Key Findings

1. Unlike the revenue-neutral carbon tax proposed two years ago, Governor Inslee’s new proposal (SB 6203) would significantly increase taxes, promising to use the money to cut emissions.

2. The bill makes basic scientific errors, claiming snowpack is “dwindling” when snowpack levels are consistently above average, and makes claims about ocean acidification that are contradicted by the state Department of Ecology.

3. The carbon tax would add $210 to average household costs in 2019, increasing to $525 a year in 2029.

4. This would represent a 20 percent increase in gas taxes in 2019, and a 60 percent increase by 2029.

5. Families under 200% of the Federal Poverty Level would see some of their vehicle license costs waived, reducing their total carbon tax bill by 65 percent in the first year, but only 18 percent by 2029.

6. With most industries exempted from the legislation, the burden of these taxes falls primarily on families and commercial business.

Introduction

Saying global warming represents an “existential threat” to Washington state, Governor Jay Inslee is promoting his latest climate policy, SB 6203, to impose a carbon tax that would raise about $1.8 billion in the first two full years, funneling the money to a wide range of projects he argues would cut CO2 emissions.¹

Unlike the simpler and more transparent revenue-neutral carbon price the Governor opposed two years ago, his new proposal includes funding for a range of special interest groups and speculative programs that would waste a significant percentage of the revenue on efforts that would do little to cut emissions.

Despite the dramatic rhetoric from the Governor and other environmental activists, SB 6203 would be surprisingly ineffective when it comes to actually producing results.² Although there are some important elements, such as metrics to measure the effectiveness of government expenditures, they are undermined by elements designed to satisfy special interest groups and to gain political support.

The result is legislation that would put the heaviest burden on families, using the new taxes to placate special interests rather than cut actual CO2 emissions.

This Legislative Memo is the first of a series that analyzes the Governor’s carbon tax proposal, and examines the justification for the legislation, its cost, the new bureaucracy it would create, and its effectiveness. In total, the policy structure of the bill indicates the goal is to get something passed and claim as a political victory, even if it means sacrificing the bill’s purported goal of effectively reducing carbon dioxide emissions.

Examining the claim of “devastating effects”

The preamble of the legislation outlines environmental risk in stark terms. Carbon dioxide, it argues, “has devastating


negative impacts on Washington’s economy, environment, natural resources, and communities."

There is a fair level of agreement among scientists that emission of greenhouse gases like carbon dioxide and methane tends to trap heat in Earth’s atmosphere that would have otherwise escaped into space. The debate, however, is over how sensitive the climate is to these added greenhouse gases. The U.N.’s Intergovernmental Panel on Climate Change (IPCC) reduced that sensitivity in its most recent report and reduced its temperature-increase projections along with it.³

Despite that uncertainty, the preamble of the bill is unequivocal about the effects the state is “already experiencing,” including claims of depleted snowpack, forest fires, and acidifying oceans. Although greenhouse gases may have impact in the future, highlighting these as existing effects demonstrates how the rhetoric in the bill has outstripped the science when it comes to understanding climate policy.

First, it is worth noting that if these problems are, indeed, being caused by climate change, legislators and the Governor should demand the maximum environmental benefit from government policy. The legislation, unfortunately, focuses more of the spending on politics than on true emissions reduction. The policy, even if it works as promised, does not match the dire rhetoric used to justify it.

Second, the IPCC scenarios also make it clear that meaningful climate effects are in the future, not occurring now. The three impacts listed above are cases in point. For example, contrary to the claim that we are “already experiencing” loss of snowpack, Washington state snowpack levels have been above average in eight of the last ten years.⁴

Through February 12th of this year, snowpack averages 95 percent of normal, but has also been above average at several points during the winter.³ Far from being depleted, as the legislation claims, snowpack has been robust or average for most of the last decade.

Ocean acidification is also frequently cited by the governor as an example of a currently existing impact. His claim is that carbon dioxide in the atmosphere makes ocean water less alkaline (i.e. more acidic), harming oysters and other shellfish. State Department of Ecology scientists and others, however, say the evidence simply “isn’t there” to make this claim.⁶

The Department of Ecology notes there are several other potential causes of oyster losses blamed on acidification, including natural deep ocean upwelling that brings more acidic seawater to the surface, runoff, and other potential causes.

Finally, with the serious forest fires of the last few years and the smoke that blanketed much of Washington state last summer, it is tempting to claim that climate change was a primary cause of the severity of the fires. It is true that hot weather increases the likelihood of major forest fires, but that masks other important contributors to these catastrophic fires.

