



# SCALING UP AMBITION: LESSONS FROM BRITISH COLUMBIA'S CARBON TAX

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**ACTION AREA:** Revising

**FOCUS AREA:** Mitigation

**COUNTRY:** Canada (British Columbia)

## SECTORS

**INVOLVED:** Cross-sectoral

**TIMEFRAME:** July 2008 - ongoing

**CASE SUMMARY:** Many consider the British Columbia (B.C.) carbon tax to be a 'textbook' example of a broad-based, revenue-neutral carbon tax (World Bank, 2017). The carbon tax was introduced in 2008 at a rate of Canadian Dollars (CAD) 10 per metric ton of carbon dioxide (CO<sub>2</sub>) equivalent and annually raised by CAD 5, until reaching CAD 30 in 2012. The tax is paid by all individuals and businesses that purchase or use fuel in the province. Initially, the revenues from the carbon tax were used to fund reductions in other taxes on citizens and businesses. In May 2013, the government froze carbon tax rates until 2017. As of April 2018, the tax has been increasing again, taking steps of CAD 5 annually to reach CAD 50 in 2021. A portion of these new incremental revenues will be spent on new green initiatives, in addition to measures consistent with the previous revenue-neutral policy.

British Columbia's carbon tax can be considered a good practice as it involves a broad range of stakeholders that are actively pushing for ambitious tax rates and the long-standing engagement of the government of British Columbia for ambitious climate policies. Also, the carbon tax has given B.C.'s economy a real push to invest in innovative low-carbon production technologies





**BACKGROUND:** ————— The emergence of a carbon tax in the Canadian province of British Columbia (B.C.) 'reflected a perfect storm of political conditions for carbon taxation' (Harrison, 2013). Among these conditions counted the strong political commitment for ambitious climate policy, a high level of consciousness for the climate change problem among the population, a government that enjoyed the support from the business sector and the high availability of hydropower as a source for clean energy (ibid). Beyond these structural factors, a number of events further spurred momentum to take action against climate change in the province. In the period leading up to 2008, B.C. experienced a number of concentrated environmental issues, when mountain pine beetles spread across the province as they experienced warmer weather and killed millions of pine trees (Harrison, 2012). The beetle infestation was accompanied by a series of intense storms in the province (Cecco, 2018). These events contributed to a high level of public awareness for climate change-related issues in B.C. Over 20 % of B.C.'s voters identified climate change as the single most important issue at the beginning of 2007, while other issues such as the economy only reached single digits at that time (Harrison, 2013).

Already in 2007, the province had set itself ambitious legislated emission reduction targets to fight climate change through its Greenhouse Gas Reduction Targets Act: At least 33% below 2007 levels by 2020 and at least 80% below 2007 levels by 2050 (World Bank, 2017). As one of the measures to achieve this goal, the B.C. government launched a broad-based, revenue-neutral carbon tax in July 2008 (World Bank, 2017) through the Carbon Tax Act (British Columbia, 2019b). Revenue-neutrality means that every dollar collected is returned to B.C.'s population in the form of tax measures such as tax breaks or credits (UNFCCC, n.a.). The tax is administered by the Ministry of Finance and applies proportionally to the global warming potential of various greenhouse gases (GHGs) emitted by the combustion of fossil fuels. It covers the purchase and use of 23 fuels (such as gasoline, diesel, natural gas, heating fuel, propane and coal) (World Bank, 2017; British Columbia, 2019g), unless a specific exemption applies (British Columbia, 2019g). These fuels represent around 70 % of British Columbia's GHG emissions (Murray and Rivers, 2015). The tax aimed at (World Bank, 2017):

- Encouraging individuals and businesses to reduce their fuel use and their GHG emissions;
- Sending a consistent price signal;
- Ensuring that emitters also pay for these emissions (polluter pays principle);
- Enhancing the economic attractiveness of clean energy alternatives

Although the public was already concerned about the impacts of climate change at the time, the introduction of the tax nevertheless sparked public opposition. Some of the rural and poorer sections of society perceived the tax as punitive. Despite these concerns, the provincial liberal party was re-elected in 2009. One important factor that contributed to the success of the carbon tax was the support of the business sector for the liberal government and its carbon tax. This support has depended on two factors: The revenue-neutrality of the tax, and the even taxation of households and industrial sources (Harrison, 2013). Moreover, liberal Premier Gordon Campbell was strongly committed to introducing the tax. The availability of hydropower in the region also facilitated the introduction of a carbon tax (ibid.) as electricity from this source is cheap, low-carbon, and also available for heating.

