



# The Inflation Reduction Act & Climate

December 13, 2022

# Green Energy Consumers Alliance

Harnessing our power as energy consumers to speed the transition to a zero-carbon future.



- **Non-profit founded 1982**
- **Mass. & Rhode Island**
- **Programs & Advocacy**

# Green Energy Consumers Alliance

---

**Mission:** Harnessing our power as energy consumers to speed the transition to a zero-carbon future

## Today's Speakers

### **Larry Chretien**

Executive Director

[larry@greenenergyconsumers.org](mailto:larry@greenenergyconsumers.org)

### **Anna Vanderspek**

Electric Vehicle Program Director

[anna@greenenergyconsumers.org](mailto:anna@greenenergyconsumers.org)

### **Loie Hayes**

Energy Efficiency Coordinator

[loie@greenenergyconsumers.org](mailto:loie@greenenergyconsumers.org)



# Webinar Logistics

---

1. Everyone is muted to avoid background noise.
2. Send questions in the GoToWebinar box on your screen.
3. We'll answer questions at the end.
4. We will share the slides and a recording after the webinar!



# Outline

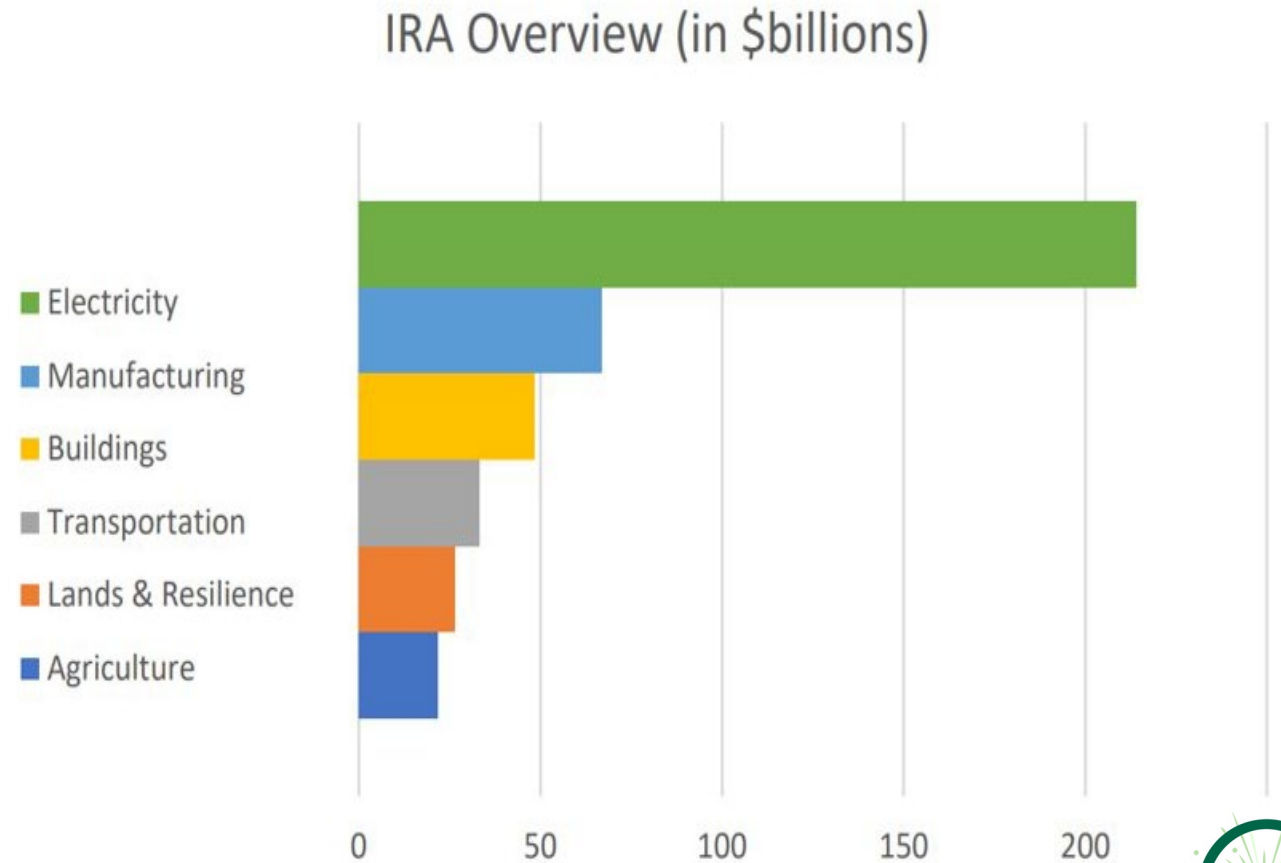
---

- Big Picture
- Transportation
- Heating & Buildings
- Electric Power
- Other Issues
- Now what?



