



The National Round Table on the Environment and the Economy (NRTEE)

was created by the government of Canada to promote sustainable development that advanced environmental and economic interests simultaneously using policy research and directly advising the government.

This analysis assesses how the NRTEE in its 25-year history addressed conflict in the energy arena, built consensus around energy and environmental issues, and which aspects of its institutional design and process contributed to those outcomes.



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EXECUTIVE SUMMARY

This case study is part of Positive Energy's "What Works?" Series which focuses on identifying organizations, institutions, and programs which may help build consensus and address polarization, conflict, and tensions among energy, the environment, and the economy in Canada. Within the energy sector, the lack of clear pathways and conflict over Canada's energy future are impacting climate change policymaking and decisions for the future of energy. Much of this is because of increasing levels of polarization over some aspects of Canada's energy system and policies. There is even disagreement over terms such as "energy transition" (Beck 2020). Within government, mandates concerning the environment and economic development are separated across departments. Extensive conflict and polarization, and the lack of consensus concerning Canada's energy future, have profound implications. They reduce Canada's global competitiveness, slow down the country's ability to address significant questions and problems in the energy sector, and lessen policy clarity for industry, NGOs, and Canadian citizens.

Beginning in 1988, the National Round Table on the Environment and the Economy (NRTEE) was created by the government of Canada to promote sustainable development that advanced environmental and economic interests simultaneously using policy research and directly advising the government. This analysis assesses how the NRTEE in its 25-year history addressed conflict in the energy arena, built consensus around energy and environmental issues, and which aspects of its institutional design and process contributed to those outcomes¹.

This analysis of the NRTEE focuses on the goals, effectiveness, and design of the processes established by the Round Table. The research has four main components: i. a literature review on energy conflict and multi-stakeholder processes for consensus building; ii. a systematic review of NRTEE publications to better understand and assess its 25-year history; iii. a set of semistructured interviews with NRTEE staff. participants, and observers; and iv. a media analysis of coverage of the NRTEE across its history to better understand its impact and effectiveness. The NRTEE worked on a range of topics relating to sustainable development and the economy such as water and toxins, natural resources, transportation, foreign policy, and sustainable citizenship. Many of those issues were either directly relevant to energy, or indirectly linked.

¹ Two earlier analyses stand out for their focused and exceptional analysis of the NRTEE. Dale et al's case study (2007) and a slightly later study by Toner and Meadowcroft (2009).



Impact is determined by the degree to which NRTEE influenced government, developed outputs which impacted the policy process, and used decision-making processes that were scientific, consensus-based, and reflected a broad representation of stakeholders.

The analysis demonstrates that much of the NRTEE model was an effective and useful approach for developing consensus on many (but not all) controversial policy arenas in the environmental and energy realm. The NRTEE achieved notable successes and influenced policy for sustainability planning in business and urban arenas, carbon accounting, climate change impacts, waste-water solutions, energy efficiency, forestry management, and international environmental partnerships and dialogue.

The investigation reveals that the NRTEE model had specific aspects of its institutional design that contributed to its success. These include:

- » The use of consensus-based round table processes which included diverse representation across regions, institutions, and sectors with representatives who had access to scientific expertise, and multidisciplinary backgrounds.
- » Substantive involvement by high level decision-makers across government, industry, NGOs, and academia. This included some closed meetings (with a mix of occasional open meetings) and "no-substitutes" rules to encourage frank discussion and maintain high level engagement.
- » Agenda setting that was realistically limited to issues for which the group had

the appropriate resources, bandwidth, and expertise.

- » In its early years, the appointment of members by an independent advisory committee
- » A focus on leading edge policy issues, but without formalized policy or lawmaking abilities. Thus the institution could advise and emphasize solutions to government, media, the general public, and other stakeholders.

As a result, the NRTEE improved networks and partnerships across sectors and among industry, NGOs, and government, and broadly increased trust in that context. Interviewees from all time periods agreed that an effective round table process with an emphasis on consensus-building had been successfully realized. Further, it helped to contribute to improved solutions and policies across a wide context of issue areas in the environmental and energy arenas. These included the first comprehensive modelling of climate change impacts in Canada, new ways to calculate CO₂ emissions adopted by the government, and extensive guidance on sustainability reporting that was adopted by many private sector companies.

The analysis also shows areas of concern. For instance, mechanisms to maintain both political independence and engagement were particularly challenging. The potential opportunities for NRTEE outputs and policy suggestions to be put into the public sphere via more assertive outreach to media, citizens, and other venues were missed. These recommendations are shown below:

» Independent Board oversight



with requirements for cross-partisan and non-partisan expertise, heterogeneity, and diverse representation; including appointment of an apolitical chair.

- » Creation and support of the institution via long-term legislation but still ring-fenced from government. This would include clear legislation for funding, independence, and high level government involvement in an advisory or consultative role, with specific roles for ministers and the federal public service.
- » Stronger emphasis and requirements for public and media engagement on solutions, reports, and analyses. This would include requirements for a response or acknowledgment from the government in power.
- » The use of mechanisms to encourage frank and open discussion, such as the Chatham House Rule.

The NRTEE model shows great potential for contributing to effective policy solutions, strengthening networks and improving communication among key stakeholders in important areas of highly challenging and seemingly intractable energy challenges.



INTRODUCTION

The first two decades of the 2000s have demonstrated that public opinion on climate change and energy policy in Canada is highly polarized, and increasingly more so (Johnston 2019; Lachapelle, Borick, and Rabe 2012, 2014; Mildenberger et al. 2016). Ongoing uncertainties about the choice and design of climate change policies have led to extensive skepticism concerning policy options and division across the country. Similarly, there has been widespread disagreement on a variety of energy issues directly related to climate concerns such as pipeline development (e.g., recent controversies concerning Energy East, Trans Mountain, Northern Gateway), but also other energy issues such as the Site C Dam, transmission expansion in Manitoba, natural gas generation in Toronto, and fracking in New Brunswick.

Canada's energy sector is critical to its economy, ranging from 7-10% of total GDP from 2017-2022 (Canadian Centre for Energy Information (NRCAN) 2022). A highly polarized policy milieu significantly and negatively impacts the development of thoughtful, long-term policy planning for Canada's energy transition. One of the core research strands in the work of Positive Energy specifically focuses on institutional responses that promote consensus in response to energy conflict or polarization. In short, can the design and function of government (or quasigovernmental) institutions help to reduce the polarized context of energy policy, and create common frameworks for decisionmaking? In this case, the focus is on the National Round Table on the Environment and the Economy (NRTEE). This case history is part of a broader set of Positive Energy case studies attempting to address consensus building in Canada (and by limited generalization to the United States or other advanced industrialized democracies).

This analysis focuses on institutional design. Environmental Policy Integration (EPI) theory argues that policy outcomes are affected by three components: substantive policies and regulations, the processes and procedures that are implemented to support them, and the design and function of the institutions that oversee policy development and oversight (Hertin and Berkhout 2003). It is a useful approach to assess institutions and institutional design in terms of how they may potentially improve policy outcomes.

Polarization refers to situations in which opinion across the population, or between different groups, is extensively concentrated at the extremes of an opinion spectrum, with little common ground in the middle. Polarization is particularly troublesome in energy because addressing change in the energy system is no simple task; it is a complex process that requires technical, cultural, and political support and changes in long-lived ways of life (Stirling 2014). Increased



polarization and disagreement occurs particularly in the context of climate change when scientific information contradicts the position held by the political group that a person identifies with (Rekker 2021; Dunlap, McCright, and Yarosh 2016). While a plurality of the literature on these issues has focused on the United States, these concerns extend to Canada. As political leaders and media institutions focus on climate change and increasingly dire evidence concerning its impacts, there is division over its veracity and how government should respond to increased polarization amongst the public and decision-makers (Chinn, Hart, and Soroka 2020)

Beginning in 1988, the NRTEE was created to promote sustainable development that advanced environmental and economic interests simultaneously using policy research and directly advising the government. This analysis assesses how the NRTEE in its 25-year history addressed conflict in the energy arena, built consensus around energy and environmental issues, and which aspects of its institutional design and process contributed to those outcomes.

The Round Table was not created to address polarization or the energy sector specifically, but its broader goals were focused on the creation of solutions to environmental policy issues, which often included aspects related to energy. The NRTEE focused on integrating

environmental and economic concerns. They did this in four ways: i. gathering information, ii. advising the government and community, iii. promoting public awareness, and iv. participating in cooperative efforts (Dale, Spencer, and Ling 2007)². In particular, it used a multistakeholder process, incorporating interests across the public, government, academic, private, and NGO sectors, in explicitly apolitical ways. In its final years, the NRTEE fought for initiatives such as reducing GHG emissions through the implementation of a carbon pricing policy. It was also tasked with improving awareness of environmental concerns in the general public. By demonstrating that there are feasible solutions to controversial environmental issues, there was also anticipation that the NRTEE might function as an exemplar of an organization that enables successful resolution for seemingly intractable policy issues. There was an expectation that helping communities recognize the impacts of environmental issues such as climate change impacts now and in the future could help reduce conflict around policy response to these challenges (Guber 2013; Miller, Richter, and O'Leary 2015).

Importance of the Canadian Energy Sector

Canada is an energy superpower (Bird and Heintzelman 2018). The sector makes a significant contribution to the Canadian

² Two earlier analyses stand out for their focused and exceptional analysis of the NRTEE. Dale et al's case study (2007) and a slightly later study by Toner and Meadowcroft (2009). The Dale study directly examines factors driving and limiting the NRTEE's success and impact. Further, it is informed by Dr. Dale, who was in senior leadership for the institution prior to its creation and during its earliest years. This work adds to these analyses by including the end years of the NRTEE's existence, expanding the interview and media analysis, and considering additional factors.



economy as a major employer across most provinces. It contributes 10.6 percent to the country's GDP, and is the sixth largest producer and the eighth largest consumer of energy in the world (Natural Resources Canada (NRCAN) 2020). A large part of the energy sector is dependent on trade between Canada and the United States. The export industry brought in \$132.2 billion and 89% of the product went to the United States in 2018. Similarly, imports in earlier years totaled \$50.5 billion and 70% came from the United States (Natural Resources Canada (NRCAN) 2020). Trade between the two countries has high monetary value and includes crude oil, hydro-electricity, natural gas, uranium, and coal. The diversity of the energy sector signifies a prominent future in the Canadian economy.

There is also significant potential economic advantage in an energy transformation. The average Canadian household spent 6.7% of its income (~ \$4,281) on energy in 2017. The transformation within the energy sector has led Canada to spend 14% of its funding on energy efficiency and increasing carbon capture and storage in 2017, and clean energy technologies have contributed 1.7% to Canada's GDP (Natural Resources Canada (NRCAN) 2020). Along with concentrating on carbon capture and storage, Canada has invested in commercial and residential energy expenditures in building efficiency, significant increases across a range of clean energy sources in solar, wind, and hydro, and re-investments in its nuclear sector in Ontario.

While Canada is clearly embarking on a transformation of the energy sector, the clarity, speed, extent, and form of that

transition is still unclear, in part because of the extensive degree of polarization, conflict, and lack of clarity inherent in the decision process surrounding it. Ultimately, this results in considerable inconsistencies in government policies that can hamper decision-making across the energy sector and beyond. Such delays, or "yo-yoing" between policies (e.g., participation, withdrawal, and then participation in the IPCC negotiations) can hamper its international competitiveness, create uncertainty across the financial sector, and slow down a variety of clean energy developments (Cleland and Gattinger 2021; Bird 2018). As a result, understanding whether institutions or institutional design can improve decision-making, decrease polarization, and promote consensus is a useful endeavor.



