

The Inflation Reduction Act (IRA)

- Benefits climate & people
- How can it help you?



Energy/Climate Provisions of the IRA?

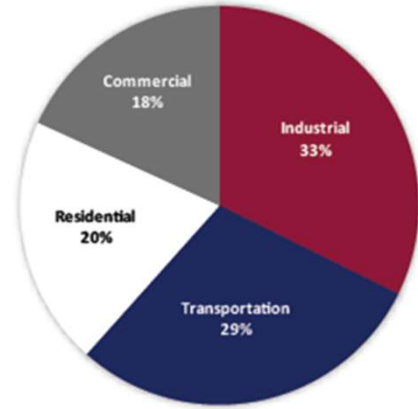
- Deploying clean energy
- Electric vehicle incentives
- Building electrification and efficiency
- Methane pollution fee
- Natural climate solutions
- Innovation and domestic green manufacturing



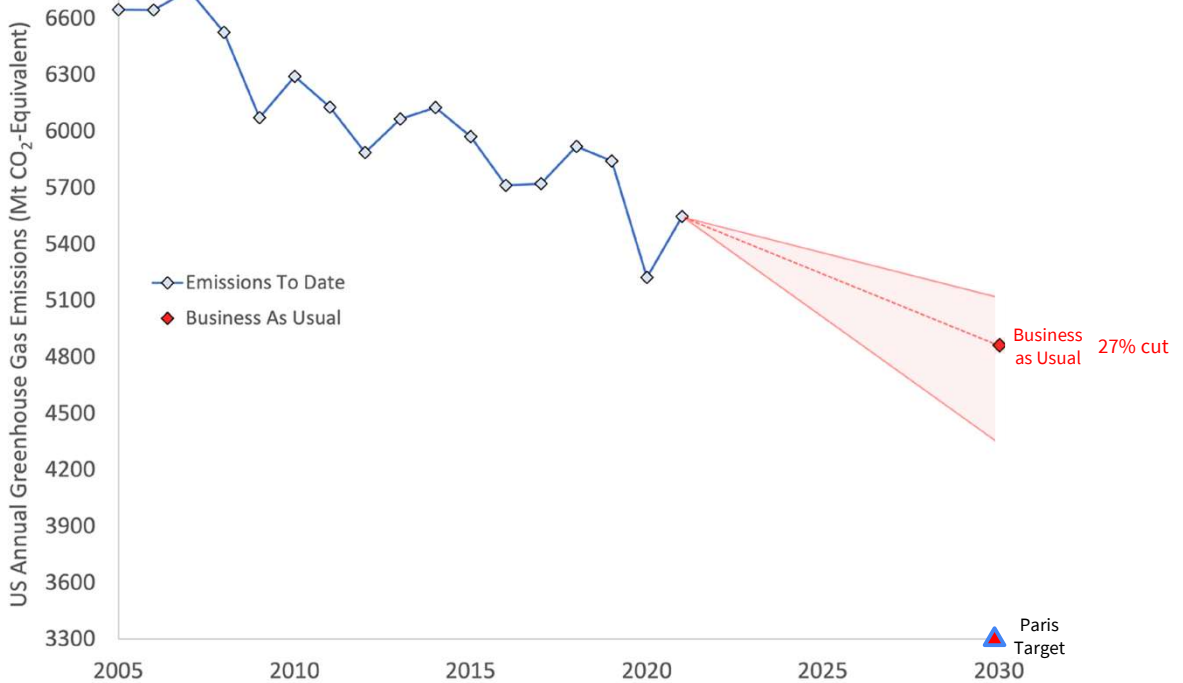
Environmental Benefits of Going All-Electric

