



British Columbians' perspectives on global warming and the carbon tax

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At a Glance

British Columbians are concerned about global warming and want to see the province do more to help solve the problem. They are confident that reducing greenhouse gas pollution and maintaining a strong economy can go hand-in-hand.

The carbon tax is motivating behaviour changes and British Columbians are supportive of further increases in the rate if the additional revenue is invested in healthcare and education, greenhouse gas reduction projects, personal income tax cuts or protecting low income British Columbians. There is next to no appetite for further increases in the rate if the revenue is used to reduce corporate income taxes. At the same time, British Columbians have a less positive view of the carbon tax when compared to a similar poll conducted in 2011.

These results present an interesting dilemma for the province: while British Columbians want more action on global warming and are supportive of further rate increases, they have some dissatisfaction with the current policy. Further research into why British Columbians hold these perspectives should inform future adjustments to the carbon tax, allocation of revenue and approaches to public engagement and communication.

Methodology

The results of this opinion poll are based upon a representative sample of 1035 British Columbians. The study was hosted on the Angus Reid forum.³ The national research firm Strategic Communications Inc. conducted the survey from 12 to 14 July 2012. The poll's sample is reflective of British Columbia's actual regional, gender, education and age composition relative to the 2006 Census. A probabilistic sample of this size would yield a margin of error of ± 3.4 per cent, 19 times out of 20. A similar opinion poll was conducted in 2011 and the results are compared where possible. Appendix 1 provides a full list of the poll questions and discusses how the questions in this poll compare to those asked last year.

¹ Matt Horne and Kevin Sauvé are from the Pembina Institute.

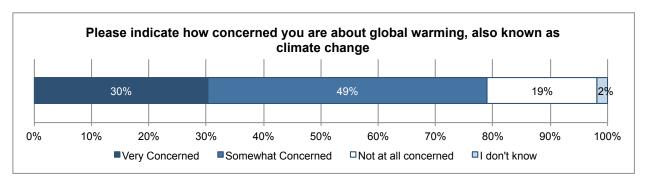
² Tom Pedersen is from the Pacific Institute for Climate Solutions.

³ Angus Reid Forum. https://www.angusreidforum.com/Portal/p.aspx

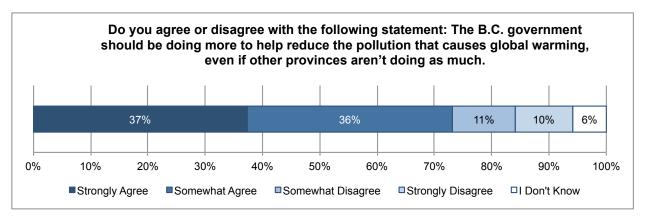
Results

Concern about global warming, desire for action

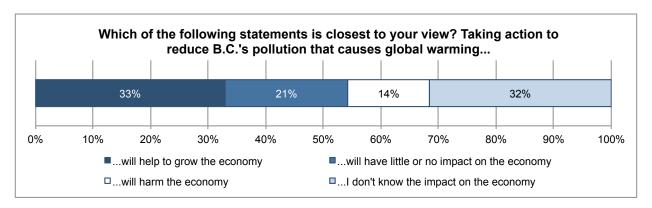
A strong majority of British Columbians are either very concerned (30%) or somewhat concerned (49%) about global warming.



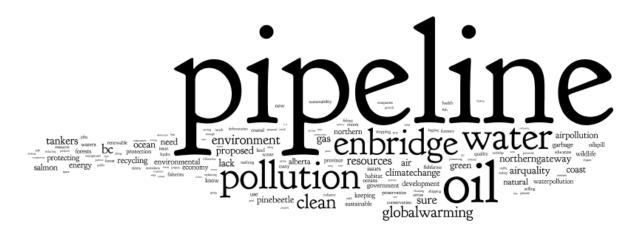
They also want the provincial government to take stronger action to reduce greenhouse gas (GHG) pollution, with a combined 73 per cent of participants agreeing that B.C. should do more to help reduce global warming pollution, even if other provinces are not doing as much. British Columbians appear to reject the argument that the government should wait for other provinces before taking action.



A majority of British Columbians believe that action to reduce GHG pollution will help to grow (33%) or have little to no impact (21%) on the provincial economy, while 14 per cent of participants believe that taking action to reduce GHG pollution will harm the economy. A further one third of participants are unsure of what the economic consequences will be, meaning that, of those that have formed an opinion, 79 per cent believe that taking action will help grow or have little to no impact on the provincial economy.



