

# Washington Voters Contemplate a Carbon Tax

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## Key Findings

- This November, Washington voters will decide whether to become the first state to adopt a carbon tax.
- Initiative 732's proposed tax would begin at \$15 per metric ton of carbon emissions, rising to an inflation-adjusted \$100 per metric ton, after which increases would be tied solely to the rate of inflation.
- The ballot initiative pairs the new carbon tax with reductions to the sales tax and the state's Business & Occupation tax rates on manufacturing, and the expansion of the Working Families Credit. The tax is designed to be revenue neutral in early years, though these projections are disputed.
- The carbon tax base would be limited to fossil fuel combustion, which accounts for about 75 percent of greenhouse gas emissions. The tax would be levied using calculations of associated emissions for each fuel type. The size of this base can be expected to erode over time, particularly if the tax succeeds in its ecological aim of reducing carbon emissions.
- The average household would pay \$225 more per year for gasoline under the proposal, and \$64 more for electricity. They would also see a rise in the cost of consumer goods.
- A state-specific carbon tax has the potential to induce "leakage" of manufacturing from Washington to other states which do not impose such taxes.
- The fuel mix for imported electricity may frequently be unknown or unclassified, which would lead to increased tax burdens for some homeowners.
- An existing constitutional dedication of motor fuel tax revenue to transportation could complicate the initiative's intended general fund offsets.
- Initiative 732 is an ambitious proposal, and in many respects a balanced one, but it also carries significant risks, both in terms of revenue certainty and broader economic effects.

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## Introduction

From the northwest slope of Mount Rainier, the Carbon River tumbles through cataracts and meanders across glacial valleys, flowing past the coal deposits that give the river (and its glacial source) its name. The town of Carbonado, established along its banks, has a population of scarcely 600 now, but once rivaled Tacoma in size, its prospering coal mines supplying the energy needed to fuel the booming towns along the Puget Sound. Seattle was a lumber town; Tacoma was selected as the western terminus of the Northern Pacific Railroad. The history of Washington state is inextricably entwined with carbon, and now, some would like the state to write a new chapter of that history. This November, voters will decide whether Washington will become the first state to adopt a carbon tax.

Designed as a revenue-neutral carbon tax, Initiative Measure 732 (I-732) would impose a new tonnage-based tax on fossil fuels, coupled with offsetting reductions to the sales tax and gross receipts taxation of manufacturing, while expanding the state's tax credit for low-income households. Commencing at a rate of \$15 per ton of carbon dioxide (CO<sub>2</sub>) emissions in 2017 and increasing to \$25 per ton in 2018, the carbon tax rate would continue to rise incrementally thereafter. Offsetting tax reductions would be phased in fully by 2018.<sup>1</sup> The following table shows tax changes as of 2017, 2018, and upon complete phase-in of the proposed carbon tax.

Table 1.

### Tax Rates Under I-732

Tax Component	Current	FY 2018	FY 2019	Final
Carbon Tax (per ton)	n/a	\$15	\$25	Inflation-adjusted \$100
Sales Tax	6.5%	6.0%	5.5%	5.5%
B&O Manufacturing Rate	0.484%*	0.01%	0.01%	0.01%
Working Families Credit	10% of EITC	15% of EITC	25% of EITC	25% of EITC

\*Most manufacturing is currently at 0.484 percent, but select forms of manufacturing are currently assessed at lower rates.

## Outline of Proposal

The carbon tax at the heart of I-732, levied at \$15 per ton of CO<sub>2</sub> emissions from fossil fuel in 2017 and \$25 per ton in 2018, would continue to rise thereafter at a rate 3.5 percentage points above inflation until it reaches a cap of an inflation-adjusted \$100 per ton of carbon, at which point further rate increases would be tied solely to the rate of inflation.

The following table offers an estimate of nominal and inflation-adjusted carbon tax rates (in 2016 dollars) for select years from 2017 through 2070, relying on Congressional Budget Office CPI-U projections through 2026 and assuming 2.4 percent inflation thereafter. In this projection, the carbon tax would not match the inflation-adjusted value of \$100 until 2061, at

1 Washington Secretary of State, "Initiative Measure No. 732," [https://sos.wa.gov/\\_assets/elections/initiatives/FinalText\\_779.pdf](https://sos.wa.gov/_assets/elections/initiatives/FinalText_779.pdf).

a nominal rate of \$289.46 per ton of carbon. The carbon tax would raise an estimated \$1.93 billion a year by fiscal year 2019 (in tax year 2018), when the rate stands at \$25 per metric ton.<sup>2</sup>

Table 2.

