

Washington's Carbon Tax Will Cost \$530 Per Household In 2029

By TODD MYERS | BLOG | Feb 5, 2018

Last week, the Senate Energy, Environment and Technology Committee passed its version of a carbon tax, noting it was still "a work in progress." Including numerous exemptions for industry, the burden of the tax falls primarily on households and commercial businesses in Washington state. The tax begins at \$10 per metric ton (MT) of CO2e (carbon dioxide equivalent that includes other greenhouse gases like methane), increasing to \$30 per MT by 2029.

So, how much will this cost and who will pay for it?

Families will pay in three ways: at the gas pump, to heat their home, and for electricity. An average home in Seattle will pay about \$170 per year to begin, increasing to about \$510 per household in 2029. Spokane's average is higher due to the different energy mix, beginning at about \$177 per household and going to more than \$532 annually in 2029.

The largest portion of the cost comes from gasoline. A \$10/MT CO2 tax is about 10 cents per gallon. The Federal Highway Administration reports Washington state drivers average 12,837 miles per year, and we assume there are two drivers per household. Finally, the Washington State Transportation Commission estimates the average car in Washington gets about 20.5 miles to the gallon. Each household uses about 1,250 gallons of gas.

As a result, the average Washington family would spend \$125 more on gasoline every year in 2019 and \$375 more per year in 2029.

People would also pay more for home heating. On average, Seattle residents use about 650 therms per year and would pay \$35 more per year in 2019 and \$103 more in 2029. Spokane residents use a bit more, so it would cost them \$42 more per household each year in 2019, increasing to \$126 in 2029.

Electricity is the smallest portion since Washington state emits the least CO2 per kilowatt hour of any state. I assume Seattle will continue to have entirely carbon-free electricity (this is not quite true) and that the rest of the state emits only about one MT of CO2 annually from electricity. This means, on average, the carbon tax will add about \$10 a year for electricity in 2019 and \$31 per year in 2029 for the average household.

Additionally, most industry in Washington state is exempted – all the way from flour milling to flat glass manufacturing. The authors of the bill recognize that adding costs to industries that compete worldwide may induce them to close their Washington plants and move elsewhere.

The result of these broad exemptions is that the burden of the tax falls on families and commercial industry. The assumption is that while industry will leave the state due to high costs, commercial business and families are less likely to do so and will simply endure the costs.

Ultimately, the increased costs are borne by families who can't avoid them and must find a way to fit them into an ever-increasing burden of taxes in Washington.