

Evaluation of the One-Tonne Challenge Program

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Acronyms used in the report

A&E	Audit and Evaluation
CC	Climate Change
CCAF	Climate Change Action Fund
CESD	Commissioner of the Environment and Sustainable Development
CESF	Competitiveness and Environmental Sustainability Framework
CFLs	Compact Fluorescent Light bulbs
DAEC	Departmental Audit and Evaluation Committee
DG	Director General
EC	Environment Canada
GHG	Greenhouse Gas
GoC	Government of Canada
NRCan	Natural Resources Canada
MOU	Memorandum of Understanding
Mt	Megatonne
OE	Opportunities Envelope
OEE	Office of Energy Efficiency
OGD	Other Government Departments
OPP	Outcome Project Plan
OTC	One-Tonne Challenge
PERRL	Pilot Emissions Removals, Reductions and Learnings Initiative
PEO	Public Education and Outreach
RMAF	Results-based Management and Accountability Framework
TBS	Treasury Board Secretariat
TC	Transport Canada

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Report prepared by Environment Canada's Evaluation Division, Audit and Evaluation Branch

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EXECUTIVE SUMMARY

As identified in the Departmental Audit and Evaluation Plan 2005/6 to 2007/8, an evaluation of the One-Tonne Challenge (OTC) program was conducted.¹ The primary objective of this formative evaluation was to assess OTC progress toward leading Canadians citizens to take actions to reduce the greenhouse gas (GHG) emissions that they produce. As education and engagement are key levers in the achievement of a number of environmental results for Canadians, the evaluation also shed light on the challenges of achieving an environmental goal with a public education and outreach program.

This report presents the findings and lessons learned from the evaluation which was conducted jointly by the Evaluation teams at Environment Canada (EC) and Natural Resources Canada (NRCan). Note that on April 13, 2006, the Minister of NRCan, in a public news release entitled "First Steps Taken Towards Made-in-Canada Approach", confirmed the Government of Canada decision to take a different approach with the OTC program. In light of this, no recommendations are made with respect to the Program other than to note lessons learned that would apply to the design of any relevant future program.

Through the use of public education and outreach means (i.e., a national marketing initiative and partnerships with key sectors of the Canadian society), the OTC program called on all Canadians to reduce the GHG emissions that they produce and hence do their part in achieving Canada's climate change objectives. Specifically, the OTC program challenged individual Canadians to reduce their annual GHG emissions by an average of one tonne or about 20 percent by encouraging them to use less energy and fewer resources in their daily activities by taking into account energy efficient/conservation considerations in their purchase, use and lifestyle decisions.

The evaluation examined the following four evaluation issues:

- a. **Relevance** assessed whether the OTC addressed actual needs.
- b. **Success** focussed on whether the OTC was on track to meeting its public education outcomes (i.e., awareness, understanding and support for the Challenge) and had the potential to achieve what it was ultimately intended to do, namely, lead Canadians to actions that reduce their annual GHG emissions.
- c. **Design and delivery** investigated the extent to which the OTC was designed and delivered in the best possible way.
- d. **Cost-effectiveness** investigated whether the most appropriate and efficient means were used to achieve outcomes.

In accordance with best practices, the approach for the evaluation involved the use of multiple lines of enquiry including document review, key informant interviews, a review of results of relevant survey research and an analysis of OTC linkages with other programs.

The following represent the summary findings from this report by evaluation issue.

¹ Evaluations of two other climate change programs, namely the Pilot Emission Removals, Reductions and Learnings (PERRL) Initiative and the Opportunities Envelope (OE) were also conducted. The three climate change programs were selected for evaluation given the central role played by Environment Canada (EC) in regard to their shaping and implementation, their contribution to helping EC address its broader priorities by way of fostering multi-jurisdictional collaboration, enabling sound decision-making, and empowering citizens to make informed decisions, and the need to respond to program specific risks and issues.