NRTEE HISTORY

Establishment of the NRTEE

The establishment of the National Round Table on the Environment and the Economy (NRTEE) occurred in 1988. It was derived from the Brundtland Commission's activities as the UN organization focused on sustainable development from 1983 until 1987. In Canada, a Task Force on Environment and the Economy was established in 1986 to determine Canada's response to Brundtland, and the creation of the National Round Table was its primary recommendation. The intentions for the NRTEE were to "generate and promote sustainable development solutions to advance Canada's national environmental and economic interests simultaneously, through the development of innovative policy research and advice" (Corley and Fishlock 2009). The expectation was that the Round Table would incorporate public inputs along with scientific, regulatory, and private sector expertise to provide guidance to government planning and legislation in areas of challenging or conflicted environmental contexts.

The rationale to use a Round Table model was motivated by an attempt to create an institution outside of government structures. There were concerns that conventional policymaking would not work, and that sustainable development needed a different approach, using an unstructured "horizontal" deliberative process, with direct access to decision-making at high levels (Dale, Spencer, and Ling 2007; Toner and Meadowcroft 2009). This aligns with the discussion of environmental policy integration theory discussed earlier – in short, a different type of institutional design was being implemented. The interviews discussed later in the analysis support this underlying idea.

Members of the NRTEE were specifically recruited from varying professions and backgrounds to ensure that a diversity of views from Canadian society would be included. Legal scholar David Johnston was appointed in 1988 as its first Chair with a two-person executive team. Johnston was in senior leadership at several of Canada's universities at the time (and later served as the 28th Governor General of Canada). This set a precedent of including senior decision makers across a range of non-profit, academic, private sector, and government entities, and with a certain degree of regional representation.

A five-member advisory committee developed governance and membership policies that were implemented in its early days. Diversity across the NRTEE's membership was considered a critical component for its success, particularly as it brought together different business sectors, regions, and disciplinary approaches all with high levels of expertise and/or decision-making influence (Dale, Spencer, and Ling 2007). Broadly, most



literature on multi-stakeholder processes recommends a fully representative and diverse set of stakeholders in order to achieve successful solutions (Leach, Pelkey, and Sabatier 2002; Faysse 2006).

Operational Processes

In the early years, the selection criteria for Round Table membership were based on apolitical recommendations from an independent advisory committee, with 2 year rotations. It included strong interaction and representation from ministers and the Prime Minister's Office, but independent discussions and consensus-based reports separated the Round Table from political agendas.

Structurally, the National Round Table was to include up to 25 representatives, including at least three government representatives and a Chair. It was to include diverse members from four groupings: political, business, science and policy, and public interest and labour. Environmental NGO representation was assumed to come from the last two categories and was generally expected to come from national level environmental organizations. Separately, representation from the environment and finance ministers were included from the government, as well as a seat for the Chair of the Canadian Council of Ministers of the Environment. Finally, the NRTEE Chair was additional to these members, and was considered to be "neutral." Generally, members did not have a mandate to "represent" their sectors or regions per se, but rather to contribute to discussions as individuals with skills, networks, and resources. Finally, the membership nominations were encouraged to ensure inclusion across categories of geographic representation, language, gender, minority status, and socio-economic circumstance (Dale, Spencer, and Ling 2007; Toner and Meadowcroft 2009).

The issues that the NRTEE took on were determined by the membership without any formal set of criteria to make those determinations. The Round Table was expected to focus on strategic, not operational concerns, with a multi-jurisdictional, long-term scope on questions of national or international scale.

Stages of NRTEE Operation

Broadly, the evolution of the NRTEE can be considered as progressing through four stages. First, its initiation as an advisory group before becoming a fully formalized organization. In these formative years from 1989-1993 the group included at least two federal ministers and had direct access to the Prime Minister's Office. Its role was considered to be strictly advisory, and the mandate of the NRTEE at the time covered a wide swath of environmental issues.

From 1994-99 the NRTEE was formalized via a legislative mandate as a departmental corporation reporting directly to the PM (National Round Table on the Environment and the Economy Act 1994). The size of the Round Table increased slightly, and its role, as described by Dale et al, was to be a "catalyst" (Dale, Spencer, and Ling 2007). The NRTEE



focused more specifically on choosing issues for which solutions and consensus could be found, and which would benefit from sustained attention towards complex solutions. During this period, external factors also had an influence on the role the NRTEE was playing. The organization had to work to maintain the interest of officials as well as other political figures, and broadly it was seen as having somewhat less influence (Toner and Meadowcroft 2009).

From 1999-2006, Dale et al describe the role of the NRTEE as one in which it was somewhat less focused on finding consensus-based solutions amongst all stakeholders. Rather, reports described the "state of the debate" of environmental issues. This was a somewhat fundamental change in the approach of the NRTEE towards sustainable development problem-solving.

Finally, during the Harper years from 2006-2013, the NRTEE had a quieter role, functioning more in the background. This reflected the Harper administration's significant deemphasis of environmental issues broadly, and also reflected the increased amount of control the government had in determining membership and the agenda of the NRTEE.

Table 1. Stages of the NRTEE

| 1989-1993 | Informal advisory group; direct access to PM and Ministers |
|-----------|---|
| 1994-1998 | Formal government entity; reported to PM |
| 1999-2006 | Reported to Minister of Environment; focus on in-depth issue description and solution options rather than recommendations |
| 2007-2013 | Quiet period; background reports / significant government oversight, and later, tension |

In 2011, the NRTEE was asked to assess the climate change plans that Canada had outlined and the progress that was being made towards emissions reductions targets. The NRTEE analysis demonstrated that the government was significantly behind in attaining its greenhouse gas targets. At the same time, NRTEE analysis focused on carbon taxes as a specific policy approach to address these concerns. Shortly after the NRTEE released the assessment, they were expected to lose their funding in the 2012 budget.

"I was amazed it lasted 25 years."

The disbandment of the NRTEE occurred in 2013, seven years after Prime Minister Harper was elected. A variety of scholars have argued that the election of Harper served to "modify Canadian political culture" (Ives 2015; see also Bratt 2016). Policy changes included substantial restrictions in science communication with the public and media organizations (Linnitt 2013). While the focus was on carbon pricing, a specific policy approach that the Harper government opposed, the administration was also opposed to Canada's membership in the Kyoto Agreement (Bratt 2016; Dalby 2016). The government reduced



funding for a variety of scientific programs focused on climate change, in addition to support for the NRTEE.

In its decision to end the institution, the Harper government argued that the "NRTEE filled an important need in the past, a mature and expanded community of environmental stakeholders has demonstrated the capacity to provide analysis and policy advice to the Government. As a result, the Government introduced legislation to eliminate the NRTEE" (Voices-Voix 2012). Environment Minister Peter Kent argued that the work the Round Table was doing could be found on the Internet and that substantive information could be gathered by the general public at a lower cost (Voices-Voix 2012). The National Round Table was disbanded in 2013.



Understanding Polarization and Conflict Over Energy and the Environment

Before delving into the interviews and analysis, it is useful to spend a brief moment to understand underlying issues in energy conflict and political polarization. Political polarization refers to increased levels of political conflict that both cause, and are caused by, a divergence of opinion to its extremes amongst individuals or groups (DiMaggio, Evans, and Bryson 1996). The term political polarization lacks a definitive definition. The use of the term in this analysis is elicited from the broader scholarly literature.

As a result of polarization, public opinion on controversial topics occupies less common ground and instead occurs at more extreme ends of an opinion spectrum. One common explanation for increased polarization is that political elites are driving the general public to become more polarized through influence processes mediated by social media and journalism (Tranter 2013). Some scholars argue that these processes deter the general public from forming their own views (Claassen and Highton 2009). There is evidence that party influence no longer simply affects people's general attitudes but has moved to mediate and infiltrate their beliefs as well. In this argument, a person's attitude is based on their core values where their belief is dependent on their interpretation of past experiences (Kumar 2018). Another aspect of this explanation is that people pick political leaders based on the similarity of their own political identity which increases

the citizen's desire to support them (Fraune and Knodt 2018). Finally, there is considerable evidence that political polarization has been increasing in the past 20-30 years both in Canada and the United States (Boxell, Gentzkow, and Shapiro 2020; Johnston 2019).

In particular, the increased influence of party identification as a primary driver for policy opinions has led to the simplification and increased tension and hostility in the search for political solutions. Individuals may reduce efforts to look for further information but instead feel educated about a topic because they trust information that comes from their political party or elites (Bafumi and Shapiro 2009). Further, the attitudes of party candidates and leaders are becoming more polarized than those of voters (Tranter 2013).

Polarization versus Conflict

The terms *polarization* and *conflict* have an ambivalent relationship. Esteban and Schneider (2008) argue that conflict is related to polarization in a context where polarization between competing groups functions as a driving force towards conflict. Similarly, a literature review from Positive Energy referred to polarization as the "tipping point which exacerbates conflict amongst other things" (Aguirre 2020). The interviews with NRTEE stakeholders show a clear delineation between the two terms and imply that



they should not be used interchangeably. Broadly, scholars conceive of polarization as a form of extreme conflict, as a factor that increases conflict, and simultaneously a situation that can be increased by conflict.

Once an issue becomes part of a public debate, polarization can occur or increase because of social amplification, in which risks of a policy choice are overstated (in either direction) such that the response to the risk is increased opinion extremes or polarization (Baldassarri and Bearman 2007; Busby and Onggo 2013). This process is likely common in the context of highly publicized energy and environmental debates.

Conflict and polarization are both associated with situations in which definitions, interpretations, or context are unclear or can have multiple meanings. For instance, Clarke studied public response to differences in descriptive framing comparing global warming versus climate change, and hydraulic fracking to shale oil or gas development. Polarized opinions in these responses occurred due to uncertainty regarding terms that are interchangeable and differing possible contexts. Framing effects, top-of-mind associations, and political ideology all exacerbate opinion extremes (Clarke et al. 2015).

Claassen and Highton argue that polarization has increased as "the divide between political elites' views has grown, and the intra party variation has diminished." (2009, 539) Thus party consolidation has occurred while the distance and contrast between parties have increased (in the U.S. context, but likely generalizable to other countries).

They argue that constraints on the ability to pass policies have only driven parties to further extremes.

Often polarized views have little to do with facts or data: "... the more we know, the less it seems that climate change skepticism has to do with climate science at all. Climate change provokes such visceral arguments because it allows ancient battles — about personal responsibility, state intervention, the regulation of industry, the distribution of resources and wealth, or the role of technologies in society — to be fought all over again" (Tranter 2013, 411). Tranter emphasizes the role of elites as opinion leaders, and their role in focusing on proxy issues rather than the core policies being discussed. Party identification and allegiance has become a much stronger factor in polarized opinions over climate, energy, and other policy issues (Bafumi and Shapiro 2009; Tranter 2013; Gromet, Kunreuther, and Larrick 2013).

These concepts have emerged into two key theories driving polarization theory: partisan sorting and affective polarization. Sorting extends the notion of elite and party driven polarization with the idea that voters surround themselves - geographically or in the digital realm - with other likeminded people and/or sources of information. Affective polarization is a slightly different but related theory in which a citizen's party identification becomes the primary driver of their beliefs, but also of negative opinions towards other parties. Evidence for both theories is extensive, and further, extends clearly into the Canadian experience (Kevins and Soroka 2018; Johnston 2019). Further, these analyses demonstrate that Canadian polarization



has been increasing over time in similar ways though not to the same degree as the United States.

Opinion on environmental and energy issues is also dependent on age, gender, education, and social status (Tranter 2013; Bafumi and Shapiro 2009; Kahan et al. 2011). This context of polarized conflict over energy issues dramatically complicates and reduces opportunities to develop energy policies focused on efficacy and compromise.

Institutional Design and Consensus Building Processes

A critical question for this study is whether the use of less politicized alternative institutions, such as the round table multi-stakeholder process, have the potential to sidestep contentious issues in energy regulation and policymaking. There is a long history of scholarship and analysis examining these sorts of institutions (Frank 2022; Cormick et al. 1993; Susskind, McKearnan, and Thomas-Larmer 1999; Coglianese 1997). While there are slight disagreements as to the overall effectiveness of consensus approaches, and under what circumstances they are effective, there is some degree of agreement that multi-stakeholder consensus processes can be effective in certain situations, with the right conditions.