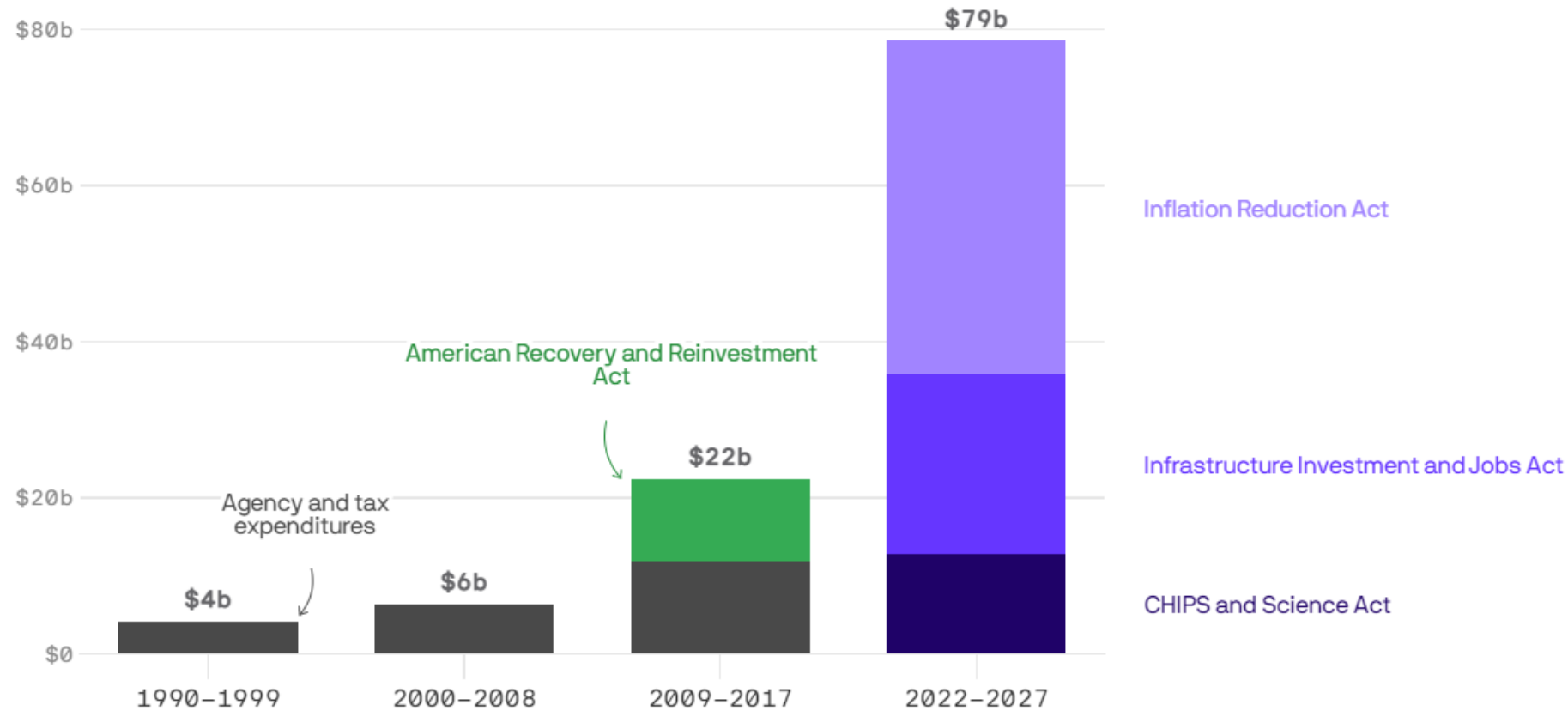
# Big Picture: Investments

- Budgeted investments and tax credits: \$369 billion
- Transportation: \$29 billion
- Building Efficiency and Electrification: \$36 billion
- Electric Power: \$214 billion



# Average Annual Federal Spending on Clean Energy

1990-2027 (projected)



Reproduced from RMI; Note: Data not available between 2018 and 2021, and projected agency spending excluded from 2022-2027; Chart: Axios Visuals

<https://www.axios.com/2022/08/23/clean-energy-spending-infrastructure-investment>



# Big Picture: Projected Emissions Reductions

- Expected GHG reduction: ~40% by 2030
- Manufacturing incentives will improve supply chain
- States that prepare & organize can maximize benefits
  - Mass. and Rhode Island clean energy plans will cost less!

## Where will climate bill emission cuts come from?

Projected 2030 greenhouse gas cuts from the Inflation Reduction Act, share by source

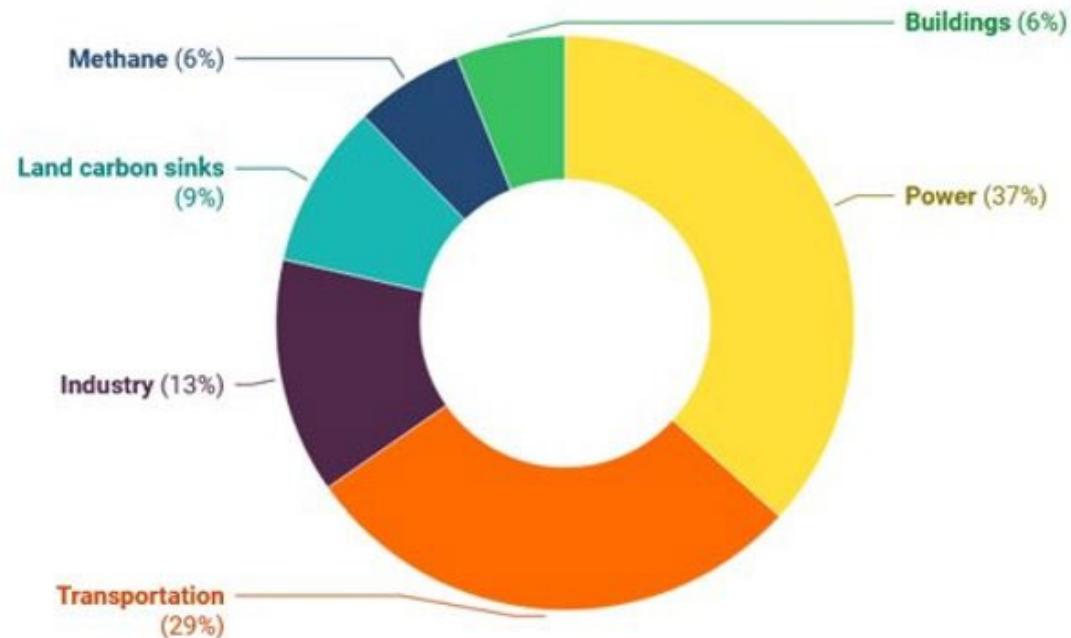


Chart: Canary Media • Source: REPEAT Project, "Preliminary Report: The Climate and Energy Impacts of the Inflation Reduction Act of 2022" • Embed • Download image





# Consumer Savings

Change in household energy costs from the IRA in 2030  
US dollars



Source: Rhodium Group. The high, central, and low emissions scenarios reflect uncertainty around future fossil fuel prices, economic growth, and clean technology costs, and are detailed in [Taking Stock 2022](#).



