



Initiative 732: Imposing a New Carbon Tax in Washington State

Briefly

- Initiative 732, on the November 2016 ballot, would impose a tax on carbon dioxide emissions and at the same time lower other taxes.
- The carbon tax would begin at \$15 per metric ton of CO₂ on July 1, 2017, jump to \$25 per metric ton on July 1, 2018 and increase by 3.5 percent plus the rate of inflation every July 1 thereafter, until it reaches \$100 in inflation-adjusted 2016 dollars.
- The initiative would reduce the B&O tax rate for manufacturing from 0.484 percent to 0.0001 percent, reduce the state sales tax from 6.5 percent to 5.5 percent and fund the working families sales tax rebate program
- While its authors intend the initiative to be revenue neutral, the Office of Financial Management has estimated that the initiative will reduce general fund-state revenue by \$797 million through Fiscal Year 2021.

Many people worry that global warming due to accumulations of greenhouse gasses in the atmosphere will impose significant costs on the world economy in future years. Frustration with the lack of carbon use restrictions nationally has led to a push at the state level to limit greenhouse gas emissions.

Overview

Initiative 732, promoted by the organization Carbon Washington, will be on the November 2016 ballot statewide. It would impose a tax on carbon dioxide emissions and at the same time lower other taxes. If approved by voters it would take effect on July 1, 2017.

The initiative includes this statement of intent:

The intent of this act is to encourage sustainable economic growth with a phased-in one percentage point reduction of the state sales tax, a reduction of the business and occupation

tax on manufacturing, and the implementation and enhancement of the existing working families' sales tax exemption for qualifying low-income persons, all funded by a phased - in carbon pollution tax on fossil fuels sold or used in this state and on the consumption or generation in this state of electricity generated by the consumption of fossil fuels.

Fossil fuel is defined:

"Fossil fuel" means petroleum products, motor vehicle fuel, special fuel, aircraft fuel, natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from these products, including without limitation still gas [a byproduct of the petroleum refining process] and petroleum residuals including bunker fuel.

Background

In the 1970s economists developed a critique of the command and control

regulatory policies then being used to reduce pollution, viewing them as both heavy handed and ineffective. They argued it would be possible to achieve much greater reductions in emissions at much lower costs if people who polluted were simply charged a price for doing so. The price would provide an incentive to reduce pollution. Decentralized decision-making would then lead to more cost effective decisions as to where and how to reduce pollution (Kneese and Schultze 1975).

The economist William Nordhaus believed that raising the price for carbon would reduce its use and incentivize a move to alternative energy sources. He saw regulatory restrictions as less effective, with the potential of creating harmful economic inefficiencies. (Nordhaus 2008). There are two broad approaches to putting a price on greenhouse gas emissions: (1) a greenhouse gas tax and (2) a cap and trade system, where market players can exchange the right to emit carbon within an overall emissions cap.

In 2008, the Legislature established goals to reduce emissions to 1990 amounts by 2020, to 25 percent below 1990 amounts by 2035 and to 50 percent below 1990 amounts by 2050. The 2008 legislation setting these goals included no enforcement mechanisms. Nevertheless, the U.S. Department of Energy calculates that 2013 emissions of carbon dioxide from burning fossil fuels in Washington state were 6.0 percent less than 2008 emissions, albeit 3.2 percent higher than 1990 levels. In 2011, the state reached an agreement with TransAlta Corporation to phase-out generation of electricity from coal at its Centralia plant. The plant's Unit 1 will stop using coal by the end of 2021; the plant's Unit 2, by the end of 2025.

Collection of the tax under I-732

The tax would be imposed on fuels based upon their carbon content, beginning July 1, 2017. The initial rate of \$15 per metric ton of CO₂ would step up to \$25 per metric ton on July 1, 2018. On

every July 1 thereafter the rate would increase by 3.5 percent, plus the rate of inflation.

The Department of Revenue (DOR) would administer the tax. Administrative details would be designed by DOR and adopted by rule.

The initiative distinguishes three classes of fossil fuels: (1) fossil fuels used to generate electricity, (2) fossil fuels used to refine fossil fuels, and (3) other fossil fuels sold or used in the state.

Fuels used to generate electricity. In the case of fossil fuels used to produce electricity, DOR will prepare tables specifying rates for different fuels based on their carbon contents. Utilities are required to file monthly reports on the mix of fuels used and pay the tax due thereon. The tax would apply to fossil fuels used out of state to generate electricity imported into the state. Puget Sound Energy, Avista and PacifiCorp have backed up their primary sources of electricity with power from the coal-fired generating plant at Colstrip, Montana.

