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Clean energy investments are the antidote to inflation

A household savings memo from Rewiring America

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- Congressional energy investments will empower American families to electrify their homes and save money on their energy bills, all while combating inflation, foreign energy dependence and climate change.
- Since Putin's invasion of Ukraine, 41 percent of overall inflation is directly attributable to skyrocketing fossil fuel prices. Investments in electrification will free American households from spiraling fossil fuel costs and pump the brakes on inflation.
- If households had electrified a year ago under Congress's potential energy provisions, they would have saved \$970 in energy bills, and \$1,350 if they had also installed solar panels.² If current prices hold over the next year, these savings will grow to \$1,420 and \$1,840, respectively.
- Congressional action will reduce the three billion barrels of oil required each
 year for household heating and transportation. Each avoided barrel of oil
 bolsters American energy security and insulates us from the whims of tyrants
 abroad.

¹ The fossil fuels used in this calculation are fuel oil, gasoline, and natural gas. The calculation reflects inflation from February to June 2022. In addition to the 41 percent of inflation directly attributable to fossil fuel price increases, further inflation is attributable to price increases in other consumer goods caused by high fossil fuel prices.

² These estimated savings from electrification include a heat pump for space heating, a heat pump water heater, and one electric vehicle. They also assume financed payments against the up-front cost difference between fossil and electric options, and the incentives contained in Congress's potential energy package.



What's at stake

Congress is currently negotiating a historic investment package that will fight inflation, cut families' energy bills, ensure U.S. energy security and create millions of new good-paying jobs. The first half of 2022 has shown us how critical these investments are: Putin's invasion of Ukraine sent energy prices skyrocketing, proving once again that fossil fuels drive inflation, tax our pocketbooks and entrench American reliance on foreign petrostates.

The longer we wait to invest in American clean energy security, the more pain American families and households will endure. Today, Congress has the chance to give Americans the relief they desperately need.

Congressional action to incentivize electrification and clean electricity is a win-win-win for America.

- 1. Electrification combats inflation and delivers savings to American households.
- 2. Electrification reduces energy burdens and protects households from energy bill volatility.
- 3. Electrification advances American energy security and resiliency.

It is precisely by delivering kitchen table savings to all Americans—particularly to those who need it most—that this climate package will deliver the aforementioned benefits and enable us to make essential progress on our climate goals. Right now, 42 percent of U.S. energy-related pollution comes from our homes and the machines we use every day: the cars we drive, how we heat and cool our homes, how we heat our water, dry our clothes and cook our meals.³ We stand no chance of meeting President Biden's climate targets unless we electrify everything.

Congress is currently negotiating energy investments—including consumer rebates, tax credits and low-cost financing—that will reduce the upfront costs of electric

³ See *Bringing Infrastructure Home Report*, Rewiring America, 2020.

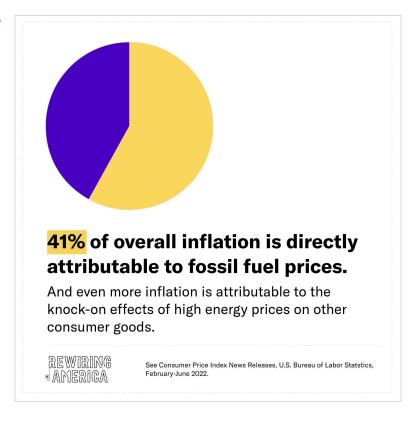


appliances and enable electrification.⁴ Households will soon be empowered to electrify their homes and save money on their bills, all while combating inflation, climate change and foreign energy dependence. There's no time to waste.

The right policies for big benefits

A Congressional energy package will put American households and communities at the center of U.S. strategy and policy—right where they should be.

Consumer-facing point-of-sale rebates, tax credits and flexible, low-cost financing will make electric technologies accessible to more Americans, while greater investments in low- and moderate-income families and disadvantaged communities will ensure that electrification serves those who need it most. 5 These clean energy provisions will



enable all American households to reap the extraordinary benefits of electrification.

⁴ In some cases, the up-front cost of electric appliances is already cheaper than the cost of new fossil fuel appliances. The up-front construction costs of new all-electric single-family homes are \$7,500-\$8,200 cheaper than baseline code homes. See Cost Study of the Building Decarbonization Code, Denniston et al., New Building Institute, 2022. In existing homes, the up-front cost of electric heat pumps may be cheaper than fossil fuel replacements when homeowners are looking to replace their entire HVAC system (i.e., heating and cooling, or a furnace and an air conditioner).

⁵ A significant portion of benefits should accrue to disadvantaged communities that have been marginalized, underserved and overburdened by pollution, per President Biden's Justice40 Initiative and Executive Order. See *Justice40*, The White House, 2022.



Electrification combats fossil fuel inflation

As American households reel from high energy costs, electrification provides both an immediate and a long-term anti-inflationary solution. Since Putin's invasion of Ukraine, 41 percent of overall inflation is directly attributable to skyrocketing fossil fuel prices—and even more inflation is attributable to the knock-on effects of high energy prices on other consumer goods.⁶ Oil and gas have been especially volatile, increasing in price four to eight times faster than electricity.⁷ And this isn't just a current phenomenon: historically, gasoline is four times more volatile than electricity, and natural gas is twice as volatile.⁸

Congressional action to catalyze electrification will rescue American families from the crushing costs of fossil fuels by providing an affordable, long-term and price-stable alternative. Electricity is anti-inflationary by nature: the market is local (not subject to foreign influence), regulated (not subject to price-gouging corporations and cartels) and predictable (not subject to supply shocks). In short, electrification will provide the energy bill stability American households deserve.

