

Risk and advantage in a changing climate:

Business Preferences for Climate Change Policy Instruments in Canada

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Introduction: A Puzzling Event

It was a rather unexpected response. On January 7, 2008, Canada's National Round Table on the Environment and the Economy published a report on climate change calling for the government to implement "an economy-wide emission price policy" (Getting to 2050: January 7, 2008: 20). As the politically indecorous term "carbon tax" began appearing in the headlines of all of Canada's major news outlets, the political class – both government and opposition – responded with derision. In this context, swift condemnation from industry could only be expected. Yet, despite the business community's history of campaigning against climate change action, particularly the Kyoto Protocol (Macdonald: May 31, 2001), no such condemnation came from Canada's major business associations or large firms.

On the contrary, the Canadian Council of Chief Executives (CCCE) – the voice of big business in Canada – was unambiguous in its support, calling the report "a sound and comprehensive policy blueprint"(CCCE: January 7, 2008). Even more surprising, the Canadian Association of Petroleum Producers (CAPP) signaled cautious agreement, suggesting that its members were "ready to move" on the policy (Cheadle: January 7, 2008).

While no survey of business preferences for climate change policy instruments was available at the time (or, indeed, until now), previous public statements by industry suggested that not all associations were likely to support a carbon tax. Only six months earlier, the Cement Association of Canada (CAC), another large emitter, denounced Quebec's nascent and minimalist carbon tax (Spicer: October 1, 2007; CAC). Moreover, both CAPP and CCCE had previously spoken out against regulatory mechanisms, calling explicitly for government to focus on voluntary instruments (CBC: 2007; Business Council for National Issues: 1994). Certainly, supporting the NRTEE report was a surprising change in tactics for both organizations.

The great question of our time and the question of this research

At the root of this story is a problem: How do we effectively respond to climate change? This is, undoubtedly, one of the most challenging questions of our time and one that, despite the high level of concern for the environment in Canada, has yet to be resolved. Five climate policy instruments are available to government: expenditures, voluntary programs, cap and trade (emissions trading) systems, traditional (command and control) regulation, and taxation. Each entails certain costs and benefits to the business community, the largest source of Canada's greenhouse gas emissions. From an economic perspective, business preference for these policies ought to be relatively clear, as certain instruments provide greater benefits to industry while others entail significant cost (Field and Olewiler: 1994). Yet, as the example of the NRTEE report demonstrates, recent pronouncements on the part of diverse business associations have demonstrated significant variation in support for policy instruments across industry and over time, which – surprisingly – does not appear to conform to economic expectations. *What causes variation in business support for climate change policy instruments, between organizations and across time?*

The purpose of this research is to fill a considerable gap in the public policy literature by providing a foundation for future research into the impact of business preference on public policy in Canada. Scholars in Canada and the US have oft argued that business holds a privileged place in policy-making, but most take for granted the nature of business preference, assuming a vague equivalency to profit maximization (Mansbridge: 1992; Coleman: 1988; Young and Everett: 2004; see also for explicit discussion Mitchell: 1997). In other words, they argue that x (business) has an effect on y (policy outcomes) but leave x undefined and unquestioned. Before we can further our knowledge of the role of business in Canadian public policy, we must ensure a clear understanding of business preference, both in its form and its manner of development.

Nowhere is this truer than in the realm of climate change, where business activity is a central focus of public policy. Yet, little is known of business preference for climate policy instruments; while some comparative work on these instruments is available (Harrington, Morgenstern and Sterner: 2004), a systematic study of industry political response to possible climate policy instruments had not previously been carried out in

Canada or elsewhere. Indeed, before this study was completed, *no* survey of business preferences was available in the academic or popular literature. In other words, we did not know what industry wanted government to do, let alone why they wanted it. Greater knowledge of business preferences is required if we are going to finally turn our rhetorical commitments on climate change into real action.

Economic expectations

From an economic prospective, a firm's reason for supporting a given policy and its order of preference for policies is relatively clear: wishing to maximize profits, the firm will support the policy that imposes the lowest total cost on the firm. Thus, we can expect a firm or business association's order of preference to be: 1) subsidies, 2) voluntary agreements 3) cap and trade (transferable permit) systems with a grandfathered allocation process 4) traditional "command and control" regulation and 5) non-revenue neutral taxation (Field and Olewiler: 1994).

Subsidies are by far the cheapest policy instrument for the firm as they may provide that all or most of the cost is incurred by the state (Field and Olewiler: 1994). Voluntary agreements are the second best scenario for the firm. They provide considerable leeway for industry to negotiate lower abatement levels (ensuring lower costs), as well as opportunities to positively influence public perception of their environmental and social conscience (Arora and Cason: 1996; Harrison and Antweiler: 2003).

Grandfathered cap and trade systems ought to be a firm's third choice. In this regulatory system, the government sets a cap on the quantity of emissions allowed within the entire economy and then allocates credits to existing firms up to that total capped amount. As the cap will likely be lower than the current quantity, a firm will generally need to decrease its emissions or increase its allocation of credits. To do so, it has three choices: it may lower emissions to a point equal to its original allocation of credits; it may lower emissions to a point lower than its original allocation and sell its remaining credits to other firms for a price higher than its marginal cost of abatement (the cost of reducing one additional unit of pollution) or; it may leave emissions at a point greater than its

original allocation and then buy credits from another firm at a price lower than its marginal cost of abatement. This flexibility allows both efficient and inefficient firms to gain from the transaction, either through increased revenue from selling credits in the case of efficient firms or decreased cost associated with purchasing credits rather than decreasing emissions in the case of inefficient firms.

