

# CLIMATE ASPECTS OF THE 2022 INFLATION REDUCTION ACT

This presentation is mostly distilled from [Summary of the Energy Security and Climate Change Investments in the Inflation Reduction Act of 2022 \(senate.gov\)](#) and Rewiring America's guide at <https://www.rewiringamerica.org/IRAguide>.

# INFLATION REDUCTION ACT

- Signed into law on August 16, 2022 by President Joe Biden
- Raises \$737 billion
- Authorizes:
  - \$369 billion in spending on energy and climate change
  - \$300 billion in deficit reduction
  - Three years of Affordable Care Act subsidies
  - Medicare enhancements, including prescription drug price negotiation, caps on costs
  - Tax reform, including 15% corporate minimum tax, excise tax on stock buybacks, additional IRS funding, other

# KEY POINTS

- Some provisions take effect immediately but most do not take effect until Jan. 1, 2023
- Most tax credits will be administered through state governments, and how that will be done has not yet been worked out
- Provides \$4.3B to state energy offices for rebate administration

## BENEFITS OF THE BILL

- Puts U.S. on a path to reduce emissions by 40% by 2030
- Lowers energy costs for individual Americans
- Increases American energy security
- Invests in decarbonizing all sectors of the economy
- Focuses investments into disadvantaged communities
- Supports resilient rural communities

# LOWERING CONSUMER ENERGY COSTS

- \$9 billion in consumer home energy rebate programs, focused on low income consumers, to electrify home appliances and for energy efficient retrofits.
- 10 years of consumer tax credits to make homes energy efficient and run on clean energy, making heat pumps, rooftop solar, electric HVAC and water heaters more affordable.
- \$4,000 consumer tax credit for lower/middle income individuals to buy used clean vehicles, and up to \$7,500 tax credit to buy new clean vehicles.
- \$1 billion grant program to make affordable housing more energy efficient.

# INCREASING AMERICAN ENERGY SECURITY

- Approximately \$30B in production tax credits to accelerate U.S. manufacturing of solar panels, wind turbines, batteries, and critical minerals processing.
- \$10B in investment tax credits to build clean technology manufacturing facilities, like those that make electric vehicles, wind turbines and solar panels
- \$500M in the Defense Production Act for manufacturing heat pumps and processing critical minerals
- \$2B in grants to retool existing auto manufacturing facilities to manufacture clean vehicles, ensuring that auto manufacturing jobs stay in the communities that depend on them.
- Up to \$20B in loans to build new clean vehicle manufacturing facilities across the country.
- \$2B for National Research Labs to accelerate breakthrough energy research.

# DECARBONIZING THE ECONOMY

- Tax credits for clean sources of electricity and energy storage and roughly \$30 billion in targeted grant and loan programs for states and electric utilities to accelerate the transition to clean electricity.
- Tax credits and grants for clean fuels and clean commercial vehicles to reduce emissions from all parts of the transportation sector.
- Grants and tax credits to reduce emissions from industrial manufacturing processes, including almost \$6B for a new Advanced Industrial Facilities Deployment Program to reduce emissions from the largest industrial emitters like chemical, steel and cement plants.
- Over \$9B for Federal procurement of American-made clean technologies to create a stable market for clean products, including \$3 billion for the U.S. Postal Service to purchase zero-emission vehicles.
- \$27B clean energy technology accelerator to support deployment of technologies to reduce emissions, especially in disadvantaged communities

# OFFSHORE WIND, OIL, AND GAS PROVISIONS

- Offshore wind
  - Provides \$100M for planning, modeling, analysis, and development of interregional transmission and optimized integration of energy generated from offshore wind.
  - Lifts the offshore wind moratorium in the southeastern U.S. and Eastern Gulf and allows leasing in the U.S. territories.
  - Requires an oil and gas lease sale of 60 million acres in the prior year for offshore wind lease issuance, for the next 10 years
- Oil and Gas
  - Increases offshore royalty rates and onshore leasing rates substantially for 10 years
- Methane Emissions Reduction Program
  - \$1.5B for EPA to provide incentives to reduce the leaks from the production and distribution of natural gas.
  - Sets limit of 25K metric tons of CO<sub>2</sub> release per facility and penalties for exceeding



# INVESTING IN COMMUNITIES AND ENVIRONMENTAL JUSTICE

- \$3B in block grants for community led projects in disadvantaged communities and community capacity building centers to address disproportionate environmental and public health harms related to pollution and climate change.
- \$3B in grants to support neighborhood equity, safety, and affordable transportation access and support equitable transportation planning and community engagement activities.
- \$3B in grants to reduce air pollution at ports
- \$1 billion to purchase clean heavy-duty vehicles, like school and transit buses and garbage trucks.
- Many of the clean energy tax credits include either a bonus or set-aside structure to drive investments and economic development in disadvantaged communities.

