

Submission by Sustainable Prosperity to the British Columbia Climate Action Leadership Panel Discussion Paper

September 14, 2015

About Sustainable Prosperity

Made up of business, environment, policy and academic leaders, Sustainable Prosperity (SP) is a national green economy think tank/do tank. We harness leading-edge thinking to advance innovation in policy and markets, in the pursuit of a greener, more competitive Canadian economy. At the same time, SP actively helps broker real-world solutions by bringing public and private sector decision-makers to the table with expert researchers to both design and apply innovative policies and programs.

Introduction

Sustainable Prosperity commends the Government of British Columbia in its desire to build on its existing climate action measures to move closer to its long-term greenhouse gas emission reduction goals. We welcome the opportunity to submit input to British Columbia's 2015 Climate Leadership Discussion Paper. The intention of this submission is not to provide comment on the specific goals raised in the Discussion Paper, but rather to provide a series of key analyses and papers that may be informative to decision-makers.

Addressing climate change is a complex and multi-dimensional challenge, requiring not one policy but a suite of policies. These analyses do not provide comprehensive input on all aspects on climate policy, but are instead important elements of the key evidence base for how best to design climate policy, with a focus on SP's particular area of expertise: market-based policies. The analyses referenced in this submission include some of the best available evidence for how to design climate policies that support both environmental and economic objectives.

SP hopes this research provides useful insights into the Climate Leadership Plan process, and would welcome any opportunity to provide further assistance.

Submitted Resources

Salience of Carbon Taxes in the Gasoline Market

Nicholas Rivers (University of Ottawa) and Brandon Schaufele (University of Western Ontario/Richard Ivey School of Business)

Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2131468
October 22, 2014

Abstract: We demonstrate that the carbon tax imposed by the Canadian province of British Columbia caused a decline in short-run gasoline demand that is significantly greater than would be expected from an equivalent increase in the market price of gasoline. That the carbon tax is more salient, or yields a larger change in demand than equivalent market price movements, is robust to a range of specifications. As a result of the large consumer response to the tax, we calculate that during its first four years, the tax reduced carbon dioxide emissions from gasoline consumption by 3.6 million tonnes.

Maximizing Value: Options for Allocation Carbon Pricing Revenue Adam Baylin-Stern (Sustainable Prosperity)

Available at:

 $\frac{http://www.sustainable prosperity.ca/sites/default/files/publications/files/FINAL\%20 Maximizing\%20 Value-$

%200ptions%20for%20Allocating%20Carbon%20Pricing%20Revenue.pdf September 8, 2015

Carbon Pricing and Mind the Hissing

Randy Wigle (Wilfried Laurier University) and Marisa Beck (University of Waterloo)

Available at:

http://www.sustainableprosperity.ca/sites/default/files/publications/files/Mind%20the% 20Hissing.pdf

March 11, 2015

Description: Governments implementing carbon pricing as part of their efforts to transition to a low-carbon economy may see the generation of substantial revenue. This policy brief (Baylin-Stern) and supporting academic paper (Wigle and Beck) explore the carbon pricing revenue allocation options available to jurisdictions with carbon pricing policies. How to allocate this revenue is a key component of carbon pricing policy design, with the potential to influence the policy's effectiveness, efficiency and public acceptability.

British Columbia's Revenue-Neutral Carbon Tax: A Review of the Latest "Grand Experiment" in Environmental Policy

Brian C. Murray (Duke University) and Nicholas Rivers (University of Ottawa)
Available at: https://nicholasinstitute.duke.edu/sites/default/files/publications/ni_wp_15-04_full.pdf

June 30, 2015

Description: This paper reviews existing evidence on the effect of the tax on greenhouse emissions, the economy, and income distribution as well as provides new evidence on public perceptions of the tax. Empirical and simulation models suggest that the tax has reduced emissions in the province by 5–15%. At the same time, models show that the tax has had negligible effects on aggregate economic performance, though certain emissions-intensive sectors have faced challenges. Studies differ on the effects of the policy on income

distribution but agree that they are relatively small. Finally, polling data show that the public initially opposed the tax but now generally supports it.

Policy Bundles for Reducing Transportation Emissions in Large Cities **Pomme Arros (Sustainable Prosperity)**

Available at:

 $\frac{http://www.sustainableprosperity.ca/sites/default/files/publications/files/TransportationBundles\%200ct\%202014.pdf$

October 1, 2014

Related papers on "Market-based Instruments, Climate Change and Sustainable Transportation Governance" available at:

http://www.sustainableprosperity.ca/content/mbis-climate-change-and-sustainable-transportation-governance-cities

Description: This Policy Brief draws on the experiences of three large cities that have successfully bundled a mix of policy tools to revitalize and expand their public transit - London, New York and Paris. Each city has used regulation, services, and MBIs in different combinations to induce behavioural change and make alternative modes of transportation more accessible.