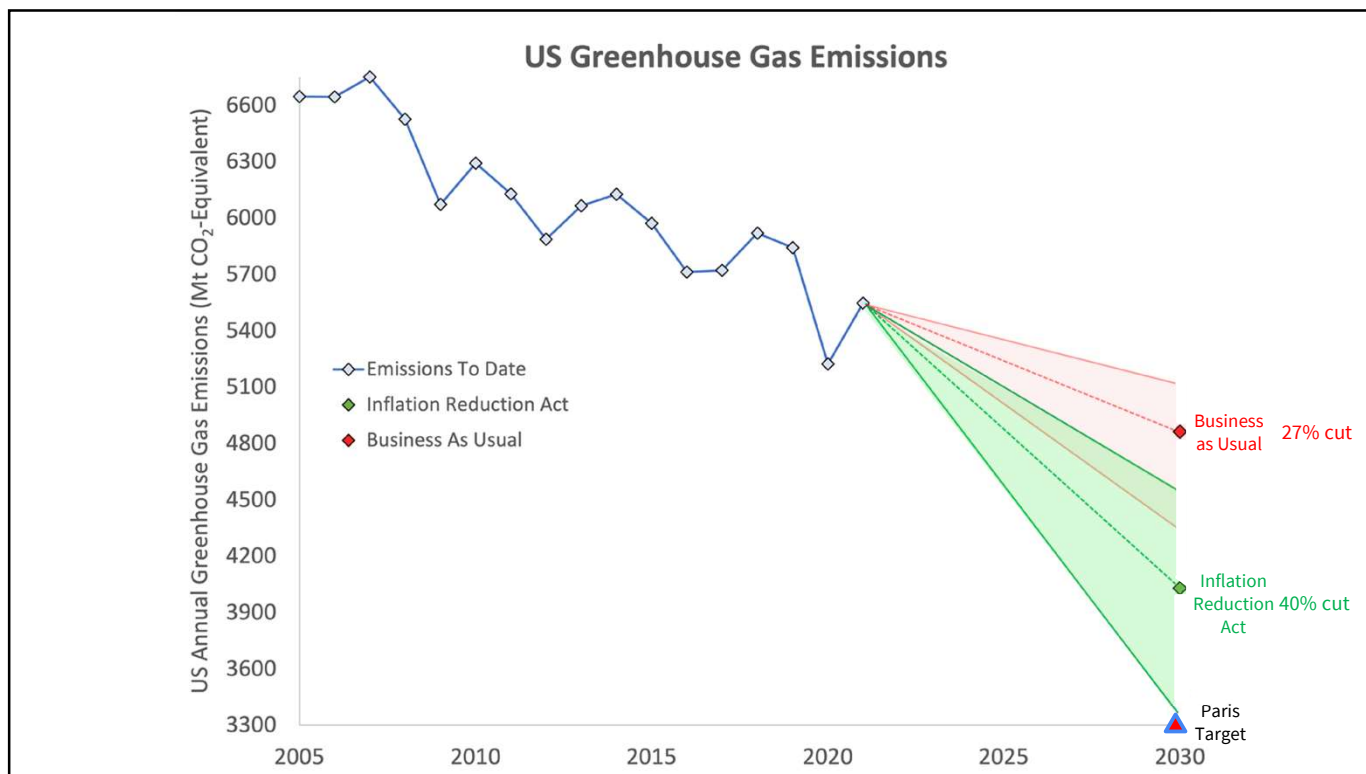
- Going electric is **one major thing that your household can do** to impact carbon emissions at the local level
- The IRA includes **incentives for businesses, not-for-profits, landlords municipalities, and households.** We'll focus on households. Others can contact HeatSmart Finger Lakes.

US ENERGY CONSUMPTION



US Greenhouse Gas Emissions





Health Benefits of Going All-Electric

- **Burning gas in the home** can be a major factor in childhood asthma .
- The presence of combustion gases in household air can lead to problems ranging from nuisance headaches to serious illness, carbon monoxide (CO) poisoning*
- **Vehicle tailpipe emissions** also are a factor in asthma in high-traffic areas.

*Canadian Government, "Combustion Gases in Your Home"



Financial Benefits of Going All-Electric

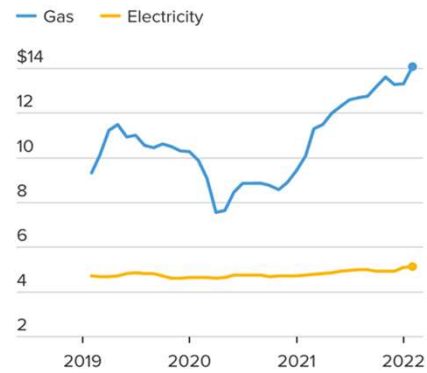
Going all-electric will:

- Protect against “fossilflation” (wild swings and increases in the cost of fossil fuels)
- Save EV car owners \$500+/year due to lower fuel costs, less maintenance

The IRA will help by:

- Providing rebates and tax credits for electrification & efficiency
- Promoting green electricity sources that tend to be less expensive

Cost for 100 miles of driving: U.S. national averages



Source: U.S. Bureau of Labor Statistics for the electricity rates and U.S. Energy Information Administration for the gas prices



Financial Incentives - 2 types



Coming Later
(probably in 2024)



Available Now

What's Included in the IRA for Households?