Scholars note the need for independence from the direct operations of government and policymaking, and concerns for ensuring regulatory independence to the degree that such organizations are involved in policymaking (Bird 2018; OECD 2017). Second, there is clear agreement that such processes need

resources, structure or facilitation, and time for conversations to develop and a sense of trust to emerge. Environmental conflict resolution also requires the development and engagement with shared knowledge, in which all actors have access to and trust in the same sets of expertise and information. Most of these structural and institutional factors were in place for the NRTEE, informed by much of the beginning thinking on these issues through Brundtland and the initial development of the sustainable development paradigm.



RESEARCH DESIGN

This case study is one of four cases completed by Positive Energy to identify 'What Works?' when it comes to consensus-building over energy and climate issues³. The NRTEE case study is comprised of four complementary parts designed to triangulate and reinforce the findings. The first section is a literature review and historical background (largely seen in the previous section). The second is a set of 14 semi-structured interviews with NRTEE stakeholders and associated analysis. The third component is an examination of the more than 100 reports published by the NRTEE. Finally, the study undertakes an extensive review of media coverage of the NRTEE throughout its history to determine the degree of coverage and other trends that can be used to consider the impact of the NRTEE. These elements are used to assess in what ways and to what degree the institutional design and day-to-day operation of the NRTEE were successful or not, the degree that they may have helped reduced conflict and/or develop successful policy solutions, and the overall impact the organization had in the development of sustainable policies in the energy and environmental realm.

The literature review included a review of scholarship on polarization, conflict, multistakeholder processes, and institutional design. Annual reports, media articles, and other scholarly analyses were used to capture the history of the NRTEE.

A semi-structured interview process was used for the interviews. In this method, interview questions are repeated, but conversations are allowed to diverge from the ordained questions in order to foster a more rich and extensive explanation of the research questions. Given the long history of the NRTEE (1988-2013), it was challenging to gain access to stakeholders, often because they had retired from public life and contact information was out of date. Each interview was conducted confidentially, and interviewees were given the option to remain anonymous in the resulting report. The process was approved by the University of Ottawa Research Ethics Board⁴. Interviews were recorded so that the authors could assess reliability in the analysis (Dearnley 2005; Longhurst 2016; Fink 2010)

The analysis of the NRTEE reports included a comprehensive gathering of all

³ Positive Energy used a comprehensive process to determine which cases it should pursue. The NRTEE was chosen, alongside the Alberta Climate Leadership Plan, the Just Transition Task Force, and the Ecofiscal Commission, to provide broad coverage of the different sorts of processes that can be put in place (government-mandated, non-government initiated, federal/provincial, etc.).

⁴ University of Ottawa Ethics File # S-03-19-3380.



published NRTEE reports across its history. The evaluation included reviews of topic and thematic categories, and evidence of efficacy or impact in reports.

For the media analysis major daily newspapers were scanned for references to the NRTEE. This was implemented with both national and provincial papers. The newspapers were selected by determining the three papers with the highest circulation in each jurisdiction. Ontario, Quebec, Alberta, and British Columbia are included for provincial analysis. 5 Searches were conducted via newspaper websites and 4 media databases, using NRTEE and associated terms as search terms in both English and French. There are concerns about the degree of accuracy of search results for older articles due to incomplete digitization for most newspapers and poor implementation of search functions in their interfaces. This is discussed further in the analysis.

⁵ National: Globe and Mail, National Post. ON: Toronto Star, Toronto Sun, Ottawa Citizen. QC: Journal de Québec, Journal de Montréal, Métro. AB: Calgary Herald, Edmonton Journal, Calgary Sun. BC: The Province, Vancouver Sun, Times Colonist.



ANALYSIS

In the following three sections, the interviews, reports, and media data are analyzed, finishing with a discussion considering the critical outcomes of these analyses as a whole. Interviews were conducted primarily to understand the relationship of the NRTEE design and process, as well as its potential usefulness as a policy developing agency and its impact on policy outcomes. The assessment of NRTEE reports allows one to understand the types of projects the NRTEE worked on, and to consider in what ways the choices of policy problems reveal underlying impacts of the Round Table. The media analysis is designed to complementarily assess the impact, relevance, and influence of the NRTEE.

Interview Analysis

The interview process brought together a variety of different stakeholders, including oil and gas representatives, environmental NGOs, government representatives, and included senior NRTEE leadership. These interviews provided insight on the NRTEE's operations, structure, goals, efficiencies, and efficacy. Fourteen interviews were conducted in total and a broad characterization of the interviewees is shown below. Identification is general to maintain anonymity.

- 1. Civil servant / researcher
- 2. Member, CEO, oil and gas industry
- 3. Member, Chair of NRTEE
- 4. Member, government representative, environment
- 5. Member, Indigenous land development
- 6. Member, leadership, oil and gas industry
- 7. Member, leadership, environmental NGO
- 8. Member, legal counsel, project development
- 9. Member, nuclear industry, environmental NGO
- 10. Member, urban development, NGO & past government role
- 11. Member, Vice chair of NRTEE
- 12. Senior civil servant / staff
- 13. Senior civil servant / staff
- 14. Senior civil servant / staff

The semi-structured interview questions are shown in generalized format in Table 2 below. Interview questions consisted of general questions about the interviewee's background, their perspective on polarization and conflict in Canada's energy and environmental context, and then progressed to questions specific to NRTEE and its operations. They were asked about the development of the NRTEE and how it progressed, adapted, and changed



over time. They were asked to evaluate changes in goals or objectives, and whether goals were achieved. Stakeholders were asked to describe how successes were achieved, and to consider whether or how the organization fell short of its goals. Each interview finished with a discussion of whether and/or how the NRTEE reduced conflict or polarization, whether this was part of the organization's goals, and the respondents' perspectives on the institutional effectiveness and operation of the Round Table.

"I think there's a crying need for something like the NRTEE, maybe broader ... These kinds of institutions work, and they work incredibly well."

The responses from the interviews have been grouped and analyzed in Table 2. The table portrays both commonalities between interviewees' answers as well as unique answers. Further discussion and analysis continue after Table 2. Broadly, the interviews reflect general agreement on many issues, which was somewhat surprising given the variation in experience and periods of experience with the NRTEE that characterized the respondents.

Table 2: Characterization of Interview Responses

| Overtion | Summary of responses | | |
|---|--|--|--|
| Question | Specific comments from interviewees / unique viewpoints | | |
| Do you conceive of a difference between the terms 'conflict' versus 'polarization'? | Summary: Polarization is provoked and can cause conflict to go to the extremes. Polarization eliminates the opportunity for debate. When opinions are at the extremes of the opinion spectrum conversation is eliminated. • People can have discussions when there is conflict, but not if there is polarization. • Polarization happens at the political level where visceral issues are used to divide and conquer elections. It is a political tool that can be leveraged. • There was general consensus amongst respondents that there is a difference, but no consensus on what the exact differences are. | | |
| | · <i>Unique viewpoint</i> - Polarization is a driver of conflict. | | |
| General public: Would you characterize general public opinion ⁶ | Summary: Depends on the issue being discussed, but generally both conflict-ridden and polarized. Consensus amongst the interviewees. | | |
| about energy issues in Canada as conflict- ridden or polarized? | The public has mixed views which create more conflict than solution. Vested interests are highly fractious over contested issues. "It's all about who's in charge, who's driving the debate." | | |

⁶The question emphasized the specific role of general public opinion versus that of elites (later question) for interviewees in this question.



Table 2: Continued

Public Fault Lines:

In your view, what are the key fault-lines of conflict/polarization in the *public*? **Summary:** Geographic region, party affiliation, and ideology were the primary factors discussed.

- · History, path dependency, and unwillingness to change were also identified by several respondents, particularly when the public is cued on these issues by political leaders or decisionmakers.
- · Multiple respondents showed a strong consensus that regionalism is one of the most important factors.
- Regional issues and partisanship surround controversial issues such as pipelines and renewables. These are driven as wedge issues by those who are focused on winning elections.

Elites: Would you characterize views by politicians or senior decision-makers (elites) in the Canadian energy sector as conflict-ridden or polarized?

Summary: Clear consensus that these are conflict-ridden. Elites have to deal with the issues. They are on a timeline and need solutions fast and don't have the time to work out disagreements. Decision-makers have more complex views on issues than the public does. They have to consider their professional relationships amongst other decision-makers, which adds additional complexity to their relationships and decision-making.

- There was consensus that decision-makers and elites were either in conflict or polarized, but no consensus on which term was correct.
- One unique viewpoint Politicians are driving conversation and solutions.
 - a. This view is unique because of the focus on leadership as critical to building solutions in addition to driving conflict.
 - b. Conflicts are exacerbated by changes in ministers where different interests take priority depending on who is in the government or which party is in power. There's a revolving door of ministers in climate and environment portfolios at the federal level.

Elite Fault Lines:

In your view, what are the key fault-lines of conflict/polarization amongst *elites*: partisan, regional, or...? **Summary:** Value systems and ideology were strong drivers.

- Conflict is also affected by institutional history and path dependency – decision-making, resistance to change, the costs of technical lock in, and time are all drivers.
- The urgency of issues impacts how an issue is assessed. Regionalism and political constituencies also drive decision-making.
- · No clear consensus; extensive and varied responses.
- Politicians especially get media coverage which influences what the public is seeing and shows how elites are responding. Recent and urgent issues draw the most media attention and have high potential for conflict.



Table 2: Continued

Origin: Can you describe the origin story of the NRTEE. When was it established, by whom, and why?

Summary: General consensus that the NRTEE resulted from the Brundtland Commission as Canada's first steps toward sustainable development.

- Began with the National Task Force which then created the Round Table.
- · Brundtland was seen as a driving vision towards a common future worldwide.
- Brundtland Commission put the focus on sustainable development, establishing the round table process, and orientation towards consensus: these foci became the core components of the NRTEE.
- In the first two parliaments during the NRTEE's existence there was substantial involvement from senior ministers.
- The NRTEE acted as the institutionalized mechanism for addressing environmental and economic issues. It created a link between the jurisdictions.
- · While NRTEE representation was based on individuals, the process and outcomes evolved into a holistic and consensually developed set of operating procedures, and importantly, recommendations.

Objectives: In your view, what were the objectives of NRTEE with regards to addressing polarization and conflict over Canada's energy future?

Summary: To create a consensus-building process that could develop realistic solutions.

- It brought together a wide variety of stakeholders, CEOs, NGOs, ministers, etc., to establish credibility. It was a safe space to discuss issues beyond the public eye.
- The NRTEE worked on a variety of upcoming issues, not just energy, but a broad environmental and economic range.
- Consensus amongst the interviewees. The responses were varied but all spoke to the broad picture described above of developing a consensus-building process and addressing areas of conflict.
- "The Round Table was about making the right connections between people." It had a diverse membership; communication occurred through its participants, not via other stakeholders.
- "The Round Table's focus was to understand the full ecosystem around a problem. It worked to identify long term problems and reports were part of establishing an understanding to improve solution design."
- · A goal was to "inform public policy and debate rather than address conflict directly."



Table 2: Continued

Measures & Tools:

What are the key measures or approaches that NRTEE applied to achieving these objectives?

Summary: The use of a round table process rather than conforming to a traditional format. The process established trust amongst the members and often enabled the ability to reach consensus.

