

FUNDING AND POTENTIALLY ELIGIBLE ACTIVITIES UNDER THE INFLATION REDUCTION ACT OF 2022 (THE "CLIMATE BILL")





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Congressional Appropriation of \$370 billion through Inflation Reduction Act of 2022

Two Pathways for the Funding to be Distributed:

#1 - Funding
Directly to Consumers

(At point of purchase or in filing taxes)

#2 - Funding to

Communities via Federal Agency Grants and Loans

(Housing and Urban Development, Dept of Energy, Environmental Protection Agency)





IRA BILL AND TRIBAL NATIONS

"This legislation will result in hundreds of millions of funding available for Tribes, and non-profits that work with tribes and <u>tribal communities</u> to support the clean energy transition for tribal communities, reduce energy costs for tribal members, and create jobs," said Ms. Thomas of Quarles & Brady."

"The IRA will provide a substantial down payment for every tribe to take advantage of clean energy technologies, energy efficiency and energy savings, and climate resilient solutions for their communities and tribal members individually."

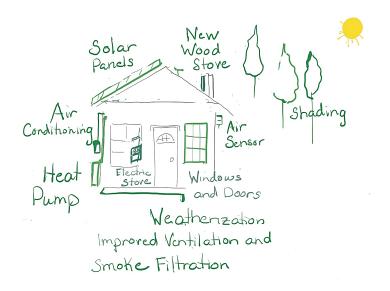
Source:

https://www.natlawreview.com/article/inflation-reduction-act-how-do-tribal-communities-benefit





WHICH IRA GRANT AND TAX CREDIT PROGRAMS WILL HAVE A DIRECT IMPACT ON INDOOR AIR QUALITY AND OCCUPANT HEALTH?







HIGHEST IMPACT IRA PROGRAMS FROM INDOOR AIR AND HEALTHY HOMES PERSPECTIVE

- 1. High-Efficiency Electric Home Rebate Program (HEEHRA)
- 2. Hope for HOMES Rebate Program
- 3. Energy Efficient Home Improvement Credit
- 4. Affordable Housing Resilience and Efficiency Investments
- 5. Environmental & Climate Justice Block Grants
- 6. Greenhouse Gas Reduction Fund
- 7. Climate Pollution Reduction Grants
- 8. Tribal Electrification Program





Funding to Consumers

High-Efficiency Electric Home Rebate Program (HEEHRA)

Up to \$4.5 billion through FY 2031 via Department of Energy

About:

Targets low to moderate income consumers with point-of-sale rebates. Will cover both appliance and installation. For low-income (less than 80% of AMI) 100% of costs covered. For moderate-income (80-150% of AMI), 50% of costs covered.

What's Likely to be Covered:

Heat pump HVAC, heat pump water heater, electric cooktop/stove, heat pump clothes dryer, breaker box, wiring, weatherization.

- A Can fund removal of combustion appliances, such as gas stoves, that emit harmful VOCs and combustion gases.
- A Can provide heat pumps, a cleaner heat alternative or supplement to woodstoves.
- A Heat pumps provide moderately effective filtration of indoor air.
- A Can improve energy efficiency, reducing demand for wood heat.
- A Can provide ventilation upgrades, which when combined with filtration, can improve indoor air quality and occupant comfort.





Funding to Consumers

Hope for HOMES Rebate Program

Up to \$4.3 billion through FY 2031. Includes \$500 million for training credits, via Department of Energy (through state energy offices)



About:

Will provide consumer rebates for comprehensive home energy retrofits. Rebates for retrofits (doubled) for low- and moderate-income households. Can't be combined with other <u>federal</u> rebate programs (such as HEEHRA), but can be combined with tax credits, or with state or utility rebates. (See https://www.dsireusa.org/). <u>Homeowners AND multifamily building owners and aggregators eligible</u>.

What's Likely to be Covered:

Appliances (eg heat pumps, air conditioners, boilers) as well as new roofs, windows, doors and skylights that meet EnergyStar requirements.

- A Lowers consumer cost of heat pumps, a cleaner heat alternative than many woodstoves.
- ↑ Heat pumps provide moderately effective filtration of indoor air.
- ↑ Can improve energy efficiency, reducing demand for wood heat.





Funding to Consumers



Energy Efficient Home Improvement Credit

About:

EnergyStar program provides list of certified products that are eligible. This is an extension and expansion of existing tax credits for homeowners to "green" their homes.

