New Studies Find Few Costs, Many Benefits to Carbon Tax

Max Bibeau

September 14, 2018

In the aftermath of an outpouring of scientific research in recent years warning against the negative environmental impacts of carbon dioxide on the environment, legislators and institutions alike have proposed countless ways to reduce emissions. While many exist, one is a clear frontrunner for many: the carbon tax.

The idea is simple – tax the emissions of carbon at a set rate per ton. Theoretically, this monetary incentive should cause companies and individuals to avoid causing high levels of emissions. They could either streamline and modernize factories or by driving more fuel-efficient cars. However, many criticize the economic impacts of such a plan. The libertarian Cato Institute, for example, believes it would discourage economic growth.

The Carbon Tax Studies

In July of this year, a series of new studies came out that should suppress such concerns. The studies make up the Carbon Tax Research Initiative, which began in early 2018. The initiative is spearheaded by four different, independent think tanks (The Center on Global Energy Policy at Columbia University, The Rhodium Group, The Urban-Brookings Tax Policy Center, and The Baker Institute for Public Policy at Rice University). All of these groups are nationally renowned for their nonpartisan research and analysis.

The studies, made public on July 17th, came to similar conclusions – a carbon tax would have negligible negative economic costs, yet a plethora of positive environmental and economic benefits.

The studies analyzed three levels of taxation in order to analyze all possible policy options. The studies all simulated a low level of \$14/ton, a medium level of \$50/ton, and a high level of \$73/ton.

Increased Revenue

The first area to examine is government revenue that the tax itself will generate. On the low level of taxation (\$14/ton), government revenue was not outstanding, but was far from meager, raising an estimated \$650 – \$750 billion over a 10 year period. The high level of taxation (\$73/ton), however, could raise enough revenue to completely change the US budget, raising between $1.5 – $3 trillion over a 10 year period. This government revenue could be critical to solving the ever-growing budget problem in the United States, providing a new and reliable stream of revenue when the state most desperately needs it.

Lowered Carbon Emission

When it comes to reducing emissions, the carbon tax also performed extremely well, lowering them across the charts. The low level of taxation reduced emissions by around 27% by 2030, coming close to, but not quite reaching the goals set by the Paris Climate Accord (28% reduction in emissions). The medium level surprisingly performed the best of all three levels, decreasing emissions by up to 46% by 2030, reaching and surpassing the Paris Accord's goal. The high level of taxation reached a plateau in the late 2020s, reducing emissions by a still impressive 41%.

Economic Impact

As for economic criticisms, the series of studies found that most, if not all claims about a hurting economy would not occur. Almost all emissions reduction (over 80%) would take place in the power sector of the economy. The tax would have an extremely minimal impact on gas prices, increasing the price of gas by around 1¢ /gallon, per dollar added to the tax. This impact would be only temporary, however, and would actually serve as a beneficial incentive to push individuals towards electric cars.

The only market severely affected is the coal market, which would fall between 28% and 84%, depending on the rate of taxation. However, this makes sense, as there are many alternatives to coal that are already in use today. The tax would simply expedite their use. Other industries, such as oil and natural gas, would not see much of a dip at all, especially as petroleum will likely still be the primary fuel for transportation in 2030.

In stark contrast to the claims of an economic downturn, some of the studies even found potential economic benefit from the carbon tax. In the early years of the tax, GDP growth would likely stagger. However, later on, GDP is expected to increase up to 0.5% as the new revenue from the carbon tax is able to lower other taxes, such as the corporate income tax, and reduce the national deficit.

A Beneficial Policy in Nearly Every Way

While definitive research surrounding the impacts of a carbon tax on the United States were previously in short supply, the information that the groups provide paints a clear picture of the US under the policy. Government revenue could see a critical new source, bringing in up to $3 trillion in only 10 years under the tax. Also, depending on the rate of taxation, emissions could be reduced by up to 46%, far surpassing the goals of the Paris Climate Accord. Finally, the economic impacts of the carbon tax could be, contrary to popular belief, extremely beneficial, raising the GDP of the US in the long run.