**Carbon Tax Rates Per Metric Ton (select tax years, in nominal and 2016 dollars).**

Year	Nominal Rate	Adjusted Rate
2017	\$15.00	\$14.65
2018	\$25.00	\$23.88
2019	\$26.46	\$24.70
2020	\$28.01	\$25.54
2025	\$37.25	\$30.22
2030	\$49.61	\$35.75
2040	\$88.00	\$50.03
2050	\$156.12	\$70.01
2060	\$276.93	\$98.98
2070	\$358.33	\$100.00

The single largest revenue offset in I-732 is a reduction in the state sales tax from its present rate of 6.5 percent to 6.0 percent in 2017 and 5.5 percent from 2018 onward. This would result in a \$1.49 billion a year revenue reduction by fiscal year 2019, once the sales tax rate is 5.5 percent.<sup>3</sup> Localities in Washington are authorized to impose their own sales tax at rates as high as 3.4 percent, and currently do so at an average rate of 2.42 percent. Should that local average rate hold, then even after the rate reduction, Washingtonians would still face an average state and local combined rate of 7.92 percent.<sup>4</sup>

Because the legal incidence of the carbon tax would fall heavily upon manufacturers, the proposed tax package also reduces gross receipts tax rates on manufacturing. The state's Business & Occupation (B&O) tax, a multi-rate gross receipts tax, is generally imposed on manufacturing at a rate of 0.484 percent, though certain types of manufacturing receive preferential rates. Under the carbon tax proposal, all manufacturers would experience a 0.01 percent rate. This would result in an estimated \$419 million a year revenue reduction by fiscal year 2019 once a modest increase in the value of the B&O base is taken into account, based on a higher cost of goods under a carbon tax regime.<sup>5</sup>

2 Washington Office of Fiscal Management, "Fiscal Impact Statement for Initiative 732," 2016, <http://www.ofm.wa.gov/ballot/2016/Initiative732FIS.pdf>, 2.

3 *Id.*, 3.

4 Jared Walczak & Scott Drenkard, "State and Local Tax Rates, Midyear 2016," Tax Foundation Fiscal Fact No. 515, July 5, 2016, <http://taxfoundation.org/article/state-and-local-sales-tax-rates-midyear-2016>.

5 Washington Office of Fiscal Management, "Fiscal Impact Statement for Initiative 732," 3.

**Table 3.**  
**B&O Tax Rates on Manufacturing Under I-732**

Tax Category	Tax Rates	
	Current	New
General Manufacturing	0.484%	
Commercial Airplanes & Parts	0.2904%	
Semiconductor Materials	0.275%	0.01%
Foodstuffs	0.138%	
Biodiesel, Alcohol Fuel, & Biomass Fuel	0.138%	
Timber and Wood Products	0.138%	

Finally, the initiative would fund and increase the state's currently dormant Working Families Tax Exemption, which provides tax refunds to low-income families in the amount of 10 percent of their federal earned income tax credit. Under I-732, the amount would rise to 15 percent of the federal Earned Income Tax Credit for exemptions claimed in 2017 and 25 percent for exemptions claimed in 2018 and thereafter, at a tax cost of \$279 million in fiscal year 2019.<sup>6</sup>

## Carbon Tax Structure

The carbon tax proposed by I-732 would be levied on the carbon content of fossil fuels sold or used within the state, and the carbon content inherent in electricity consumed in the state. This definition is important, because greenhouse gas emissions have a wide range of sources, some harder to quantify than others.

According to the U.S. Environmental Protection Agency, 30.5 percent of greenhouse gas emissions come from electricity production, 26.5 percent from transportation, 21.4 percent from industry, 9.2 percent from agriculture, 6.7 percent from commercial activity, and 5.8 percent from the residential sector. Carbon dioxide emissions represent 81 percent of greenhouse gas emissions, largely concentrated in fossil fuel combustion (75.0 percent of greenhouse gas emissions).<sup>7</sup> However, emissions also result from various industrial and agricultural processes, and these can be far more difficult to quantify and may impose much more substantial compliance costs. Applying set conversion factors to fossil fuels is administratively far less burdensome than ascertaining emissions associated with, for instance, aluminum production, wastewater treatment, or manure management.