Public support for the carbon tax increased after its implementation, showcasing that the political economy around an established carbon tax is quite different from the one around a newly introduced carbon tax (Harrison, 2013). Nevertheless, in May 2013, the B.C. government under Christy Clark, the liberal successor to Premier Campbell, froze the tax rate at CAD 30 for the upcoming five years until 2017. Clark argued that while B.C. is a climate-change leader, it was time for other jurisdictions to catch up to their climate commitments to keep British Columbia competitive (Bailey, 2013).

The election of the New Democratic Party (NDP) in 2017 led to the lift of the tax freeze the following year starting in 2018. The tax would annually increase by CAD 5 per tonne of CO<sub>2</sub> equivalent (tCO<sub>2</sub>eq), reaching CAD 50 in 2021 (Eberhard, 2017). The tax increases over time can be retraced in Figure 1.

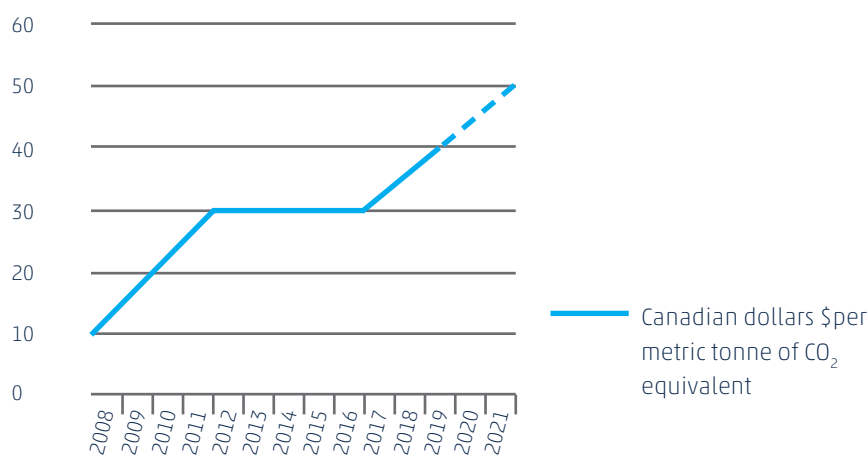


Figure 1: The rise of British Columbia's carbon tax (created by case study authors)

**ACTIVITIES:** The following section goes into more detail on the evolution of the tax, how it has been collected, the revenue-recycling modalities as well as the modifications to the use of revenues as of 2018.

### 2008-2012: Introducing and scaling up the carbon tax

Through the Carbon Tax Act, the carbon tax was introduced in 2008 at a rate of CAD 10 per tCO<sub>2</sub>eq, with a schedule to increase at a rate of CAD 5 annually until it reached CAD 30 per tCO<sub>2</sub>eq in 2012 (Harrison, 2013). Some of the major exemptions from the tax include fuel for exports, for interjurisdictional commercial aviation and marine purposes, and methane and nitrous oxide emissions from agriculture (unrelated to fuel use) (World Bank, 2017). Its broad coverage can be regarded as advantageous due to several reasons, including: i) the fairness and simplicity of the measure, ii) the cost-effective way of reducing emissions (meaning that the same marginal incentive to reduce emissions applies to most sources) (Williams, 2014), and iii) the support a broad-based carbon tax can likely gain from the environmental community.

The tax is paid downstream, i.e. by end purchasers and users, but collected upstream. Fuel distributors (i.e. wholesalers that sell domestically produced or imported fuel) must register with the Ministry of Finance as 'tax collectors'. They are responsible for collecting the tax from purchasers upon sale. Vendors are required to pay a security to the government equivalent to the full amount of the tax payable by the consumer. As of 2014, carbon taxes can be paid online using the province's



eTaxBC system (World Bank, 2017). This approach to collecting the carbon tax has been taken to reduce the administrative burden, as a downstream tax is relatively more difficult to monitor and enforce (Williams, 2014).

