

# BRITISH COLUMBIA'S (BC'S) CARBON TAX

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## ABSTRACT

The purpose of this research paper is to determine whether BC's carbon tax is an effective solution to the rising carbon dioxide (CO<sub>2</sub>) emissions. It is worth researching this topic as CO<sub>2</sub> emissions are increasing rapidly. I conducted a thorough literature review of both primary and secondary sources. The results indicate that BC's carbon tax is not a successful solution for decreasing CO<sub>2</sub> emissions. This research paper can be applied to case studies of carbon tax in other countries.

## INTRODUCTION

Carbon dioxide (CO<sub>2</sub>) emissions account for 60 percent of all anthropogenic greenhouse gas emissions globally and 80 percent of greenhouse gas emissions in British Columbia (Duff, 2008, p. 93). In 2008, British Columbia initiated a carbon tax. In a carbon tax policy, the government records the cost of pollution, so that the polluters pay tax based on how much greenhouse gas emissions they pollute (Batz, 2014, p. 3). The Government of British Columbia first implemented a carbon tax of C\$10 per tonne of CO<sub>2</sub> emissions (Milne, 2012, p. 181). The initial tax rate was relatively low but increased gradually each year until 2012, reaching the final price of \$30 per tonne, which is 7.2 cents per litre at the pumps (Milne, 2012, p. 181).

Gibson provided a framework for analyzing environmental policies. The framework is divided into the following seven parts: socio-ecological system, intragenerational equity, intergenerational equity, resource maintenance and efficiency, socio-ecological equity and democratic governance, precaution and adaptation, and immediate and long term integration.

## THESIS STATEMENT

BC's carbon tax is not a sustainable policy as it does not meet the requirements of the Gibson's framework.

## METHODOLOGY

For this research paper, I did a thorough literature review. I analyzed a variety of primary and secondary sources, from peer-reviewed journals to books. It is crucial to understand that carbon tax is a controversial topic; therefore the origin and value of the sources should be questioned. Primary and secondary sources contain incomplete information and can either lean towards economic or environmental side of the debate. BC's carbon tax has been implemented for only ten years, so there is limited data and unknown long term effects.

## CONCLUSION AND DISCUSSION

BC's carbon tax did not achieve socio-ecological integrity because BC's carbon tax policy caused land disturbance and impacted groundwater quality. BC's carbon tax also did not reach intragenerational equity, as the low income residents of British Columbia had to pay a greater proportion of their tax. BC's carbon tax did not improve intergenerational equity, since BC's carbon tax did not decrease environmental and health issues, such as cancer.

BC's carbon tax did not prevent future possible leakages and the expansion of the oil industry, so BC's carbon tax did not meet the criteria of resource maintenance and efficiency. BC's carbon tax did not satisfy the social-ecological civility and democratic governance criteria because First Nations communities do not have a voice in the decision making process in the future oil plans but rather they were only informed. BC's carbon tax did not meet the requirement of precaution, since the environmental protection acts could not keep up with the growth of the oil industry.

BC's carbon tax was successful in adaptation section of the sustainability policy by Gibson, as BC's carbon tax encouraged consumers to decrease their dependence on oil industry. However, due to the high path dependence, it is complicated to shift to renewable energy as the investment in the oil industry is substantial.

Figure 1 demonstrates greenhouse gas emissions in BC. The drop in fuel consumption was caused by the Great Recession in 2008, as seen in Figure 1. If years 2008 or 2006 are the only years examined, then a false picture of how BC emissions have fallen due to the carbon tax is constructed, while in the reality since 2010, BC's greenhouse gas emissions have skyrocketed every single year (Lee, 2016). There have been increases from "13.5 tonnes per person in 2010 to 13.7 tonnes per person in 2013," (Lee, 2016).

