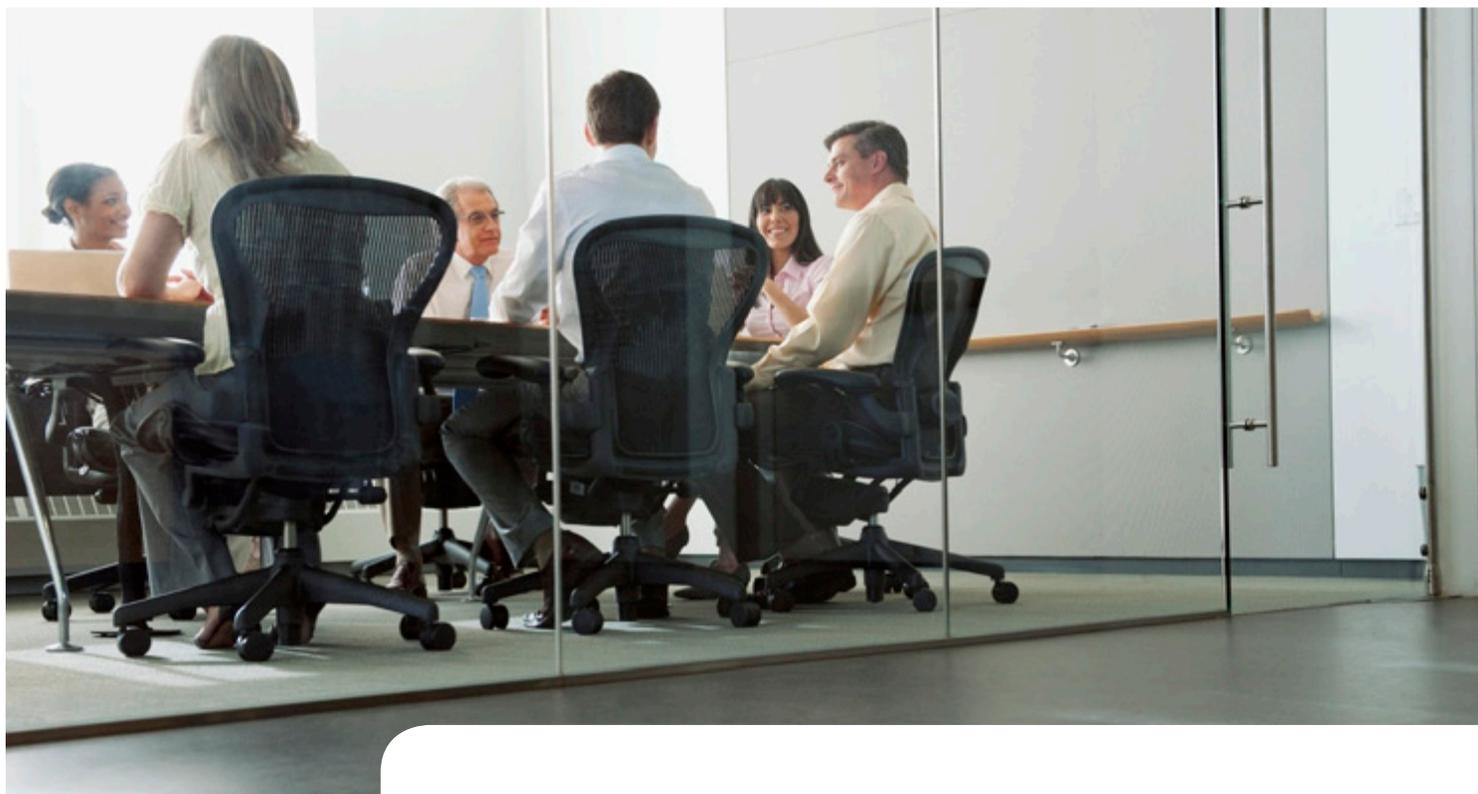


FOR A LOW CARBON ECONOMY



Sustainable Prosperity is a national research and policy network, based at the University of Ottawa. SP focuses on market-based approaches to build a stronger, greener economy. It brings together business, policy and academic leaders to help innovative ideas inform policy development.