When it comes to the environment, British Columbian's are most concerned about oilsands pipelines. with 29 per cent of participants referring to "pipelines" (and related terms) in response to an open-ended question. The word cloud below shows this result, with larger font sizes indicating a more frequently mentioned concern.⁵ Concerns about water and global warming were the next most frequently cited with mentions from eight and six per cent of participants respectively.⁶



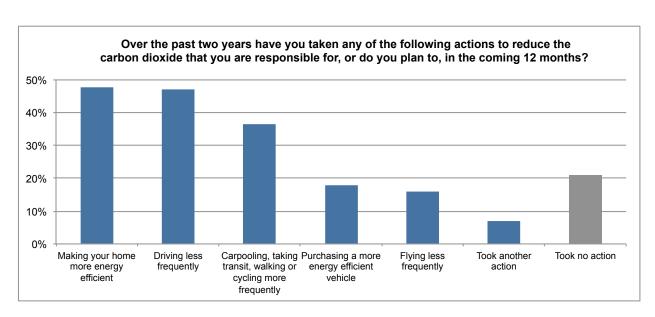
Personal action to reduce pollution

Accompanying a desire for more government action, many British Columbians are also taking matters into their own hands when it comes to reducing the amount of GHG pollution they are responsible for. When asked about actions they have taken to reduce carbon dioxide over the past two years, or plan to take within the next 12 months, only 22 per cent report taking no actions. The most frequent actions were making homes more energy efficient (48%) and driving less frequently (47%).

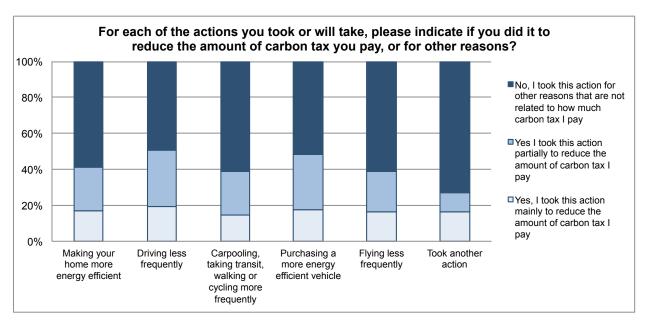
⁴ The 29 per cent includes all responses that used the terms pipeline, oil, Enbridge or Northern Gateway.

⁵ Different font sizes in the word cloud are representative of a word's frequency in responses. For example, if the font size of one word is twice as big as another it means that this word was mentioned twice as often. One unfortunate outcome of this approach is that a longer word with the same font size as a shorter word can appear to have greater significance. For example, the font size of the word "pipeline" is about three times larger than the the font size for the word "water," but the difference appears to be greater than this because "pipeline" has more letters.

⁶ The six per cent includes all responses that used the terms global warming, climate change, carbon emissions or greenhouse gas emissions. "Air pollution" and "air quality" mentions account for another five per cent of responses.



Given that the carbon tax rate is still relatively low (e.g., about seven cents per litre of gasoline and \$1.50 per gigajoule of natural gas⁷), it was a surprisingly important motivator in the decisions to take these actions. For example, 51 per cent of participants that chose to drive less frequently and 48 per cent that chose to purchase a more efficient vehicle had done so, at least in part, to pay less carbon tax.⁸ These polling results do not provide enough detail to determine if people took this type of action because of the current carbon tax rate or as a product of the 'ramping effect', that is, in anticipation that the tax rate would continue to rise in the future.

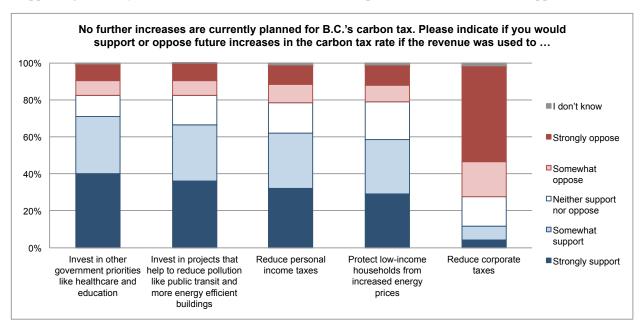


⁷ The price of natural gas for residential customers in the lower mainland (including delivery charges) was \$7.72 per gigajoule in October 2012.