Fuels used by refineries. In the case of fossil fuels consumed by refiners in the refining process, the refineries would be required to file monthly reports on carbon dioxide emissions and pay the tax due thereon.

Other fossil fuels. In the cases of other fossil fuels, the obligation to remit the tax would be generally placed on a seller who is already obliged to remit another tax on the fuel to the state. The carbon taxes for gasoline and diesel oil used on highways are to be collected concurrently with the motor vehicle fuel and special fuel taxes. The carbon tax on aircraft fuels is to be collected with the aircraft fuel tax. The carbon taxes on all other products derived from refining crude oil are to be collected in accordance with the petroleum products tax.

For all other fossil fuels (e.g. natural gas and coal), the carbon tax is to be collected in conjunction with the retail sales and use taxes.

I-732 exempts fuels brought into the state in the fuel tank of a car, truck, boat, ship, locomotive or aircraft, fuel intended for export from the state and fuel upon which the carbon tax has already been paid.

Use of the carbon tax revenue

The working families sales tax rebate. I-732 dedicates a portion of carbon tax revenues to fund this dormant program. State law currently specifies the rebate amount to be the greater of \$50 or 10 percent of the federal earned income tax credit granted to the family. For 2017 the initiative would raise the rebate amount to the greater of \$100 or 15 percent of the family's earned income tax credit. For 2018 and subsequent years, the initiative would raise the rebate amount to the greater of \$100 or 25 percent of the family's federal earned income tax credit.

State sales tax. The state sales tax rate is currently 6.5 percent. The initiative would reduce the state sales tax rate to 6.0 percent on July 1, 2017 and then to 5.5 percent on July 1, 2018.

B&O tax. The initiative would reduce the business and occupation (B&O) tax rate to 0.0001 percent for manufacturing activities. The basic manufacturing B&O rate is 0.484 percent, although about 40 percent of activities qualify for lower rates.

This reduction would benefit only manufactured goods that are exported from the state. Those manufactured goods that are sold in the state are taxed at the wholesaling or retailing rates, which would not be changed. In 2013 about 30 percent of B&O taxes paid by manufacturing firms came in under the manufacturing category.

Fiscal impact, revenue neutrality

The fiscal impact of I-732 has been estimated differently by different sources. The state Office of Financial Management (OFM) issued a fiscal impact statement for the November ballot estimating a net decrease of \$797.2 million in state Gen-

eral Fund revenue through Fiscal Year 2021 if I-732 were implemented ([OFM 2016](#)).

The Sightline Institute, a Seattle-based environmental think tank seen as broadly supportive of a revenue-neutral carbon tax, has taken issue with OFM's methods and says at the most I-732 would cause a \$78 million annual shortfall instead of OFM's predicted \$200 million annual shortfall (Eberhard and Durning, 2016).

Carbon Washington insists I-732 will be revenue neutral, claiming that OFM's analysis fails to take into account:

- "that more than \$300 million in carbon tax revenue will come from taxes on 'exported power'— i.e., taxes on fossil fuels burned in-state to generate electricity that is sold out-of-state;"
- "that more than \$300 million in carbon tax revenue will come from I-732's treatment of spot-market purchases of electricity;" and
- that because of the way the initiative's low-income tax rebate would be distributed the fiscal impact would actually be more than \$260 million less than what OFM estimated (Bauman 2016).

British Columbia carbon tax

I-732 is modeled on the revenue-neutral carbon tax enacted by the Canadian province of British Columbia in 2008. One important distinction between the two is that the B.C. law actually requires the carbon tax to be revenue neutral, whereas I-732 only requires the state Department of Revenue to report revenue gains and losses to the governor and legislature – essentially leaving it up to the state to decide whether to enforce revenue neutrality.

The B.C. carbon tax started at a rate of \$10 (Canadian dollars) per tonne (metric ton) of CO₂ equivalent emissions. The tax is currently at a rate of \$30 per tonne (at current exchange rates, equal to \$22.75 U.S. dollars), and unlike 732, is

not expected to increase. It is applied based on the amount of greenhouse gases (GHGs) burned per unit of fuel. To maintain revenue neutrality, other taxes (such as personal income, corporate and property) are reduced and tax credits are implemented (BCMF 2014a).

Examples of the B.C. carbon tax include:

- 6.67¢ (Can.) per liter of gasoline
- 7.67¢ (Can.) per liter of diesel
- 7.67¢ (Can.) per liter of home heating oil
- 5.70¢ (Can.) per cubic meter of natural gas (BCMF 2016)

Does a carbon tax reduce greenhouse gas emissions?

In British Columbia, greenhouse gas emissions have decreased slightly since the tax was enacted, although it is worth noting there was a slight downward trend in the years immediately preceding enactment. Additionally, greenhouse gas emissions in B.C. have risen since 2010 (BCME 2016).