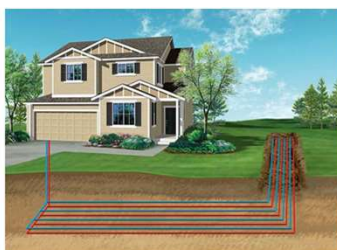
High Efficiency Electric Home Rebate Act (HEEHRA)



Clean Vehicle Credit



Residential Clean Energy Credit



Energy Efficient Home Improvement Credit



Explanation: What is a Heat Pump?

- A **heat pump** moves heat from one area to another
- Example: a refrigerator compressor
- A **heat pump** can heat or cool your house by moving heat in or out
- More heat pumps were shipped in the US in 2022 than gas furnaces



<https://www.energy.gov/energysaver/heat-pump-systems>

Explanation: Heat Pump Water Heaters

- **Heat pump water heaters** work the same way
- They are 2–3x more efficient than most current water heating systems
- This can translate to hundreds of dollars per year in energy savings over a traditional electric (or oil or propane) water heater for an average household
- **Heat pump clothes dryers** are also more efficient than traditional electric clothes dryers and need no exterior venting



What's included in the IRA for Households?

- **For Low-to-Moderate Income Households Only**
 - Green Appliance & Energy Efficiency Rebates (HEEHRA)
- **Available With Some Income Limits**
 - Clean Vehicle credit (30D/25E)
- **Available to Households of All Incomes**
 - Energy Efficient Home Improvement credit (25C)
 - Whole Home Energy Reduction Rebates (HOMES)
 - Residential Clean Energy credit (25D)

Electrification Rebates for Low-to-Moderate Income Households (“HEEHRA”)

- Will provide direct **point-of-sale rebates** for low- and moderate-income households to install new, efficient electric appliances and home energy efficiency upgrades
 - Cover **entire price for low income** households, **50% for moderate income**, up to the maximum rebate for each category
 - **Up to \$14,000** per household, available while funding lasts, up to 10 years
- **Renters are eligible** for these rebates for their own electric stoves, heat pump dryers, or window air-conditioning heat pumps.
- NYSERDA also has state incentive programs for low-income households; check with HeatSmart Finger Lakes.

Electrification Rebates for Low-to-Moderate Income Households (“HEEHRA”)

How to qualify:

-100% Upfront Rebate if **Low Income** (less than 80% Area Median Income)

-50% Upfront Rebate if **Moderate Income** (less than 150% Area Median Income)

Approx. Income Guidelines - 2022 - Rochester, NY MSA*			
% Median Family Income - Rounded			
Household Size	80%	150%	
1	\$ 50,250	\$ 94,210	
2	\$ 57,400	\$ 107,620	
3	\$ 64,600	\$ 121,120	
4	\$ 71,750	\$ 134,530	
5	\$ 77,500	\$ 145,310	
6	\$ 83,250	\$ 156,090	

*Monroe, Livingston, Ontario, Orleans, Wayne, Yates counties



Electrification Rebates for Low-to-Moderate Income Households (“HEEHRA”)

Green appliances:

- Electric Stove (traditional or induction, max. rebate \$840)
- Heat Pump Clothes Dryer (max. rebate \$840)

Advantages of Electric Stoves:

- Better indoor air quality
- **Induction** cooking is fast, precise and efficient
- **Induction** cooktops are safer - they never get hot



Note: Rebates not available yet; expected in 2024

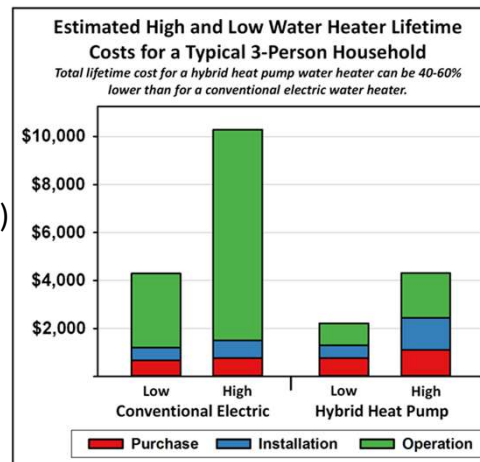
Electrification Rebates for Low-to-Moderate Income Households (“HEEHRA”)

Home energy improvements:

- Electric Breaker Panel (max. rebate \$4000)
- Upgraded Electrical Wiring (max. rebate \$2500)
- Heat Pump Water Heater (max. rebate \$1750)
- Heat Pump Air Conditioner/Heater (max. rebate \$8000)
- Insulation, Ventilation and Sealing (max. rebate \$1600)