Traditional “command and control” regulation (the fourth choice) generally does not provide this flexibility and, consequently, is less desirable to industry. Governments usually set general standards (command) and firms are expected to meet those standards or face penalties (control), no matter the cost to the firm. While some flexibility in enforcement is possible, the system itself provides no certainty of this (Field and Olewiler: 1994). Consequently, unlike a cap and trade system, a firm can expect to pay the entire cost of abatement at its own marginal abatement cost.

The least preferred policy instrument for industry ought to be taxation. In that case, a firm would pay a tax on emissions in addition to any costs of abatement it may choose to undertake. It would make the most sense for a firm to decrease its emissions until its marginal cost of abatement – the cost of decreasing one more unit of emissions - is equal to the tax, at which point paying the tax becomes cost-effective. A tax is expected to be much more expensive for the firm than other policy instruments because, unlike in both traditional regulation and grandfathered cap and trade, the firm is expected to pay a price (tax) on *all* of its emissions, not just those above a certain quota.

Two nuances in cap-and-trade systems and carbon taxes introduce slight complexity to this order of preference. First, the initial allocation of credits in a cap-and-trade system may be auctioned (firms must purchase all of their initial credits) instead of grandfathered (firms are allocated their initial credits free of charge and must only purchase credits over a certain quota). If original credits are sold or auctioned, then firms are forced to pay not only for emissions over the cap, but also for the original allocation. In that case the cap and trade system works similar to a carbon tax and would not be preferable to command and control regulation. Due to the flexibility in emissions reductions, however, it ought to be preferable to straight carbon taxation.

The second area of complexity within the order of preference is created by the issue of revenue-neutrality. While taxation ought to provide the least appeal to industry, revenue-neutral taxation - when government offsets the revenue from the policy by implementing corresponding tax cuts - may be easier to accept. If industry believes that all or most of the tax will be returned through decreases in corporate income tax, for instance, the expectation of cost is similar to that of a grandfathered cap and trade system or command and control regulation. A firm can decrease its overall taxation level through pollution abatement measures until its marginal cost of abatement is equal to the tax and, then, expect a significant amount of the remaining tax to be offset through tax decreases in other areas. The firm expects to pay the price of abatement plus the non-offset tax. The exact costs are, thus, highly dependent on the details of the taxation scheme.

There is, however, no guarantee that the tax will be returned through other sources. It is possible, for instance, that taxes on emissions will be used to decrease individual income taxes, providing no relief to industry. Consequently, where revenue-neutral taxation fits in business's order of preferences is dependent on the level of tax and the amount of corresponding tax cuts. Indeed, in the firm's order of preference based on cost, this type of taxation might be equivalent to traditional regulation: depending on the details of a policy, either option might be cheaper for industry. It would be logical, however, to expect that not all taxes would be returned; I have, consequently placed revenue-neutral carbon taxation after traditional regulation in the firm's order of preferences. Table 1 provides a summary of the order of preferences and the expected costs.

Table 1 - Theoretical costs to industry of climate policy instruments	
Increasing costs from top to bottom.	
Type of policy	Cost to industry
1. Subsidies (theoretically lowest cost)	Voluntary abatement cost – subsidy (possibly no cost)
2. Voluntary Agreements	Cost of voluntary abatement
3. Cap and Trade (when grandfathered, i.e. no cost for initial allocation of credits).	A) Cost of abatement or B) Cost of initial abatement – price of extra credits sold (price of extra credits > marginal cost of abatement) or C) Cost of initial abatement + price of extra credits purchased (price of credits < marginal cost of abatement)
4. Traditional Regulation	Cost of abatement to regulated standard
5. Revenue Neutral Carbon Tax	Cost of abatement (where marginal cost of abatement < tax) + cost of tax – tax rebates in other areas.
6. Auctioned cap and trade program	Cost of initial allocation + either A) Cost of abatement or B) Cost of initial abatement – price of extra credits sold (price of extra credits > marginal cost of abatement) or C) Cost of initial abatement + price of extra credits purchased (price of credits < marginal cost of abatement)
7. Non-neutral Taxation (theoretically highest cost)	Cost of abatement + cost of tax on remaining emissions

Given the clear cost incentive against carbon taxation and carbon pricing in general, this economic analysis only leads to further intrigue. Why would CCCE and CAPP publicly state their support for a report calling for a price on carbon, particularly when the press portrayed it as a call for a carbon tax? From an economic, cost-based perspective, all firms should prefer subsidies and voluntary agreements, yet they clearly do not. Why?

In the literature: the assumed preferences of business

This is an important question for the field of business-government relations. As the following section demonstrates, the often unspoken assumption of much research into business government relations is that the firm is profit maximizing, cost minimizing and that this characteristic, intrinsic to the nature of the firm, solely defines preferences (Mitchell: 1997). The clear deviation from economic expectations demonstrated by two of Canada's most powerful business groups, calls this assumption into question and reveals a clear gap in our knowledge of how business and governments relate.

Business-Government Relations

Indeed, while business preference is at the root of business political action, in most business-government relations literature, it is neither defined nor discussed, in part due to the context in which the field developed. Early political science analysis of business-government relations took place within a wider discussion of interest group power in the United States (Vogel: 1989; Young and Everett: 2004). These “pluralists” viewed business as just one of many interests competing for benefits within the political market place (Truman: 1981). Subsequent, “neopluralist” scholars persuasively argued that this perspective ignores the privileged place of business within a capitalist democracy (Mansbridge: 1992; Lindblom: 1977; Coleman: 1988). In both camps, however, “interests” were viewed as synonymous with the political actor itself and, thus, were fixed and exogenous.