# Big Picture: Environmental Justice

---

- Solar projects for low-income get huge boost
- Big home electrification incentives for LMI families
- Green Bank / Greenhouse Gas Reduction Fund, \$27 billion



# Green House Gas Reduction Fund

---

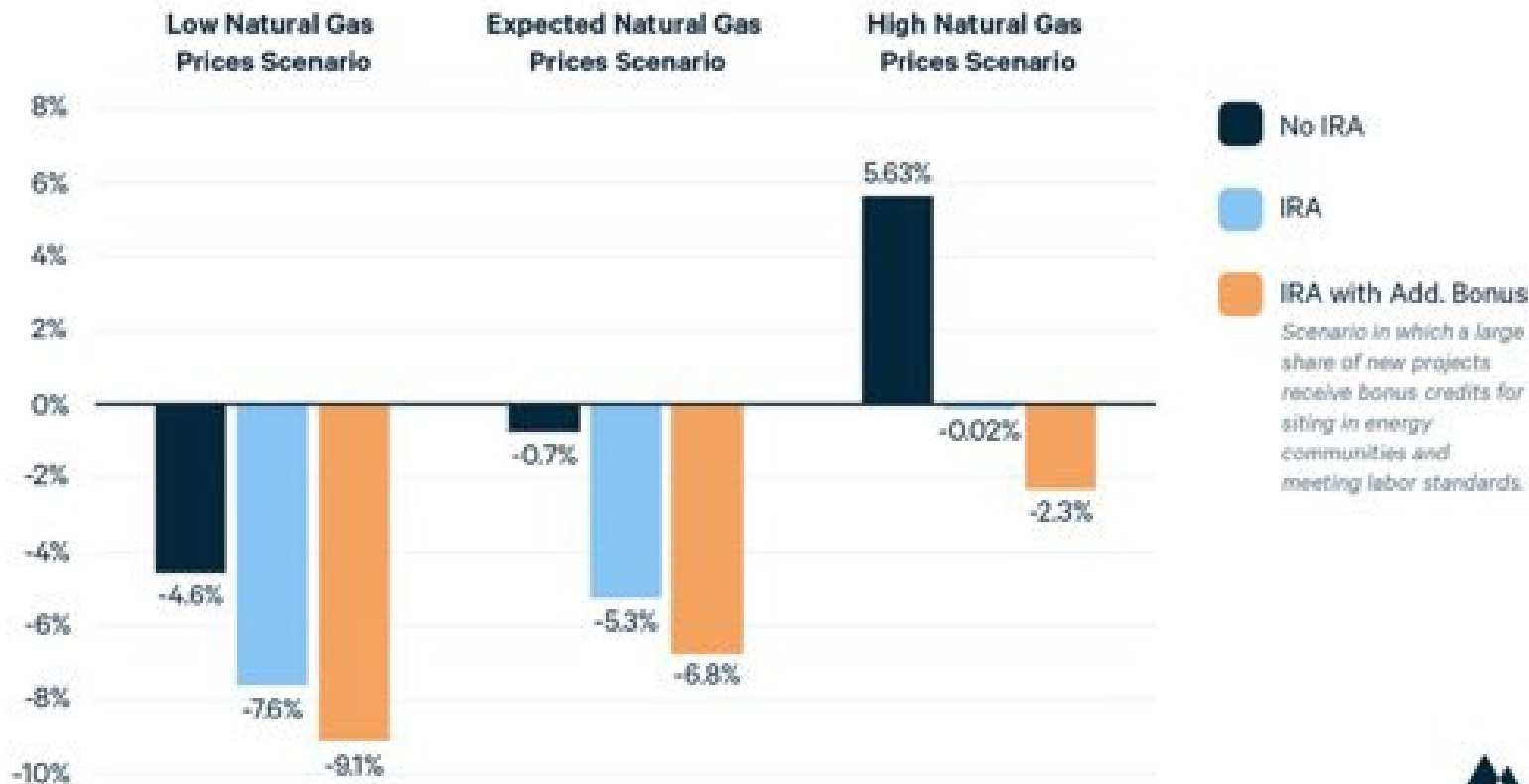
## \$27 billion

- Establishes a Green Bank designed to provide low-cost financing for clean energy infrastructure projects
- \$7 billion for states and tribes to provide grants & loans for low-income & disadvantaged
  - <https://www.washingtonpost.com/politics/2022/08/17/state-climate-action-could-be-supercharged-by-inflation-reduction-act/>
- \$12 billion for general assistance
- \$8 billion for financing in low-income & disadvantaged communities



# Electricity Rates Will Decrease & Stabilize

Change in Average Retail Electricity Prices in 2023-2032  
with and without the Inflation Reduction Act (IRA)



IRA's wind & solar will displace natural gas, reducing overall electricity rates nationally by 5-7%

- More in places where consumers are vulnerable to high natural gas prices



A photograph of a multi-lane highway during sunset. The sky is a mix of orange, yellow, and blue. Several cars are visible on the road, including a white sedan in the foreground on the left, a white van in the middle, and a dark SUV on the right. In the distance, there are highway signs, including one that says 'Express'. The overall scene is a busy roadway at dusk.

# Transportation

# Big Picture

- Lots of funding
- Production tax credit for US battery manufacturing
- Extends (and changes) tax credit for **new** EVs
- Establishes a new tax credit for **used** EVs
- Establishes a new tax credit for **commercial** EVs
  - Lesser of 30% of sales price OR incremental cost
  - Capped at \$7,500 for vehicles <14,000 lbs
  - Capped at \$14,000 for vehicles >14,000 lbs



# Transportation Funding

<b>\$20 billion</b>	<b>Loans</b> for *new* clean vehicle manufacturing plants
<b>\$2 billion</b>	<b>Grants</b> for revamping *existing* auto plants
<b>\$3 billion</b>	USPS fleet electrification
<b>\$3 billion</b>	Zero-emission equipment at ports
<b>\$1 billion</b>	Zero-emission trucks and buses



# Clean Vehicle Credit



New tax credit goes into effect **in 2023**

- Valid through 2032; no more 200,000-unit cap
- Income requirements
  - <\$300,000 for joint filers
  - <\$150,000 for individual filers
- Fuel cell vehicles now included
- New *vehicle* requirements

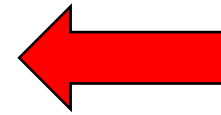




# New Vehicle Requirements

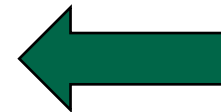
---

**1. Assembly Location:** Final vehicle assembly in North America



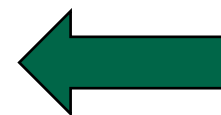
**Already in effect!**

**2. Price Cap:** \$80,000 for SUVs, pickups, and vans; \$55,000 for sedans & hatchbacks



**Kicks in in 2023**

**3. Batteries:** Mineral and battery component requirements



**Kicks in in 2023,  
then ramps up**



# Starting 2023: Battery Requirements

**1. Critical Minerals:** 40% of battery's minerals (by value) must be mined OR processed in North America or country with free trade agreement with the US, or recycled in the US

➔ **\$3,750**

+

**2. Battery Component:** Value of battery components manufactured OR assembled in North America must be at least 50% of battery value