- The expertise and high-level connections of members helped the Round Table achieve its goals.
- The freedom of choice in determining which problems/topics were addressed was dependent on specific member expertise in addition to some input from government and elites.
- It created a bridge between decision-makers across industry, economy, and the environment to understand opposing views.
- The reports showed the progress of the NRTEE and key stakeholders were drivers of the reports.
- · Consensus amongst the interviewees. Similar to the previous question, responses were varied but broadly led to the same conclusion.
- · "The bridge [linkage between members] was created to understand other views and came about from consistent management, and as a result, the Round Table process produced goals and reports based on plans and priorities. ... It was about listening rather than talking but debate was acceptable with reasonable defense as members brought reputable knowledge which others wouldn't necessarily know."
- Bringing together people working towards a more effective solution with the inclusion of high-level officials. They could produce high quality research relatively quickly.
- The process developed valuable relationships and trust among members, stakeholders, and officials. The information brought from the diverse group allowed for informed decision-making. The group wasn't there to educate but instead bring together ideas and make them into one.



Table 2: Continued

Mitigating Conflict:

In your view, what measures or approaches have not been effective in the work of the NRTEE with regards to reducing polarization and conflict? **Summary**: The loss of the involvement of high-level decision-makers over time decreased the credibility and influence of the NRTFF.

- The decrease in high level involvement by senior ministers resulted in fewer stakeholders and CEOs participating as they were no longer communicating with people of status. There were no mechanisms to encourage or maintain the involvement of the senior ministers or CEOs.
- · Over time, this decreasing status meant the NRTEE was less influential, and had less importance for the public.
- •The NRTEE's funding also came from the government so without political status the group wasn't seen as relevant. There were no institutional laws to protect the longevity of the institution or its influence.
- The isolation from politics meant a lack of politicians as members. This was in part because of reporting to the Minister of Environment rather than the PMO and over time resulted in the loss of CEOs [or high-level decision-makers] as members.
- There were no institutional leverage points for the NRTEE to push forward results.

Effectiveness:

What methods and approaches have proven to be effective?

Summary: The NRTEE did well with building a multi partite consensus process. They picked up loose ends and provided useful research which concluded in reports to disseminate their proposals to the public.

- The group was making progress on building consensus around environmental issues until they lost credibility and status.
- Consensus amongst the interviewees. Their thoughts were aligned with what the NRTEE did to reach its objectives.
- It created a solution space and generalized agreement amongst NRTEE participants with diverse interests.
- The NRTEE involved multiple stakeholders to produce publications of high-quality information and policy solutions.



The Nature of the Energy Debate. The interviewees agreed that energy issues amongst both the public and elites are either conflicted, polarized, or both. While the diagnosis for each group was similar, the reasoning differed. Respondents felt that public polarization was driven by party identification, regionalism, and past beliefs (path dependency). Elites were perceived as similarly conflicted and/or polarized by region. Interviewees mentioned additional polarizing factors for leaders and decision-makers, including the structure of political decision-making, constituency demands, and ideological stance. The interviewees differed about whether energy issues were polarized, conflict ridden, or both, amongst either the public or senior leaders.

"The most important thing I did as a part of NRTEE occurred with oil and gas. Many of them said to me 'this is the first time I've been asked to come to Ottawa to engage on issues at all' – and this occurred under the auspices of NRTEE"

General Success of the Round Table Process. Virtually all respondents described NRTEE objectives and goals as focused on a round table process that used consensus building for solving a selection of challenging environmental issues. The NRTEE's primary output was research on policy solutions or processes that informed the government (and public) about a conflict-ridden issue and provided solutions endorsed by a comprehensive set of stakeholders. Round Table members looked at the full scope of the issue, gathered information, and developed practical solutions. The solutions resulted from intelligent dialogue, analysis, and ultimately agreement amongst the participants.

Limits on Resources and Scope of Problem-Solving. Several interviewees emphasized the fact that the NRTEE did not address all environmental problems or concerns. This limitation was by design and was consistent across its 25-year history. The expertise of the Round Table was limited in scope, which reduced the range of possible environmental problems that could be addressed. Second, the group had to prioritize because of limited staff and budget. Most members of the Round Table had additional professional roles. For many members, membership at NRTEE was only one part of their overall job in industry, government, or NGOs.

Agenda-Setting Process. Interviewees noted that the choice of which problem areas to address (and which to ignore) was based on several factors, and that no consistent approach was used. Decisions were made by membership during group meetings. One consideration was the time sensitivity of the problem and the urgency for completion. Second, NRTEE needed to have membership and/or staff with the appropriate expertise and background. If there was an issue that was controversial, and the NRTEE had the personnel to conduct meaningful research, then they could attempt to do so. A third factor was that NRTEE members were able to bring forward potential problems for consideration by the group. Members were the ones who brought the knowledge to the table and an issue had to be relevant to enough of them for successful resolution. Finally, the choice of projects was influenced slightly by governments and other high-level decision-makers. Some respondents noted that while NRTEE members maintained independence, the concerns of the government in power could move the Round Table to avoid a particularly divisive issue,



or perhaps encourage it to adopt another one. That said, at least two respondents noted that the NRTEE's focus on carbon pricing in its later years demonstrated its independence and willingness to take on issues that were not favoured by the party in power at the time.

Sustainable Development and Consensus Building. Interviewees who were involved in the earliest years of the NRTEE noted that the specific focus on using a Round Table format and a consensus process occurred because the underlying philosophy of sustainable development alluded to consensus-based processes. In the beginning, the term "sustainable development" lacked meaning to the NRTEE. The Round Table recognized it incorporated environmental and economic sectors but not much beyond that. Later, as the concept matured, it allowed the NRTEE to take on a variety of topics. For example, this included waste management, international partnerships, global policies such as the outcomes of the Earth Summit and the Kyoto Protocol, as well as education and communication.

The NRTEE commitment to the Round Table process, and to underlying philosophical aspects of sustainable development matured over time. For instance, the NRTEE soon encouraged the development of provincial and municipal round tables. These were conceived to operate completely independent of the national NRTEE and were not expected to operate hierarchically or subordinate to the national organization, in accordance with some of the innate operational ideas inherent in sustainable development theory.

Energy as an Indirect Focus of NRTEE. Energy was not a specific focus of the NRTEE. The NRTEE focused on environmental issues, many of which had extensive direct and indirect associations to energy issues. For example, a focus on air pollution, waste, water management, and carbon pollution meant that environmental and sustainability issues were implicitly energy issues.

Overall Efficacy. Respondents were also asked if the NRTEE was effective in reaching its objectives, and if so, how. Interviewees from all time periods agreed that an effective round table process with an emphasis on consensus-building had been successfully realized. In particular, they noted the strong and expanded connections among the Round Table members, representing a diverse group of organizations and sectors. They noted the development of strong solutions, a culture of trust and discretion for problem-solving amongst the participants, and extensive output by the organization over its 25-year history (130 reports in total).

The NRTEE "made a difference. Can you measure these differences easily? No."

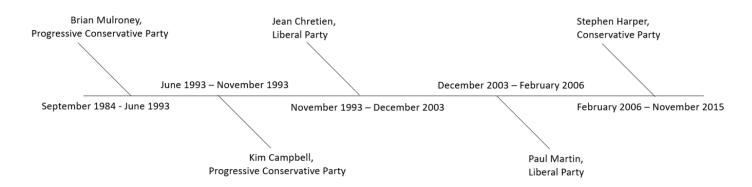
According to respondents from senior leadership in the NRTEE, the organization was successful because it influenced the perspectives of both decision-makers and the general public through its reports, and by bringing discussion from the NRTEE back to members' respective companies, government offices, and organizations. Similarly, stakeholders felt that the influence of the NRTEE was enabled by the agenda setting process and choice of areas to address, and then by the completion of reports in those arenas.



Respondents also felt the NRTEE was effective because of the genuine engagement and interest by its members over the years. This degree of engagement helped the NRTEE develop effective solutions, and it increased the ability to share its research with stakeholders, government, media, and the public in a meaningful way. In part, this level of influence was likely greater in the earlier years when more high-level politicians and CEOs were directly involved. Finally, the fact that agenda-setting and problem choice came from the membership meant that the NRTEE only took on issues for which both engagement and effective expertise were available. This meant that not all problems were or could be addressed, but the ones that were chosen could be addressed more effectively.

Decrease in Influence and Loss of High-Level Decision-Makers. According to several interviewees, the NRTEE faced challenges when involvement with high-level decision-makers began to decrease and the NRTEE stopped reporting to the prime minister and instead reported to the minister of the environment. The NRTEE began with direct access to the PMO's office, in part due to Prime Minister Brian Mulroney's explicit interest in the Brundtland Commission. Figure 1 (below) shows the timeline of prime ministers in power from the creation to the end of the NRTEE.

Figure 1: Timeline of Prime Ministers during the NRTEE years (1988-2013)



Starting in 1999, the NRTEE reported to the minister of environment rather than directly to the PM's office. In this second period of the NRTEE it faced a gradual and moderate decline in engagement from the government. The challenge with this change was "sustaining the energy and engagement of senior members while continuing to strive for consensus recommendations" (Dale, Spencer, and Ling 2007). The shift in reporting led to a loss in political and reputational status that made it more difficult to attract high level CEOs and stakeholders. Dale et al also argue that this shift actually reduced the ability of the NRTEE to achieve consensus on difficult decisions. Instead, the organization shifted the emphasis of reports towards a presentation of facts surrounding an issue, rather than consensus-based recommendations for specific policy solutions.

Separately, interviewees suggested the NRTEE's influence and impact declined because the loss of political status coincided with increased attempts by governments to increase their representation on the Round Table or alternately to reduce or limit its activities or agenda. One interviewee stated that they saw the "loss of independence when the



government started to appoint political staff which aligned with the government agenda." Both the Dale study and interviewees identified the difficult balancing act of having access by senior level government representatives yet also needing to operate independently of government. Interviewees consistently noted that contact with high level decision-makers within government and from its members and stakeholders was one of the most important factors in NRTEE impact and effectiveness.

Impact of Reports. Interview respondents argued that the NRTEE's public documents and reports were effective in increasing the impact and influence of the NRTEE but primarily in indirect and inconsistent ways. Interviewees argued that NRTEE outreach to both media and the general public could have been more resolute, consistent, and focused on effective scientific communication. Several participants felt that the NRTEE needed to have a stronger influence regarding policy changes and implementation. When asked to clarify, no one advocated that the NRTEE should have had anything beyond an advisory role, but rather that the organization's output be more vigorously presented to Parliament and other policy arenas in a way that provoked action or response. In essence, the institutional design of the NRTEE, and an insufficient public outreach strategy, limited its influence on policy development and implementation to information dissemination through elites. While the development and production of reports were extensive and impactful, there was an opportunity for more outreach and engagement with the public and media. In short, most interviewees agreed that the NRTEE was successful in building a multi-partite consensus process, developing comprehensive information on difficult environmental policy arenas, and identifying promising solutions for varying issues. However, the organization's success in disseminating those solutions and achieving lasting policy change was mixed – with soft, indirect successes that were muted and inconsistent.

Report Analysis

This project is complemented by a comprehensive assessment of NRTEE reports and assessments, the primary set of deliverables and output from the organization. This helps develop a picture of the types of reports that the NRTEE developed, a sense of the total number of reports, and by extension an additional indication of efficacy. A comprehensive search was implemented that used the current NRTEE archive website as well as several other archives (Issuu and other non-profit archive websites). Report categories shown in Table 3 and Figure 2 reflect the dominant report themes (obviously there are some overlaps across topic areas). A full list of all reports is shown in Appendix 1. Reports varied in terms of specificity, breadth and depth, and the use of descriptive versus prescriptive policy analysis.

Clearly, the NRTEE had certain areas that it emphasized extensively (e.g., energy and carbon markets; urban sustainability and eco-efficiency) and other areas that were dealt with only minimally (Indigenous issues, agriculture, tourism). Topic areas such as academia, citizenship, and international issues often focused on sustainability processes (such as round tables, sustainable partnerships, or encouraging sustainability in academia).