The revenue from B.C.'s carbon tax was fully recycled in the form of corporate and personal income tax cuts, which were phased in over time. The recycling mix also included low-income tax credits to address the regressivity of the tax. Personal tax reductions included a Low Income Climate Action Tax Credit, paid on a quarterly basis to eligible individuals. The amount of the credit paid depends on the size of the family and the adjusted family net income (British Columbia, 2019i). Northern and rural homeowners, small business venture capital programmes and seniors undergoing home renovation projects have inter alia also benefitted from personal tax reductions (World Bank, 2017). Northern and rural households furthermore benefitted from a Northern and Rural Homeowner benefit of up to CAD 200 beginning in 2011 (ibid). Business tax reductions included an increase in the corporate income tax small business threshold (there are two corporate income rates – a general rate and a lower rate for small businesses) and general corporate income tax rate reductions (British Columbia Ministry of Finance, 2013). Notably, although the carbon tax was mandated to be revenue-neutral, it was in fact revenue-negative in that the province gave more money back than it raised through the tax in each of the first five years (Harrison, 2013).

#### **2013-2017: The tax freeze period**

In May 2013, the government froze the carbon tax rate. This step was taken by the liberal government in order to give B.C.'s businesses time to adjust and to let other provinces catch on to their climate commitments. In May 2015, the government established a Climate Leadership Team to develop climate change policy recommendations for meeting the province's 2050 climate goals established by the Greenhouse Gas Reduction Targets Act. Experts from business, academics, First Nations (who are part of British Columbia's indigenous populations (British Columbia, 2019a)), representatives from the B.C. government, environmental communities and local governments were part of the team (Hui, 2016). The Climate Leadership Team recommended a CAD 10 per tCO<sub>2</sub>e annual increase in the carbon tax beginning in 2018 (ibid). Another noteworthy event took place in March 2016, when 130 British Columbian businesses signed an open letter to the government calling for a lift of the carbon tax freeze in 2017, supporting the recommendations made by the Climate Leadership Team (Meissner, 2017). In 2017, another change in government took place when the NDP formed the government.

#### **2018-2021: Ratcheting up ambition – raising the carbon tax again**

As of 2018, the new government mandated a further increase of the carbon tax. Notably, the B.C. government has adopted a new approach to carbon pricing, freeing up some of the revenues to be spent on green investments. New revenues from the tax increase will be used to (British Columbia, 2019d):

- Provide a carbon tax relief for low- and moderate-income British Columbians;
- Support emissions intense industry; and
- Support new green initiatives

In order to improve the affordability of the tax, the government has inter alia increased the Low Income Climate Action Tax Credit to CAD 154.50 per adult and CAD 45.50 per child (as the maximum annual amount that can be received (British Columbia, 2019i)) in July 2019. The government also offers several carbon tax programmes for businesses and local governments (British Columbia Ministry of Finance, 2019d). These include inter alia a Greenhouse Carbon Tax Relief Grant to cover a

portion of the carbon tax paid on natural gas and propane for those commercial greenhouses that require carbon dioxide as a production input (British Columbia, 2019c). Another tax programme is the Climate Action Revenue Incentive Programme – a grant for local governments that committed to become carbon neutral, reimbursing 100 % of the tax these governments pay directly. Furthermore, some forms of fuel are exempt from the carbon tax, including fuel used as a raw material in an industrial process to produce / upgrade another fuel or as antifreeze in natural gas pipelines (see British Columbia, 2019j, for a complete list).

In addition to these tax programmes, the B.C. government is also developing a CleanBC Programme for Industry, which will include an Industrial Incentive and a Clean Industry Fund (British Columbia Ministry of Finance, 2019d).

To further support its goals to become a low-carbon economy and foster energy-efficient solutions to that end – thus increasing the feasibility of the carbon tax – the B.C. government published its CleanBC plan in December 2018, which prioritises (British Columbia, 2019h):

- a shift of the public and private sector towards greater use of clean B.C. and other renewable energies;
- increasing the affordability and availability of energy-efficient solutions for B.C.'s citizens, such as zero-emission vehicles; and
- turning the province into a destination for increased investments and for industry producing low-carbon products and services as well as pollution-reducing technologies.

## **INSTITUTIONS**

**INVOLVED:** ————— The carbon tax is administered by the Government of British Columbia through its Ministry of Finance.