Poor forest health, especially on federal lands, is a major factor that sets the scene for catastrophic fire and is a more likely contributor than temperature over the last fifteen years. For example, looking at Wenatchee temperature station data, although

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2004 had the second highest summer temperatures, that year saw less than 100,000 acres burned statewide, one of the lowest amounts in the last decade and a half.\(^7\)

In contrast, 2006 saw over 410,000 acres burned – the second highest total of the last 15 years – despite being in the middle range of summer temperatures during the past 15 years.\(^8\) Similarly, 2016 had the 10th highest temperature of the last 15 years, but saw more acres burned than average. The hottest year during that period, 2015, also saw dramatically more acres burned, setting a state record of over 1.1 million acres. That, understandably, stands out in people’s minds due to the obvious correlation between temperature and fire.

So, although hot summers can increase the severity of forest fires, the recent history shows a weak correlation between summer temperatures and large fires. Poor forest health, the result of poor forest management, is playing a major role.

Indeed, the carbon tax legislation specifically allocates funding for a “Forest Resilience Account,” which would be spent on “thinning or prescribed fires,” that would reduce the susceptibility of forests to fire.

Forest fires, however, are a useful talking point used to justify carbon taxes, so they are held out as evidence, even when the legislation itself recognizes the more serious cause of the fires we’ve experienced is poor management of public lands.

None of this indicates the risk of greenhouse gases is zero. It does, however, indicate that politics is overwhelming an honest assessment of the science when it comes to creating sound energy policy. It reinforces the need to create policy that offers “no regrets” – one that has merit even if the risk from climate change turns out to be small. The proposed carbon tax, however, is far from that mark. Costs are one reason why.

**Imposing costs on families – higher gas prices**

The proposed carbon tax would begin at $12 per metric ton (MT) of carbon dioxide in 2019 and would increase rapidly to $30 per MT in 2029. Since most manufacturing in the state would be exempted from the new taxes, the cost would be paid primarily by commercial business and families. The amount depends on where families live. Washington families would pay the carbon taxes in three ways: every time they fill up their gas tanks, when they use natural gas to heat their homes, and when they turn on their lights.

The largest portion of the cost would be imposed at the gas pump. The cost per MT translates almost perfectly into higher prices at the pump, with every dollar per MT of CO2 amounting to a one cent per gallon increase in the cost of gas.\(^9\) Washington residents drive, on average, about 25,674 miles per household per year, assuming at least two drivers per household.\(^10\) With an average fuel efficiency of existing cars at 20.5 miles per gallon, the bill would impose an additional $150 per household per year in 2019, increasing to $376 per year in 2029, when the carbon tax would amount to 30 cents per gallon.

**Higher home heating costs**

Families would also pay more for home heating. There is some difference between Seattle, where outdoor temperatures are mild, and Spokane, where there are more severe cold days. As a result, families in Spokane use about 22 percent more natural gas for home heating than families in Seattle. At an average of 650 therms per year, Seattle families would pay an additional $41.34 per year in 2019, increasing to $103.35 per year in 2029. A household in Spokane would be hit harder, paying an additional $41.34 per year in 2019, increasing to $103.35 per year in 2029.

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7 National Aeronautics and Space Administration, “Station Data: Wenatchee (47.42N, 120.32W),” [https://data.giss.nasa.gov/cgi-bin/gistemp/sdata_show.cgi?id=425004590740&dt=1&ds=5](https://data.giss.nasa.gov/cgi-bin/gistemp/sdata_show.cgi?id=425004590740&dt=1&ds=5) (Accessed February 12, 2018)


additional $50.37 to begin with, and paying $126 more in 2029.

**Higher electricity costs**

Finally, Washington residents would pay more for electricity. Washington already has the lowest level of carbon emissions per capita for electricity than any other state, so this is the smallest impact. The average Washington family would pay about $12 more per year in electricity costs, increasing to about $31 by 2029.

In total, the average household cost would increase from about $204 per household in Seattle in 2019, to $510 in 2029. For Spokane, the cost would start at about $213 per household, increasing to $532 in 2029. Adjusted for a three-percent inflation rate, the costs for Spokane would go from about $210 per household in 2019 up to $391 in 2029 – nearly doubling even after discounted.

Unlike the previous carbon tax initiative, this proposal does not attempt to offset the costs of the new tax by cutting other state taxes. There is one exception; the legislation cuts the cost of registering a vehicle for those below 200 percent of the Federal Poverty Level. About one-quarter of Washington state households live below this line. These households are exempt from the $30 renewal fee, the $3 county filing fee, and the vehicle weight fee up to 6,000 pounds, which is either $25 or $45, depending on vehicle weight.