Figure 2: NRTEE Reports by Category

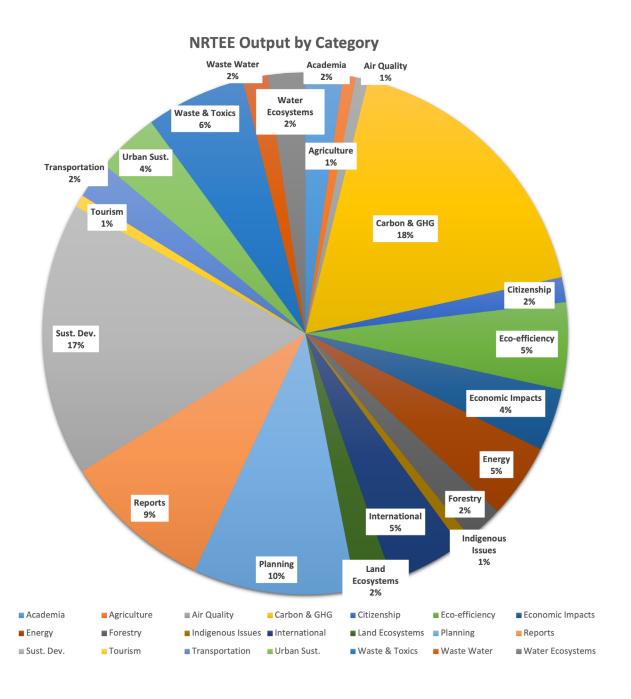




Table 3: NRTEE Reports 1987 - 2013

| Report Category | # | % |
|-------------------------|-----|----|
| Carbon & GHG | 23 | 18 |
| Sustainable Development | 22 | 17 |
| Waste and Toxics | 8 | 6 |
| Eco-efficiency | 7 | 5 |
| Energy | 6 | 5 |
| International | 6 | 5 |
| Economic Impacts | 5 | 4 |
| Urban Sustainability | 5 | 4 |
| Academia | 3 | 2 |
| Forestry | 3 | 2 |
| Land Ecosystems | 3 | 2 |
| Transportation | 3 | 2 |
| Water Ecosystems | 3 | 2 |
| Citizenship | 2 | 2 |
| Waste Water | 2 | 2 |
| Agriculture | 1 | 1 |
| Air Quality | 1 | 1 |
| Indigenous Issues | 1 | 1 |
| Tourism | 1 | 1 |
| Operational Reports | | |
| Planning* | 13 | 10 |
| Yearly Reports | 12 | 9 |
| Total | 130 | |

^{*}e.g., NRTEE Agenda and Planning Reports

An example of a broad, comprehensive report is Water and Wastewater Services in Canada (Figure 3, below). It addressed the need to expand Canada's water and wastewater system while accommodating for limited funding. Alternately, other reports focused on economic costs and benefits of given actions. Figure 4 shows the example of the Climate Prosperity Reports, which focused primarily on the allocation of costs and benefits of adopting GHG policies.

Figure 3: Water and Wastewater Services in Canada Cover Page (State of Debate 1996)

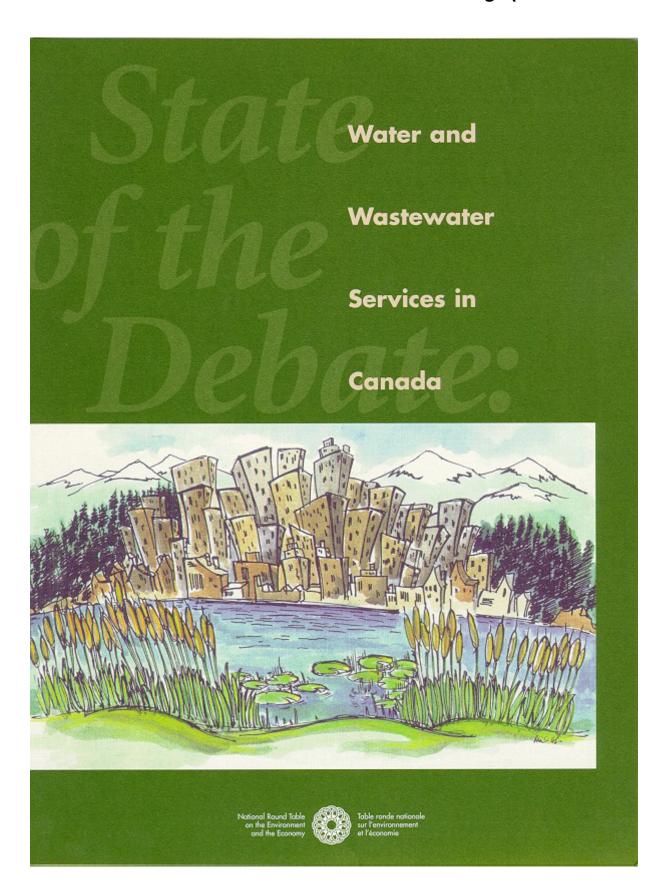




Figure 4: Image of Climate Prosperity reports (paying the Price 2010)

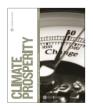
CLIMATE PROSPERITY THE TIMELINE





REPORT 01 //
MEASURING UP:
BENCHMARKING CANADA'S
COMPETITIVENESS IN A
LOW-CARBON WORLD

This report will assess Canada's capacity to be competitive in a new global low-carbon economy, by comparing us to other G8 nations in areas such as emissions and energy, skills, investment, innovation and governance.



REPORT 02 //
DEGREES OF CHANGE:
CLIMATE WARMING AND
THE STAKES FOR CANADA

This report will communicate the risks and benefits that a warming climate poses to Canada over the next one-hundred years in areas such as ecosystems, water resources, health, infrastructure and natural resource sectors and how adaptation can help.



REPORT 03 // PARALLEL PATHS: CANADA-U.S. CLIMATE POLICY CHOICES

This report will examine Canadian climate policy choices based on potential U.S. courses of action and what this means for achieving Canadian environmental goals at the least economic cost



REPORT 04 //
PAYING THE PRICE:
THE ECONOMIC IMPACTS
OF CLIMATE CHANGE
FOR CANADA

This report will provide, for the first time, national economic costings of the impact of climate change on Canada, together with a detailed look at three key sectors.



REPORT 05 //
POLICY PATHWAY
REPORT FOR CLIMATE
IMPACTS AND
ADAPTATION

Building on previous reports in the series, this advisory report will provide a range of policy pathways and actions to help Canada take advantage of its potential to adapt to a changing climate.



REPORT 06 //
POLICY PATHWAY
REPORT FOR GLOBAL
LOW-CARBON
TRANSITION

Building on previous reports in the series, this advisory report will provide policy pathways and actions necessary for Canada to thrive in a global low-carbon economy in areas such as energy, innovation, skills, investment and governance.



A variety of reports focused on aspects of sustainable development and governance, and often focused on process. For instance, Local Round Tables: Realizing Their Full Potential, discussed many of the elements needed in establishing a round table institution. The NRTEE had emphasized the importance of using the round table format in provincial jurisdictions and other contexts. It focused on the importance of clear agenda-setting, the need for expertise, and the usefulness of limiting the scope of a given report.

The final report, Building a Sustainable Future: The Legacy of Canada's National Round Table (NRTEE), requires a brief discussion. Past leaders of the NRTEE were dismayed by the dismantling of the Round Table, and had concerns over the politicization of their past, non-partisan work and what they saw as attempts to "bury" the past work of the organization. As a result, in coordination with efforts to ensure that all past output of the NRTEE was properly archived or otherwise available, they wrote an extensive assessment of the NRTEE's actions, successes, and impacts (Page 2013).

The self-assessment embedded in the NRTEE's final report argued that the NRTEE had an influence on policy dialogues which lead to policy change or important analysis. For



example, the NRTEE was the first organization to comprehensively model the impacts of climate change in Canada with extensive cost/benefit analysis and to provide breakdowns by region and sector. As the climate modelling report was developed, extensive interaction and discussions included senior officials from the Privy Council Office and the Government of Alberta. The NRTEE was the first to propose a different way of calculating CO_2 emissions which was then adopted by Environment Canada and Natural Resources Canada. Another positive outcome from the NRTEE was the drive for companies to publish or conduct sustainability reports. One could argue that increases in transparency for sustainability in the private sector significantly increased with prodding from the NRTEE.

A consensus emerges from the Dale analysis, the interviews here, and from the 2013 NRTEE assessment: NRTEE reports were well-known amongst policy decision-makers in government, NGOs, and the private sector. Occasionally they had direct influence on policy, and at other points made indirect or softer contributions to the ongoing dialogue concerning a wide variety of environmental and energy issues. Some interviewees argued that some governments considered the reports "indirect criticism" of their actions or felt that they were partisan, though NRTEE membership was non-partisan, and the only government involvement was from the party in power.

Media Analysis

The media analysis reviewed as comprehensively as possible news coverage of NRTEE in print media from 1987-2013, but with an important caveat: digitized media records prior to 2005 are extremely limited and most news articles from that period are unavailable and therefore not included in the analysis. The media analysis still provides a small window into information that can be helpful for understanding the impact of the NRTEE in the public realm.

As discussed previously, major daily newspapers were scanned for references to the NRTEE. This was implemented with the highest circulation national and provincial (ON, PQ, AB, BC) papers⁷. Searches used newspaper websites and 4 media databases using English and French language variations on the NRTEE and associated terms. Figure 5 (below) shows coverage of the NRTEE across the time period. Overall, 308 media stories were found, of which 115 occurred in the Globe and Mail, and the National Post.

The NRTEE clearly had some degree of national exposure in Canada's media, and by consequence in the national dialogue. That said, content analysis of the articles demonstrates that the organization received the most attention in the context of concerns over politicization or controversy of both specific issues (e.g., climate pricing) and at times the operation of the NRTEE itself. It rarely received basic coverage of its specific policy recommendations.

⁷ National: Globe and Mail, National Post. ON: Toronto Star, Toronto Sun, Ottawa Citizen. QC: Journal de Québec, Journal de Montréal, Métro. AB: Calgary Herald, Edmonton Journal, Calgary Sun. BC: The Province, Vancouver Sun, Times Colonist.

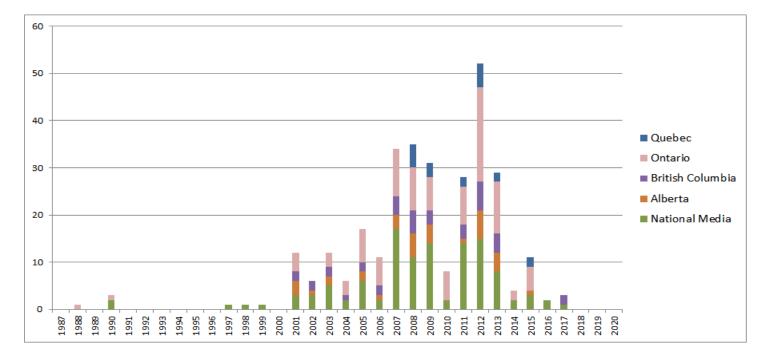


Figure 5: NRTEE Media Coverage 1987-2020

Overwhelmingly, the two most discussed stories focused on (i) the NRTEE's advocacy for a carbon pricing scheme as a means of meeting the country's emissions reduction targets, and (ii) the shuttering of the NRTEE at the hands of the Harper administration. In multiple articles, the two topics are linked, whereby the recommendation for carbon pricing was seen (and as some articles point out, explicitly mentioned) as a cause for defunding of the agency. There are two distinct "hot spots" in time when carbon pricing was mentioned, at least on the national level. The first one is around 2007, when the NRTEE proposed carbon pricing as a means of achieving emissions reductions, and the second one is in 2012, related to the closure of the agency.

Another topic of interest in the media was the political aspect of the NRTEE's mission and staff. Indeed, there are multiple news articles which discuss how particular appointments to the NRTEE could be seen as politically motivated. This political angle was also highlighted concerning the closure of the NRTEE, as several articles point out that the defunding of the agency constituted a political act rooted in partisan politics. One of these political 'hot spots' occurs around 2005, with a patronage "scandal" during the Martin administration, as well as the 2012 NRTEE closure by the Harper government, noted above.