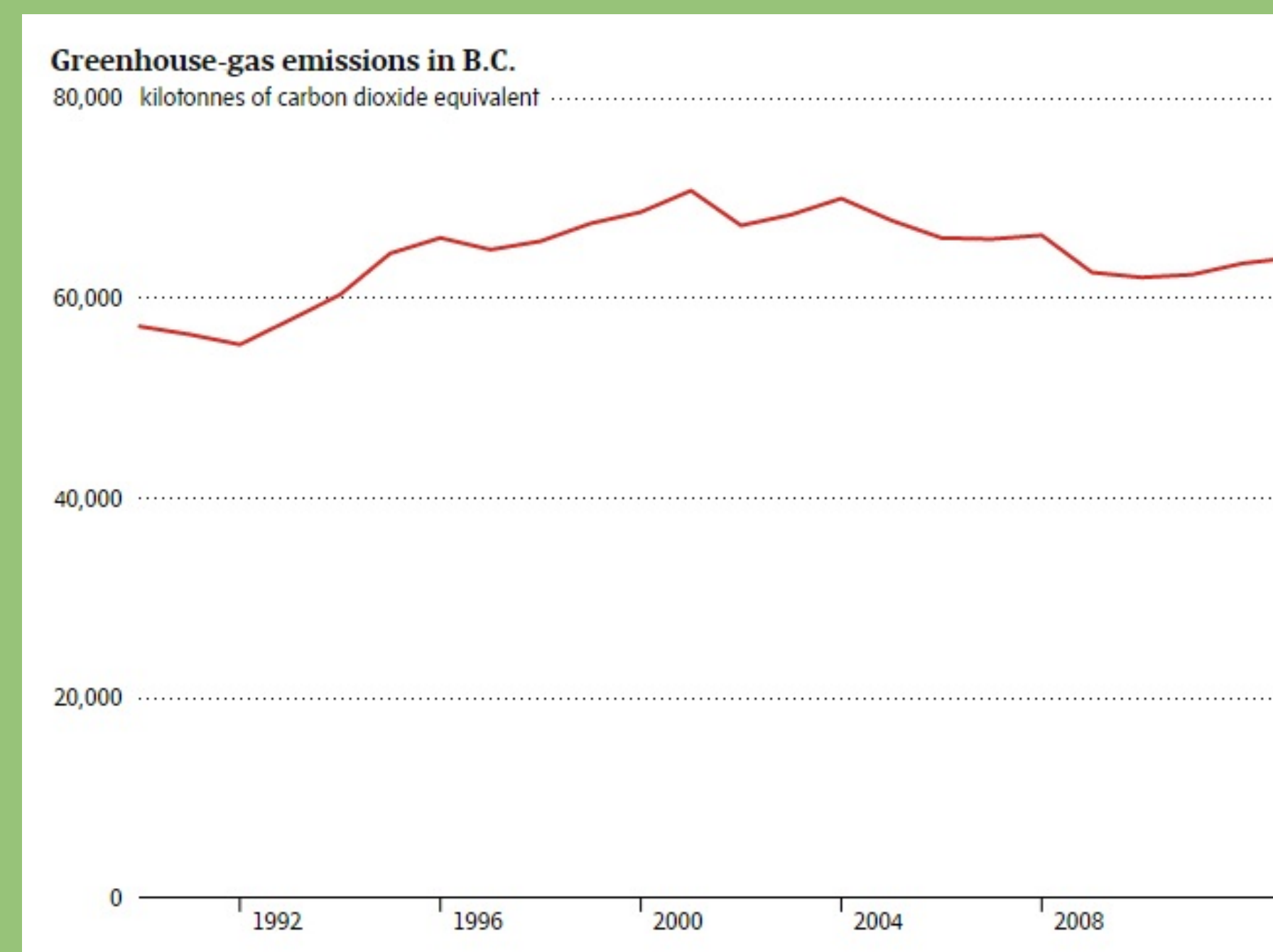


Figure 1: The effects of the BC's carbon tax on greenhouse gas emissions by Keller, 2016