

Climate Change 5: Finally, Congressional Action!

In the early summer of 2022, it became clear that the Build Back Better (BBB) plan could not be passed due to opposition from Senators Manchin and Sinema, and the prospect for any legislation about climate change this year looked very bleak. But then the Inflation Reduction Act (IRA) was proposed by Manchin and Schumer, and was soon passed by both houses of Congress (but with no Republican votes in either House).

The IRA is not as comprehensive as the BBB plan, but it is the strongest climate bill ever passed in the U.S. It provides strong support for clean energy production over this decade, strong incentives for both individuals and for industry, and perhaps most importantly shows that the U.S. is seriously committed in the fight against climate change.

President Biden's stated goal (and the target of the original BBB plan) was to reduce U.S. CO₂ emissions by 2030 to 50% of their 2005 levels¹. Before the IRA, we were on track to achieve only a 27% reduction by that date. The IRA is expected to increase that to 42%. This is not enough to fully meet the U.S. commitments, and certainly not enough to keep global temperature increases below 2°C, but it is a major step forward.

The IRA is more than just a climate bill; it is a package that addresses 3 important areas:

1. It requires billion-dollar corporations to pay at least 15% federal income tax, and strengthens the IRS to crack down on wealthy and corporate tax cheats;
2. It finally authorizes Medicare to negotiate lower prescription drug costs, places a cap on seniors' out-of-pocket drug costs (including insulin), and lowers health insurance premiums for 13 million people who get insurance through the ACA;
3. It provides strong support for clean energy production, with strong tax incentives to help working people afford electric vehicles (EVs), carbon-free water heaters and furnaces, and home energy improvements.

The Congressional Budget office released a final accounting² of the bill on September 7, finding that it will reduce the federal deficit by \$238B over a decade. It does this by providing \$738B of new funds (mainly from item #1 above), and spending \$108B in reducing health care costs and providing \$391B for energy and climate concerns.

The funding for energy and climate concerns is the part that we are most concerned with here. It will provide:

1. Tax incentives of up to \$7,500 for the purchase of a new electric vehicle (EV), with important (and complicated) restrictions described below;
2. Tax incentives of 30% for the purchase of electric furnaces and water heaters, solar panels, and energy-saving home improvements³;
3. Incentives to American industries to reduce sticker price of EVs, to increase the production of EV's within the U.S., and to increase production of batteries needed for these, as described below.

To ensure that these incentives benefit the average American, rather than the very wealthy, the EV incentives are only available for individuals with an annual income of less than \$150K, or families with an income of less than \$300K. In order to encourage development of U.S. manufacturing, this is also restricted to EV's that cost less than \$55K, which are assembled in North America, and whose batteries contain a significant component of U.S. manufacture. More details are given in reference 4. The precise implementation of these requirements, and which EV models will be accepted, will be determined by the IRS, presumably later this year.

Tesla and GM have already exceeded the existing 200,000 limit on existing incentives, and will not be eligible for the new incentives for the remainder of 2022 – BUT this limit expires on January 1, 2023, and for the next 10 years there will be no limits on the number of sales qualifying for these incentives. For more information, see references 5 and 6.

Although there are also negative elements associated with the bill which might encourage expanded fossil fuel exploration⁷, the passage of the IRA is a major step in the fight against climate change. It has certainly put the U.S. back into a leadership position, and brings us significantly closer to meeting Biden's pledge of a 50% reduction in CO2 levels by 2030 and carbon neutrality by 2050. It is expected to have a significant effect on the actions of other countries with respect to climate change.

There have been a number of other very positive recent developments in the fight against climate change. The Bipartisan Infrastructure Act and the CHIPS and Science Act, passed earlier this year, will provide support for essential improvements in our electric grid, science, R&D, and American manufacturing capabilities. California and Washington have committed to phasing out non-EV new car sales by 2035 and 2030 respectively, and many other states are expected to follow suit. Twenty-one states have now made commitments for 100% green energy production by or before 2050. The Biden Administration has announced a Federal-State Offshore Wind Partnership with 11 east-coast states. The addition of the Inflation Reduction Act to this list makes 2022 a very good year for the fight against climate change.

If public awareness of the urgency of our situation continues to grow, and if Democrats retain control of both Houses of Congress, there is real hope that we can continue to build on these successes and possibly keep the global temperature increase below 2°C.

Footnotes:

1. [Goals of the Build Back Better Plan](#), White House Fact Sheet (April 22, 2021)
2. [CBO Final Scoring of IRA Bill](#), CRFB (September 7, 2022)
3. [Health Care Costs and the IRA](#), White House Fact Sheet (August 18, 2022)
4. [\\$7,500 Tax Credit for EVs is Complicated](#), Arezvou Rezvani, NPR (August 22, 2022)
5. [Tesla Models and the IRA Tax Credit](#), LeafScore (Autumn, 2022)
6. [GM Models and the IRA Tax Credit](#), GM Authority (August 19, 2022)
7. ["Permitting Reform" Bill and the IRA](#), Vox (September 13, 2022)