What's Likely to be Covered:

Provides tax credits for a range of energy-saving improvements, such as heat pumps, certain water heaters, air conditioning systems, etc. Provides 30% tax credit for qualified home improvements.

https://www.energystar.gov/about/federal_tax_credits Includes appliances (e.g. heat pumps, air conditioners, boilers) as well as new roofs, windows, doors and skylights that meet EnergyStar requirements.

- A Lowers consumer cost of heat pumps, a cleaner heat alternative or supplement to woodstoves.
- A Can improve energy efficiency, reducing demand for wood heat.
- A Lower cost of air conditioning, which can protect residents from excessive indoor heat during climate-related heat events.





Funding to Communities via Federal Agencies



Affordable Housing Resilience and Efficiency Investments

Up to \$1 billion invested for HUD's multi-family housing programs (owners and operators of Sec 8, Sec 202 and Sec 236)

About:

Housing and Urban Development New grant or loan program to fund energy efficiency, indoor air quality, and work that will increase the climate resilience of affordable housing.

What's Likely to be Covered: TBD





Funding to Communities via Federal Agencies

Environmental & Climate Justice Block Grants

Up to \$3 billion through FY 2026 Environmental Protection Agency



About:

Block grants will be provided to partnerships between Tribes, local governments, universities, non-profits, etc. Eligible projects address environmental harms in low-income and disadvantaged communities.

What's Likely to be Covered:

Air quality monitoring; zero-emission infrastructure; transportation emissions reduction; climate resiliency; pollution prevention; low-and zero-emission energy technologies; indoor air toxics and indoor air pollution; engagement of disadvantaged communities.

- Λ Indoor air monitoring, assessments and inspections can provide key information on indoor pollutant sources and levels.
- A Resident education and outreach can aid in reducing occupant behaviors that contribute to indoor air pollution.
- A Funding may enable direct mitigation of indoor air toxics (i.e., radon, lead, woodsmoke, CO) specific activities are TBD
- A Funding specifically available to upgrade or replace woodstoves.





Environmental & Climate Justice Block Grants, continued

Up to \$3 billion through FY 2026 Environmental Protection Agency

Eligible Activities: "(B) mitigating climate and health risks from urban heat islands, extreme heat, wood heater emissions, and wildfire events; "(D) reducing indoor toxics and indoor air pollution; or

Eligibility: "(A) a partnership between—

- "(i) an Indian tribe, a local government, or an institution of higher education; and
- "(ii) a community-based nonprofit organization;
- "(B) a community-based nonprofit organization; or
- "(C) a partnership of community-based nonprofit organizations.





Funding to Communities via Federal Agencies



Greenhouse Gas Reduction Fund

Up to \$27 billion Green Bank (administered via EPA)

About:

Zero emission technologies available to states, municipalities, tribal governments, and eligible recipients for zero emission technologies. Grants and loans will be also be available (up to \$8 billion for low-income and disadvantaged communities) to deploy or benefit from "zero-emission technologies"

What's Likely to be Covered:

Financing of solar panels, residential energy efficiency projects, electrical vehicles and other. (TBD)

Potential Indoor Air/Healthy Homes Impacts:

A Potential to meaningfully reduce mobile emissions, including key pollutants with adverse health effects (CO, PM, NOx, SO₂, VOCs) and that are found in indoor environments where structures are in close proximity to roadway.





Funding to Communities via Federal Agencies



Climate Pollution Reduction Grants

Up to \$5 billion through FY 2026. Environmental Protection Agency

About:

Principally to <u>states</u>, <u>municipalities</u> or <u>air pollution control agencies</u>. Will also fund projects that reduce GHG pollution sources in <u>low-income and disadvantaged communities</u>.

What's Likely to be Covered:

Greenhouse gas air pollution planning and implementation activities.

Potential Indoor Air/Healthy Homes Impacts:

 Λ Potential to meaningfully reduce ambient air quality through reductions in mobile emissions, including pollutants with adverse health effects (CO, PM, NOx, SO₂, VOCs) that are detected in indoor environments (especially where structures are close to major roadway).





Tribal Electrification Program

Up to \$150 million for tribal home electrification and \$75 million for loans to tribal energy development.

About:

Will fund "transitioning electrified homes" via zero-emissions energy systems.

What's Likely to be Covered:

Will support home repairs and retrofits necessary for the installation of zero-emission equipment. <u>Tribal homes that already have electricity are also eligible for renewable energy installations.</u>

Potential Indoor Air/Healthy Homes Impacts:

A Funding may provide households that rely exclusively on wood heat (i.e., not electrified), with electric heat pumps.