Initiative 732 avoids these administrative difficulties by restricting the levy of the proposed carbon tax to fossil fuel combustion and electricity generation. This means, by way of example, that industries would face carbon taxes on the energy they consume in production, but not

<sup>6</sup> *Id.* The Working Families Tax Exemption is the greater of \$50 or 15 percent of the Earned Income Tax Credit (EITC). This \$50 minimum refund would remain in place as the percentage of the EITC rose.

<sup>7</sup> U.S. Environmental Protection Agency, "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014," Apr. 15, 2016, <https://www.epa.gov/sites/production/files/2016-04/documents/us-ghg-inventory-2016-main-text.pdf>, 2-23. Figures exclude U.S. territories.

on carbon dioxide emissions from chemical reactions or other emission-producing industrial processes.

Although this approach does not capture all greenhouse gas emissions, or even all carbon emissions, it does cover the overwhelming majority of carbon emissions in a relatively administratively efficient manner, relying on simple calculations of carbon emissions associated with each source of fossil fuel (e.g., 8.91 kilograms of CO<sub>2</sub> emissions per gallon of gasoline or 1.1 metric tons per megawatt hour (MWh) of electricity produced by a coal-fired plant).<sup>8</sup> Under the proposal, companies that can demonstrate that some of their fossil fuel consumption does not increase atmospheric emissions—for instance, by utilizing sequestration technology—could apply for reductions or refunds.<sup>9</sup>

## Consumer Costs of Carbon Taxation

The average Washington household consumes 1,005 kilowatt hours (kWh) of electricity per month.<sup>10</sup> That same household purchases 1,011 gallons of gasoline each year.<sup>11</sup> At \$25 per metric ton, this household would expect to pay an additional \$225 a year on gasoline. The carbon tax on their electricity consumption, however, depends on the fuel mix used by their utility provider.<sup>12</sup>

The high-bound estimate, based on electricity generated exclusively at coal-fired power plants, would entail a carbon tax impact of \$302 per year for a Washington household with average electricity use. However, hydroelectric power is more than four times as prevalent as coal-fired in Washington, and natural gas, nuclear, and renewable energy sources are also utilized by in-state utilities.<sup>13</sup> Using a blended average of the state fuel mix, the carbon tax can be expected to add about \$64 to the average household's electric utility bill, though some families may pay considerably more or less. About half the power generated by utilities like Pacific Power and Puget Sound Energy is derived from coal and natural gas, while utilities like Seattle City Light rely heavily on hydroelectric power generation, with one environmental advocacy group estimating that the cost differential between the two classes of utilities would be approximately \$100 a year.<sup>14</sup>

Proponents of I-732 have created a tax calculator which permits individuals to assess their likely liability under the proposed tax package. Adopting their methodological assumptions

8 U.S. Energy Information Administration, "Voluntary Reporting of Greenhouse Gases Program Fuel Carbon Dioxide Emission Coefficients," <http://www.eia.gov/oiaf/1605/coefficients.html>. Tables 1-2.

9 Washington Secretary of State, "Initiative Measure No. 732," § 4(6).

10 U.S. Energy Information Administration, "Average monthly residential electricity consumption, prices, and bills by state," Oct. 21, 2015, <https://www.eia.gov/tools/faqs/faq.cfm>.

11 National figure. See Michael Sivak, "Has Motorization in the U.S. Peaked?" University of Michigan Transportation Research Institute, June 2013, <http://www.bv.transports.gouv.qc.ca/mono/1136348.pdf>.

12 Tax Foundation calculations. See Washington Department of Commerce, "Washington State Electric Utility Fuel Mix Disclosure Reports for Calendar Year 2014," <http://classic.commerce.wa.gov/Documents/FMD-2014-rev121615-final.pdf>.

13 Washington Department of Commerce, "Washington State Electric Utility Fuel Mix Disclosure Reports for Calendar Year 2014," Dec. 2015, <http://classic.commerce.wa.gov/Documents/FMD-2014-rev121615-final.pdf>, 5.

14 Kristin Eberhard & Alan During, "Weighing CarbonWA's Tax Swap Ballot Initiative," Sightline Institute, Aug. 1, 2016, <http://www.sightline.org/2016/08/01/pros-cons-carbonwa-carbon-tax-swap-ballot-initiative-732/>.