Advantages:

- Heat pumps bring large savings for those converting from oil or propane
- Heat pump water heaters and clothes dryers cost much less to operate than conventional electric



Clean Vehicle Credits

New Electric Vehicles (30D)

- Income tax credit of up to \$7,500 for certain new electric vehicles. Includes some plug-in hybrid vehicles. Must have income under \$150K for single filers or under \$300K for joint filers.
- Not all vehicles are eligible; check with the dealer or IRS. More vehicles are eligible if leased; rebate goes to manufacturer but consumer can negotiate
- NYS incentive may also be available

Used Electric Vehicles (25E)

- Income tax credit of 30% of vehicle price, up to \$4,000 for used (2+ years old) electric vehicles purchased from a dealer. Max vehicle price \$25K, max. income \$75K for single, \$150K for joint filers



Clean Vehicle Credits

- For tax credit, vehicle must be **for own use**, not for resale
- EVs require **less maintenance** (no oil changes, tune-ups, spark plugs, air filters)
- **Savings** on fuel and maintenance over a vehicle's lifetime more than offset any extra initial cost
- If you can **charge at home or work**, you may rarely need to find other chargers
- There's a separate 30% tax credit (up to \$1000) for installing EV chargers in rural or low-income areas.
- Starting in 2024, the plan is to shift from tax credit to point of sale rebate like HEEHRA



Explanation: Weatherization

What is it?

- Actions to reduce heat leaking out of your house

How does it help the climate?

- If we're still using fossil fuels, we can at least use less
- Electrification and cleaning up the grid will be easier the less energy we need

And, of course, it helps you by lowering your utility bills!



Energy Efficient Home Improvement Credit (25C)

- Gives **all homeowners** an income tax credit of 30 percent of the cost of certain energy efficiency upgrades to their homes, up to annual limits.
- **Eligible (non-heat pump) projects and annual limits:**
 - Insulation and air sealing/\$1200 (Meet IECC Standards)
 - Doors: \$250/door; \$500 total (Must be “Energy Star”)
 - Windows/\$600 (Must be “Energy Star Most Efficient”)
 - Energy audits/\$150
 - Electrical panel upgrades if needed for and done with a heat pump installation/\$600

**AVAILABLE
NOW**

Energy Efficient Home Improvement Credit (25C)

- The maximum total credit per year is **\$1200 for all projects on previous slide** (panel upgrades, weatherization, insulation, etc.).
- Heat pumps are one exception to the \$1200 annual limit. For heat pumps or heat pump water heaters, the separate maximum credit is **\$2,000 per year**.
- The \$1200 or \$2000 limits reset every year, so you can tackle an efficiency project every year to maximize savings.
- **These credits will be available to all for the next 10 years!**
- Note: NYS incentives may also be available for these purchases.

Whole House Energy Reduction (HOMES)

A separate program offers **money back for large overall reductions in energy use**. This program may appeal most to:

- Households currently on electric resistance heating
- Higher-income households that don't qualify for the low-to-moderate income rebates



Whole Home Energy Reduction Rebates (HOMES)

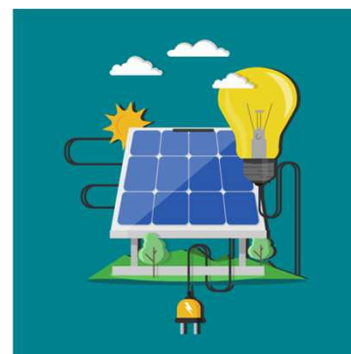
- Requires work that is modeled to reduce energy usage at least 20%. Bigger rebates for higher reductions. Low-income households can get higher rebates
- Rebates depend on income:
 - Up to \$8,000 for low- and moderate-income households
 - Up to \$4,000 for higher income households
- More details coming in late 2023 or early 2024



Residential Clean Energy Credit: Solar/Battery (25D)

- Renews an existing program allowing households installing **solar panels** to receive an income tax credit of 30 percent of the cost of the project.
- Guards against fluctuating electricity rates
- **An average 6kW rooftop solar installation costs about \$19,000. For that, the federal tax credit would be \$5,700. There's also a NY state credit of 25% up to \$5000. So the net cost would be \$8550.**

AVAILABLE NOW



Residential Clean Energy Credit: Solar/Battery (25D)