As the field progressed, considerable scholarship investigated the methods of business political activity, examining practices such as lobbying and financial contributions (Wright: 1990; Hall: 2006). Other work in the US began to question the fluctuating nature of business influence in the policy arena (Vogel: 1989; Mucciaroni: 1995; Mitchell: 1997), an area outside the realm of the pluralist-neopluralist debate. The majority of these scholars, however, continued to leave business preference outside the scope of their studies, viewing preferences as vaguely synonymous with cost minimization. Indeed, Mitchell makes this point explicit:

“The principal goal of business is economic success, not to participate in politics. While political scientists have no general political theory of the firm, we have come some way in testing a set of propositions to explain this activity derived from the general assumption of the firm as profit maximizing” (Mitchell: 1997: 11).

Mitchell did allow that the motivations behind industry’s political action may not be solely economic (Mitchell: 1997: 12). It was, however, beyond the scope of his research to problematize business preference and he, like others before him, adopted the traditional assumption of business preferences based on cost minimization.

The Canadian Perspective

In Canada, the literature on business-government relations is extremely thin, particularly within political science. Most work is focused on analyzing or describing the

form of business's political action and the firm's place within the political system (Coleman: 1988, Stanbury: 1994) or on providing textbook style overviews of the field (Brooks and Stritch: 1991; Stanbury: 1994; Hale: 2007). While the possibility of variable business preferences for government policy is never explicitly denied, no work makes it the central focus of analysis.

If little literature exists in Canada on the subject of business-government relations generally, then *very* little exists on the subject of business-government relations on environmental policy. In providing a rationale for his 2007 book on the topic, MacDonald points out: "no comparable book-length treatment of the subject exists in Canada, despite the fact that business influence is one of the major forces shaping environmental policy" (Macdonald: 2007). While related journal-length literature does exist (Harrison and Antweiler: 2003), there is undoubtedly need for further research in the field.

Unlike most other work, Macdonald, does question the notion of business preferences, although the issue is only one of many areas examined. His account of forty years of business-government relations on environmental policy in Canada provides evidence that profitability is the strongest determinant of business preference, but that the search for legitimacy has also played a roll, particularly in recent years. The book, however, does not clearly explain why legitimacy matters to firms, nor in what context firms or associations will make lobbying decisions based on reputational concerns. Without this clarification, we cannot explain how and why firms and associations develop their preferences for climate policy instruments.

Sample and methodology

Unlike MacDonald's work, this study focused entirely on the subject of business preferences for government policy with the goal of determining a clear theory of preference development. The study employed qualitative research methods. Semi-structured interviews provided the principal research tool, in addition to primary source material such as parliamentary committee testimonials and corporate documentation. Interviews were broken into two groups: business actors and elite observers (officials from government, NGOs and consultancies). Two types of business actors participated: associations and firms. Interviews were conducted with one or two officials at each of the

participating organizations (the number of individuals involved was the choice of the participant association or firm) between October 2008 and September 2009. Generally, the person chosen for the interview was either the lead on environmental issues or the President/CEO of the organization. In total, sixty individuals participated in the study.

Associations

Thirteen associations took part in this study, representing a broad cross section of industrial sectors involved in climate change politics in Canada. To ensure comparability, the sample was limited to associations representing large corporations and did not include any groups representing so-called “small business” views.

Twelve of the associations participating in this study represent a specific industrial sector: forestry, mining, steel, chemicals, cement, upstream petroleum, downstream petroleum, natural gas, electricity, automobiles, railways, and aluminum. One association, the Canadian Council of Chief Executives, represents CEOs of large corporations from across the business community. It is the only major multi-sectoral organization operating at the federal level in Canada that limits its membership to individuals representing large corporate actors.

Firms

While an effort was made to include representatives from all major industrial associations representing large corporations, the sample of firms was limited to companies working in the oil and gas, cement, and forestry sectors (with one exception). This was done for both practical and methodological reasons. It would be impossible to interview officials from firms in all sectors of the Canadian economy due to time and resource constraints. In addition, understanding the levels of variation in business preference required interviewing officials at more than one firm in each sector. As such, limiting the sample to specific industries provided a stronger research design than would have been otherwise possible. The forestry, cement, and oil and gas sectors were chosen because they provide variance on cost and ease of abatement ensuring that, no matter the corporate circumstances of the individual firms in the sector, the significance of emissions intensity and cost could be examined.

The remaining interviews were carried out with government officials, NGO officials and consultants working on climate change who were privy to negotiations between business and government. The data gleaned from interviews with these elite observers serves as corroborating evidence, confirming (or discrediting) information provided by firms and associations, who are hardly unbiased participants. This was particularly important with respect to historical data, as it can sometimes be difficult for individuals to separate their current preferences from previous preferences. Supplementing this data are documents and transcripts of testimonies by firms and associations from 1988-2009.

Findings 1: Survey of business preferences for climate change policy instruments

The following section describes the response of business officials to the most basic question of this research: “what climate change policy instrument – subsidies, voluntary agreements, regulations, cap-and-trade or carbon taxation – would your organization like government to adopt?” I begin by outlining the preferences of the participating associations before moving on to the sample of firms from the three industrial sectors.

Associations

Thirteen major business associations took part in this study. Remarkably, all but one of the associations articulated support for a price on carbon. Only the Canadian Electricity Association suggested that a price was unnecessary and even dangerous for Canada (Guimond: 2009). All other associations openly supported the implementation of a carbon price either through carbon taxation or emissions trading, although half (6) of those associations had not developed an official preference for either of the two instruments.