Canadian Business Preference on Carbon Pricing¹

Key Messages

- The majority of energy and carbon intensive industries in Canada are overwhelmingly in favour of a price on carbon.
- There is a clear preference for a market-based mechanism over voluntary measures, subsidies or command and control regulation.
- There is no consensus, however, on the type of carbon pricing instrument preferred, with some favouring a cap-and-trade program, and others supporting carbon taxation.
- Risk management, not cost minimization, has been the major factor influencing the shift in policy preference of Canada's carbon intensive industries from subsidies and voluntary measures to carbon pricing.

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¹ This Sustainable Prosperity *Policy Brief* is derived from research carried out by Kaija Belfry Munroe, a PhD candidate at the University of British Columbia. Sustainable Prosperity would like to thank Kaija for her work and collaboration. SP would also like to thank Matt Paterson and Adam Bumpus for their thoughtful input.

The issue

It is commonly believed that energy and carbon intensive industries in Canada are uniformly opposed to carbon pricing since they would incur the highest costs of the policy. These industries' opposition has been cited as the reason for the Canadian federal government's inaction on climate change.

However, research on the policy preferences of these industries shows that not only are they largely in favour of carbon pricing; but they are more concerned about policy uncertainty than cost minimization. This suggests that the federal government can and should engage with these industries to develop a national carbon pricing strategy.

The Knowledge Base

This section describes the policy instruments available to governments looking to reduce a country's carbon emissions, and reviews the experience with these instruments in Canada to date. It also identifies and explains business preferences in Canada for specific instruments.

Five policy instruments are available to governments looking to decrease a country's carbon emissions: subsidies, voluntary programs, traditional regulation, cap-and-trade and taxation (Field and Olewiler: 1994). Subsidies provide individuals and/or industry with public funding for carbon emission reductions. In voluntary programs, industry associations or individual firms agree (often formally) to decrease carbon emissions by a certain amount. However, there is generally no penalty for non-compliance. Cap-and-trade, command and control regulation, and taxation programs, on the other hand, are regulatory and include punitive action or an economic cost for non-compliance. Command and control regulation, as the name suggests, involves government setting a target for industry and enforcing compliance through penalties, often financial. Cap-and-trade involves government setting a limit (cap) on the amount of emissions for the entire economy and then allocating emission credits to individual firms up to that amount. Firms requiring more credits may purchase them from other firms who require fewer credits than their allocation. Finally, a carbon tax would increase the cost of carbon emissions, providing an incentive for firms to decrease emissions.

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The knowledge base in Canada

Although the Government of Canada first indicated readiness to adopt regulatory measures in 2002 before ratification of the Kyoto Protocol, Canada has no framework regulation on climate at the federal level at the present time. Plans have been announced for new efficiency standards for automobiles and regulations pertaining to new coal-based electricity generation. However, implementation of these measures (and indeed of any regulatory framework) has been made contingent on parallel regulatory development in the United States.

Approximately half of Canada's emissions result from heavy industry, referred to as Large Final Emitters (LFE), and consequently Canadian climate policy has generally focused on influencing the behaviour of these business actors (Bramley: 2004). Prior to 2001, both industry and government agreed that voluntary agreements and subsidies were the best available climate policy instruments. In 2001, however, the government began to recognize that these policies had not succeeded in reducing emissions. Indeed, emissions have grown substantially since 1990 (Macdonald: Forthcoming).

Given that large final emitters are the primary targets of climate change policy instruments, and that costs to some² companies would be expected to increase if regulatory instruments were implemented, business obstruction of these policies could only be expected. The argument that business discontent has led to the government's current policy lethargy is compelling, if we assume that firms are profit maximizing and, therefore, view cost minimization as a central objective. However, the findings of a UBC research study suggest otherwise.³

In fact, the majority of energy and carbon intensive industries in Canada overwhelmingly supports a price on carbon and has done so since 2006-2007. The shift from preferring voluntary measures and subsidies to a carbon price can be explained by the fact that many industry associations and firms now value minimizing risk and policy uncertainty over pure cost minimization.