# SUPPORTING RESILIENT RURAL COMMUNITIES

- More than \$20B to support climate-smart agriculture practices.
- \$5B in grants to support healthy, fire resilient forests, forest conservation and urban tree planting.
- Tax credits and grants to support the domestic production of biofuels, and to build the infrastructure needed for sustainable aviation fuel and other biofuels.
- \$2.6B in grants to conserve and restore coastal habitats and protect communities that depend on those habitats.

# CLIMATE-RELATED BUSINESS INCENTIVES

- Extends for 10 years:
  - Investment tax credit (ITC) incentives for emerging and established technologies
  - Production tax credits (PTC) for wind, solar, geothermal, biomass, and certain hydropower projects
- New tax credits for:
  - Clean fuel and energy investments
  - Carbon capture and sequestration
  - Clean hydrogen
  - Advanced energy projects
  - Advanced manufacturing production
  - Zero emission nuclear power production
- Loans for construction of or modifications to transmission lines and facilities
- Tax credits for purchase of clean vehicles
- Deductions for making commercial buildings energy efficient

# CLIMATE-RELATED INDIVIDUAL INCENTIVES

- Clean Vehicles Credits:
  - Up to \$7,500 tax credit for new electrified vehicles, with two components:
    - \$3,750 when a minimum percentage of battery components are of U.S. origin
    - \$3,750 when a minimum percentage of the battery is of U.S. origin
  - \$4,000 for used vehicles or 30 percent of sales price
  - Different maximum vehicle prices and income limits apply for new and used vehicles
  - Applies to vehicles placed in service after Dec. 31, 2022
  - Can sometimes be transferred to dealer to lower purchase price
  - Few current electrified vehicles currently meet requirements

# CLIMATE-RELATED INDIVIDUAL INCENTIVES

- Residential Energy Efficiency Credits:
  - Increases from maximum of 10% to 30% of cost through 2032
  - May include water heaters, heat pumps, central air conditioners, hot water boilers, biomass stoves, oil furnaces, air sealing materials and systems, costs of home energy audits, and electrical panels, and home energy audits
  - Up to \$1,200 annual credit for purchases, except heat pumps and biomass stoves get \$2,000
  - Credit for one item can't exceed \$600
  - Credit for all windows and skylights can't exceed \$600
  - Credit for individual exterior doors can't exceed \$250 and all doors can't exceed \$500
  - Roofs aren't eligible

# CLIMATE-RELATED INDIVIDUAL INCENTIVES

- Energy Efficient Home Improvement Tax Credits:
  - Tax credit for qualified residential energy efficient property purchases (solar, geothermal, wind, etc.)
  - Capped at 30% through 2032, 26% for 2033, 22% for 2034
  - Battery storage with capacity of at least 3 kWh is eligible
- Residential Clean Energy Tax Credits
  - Uncapped 30% tax credit for renewable energy installations, including rooftop solar, battery storage, geothermal heat pumps and some community solar ownership models
- EV Charging Tax Credits
  - 30% tax credit for installing EV home charger

# CLIMATE-RELATED INDIVIDUAL INCENTIVES

- High-Efficiency Electrification Rebates (HEEHRA)
  - Immediate point-of-sale discounts on purchases of up to \$14,000 to enable low- and moderate-income household electrification, including appliances and labor.
  - Must replace non-electric with electric.
  - Covers 100% of costs for low income and 50% for moderate income households.
  - \$8,000 for heat pumps, \$1,750 for heat pump water heaters, and \$840 for electric stoves.
  - Rebates also for improvements to electrical panels, wiring, home insulation, or sealant.