Of the associations stating an official preference, five supported cap-and-trade, while one supported a form of carbon tax. The Canadian Association of Petroleum Producers (CAPP) supports a modified carbon tax, which they call a carbon levy. The tax, similar to the system currently in place in the province of Alberta, would not go to general revenue but instead would be used to support a technology fund. Companies

could access the fund for projects aimed at decreasing emissions, such as carbon capture and storage.

The Canadian Chemical Producers Association (CCPA), which states a preference for a cap-and-trade system, in reality supports a very similar program to CAPP. That association argues in favour of emissions trading but with the option of paying into a technology fund at a fixed price. The fund would thus act as a price ceiling for the emissions trading market and provide industry with funds to implement green projects (Lloyd: 2009).

The other associations stating a clear preference support a traditional cap-and-trade program. Each association was, however, concerned about the specifics of any emissions trading regime, particularly the base year and the method of allocation.

Interestingly, of the six associations who supported a price on carbon but had not developed an *official* preference for the pricing mechanism, four stated an *unofficial* preference for a carbon tax. Here, unofficial means that the association, through its decision-making apparatus, had not declared a preferred instrument, but that the interview subject(s) suggested either that the organization was leaning towards a carbon tax or that the subject and other officials at the organization supported carbon taxation as a policy instrument. The reason given for the lack of an official preference was often that there was no consensus among member companies and, thus, no ability to declare a preference. It should also be noted that interviews were undertaken after the Liberal party's crushing defeat in the 2008 election, in part due to lack of support for their carbon tax policy. As such, at the time, the idea of a carbon tax was very unpopular and this likely caused some reticence among associations in declaring it as their official preference, even if they believed it to be the best policy. Table 2 summarizes association preferences.

Name	Supports price on carbon?	Official Preference	Unofficial Preference
Canadian Electricity Association	No	Delay, Money (through increase in electricity price where regulated)	
Mining Association of Canada	Yes	None	Carbon Tax
Canadian Vehicle Manufacturer's Association	Yes	Cap-and-trade	
Canadian Steel Producers Association	Yes	None	None
Canadian Gas Association	Yes	None	Carbon Tax
Canadian Petroleum Products Institute (refiners and retailers)	Yes	None	Carbon Tax
Canadian Council of Chief Executives	Yes	None	Carbon Tax
Canadian Chemical Producers Association	Yes	Cap-and-Trade	
Railway Association of Canada	Yes	Cap-and-Trade	
Forest Products Association of Canada	Yes	Cap-and-Trade	
Aluminum Association of Canada	Yes	Cap-and-Trade	
Canadian Association of Petroleum Producers	Yes	Carbon Tax	
Cement Association of Canada	No	None	

Firms

Forestry

Five forestry firms participated in this study: Weyerhaeuser, Canfor, Catalyst Paper, West Fraser, and Abitibi-Bowater. Interestingly, only two of the companies had established official preferences, the smallest percentage of any participating sector. The two that had preferences, Weyerhaeuser and Abitibi-Bowater, both supported a cap-and-trade system. It is worth noting that all three of the firms without clear preferences were based in British Columbia (while the other two were not), where a carbon tax has recently been implemented. Of the BC firms, Canfor's Director of Technology suggested an unofficial preference for cap-and-trade, while Catalyst Paper's Vice President of Corporate Relations and Social Responsibility unofficially favoured a carbon tax. West Fraser did not state either an official or unofficial preference, as its Manager, Environmental Affairs felt such a declaration was premature without greater detail on a proposed cap-and-trade system.

Cement

There are eight cement firms in the Cement Association of Canada and four of those firms agreed to take part in this study: Essroc, St Mary's Cement, Holcim, and Lehigh. Essroc, St. Mary's and Holcim all stated official preferences: St Mary's and Holcim for a cap-and-trade system and Essroc, first, for voluntary agreements and, secondly, for a carbon tax. Interestingly, Essroc was the only company in this study to list a preference for voluntary measures above a price on carbon. It did prefer a carbon tax if regulation was inevitable and was strongly against cap-and-trade. Lehigh, which only operates two plants in Canada, did not have an official preference for Canada, but unofficially supported a cap-and-trade system.

Oil and Gas

Eight oil and gas firms participated in the study: three firms that primarily or completely operate in the natural gas sector, and five firms with primary petroleum interests. Originally, as with the other sectors, the research design called for the participation of five firms from the oil and gas sector as a whole. However, over the course of research, it became clear that firms tended to either view themselves as petroleum or natural gas companies. Given that natural gas produces fewer emissions when consumed than petroleum, it became clear that the market factors facing this industry were quite distinct from those faced by petroleum producers. As such, three extra natural gas companies were added to the sample to ensure comparability to that industry as well.

The three participating natural gas companies were Union Gas in Ontario, Gaz Metro in Quebec and EnCana in Calgary. EnCana also has petroleum interests but considers itself primarily a natural gas company (Protti: 2009). Indeed, the firm is planning to split off its petroleum interests into a new company, Cenovus, in order to allow EnCana to focus on the natural gas market (EnCana: 2009).

All three companies had official preferences. Both EnCana and Union Gas had strong preferences for carbon taxation, so much so that they were willing to openly lobby the Canadian Environment Minister and the American Secretary of Energy in favour of the instrument (Dill: 2009; Protti: 2009). Gaz Metro, on the other hand, was in favour of a cap-and-trade program.

The five participating petroleum companies were Conoco-Phillips, Nexen, Suncor, Petro-Canada and Shell Canada. Both Suncor and Shell held strong preferences for Cap-and-trade, while Nexen had a strong preference for carbon taxation. Petro-Canada made a conscious choice not to state a public preference, but did support CAPP's carbon levy policy. Nonetheless, I have listed Petro-Canada as having no preference in the table below, because it was clear that *not* having a preference was a key company policy.