⁸ The poll also tested the degree of familiarity that participants had with the carbon tax. Two-thirds of participants report being either very (14%) or somewhat (57%) familiar with B.C.'s carbon tax. A further 27 per cent report being unfamiliar with the carbon tax and three per cent did not know B.C. had a carbon tax prior to taking the survey.

Support for increasing the carbon tax

B.C.'s carbon tax was implemented in 2008 at \$10 per tonne of GHG pollution, rising by \$5 per year until it reached \$30 per tonne on July 1 2012. No further increases in the rate are currently scheduled. According to this polling research, British Columbians are supportive of further rate increases, depending on how the revenue would be used. Participants were most supportive of future rate increases if the revenue was used for government priorities such as health care and education (71% support) or projects that help to reduce pollution, such as public transit or more energy efficient buildings (67% support). Support for raising the carbon tax was also high if revenue would be used to reduce personal income taxes (62% support) or protect low-income households (58% support). Support for raising the carbon tax dropped significantly if revenue would be used to reduce corporate income taxes (12% support).



The results from this question point to a disconnect between British Columbian's priorities for carbon tax revenue and the Carbon Tax Act's stipulation that the carbon tax be revenue neutral. When it implemented the carbon tax the provincial government decided to make it revenue neutral, reducing the amount of other taxes it collects by an amount equal to the revenue it raises with the carbon tax (projected to be \$1.17 billion in 2012/2013⁹). According to our polling results, British Columbians do not appear to place a high priority on a making the the carbon tax revenue neutral. While there is support for personal income tax cuts and protecting low-income British Columbians — both of which are part of the current tax shift — the strongest support is for options that would represent an increase in overall government spending and a departure from revenue neutrality.

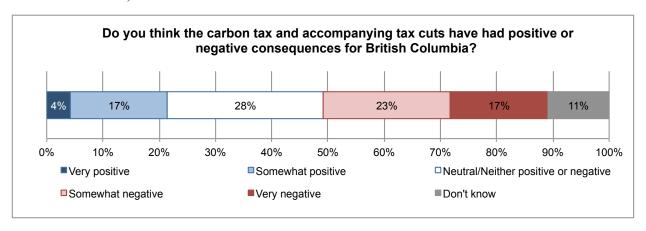
There is also next to no appetite for additional corporate tax cuts, which will account for 57 per cent of the tax cuts financed by the carbon tax revenue in 2012/13. The poll did not directly ask participants what they thought of the tax cuts currently financed with carbon tax revenue, so it is unclear if the lack of support for additional tax cuts applies to the tax cuts already implemented.

⁹ British Columbia Ministry of Finance, Budget and Fiscal Plan 2012/2013 – 2014/2015, page 68, table 2.

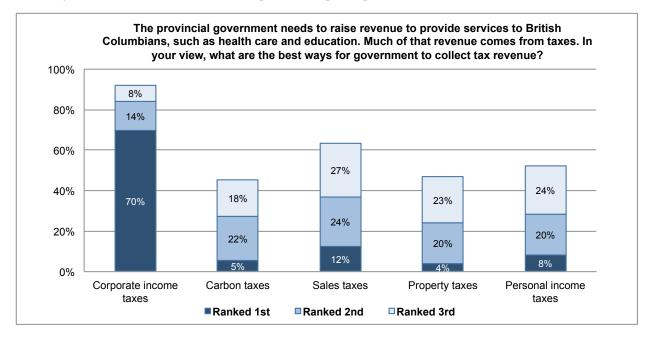
¹⁰ Ibid – page 68, table 2

Warning signs for carbon tax supporters

Results from the poll highlight a decline in support for the carbon tax and some dissatisfaction with the tax that will undermine support for the policy if left unaddressed. When asked about the overall consequences of the carbon tax for the province, 21 per cent report positive impacts, 28 per cent neutral, 40 per cent negative and 11 per cent do not know. A shift from a similar question in 2011 is notable, where the number of participants reporting positive consequences is down by 12 per cent (33% in 2011 versus 21% in 2012) and the number reporting negative consequences is up by 13 per cent (27% in 2011 versus 40% in 2012).



A larger slip in support appears when participants are asked about preferred approaches for the government to collect tax revenue. When given a choice between corporate income, sales, property, personal income and carbon taxes, 45 per cent of participants select the carbon tax as one of the best ways to raise government revenue. In 2011, 71 per cent of participants selected carbon taxes.



¹¹ Note that the wording was slightly different for this question between 2011 and 2012. In 2011, this question read, "Based on what you have seen, read, or heard do you feel the carbon tax and accompanying tax cuts have had positive or negative consequences for British Columbia?" A "don't know" option was also added in 2012.

