

What the Inflation Reduction Act means for working families in Minnesota

Biden goals on climate and social equity are well within reach.

By David Foster

Last month, the Energy Futures Initiative (EFI), a Washington, D.C.-based energy policy thinktank, released its analysis of the Inflation Reduction Act (IRA), [*Jobs, Emissions, and Economic Growth \(JEEG\)—What the IRA \(Inflation Reduction Act\) Means for Working Families*](#). In his remarks at the National Press Club, Dr. Ernest Moniz, CEO and founder of EFI and former U.S. Secretary of Energy, emphasized, [“Social equity and climate need to be addressed together and focus in on the question of jobs.”](#)

As lead author of the study and a longtime Minnesotan, I want to underscore Moniz’s observation and highlight two of our key findings, both nationally and in Minnesota.

First, when energy investments are designed strategically, they can have cascading effects that reinforce each other, creating multiple layers of high-quality jobs in construction, the manufacture of the goods needed for that construction, and the expansion of high-paying jobs in the electric utility sector.

Second, by targeting investments in energy efficiency at the same time as expanding the generation of electricity from multiple renewable and low carbon resources, overall energy consumption declines even while electrification of the overall economy increases. Our modeling showed a [6% decline](#) in overall consumption of energy in the U.S. by 2030.

This interlocking approach to decarbonization results in even more economic growth, fueling the American economy to add 1.46 million more jobs by 2030 than in our base case, including 600,000 more construction jobs, 100,000 more manufacturing jobs, and 190,000 more electric utility jobs.

In Minnesota, this means an additional 16,000 jobs by 2030, concentrated in those same sectors, adding roughly 7,500 construction jobs, 4,500 electric utility jobs, and 4,000 in manufacturing. Those in manufacturing would be concentrated in batteries and electrical equipment.

JEEG was designed, with the support of our partners at FTI Consulting, to integrate three modeling tools – PLEXOS, which modeled the changes in electricity technologies to achieve a 65% reduction in greenhouse gas (GHG) emissions in that sector; CTAM, an open source modeling program designed by the State of Washington to model non-electricity fuels’ usage; and REMI, a computable general equilibrium model of the U.S. economy, designed to look holistically at the impacts of policy on a wide range of economic indicators, including:

- job creation and loss in 160 sectors of the economy,
- GDP growth in the overall economy and by sector,
- per capita income effects, and
- the impact on inflation rates.

Since our modeling was focused on the overall impacts of the IRA, we also measured the effects of its tax increases and the \$300 billion deficit reduction that were fundamental parts of the legislation. We found no significant negative impacts from the tax policy, while the inflation reduction, driven by the Federal Reserve's interest rate increases, occurred slightly sooner with the IRA because of its energy efficiency investments.

Another of our study's important findings is that the job quality and domestic content provisions of the IRA actually work. In the motor vehicle industry, for instance, battery manufacturing adds [61,000 jobs over the next decade](#), including 1,100 in Minnesota, more than offsetting the jobs lost in motor vehicle internal combustion engine manufacturing.

In addition, the three sectors that experience the most incremental growth over the next decade – construction, manufacturing and electric utilities – are all sectors that pay higher than average weekly earnings and enjoy higher unionization rates than the American workforce as a whole. The electric utility sector is particularly notable with unionization rates more than three times the national average of [6.1% in the private sector and weekly earnings that are \\$500 a week higher than the national average of \\$973](#).

This does not mean that there will not be challenges in specific industries and geographies. But it does demonstrate that we will have tools to respond to those challenges if we adhere to the implementation strategies built into the IRA. For instance, the law encourages the targeted allocation of investments into communities impacted by the energy transition.

In coal mining, our analysis found that the industry could lose as many as [9,000 more jobs](#) over the next decade as in the base

case. However, it also found that the increased demand for domestically produced minerals needed by electric vehicles and renewable technologies would result in an increase of [48,000 more jobs](#) in metal ore mining, nonmetallic mineral mining, and support activities for mining than in the base case. The recent announcement by [Sparkz](#), a start-up battery manufacturer, that it would build its first commercial plant in Bridgeport, West Virginia and establish a collaborative training center with the United Mineworkers is a perfect example of how the energy transition can be effectively managed. Similarly, [Form Energy is collaborating with Great River Energy](#) to build one of its two long-term battery storage demonstration plants, using direct reduced iron as a feedstock, here in Minnesota.

Finally, our analysis found that the IRA would result in a [37% reduction in GHG emissions](#) by 2030. While less than the Biden administration's goal of reaching 50-52 percent reductions by 2030, our modeling looked solely at the tools that were set in motion by the IRA spending. We did not include a number of other opportunities that are at the disposal of both the federal and state governments, as well as the private sector. These might include new technologies such as carbon direct removal, changes in land use, such as reforestation, and agricultural practices such as biogas capture, or mineralization.

In short, the Biden goals on climate and social equity are well within reach.

David Foster is a Distinguished Associate with the Energy Futures Initiative and retired director, United Steelworkers District No. 11.

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