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2 The distribution of costs between sectors and then firms is heavily dependent on the instrument and its design, timeline, implementation and other factors.

3 Kaija Belfry Munroe, *Business, Risk, and Carbon Pricing: Business Preference for Climate Change Instruments in Canada*. This study interviewed over 35 representatives from major industry associations and some large firms in high emitting sectors in Canada.

Table 1 below lists the preferences of the participating industry associations in 2009 when interviews were undertaken; Table 2 lists the preferences of participating firms along with association preferences for each sector, again as of 2009.⁴ Assuming that firms' policy preferences are most heavily influenced by cost minimization, firms would be expected to prefer subsidies and voluntary agreements – theoretically the cheapest policies for companies – and, then, cap-and-trade, command and control regulation, and carbon taxation in that order (Field and Olewiler: 1994). However the findings of this study do not correspond with these expectations, even though the full range of regulatory and market-based options were presented in interviews.

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Table 1. Association Preferences as of 2009

NAME	SUPPORTS PRICE ON CARBON?	OFFICIAL PREFERENCE	UNOFFICIAL (PERSONAL) PREFERENCE ⁵
Canadian Electricity Association (CEA)	No	Time, Money (through increase in price where regulated)	
Mining Association of Canada (MAC)	Yes	No	Carbon Tax
Canadian Vehicle Manufacturer's Association (CVMA)	Yes	Cap-and-trade	
Canadian Steel Producers Association (CSPA)	Yes	No	No
Canadian Gas Association (CGA)	Yes	No	Carbon Tax
Canadian Petroleum Products Institute (refiners and retailers) (CPPI)	Yes	No	Carbon Tax
Canadian Council of Chief Executives (CCCE)	Yes	No	Carbon Tax
Canadian Chemical Producers Association (CCPA)	Yes	Cap-and-Trade	
Railway Association of Canada (RAC)	Yes	Cap-and-Trade	
Forest Products Association of Canada (FPAC)	Yes	No	Cap-and-Trade
Aluminum Association of Canada (AAC)	Yes	Cap-and-Trade	
Canadian Association of Petroleum Producers (CAPP)	Yes	Modified Carbon Tax ⁶	
Cement Association of Canada (CAC)	Yes	No	

4 While the reader may legitimately wonder whether economic conditions in 2009 were materially different, and whether the conclusions drawn in this exercise might be less relevant to today as a result, SP believes that risk management has now become – if anything – a more pressing priority for business. Therefore, we assume that business attitudes to carbon pricing have not changed.

5 Official preferences have been formally adopted by the organization through its decision-making apparatus; however, in many cases, representatives from associations or firms with no official preference articulated unofficial or personal support for an instrument. This is listed here because it demonstrates a higher level of support for carbon taxation within the business community than would otherwise be apparent.

6 CAPP supports a carbon tax on marginal emissions above a set quota. It is therefore different than traditional carbon taxation, which would tax all emissions.

Table 2. Firm Preferences as of 2009 – (Associations for included sectors also listed in bold)