Just the Facts, Please: A Series of Blogs about British Columbia's Carbon Tax Shift

Stewart Elgie (University of Ottawa, Sustainable Prosperity) and Vincent Thivierge (Sustainable Prosperity)

July, 2015

The True Story of How BC's Carbon Tax is Working:

http://www.sustainableprosperity.ca/blog/just-facts-please-true-story-how-

bc%E2%80%99s-carbon-tax-working

What's Behind BC's Whopping Fuel Use Drop?:

http://www.sustainableprosperity.ca/blog/just-facts-what%E2%80%99s-behind-

bc%E2%80%99s-whopping-fuel-use-drop

Did the Carbon Tax Shift Burden or Buoy BC's Economy?:

http://www.sustainableprosperity.ca/blog/just-facts-did-carbon-tax-shift-burden-or-buoy-bc%E2%80%99s-economy

Is BC's Carbon Tax Shift a Silver Bullet Solution?:

 $\underline{http://www.sustainable prosperity.ca/blog/just-facts-bc\%E2\%80\%99s-carbon-tax-shift-silver-bullet-solution}$

Is there a Cure for "Carbon Price Phobia"?:

 $\frac{http://www.sustainable prosperity.ca/blog/just-facts-there-cure-\%E2\%80\%9Ccarbon-price-phobia\%E2\%80\%9D$

Description: This series of blogs marked the 6^{th} anniversary of the carbon tax. It includes analysis regarding BC's economic and environmental performance over the period since the tax's introduction.

The Public Policy Role in Accelerating Clean Innovation

Michelle Brownlee, Mercedes Marcano, Craig Milne

March 31, 2015 "Accelerating Clean Innovation: How Public Policy Can Drive Greener Growth" Conference videos: http://www.sustainableprosperity.ca/content/accelerating-clean-innovation-how-public-policy-can-drive-greener-growth

Blog 1: The Canadian Context: http://www.sustainableprosperity.ca/blog/accelerating-clean-innovation-conference-session-1-canadian-context

Blog 2: Public Policy Solutions: http://www.sustainableprosperity.ca/blog/accelerating-clean-innovation-conference-session-2-public-policy-solutions

Blog 3: Key Components - Linking Theory with Practice:

http://www.sustainableprosperity.ca/blog/accelerating-clean-innovation-conference-session-3-key-components-%E2%80%93-linking-theory-practice

Blog 4: The Path Forward: http://www.sustainableprosperity.ca/blog/accelerating-clean-innovation-session-4-path-forward

Blog 5: What Will It Take? More Voices Add to the Conversation:

http://www.sustainableprosperity.ca/blog/innovation-blog-5-%E2%80%93-what-will-it-take-more-voices-add-conversation

Description: The videos from this March 2015 conference contain international and Canadian experts discussing what challenges exist in developing public policies that accelerate the creation and adoption of clean innovations. A series of 5 blogs summarize conference findings in shorter format.

Shadow Carbon Pricing in the Canadian Energy Sector **Sustainable Prosperity**

March 4, 2013

Available at: http://www.sustainableprosperity.ca/content/shadow-carbon-pricing-canadian-energy-sector

Description: Many companies in Canada in a variety of sectors are using a shadow carbon price (SCP). In order to gain a better understanding of how and why companies in a carbon-intensive sector are using a SCP, Sustainable Prosperity surveyed3 ten energy sector companies operating in Canada (BP, Shell, Suncor, Statoil, Devon, Cenovus, Penn West, Enbridge, Ontario Power Generation, and SaskPower). All ten companies have some experience in using shadow carbon pricing; seven formally4 and three informally. A review of the literature suggests that using a shadow carbon price has become an industry standard for the oil and gas sector.

Financing Residential Energy Savings

Michelle Brownlee (Sustainable Prosperity)

December 2013

Available at:

 $\frac{http://www.sustainableprosperity.ca/sites/default/files/publications/files/Financing\%20}{Residential\%20Energy\%20Savings.pdf}$

Description: Assessing Key Features of Residential Energy Retrofit Financing Programs Residential energy retrofits offer substantial opportunities in Canada for greenhouse gas (GHG) emissions reductions, job creation and residential energy savings. Many residential energy efficiency measures are cost-effective with favourable payback periods and investment returns, yet up-take of these measures has been lower than expected due to persistent market barriers. This Policy Brief explores the case for using financing programs to promote energy efficiency actions in residential applications, and experience with these programs to date.