ConocoPhillips is a member of the United States Climate Action Partnership (US CAP) and, thus, the US parent company was strongly in favour of Cap-and-Trade. Interestingly, the CEO and officials working on climate change at ConocoPhillips Canada held a preference for a carbon tax in Canada. This is the only case of clear dissonance between the Canadian company and its foreign parent within the sample of firms, but Shell Canada and Royal Dutch Shell exhibited similar variation before Shell Canada's board of directors was disbanded in 2007.

A clear limitation of this research method is evident in the selection bias inherent to the sample of participating petroleum companies. Four out of five participating companies are considered leaders with respect to emission reductions and climate change action. Only Petro-Canada does not fit this description. Several so-called laggard companies were contacted for this study but all refused to take part, either through explicit refusal or more often lack of response. While this sort of self-selection bias is inevitable in a voluntary study, it is unfortunate that greater inclusion of laggard companies was not possible.

Information provided by the former official at Petro-Canada, therefore, is very important in ensuring findings within the petroleum sector are not merely relevant to leader companies. The interview took place after Petro-Canada had been taken over by Suncor and had ceased to exist in its previous independent form. As this change had happened only weeks before the interview, the former official was able to speak of the company's pre-merger preferences and Petro-Canada was used as a data point like any other. Interestingly, the former official at Petro-Canada corroborated the hypothesis that laggard oil companies were not responding in part because they are laggards: the official stated that he/she would not have been permitted to sit for an interview before the merger

as it was Petro-Canada’s policy not to publicly discuss their preferences for climate change instruments. Only once the company no longer existed was the official free to elaborate on Petro-Canada’s internal views.

Table 3 summarizes the climate change preferences of all firms and is organized by industry. It is worth noting that all firms accepted a price on carbon and only Essroc articulated a first preference other than a pricing mechanism.

Sector	Firm	Accepts a price on carbon?	Official Preference?	Unofficial preference?
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	
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
Natural gas	EnCana	Yes	Carbon Tax	
Natural Gas	Union Gas	Yes	Carbon Tax	
Natural Gas	Gaz Metro	Yes	Cap-and-trade	
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	Yes	No (although support of CAPP position)	No
Petroleum	Shell Canada	Yes	Cap-and-trade	
Electricity	Transalta	Yes	Cap-and-trade	

The Shift

While Canadian industry is now very much in support of a price on carbon, interview data and public testimonials by association representatives over the past ten years demonstrate that this was not always the case. Prior to 2006, the business community lobbied in favour of voluntary agreements and subsidies. While a few corporations, such as Suncor and Alcan, were known for their progressive stances, during the entirety of the Liberal mandate (which ended in January 2006) industry aggressively fought the concept of regulation and leader companies rarely took a stand against their laggard colleagues

(Former Advisor to Minister of the Environment: 2009; Stein: 2009). The only business association to actively accept regulation was the forestry industry, which signed a memorandum of understanding on the issue with the Chrétien government as early as 2003 (Lansbergen: 2009). At the time, however, no other association supported their stand (Bradley: 2009).

In 2006, public opinion shifted strongly in favour of action on climate change both domestically and internationally, and the new Conservative government was obliged to take an interest in the environment. After shuffling its much-maligned Environment minister in January 2007, the government released a new regulatory proposal in April of that year. Industry, which perceived an ally in Conservative Prime Minister Stephen Harper, was forced to sharply adjust its expectations and many business leaders came to realize that regulation was “just a matter of time” (MacKay: 2009).

Outside of Ottawa, the release of Al Gore’s movie *An Inconvenient Truth* in the summer of 2006 had ratcheted up attention on the issue and increased pressure on politicians to act. In the US, President Bush’s mandate was coming to a close and as expectations of a Democratic win in November 2008 increased, so too did the sense of inevitability associated with climate change regulation in that country. For Canadian industry, the realization that the US would likely act led to increased expectations that Canada would ultimately follow suit (Lloyd: 2009; Former Official at Petro-Canada: 2009).

Returning north of the border, action finally came from an unlikely source. In March 2007, the Government of Alberta – Canada’s largest oil producing province – put in place the first significant price on the carbon dioxide produced by large industry in Canada. While observers decried the \$15/tonne price ceiling created by the inclusion of a technology fund option, the limited emissions trading program did have the effect of cementing the expectation of carbon pricing in the minds of big business actors. With the implementation of Alberta’s carbon pricing system, the last of the carbon price fighters conceded the inevitable (Lambert: 2008). Thus, by the spring of 2007, the business community gave up its fight against regulation and began debating the type of pricing mechanism to be employed, a debate that is ongoing.

Summary of Variation

Two findings stand out from the above discussion. First, with very few exceptions, Canadian industry now appears fully in support of a price on carbon. This was not the case prior to 2006-2007. Secondly, there is considerable variation in the type of carbon price that firms and associations prefer: while cap-and-trade is clearly the more popular of the two, five firms and one association officially supported a carbon tax (compared to eight firms and five associations supporting cap-and-trade). Neither outcome is expected. Any satisfying explanation of preference variation, then, must explain both why industry appears to have moved *en masse* to support a price on carbon and why certain firms or associations support a carbon tax over a grandfathered cap-and-trade program. Cost alone cannot provide such an explanation for these findings.

The Problem with Cost

There can be little doubt that cost is a key determinant of business preferences. While economists have clear theoretical expectations for the cost of each policy instruments which do not explain the current variation, most organizations did articulate reasons for their preferences that, in the end, still came down to cost – even those supporting carbon taxation. Those in favour of a cap-and-trade system generally listed a need for policy harmonization across provinces, North America or even the world as key to their policy preference. These firms and associations were concerned with the cost of administration related to dealing with multiple policy frameworks. They believed that cap-and-trade was the more likely instrument to be harmonized across borders. In addition, cap-and-trade supporters viewed the system as the most flexible and, thus, least costly – just as economic analyses suggest. (It should be noted that a third reason for supporting cap-and-trade was not related to cost, but revenue: certain organizations believed they would be sellers in a carbon market.)