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regarding air travel,<sup>15</sup> the average household would pay a further \$20 per year in additional taxes on air travel, based on average annual household air travel of 4,932 miles per year. Of course, individuals who fly regularly would experience a much higher burden in this regard.

Finally, carbon taxation will increase the price of manufactured goods. Carbon Washington, an organization advocating for I-732 and its primary architect, contends that this will increase the sales tax base by approximately \$500 million as the cost of the carbon tax is passed along to consumers. If true, this would represent an average burden of \$189 per household, though a median household's costs would likely be substantially lower. Scaling based on consumer spending patterns suggests that costs for the median household might be around \$43.<sup>16</sup>

Table 4.

### Annual Carbon Tax Costs Per Washington Household

Consumption Category	Carbon Tax Cost	
	at \$25 / ton	at \$100 / ton
Gasoline	\$225	\$900
Electricity	\$64	\$256
Manufactured Goods (higher costs)	\$43	\$172
Air Travel	\$20	\$80

## Revenue Projections

1. The nonpartisan legislative Washington Office of Fiscal Management projects that the tax shift in I-732 would result in a cumulative revenue reduction of \$797 million over the first four years.<sup>17</sup> This is likely to represent slightly less than 0.5 percent of the state budget over that period. Carbon Washington contends that the tax swaps contained within the initiative are revenue neutral, advancing several arguments against the assumptions in the Office of Fiscal Management (OFM)'s analysis,<sup>18</sup> among others:
2. The treatment of exported electricity. The language of I-732 is clear that liquid fuels exported from Washington are not subject to the proposed carbon tax, but Carbon Washington anticipates the tax falling on exported electricity, whereas the OFM treats power distributed out-of-state as an exported fuel, and thus regards it as exempt.
3. Growth of the value of the sales tax base. Carbon Washington contends that the OFM neglects a growth in the value of transactions subject to the sales tax that will arise from the higher prices of goods associated with the imposition of a carbon

15 Yoram Bauman & Justin Bare, "Carbon Tax Calculator Methodology," University of Washington, Sept. 12, 2016, <http://carbon.cs.washington.edu/assets/docs/methodology.pdf>, 8.

16 Author's calculation.

17 Washington Department of Revenue, Fiscal Note #0732-2-2, Jan. 25, 2016, <https://fortress.wa.gov/ofm/fnspublic/FNSPublicSearch/Search/732/64>.

18 Some of their criticisms were specifically responsive to an earlier and more detailed official analysis, Washington Department of Revenue, Fiscal Note #0732-2-2, Jan. 25, 2016, <https://fortress.wa.gov/ofm/fnspublic/FNSPublicSearch/Search/732/64>. Mentioned here are those thought to be still pertinent.

tax. The OFM accounts for elasticity, assuming an increase in taxable sales due to a lower tax rate, but it is unclear whether its analysis considers the effect of rising prices.

4. The effects of population growth. If Washington's population grows, revenues should increase as well, all things being equal. This itself need not be addressed in OFM's revenue estimates, as the projected cost of \$797 million does not imply that revenues will be lower than current levels by that amount, but rather that they would be \$797 million less than they would be absent the adoption of I-732. However, OFM also assumes that carbon emissions in Washington will represent a fixed share of Pacific Region emissions, an assumption Carbon Washington rejects on the grounds of relative population growth. Nevertheless, should pricing carbon have its intended environmental effect, or should the higher cost of living change migration patterns, these assumptions may not stand.
5. The implementation of the Working Families Tax Exemption. This tax exemption already exists, but is not currently funded. Whereas OFM assumes that two years' worth of payments would be made in fiscal year 2018, Carbon Washington holds that only one year's payment would be required.

There is merit in many of Carbon Washington's objections, but some of its assumptions are overly optimistic. A conservative assumption would be that, all else being equal, the revenue loss would be somewhat less than OFM estimates, though—at least initially—short of achieving revenue neutrality. Because all offsets are phased in within two years, while the carbon tax rate will continue to increase for decades, in the long run, I-732 represents a substantial tax increase.

## Challenges for State Taxation of Carbon Emissions

Traditionally, taxation of greenhouse gas emissions has largely been viewed as a matter for national, rather than state, governments. A state moving forward with such a tax independently risks placing itself at a competitive disadvantage with neighboring states and may face significant administrative barriers and compliance costs. While these issues arise at the national level as well—nation-states, after all, compete in a global economy—the belief has largely prevailed that states proceeding alone would face unique, or at least uniquely salient, challenges.