Relevance

The evaluation found that public education and outreach programs like the OTC are relevant. Such programs respond to the need among Canadians for information on the issue of climate change to allow them to make informed decisions about their use of energy and resources in their daily activities. Programs like the OTC are also relevant given that the climate change phenomenon presents unique challenges in terms of establishing it as a priority for action at the individual level. The fact that Canadian citizens are responsible for about 30 percent of Canada's GHG emissions makes them a key component of Canada's fight against climate change. Public education and outreach means also have a role to play in stimulating consumer demand for new and more energy efficient products. In this sense, a program like the OTC directly contributes to the market transformation that is called upon to effectively achieve Canada's short-term and longer-term climate change goals.

Success

The OTC was found to be on track to achieve its public education outcomes. The level of awareness of the OTC increased significantly from 2004 to 2005. The OTC was generally understood by Canadian citizens as a program designed to reduce emissions and/or energy use, and Canadians supported the Challenge, including an expressed willingness to take personal action to reduce GHG emissions. It is not clear, however, whether the OTC was on track to achieve its emission reduction target. The evaluation found that the Program was faced with a number of measurement issues which challenged it in delivering clear and attributable GHG emission reductions. Moreover, the evaluation also found that a majority of Canadians believe that it will be difficult to personally meet such a Challenge. The perceived difficulty remains most evident among those Canadians that are emitting relatively more GHG emissions. Key barriers to actions include low interest/concern, the lack of information about how to reduce emissions and the perception that the Challenge is too inconvenient or time-consuming.

Design and Delivery

While the OTC was well designed and delivered to achieve its public education outcomes, the evaluation identified a number of missed opportunities with respect to partnering and integration. Specifically the evidence indicated a need to:

- redefine certain partnerships and/or better define their roles;
- complement OTC activities with additional tools (e.g., incentives, regulations) that could provide additional motivators for taking action to reduce GHG emissions; and
- consistently integrate messaging efforts with other key related programs/initiatives, including those at the provincial/territorial levels.

Cost-effectiveness

The evidence also indicated that complementing OTC-like activities with additional tools (e.g., economic instruments, regulations) would enhance the cost-effectiveness of such a Program, especially in light of its emission reduction goal. The unique challenges in moving Canadians from awareness to GHG emission-reducing actions, the lessons learned from analogous behavioural-changing initiatives in the area of tobacco control, and the ongoing recommendations by the OECD on the wider use of economic instruments, in association with other instruments (e.g., public education, regulations) were other reasons provided in support of the need to use additional tools to enhance cost-effectiveness.

Conclusions and Lessons Learned

Based on the findings above, this evaluation concluded that in order to achieve GHG emission reductions, national public education and outreach (PEO) programs like the OTC need to be complemented by additional tools (e.g., economic instruments, regulations) to assist Canadians in reducing the GHG emissions that they produce. In selecting such tools in the future, close scrutiny should be given, for example, to how they may increase the reach of the intended audience, stimulate the demand for new GHG-emission reducing products and create synergies across relevant initiatives, including those being used and developed at the provincial and territorial levels.

Furthermore, consistent and integrated messaging would also be necessary given the existence of other related initiatives, including those at the provincial/territorial levels. To this end, national public education messaging in the area of climate change should better account for other key motivators (e.g., energy conservation, financial, environment in general) that are driving many related undertakings.

Management Response

Learnings of this evaluation will be taken into account in the development of any future and relevant programs.

1.0 INTRODUCTION

Environment Canada's (EC) Audit and Evaluation Branch conducted evaluations of three climate change programs, namely the One-Tonne Challenge (OTC), the Pilot Emission Removals, Reductions and Learnings (PERRL) Initiative and the Opportunities Envelope (OE).² These programs are part of a broader set of programs and initiatives on climate change that the Government of Canada established ranging from technology development to emissions trading. The three climate change programs were selected for evaluation given the central role that EC has played in regard to their shaping and overall implementation. Furthermore, in order for the department to undertake an appropriate balance of evaluation work and that it be strategically focused, the three programs were also selected given their contribution to helping the department address its broader priorities by way of fostering multi-jurisdictional collaboration, enabling sound decision-making, and empowering citizens to make informed decisions. These priorities are key in helping the department implement the Competitiveness and Environmental Sustainability Framework (CESF).³

While all three programs aim to address the issue of climate change, the evaluations were conducted separately given their differences in terms of goals and requirements, design and delivery aspects and targeted audiences. Close attention, however, was given to the overall design of the evaluations as is reflected in the choice of evaluation issues and questions. This has facilitated the roll-up of the evaluations' findings and lessons learned under common broad themes, including the following: greenhouse gas (GHG) measurement is a young and complex area of activity; there is a need for clearer alignment between tools/approaches used and desired outcomes and overall certainty and coordination is needed when implementing initiatives. It is important to note that the conclusions of these evaluations are by no means meant to directly apply to other climate change programs, policies and initiatives.