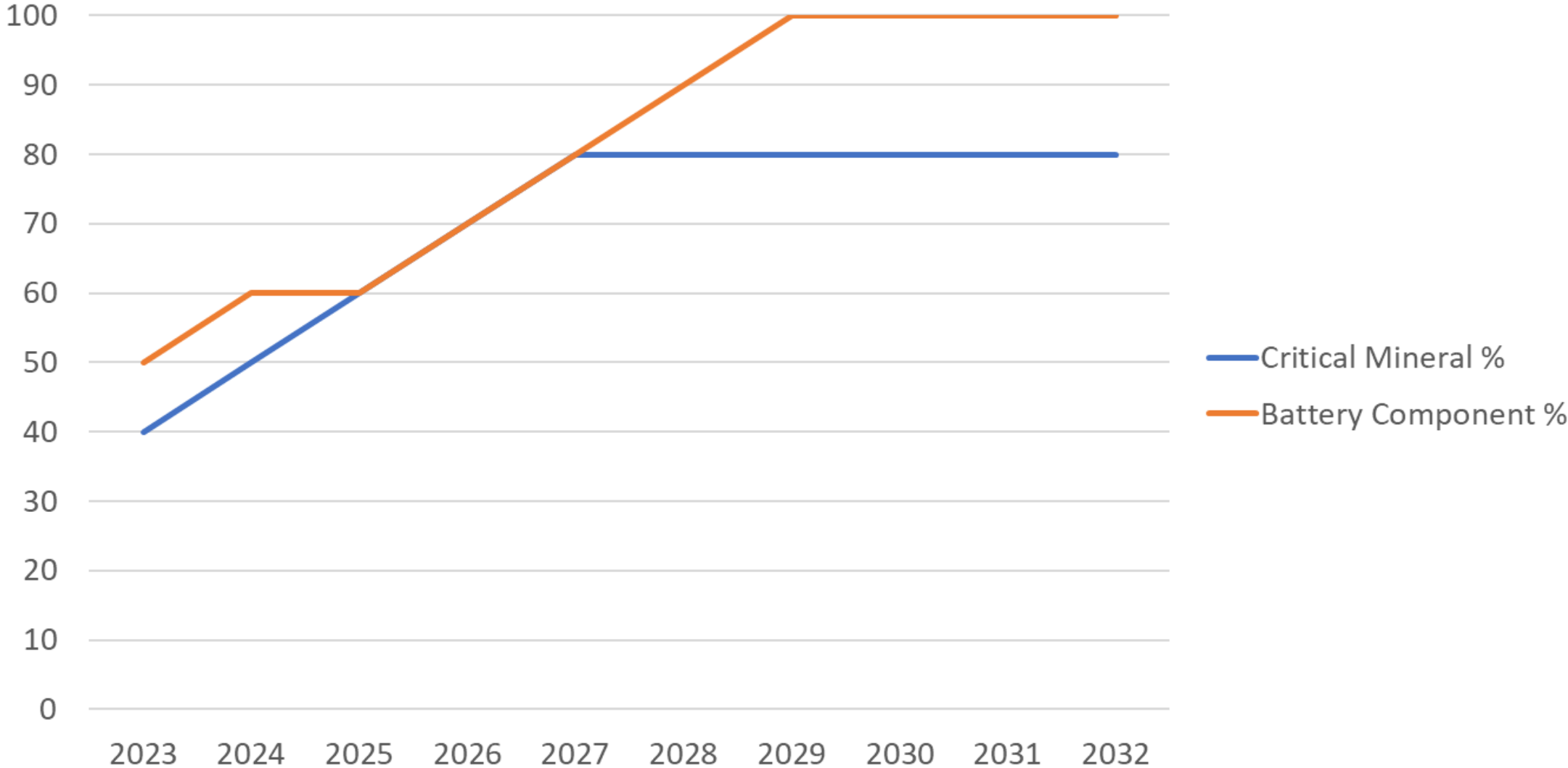
➔ **\$3,750**

---

**= \$7,500**



# Ramp-Up Over Time



# Plus... foreign entities of concern!

- Starting 2024: **Vehicles** cannot have any *battery components* from a foreign entity of concern
- Starting 2025: **Batteries** cannot have any *critical minerals* from a foreign entity of concern

*Russia*



*China*



# Starting 2023: Used Vehicles Qualify



- Battery requirements do not apply
- \$4,000 or 30% of sale price, whichever is lower
- Must buy vehicle from dealership
- Must be at least 2 years old and cost <\$25,000
- Only applies at first resale
- Lower income threshold
  - Joint filers: <\$150,000
  - Individual filer: <\$75,000



# Starting 2024: Point of Sale

- Consumer can choose to transfer the tax credit to the dealership
- Details are still TBD!



# Timeline

## Starting January 1, 2023:

- No more manufacturer cap
- Income requirements
- Vehicle price cap
- Battery requirements
- Credit available for *used* cars

Battery requirements  
ramp up over time



**Starting now:**  
Assembly location  
requirement

## Starting January 1, 2024:

- *Vehicle* foreign entity of concern requirements
- Point-of-sale option

## Starting January 1, 2025:

*Battery* foreign entity of concern requirements



# What vehicles are eligible?

- **Some are already ineligible** because of the final assembly location
- **Some will be ineligible starting in 2023** because of the price or battery requirements
- **Some will become newly eligible starting January 1** because of the lifting of the 200,000-unit cap

**[Our blog](#) has more info & lists!**

## The New Federal Tax Credit For EVs

Posted by **Anna Vanderspek** on Monday, August 22, 2022 @ 02:50 PM

[Tweet](#) [Share](#) [Like 12](#) [Share](#)



President Biden signed the Inflation Reduction Act (IRA) into law on August 16, 2022. The IRA is a huge deal. It's the largest climate bill ever passed within the US and touches on all the major cornerstones of the fight against climate change: electricity generation, heating, and transportation (among lots of other things). We're holding a **webinar on August 30** to explain what the IRA means for consumers in Massachusetts and Rhode Island. However, we're getting a lot of questions already on the changes to the federal tax credit for





# Unknowns

---

- Which existing and upcoming models meet the 2023 battery requirements? In other words, which models will be eligible as of January 1?
- What if batteries for the same vehicle are manufactured in multiple locations?
- How exactly will the point-of-sale credit work?