For instance, while it is relatively simple to ascertain the sources of electricity generated in-state, it may be difficult to assign a source (e.g., coal, hydro, natural gas) to electricity generated elsewhere and imported into Washington. While electric utilities in other states know the sources of their electricity generation overall, it may frequently be difficult if not impossible to stipulate whether power “wheeled” from other states onto the Washington grid is from a particular source. Furthermore, to the extent that some fuel mix might be assigned, out-of-state utilities may have incentives to deem that their renewable energy is utilized in their own states to meet renewable portfolio targets or gain access to incentives.

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Under I-732, when the source of electric generation is unclassified, it is to be taxed as if it were fully sourced from coal-fired plants,<sup>19</sup> at a cost nearly five times as high as that imposed on the overall fuel mix in Washington. This issue was acknowledged by Yoram Bauman of Carbon Washington in a recent paper on state taxation of carbon, with he and his coauthors cautioning that “when utilities buy power from a multi-state grid, it may not be obvious how to assign a carbon intensity to the imported electricity.”<sup>20</sup> Either some Washingtonians would experience higher than anticipated taxes on their electricity or Washington utilities would have to increase capacity to reduce reliance on imported energy.

When a state goes it alone on carbon taxation, moreover, interstate (and international) competition makes the environmental, as well as the economic, benefits less certain. A carbon tax substantially increases the cost of manufacturing in Washington, giving goods manufactured in other states an advantage in and out of Washington. To the extent that Washington already cares about ecologically sensitive manufacturing processes and power generation and uses legal and regulatory processes to promote them, taxes that drive manufacturing and energy out of state (termed “leakage”) can actually lead to worse ecological outcomes, as these activities take place in less regulated environments. The adverse impact on Washington businesses could produce little or no environmental benefit absent broader coordination.

Consider, for instance, a business that currently purchases custom parts from companies in Kennewick and Wenatchee, Washington, but after the imposition of a carbon tax, finds it more beneficial to use vendors out of Arizona or even China. In both cases, the result could actually be greater greenhouse gas emissions—in the latter case, markedly so. A carbon tax in a single state may involve more “leakage” of trade-exposed energy intensive industries than a national tax, as capital mobility across state lines is greater than capital mobility across international borders.

Proponents often cite a carbon tax adopted in the Canadian province of British Columbia as evidence against adverse effects, but it must be noted that most of British Columbia’s manufacturing output is closely connected to its natural resource wealth (e.g., timber, with wood and paper products accounting for 30 percent of the province’s manufacturing).<sup>21</sup> Unlike factories, these resources cannot be relocated, and British Columbia’s absolute advantage may be sufficiently large to withstand some reduction of profit margins in these industries.

Washington’s manufacturing sector is four times the size of British Columbia’s,<sup>22</sup> and manufacturing accounts for 13.5 percent of Washington’s state gross product,<sup>23</sup> compared

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19 Washington Secretary of State, “Initiative Measure No. 732,” § 7.

20 Adele Morris, Yoram Bauman, & David Bookbinder, “State-Level Carbon Taxes: Options and Opportunities for Policymakers,” The Brookings Institute Climate and Energy Economics Project, July 28, 2016, <https://www.brookings.edu/wp-content/uploads/2016/07/State-level-carbon-taxes-Options-and-opportunities-for-policymakers.pdf>, 16.

21 British Columbia BCStats, “Manufacturing Sales by North American Industrial Classification (NAICS),” <http://www.bcstats.gov.bc.ca/StatisticsBySubject/BusinessIndustry/Manufacturing.aspx>.

22 National Association of Manufacturers, “Washington Manufacturing Facts,” <http://www.nam.org/Data-and-Reports/State-Manufacturing-Data/State-Manufacturing-Data/March-2016/Manufacturing-Facts--Washington/>.

23 *Id.*

to about 7 percent of British Columbia's provincial economy.<sup>24</sup> Washington's aerospace industry alone accounts for twice the entire manufacturing output of British Columbia.<sup>25</sup> Boeing's decision to locate a new manufacturing facility in South Carolina a few years ago came as a blow to Washington;<sup>26</sup> the consequences of a new carbon tax on manufacturers' location decisions, while speculative, may give rise to legitimate concerns for Washington policymakers.