POTENTIAL MITIGATION FUNDING THROUGH THE IRA BY SPECIFIC INDOOR AIR HAZARD





Wildfire Smoke Events:

Mitigation Eligible Under the IRA

INDOOR AIR RISK FACTOR: Smoke often leaks into a home around plumbing, ducting, wiring, and insulation gaps. Indoor smoke concentrations are also elevated when households with limited or no air conditioning must open windows and doors to cool their home. Wildfire smoke is a mix of hazardous particulates, chemicals, and gases, posing risk to pregnant women, children, the elderly, diabetics, those with heart or lung diseases, or a compromised immune system.





Provide **air sealing** to tighten the home, reducing leaks and infiltration (part of weatherization).

Potential IRA sources

High-Efficiency Electric Home Rebate Program (DOE) Hope for HOMES Rebate Program (DOE – via State Energy offices)

Affordable Housing Resilience and Efficiency Investments via HUD – multifamily multi-family housing programs (owners and operators of Sec 8, Sec 202 and Sec 236)



Provide filtration of particulate matter inside the home by installing a **heat pump**

Potential IRA sources:

High-Efficiency Electric Home Rebate Program (DOE) Hope for HOMES Rebate Program (DOE – via State Energy offices)

Affordable Housing Resilience and Efficiency Investments via HUD – multifamily multi-family housing programs (owners and operators of Sec 8, Sec 202 and Sec 236)

Energy Efficiency Home Improvement Credit



Provide filtration of particulates and VOCs with an **air cleaner** – targeting susceptible residents and homes without any other forms of air filtration (i.e. furnace or heat pump).

Potential IRA sources:





Extreme Heat Events: Mitigations Eligible Under the IRA

INDOOR AIR RISK FACTOR: Heat itself poses a health risk, but high indoor temperatures can initiate chemical reactions, increasing a person's exposure to volatile organic compounds (VOCs). Inadequate cooling, as well as rolling blackouts where no cooling is possible, contribute to high indoor temperatures, and in turn to occupant dizziness, fatigue, and even heat stroke. VOC exposure is associated with a range of adverse health outcomes as well.





Install Energy-Star certified **air conditioner** to control heat and humidity

Potential IRA sources

Energy Efficient Home Improve Credit (Energy Star Program)

High-Efficiency Electric Home Rebate Program (DOE)

Hope for HOMES Rebate Program (DOE – via State Energy offices)

Affordable Housing Resilience and Efficiency Investments via HUD – multifamily multi-family housing programs





Provide affordable air cooling through installation of a **heat pump**

Potential IRA sources

High-Efficiency Electric Home Rebate Program (DOE)

Hope for HOMES Rebate Program (DOE – via State Energy offices)

Affordable Housing Resilience and Efficiency Investments via HUD – multifamily multi-family housing programs (owners and operators of Sec 8, Sec 202 and Sec 236)

Energy Efficiency Home Improvement Credit





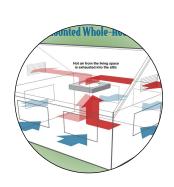
Reduce indoor chemical (VOC) exposures that may occur during high heat with an **air cleaner** – targeting homes with susceptible residents and homes.

Potential IRA sources



Outdoor Sources of Hazardous or Harmful Air Pollution that Infiltrate the Home: Mitigations Eligible Underthe IRA

INDOOR AIR RISK FACTOR: Outdoor air quality reaches unhealthy levels when compromised by climate-related events, including dust and sandstorms, prolonged allergy seasons, elevated Ozone during high heat events, and wildfire smoke events. Homes without limited or inadequate air exchange and air filtration are less equipped to protect their occupants. Homes without sufficient air sealing are less protected from unhealthy air quality conditions, due to leakiness and higher intrusion rates.



Improve ventilation and air exchange through air sealing and ventilation

Potential IRA sources

Energy Efficient Home Improve Credit (Energy Star Program)

 $High-Efficiency\ Electric\ Home\ Rebate\ Program\ (DOE)$

High-Efficiency Home Rebate Program (DOE) - "Non-Appliance Upgrade" Section.

Hope for HOMES Rebate Program (DOE – via State Energy offices)

Affordable Housing Resilience and Efficiency Investments via HUD – multifamily multi-family housing programs



Provide indoor air filtration through installation of a **heat pump**

Potential IRA sources

High-Efficiency Electric Home Rebate Program (DOE)

Hope for HOMES Rebate Program (DOE – via State Energy offices)

Affordable Housing Resilience and Efficiency Investments via HUD – multifamily multi-family housing programs (owners and operators of Sec 8, Sec 202 and Sec 236)

Energy Efficiency Home Improvement Credit



Reduce indoor chemical (VOC) exposures that may occur during air quality events with an **air cleaner** – targeting homes with susceptible residents and homes.