Those supporting carbon taxation, on the other hand, were almost uniformly concerned about price certainty, again a matter of cost, and/or the administrative costs associated with cap-and-trade, which they viewed as likely greater than those associated with straight taxation. Others were also concerned that speculation on the part of unregulated entities, such as bankers and trade brokers, would artificially increase the

price of a cap-and-trade system. Those individuals pointed to the recent financial crisis as proof of this possibility.

The problem with cost as an explanatory variable, however, is that it cannot explain why one organization interprets the cost of a policy differently than another, even if their marginal costs of abatement should be relatively similar. Why, for instance, does Suncor view harmonization as the most pressing issue (and thus support cap-and-trade), while Nexen views administrative simplicity and price certainty as imperative (supporting a carbon tax)? Both firms are leaders in reducing emissions within the oil and gas industry; consequently, having already picked most of the low-hanging fruit (in terms of emission reductions), they should be facing similar marginal abatement costs. Yet, their views on climate policy options and the costs thereof differ drastically.

The problem with cost may be explained by the inherent nature of decision-making; in creating preferences for possible *future* policy options, firms are making decisions under high levels of uncertainty. Even if their goal is to choose the least costly policy option, their analysis must be based on a number of assumptions, which are inevitably subjective. What base year will be used? Will the government administration be efficient or onerous? Will the price be stable or variable? Will the tax be high or low? Will I receive large returns in corresponding tax cuts or not? These are just a few of the unknowns facing business as they attempt to grapple with possible future policies. Some method must be employed to help officials fill in these gaps in knowledge. Cost does not tell the whole story.

Additionally, cost cannot explain preferences based on positive outcomes. A number of firm's particularly in the forestry and natural gas sectors have developed preferences in relation, not to cost, but revenue. In the case of the forest industry, firms perceive a chance to make money as a seller in a cap-and-trade system. Their positive and early acceptance of regulation also provided them with an opportunity to undermine the industry's negative reputation as bad for the environment. In both cases, the industry perceived inherent opportunity within a cap-and-trade system.

Findings 2: The Risk and Advantage Heuristic

If cost alone cannot explain the observed configuration of preferences, what does? Interview subjects, asked to explain their articulated preferences, referred to one concept more than any other: risk. The term risk was much more prevalent than cost. Indeed, one association president opened his comments by stating, “Cost minimization is not my number one priority. My number one priority is risk minimization” (Lazaar: 2009). Others echoed this view, referring again and again to risk management as a key determinant of corporate preferences.

While the negative concept of risk received the most attention, the advantages or opportunities created by climate policy also strongly influenced some participant preferences. As stated above, this was particularly the case amongst the natural gas industry and the forestry industry, although not all firms within these sectors viewed the policies equally. In this light, forming preferences for policies appears to entail a balancing act of sorts in which the risks of a policy instrument are compared to its possible advantages. In some cases, perceived risks weigh more heavily than perceived advantages, while in other cases the opposite is true.

The key finding of this research is that process of risk assessment, overwhelmingly employed by business to judge the viability of investments, is also employed to analyze public policy. While it may seem counterintuitive for business to adapt a method of analysis for investments to public policy, I argue that risk management analysis acts as a heuristic device that helps business leaders interpret and understand policy instruments of which their level of knowledge and information may vary. Policies are examined, first, for the risks that they pose to the firm – both to its capacity to grow and to its overall survival – and, secondly, for any advantages they may provide to the firm vis à vis its competitors. This process can be conceived in the form of a set of scales in which the risks to the corporation are balanced against the advantages.

While political scientists may find the concept of business risk completely foreign, for most students of business administration it hardly requires definition. A plethora of books and articles discuss the concept and most large companies have risk management departments with the goal of limiting risks to the corporation (Abkowitz: 2008; Monahan: 2008; van Greuning: 2009). Given the term’s common usage, it is

perhaps unsurprising that most interview subjects could not clearly define what they meant by risk, stumbling in the way one might if asked to define something as basic as “to be”.

Certainly, business practitioners are not alone in their confusion. Risk is a contested concept with multiple and often incompatible meanings in different disciplines and sometimes within the same discipline. No universally-accepted definition exists (Hubbard: 2009). Moreover, even within management texts specifically created to assist corporate officials in mitigating risk, it is rare that a clear definition is provided.

Despite this confusion, there is little doubt that when interview subjects use the term, they do mean something quite specific and understanding *that* meaning, rather than how scholars from multiple disciplines define the term, is what matters to this research. Hubbard’s (2009) definition of the concept provides a useful starting point for understanding risk within the business setting. The business consultant argues that “risk [is] a state of uncertainty where some of the possibilities involve a loss, injury, catastrophe, or other undesirable outcome (ie. Something bad could happen)” (Hubbard: 2009).

While risk *can* refer to any type of possible loss, interview subjects appeared most concerned with risk as defined within the context of investments. For portfolio and investment managers, “risk is uncertainty that an investment will earn its expected rate of return” (Reilly: 2006). Several interview subjects explicitly defined risk in these terms and investor concerns were cited by over 1/3 of officials from firms and associations in explaining public policy preferences (Brown: 2009; Former Official at Petro-Canada: 2009; Protti: 2009).