^{*} Period from 1987-2005 is incomplete due to lack of comprehensive digitized records. N = 308.



DISCUSSION & RECOMMENDATIONS

The NRTEE was Canada's first national multi-stakeholder process. A clear case emerges that several of its components and operations were successful at promoting consensus on energy and climate policy in the country. It developed broad solutions that contributed to the development of policy in Canada in areas that were often contentious and polarizing. In this way it provides an exemplar of an institutional design that could serve as a model for organizations or initiatives aimed at supporting consensus-building on contentious policy issues. In particular, several suggestions for potential improvements in

"The real question was how to establish an intelligent dialogue."

operations and implementation that could lead an institution such as NRTEE to be more effective are provided. The analysis builds on previous external assessments from Boutros and Dale et al (2009; 2007), but also expands and finesses those assessments.

There is a consistent narrative emerging from previous work (Boutros, Dale et al), the 2013 NRTEE self-assessment, and the interviews from this report. Overall, the NRTEE's use of the consensus-based round table approach was unique and useful. When undertaken with high level and diverse representation, the NRTEE could produce policy reports and analyses focused on successful solutions to contentious environmental and economic issues. The NRTEE's successes included its work on sustainability planning in business and urban arenas, carbon accounting, climate change impacts, wastewater solutions, energy efficiency, forestry management, and international environmental partnerships and dialogue.

Through the NRTEE's years of existence, there is extensive evidence of the success of bringing diverse representation to the Round Table. That said, evidence seems to demonstrate that appointments via political parties reduced that degree of representation. Some evidence exists that increased representation by academic and scientific expertise could have helped facilitate a more robust volume of outputs. Solutions for safeguarding the NRTEE's independence from government, but at the same ensuring high level interaction and participation with government, were likely critical to its success.

"A balance is needed between independence from and engagement with the political agenda and personnel. If the Round Table is too independent then it will struggle to gain acceptance in the political establishment, if it is too controlled then its meaning as a round table connecting the establishment with the general public is lost." (Dale, Spencer, and Ling 2007, np)



"You have to insulate [an institution like the NRTEE] from short term political interference" The use of an independent commission for nominations to the Round Table and the use of long-term legislation with an associated budget commitment that is beyond the reach of the party in power is likely necessary to ring-fence the institution from excessive political interference. At the same time, meaningful and frank dialogue with both the federal bureaucracy and the government are critical to achieving policy influence. Measures to ensure that degree of high-level representation and also

some degree of discretion for government and political representatives to engage in open discussion are critical to serious engagement. Thus, access which allows for free dialogue by ministers and senior public service members is critical. Closed meetings address this issue and should be used substantively. Some public meetings, or alternately the use of the Chatham House Rule, could be implemented to ensure public transparency.

There is somewhat more limited evidence of NRTEE's impact on the broader public dialogue. Media coverage from the era of comprehensive digital records (post-2005) is clearly evident but is primarily focused on political concerns surrounding support for the NRTEE, or processes surrounding the NRTEE, rather than the research and policy analyses it produced. As a result, the NRTEE's impact and influence primarily occurred amongst elite networks of decision-makers, but it did not gain traction with the broader public. This lack of public visibility may have ultimately undermined public knowledge of and support for the institution and its work. As a result, an institution such as the NRTEE needs a mandate to develop a high degree of media and public outreach about its role and work.

In terms of agenda setting, interviews demonstrate that the NRTEE was most successful when it chose problems that (i) were within its expertise, (ii) were likely solvable, and (iii) had some degree of government support or willingness to engage on the issue. Arguably all three requirements were necessary for the long-term success of the institution.

Table 4 below shows aspects of NRTEE's operational design that were successful for resolving challenging economic and environmental problems. These likewise represent suggestions to improve the ability of such an institution to have greater success, impact, and longevity.



Table 4: NRTEE Institutional Design Components and Recommendations

Successful Institutional Design Components

- 1. Use of consensus-based approach to solutions, per general round table and sustainability theory
- 2. High level government involvement (early years)
 - · with direct reporting to Prime Minister
- 3. Consequent high-level involvement from other members (business, academic, NGOs)
- 4. Use of the "no substitutes" rule to maintain high level involvement across all members.

Aides, assistants, and consultants can be used external to the meetings to increase expertise, but the presence of high-level decision-makers at the meetings is critical

5. Extensive diversity of regions, institutions, sectors (business – NGO – government – academia / science), expertise, disciplines, and focus on economic components intersected with other critical arenas.

Improved networks and partnerships; trust

Improved quality of solutions

6. Agenda setting focused on a subset of issues based on resources / bandwidth / expertise, potential for solutions, and issues that are not anathematic to the party in power.

NRTEE doesn't address all environmental and economic issues

- 7. No actual policy or lawmaking ability, but focused on the leading edge of policy
- 8. "Politically neutral appointments made by an independent advisory committee to the Privy Council Office, based on transparent and public selection criteria." (Dale, Spencer, and Ling 2007, np) to maintain political independence
- 9. Mix of closed and open meetings

Recommendations

- 1. Independent board oversight with clear requirements for cross-partisan and non-partisan expertise, heterogeneity, and diverse representation "made by an independent advisory committee to the Privy Council Office, based on transparent and public selection criteria" (Dale, Spencer, and Ling 2007, np)
- 2. Appointment of an apolitical chair (could be recruited from academic or legal context)
- 3. Consolidated and finalized by long-term legislation but still ring-fenced from government clear legislation for funding, independence, government involvement but not undue influence Funding appropriations ring-fenced and secured from interference by the government
- 4. High level input and involvement, without decision-making power. With specific roles for ministers and the federal public service
- 5. Stronger emphasis and requirements for public and media engagement on solutions, reports, and analyses

Stronger involvement from academic and scientific expertise

Requirements for response / acknowledgement from government in power

Stronger emphasis on communicating heterogeneity, diversity, and cross-sector expertise

6. Chatham House Rule for meetings – in which the contents of discussions are reported out in general fashion by a neutral rapporteur, but without attribution; could be used as a way to increase transparency of closed meetings while maintaining the ease for participants to speak openly



CONCLUSION

The NRTEE was an effective model for developing consensus solutions for challenging environmental and energy problems while considering economic impacts. Whether such an institution can be effective in addressing or reducing broader conflict or energy polarization is less clear.

A variety of success factors emerge from the evidence. First, thoughtful use of consensus-based approaches combined with representation across geographic regions and sectors (government, academia, industry, and NGOs) provided the opportunity to find solutions with broad support that reflected an extensive range of perspectives. The NRTEE's model of high-level government involvement and engagement balanced with independence from the political party in power was a critical aspect of its early success. Mechanisms to ensure substantive participation of diverse stakeholders were also an important part of the organization's impact. "Influence, not power" could function as the mantra for the NRTEE structure. The Round Table's separation from actual policymaking helped to insulate it from the kinds of interest and constituent pressures that can prevent genuine problem-solving. Lastly, the flexibility in choosing which problems to solve meant that the NRTEE was able to ensure it had the right expertise, resources, and engagement to successfully develop solutions.

Challenges also emerge from the analysis of NRTEE operations. Clearly the organization was limited by a need to avoid issue areas that were too politicized for the party in power to embrace. This, and limits in expertise and other resources, meant that the organization was not able to comprehensively address all existing problems. Further, the innate structure of the NRTEE limited its public profile. It would have likely helped the NRTEE's mission to make significant efforts to ensure its solutions were seen and responded to by both the public and higher-level decision-makers.

Finally, it is unclear to what degree the NRTEE's existence, institutional processes, and output helped to mitigate the worst aspects of conflict over energy decisions. Colloquial evidence seems to show a moderate effect, with some observers claiming a more extensive impact in terms of moderating and tempering debates over contentious environmental and energy issues.

In the modern era of contentious, fragmented, and polarized decision-making about Canada's energy future in an age of climate change, the need for intentionally designed institutions that provide a mechanism for thoughtful, consensus-based solutions is greater than ever. The NRTEE round table model provides a useful model for just such a necessity.



REFERENCES:

Aguirre, Rafael. 2020. "A Literature Review on Polarization and on Energy and Climate Policy in Canada." Positive Energy, March, 28. https://www.uottawa.ca/research-innovation/sites/g/files/bhrskd326/files/2022-08/literature_review_on_polarization_and_energy_policy_in_canada_web.pdf.

Allen, Liz, Alison O'Connell, and Veronique Kiermer. 2019. "How Can We Ensure Visibility and Diversity in Research Contributions? How the Contributor Role Taxonomy (CRediT) Is Helping the Shift from Authorship to Contributorship." Learned Publishing 32 (1): 71–74.

Bafumi, Joseph, and Robert Y. Shapiro. 2009. "A New Partisan Voter." The Journal of Politics 71 (1): 1–24. https://doi.org/10.1017/S0022381608090014.

Baldassarri, Delia, and Peter Bearman. 2007. "Dynamics of Political Polarization." American Sociological Review 72 (5): 784–811. https://doi.org/10.1177/000312240707200507.

Beck, Marisa. 2020. "What Is 'Transition'? The Two Realities of Energy and Environmental Leaders in Canada." Ottawa: Universite d'Ottawa. https://www.uottawa.ca/research-innovation/positive-energy/publications/what-transition-two-realities-energy-environmental-leaders-canada

Bird, Stephen. 2018. "The Policy-Regulatory Nexus in Canada's Energy Decision-Making." Energy Regulation Quarterly 6 (3). http://www.energyregulationquarterly.ca/articles/addressing-the-policy-regulatory-nexus-in-canadas-energy-decision-making#sthash. JjGufTEG.dpbs.

Bird, Stephen, and Martin D. Heintzelman. 2018. "Canada/U.S. Transboundary Energy Governance." In Transboundary Environmental Governance Across the World's Longest Border, edited by Stephen Brooks and Andrea Olive. East Lansing, MI: Michigan State University Press.

Boutros, Serena. 2009. "A Child of Brundtland: The Institutional Evolution of the National Round Table on the Environment and the Economy." In Innovation, Science, Environment 1987-2007: Special Edition: Charting Sustainable Development in Canada, 1987-2007, edited by Glen Toner and James Meadowcroft. McGill-Queen's Press - MQUP.

Boxell, Levi, Matthew Gentzkow, and Jesse M. Shapiro. 2020. "Cross-Country Trends in Affective Polarization." https://doi.org/10.3386/w26669.

Bratt, Duane. 2016. "Stephen Harper and the Transformation of Canadian Foreign Policy." The USA and Canada 2016. 18th Edition. The Europa Regional Surveys of the World, 486–95.

Busby, J. S., and S. Onggo. 2013. "Managing the Social Amplification of Risk: A Simulation of Interacting Actors." Journal of the Operational Research Society 64 (5): 638–53. https://doi.org/10.1057/jors.2012.80.



Canadian Centre for Energy Information (NRCAN). 2022. "Energy and the Economy." July 20, 2022. https://energy-information.canada.ca/en/subjects/energy-and-economy.

Chinn, Sedona, P. Sol Hart, and Stuart Soroka. 2020. "Politicization and Polarization in Climate Change News Content, 1985-2017." Science Communication 42 (1): 112–29. https://doi.org/10.1177/1075547019900290.

Claassen, Ryan L., and Benjamin Highton. 2009. "Policy Polarization among Party Elites and the Significance of Political Awareness in the Mass Public." Political Research Quarterly 62 (3): 538–51. https://doi.org/10.1177/1065912908322415.

Clarke, Christopher E., Philip S. Hart, Jonathon P. Schuldt, Darrick T. N. Evensen, Hilary S. Boudet, Jeffrey B. Jacquet, and Richard C. Stedman. 2015. "Public Opinion on Energy Development: The Interplay of Issue Framing, Top-of-Mind Associations, and Political Ideology." Energy Policy 81 (June): 131–40. https://doi.org/10.1016/j.enpol.2015.02.019.