SECTOR	FIRM	ACCEPTS A PRICE ON CARBON?	OFFICIAL PREFERENCE	UNOFFICIAL (PERSONAL) PREFERENCE
FPAC		Yes	Cap-and-trade	
Forestry	Weyerhaeuser	Yes	Cap-and-trade	
Forestry	Canfor	Yes	No	Cap-and-trade
Forestry	Catalyst Paper	Yes	No	Carbon Tax
Forestry	West Fraser	Yes	No	No
Forestry	AbitibiBowater	Yes	Cap-and-trade	
CAC		Yes	No	No
Cement	Essroc	Yes	Voluntary, then Carbon tax	
Cement	St Mary's Cement	Yes	Cap-and-trade	
Cement	Holcim	Yes	Cap-and-trade	
Cement	Lehigh	Yes	No	Cap-and-trade
CGA		Yes	No	Carbon Tax
Natural gas	EnCana	Yes	Carbon Tax	
Natural Gas	Union Gas	Yes	Carbon Tax	
Natural Gas	Gaz Metro	Yes	Cap-and-trade	
CAPP		Yes	Modified Carbon Tax	
Petroleum	ConocoPhillips Canada	Yes	Carbon tax in Canada (Cap-and-trade in US)	
Petroleum	Suncor	Yes	Cap-and-trade	
Petroleum	Nexen	Yes	Carbon tax	
Petroleum	Petro-Canada	Unclear ⁷	No (although support of CAPP position)	No
Petroleum	Shell Canada	Yes	Cap-and-trade	

Determining preferences

As the tables illustrate, there is considerable variation in the type of carbon pricing supported by industry. While the majority of firms supported a cap-and-trade program; several supported a carbon tax. A proponent of one instrument over another tended to emphasize its virtues: for example, the simplicity and efficiency of a carbon tax, or the potential for a harmonized North American cap-and-trade system. Cap-and-trade was also criticized by proponents of carbon taxation as susceptible to price volatility and, therefore, uncertainty. Why one firm or association viewed efficiency (taxation) as more significant than harmonization (cap-and-trade) could not be clearly explained through the particular characteristics of a firm or industry.

Instead, two factors influenced support for carbon taxation versus emissions trading. First, firms where decision-makers had direct previous experience with an instrument were more likely to support that instrument. Second, where firm or association officials perceived a competitive advantage from a particular instrument, they would support that instrument. For instance, natural gas firms operating in regions where electrical utilities currently employ coal for power generation supported carbon taxation, because officials believed

⁷ Petro-Canada's views on carbon pricing were contradictory and thus no preference is recorded.

that a tax would make coal relatively more expensive and natural gas relatively less expensive to utilities. In other words, natural gas firm officials believed that carbon taxation could help them increase their market share in electricity generation.

However, this study also found that while perceived advantage or previous experience explain much of the variation in support for a type of carbon pricing, understanding why firms have come to support carbon pricing over voluntary mechanisms requires a shift in the conceptual lens we use to understand business preferences for government policy. A significant number of respondents cited risk management as weighing more heavily in their organization's preference decision-making processes than cost minimization.

Risk Management and Investment

Risk management has steadily become an overwhelming focus in the business community, likely due to past high profile events where large companies faced threats from unexpected sources, such as the collapse of the venerable Barings Bank due to the actions of a rogue trader in 1995. Risk management as a corporate governance practice attempts to “manage the unmanageable” by putting in place systems and structures to prevent such catastrophes (Power: 2004a: 73).

Governments and professional organizations have implemented rules and frameworks to compel firms to adopt risk management “best practices”. The Sarbanes-Oxley legislation in the US and the international Basel II accords for the banking industry provide perhaps the best examples of this phenomenon (Power: 2004b). These legislative changes have transformed risk management from a practice into a regime, increasing its significance in all areas of corporate decision-making.

While the term “risk” is often employed loosely by business and government officials and can refer to an event that might lead to a negative consequence for a firm (a hazard), the probability of that event taking place, or the consequence of that event, it also highlights the significance of investment for business success or failure. In the business context, risk is most often defined as “[the] uncertainty that an investment will earn its expected rate of return”(Reilly: 2006).

Investors are concerned with the risk-return trade-off of any potential investment: the greater the risk, the greater the return required to compensate the investor. Therefore, any environmental or political change that increases the uncertainty that an investment will provide the expected rate of return over its life span increases the risk of that investment and decreases the likelihood that it will receive funding from investors. This

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pattern influences not only the firm's internal investment decision-making (i.e. should we build that plant now?); but also the likelihood that the firm itself will be viewed as a secure investment vehicle by external investors, including institutional investors and shareholders.