Electrification lowers energy bills, delivering structural relief to disadvantaged communities and all Americans

Electrification delivers real savings. If households had electrified a year ago under Congress's potential energy provisions, they would have saved \$970 in energy bills, and \$1,350 if they had also installed solar panels. If current prices hold over the next year, these savings will grow to \$1,420 and \$1,840, respectively. Lower energy bills deliver much-needed relief to American families, especially those who are struggling to afford their energy bills. When energy prices rise, disadvantaged communities with less disposable income are more likely to become energy

⁶ See <u>Consumer Price Index News Releases</u>, U.S. Bureau of Labor Statistics, February-June 2022.

⁷ See *Fossil Fuels Are A Big Driver Of Inflation*, Maria Virginia Olano, Canary Media, 2022.

⁸ See <u>Energy Price Stability: The Peril Of Fossil Fuels And The Promise Of Renewables</u>, Lauren Melodia and Kristina Karlsson, Roosevelt Institute, 2022.



insecure. Black households are twice as likely to suffer from energy insecurity,⁹ and low-income households face energy burdens¹⁰ three times higher than non-low-income households.¹¹ High energy burdens subsequently increase the risk of utility shutoffs and homelessness.¹²

	ı had electrifed a year ago, have saved	\$970
	ı had electrifed a year ago solar, you'd have saved	\$1,350
	ı electrify today, at current s, you'll save	\$1,420
_	electrify today with solar, rrent prices, you'll save	\$1,840
REWIRING AMERICA	The estimated yearly savings from electrification include a heat pump for spa and one electric vehicle. They also include financed payments against the up electric options, and the incentives contained in Congress's potential energy	-front cost difference between fossil an

This is exactly why
Congressional action to
lower the up-front cost of
electrification is so
important: it will
empower American
families to electrify their
households, unlocking
energy bill savings for
those who need it most.

And these savings are structural: once a home is fully electrified, it is insulated from long-term fossil fuel volatility and bill spikes. Electrification's economic relief is complemented by its health benefits¹³—and the associated decrease in healthcare costs.¹⁴

⁹ See <u>Energy Price Stability: The Peril Of Fossil Fuels And The Promise Of Renewables</u>, Lauren Melodia and Kristina Karlsson, Roosevelt Institute, 2022.

¹⁰ Energy burden is defined as the percentage of gross household income spent on energy costs.

¹¹ See <u>How High Are Household Energy Burdens?</u>, Drehobl et al., American Council for an Energy-Efficient Economy, 2020.

¹² See *Lifting The High Energy Burden In America's Largest Cities*, Ariel Drehobl and Lauren Ross, American Council for an Energy-Efficient Economy, 2016.

¹³ For example, an electric stove can reduce a child's risk of asthma symptoms by 40 percent. See <u>Health Effects from Gas Stove Pollution</u>, Brady Anne Seals and Andee Krasner, RMI, Mothers Out Front, Sierra Club, and Physicians for Social Responsibility, 2020. The health benefits of electrification are greatest within disadvantaged communities, who currently suffer most from pollution and dangerously low air quality.

¹⁴ Health costs from particulate matter air pollution—the result of fossil fuel combustion—alone reached \$820 billion in 2020. See <u>The Costs of Inaction: The Economic Burden of Fossil Fuels and Climate Change on Health in the United States</u>, Donald De Alwis and Dr. Vijay S. Limaye, Medical Society Consortium on Climate & Health and NRDC, 2021. As with health benefits, the potential decrease in healthcare costs is greatest within disadvantaged communities.



Electrification boosts U.S. energy security and resiliency

American dependence on fossil fuels imperils not just our pocketbooks but also the country as a whole. Fossil fuel dependence has hamstrung America's economy, making it harder for U.S. businesses to compete on the world stage.

Fossil fuel dependence also entrenches our reliance on

3 Billion

The United States uses three billion barrels of oil per year for household heating and transportation.

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See Fuel Oil and Kerosene Sales 2020, U.S. Energy Information Administration, 2022 and Gasoline Explained, U.S. Energy Information Administration, 2022.

petrostate autocrats and compromises our national security. The United States uses three billion barrels of oil each year for household heating and transportation, 15 with each barrel subject to the whims of the global fuel market and the tyrants who control it. Reducing our dependence on fossil fuels—in addition to building out strong domestic manufacturing—will free the United States from foreign influence and create an export market that supports our allies.

Electrification will create millions of jobs, further strengthening the American economy and American world standing. Research shows that electrification will generate over 450,000 installation jobs that are necessarily local and cannot be automated or offshored, in addition to creating 80,000 to 100,000 manufacturing jobs and 800,000 indirect and induced jobs. ¹⁶

A Congressional energy package will also represent a crucial step towards meeting our climate goals, which will mitigate the destructive impacts of climate change and safeguard America's long-term climate resilience.

¹⁵ See *Fuel Oil and Kerosene Sales 2020*, U.S. Energy Information Administration, 2022 and *Gasoline Explained*, U.S. Energy Information Administration, 2022.

¹⁶ See *Mobilizing for a Zero Carbon America: Jobs, Jobs, Jobs, and More Jobs*, Griffith et al., Rewiring America, 2020.