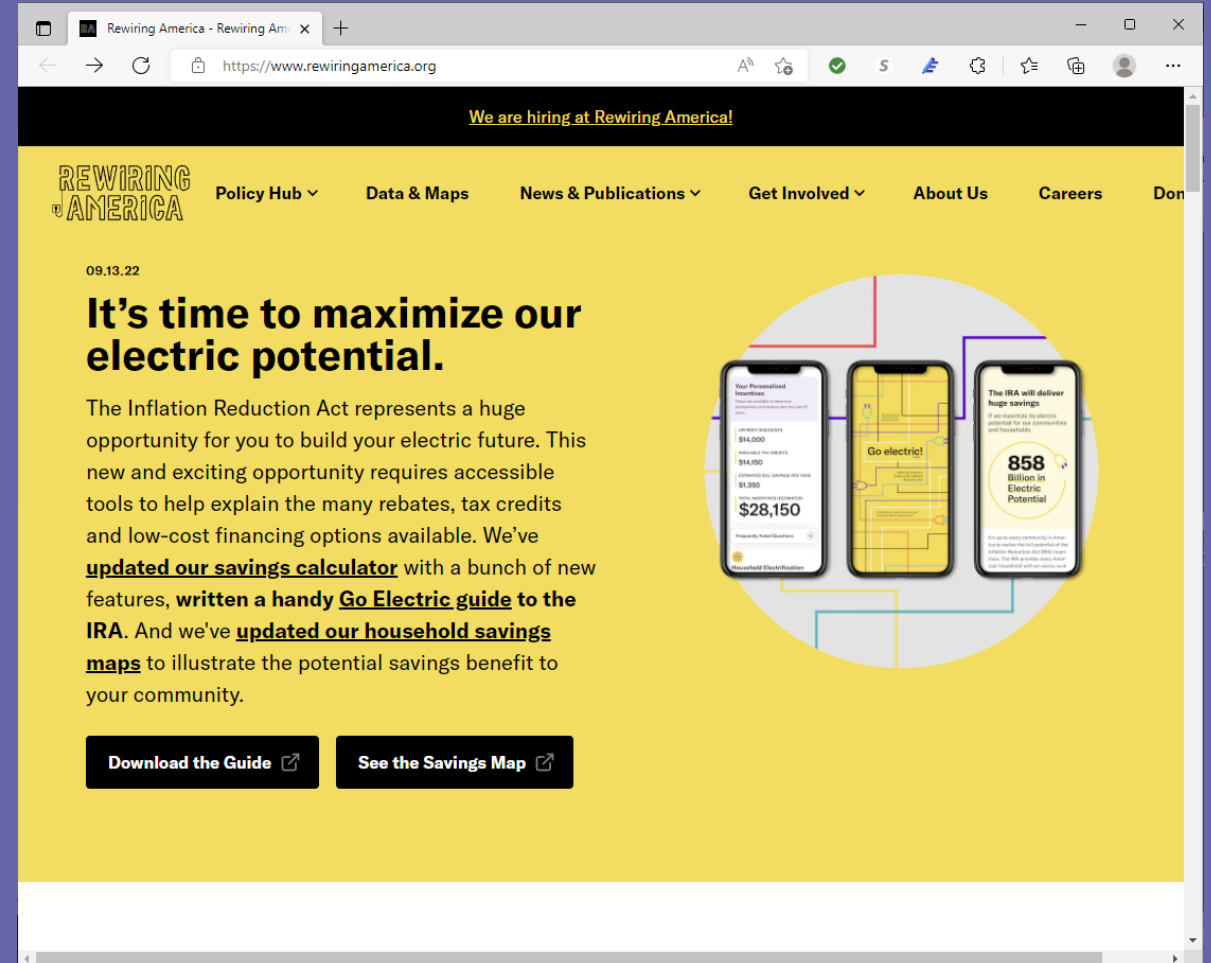
# CLIMATE-RELATED INDIVIDUAL INCENTIVES

- Whole Home Energy Reduction Rebates (Hope For Homes)
  - Retrofits with modeled energy system savings of 35 percent or more: the lesser of \$4,000 or 50 percent of project costs
  - Retrofits with modeled energy system savings of 20-34 percent: the lesser of \$2,000 or 50 percent of project costs
  - Retrofits with measured energy savings of 15 percent or more: a payment rate per kWh saved up to \$2,000 for a 20 percent reduction in energy use
  - Most useful for low- and moderate-income households with electric resistance heating
  - Incentives for low-income households (less than 80 percent of area median income) are doubled, or up to 80 percent of project costs
  - May also be useful for high-income households who do not qualify for HEEHRA discounts



# REWIRING AMERICA

- <https://www.rewiringamerica.org/>
- Estimates families will save an average of \$1,800 per year on their energy bills nationally
- Estimates average household total benefits for Harford County residents of \$12,543, with county-wide total benefits of \$786M
- Downloadable guide
- Calculator page to estimate individual savings based on what you do



The screenshot shows the Rewiring America website with a yellow background. At the top, there is a navigation bar with the logo and links for Policy Hub, Data & Maps, News & Publications, Get Involved, About Us, and Careers. A banner at the top right says "We are hiring at Rewiring America!". The main content area features a date "09.13.22" and a headline "It's time to maximize our electric potential." Below the headline is a paragraph explaining the Inflation Reduction Act and the availability of tools like a savings calculator, a "Go Electric" guide, and household savings maps. To the right of the text is a circular graphic containing three smartphone screens. The first screen shows a "Your Potential Incentives" calculator with values: \$14,500 for potential tax credits, \$14,500 for potential net savings, and a total of \$28,150. The second screen says "Go electric!". The third screen states "The IRA will deliver huge savings" and "858 Billion in Electric Potential". At the bottom of the article, there are two buttons: "Download the Guide" and "See the Savings Map".

# OTHER GOOD SOURCES OF INFORMATION ON BILL

- Bipartisan Policy Center
  - <https://bipartisanpolicy.org/blog/inflation-reduction-act-summary-energy-climate-provisions/>
- Holland and Knight Law
  - <https://www.hklaw.com/-/media/files/insights/publications/2022/08/080822inflationreductionactsummary.pdf?la=en>
- Senate Democrats
  - [https://www.democrats.senate.gov/imo/media/doc/summary\\_of\\_the\\_energy\\_security\\_and\\_climate\\_change\\_investments\\_in\\_the\\_inflation\\_reduction\\_act\\_of\\_2022.pdf?ftag=MSF0951a18](https://www.democrats.senate.gov/imo/media/doc/summary_of_the_energy_security_and_climate_change_investments_in_the_inflation_reduction_act_of_2022.pdf?ftag=MSF0951a18)