

Carbon pricing in Washington: Lessons from British Columbia's carbon tax



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In 2008, Gordon Campbell's right-of-center Liberal party in British Columbia enacted a revenue-neutral carbon tax shift. This policy has since been hailed by many as among the best designed climate policies in the world.

BC's carbon tax is revenue-neutral, meaning that 100% of the revenue (\$1.8 billion over the first 3-year period) is being returned to taxpayers: 42% to reduce personal income taxes; 22% to reduce corporate income taxes; 14% to reduce small business taxes; and 21% for payments to offsets impacts on low-income households. While tax reductions are an important part of the overall package, public opinion research in BC indicates that **100% revenue-neutrality was not a key for broad support** and that some targeted spending -- for green jobs training, clean energy, or transit -- would likely have made the package more attractive.

As fate would have it, the tax commenced during 2008's historic run-up in gas prices. This upset many voters, but public concern subsided as fuel prices came back down. During the 2009 provincial elections, the left-of-center opposition party, the NDP, attacked the carbon tax, but their argument proved ineffective. Instead, attacking the tax alienated some of the NDP's traditional environmental base, which split between the NDP, Campbell's Liberal Party, and the Green Party. Campbell won re-election by a convincing margin and declared the carbon tax "vindicated."

Adopting a version of BC's policy in Washington could reduce carbon emissions while also reducing unpopular taxes. **A carbon tax might also serve as a trailblazer** for regional and national climate policy if cap-and-trade efforts stall in 2010 and Republicans advance in the November elections. (A carbon tax could also work in conjunction with regional or national cap-and-trade programs; BC, for example, continues to be a member of WCI.)

A carbon tax in Washington

- ◆ **Tax rates:** A levy of \$30/ton CO₂ on fossil fuels purchased for use in Washington. It may be possible to also tax the fuels associated with imported electricity.
- ◆ **Climate impacts:** Fossil fuels make up about 85% of the Washington's total greenhouse gas emissions. Short-term impacts would be modest – probably reducing emissions by less than 10% -- but moving toward a higher price on carbon is the most effective climate strategy in the long run.
- ◆ **Price impacts:** The tax would add roughly 30 cents/gallon of gasoline, diesel, or jet fuel; about 3 cents/kWh of coal-fired power; and about 1.5 cents/kWh of gas-fired power.
- ◆ **Revenue impacts:** The tax would initially generate about **\$2.2 billion per year**, assuming a 10% reduction in emissions. Carbon tax revenues are likely to decline over time, as CO₂ emissions decline.
- ◆ **Revenue recycling:** The tax could provide significant rebates to state property and B&O taxes, fund the Working Families Rebate, and invest in clean energy and green jobs, and perhaps even K-12 math and science education.
- ◆ **Political support:** Some businesses and conservative groups (e.g., Puget Sound Energy, Washington Policy Center) have publicly endorsed carbon taxes.

Table 1: GHG emissions in Washington State in 2004.

Source	Short tons of CO2-equivalent (2004)
Motor gasoline	26 million
Natural gas	15 million (split roughly evenly between electricity generation, residential, commercial, and industrial)
Coal	11 million (all from TransAlta)
Diesel fuel	11 million (mostly for transportation)
Jet fuel	8 million
“Other petroleum”	7 million (mostly petroleum coke and still gas)
Imported electricity	5 million (estimated from Fuel Mix Disclosure reports)
Non-fossil fuel emissions (not covered by carbon tax)	15 million (roughly evenly divided between industrial process emissions and agricultural emissions)

Table 2: Price impacts of a tax of \$30/ton of CO2.

Fossil fuel	Carbon tax	Current price (Jan 2010)
Gasoline	\$0.29/gallon	\$2.80 including \$0.38 state tax and \$0.184 federal tax.
Diesel	\$0.34/gallon	Pre-tax price similar to gasoline
Jet fuel	\$0.32/gallon	Pre-tax price similar to gasoline
Natural gas	\$1.81/ mcf, or \$0.0176 per kWh.	\$11.50 mcf residential, \$10.22 mcf commercial, \$9.69 mcf industrial, \$7.85 mcf electric power.
Coal	\$56/ton, or \$0.0319 per kWh.	WA data not available. U.S. “average open market sales price” is \$32/ton (2008).

Table 3: Some revenue recycling options for \$2.2 billion per year in carbon tax revenue.

Option	Comments
Property tax rebates (50%)	\$1.1 billion provides rebates that cover more than half of the \$2b collected for state property taxes. (State property taxes are roughly one-fourth of total property taxes.) Alternatively, \$1.1b could fund a reduction in the state sales tax from 6.5% to 5.6%.
B&O tax rebates (25%)	\$550m to rebate a portion of the \$3b collected for state B&O taxes. (Of this figure, \$35-\$65m could be targeted at increasing the small business B&O exemption.)
Working Families Rebate (15%)	\$330m would offset impacts on low-income households, perhaps using the currently unfunded working families rebate.
Clean energy research (2%)	\$44m/year for UW, WSU, WWU, EWU, CWU, and maybe PNNL.
Green jobs training (2%)	\$44m for community college programs.
K-12 math & science (6%)	\$132m.

For more information, please see Sightline’s full analysis, “Carbon Pricing in Washington,” available at http://www.sightline.org/research/energy/res_pubs/carbon-pricing-washington.pdf.

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