A state-levied carbon tax, moreover, must necessarily be imposed further downstream in the production process than one imposed at the national level. As noted previously, the I-732 tax adopts the expedient of limiting the tax base to fossil fuel consumption, which accounts for about 75 percent of greenhouse gas emissions. This is a substantial percentage, but inevitably favors some emissions sources over others.

Should the carbon tax succeed in its ecological mission by increasing the price of, and thus disincentivizing, carbon emissions, the carbon tax base can be expected to erode over time. This would represent a victory on environmental policy grounds, but also limits future revenue potential for the state. The steadily increasing rate of carbon taxation entailed in the I-732 proposal can help counteract those losses, but also accelerates them.

Washington's constitution creates another challenge by dictating that all excise taxes collected on the sale of motor fuel be used exclusively for highway purposes.<sup>27</sup> Initiative 732 does not seek to amend this constitutional provision, but rather attempts to stipulate by statute that the carbon tax's application to motor fuel is not an excise tax for purposes of that constitutional provision. It is plausible that a court would hold that the new tax is legally an excise tax nonetheless and thereby mandate that all revenues from the share of the tax imposed on motor fuel be dedicated to highway funding. The carbon tax is intended to replace general fund revenues, so such a ruling could have significant ramifications for the state budget.

## Conclusion

The Washington carbon tax proposal is perhaps the most intriguing tax initiative on the ballot anywhere in the country this year. By restricting the base to fossil fuel combustion, it sacrifices a degree of neutrality in favor of administrative simplicity. By adopting offsetting reductions of other taxes, it strives for revenue neutrality, and through its selection of those offsetting tax reductions, it attempts to redress the inherent regressivity of carbon taxes. It is an ambitious proposal, but also, in many respects, a balanced one.

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24 British Columbia BCStats, "A Profile of British Columbia's Manufacturing Sector," June 2015, <http://www.bcstats.gov.bc.ca/StatisticsBySubject/BusinessIndustry/Manufacturing.aspx>.

25 *Id.*, "B.C. Gross Domestic Product at Basic Prices," May 2016, <http://www.bcstats.gov.bc.ca/StatisticsBySubject/Economy/EconomicAccounts.aspx>.

26 The decision was made on labor grounds. See, e.g., "Moving Factories to Flee Unions," *The Economist*, Apr. 25, 2011, [http://www.economist.com/blogs/democracyinamerica/2011/04/boeings\\_labour\\_problems](http://www.economist.com/blogs/democracyinamerica/2011/04/boeings_labour_problems); Steve Wilhelm, "After 2020, Boeing On Course to Build More 787 Dreamliners in South Carolina Than Washington," *Puget Sound Business Journal*, May 11, 2015, <http://www.bizjournals.com/seattle/news/2015/05/11/after-2020-boeing-on-course-to-build-more-787.html>.

27 W.A. Const. art. II, § 40.

Nevertheless, I-732 represents an experiment with considerable risk, not only in terms of revenue projections but also in its broader economic effects. British Columbia's carbon tax notwithstanding, a state with Washington's diversified economy to adopt a carbon tax on its own is uncharted territory. Proponents hope that carbon emissions will decline as the tax encourages manufacturers and consumers to become more efficient or curtail consumption. They would not, presumably, regard it as a victory if carbon emissions plummeted in Washington merely because manufacturing jobs migrated to other states.

Bauman, the economist behind I-732, expressed hope in a recent paper on state taxation of carbon that states would come together in adopting and harmonizing carbon tax policies to discourage leakage and reduce administrative and compliance costs, while simultaneously acknowledging the limitations of state taxation of carbon emissions:

While far better than nothing, even a reasonably coordinated collection of state and provincial carbon pricing policies, in part derived from a patchwork of federal regulations and supplemented by a collage of other federal and sub-national policies, would create inefficiently disparate abatement incentives across sources, gases, sectors, and jurisdictions. Relying on state action also complicates international negotiations around both emissions targets and carbon prices. For example, it is difficult for the U.S. State Department to make a strong case to other countries that the United States will achieve a particular emissions goal by a certain date if the policies to attain it are directed by state actors over which the federal government has little control. Arguably, a more comprehensive approach, across and within major economies, will prove indispensable to achieve ambitious [greenhouse gas] stabilization targets at reasonable cost. But in the absence of new federal legislation in the United States, this scenario of state and provincial coordination is about as good as it could get.<sup>28</sup>

Ultimately, the voters will have to decide whether such hopes are good enough.