This document presents the findings and lessons learned for the formative evaluation of the OTC Program conducted jointly by the Evaluation teams at EC and Natural Resources Canada (NRCan). Note that on April 13, 2006, the Minister of NRCan, in a public news release entitled "First Steps Taken Towards Made-in-Canada Approach", confirmed the Government of Canada decision to take a different approach with the OTC program. In light of this, no recommendations are made with respect to the Program other than to note lessons learned drawn from the evidence from the evaluation that would apply to the design of any relevant program.

An evaluation committee was created to support the evaluation process from start to finish. This committee was comprised of officials from the Evaluation Divisions as well as the OTC program in both departments.

² All three evaluations are included in the EC 2005-06 Audit and Evaluation Plan which was approved by EC's Departmental Audit and Evaluation Committee (DAEC) on June 15, 2005.

³ The CESF aims to attain the highest level of environmental quality as a means to enhance the well-being of Canadians, preserve our natural environment, and advance our long-term competitiveness. The five pillars supporting this framework are decision-making, information, science and technology, compliance and enforcement, and education.

2.0 PROGRAM SUMMARY

2.1 Brief History

The Government of Canada established the Climate Change Action Fund (CCAF) in the 1998 Budget. The Public Education and Outreach (CCAF-PEO) component of this Fund was the first major climate change program of its type.⁴ Its focus was on catching the public's attention and raising awareness and understanding of climate change as an issue.⁵ During the 1998-2001 period, PEO activities focused on building awareness and understanding among Canadians of climate change as a real issue.⁶ Focus was given to the causes and potential impacts of climate change, and to the need for all parts of society to play a role.

The CCAF was renewed for 2001-2004. Several changes were introduced to refine the PEO component, including more targeted investments and local delivery. In terms of partner outreach, provincial hubs were established, bringing together all levels of government, business, academia, environmental groups and other stakeholders. Project funding was more targeted to build on successes, fill gaps and link with other Government of Canada initiatives. Four distinct project streams were created to reach key target groups: the general public; business and industry; communities; youth and educators. The CCAF-PEO component was completed on March 31, 2004. The successes and lessons learned from this program have helped refine the activities of other PEO programs and have fed into the design of new programs.

On December 17, 2002, following the release of the *Climate Change Plan for Canada* and Parliamentary votes, Canada ratified the Kyoto Protocol, which requires that Canada reduce its greenhouse gas (GHG) emissions by an average of 6 percent below 1990 levels over the period 2008-2012. To support the implementation of the *Plan*, Budget 2003 allocated \$2 billion to support measures leading to emission reductions in Canada several of which were announced in August 2003. This included the investment for the OTC of \$45 million for fiscal years 2003-2006. This amount included a \$3.5 million reallocation from EC in 2003-2004 as well as \$4.5 million to support corporate communication. The net funding for the OTC is hence \$37 million over the three years from 2003 to March 2006. The budget for both the program and for communications is divided equally between EC and NRCan.

The focus here was no longer about convincing Canadians that climate change was an issue. Instead, it was to encourage and motivate Canadians to take personal action to reduce GHG

⁴ The 1998 federal Budget provided \$150 million over three years for the Climate Change Action Fund (CCAF) to support early actions to reduce GHG emissions, to reach out to the public, and to increase understanding of the impacts, costs and benefits of implementing the Kyoto Protocol and the options open to Canada. This funding also helped the establishment of 16 issue tables/working groups that brought together a number of experts from all levels of government, industry, academia, and non-governmental organisations to learn about potential options to reduce Canadian GHG emissions and about the implications of these emissions, including their socio-economic and environmental impacts. The PEO Issue table was one of these tables. The Government of Canada replenished the CCAF in the 2000 federal Budget with a further \$150 million in funding that ended in fiscal year 2003/04. The PEO once again represented one of five components.