These results highlight two contradictions. The first being British Columbians' concern about global warming and desire for more government action, while simultaneously showing limited support for what is arguably one of the strongest climate policies in North America. The second being the negative perspectives held by participants about the carbon tax even though they support further rate increases.

The poll results do not provide any explanation for the first contradiction, but a potential explanation for the second contradiction is that participants do not agree with how revenue is being spent, thus negatively influencing their overall assessment of the policy. In other words, if British Columbians would rather see investment in health care, education and green projects than they would in corporate or income tax cuts, they increasingly view the carbon tax negatively. This explanation would only be accurate if the priorities stated for hypothetical revenue from a higher carbon tax are transferable to the priorties established for current carbon tax revenue.

While decisions around carbon tax revenue are undoubtedly important from a number of perspectives, they are unlikely to fully explain how British Columbians are forming their conclusions about the carbon tax. An open-ended question asking participants "what words come to mind when you think of B.C.'s carbon tax?" provided some insight into this issue. The three most common negative themes in those responses were that the carbon tax was "expensive," (mentioned in 7% of responses) "unfair" (mentioned in 7% of responses) or "ineffective" (mentioned in 5% of responses). The limited information provided by responses to this question does little to explain what is meant by these terms, why they have been attributed to the carbon tax and what changes would help British Columbians to deem the tax "fair" and "effective." Further public opinion research is warranted to understand why British Columbians hold these perspectives, and whether they are best responded to through communication efforts and/or changes in the design of the carbon tax and related government policy.

B.C.'s carbon tax challenge

British Columbians are presenting their government with an interesting challenge:

- They want the province to do more to fight global warming and are confident that doing so will either help improve or have little to no impact on the provincial economy.
- They are supportive of future increases in the carbon tax as long as the revenue is not used to pay for additional corporate tax cuts.
- However, support for the carbon tax one of B.C.'s strongest efforts to fight global warming is down relative to 2011.

The challenge for the province is to navigate the next steps of the carbon tax, recognizing that there is support for further rate increases despite some frustration with the current design of the carbon tax. Further research is needed to understand where that frustration is coming from, what changes are most appropriate and how they can be best communicated.

Additional results

The numerical results for each question, including breakdowns by region, gender, age, income and education are available at http://www.pembina.org/pub/2376.

Acknowledgements

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Appendix 1 – Full list of questions compared with 2011 polling questions

A similar set of questions related to British Columbians' opinions about the carbon tax were asked in the spring of 2011, the results of which can be found at http://www.pembina.org/pub/2233. The Pembina Institute used feedback generated from that opinion analysis for this poll in order to generate a more balanced set of questions with more reliable results.

Question		Comparability with 2011		
1. The provincial government needs to raise revenue to provide services		Identical question in 2011		
	ish Columbians, such as health care and education. Much of that	poll.		
revenue comes from taxes. In your view, what are the best ways for				
govern	government to collect tax revenue? Please rank up to three of the			
follow	ing sources of revenue:			
0	Corporate income taxes			
0	Carbon taxes			
0	Sales taxes			
0	Property taxes			
0	Personal income taxes			
	en thinking only about the environment, what in your opinion is	New question in 2012.		
	st important issue facing B.C.?			
	se indicate how concerned you are about global warming, also	Global warming was one of		
known	as climate change.	a number of issues asked		
0	Very concerned	about in 2011. Five options		
0	Somewhat concerned	were provided to participants		
0	Not at all concerned	in 2011.		
0	I don't know			
4. Whi	ch of the following statements is closest to your view?	The 'I don't know' option		
0	Taking action to reduce B.C.'s pollution that causes global	was added in 2012.		
	warming will help to grow the economy			
0	Taking action to reduce B.C.'s pollution that causes global			
	warming will have little or no impact on the economy			
0	Taking action to reduce B.C.'s pollution that causes global			
	warming will harm the economy			
0	I don't know how taking action to reduce B.C.'s pollution that			
	causes global warming will impact the economy.			
	you agree or disagree with the following statement: The B.C.	New question in 2012.		
	government should be doing more to help reduce the pollution that			
causes	global warming, even if other provinces aren't doing as much.			
0	Strongly agree			
0	Somewhat agree			
0	Somewhat disagree			
0	Strongly disagree			
0	I don't know			
	We're going to ask you a few questions about B.C.'s carbon tax. Please New information in 2012.			
	read each question carefully and respond to the best of your ability. If			
you ar	you are unsure about your response or do not know, please indicate so.			

