500*	Incentive: \$4,000*

\*Additional incentives may be available for heat pump installation if done within 24 months of completing the work to install your Comfort Home Load-Reduction Package

# Heat Pumps



- When it's time to upgrade your heating system, look into very efficient heat pump systems that provide both heat and air conditioning.
- A variety of systems are available:
  - Air source heat pumps
  - Ground source heat pumps
  - Heat pump water heaters



### Low-Interest Financing

#### **On-Bill Recovery (OBR) Loan**

Convenient - loan payment included in utility bill.

Loan payment must be less than the energy savings.

Can be passed to new homeowner if you sell your home before paying off loan

#### **Smart Energy Loan (SEL)**

Flexible - automatic withdrawals from bank account.
Loan Payment can exceed energy savings

Area Median Income	On-Bill Recovery or Smart Energy auto-pay	Smart Energy direct billing (mail)
Up to 120%	<mark>3.49%</mark>	<mark>3.99%</mark>
Over 120%	6.99%	7.49%

### Federal Tax Credits and Utility Rebates

	Air Source Heat Pump, partial heating load	Air Source Heat Pump, full heating load	Geothermal Heat Pump	Heat Pump Water Heater
IRA-Federal Tax Credit	30%, up to \$2,000	30%, up to \$2,000	30% of cost, no cap	30%, up to \$2,000
National Grid Rebate	\$500 per outdoor unit	\$1,000 per 10,000 BTUH	\$1,500 per 10,000 BTUH	\$700-900
NYSEG Rebate	\$500 per outdoor unit	\$1,000 per 10,000 BTUH	\$1,500 per 10,000 BTUH	\$700-900
Central Hudson Rebate	\$500	\$500 if not removing old system; \$700 if installing advanced controls or \$1000 if removing old heating system entirely	\$1,000 per 10,000 BTUH	\$1000

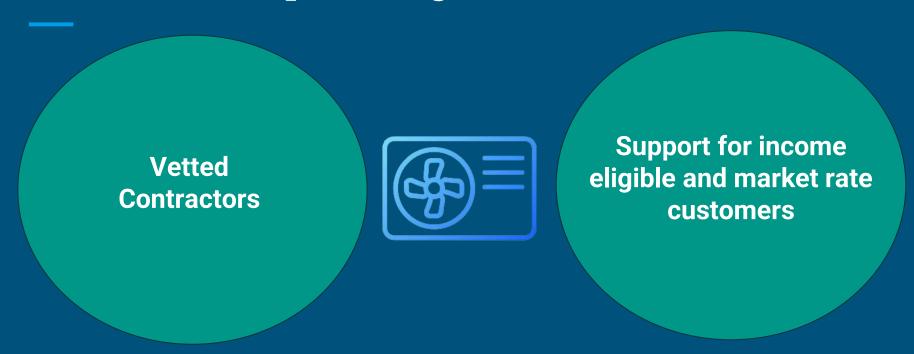




More Federal Energy Info Here.

EQUIPMENT TYPE	TAX CREDIT AVAILABLE FOR 2022 TAX YEAR	UPDATED TAX CREDIT AVAILABLE FOR 2023-2032 TAX YEARS	
Home Clean Electricity Products			
Solar (electricity)			
Fuel Cells	30% of cost		
Wind Turbine			
Battery Storage	N/A	30% of cost	
Heating, Cooling, and Water Heating			
Heat pumps			
Heat pump water heaters	\$300	30% of cost, up to \$2,000 per year	
Biomass stoves			
Geothermal heat pumps	30% of cost		
Solar (water heating)	30% Of COST		
Efficient air conditioners*	\$300 30% of cost, up to \$600		
Efficient heating equipment*	Ψ300	30% of cost, up to \$600	
Efficient water heating equipment*	\$150	30% of cost, up to \$600	
Other Energy Efficiency Upgrades			
Electric panel or circuit upgrades for new electric equipment*	N/A	30% of cost, up to \$600	
Insulation materials*	10% of cost	30% of cost	
Windows, including skylights*	10% of cost	30% of cost, up to \$600	
Exterior doors*	10% of cost	30% of cost, up to \$500 for doors (up to \$250 each)	
Home Energy Audits*	N/A	30% of cost, up to \$150	
* Subject to cap of \$1200/year			

### Heat Smart Capital Region



https://heatsmartcapitalregion.com/



## Heat Smart Capital Region













#### ELECTRIC VEHICLES



https://www.irs.gov/credits-deductions/credits-for-newclean-vehicles-purchased-in-2023-or-after

#### All-Electric, Plug-in Hybrid, or Fuel Cell Vehicle

- Up to \$2000 NYS Drive Clean Rebate
- Up to \$7500 in federal IRA tax credits
  - -Vehicle must meet critical mineral (\$3750) and battery requirements (\$3750) -Qualified manufacturer & final assembly in
  - North America
  - -Income limit of \$150K/\$225K/\$300K
  - -Cannot apply excess tax credit to future years
- Used EV up to \$4000 tax credit from dealer



### High Efficiency Appliances- IRA Tax Credit

**Induction Cooktops** 

**Electric Stoves** 

**Heat Pump Clothes Dryers** 

Air conditioners

- Energy efficient-Energy Star
- Better air quality
- Better for climate
- Can be powered by renewables

https://www.energy.gov/scep/home-energy-rebate-programs-frequently-asked-questions

- Up to \$600 tax credit per item.
- Maximum of \$1200 per year.
- To be finalized later in 2023.

### Non-Profit & Small Business Resources

- Small Business and Not-for-Profit Financing access to low interest financing for energy efficiency projects (NYSERDA)
- Small Commercial and Not-for-Profits Energy Studies access to cost share funding for a custom study to identify efficiency improvements and potential incentives and low cost financing options for putting energy saving measures into action (NYSERDA)

National Grid Offers no cost facility audits for small business customers and direct installation of energy measures.



#### Resources

#### **Energy Efficiency Incentives:**

Clean Energy Hub-Capital Region <a href="https://www.cleanenergycapitalregion.org/">https://www.cleanenergycapitalregion.org/</a>
NYS Benefits <a href="https://mybenefits.ny.gov/screening/ScreeningWelcome\_input.nysmybw">https://mybenefits.ny.gov/screening/ScreeningWelcome\_input.nysmybw</a>
IRA Benefits <a href="https://www.rewiringamerica.org/app/ira-calculator">https://www.rewiringamerica.org/IRAguide</a>
<a href="https://www.rewiringamerica.org/IRAguide">https://www.rewiringamerica.org/IRAguide</a>

#### **Heat Pump Information: HeatSmart Capital Region**

https://heatsmartcapitalregion.com https://cleanheat.ny.gov/planner

#### **Programs and Incentives: NYSERDA**

**Available Rebates:** <a href="https://cleanheat.ny.gov/find-available-rebates">https://cleanheat.ny.gov/find-available-rebates</a>

**Eligibility Assessment:** <a href="https://www.nyserda.ny.gov/All-Programs/Home-Energy-Efficiency-Upgrades">https://www.nyserda.ny.gov/All-Programs/Home-Energy-Efficiency-Upgrades</a>

Energy Efficiency Providers - https://www.nyserda.ny.gov/Contractors/Find-a-Contractor

**Energy Saving Tips** - <a href="https://www.nyserda.ny.gov/residents-and-homeowners/at-home/energy-saving-tips">https://www.nyserda.ny.gov/residents-and-homeowners/at-home/energy-saving-tips</a>

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