**COOPERATION WITH:** — On the provincial level, B.C.'s government has been cooperating with various state and non-state actors, who mainly provide strategic advice on how to further develop the government's tax policy. These actors include:

- The private sector
- First Nations
- Academia
- Environmental organisations
- Local governments

In addition to that, B.C. is diffusing its carbon tax policy knowledge and sharing experiences through a plethora of different partnerships at regional, national and international levels. The government of British Columbia (2019f) provides a detailed overview of these collaboration formats.

**FINANCE:** ————— British Columbia's carbon tax is paid by all individuals and businesses that purchase or use fuel in the province. The tax rate was initially set at CAD 10 per tCO<sub>2</sub>eq of emissions and increased by CAD 5 per tCO<sub>2</sub>eq, until reaching CAD 30 in 2012. Since 2018, it has been increasing again by CAD 5 per tCO<sub>2</sub>eq annually, until it reaches CAD 50 in 2021. Some of the tax revenue is recycled in the form of tax credits. Since 2018, it is also being used to support clean growth initiatives.



**IMPACT OF ACTIVITIES:** — **A BOOMING CLEAN TECHNOLOGY INDUSTRY:** The carbon tax has successfully supported the emergence of a world-wide leading clean-tech industry. Seven companies from B.C. alone appear in the '2019 Global Cleantech 100' list (an annual guide to the world's top 100 companies in sustainable innovation) more than from any other province or state around the world (Tipping and Kniewasser, 2019). According to a 2016 report by KPMG, the tax has been one of the government policies and programmes that enhanced the development of the clean-tech sector (KPMG, 2016).

· **INCENTIVES FOR THE PUBLIC SECTOR TO REDUCE EMISSIONS:** As part of the carbon tax policy, B.C. communities are supported in their efforts to reduce GHG emissions. Those 182 communities that have signed B.C. Climate Action Charter commit themselves to operate in a carbon-neutral way and to build energy-efficient communities. To the end of assisting them in their efforts, they can receive a grant of up to 100 % of the carbon taxes that they pay (UNFCCC, n.a.). Thus, the tax not only incentivises businesses to innovate (as seen above), but also the public sector.

### WHY IS IT

#### GOOD PRACTICE:

· **STAKEHOLDER ENGAGEMENT:** In the case of B.C., diverse stakeholder groups have actively pushed for more ambitious policies – exemplified by the Climate Leadership Team that involved businesses, First Nations, local governments, academia and the environmental sector (Climate Leadership Team, 2015). Another noteworthy example for B.C.'s strong stakeholder engagement is the Climate Solutions and Clean Growth Advisory Council, which provides strategic advice to the government on climate action and clean economic growth and which includes members from First Nations, environmental organisations, industry, academia, labour and local government (British Columbia, 2019e).

· **POLITICAL BUY-IN:** B.C. has proven its political commitment for implementing the carbon tax from the beginning. The government also exemplifies its long-term goal to pursue low-carbon development through its participation in diverse partnerships at the local, national, regional, and international level. A noteworthy example is the Carbon Pricing Leadership Coalition, through which the province has partnered with the World Bank to support other jurisdictions to develop carbon pricing policies, while sharing its own experiences (British Columbia, 2019f). Through actively advocating its ambitious policies on various levels, B.C. has contributed to 'reverse leakage', i.e. diffusing its own climate regime to influence the choices of other jurisdictions (Pahle et al., 2017).

· **INNOVATION:** By introducing a broad-based carbon tax, B.C. has sent a price signal to its economy, spurring a shift towards cleaner modes of production. The CleanBC Programme for Industry will provide businesses with an additional financial incentive to cut their emissions and invest in innovation. Industries can benefit from this programme through incentives to lower their carbon intensity and invest in emission reduction technologies, which accelerates the economic shift towards low-carbon production methods (UNFCCC, n.a.).

#### SUCCESS FACTORS:

· **REVENUE NEUTRALITY OF THE CARBON TAX:** Although the introduction of the carbon tax spurred some initial backlash among the population, the government was able to alleviate concerns that the tax would constitute an additional financial burden. The revenue neutrality of the tax was a key success factor in implementing the carbon tax and raising the tax rate, while public acceptance rose with it. Recently, wide acceptance of the tax has allowed some of its revenue to be channelled into new green initiatives.