# Charging, too!



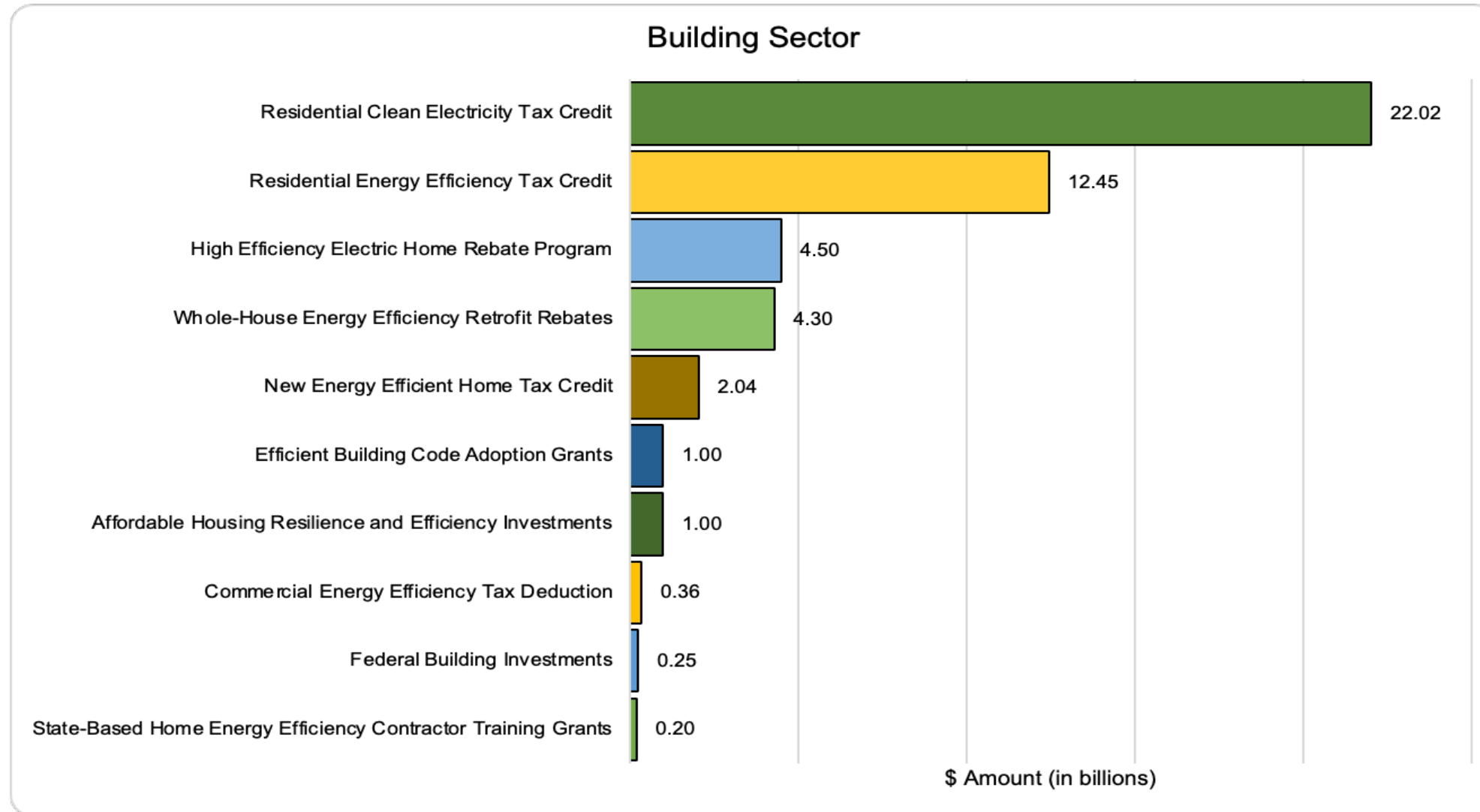
- Ten-year extension of 30% tax credit for installing EV charging
  - Individuals: \$1,000 or 30%, whichever lesser
  - Commercial: 30%, up to \$100,000
- New requirements:
  - Census tract with poverty rate of at least 20% or median family income <80% of state median family income
  - Commercial projects: Apprenticeship & prevailing wage requirements
- Includes bi-directional chargers!



# Building Efficiency & Electrification



# Building Investments



# Residential Clean Energy Tax Credit

---

## \$22 billion

- Extends for 10 years a tax credit that was set to expire
- 30% from 2022 till 2032; 26% in 2033, and 24% in 2034
  - geothermal heat pumps
  - solar PV
  - solar water heating
  - home battery storage *for the first time with or without solar*



# Residential Energy Efficiency Tax Credit

## \$12.5 billion

- 10 years, starting in 2023
- increases credit amount from 10% to 30% for qualified energy efficiency improvements
- removes lifetime cap so you can apply for this annually

**\$600**

Windows, Skylights; Central A/C; Electric Panels; High Efficiency Fossil Fuel Water Heaters, Furnaces and Boilers

**\$2,000**

Electric or Natural Gas Heat Pump Water Heaters, Electric or Natural Gas Heat Pumps, and Biomass Stoves and Boilers