The amount this saves for families depends on the vehicle. For example, the owner of a 2012 Prius in Seattle would save $58 on the annual renewal of $316, a reduction of 18 percent. In Spokane, however, the owner of the same vehicle would only pay $26, a reduction of 69 percent from the $84 fee.

Combined with the carbon tax, for families living below 200 percent of the Federal Poverty Level, this would reduce their total tax (assuming two vehicles per household), by 65 percent in the first year. The effect, however, would diminish over time. By 2029, those families would still be paying about 82 percent as much as the average family in total carbon taxes.

The bill would also allow utilities to spend some of the carbon tax revenue to provide low-income subsidies for electricity users. Since the impact on electricity costs is fairly small – less than $1 per month for the average household to start with – any relief provided would not have a significant impact on the total cost of the tax.

Commercial business owners would also see their energy costs go up. According to the Energy Information Administration, commercial business accounts for 18.5 percent of energy consumption, slightly less than residential use.

Industrial use, which accounts for about 27.8 percent, would be largely exempt from the new carbon taxes. Ranging from flour milling to flavoring syrup and concentrate manufacturing to cement manufacturing, many of Washington’s energy-intensive manufacturing industries would not be covered by the tax.

This has some merit. Aluminum manufacturers have to compete worldwide and additional costs make it more difficult for them to sell their product on a world market. This is why industries dubbed, “Energy-Intensive, Trade-Exposed,” would be mostly exempted.

The bill’s sponsors recognize that taxation may lead these industries to close and go elsewhere. Ironically, this contradicts Governor Inslee’s unsupported claim that carbon taxes, “do not, repeat, do not result in

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12 Kaiser Family Foundation, “Distribution of the Total Population by Federal Poverty Level (above and below 200% FPL), 2016,” [https://www.kff.org/other/state-indicator/population-up-to-200-fpl/?currentTimeframe=0&sortModel=%7B%22colId%22:%22location%22%2C%22sort%22:%22asc%22%7D](https://www.kff.org/other/state-indicator/population-up-to-200-fpl/?currentTimeframe=0&sortModel=%7B%22colId%22:%22location%22%2C%22sort%22:%22asc%22%7D) (Accessed February 12, 2018)

deindustrialization of those communities.”

The legislation, which the Governor has endorsed, recognizes and admits that new carbon taxes will risk that very thing.

To put those amounts in context, we can compare the bill’s proposed increases to existing taxes paid by Washington residents. First, the 12-cent-per-gallon increase amounts to a nearly 25 percent increase over the existing gas tax of 49.4 cents per gallon. By 2029, it would amount to a 60 percent tax increase.

The additional $210 per household is also significant when compared to the sales taxes received by counties from the state. Assuming an average household size of 2.6 people in Washington state, the carbon tax would amount to a 60 percent increase for those over 200 percent of FPL, and a 40 percent increase for households below 200 percent of FPL. These increases are also on top of recent increases in property taxes, vehicle license renewal, and other recent increases.

The cost and the risk

Even assuming, as we do in this analysis, that carbon dioxide emissions can create risk of environmental impact in the future, the costs of the proposed carbon tax are significant. Starting at twelve cents per gallon and rapidly increasing to 30 cents per gallon in 2029, the average Washington household would see additional annual costs of $210, increasing to $525 in 2029. This would amount to a significant jump in state gas and energy taxes.

To justify these costs, the authors of the legislation have attempted to raise the specter of climatic catastrophe, saying it represents an “existential threat” (the very existence of the state of Washington is at risk!). In reality, many of the risks highlighted by the legislation are either false (snowpack is not declining), exaggerated (claims of ocean acidification are tenuous), or distractions from the primary cause (forest fires are more likely related to poor forest health than to climate change).

Conclusion

With the mismatch between costs and environmental benefits, the proposed carbon tax would create more burden for Washington families than it would relieve. Even if the bill works as intended to reduce carbon dioxide emissions, the costs would still be significant when compared to the benefits. Unfortunately, the spending included in the bill focuses primarily on satisfying special interest needs and would waste a significant amount of the money that could otherwise be used to reduce emissions.

Putting a price on pollution, whether that is sewage or air pollution, can be an effective policy approach to reducing environmental impact. Unfortunately, the simple and transparent approach that incentivizes individuals and companies to find the best way to reduce environmental impacts is often hijacked by politicians who want to appropriate that effort for their own political purposes. The carbon tax being proposed by the Governor is another example of that wasteful impulse.