Potential IRA sources





Indoor Sources of Hazardous or Harmful Air Pollution: Mitigations Eligible Under the IRA

INDOOR AIR RISK FACTOR: Some combustion appliances emit hazardous gases such as Carbon Monoxide, Sulfur Dioxide, volatile organic compounds (VOCs), and particulate matter. These may include uncertified or older woodstoves, fireplaces, gas cook stoves, and unmaintained combustion appliances (Toyo stove, propane, or gas furnace). Other indoor air quality hazards include second-hand smoke (tobacco, marijuana or vape), mold spores, or asthma triggers, including allergens from pets, carpets, and household furnishings.



Replace existing stove or fireplace and reduce woodsmoke emissions by installing a certified woodstove or pellet stove

Potential IRA sources

Environmental and Climate Justice Block Grants (EPA)



Remove hazardous combustion gases emitted by gas cooktops by installing an **electric stove**

Potential IRA sources

Energy Efficient Home Improve Credit (Energy Star Program)

High-Efficiency Electric Home Rebate Program (DOE)



Provide indoor air filtration by installing a **heat pump**

Potential IRA sources

High-Efficiency Electric Home Rebate Program (DOE)

Hope for HOMES Rebate Program (DOE – via State Energy offices)

Affordable Housing Resilience and Efficiency Investments via HUD – multifamily multi-family housing programs (owners and operators of Sec 8, Sec 202 and Sec 236)

Energy Efficiency Home Improvement Credit



Lower exposure to smoke, allergens and mold spores by providing an air cleaner

Potential IRA sources





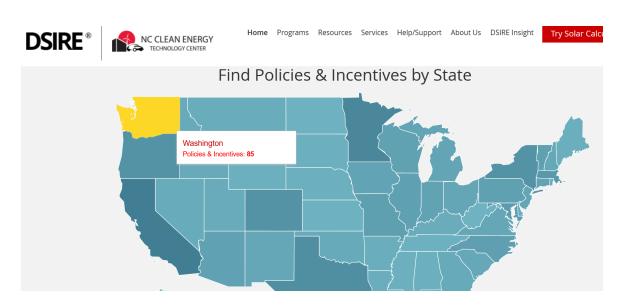
DATABASES FOR FINDING TAX CREDITS, REBATES, INCENTIVES AND A DATBASE FOR TRIBAL-SPECIFIC GRANTS AND LOANS

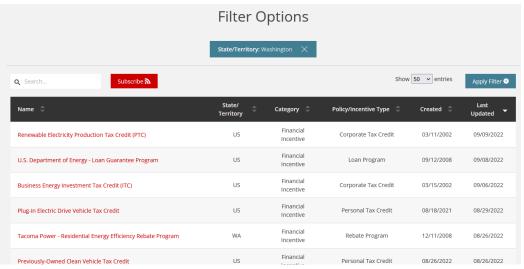




Database of State Incentives for Renewables & Efficiency

https://www.dsireusa.org/









Database of Tribal Healthy Homes Grants and Loans (Tribal Specific but Many Programs have Non-Tribal Corollaries)