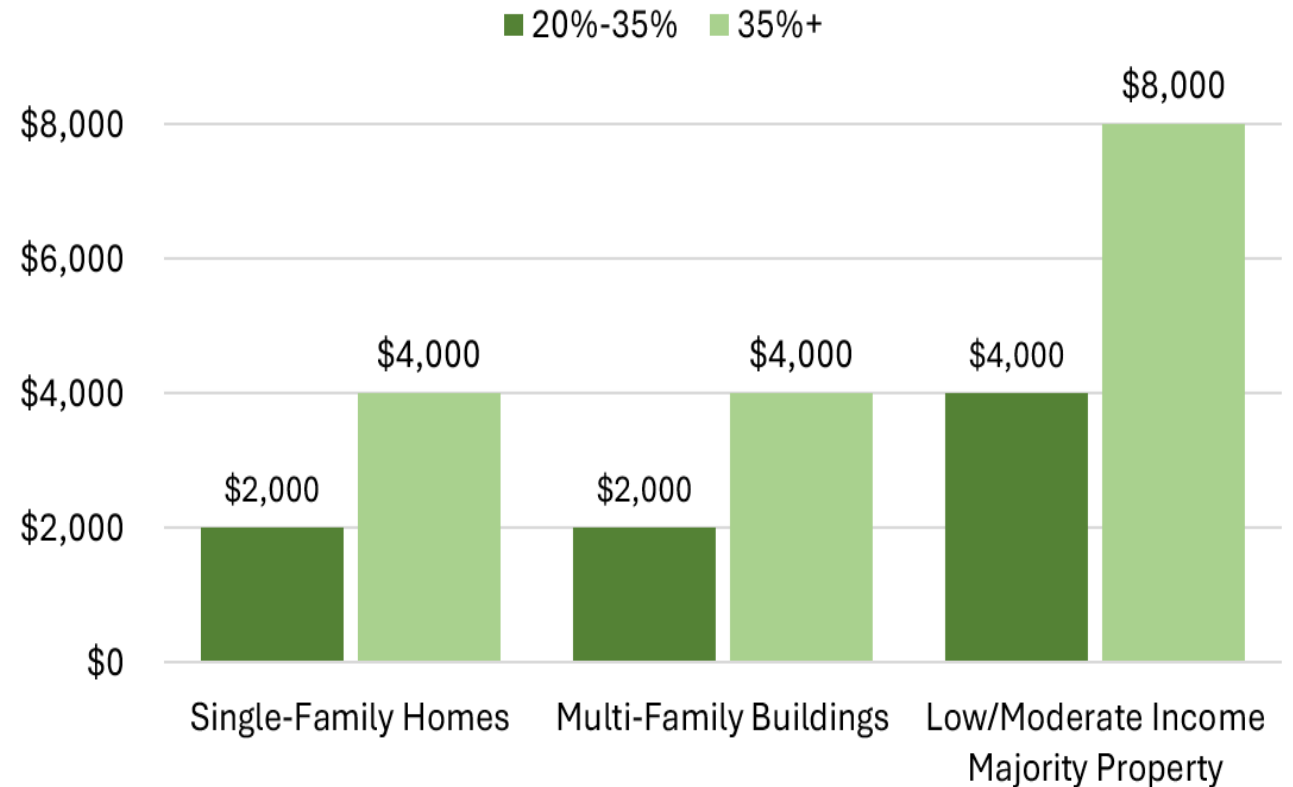


# HOMES Program, rebates administered by states

**\$4.3 billion for US**

**\$73 million for Mass.**

- Rebates based on **projected energy savings** of total retrofit
- No income restrictions: up to 50% of project cost
- Low-income adder: up to 80% of project cost
- HERS Raters can project savings
- Starts in 2023



Source: [Atlas Buildings Hub](#)

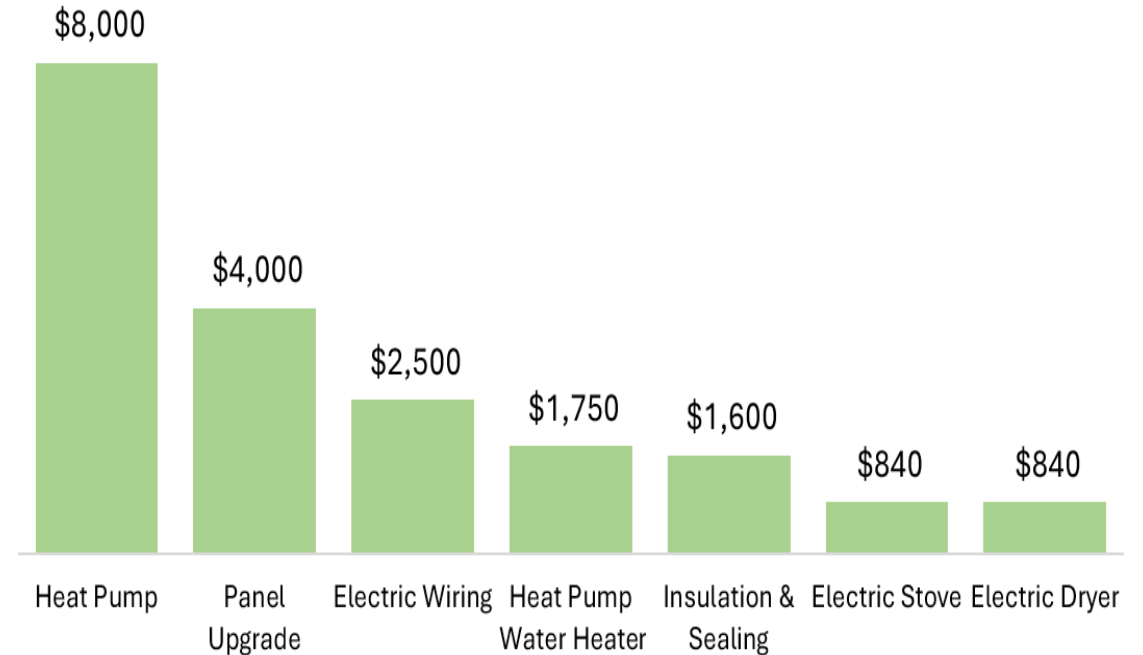


# High Efficiency Electric Home Rebates

**\$4.5 billion for US**

**\$73 million for Mass.**

- **income-qualified** rebates
- <80% AMI: up to 100% of cost
- <150% AM: up to 50% of cost
- Cap: \$14,000/unit
- Starts in 2023
- Can't be combined for same measure



Source: [Atlas Building Hub](#)

AMI Source: [Area Median Income Lookup Tool \(fanniemae.com\)](#)





# Additional investments

- \$1 billion for affordable housing renovations thru HUD
- \$2 billion for developers of new residential buildings
- \$1 billion for commercial buildings, worker trainings, & federal buildings
- \$1 billion to states for efficient building code adoption