- PERSONAL ENGAGEMENT OF THE PREMIER:** B.C.'s carbon tax would probably not have seen the light of day without the strong commitment of Premier Gordon Campbell. The Premier even put his political career at stake on the passage of the tax, telling his caucus colleagues 'that if they wanted to get rid of the tax they would have to get rid of him' (Harrison, 2013). Campbell was personally engaged in tackling climate change, creating a cabinet committee on climate action, which he personally chaired, and establishing a Climate Action Secretariat within his office prior to the introduction of the carbon tax (Harrison, 2013). As the case of B.C. shows, one key political figure can be vital to introduce ambitious carbon pricing policies.
- TRANSPARENT COMMUNICATION OF THE REDISTRIBUTION OF CARBON TAX REVENUES:** A key factor that secured a transparent process for redistributing the tax revenues was a clear ministerial communication of the use of revenues. The Minister of Finance had been required to submit a 3-year plan each year to communicate the ways in which the revenues from the tax would be used (Sustainable Prosperity, 2012). This step was taken in order to enhance the public acceptance of the tax (World Bank, 2017).

**OVERCOMING BARRIERS / CHALLENGES:** —————

**WHAT WERE THE MAIN BARRIERS / CHALLENGES TO DELIVERY?**

**POLITICAL:** The introduction of the carbon tax initially faced opposition from British Columbia's rural and low-income sections of society, as they feared an additional tax burden falling upon them. Some raised concerns that the carbon tax could be regressive.

**ECONOMIC:** As a result of the high availability of hydropower in the region, most of B.C.'s industry has not been heavily impacted by the introduction of the carbon tax. However, especially fuel-intensive industries in B.C. feared that the tax would have an adverse effect on their economic viability.

**HOW WERE THESE BARRIERS / CHALLENGES OVERCOME?**

Through targeted tax credits, the B.C. government made sure that the burden on the sections of society that would be most heavily impacted by the tax would be properly redistributed. For example, the tax incorporated a Low Income Climate Action Tax Credit, which was designed to offset the carbon tax for lower-income households (Sustainable Prosperity 2012). When the tax credit was raised in 2011, it increased by a smaller percentage than the carbon tax, but it still fully offset the estimated cost of the carbon tax for households with a lower income (World Bank, 2017).

Through openly communicating how the tax revenue would be recycled in the form of tax breaks and making revenue-neutrality a legislated requirement, the B.C. government was able to mitigate the opposition from businesses when the tax was first established.

**LESSONS LEARNED:** —————

- DISTRIBUTE THE IMPACTS OF THE CARBON TAX IN A SOCIALLY JUST WAY:** Some sections of society will be more heavily impacted by the introduction of a carbon tax than others. It is important to take this factor into account and design the tax in a way that redistributes the burden on these sections to be socially just. This not only enhances the social acceptance of the tax, but also the fairness of the policy.



- **ADOPT A PHASED AND PREDICTABLE APPROACH TO INTRODUCING THE TAX:** The phased approach to the carbon tax in the years 2008 to 2012 followed by the tax freeze period in the years 2013 to 2018 gave individuals and businesses time to adjust to the tax (Duff, 2008).

**HOW TO REPLICATE THIS PRACTICE:**

- **COMMUNICATE THE TAX IN A TRANSPARENT WAY:** While leaving stakeholders time to accommodate to the new tax is important, governments should also openly communicate the exact amount of a planned tax increase over time to keep the citizens in the picture. Furthermore, by including clear and transparent information on how the money collected through the carbon tax is put to use in the government budget, acceptance for the tax is likely to increase.
- **USE A FAVOURABLE MOMENT TO INTRODUCE A CARBON TAX:** Structural conditions such as a government that enjoys the support of the private sector or the availability of clean energy can constitute effective levers for the introduction of a carbon pricing policy. But also unforeseen factors such as extreme weather events can increase awareness for climate change amongst the population and thus heighten societal support to take political action against it. It is important to realise the moment when the time is 'ripe' for the introduction of a carbon pricing policy – and seize it.

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**FURTHER KEY RESOURCES:**

Carbon Tax Act (2008). SBC 2008, c 40. Available at: <http://canlii.ca/t/52lcv>

**WEBSITES:**

British Columbia on its carbon tax: <https://www2.gov.bc.ca/gov/content/environment/climate-change/planning-and-action/carbon-tax>

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