https://tribalindoorairfunding.org









BENEFIT CALCULATOR FOR INDIVIDUALS AND HOUSEHOLDS



FULL TEXT OF THE ENTIRE BILL





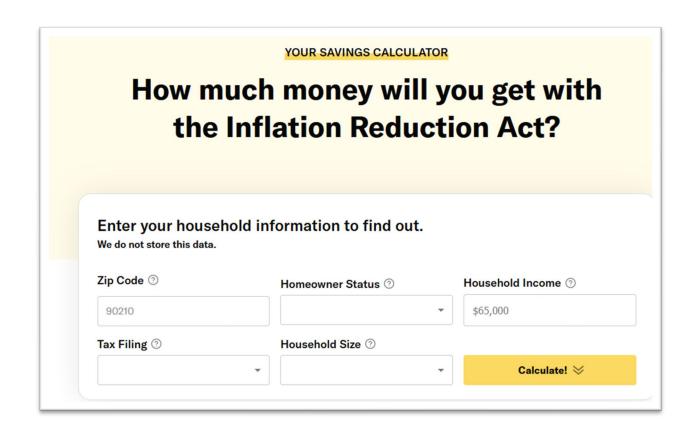


CALCULATE POTENTIAL SAVINGS AND BENEFITS FOR YOU AND YOUR FAMILY

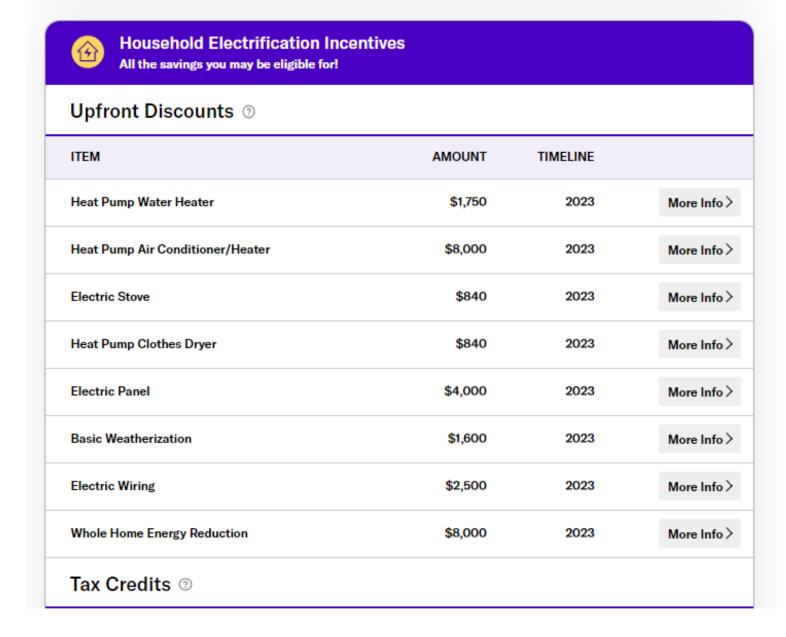
INFLATION REDUCTION ACT OF 2022

Benefits Calculator:

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



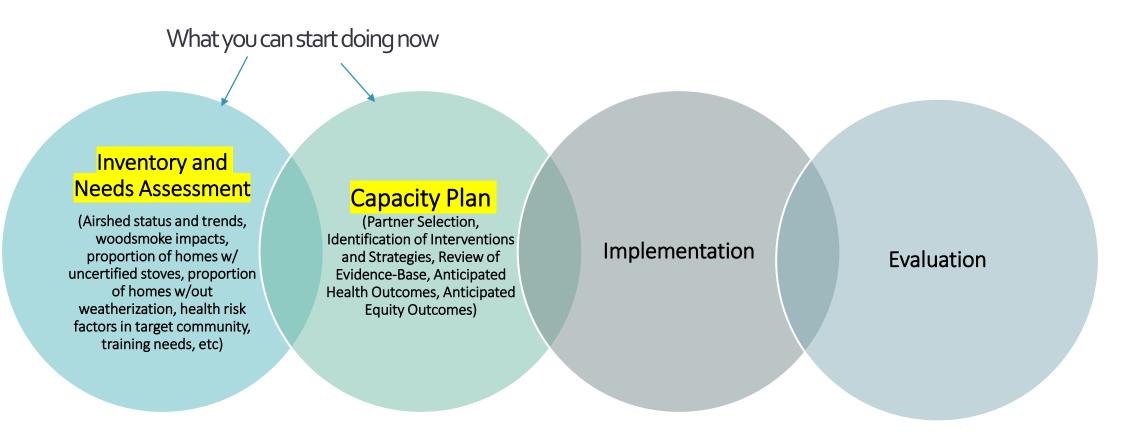
EXAMPLE OF WHAT THE BENEFITS CALCULATOR PROGRAM WILL SHOW YOU



EXAMPLE OF WHAT THE BENEFITS CALCULATOR PROGRAM WILL SHOW YOU

ITEM	AMOUNT	TIMELINE	
Rooftop Solar Installation	30%	Available Now!	More Info
Geothermal Heating Installation	30%	Available Now!	More Info
Battery Storage Installation	30%	2023	More Info
New Electric Vehicle	\$7,500	2023	More Info
Used Electric Vehicle	\$4,000	2023	More Info
Electric Vehicle Charger	\$1,000	2023	More Info
Heat Pump Air Conditioner/Heater	\$2,000	2023	More Info
Heat Pump Water Heater	\$2,000	2023	More Info
Electric Panel	\$600	2023	More Info
Basic Weatherization	\$1,200	2023	More Info

Preparing for IRA Funding



The Tribal Healthy Homes Network can provide free technical assistance and Healthy Homes training to Tribes in Washington, Oregon, Idaho and Alaska, and can help you navigate potential mitigation strategies and interventions for your IRA proposals.