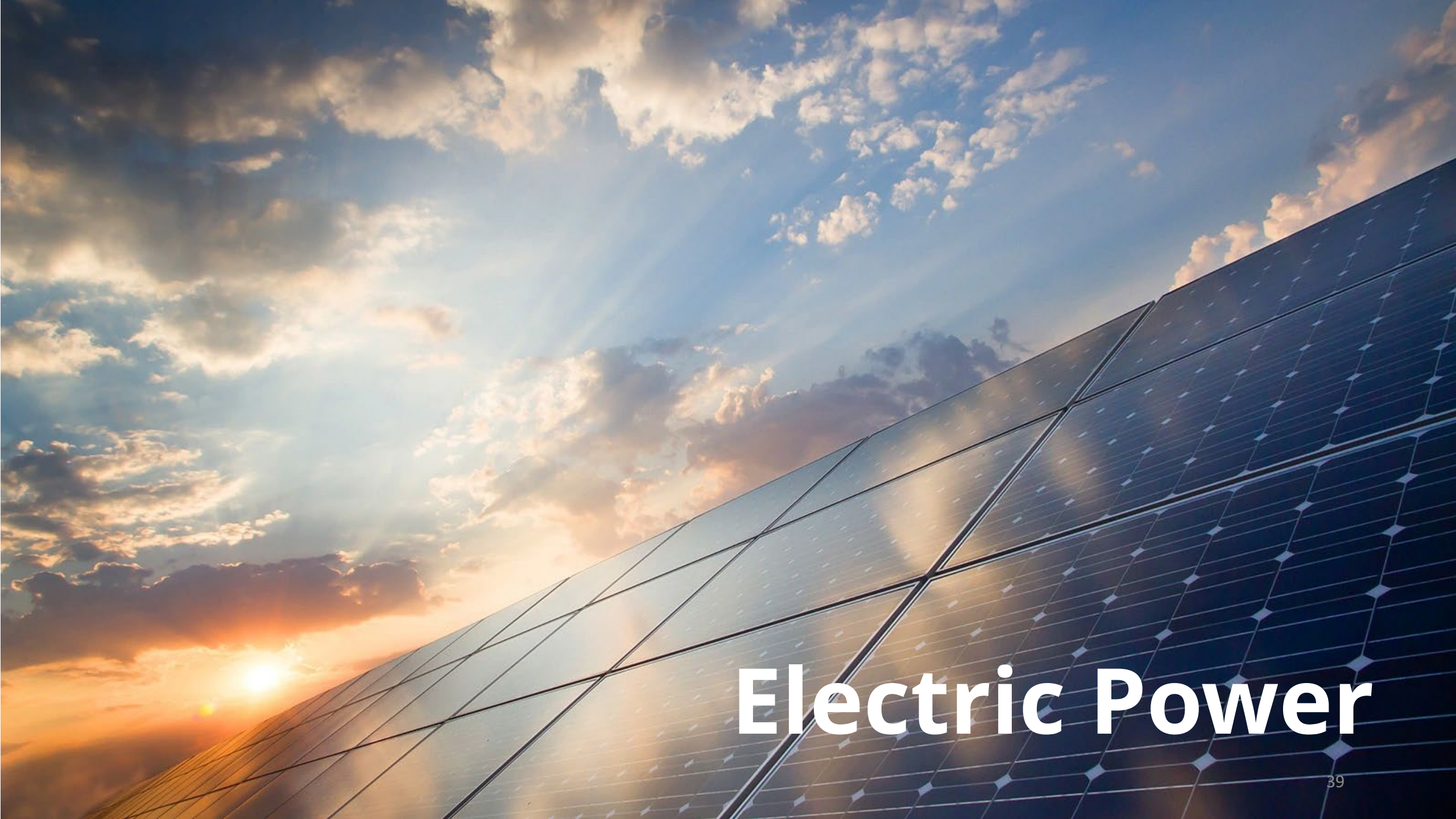


# Resources/Next Steps

---

- Learn more about the Inflation Reduction Act and your home  
[How much money will you get with the Inflation Reduction Act?](#)
- Make a comprehensive plan for home electrification  
[Clean Energy Home Plan, Mass Clean Energy Center](#)
- Find out if you can produce electricity for less than utility cost  
[Go Solar with Green Energy Consumers Alliance | EnergySage](#)
- Get trusted advice on heat pumps  
[GreenEnergyConsumers.org/heatpumps](#)





# Electric Power

# Solar & Wind Will Get Big Boost From Climate Bill

Projected capacity growth under Inflation Reduction Act compared to baseline expectations

