How will the Inflation Reduction Act affect US environmental policy?

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Funds in the Inflation Reduction Act targeted for energy security and climate change reduction will encourage a major transformation in the U.S. renewable energy infrastructure, says Don Fullerton, the Gutgsell Professor of Finance at the Gies College of Business at the University of Illinois Urbana-Champaign and a senior scholar at the Institute of Government and Public Affairs. Credit: L. Brian Stauffer

Don Fullerton is the Gutgsell Professor of Finance at the Gies College of Business at the University of Illinois Urbana-Champaign and a senior scholar at the Institute of Government and Public Affairs. Fullerton, an expert in energy and environmental policy, spoke with News Bureau business and law editor Phil Ciciora about the environmental impact of the Inflation Reduction Act of 2022.

The $369 billion in the Inflation Reduction Act for energy security and climate change reduction represents a serious investment by the Biden administration in climate policy. What is its potential impact?

This law will provide direct household rebates to purchase energy-efficient appliances, plus up to $7,500 in tax credits to purchase electric vehicles, and many other climate protection investments. The government estimates it will create millions of green jobs in the clean energy sector. That estimate, of course, doesn't count the jobs that might be lost over the long run in the fossil fuel sector, so the net change in jobs is probably small.

But the law does extend and encourage a major transformation of energy in the U.S. that is already underway—attributable to the huge gradual technological progress that already has been reducing the cost of solar power, wind power and other renewables. It encourages progress on the all-important batteries necessary to store the power generated during sunny days and windy periods, and to make it available when people use electricity in the evening and less-windy times.

By spending $369 billion on greenhouse gas-reduction investments, the Inflation Reduction Act can help the U.S. set an example for the rest of the world, especially when so many other countries look to the U.S. for the leadership necessary to get 200 nations on board to reduce this global climate crisis. Addressing global climate change will require efforts by all nations, and this new law might help achieve more worldwide greenhouse gas abatement than just in the U.S.

Does the legislation put the U.S. on track to meet its Paris Agreement commitments and reestablish its credibility as a global leader on climate change policy?

Under the 2015 Paris Agreement, the U.S. promised by 2025 to cut 25% of its greenhouse gas emissions compared with 2005 levels. That description makes the commitment sound dramatic, but 2005 was a boom year before the Great Recession, so economic activity and emissions were high. Emissions fell, and then increased by smaller amounts because of other changes like cheaper natural gas, which replaced coal-fired power plants, and cheaper renewables like solar and wind power.

The U.S. was on track to meet its Paris commitment until June 2017, when President Trump announced that the U.S. would withdraw from the accord. President Biden has recommitted to the Paris accord, and his administration has taken three major steps toward meeting that commitment of 25% reduction by 2025: the Bipartisan Infrastructure Law of 2021, the Inflation Reduction Act of 2022 and continued executive branch actions to strengthen standards that drive energy efficiency and pollution reduction.

But the Biden administration's claim that this new law will reduce emissions by 40% by 2030 is probably an overstatement. They really mean that this new law and all other changes happening within the U.S. lead them to expect total emissions to fall by 40% from the highs experienced in 2005.

What will the Inflation Reduction Act mean for the average U.S. citizen?

The legislation has government rebates for energy-efficient heat pumps, electric water heaters and electric cooktops. Homeowners also can receive a 30% credit for installing solar panels. It has a $7,500 credit for buying a new electric vehicle next year, and a $4,000 credit for buying a used electric vehicle. But many of these credits phase down at higher income levels, so they provide the most help to low-income families. At the same time, some of the credits are extremely complicated.

They are complicated because the Biden administration wants to limit China's power over U.S. markets, so the law helps to build domestic supply chains. For example, the law limits credits to electric vehicles based on the percentage of the vehicle's components actually made in the U.S. Ultimately, that means manufacturers will have to change their entire procurement process to increase their customers' eligibility for these new credits.

Economists have been pushing the idea of a carbon tax on emissions for years. Some countries and U.S. states have already adopted such taxes, but this new climate initiative goes in a completely different policy direction. Why is that?

The theory is certainly correct that a carbon tax would minimize the cost of any given amount of pollution reduction. It would provide incentives for any household to reduce electricity and gasoline consumption in the easiest and cheapest way for them, and it would also encourage firms to research new methods of reducing emissions in a cost-efficient manner.

But two problems prevented achieving those economic benefits. The first problem is political, since nobody likes the idea of a new tax or of raising prices for consumers. Instead, this new law provides credits and subsidies to consumers—a much more palatable political solution. Of course, those subsidies will eventually require the government to raise other taxes to pay for them, but future costs are politically easier to ignore.

The second problem is that carbon pricing requires time to work. It would've worked just fine if the U.S. started carbon pricing three or more decades ago, when scientists first pointed out this looming climate crisis. But political expediency meant ignoring the climate problem for so many years that we can no longer afford a gradual approach.

The new law makes climate investments more quickly, which now might be the best approach.

Provided by University of Illinois at Urbana-Champaign

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