- Now also includes **residential battery storage systems**
- Also includes a 30 percent uncapped tax credit for an electrical panel upgrade, but only if it's upgraded in conjunction with and needed for rooftop solar.
- Solar plus battery storage can protect against power outages
- Mining for minerals only happens once; extracting fossil fuels is unending

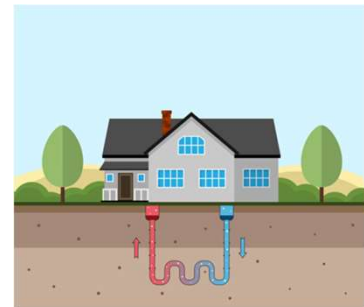
AVAILABLE NOW



Residential Clean Energy Credit: Geothermal (25D)

- IRA also renews an existing 30% income tax credit for geothermal heating
- Geothermal systems last **20-50 years** and are **3-5 times more efficient than traditional heating systems**
- If a geothermal installation costs \$30,000, the 25D tax credit will be \$9000. There would also be a \$5000 NY tax credit (25% with a maximum of \$5000). **The net cost to the homeowner would be \$16,000.**
- If a homeowner's income tax is low, the unused portion of the **25D credit can be carried forward for 10 years.**

AVAILABLE NOW



Summary: When are these all available?

Tax Credits

Energy Efficient Home Improvement Credit (25C) - **AVAILABLE NOW (new 1/1/23)**

Clean Energy Credit (25D: Geothermal/Solar/Battery) - **AVAILABLE NOW**

Clean Vehicle Credit (30D) - **AVAILABLE NOW (new 1/1/23)**

Rebates (being implemented through individual states)

High Efficiency Electric Home Rebate (HEEHRA) - **2024 (via state)**

(for Low-to-Moderate Income Households)

Whole Home Energy Reduction Rebates (HOMES) - **2024 (via state)**

Where to start?

- **Home energy audit** is a great starting point
- Then **weatherization**
- **Have a plan** so you're prepared when your hot water heater, kitchen stove, clothes dryer, and furnace die:
 - Which one will you purchase?
 - Will your electrical panel support it?
- Is your car getting old? **Install a car charger** so that you can buy an EV or plug-in hybrid next.



Rewiring America Savings Calculator

With its calculator you can:

- Enter specifics for your household (size, income, etc.)
- Find out which rebates and/or tax credits you may be eligible for
- <https://www.rewiringamerica.org/app/ira-calculator>

Zip Code [Ⓢ]
95652

Homeowner Status [Ⓢ]
Homeowner

Household Income [Ⓢ]
\$100,000

Tax Filing [Ⓢ]
Joint

Household Size [Ⓢ]
4 people

Calculate! We do not store this data.

Your Personalized Incentives
Use these any time in the next 10 years.

UPFRONT DISCOUNTS	AVAILABLE TAX CREDITS
\$14,000	\$7,536
ESTIMATED TOTAL INCENTIVES	
\$21,536	

Household Electrification Incentives
These are available to American homeowners and renters over the next 10 years.

ITEM	DISCOUNT TYPE	DISCOUNT	TIMELINE
Rooftop Solar Installation	Tax Credit	30%	Now!
Geothermal Heating Installation	Tax Credit	30%	Now!
Battery Storage Installation	Tax Credit	30%	Now!
Community Solar Subscription	Tax Credit	30%	Now!
New Electric Vehicle	Tax Credit	\$7,500	2023
Used Electric Vehicle	Tax Credit	\$4,000	2023
Heat Pump Air Conditioner/Heater	Tax Credit	\$2,000	2023
Electric Panel	Tax Credit	\$600	2023
Basic Weatherization	Tax Credit	\$1,200	2023
Heat Pump Water Heater	Upfront Discount	\$1,750	2023
Heat Pump Air Conditioner/Heater	Upfront Discount	\$8,000	2023

Who provides impartial local advice?

- **Climate Solutions Accelerator** is a nonpartisan 501(c)(3) nonprofit dedicated to inspiring and facilitating a large-scale climate mobilization in the nine-county Genesee-Finger Lakes Region
- In 2022, the Accelerator was designated as one of New York State’s 12 Regional Clean Energy Hubs
- **HeatSmart FingerLakes** is a program of the Accelerator, intended to help homeowners and business owners transition to clean energy technology



How do I get that impartial local advice?

-Book a meeting with an Energy Advisor via HeatSmartFLX.org .

-They can walk you through how to get an energy audit, guide you to incentives, and connect you with partner contractors



Presentation by Citizens Climate Lobby - Rochester

Visit cclusa.org

Citizens Climate Lobby advocates for legislation to reduce climate change