Question	Comparability with 2011
6. How familiar are you with B.C.'s carbon tax?	New question in 2012.
 Very familiar 	
 Somewhat familiar 	
 Not familiar 	
o Before I took this survey I did not know B.C. has a carbon tax	
7. What three words come to mind when you think of B.C.'s carbon	New question in 2012.
tax?	_
In 2008, the Government of British Columbia introduced a carbon tax.	Changed slightly from 2011
The tax is applied to the carbon dioxide that is produced when fossil	pre-amble, which read: "In
fuels such as coal or gasoline are burned. For gasoline, the carbon tax	2008, the Government of
adds 6.67 cents per litre at the pump. The tax was intended to encourage	British Columbia introduced
British Columbians and B.C. businesses to make decisions that would	a carbon tax on fossil fuels
result in less carbon dioxide being produced.	in an effort to reduce the
	pollution that causes global
By 2012, the carbon tax will be collecting \$1.2 billion per year (about	warming.
4% of government revenue). The B.C. government's financial records	-
show that it has used that revenue to lower income tax and corporate tax	By 2012, the carbon tax will
rates, and give tax credits to low-income British Columbians.	be collecting \$1.1 billion per
	year (about 3% of
	government revenue). B.C.
	has used that revenue to
	lower income tax and
	corporate tax rates, and give
	tax credits to low-income
	British Columbians."
8. Do you think the carbon tax and accompanying tax cuts have had	The 'I don't know' option
positive or negative consequences for British Columbia?	was added in 2012.
 Very positive 	
 Somewhat positive 	
 Neutral/Neither positive or negative 	
 Somewhat negative 	
 Very negative 	
o Don't know	
9. Over the past two years have you taken any of the following actions	New question in 2012.
to reduce the carbon dioxide you are responsible for, or do you plan to	
in the coming 12 months? [CHECK ALL THAT APPLY]	
 Purchasing a more energy efficient vehicle 	
o Driving less frequently	
o Carpooling, taking transit, walking or cycling more frequently	
o Flying less frequently	
Making your home more energy efficient	
None of the above	
Another action [SPECIFY]	

Question	Comparability with 2011
9b. For each of the actions you took or will take, please indicate if you	New question in 2012.
did it to reduce the amount of carbon tax you pay, or for other reasons?	•
 Yes, I took this action mainly to reduce the amount of carbon 	
tax I pay	
 Yes I took this action partially to reduce the amount of carbon 	
tax I pay	
 No, I took this action for other reasons that are not related to 	
how much carbon tax I pay	
10a. No further increases are currently planned for B.C.'s carbon tax.	New question in 2012.
Please indicate if you would support or oppose future increases in the	1
carbon tax rate if the revenue was used to invest in projects that help to	
reduce pollution like public transit and more energy efficient buildings.	
 Strongly support 	
 Somewhat support 	
Neither support nor oppose	
 Somewhat oppose 	
Strongly oppose	
o I don't know	
10b. No further increases are currently planned for B.C.'s carbon tax.	New question in 2012.
Please indicate if you would support or oppose future increases in the	riew question in 2012.
carbon tax rate if the revenue was used to invest in other government	
priorities like healthcare and education.	
Strongly support	
Somewhat support	
 Neither support nor oppose 	
Somewhat oppose	
Strongly oppose	
o I don't know	
10c. No further increases are currently planned for B.C.'s carbon tax.	New question in 2012.
Please indicate if you would support or oppose future increases in the	New question in 2012.
carbon tax rate if the revenue was used to protect low-income	
households from increased energy prices.	
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Od No further increases are currently planted for P.C.'s earhor tay.	New question in 2012.
10d. No further increases are currently planned for B.C.'s carbon tax.	New question in 2012.
Please indicate if you would support or oppose future increases in the	
carbon tax rate if the revenue was used to reduce personal income taxes.	
 Strongly support 	
Somewhat support	
Neither support nor oppose	
 Somewhat oppose 	
 Strongly oppose 	
o I don't know	

Question	Comparability with 2011	
10e. No further increases are currently planned for B.C.'s carbon tax.	New question in 2012.	
Please indicate if you would support or oppose future increases in the		
carbon tax rate if the revenue was used to reduce corporate taxes.		
 Strongly support 		
 Somewhat support 		
 Neither support nor oppose 		
 Somewhat oppose 		
 Strongly oppose 		
o I don't know		