Two types of investment risks were described: those internal to the firm, referring to investments made by the firm which might be negatively affected by a government policy, and those external to the firm, the possibility that the returns to shareholders of the company will be less than expected. This latter concern appeared most prevalent, as officials believed different climate policy instruments could decrease the rate of return offered to shareholder or, equally important, reduce shareholder confidence in those returns.

It should be noted that corporations are in competition for investors and, if their ability to provide a good rate of return decreases due to a public policy or any other change, this could lead to lack of capital for projects and ultimately even the end of the corporation, either through bankruptcy or, more likely, hostile acquisition. As one oil executive explained,

When I talk about shareholders, it's just a recognition that it's not our money, it's their money. They expect and deserve a competitive rate of return. If they don't get it, you run the risk of having them withdraw their funds and having them go invest in someone else . . . [if a policy leads to a decrease in returns] you end up with Canadian companies being disadvantaged. Their credit rating goes down, their share price goes down, they still have reserves, someone comes along and takes them out. (Robson: 2009)

From the viewpoint of business officials, any policy that might lead to decreased investor confidence could, at worst, lead to the demise of the corporate entity for which they work or, at best, lead to decreased competitive strength within the market place.

Unlike risk, advantage is a fairly clear concept. Advantage and opportunity are used interchangeably and refer to the capacity of the organization to increase returns to shareholders. Advantages of policy instruments could be direct (increased revenue from sales of credits) or indirect (increased revenue from greater sales of product or increased shareholder/consumer confidence due to greener image, etc).

The risk and advantage heuristic assists business decision makers in interpreting public policy. Risk and advantage assessments are based both on concrete market factors specific to the firm or industry and on ideational influences of key decision makers who are developing preferences under uncertainty. While in some cases, the market logic in favour of a particular policy instrument is fairly clear, in most cases the market factors themselves are uncertain. As a result of this uncertainty, risk and advantage assessments are almost always subjective exercises in which personal experience, values and beliefs play as strong a role in interpreting policy as concrete market factors.

It is unsurprising that market factors - such as expected costs, product type, economic strength, competitive positioning and capacity to decrease emissions, among other things - form the basis of corporate risk assessments. In the natural gas industry, for instance, the emission-intensity of substitute fuels within a given market and the type of customer – commercial or consumer - strongly influenced the preferences of firms. The participating natural gas firms operating or selling in Ontario, Alberta and/or US

jurisdictions were strongly in favour of a carbon tax. Executives believed that taxes would influence the choices of individual consumers, their main clients, and cause utilities to switch from higher-emitting coal to lower-emitting natural gas, opening up a substantial new market (Protti: 2009; Dill: 2009). In Quebec, however, the participating firms faced a zero-emitting substitute in hydro electricity. Like in other areas, the Quebec firm was generally locked out of the electricity market but, unlike in Ontario and Alberta, climate policy did not provide any justification for fuel switching on the part of the utility. Consequently, the Quebec firm continued to focus on its commercial customers (its main clients) and perceived cap-and-trade as the best policy because it provided its customers with the most flexibility (Former official at Gaz Metro: 2009). Where market factors led the Ontario and Alberta gas firms to perceive clear advantage in a carbon tax, no such advantage existed for the firm in Quebec.

While the market logic behind natural gas industry preferences was clear, in most cases, the market factors themselves are uncertain or do not lend themselves to an obvious policy preference. The uncertainty associated with one type of market factor, cost, was discussed above. Other factors, such as the future strength of the economy, the economic strength of a firm's competitors, the number of jurisdictions in which a firm operates or the emission intensity of a product, are either fundamentally uncertain or their significance in relation to the policy instrument cannot be objectively measured. For example, the high emissions of tar sands oil has attracted considerable attention from environmentalists and led to an American bill forbidding US government services from purchasing Alberta oil. One possible risk to Alberta oil producers is that their product could be banned from US markets entirely due to its negative impact on the planet. Yet, business officials analyzing this risk must answer a number of questions in developing preferences for government policy: is this likely? Will a particular government policy mitigate this risk? For some Alberta companies, reputational risks associated with the high emissions intensity of their product strongly influence policy preferences. For others, however, this risk is deemed inconsequential and, thus, unrelated to instrument preferences.

Risk assessments of public policy are human exercises, undertaken with less than perfect information. Indeed, most aspects of such assessments are uncertain and reliant

on factors outside the control of the firm. Evidence suggests that ideational factors – particularly interpretations of previous experience with climate policy instruments or government policy more generally, and personal conviction on the part of key decision-makers – play a significant role in addressing the uncertainty gap. In other words, where information about market factors alone is insufficient to assess risks, managers fill in the uncertainty gap by turning to their own experiences, values and beliefs.

Familiarity appears key. Once an organization has had experience with a particular policy instrument, officials are often far less concerned about the risks of the policy. Moreover, a familiar instrument will tend to be preferred to an unfamiliar one. Many companies pointed to experience with the American SOx and NOx cap-and-trade program or other emissions trading schemes as proof that cap-and-trade works when articulating their preferences. It is likely that experience with a program decreases the uncertainties associated with it and reduces concern for the survival of the company.

The importance of the personal convictions of key decision makers cannot be underestimated, however. Time and again, interview subjects referred to the support, interest or convictions of the CEO (in addition to key managers and the board of directors) in explaining why the company had moved in a certain direction. In the case of the Canadian Electricity Association, it appears that the CEO's doubts about the science of climate change and his perception of the risks of carbon pricing to Canada have come to define that organization's preference. Other interview subjects referred to the CEO's general views of taxation, past business experience and keen involvement in the issue as key to their preference development and, additionally, to how narrowly or broadly risk was defined. For some, risks were perceived merely in terms of decreasing returns on investment in the near term (increased cost), while for others possible draconian future scenarios, closed markets in other jurisdictions or even outright bans on their product were viewed as real possibilities.