In Norway, which first implemented a carbon tax in 1991 (and has since imple-

decreased. (Statistics Norway, 2015). (See chart) It's also important to note that approximately 96% percent of Norway's energy comes from hydropower, widely considered to be renewable and "green" (EIA 2015).

Effect on energy costs

At \$25 per metric ton, I-732's carbon tax would raise the price of:

- Gasoline by 22.2¢ per gallon (this assumes no ethanol is blended in)
- Home heating and diesel oil by 25.4¢ per gallon
- Jet fuel by 23.9¢ per gallon
- Bunker fuel by 29.5¢ per gallon
- Natural gas by 13.3¢ per therm (the average PSE residential customer used 68 therms/month, implying annual cost of \$108.26) (EIA 2011, 2016)

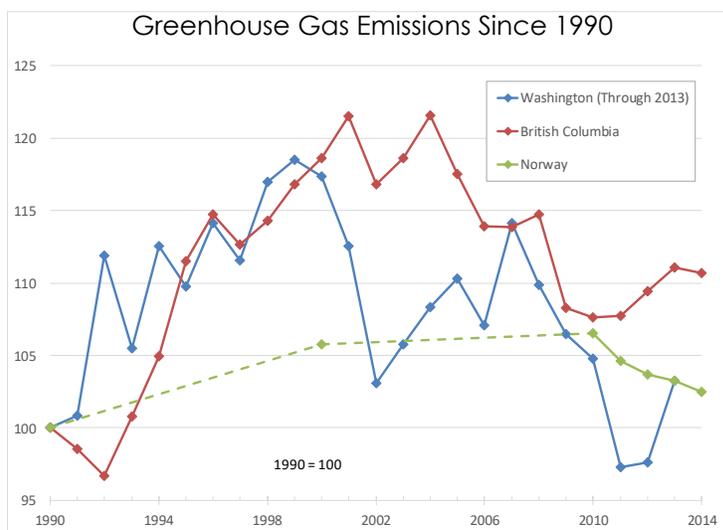
Economic impact of a carbon tax

The British Columbia Ministry of Finance reports on its carbon tax,

Economic analysis conducted for the carbon tax review indicates that BC's carbon tax has had, and will continue to have, a small negative impact on gross domestic product (GDP) in the province. Increasing the carbon tax beyond the current \$30 per tonne would have a stronger negative effect on economic growth (BCMF 2014b).

In a 2013 report, the Congressional Budget Office (CBO) wrote,

Without accounting for how the revenues from a carbon tax would be used, such a tax would have a negative effect on the economy. The higher prices it caused would diminish the purchasing power of people's earnings, effectively reducing their real (inflation-adjusted) wages. Lower real wages would have the net effect of reducing the amount that people worked, thus decreasing the overall supply of labor. Investment would also decline, further reducing the economy's total output.



mented other policies aimed at reducing greenhouse gas emissions, including emissions trading) greenhouse gas emissions into the air have slightly increased since 1990. Since 2010 emissions have

The CBO also predicted a carbon tax would hit people harder the lower their income:

The costs of a carbon tax would not be evenly distributed among U.S. households. For example, the additional costs from higher prices would consume a greater share of income for low-income households than for higher-income households, because low-income households generally spend a larger percentage of their income on emission-intensive goods (CBO 2013).

Discussion

What is distinctive about the problem of greenhouse gas emissions is its global nature. The damages from emissions from any particular facility are not concentrated near to that facility. While the state may face costs due to global warming, there is little that the state can do by itself to avoid these costs.

From 1990 to 2012 worldwide emissions of CO₂ increased by 50 percent, from 21.6 trillion metric tons to 32.3 trillion metric tons. Emissions of the industrializing nations in Asia grew by far greater

percentages: Singapore, 260 percent; China, 257 percent; Thailand, 246 percent; India, 216 percent; Malaysia, 205 percent; Indonesia, 192 percent; South Korea, 171 percent. In all these countries, carbon emissions are driven by economic development.

As has been observed in British Columbia and Norway, both of which have a carbon tax, emissions have either gone down only slightly or slightly increased. The jury is still out, it would appear, on whether a carbon tax reduces carbon emissions enough to justify its other costs - to consumers, workers, employers, and the economy overall.

Putting a large price on carbon will raise the costs of living and doing business in this state. If we go it alone, the reduction we achieve here could be offset by increases elsewhere. Successfully attacking the global warming problem requires the coordinated action of national governments. If the U.S. is to provide leadership on global warming, that leadership must come from Washington, D.C., not Washington state.

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