Real-World Benefits

of the Inflation Reduction Act's Historic Climate Investments

The Inflation Reduction Act of 2022 includes <u>more than 100</u> programs that will invest about \$369 billion in climate action, clean energy jobs, and environmental justice.¹ Collectively, these unprecedented investments will put us on a path to cutting climate pollution by 40% by 2030 while creating <u>over 9 million family-sustaining jobs</u> over the next decade and advancing racial, economic, and environmental justice. The act also includes funding to track its labor, equity, and environmental standards and impacts to enable oversight and accountability.

Though the Inflation Reduction Act does not get us all the way to President Biden's goal of reducing emissions by half by the end of the decade, and its oil and gas leasing provisions place an unacceptable burden on frontline communities, it <u>marks</u> the single biggest investment in climate action by Congress to date. The Sierra Club will continue to defend against the harmful effects of fossil fuel development and work to ensure environmental justice in every community.

What tangible benefits will families and communities see from these investments? To name just a few examples, the Inflation Reduction Act will:



Clean Transportation

- Replace tens of thousands of diesel heavy-duty vehicles with zero-emission trucks and buses, reducing harmful toxic emissions in communities and ensuring that schoolchildren, transit riders, logistics truck drivers, and port and warehouse workers can breathe cleaner air²
- Lower the purchase cost of new qualifying battery electric vehicles and fuel cell vehicles by up to \$7,500
- Lower the cost for lower- and middle-income households to buy used electric vehicles by up to \$4,000³, which is crucial because consumers are three times more likely to buy used cars than new cars
- Help individuals and businesses install more than 200,000 electric vehicle charging stations⁴ in communities nationwide⁵
- Convert 35% of U.S. Postal Service mail trucks to clean electric vehicles to reduce air and climate pollution⁶
- Help reconnect neighborhoods primarily in Black and Latinx communities that have been divided for decades by highways that reinforce systemic racism and expose residents to harmful pollution⁷



Clean Electricity

- Help the average family save hundreds of dollars annually on utility bills through clean energy, energy efficiency, and electrification incentives⁸
- Expand wind, solar, and battery deployment, bringing lower cost renewable energy to millions of additional homes each year⁹
- Allow nonprofit rural electric and municipally owned utilities, serving nearly one-third of homes, to move away from fossil fuel power like coal and build solar, wind, and storage, lowering electric bills and reducing air and water pollution^{10,11}
- Make it \$7,000 cheaper on average to install solar panels on your rooftop12
- Boost access to renewable energy in low-income and Indigenous communities by covering 40%-50% of the cost of solar, wind, and battery projects¹³
- Make the electric grid more reliable so that communities don't experience disastrous grid failures like the one that killed over 100 people in Texas in 2021 when a cold snap knocked out power for over 4 million homes¹⁴
- Support clean energy,¹⁵ clean transportation,¹⁶ decarbonized buildings,¹⁷ and deployment of grid upgrades,¹⁸ especially in frontline communities



Community Health & Resilience

- Support community-led efforts to monitor and clean up toxic pollution, adapt to climate change, and achieve healthier living standards in neighborhoods that have endured environmental injustice¹⁹
- Boost water supplies for communities, including Tribal communities, experiencing increasing droughts²⁰
- Provide support for coal miners and their families affected by black lung disease through full and permanent funding for the Black Lung Disability Trust Fund²¹
- Ensure workers at qualified solar and wind facilities are paid prevailing wages²²
- Ensure Superfund cleanups have a guaranteed stream of funding by reinstating the Hazardous Substance Superfund financing rate tax rate on oil production²³
- Improve methane monitoring, fund environmental restoration, and help communities reduce the health effects of pollution and increase their climate resilience through a Methane Emissions Reduction Program²⁴



Lands & Wildlife Protection

- Protect forests for people to enjoy, for ecosystems to thrive, and for a more livable climate²⁵
- Block the funding of temporary or new roads in wilderness areas
- Cultivate urban green spaces to protect children and communities from extreme temperatures²⁶
- Protect wetlands that shield coastal communities from hurricanes and storms²⁷
- Create recovery plans to protect threatened and endangered species, battle invasive species, and restore habitat²⁴
- Make critical reforms to the oil and gas industry that advance taxpayer fairness and hold the industry accountable²⁸



Healthy Buildings

- Enable working- and middle-class families to save up to \$8,000 while weatherizing their homes to reduce utility bills and pollution²⁹
- Make it as much as \$14,000 cheaper to convert your home from fossil fuel-based appliances to electricity-based appliances — including heating and cooling — to slash air and climate pollution while reducing home energy costs³⁰
- Upgrade living conditions for more than 12,000 people who live in affordable housing,³¹ while creating nearly 10,000 jobs³²
- Develop zero-emissions energy systems in homes on Tribal lands through the Tribal Electrification Program³³



Clean Manufacturing

- Create more than 900,000 jobs over the next 10 years by helping to establish and retool factories to manufacture electric vehicles, wind turbines, solar panels, and other clean energy goods³⁴
- Reduce toxic air and climate pollution from factories that produce steel, cement, and other highly polluting industrial products³⁵



Sustainable Agriculture

- Enable nearly 37,000 farmers to switch to renewable energy and machinery that uses less energy³⁶
- Support the efforts of more than 200,000 farmers to protect healthy soil so as to increase harvests, reduce the impacts of droughts, and trap more climate pollution;³⁷ and support 380,000 jobs³⁸