Cleland, Michael, and Monica Gattinger. 2021. "Energy Project Decision Systems for Net Zero – Designing for Functionality, Adaptability and Legitimacy." Ottawa: Positive Energy | University of Ottawa. https://www.uottawa.ca/research-innovation/positive-energy/publications/energy-project-decision-systems-net-zero-designing-functionality-adaptability-legitimacy

Coglianese, Cary. 1997. "Assessing Consensus: The Promise and Performance of Negotiated Rulemaking." Duke Law Journal 46: 1255–1349.

Corley, Richard, and Robert Fishlock. 2009. "NRTEE Proposes Carbon Policy To Achieve 2050 Goals." Blake, Cassels, and Graydon LLP, June 19, 2009. http://www.mondaq.com/canada/x/81562/Energy+Law/NRTEE+Proposes+Carbon+Policy+To+Achieve+2050+Goals.

Cormick, Gerald, Norman Dale, Paul Emond, S Glenn Sigurdson, and Barry D Stuart. 1993. Building Consensus for a Sustainable Future: Putting Principles into Practice.

Dalby, Simon. 2016. "Geopolitics, Ecology and Stephen Harper's Reinvention of Canada." In Handbook on Sustainability Transition and Sustainable Peace, 493–504. Springer.

Dale, Ann, Carrie Spencer, and Chris Ling. 2007. "The National Round Table on the Environment and the Economy (NRTEE): Expanded Decision-Making for Sustainable Development." Victoria BC: Community Research Connections - Royal Roads University. https://www.crcresearch.org/community-research-connections/crc-case-studies/national-round-table-environment-and-economy-nrtee

Dearnley, Christine. 2005. "A Reflection on the Use of Semi-Structured Interviews." Nurse Researcher (through 2013) 13 (1): 19–28. https://search.proquest.com/docview/200774376/abstract/474ED88888424423PQ/1.

DiMaggio, Paul, John Evans, and Bethany Bryson. 1996. "Have American's Social Attitudes Become More Polarized?" American Journal of Sociology 102 (3): 690–755. http://www.jstor.org/stable/2782461.



Dunlap, Riley E., Aaron M. McCright, and Jerrod H. Yarosh. 2016. "The Political Divide on Climate Change: Partisan Polarization Widens in the U.S." Environment: Science and Policy for Sustainable Development 58 (5): 4–23. https://doi.org/10.1080/00139157.2016.1208995.

Esteban, Joan, and Gerald Schneider. 2008. "Polarization and Conflict: Theoretical and Empirical Issues: Introduction." Journal of Peace Research 45 (2): 131–41. https://www.jstor.org/stable/27640646.

Faysse, Nicolas. 2006. "Troubles on the Way: An Analysis of the Challenges Faced by Multi-Stakeholder Platforms." Natural Resources Forum 30 (3): 219–29. https://doi.org/10.1111/j.1477-8947.2006.00112.x.

Fink, A. 2010. "Survey Research Methods." In International Encyclopedia of Education (Third Edition), edited by Penelope Peterson, Eva Baker, and Barry McGaw, 152–60. Oxford: Elsevier. https://doi.org/10.1016/B978-0-08-044894-7.00296-7.

Frank, Brendan. 2022. "Overcoming Limits to Consensus-Building on Energy and Climate: Toxic Partisanship, Us Versus Them, False Polarization." Ottawa Canada: Positive Energy | University of Ottawa. https://www.uottawa.ca/research-innovation/positive-energy/publications/overcoming-limits-consensus-building-energy-climate-toxic-partisanship-us-versus-them

Fraune, Cornelia, and Michèle Knodt. 2018. "Sustainable Energy Transformations in an Age of Populism, Post-Truth Politics, and Local Resistance." Energy Research & Social Science, Sustainable energy transformations in an age of populism, post-truth politics, and local resistance, 43 (September): 1–7. https://doi.org/10.1016/j.erss.2018.05.029.

Gromet, D. M., H. Kunreuther, and R. P. Larrick. 2013. "Political Ideology Affects Energy-Efficiency Attitudes and Choices." Proceedings of the National Academy of Sciences of the United States of America 110 (23): 9314–19. https://doi.org/10.1073/pnas.1218453110.

Guber, Deborah Lynn. 2013. "A Cooling Climate for Change? Party Polarization and the Politics of Global Warming." American Behavioral Scientist 57 (1): 93–115. https://doi.org/10.1177/0002764212463361.

Hertin, Julia, and Frans Berkhout. 2003. "Analysing Institutional Strategies for Environmental Policy Integration: The Case of EU Enterprise Policy." Journal of Environmental Policy & Planning 5 (1): 39–56.

Ives, Andrew. 2015. "The Canadian general election of 2015: The Liberal victory marks a swing back to the center in Canadian politics." IdeAs. Idées d'Amériques, no. 6 (October). https://doi.org/10.4000/ideas.1253.

Johnston, Richard. 2019. "Affective Polarization in the Canadian Party System 1988-2015." In , 29. CPSA. https://www.cpsa-acsp.ca/documents/conference/2019/334.Johnston.pdf.



Kahan, Dan M., Maggie Wittlin, Ellen Peters, Paul Slovic, Lisa Larrimore Ouellette, Donald Braman, and Gregory N. Mandel. 2011. "The Tragedy of the Risk-Perception Commons: Culture Conflict, Rationality Conflict, and Climate Change." SSRN Scholarly Paper ID 1871503. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=1871503.

Kevins, Anthony, and Stuart N. Soroka. 2018. "Growing Apart?: Partisan Sorting in Canada, 1992-2015." Canadian Journal of Political Science 51 (1): 103–33. https://doi.org/10.1017/S0008423917000713.

Kumar, Mohan. 2018. "The Relationship Between Beliefs, Values, Attitudes and Behaviours." Owlcation. July 23, 2018. https://owlcation.com/social-sciences/Teaching-and-Assessing-Attitudes.

Lachapelle, Erick, Christopher P. Borick, and Barry Rabe. 2012. "Public Attitudes toward Climate Science and Climate Policy in Federal Systems: Canada and the United States Compared 1." Review of Policy Research 29 (3): 334–57.

Lachapelle, Erick, Christopher P. Borick, and Barry G. Rabe. 2014. "Public Opinion on Climate Change and Support for Various Policy Instruments in Canada and the US: Findings from a Comparative 2013 Poll." Issues in Energy and Environmental Policy, no. 11.

Leach, William D., Neil W. Pelkey, and Paul A. Sabatier. 2002. "Stakeholder Partnerships as Collaborative Policymaking: Evaluation Criteria Applied to Watershed Management in California and Washington." Journal of Policy Analysis and Management 21 (4): 645–70. https://doi.org/10.1002/pam.10079.

Linnitt, Carol. 2013. "Harper's Attack on Science: No Science, No Evidence, No Truth, No Democracy." Academic Matters, May. https://academicmatters.ca/harpers-attack-on-science-no-science-no-evidence-no-truth-no-democracy/.

Longhurst, Robyn. 2016. "Semi-Structured Interviews and Focus Groups." In Key Methods in Geography, Third, 143–56. SAGE.

Mildenberger, Matto, Peter Howe, Erick Lachapelle, Leah Stokes, Jennifer Marlon, and Timothy Gravelle. 2016. "The Distribution of Climate Change Public Opinion in Canada." PloS One 11 (8): e0159774.

Miller, Clark A., Jennifer Richter, and Jason O'Leary. 2015. "Socio-Energy Systems Design: A Policy Framework for Energy Transitions." Energy Research & Social Science 6 (March): 29–40. https://doi.org/10.1016/j.erss.2014.11.004.

National Round Table on the Environment and the Economy Act. 1994. S.C. 1993, c. 31. https://laws-lois.justice.gc.ca/eng/acts/N-16.4/20120316/P1TT3xt3.html?wbdisable=true.

Natural Resources Canada (NRCAN). 2020. "Energy and the Economy." Natural Resources Canada. 2020. https://energy-information.canada.ca/en/subjects/energy-and-economy



OECD. 2017. "The Governance of Regulators: Creating a Culture of Independence - Practical Guidance Against Undue Influence." Paris: Organisation for Economic Co-operation and Development (OECD). https://www.oecd.org/gov/creating-a-culture-of-independence-9789264274198-en.htm

Page, Bob. 2013. "Building a Sustainable Future: The Legacy of Canada's National Round Table (NRTEE)." Ottawa Canada: National Round Table on The Environment and the Economy. https://issuu.com/nrtee/docs/nrtee-legacy.

Rekker, Roderik. 2021. "The Nature and Origins of Political Polarization over Science." Public Understanding of Science, February, 0963662521989193. https://doi.org/10.1177/0963662521989193.

Stirling, Andy. 2014. "Transforming Power: Social Science and the Politics of Energy Choices." Energy Research & Social Science 1 (March): 83–95. https://doi.org/10.1016/j.erss.2014.02.001.

Susskind, Lawrence, Sarah McKearnan, and Jennifer Thomas-Larmer. 1999. The Consensus-Building Handbook: A Comprehensive Guide to Reaching Agreement. Thousand Oaks CA: Sage Publications.

Toner, Glen, and James Meadowcroft. 2009. Innovation, Science, Environment 1987-2007: Special Edition: Charting Sustainable Development in Canada, 1987-2007. McGill-Queen's Press - MQUP.

Tranter, Bruce. 2013. "The Great Divide: Political Candidate and Voter Polarisation over Global Warming in Australia." Australian Journal of Politics & History 59 (3): 397–413. https://doi.org/10.1111/ajph.12023.



APPENDIX A

Table of Reports by Category

Total Reports: N=130

| 1. | Bridging Business and Sustainable Development Education at Centres of Higher Learning in Cana- da [1998] | Academia |
|-----|--|--------------|
| 2. | A Practical Introduction to Environment Manage- ment on Canadian Campuses [1995] | Academia |
| 3. | Green Guide: A User's Guide to Sustainable Development for Canadian Colleges [1992] | Academia |
| 4. | Environmental Farm Plans (EFP) and Ecological Fiscal Reform [2001] | Agriculture |
| 5. | Developing Ambient Air Quality Objectives for Canada [2008] | Air Quality |
| 6. | 2011 Response of the NRTEE to its Obligations Under the Kyoto Protocol Implementation Act (the government's fourth Plan released in May 2011) | Carbon & GHG |
| 7. | Achieving 2050: A Carbon Pricing Policy for Canada (Advisory Report) [2009] | Carbon & GHG |
| 8. | Measuring Up: Benchmarking Canada's Competitiveness in a Low-Carbon World [2010] | Carbon & GHG |
| 9. | Achieving 2050: A Carbon Pricing Policy for Canada [2009] | Carbon & GHG |
| 10. | Getting to 2050: Canada's Transition to a Low-emission Future [2008] | Carbon & GHG |
| 11. | Canada's Options for a Domestic Greenhouse Gas Emissions Trading Program [1999] | Carbon & GHG |
| 12. | 2010 Response of the NRTEE to its Obligations Under the Kyoto Protocol Implementation Act (the government's fourth Plan released in May 2010) | Carbon & GHG |
| 13. | Achieving 2050: A Carbon Pricing Policy for Canada (Outreach Report) [2009] | Carbon & GHG |