The risk and advantage heuristic aids business officials in interpreting public policy by providing a clear and familiar method through which to judge policy instruments. How officials weigh the risks and advantages of a policy depends both on the concrete market factors facing a firm and on ideational influences of key managers. Ideational factors matter because the fundamentally uncertain nature of market factors

and public policy outcomes often requires business people to ‘use their gut’ in deciding whether a policy is risky or not.

Explaining the shift

This framework not only explains preference change both within a firm or association, it also accounts for the shift in aggregate business preference in 2006-2007 toward a price on carbon. As corporate circumstances change, so too do perceptions of risk and advantage. A recent example is the shift in business preference from intensity targets (emissions per unit output) to absolute targets. When the Canadian economy entered a recession in late 2008, several associations and firms who formerly supported intensity targets shifted their support to absolute targets, because those targets entailed less risk to a contracting firm. If, for instance, a company decreases production by canceling the overnight shift in a factory, its output decreases but its emissions will not be reduced by an equivalent amount because it must still keep many systems (heat, boilers, etc) in operation. Thus, when the economy is growing intensity targets allow a company to decrease its emissions while continuing to grow, but when a corporation’s production contracts, emissions intensity may actually increase (Lloyd: 2009). Changes in corporate circumstance, therefore, can quickly change corporate preferences.

With respect to ideational factors, new information can lead to new perceptions of risk and advantage. Additionally, as new individuals enter an organization, such as a new CEO or board of directors, a new set of personal experiences, beliefs and values begin to influence preference creation. In 2007, Shell Canada’s climate policy preferences shifted drastically, a fact that coincided exactly with the disbanding of its Calgary-based board of directors in favour of the parent company’s European board (Official at Shell Canada: 2009).

It is, however, a change in expectations for future government policy that most clearly explains the remarkable shift in aggregate business preference in support of a price on carbon. When public opinion shifted drastically in support of strong action on the environment in 2006, electoral incentives forced governments around the world – including the Conservative governments of Canada and Alberta – to act. As Canada moved towards a cap-and-trade program and Alberta implemented its own system, business officials were forced to face a future where regulation appeared all but certain.

This change in expectations shifted the risk assessment associated with regulatory policy. Risk assessments are relative; they are undertaken in relation to a reference point, generally the status quo. In the case of climate change, the status quo was an absence of regulation. In comparison, regulation of any sort would entail more risks to the firm, such as decreased competitive strength, uncertain cost increases and possible reduced revenue. Moreover, investors would be less likely to invest if an unregulated alternative is available elsewhere. Over time, new information may allay some of these fears and provide new details on possible advantages. Yet, in comparison to the certain status quo, regulation continues to be perceived as risky and most companies will oppose it.

It is when expectations for government action change, shifting the reference point from the status quo of no regulation, to certain future regulation with varying degrees of risk to the firm (depending on the policy option chosen), that aggregate business preference shifts in favour of regulation. Once there are widespread expectations of regulation amongst investors, managers and clients, continuing to advocate for the status quo compounds uncertainty and actually increases risk to the firm. Investors, for instance, are unwilling to provide billions of dollars in capital for a new oil sands project, if they are uncertain of the regulatory climate in which that project will operate during its period of amortization, often 25-50 years. Thus, not only does industry accept that regulation is forthcoming, they begin to believe that it is the best outcome for their business. As Rick Hyndman, CAPP's Senior Advisor on Climate Change, put it, "no policy is not a good answer for us."

Shell's public scenario analyses made this risk assessment explicit. The company examined two possible futures for climate policy, one in which action was taken early and another where it was undertaken only when climate change had become clearly observable. Note that in both scenarios, regulation is eventually put in place. The company believes that the latter scenario would lead to a much more restrictive and draconian business climate than the former and, thus, supports action now (Shell International: 2008).

While not all firms were as explicit in this risk assessment, it appears that Canadian industry as whole underwent a similar realization in 2006-2007. Once government regulation on climate change was viewed as inevitable, firms realized that by

accepting a price on carbon, they could attempt to mold the policy to provide them with the fewest risks and the greatest advantage. Continuing to fight against a carbon price would not only waste resources on a losing battle, but also undermine investor confidence. Untold reputational risks associated with acting contrary to clear public opinion also weighed heavily. Once regulation was perceived as inevitable, the risks of inaction outweighed the risks of action (Former Official at Petro-Canada: 2009) and, consequently, business began declaring preferences for policies that, from a simple economic perspective, were more costly than both their alternatives and the unregulated status quo.

Conclusion

Business preferences for public policy are a basic element of business-government relations research, yet have received almost no attention from political scientists. This paper presents the findings of the first study into business preference for climate change policy instruments in Canada, providing a foundation for future research on the subject. While political scientists have generally assumed that profit maximization and cost minimization are synonymous with business preference, this paper argues that preference development is far more complex. Perceptions of risk and advantage, based both on market and ideational factors, are the key metric by which policies are judged. As any action or outcome that might decrease investor confidence in the firm presents a risk, a wide array of factors, far beyond cost, come into play. This includes reputational concerns (what MacDonald calls legitimacy), but only when a firm's reputation is perceived as at risk. For policy makers and political scientists, this means that assumptions of fixed interests on the part of business are misplaced. Preferences not only *can* but *will* shift as corporate circumstances and personnel change, as new information is provided, and as expectations of future government policy evolve. Business-government relations, therefore, is not an exercise in static negotiation and compromise; it is a dynamic process that can shift the very preferences on which negotiations are based.

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