Endnotes

- 1 Generally, tax credits have no limit on the investment tool they could potentially reach. Actual government expenditure could eclipse initial cost and investment estimates.
- 2 Sections 60101 and 60102 of the Inflation Reduction Act.
- 3 Sections 13401 and 13402 of the Inflation Reduction Act.
- 4 According to the DOE, the <u>average cost</u> for a public, Level 2 charger is about \$7,556. Given the JTC score of \$1.738 billion for the charging tax credit, it would enable over 200,000 chargers.
- 5 Section 13404 of the Inflation Reduction Act.
- 6 Section 70002 of the Inflation Reduction Act includes \$3 billion to electrify the U.S. Postal Service (USPS) vehicles (Section 70002). Based on an estimate from USPS that a \$6 billion investment would be sufficient to electrify 70% of its mail delivery vehicles, \$3 billion should allow USPS to electrify half that or 35% of its fleet.
- 7 Section 60501 in the Inflation Reduction Act.
- 8 For example, Resources for the Future estimates that the Inflation Reduction Act will reduce retail electricity costs by 5.2% to 6.7%, which means the average household could save between \$170 and \$220 per year on their electricity bills. Some provisions that support these savings include, Sections 30002, 13302, 13304, 13101, 13103 of the Inflation Reduction Act. Households may also experience savings through electrification (e.g., converting gas appliances to electric), which could reduce or eliminate gas utility bills. Sections 50121 and 50122 of the Inflation Reduction Act.
- 9 Sections 13103,13701, 13702, 50153 of the Inflation Reduction Act.
- 10 Section 13801 of the Inflation Reduction Act, providing "elective payments" (i.e. direct pay) of clean energy tax credits.
- 11 Section 22004 of the Inflation Reduction Act
- 12 Section 13302 of the Inflation Reduction Act offers a 30% refundable tax credit to homeowners for the installation of rooftop solar and other clean electricity equipment (Section 13101). The median cost of a residential solar photovoltaic system is currently nearly.25,000. This tax credit would reduce that cost by more than \$7,400.
- 13 Sections 13103, 13702 of the Inflation Reduction Act (10% bonus credit (40% total) for solar, wind, and battery projects serving low-income communities and 20% bonus credit (50% total) for such projects serving affordable housing.)
- 14 Sections 50151, 50152, and 50153 of the Inflation Reduction Act. See here and here for more information on the Texas power failure.
- 15 Section 13103 of the Inflation Reduction Act.
- 16 Section 60102 of the Inflation Reduction Act.
- 17 Section 30002 of the Inflation Reduction Act.
- 18 Sections 50152 and 50153 of the Inflation Reduction Act.
- **19** Sections 60104, 60105, 60106, 60114, and 60201 of the Inflation Reduction Act.
- **20** Sections 50231, 50232, and 80004 of the Inflation Reduction Act.
- 21 Section 13901 of the Inflation Reduction Act.
- 22 Sections 13101 and 13102 of the Inflation Reduction Act.
- 23 Section 13601 of the Inflation Reduction Act.
- 24 Section 60113 of the Inflation Reduction Act.

- 25 Sections 23001, 23003 and 50221 (among others) of the Inflation Reduction Act
- 26 Section 20003 of the Inflation Reduction Act
- 27 Section 40001 of the Inflation Reduction Act 24 Sections 60301 and 60302 of the Inflation Reduction Act
- 28 Sections 50261, 50252, and 50263 of the Inflation Reduction Act
- 29 Sections 50121 of the Inflation Reduction Act
- 30 Section 50122 of the Inflation Reduction Act
- 31 The Inflation Reduction Act includes \$1 billion for affordable housing improvements (Section 30002), including upgrades to boost energy and water efficiency and climate resilience. A report by the McHarg Center and Data for Progress estimates that upgrading the nation's entire public housing stock would cost between \$119 billion and \$172 billion. Using the midrange estimate of \$146 billion, the Inflation Reduction Act will upgrade about 0.7% of the nation's public housing units. With 1.8 million people living in public housing nationwide, that investment suggests benefits for about 12,000 public housing residents.
- **32** The BlueGreen Alliance estimates that the Inflation Reduction Act will create over 10,000 jobs in retrofitting and efficiency upgrades.
- 33 Section 80003 of the Inflation Reduction Act
- 34 The Inflation Reduction Act includes more than \$42 billion in tax credits, grants, and loans for firms to manufacture electric vehicles, solar and wind components, battery storage, and other clean energy goods (Sections 13501, 13502, 50142, 50143, 30001) It also includes nearly \$5.5 billion to support government procurement of clean materials (Sections 60112, 60116, 60503, 60504, 60506, 70006), \$5.8 billion in incentives for industrial transformation to reduce pollution (Section 50161), and \$13 billion in incentives for clean hydrogen (Section 13204). Based on recent economic modeling from the University of Massachusetts Amherst, the BlueGreen Alliance estimates that IRA's investments in clean manufacturing will create 900,000 jobs over the next ten years.
- **35** Section 50161 (among others) of the Inflation Reduction Act
- 36 The Inflation Reduction Act includes \$1.177 billion for the Rural Energy for America Program (REAP), which offers grants and loans to farmers and rural small businesses for renewable energy and energy efficiency projects (Section 22002). In fiscal year 2020, 1,586 farmers and rural small businesses received over \$51 million in grants under REAP, yielding an average grant size of over \$32,000. Using the same average, the Inflation Reduction Act's more than \$1 billion for REAP would yield nearly 37,000 grants and loans.
- 37 The Inflation Reduction Act includes \$21.15 billion for agricultural conservation investments (Section 21001 and 21002), including programs that prioritize funding for disadvantaged farmers. In October 2021, the White House estimated that similar levels of investment in the Build Back Better Act (\$22.3 billion; Section 15002)) "could reach roughly 130 million cropland acres per year, representing as many as 240,000 farms."
- **38** Based on modeling by the University of Massachusetts Amherst, the BlueGreen Alliance <u>estimates</u> that investments in regenerative farming will create 380,000 jobs.