■ Baseline ■ Additional growth under Inflation Reduction Act

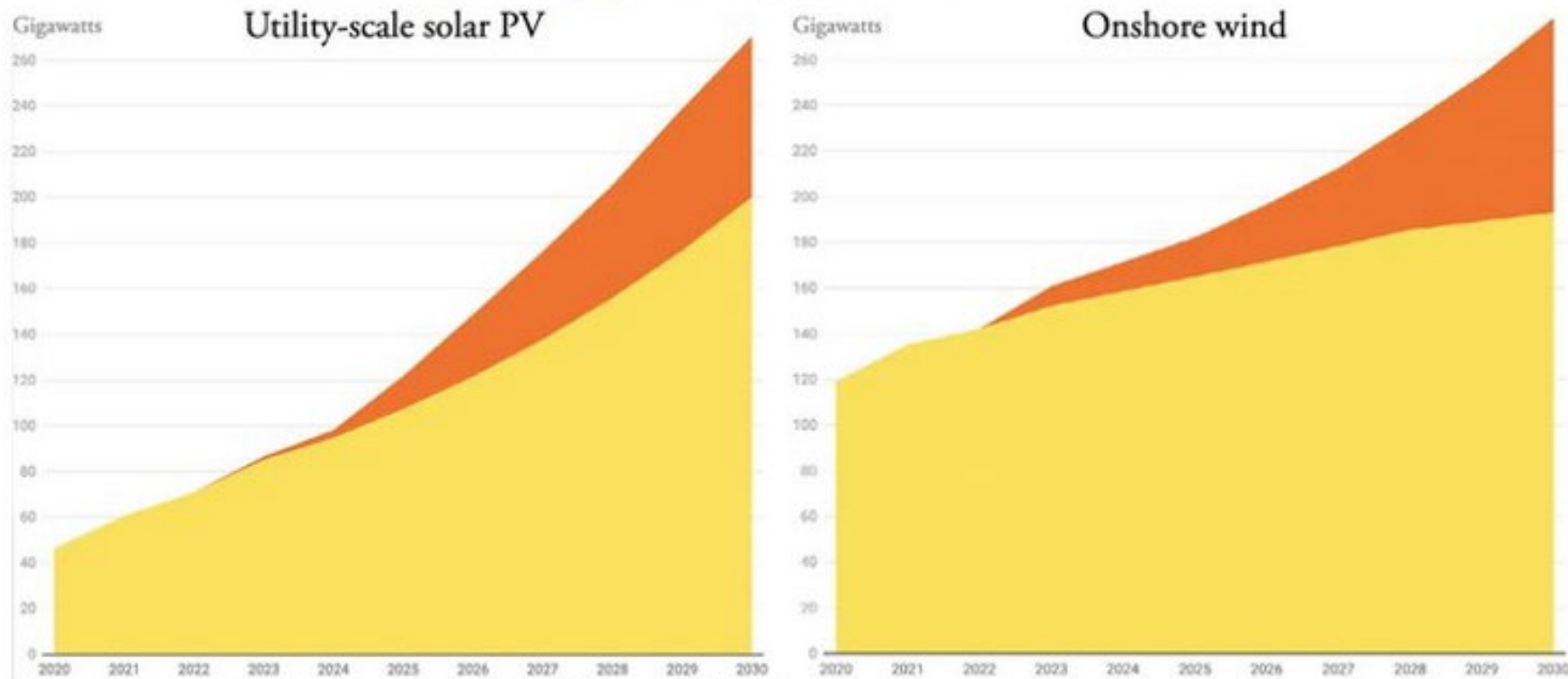
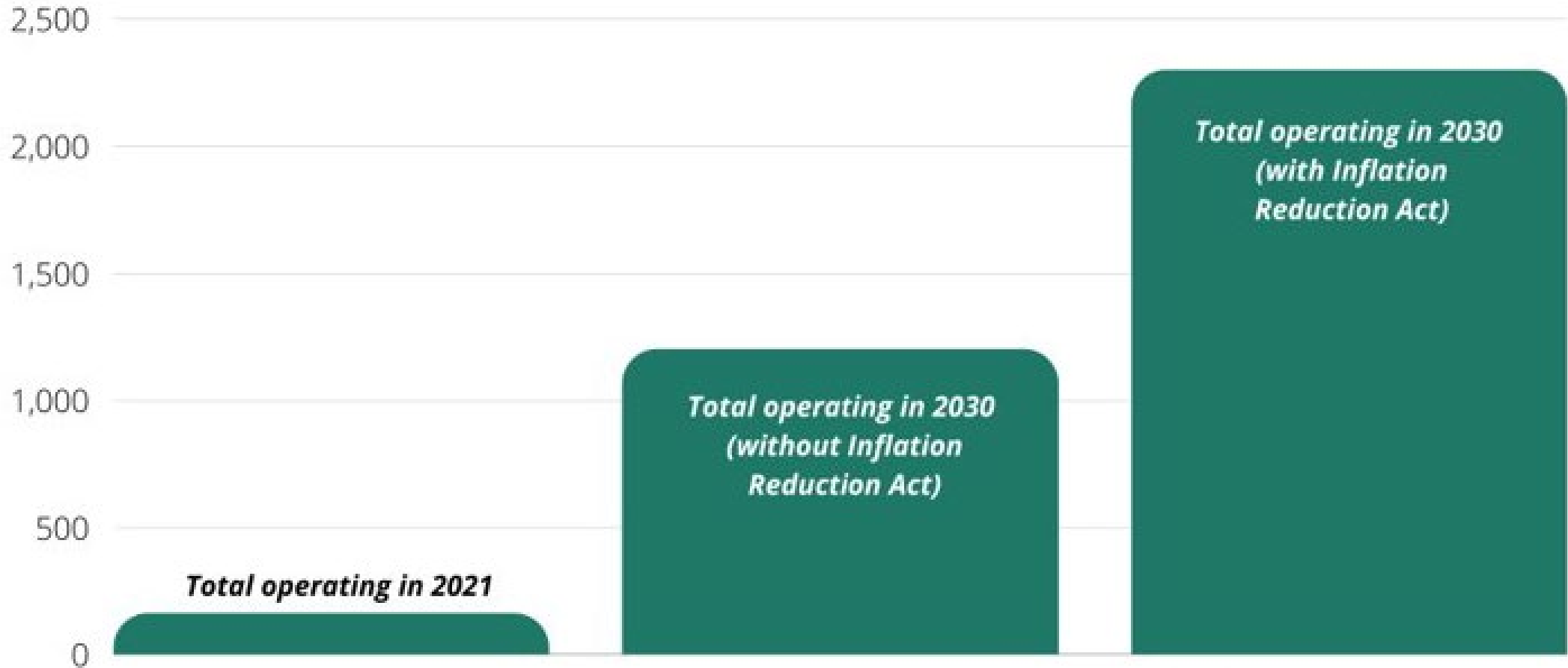


Chart: Canary Media. Source: Rystad Energy's RenewableCube

[https://www.canarymedia.com/articles/clean-energy/chart-how-much-will-solar-and-wind-grow-under-the-new-climate-law?utm\\_campaign=chart-of-the-week&utm\\_source=twitter&utm\\_medium=social&utm\\_content=1661526282](https://www.canarymedia.com/articles/clean-energy/chart-how-much-will-solar-and-wind-grow-under-the-new-climate-law?utm_campaign=chart-of-the-week&utm_source=twitter&utm_medium=social&utm_content=1661526282).



# The IRA Will Double Battery Storage on the Grid



Estimates based on Department of Energy analysis



# Tax Credits

---

- Renewable Energy Production Tax Credit- \$51 billion
- Clean Electricity Investment Tax Credit- \$51 billion
- Low-Income Solar and Wind Investment Tax Credit (funding in the previous two tax credits)
- Clean Electricity Tax Credits Extended to 2032 or possibly 2034
- 30% until 2032, 26% in 2033, 24% in 2034
- Direct Pay for tax-exempt entities (non-profits & municipalities)
- 20% bonus credit if located in low-income community or benefits low-income



# What do we all do now?

---

- At home
- In our cities and towns
- Massachusetts and Rhode Island



# How to Find Out What Applies to You

REWIRING  
AMERICA

YOUR SAVINGS CALCULATOR

## How much money will you get with the Inflation Reduction Act?

Enter your household information to find out.



Zip Code <sup>?</sup>

90210

Homeowner Status <sup>?</sup>

Household Income <sup>?</sup>

\$65,000

Tax Filing <sup>?</sup>

Household Size <sup>?</sup>

<https://www.rewiringamerica.org/app/ira-calculator>





# Cities & Towns

- Start planning now.
- Identify sites, consultants, partners.
- Learn what rules will be for geographic eligibility.



# Rhode Island & Massachusetts

---

- Assign staff NOW to stay current with forthcoming federal rules
- Bring state & local projects up to shovel ready
- Some federal grants will be awarded on competitive basis
- Spending state \$ to promote IRA well will have high return on investment
- Ramp up workforce development to take advantage of higher credits for prevailing wages and apprenticeships



celebrating

40

years



SUPPORT OUR CLIMATE ACTION IN NEW ENGLAND: [GREENENERGYCONSUMERS.ORG/DONATE](https://GREENENERGYCONSUMERS.ORG/DONATE)

# Questions?

---

***Electric Power*** —————→ **Larry Chretien**  
Executive Director  
larry@greenenergyconsumers.org

***Transportation*** —————→ **Anna Vanderspek**  
Electric Vehicle Program Director  
anna@greenenergyconsumers.org

***Buildings & Heating*** —————→ **Loie Hayes**  
Energy Efficiency Coordinator  
loie@greenenergyconsumers.org