The research carried out by Belfry found considerable evidence that concern over investor risk perceptions significantly impacted business-government relations on climate change in Canada and that business preferences for climate change policy instruments ultimately shifted in response to investor concern. In 2002, the Government of Canada surprised many in the environmental and business community when it agreed to limit business liabilities under a possible future carbon price to \$15/ton and a 15% emissions reduction from business as usual in 2012 (Harrison: 2007). Given that this agreement rendered it almost impossible for Canada to meet its Kyoto obligations without substantial public funding, most observers were baffled by the government's decision (Harrison: 2007). Officials on both side of the negotiation affirmed, however, that the reason for the agreement was that institutional investors were refusing to provide necessary capital for oil sands development until certainty on a future carbon price was provided (Alvarez: 2010), (Confidential Interview with a government official: 2009). None of the interview subjects could remember why \$15 was chosen as the price ceiling, suggesting that the certainty itself was more important than the cost.

Equally, this study found a correlation between the shift in business preferences toward carbon pricing and a substantial increase in the frequency of communications with shareholders, through annual reports, on climate change starting in 2007. In other words, Canadian business responded to public opinion⁸ by shifting its preference towards carbon pricing in 2006-2007. Shareholder risk perceptions are of particular importance because the strength of a firm's share price has been found to be directly and inversely related to the likelihood of hostile acquisition by competing firms – a significant threat to firm survival (Powell: 1997).

Risk management has steadily become an overwhelming focus in the business community.

8 Public opinion can be a proxy for the concerns of shareholders.

The significance of risk management and investment for business carbon pricing policy preferences has several implications for business-government relations in Canada.

Survival

Business officials care not only about optimizing profit, but about ensuring the survival of the organization for which they work. “Reputational risks” are a significant concern to business officials, as they try and manage how they are perceived by external investors and customers. Firms, therefore, may be willing to assume greater costs in order to protect their reputation in relation to public opinion and investor concern. This is not an example of “green washing” but a necessary component of business success.

Policy Certainty

As risk in the investment context is a type of uncertainty, policy certainty is very important to business success. Certainty in climate policy is necessary for firms to make informed decisions about their own investments, while external investors also require certainty for their analysis and investment decision-making process, meaning that policy uncertainty is almost always bad for business. For example, Nexen, an oil company operating in Alberta and overseas, has delayed aspects of a major development at Long Lake, Alberta, until further details on Canada’s climate change plan are made available (Haggett: 2009; Nexen: 2009). In this case, company officials were concerned not only that a carbon price would make the investment unviable, but that the corporation would be forced to develop a carbon capture and storage facility at the plant – a process that would be both more efficient and less costly to implement if included at the development stage of the project (Blackwell: 2009).

Experience

Belfry’s research suggests that past experience on the part of the firm– and, thus, of decision-makers within the firm – with a particular policy option increases their relative support for that policy. Familiarity with a given policy decreases risk and uncertainty, giving management confidence that they are able to manage and operate under the policy.

Certainty in climate policy is necessary for firms to make informed decisions about their own investments.

Implications for policy makers

On the issue of business preferences for carbon pricing in Canada, Sustainable Prosperity believes that the following conclusions are of direct relevance to policy makers:

1. Business preferences for government policy are complex, and cannot accurately be predicted through a quick analysis of the costs associated with a given policy instrument. Costs are not necessarily the primary concern of corporate decision-makers.
2. The current tone of uncertainty surrounding federal climate policy in Canada creates risk for the business community, as companies and investors need to be able to make predictions about the future for sound risk management and planning. As such, there is wide support in the energy and carbon intensive industries for the implementation of a carbon pricing policy in Canada.
3. To influence the business community towards acceptance of a carbon pricing policy, policymakers should also appeal to their concern for risk management and increased policy certainty, not only cost minimization.

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