How Federal Clean Energy Tax Credits Benefit Wisconsin

Federal clean energy tax credits in the Inflation Reduction Act (IRA) are transforming the United States economy, already generating over $360 billion in project announcements that have so far created 313,000 new jobs as of June 2024. Prior modeling by Energy Innovation showed IRA tax credits are projected to unleash billions in investment by 2030, increasing GDP up to $200 billion and creating up to 1.3 million jobs nationally. Data from Climate Power shows that since the IRA's passage in August 2022, over $940 million in clean energy investments and nearly 2,000 new jobs have been announced in Wisconsin as of June 2024.
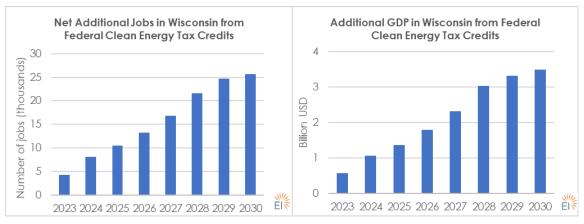
Energy Innovation used our free and open-source Energy Policy Simulator (EPS) to study potential state-level benefits on economic growth, jobs, and public health in Wisconsin from the IRA. We focus this analysis on clean electricity and clean vehicle tax credits, given the outsized impact of these tax credits on jobs and the economy.

This modeling finds these federal clean energy tax credits are projected to lower annual energy costs nearly $69 per household for Wisconsin residents in 2030, prevent more than 450 early deaths from pollution through 2050, and cumulatively prevent more than 510 million metric tons of carbon dioxide through 2050 compared to the base case – equivalent to the emissions from 139 coal-fired power plants in one year.

Federal Clean Energy Tax Credits Add to GDP and Cut Household Energy Spending

Federal clean energy tax credits will increase clean energy deployment and electric vehicles sales in Wisconsin. These investments and their impacts are projected to increase Wisconsin's GDP by $3.4 billion in 2030. Higher clean energy deployment and decreased spending on gasoline are projected to reduce average annual household energy spending by $69 per year in 2030 and a cumulative $3.8 billion through 2050 across all households in Wisconsin.

Because more clean energy will be deployed with federal clean energy tax credits, Wisconsin is projected to gain more than 25,000 jobs in industries like manufacturing, construction, and sales in 2030.

Federal Clean Energy Tax Credits Are an Investment in Cleaner, Healthier Communities

IRA programs are expected to shift the U.S. energy system, replacing fuel combustion with clean energy. This transition will dramatically reduce greenhouse gas emissions along with harmful air pollution that causes asthma, respiratory illness, and premature death. Federal clean energy tax credits are projected to prevent 450 premature deaths and 190 asthma attacks in Wisconsin through 2050. The shift to clean energy is expected to have a particularly positive impact on the health of communities of color and low-income communities, which are disproportionately affected by vehicle and power plant pollution. Pollution reductions in neighboring states would avoid additional premature deaths and health impacts as well.

Avoided Health Impacts	in 2030	through 2050
Premature Mortality	12	452
Asthma Attacks	196	7,196
Nonfatal Heart Attacks	4	139
Hospital Admissions	2	88

Methodology

We identify incremental state clean electricity deployment by comparing two scenarios from modeling by the National Renewable Energy Lab: the *Mid-case, nascent techs, current policies scenario* and the *No IRA, nascent techs, current policies scenario*. Comparing these two scenarios reveals the incremental clean electricity deployment from the IRA. We used the incremental clean electricity deployment to develop an IRA policy scenario for each state in the Energy Innovation EPS. We estimated clean vehicle tax credit impacts using a a complementary model we developed. We combined the clean vehicle tax credits and clean electricity deployment to create an IRA scenario for Wisconsin and compared it against a case without the IRA to find outputs for changes in emissions, health impacts, statewide household savings, GDP, and jobs.