| 14. | 2009 Response of the NRTEE to its Obligations Under the Kyoto Protocol Implementation Act (the government's third Plan released in May 2009) | Carbon & GHG |
|-----|--|--------------|
| 15. | Achieving 2050: A Carbon Pricing Policy for Canada (Technical Report) [2009] | Carbon & GHG |
| 16. | 2008 Response of the NRTEE to its Obligations Under the Kyoto Protocol Implementation Act (the government's second Plan released on May 31, 2008) | Carbon & GHG |
| 17. | Greenhouse Gas Emissions from Urban Transportation [1998] | Carbon & GHG |
| 18. | A Low-Carbon Future for Canada: The NRTEE Advisory Report on Energy and Climate Change [2006] | Carbon & GHG |
| 19. | Greenhouse Gas Emissions Forecasting: Learning from International Best Practices [2008] | Carbon & GHG |
| 20. | 2007 Response of the NRTEE to its Obligations Under the Kyoto Protocol Implementation Act (the government's first Plan released on August 21, 2007) | Carbon & GHG |
| 21. | Economic Instruments for Long-term Reductions in Energy-based Carbon Emissions [2005] | Carbon & GHG |
| 22. | Planning for Prosperity: Building Canada's Low-Carbon Growth Plan [2011] | Carbon & GHG |
| 23. | Framing the Future: Embracing the Low-Carbon Economy [2012] | Carbon & GHG |
| 24. | Climate Prosperity: The Economic Risks and Opportunities of Climate Change for Canada [2010] | Carbon & GHG |
| 25. | Declaration of the National Forum on Climate Change [1998] | Carbon & GHG |
| 26. | Degrees of Change: Climate Warming and the Stakes for Canada [2010] | Carbon & GHG |
| 27. | Reality Check: The State of Climate Progress in Canada [2012] | Carbon & GHG |



| 28. | True North: Adapting Infrastructure to Climate Change in Northern Canada [2009] | Carbon & GHG |
|-----|--|------------------|
| 29. | Tools of Change: Proven Methods for Promoting Environmental Citizenship [1998] | Citizenship |
| 30. | Model Round Table for Youth Kit [1995] | Citizenship |
| 31. | Focus 2000: A Small Business Guide to Environ- mental Management [1991] | Eco-efficiency |
| 32. | Measuring Eco-Efficiency in Business [1999] | Eco-efficiency |
| 33. | Measuring Eco-efficiency in Business: Feasibility of a Core Set of Indicators [1999] | Eco-efficiency |
| 34. | Calculating Eco-Efficiency Indicators: A Work- book for Industry [2001] | Eco-efficiency |
| 35. | Advisory Report – Facing the Elements : Building Business Resilience in a Changing Climate [2012] | Eco-efficiency |
| 36. | Business Primer – Facing the Elements : Building Business Resilience in a Changing Climate [2012] | Eco-efficiency |
| 37. | Case Studies – Facing the Elements : Building Business Resilience in a Changing Climate [2012] | Eco-efficiency |
| 38. | Paying the Price: The Economic Impacts of Cli- mate Change for Canada [2011] | Economic Impacts |
| 39. | Trade, Environment and Competitiveness [1993] | Economic Impacts |
| 40. | Toward a Canadian Agenda for Ecological Fiscal Reform: First Steps [2002] | Economic Impacts |
| 41. | Capital Markets and Sustainability: Investing in a sustainable future [2007] | Economic Impacts |
| 42. | TD Forum on Canada's Standard of Living [2002] | Economic Impacts |
| 43. | Advice for a Long-Term Strategy on Energy and Climate Change for Canada - Outreach Initiative [2006] | Energy |
| 44. | Oil Sands: From Debate to Dialogue [2010] | Energy |
| 45. | Advice on Long-term Strategy on Energy and Climate Change [2006] | Energy |
| 46. | The International Policy Elements of a Long-Term Energy and Climate Change Strategy for Canada [2006] | Energy |
| 47. | Towards a Canadian Clean Energy Strategy: Sum- mary of the Banff Clean Energy Dialogue, April 8-10, 2010 | Energy |
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| 48. | Geared for Change: Energy Efficiency in Canada's Commercial Building Sector [2009] | Energy |
|-----|--|-------------------|
| 49. | Boreal Futures: Governance, Conservation and Development in Canada's Boreal [2005] | Forestry |
| 50. | Private Woodlot Management in the Maritimes [1997] | Forestry |
| 51. | Forest Round Table on Sustainable Development [1994] | Forestry |
| 52. | Aboriginal Communities and Non-Renewable Resource Development [2001] | Indigenous Issues |
| 53. | On the Road to Brazil: The Earth Summit [1991] | International |
| 54. | Canada - Japan Workshop on the Environment [1991] | International |
| 55. | The Halifax Summit, Sustainable Development, and International Institutional Reform [1995] | International |
| 56. | Advancing Sustainable Development at the Summit of the Americas, Volume 3 [1995] | International |
| 57. | Advancing Sustainable Development at the Summit of the Americas, Volume 1 [1994] | International |
| 58. | Parallel Paths: Canada-U.S. Climate Policy Choices [2011] | International |
| 59. | Improving Site-Specific Data on the Environmental Condition of Land [1997] | Land Ecosystems |
| 60. | Securing Canada's Natural Capital: A Vision for Nature Conservation in the 21st Century [2004] | Land Ecosystems |
| 61. | You Can't Give It Away: Tax Aspects of Ecologically Sensitive Lands [1992] | Land Ecosystems |
| 62. | Report on Plans and Priorities 2012-2013 | Planning |
| 63. | Report on Plans and Priorities 2003-2004 | Planning |
| 64. | Report on Plans and Priorities 2002-2003 | Planning |
| 65. | Report on Plans and Priorities 2001-2002 | Planning |
| 66. | Report on Plans and Priorities 2000-2001 | Planning |
| 67. | Report on Plans and Priorities 2011-2012 | Planning |
| 68. | Report on Plans and Priorities 2010-2011 | Planning |
| 69. | Report on Plans and Priorities 2009-2010 | Planning |
| 70. | Report on Plans and Priorities 2008-2009 | Planning |
| 71. | Report on Plans and Priorities 2007-2008 | Planning |
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| 72. | Report on Plans and Priorities 2006-2007 | Planning |
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| 73. | Report on Plans and Priorities 2005-2006 | Planning |
| 74. | Report on Plans and Priorities 2004-2005 | Planning |
| 75. | Building a Sustainable Future: The Legacy of Canada's National Round table [2013] | Reports |
| 76. | Departmental Performance Report 2011-2012 | Reports |
| 77. | Departmental Performance Report 2010-2011 | Reports |
| 78. | Departmental Performance Report 2009-2010 | Reports |
| 79. | Departmental Performance Report 2008-2009 | Reports |
| 80. | NRTEE Interim Report to the Minister of the Environment [2007] | Reports |
| 81. | Departmental Performance Report 2007-2008 | Reports |
| 82. | NRTEE - Report of the National Task Force on the Environment and the Economy [1987] | Reports |
| 83. | Pathways to Sustainability: Assessing Our Prog- ress [1995] | Reports |
| 84. | Departmental Performance Report 2006-2007 | Reports |
| 85. | Departmental Performance Report 2004-2005 | Reports |
| 86. | Departmental Performance Report 2003-2004 | Reports |
| 87. | Greening of the Budget Submission - Natural Capital: A Critical Foundation of Our Economy [2004] | Sustainable Development |
| 88. | Environment and Sustainable Development Indicators for Canada [2004] | Sustainable Development |
| 89. | Projet de société: Canadian Choices for Transi- tions to Sustainability [1995] | Sustainable Development |
| 90. | Sustainable Development: A Manager's Hand- book [1991] | Sustainable Development |
| 91. | Building Consensus for a Sustainable Future: Guiding Principles [1993] | Sustainable Development |
| 92. | Canada's Opportunity: Adopting Life Cycle Approaches for Sustainable Development [2012] | Sustainable Development |
| 93. | Decision Making Practices for Sustainable Development [1991] | Sustainable Development |
| 94. | Focus 2000: A Small Business Guide to Environ- mental Management [1991] | Sustainable Development |
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| 95. | Sustainable Development: Getting There From Here [1993] | Sustainable Development |
|------|---|-------------------------|
| 96. | Preserving Our World: A Consumer's Guide to the Brundtland Report [1990] | Sustainable Development |
| 97. | Projet de société: Planning for a Sustainable Fu- ture [1993] | Sustainable Development |
| 98. | Local Round Tables: Realizing Their Full Potential [1994] | Sustainable Development |
| 99. | Progress through Process: Achieving Sustainable Development Together [2010] | Sustainable Development |
| 100. | Progress through Process: Achieving Sustainable Development Together [2010] | Sustainable Development |
| 101. | Achieving a Balance: Four Challenges for Canada in the Next Decade [2000] | Sustainable Development |
| 102. | Towards Reporting Progress on Sustainable Development in Canada [n.d.] | Sustainable Development |
| 103. | Discussions on Decision Making Practices for Sustainable Development [1991] | Sustainable Development |
| 104. | Achieving Balance: NRTEE Identifies New Envi- ronmental Changes [2000] | Sustainable Development |
| 105. | Indicators Overview Paper - Stakeholder Work- shop Draft [2001] | Sustainable Development |
| 106. | Leaders Forum on Sustainable Development - Executive Summary [2000] | Sustainable Development |
| 107. | Building Consensus for a Sustainable Future: Putting Principles into Practice [1996] | Sustainable Development |
| 108. | Sustainable Development: A Manager's Hand- book [1991] | Sustainable Development |
| 109. | Code of Ethics and Guidelines for Sustainable Tourism [1992] | Tourism |
| 110. | The Road to Sustainable Transportation in Canada [1997] | Transportation |
| 111. | Sustainable Transportation in Canada [1996] | Transportation |
| 112. | A Strategy for Sustainable Transportation in On- tario [1995] | Transportation |
| 113. | Addressing the Paper: "A Scan of the Community Investment Sector In Canada" [n.d.] | Urban Sustainability |
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| 114. | Environmental Quality in Canadian Cities: The Federal Role [2003] | Urban Sustainability |
|------|--|----------------------|
| 115. | Toward Sustainable Communities: A Resource Book for Municipal and Local Governments [1992] | Urban Sustainability |
| 116. | NRTEE Tour: Investing in the Environmental Quality of Canadian Cities - Thematic Report [2004] | Urban Sustainability |
| 117. | Urban Sustainability Program – Multi-Stakehold- er Workshop [2002] | Urban Sustainability |
| 118. | The National Waste Reduction Handbook [1991] | Waste & Toxics |
| 119. | Strategic Solutions for the Removal of Liens and Tax Arrears on Brownfield Sites [2005] | Waste & Toxics |
| 120. | Greening Canada's Brownfields: A National Framework for Encouraging Redevelopment of Qualifying Brownfields through Removal of Crown Liens and Tax Arrears [2005] | Waste & Toxics |
| 121. | The Financial Services Sector and Brownfield Redevelopment [1997] | Waste & Toxics |
| 122. | Contaminated Site Issues in Canada [1996] | Waste & Toxics |
| 123. | Greening Canada's Brownfield Sites [1998] | Waste & Toxics |
| 124. | Managing Potentially Toxic Substances in Canada [2001] | Waste & Toxics |
| 125. | Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada [2003] | Waste & Toxics |
| 126. | Water and Wastewater Services in Canada [1996] | Wastewater |
| 127. | Charting a Course: Sustainable Water Use by Canada's Natural Resource Sectors [2001] | Wastewater |
| 128. | Sustainable Strategies for Oceans: A Co-Manage- ment Guide [1998] | Water Ecosystems |
| 129. | The Report of the Partnership on Sustainable Coastal Communities and Marine Ecosystems in Newfoundland and Labrador [1995] | Water Ecosystems |
| 130. | Changing Currents: Canada's Apparent Water Abundance Masks a Looming Security Challenge [2010] | Water Ecosystems |



POSITIVE ENERGY AT THE UNIVERSITY OF OTTAWA USES THE CONVENING POWER OF THE UNIVERSITY TO BRING TOGETHER ACADEMIC RESEARCHERS WITH EMERGING AND SENIOR DECISION-MAKERS FROM INDUSTRY, GOVERNMENT, INDIGENOUS COMMUNITIES, LOCAL COMMUNITIES AND ENVIRONMENTAL ORGANIZATIONS TO DETERMINE HOW TO STRENGTHEN PUBLIC CONFIDENCE IN ENERGY DECISION-MAKING.