⁵ The Canadian public's level of understanding of climate change was confirmed in the 1998 report of the PEO Issue Table. The latter Table formed part of the 1998 process to develop Canada's National Implementation Strategy, which led to Action Plan 2000. Action Plan 2000 was the first tranche of actions to reduce emissions. It comprised a suite of measures that targeted key sectors accounting for 90 percent of Canada's GHG emissions.

⁶ Note that the public debate at this time centred around three main issues: 1) whether climate change was a myth or reality, 2) what climate change was, what its impacts might be, and 3) whether or not to ratify the Kyoto Protocol.

emissions.⁷ The Government of Canada launched the OTC on March 26, 2004. In April 2005, the Government of Canada's refined climate change plan was launched. "*Project Green: Moving Forward on Climate Change*" included a commitment to strengthen and extend the OTC through the 2012-2013 fiscal years. *Project Green* proposed that an additional \$120 million be invested in the program.

2.2 OTC Role and Objectives

On average, each Canadian produces just over five tonnes of GHG emissions per year. Together, these emissions account for more than a quarter of Canada's emissions. Activities such as driving vehicles, heating and cooling homes, washing and drying clothes, and using appliances all use energy that may be generated by burning fossil fuels. Indirectly, water consumption and the generation of waste materials, also have an impact on the creation of GHG emissions.⁸

The OTC program, established to address this source of emissions, called on all Canadians to reduce their GHG emissions that they produce and hence do their part in achieving Canada's climate change objectives. Specifically, the OTC program challenged individual Canadians to reduce their annual GHG emissions by an average of one tonne or about 20 percent by encouraging them to use less energy and fewer resources in their daily activities by making them take into account energy efficient/conservation considerations in their purchase, use and lifestyle decisions.⁹ Moreover, because actions to reduce GHG emissions also affect air and water quality, they are also intended to help address other environmental goals pursued by Canada in these areas.

The OTC program was designed to help Canadians achieve the aforementioned GHG emission reduction goal through the use of public education and outreach means, including two key components – a national marketing initiative and partnerships with key sectors of the Canadian society.¹⁰ Through these means, the Program aimed to achieve a sequence of outcomes. Short and medium-term outcomes of the Program concern the building of awareness and understanding of climate change leading to behavioural change by Canadians

⁷ Aside from the OTC program, two other PEO programs, namely EC's EcoAction Community Funding Program and NRCan's Office of Energy Efficiency (OEE) Outreach Program, also demonstrate how PEO activities have evolved since 1998. EcoAction picked up where the CCAF-PEO left off in the area of soliciting proposals and providing leveraged funding for innovative climate change projects. Originally designed to support community groups with projects related to clean air, clean water and nature, EcoAction was restructured in 2003 to place special emphasis on climate change. The OEE Outreach program's original focus on energy efficiency has also evolved to integrate climate change messaging as well. The OEE, established in April 1998 as part of NRCan, originated out of Canada's commitment to reduce GHG emissions under the Kyoto Protocol. In promoting energy conservation and energy efficiency, the OEE manages a wide range of programs and services in every sector of the Canadian economy (e.g., residential, commercial, industrial and transportation).

⁸ The information contained in this paragraph has been quoted in key official OTC program planning and funding documents, in the *2002 Plan* and in *Project Green*. Each tonne of GHG emissions equals one thousand kilograms. Another commonly used unit of measure for GHG emissions is a megatonne (Mt). A megatonne is shorthand for one million tonnes.

⁹ The individual target of one tonne is mentioned in the key official planning and funding documents for the OTC program. The target referred to in the latter documents is specifically linked to the *2002 Plan*. The *2002 Plan* estimated that achieving this goal could reduce Canada's greenhouse gas emissions by more than 30 Mt annually (see p.45). *Project Green* re-emphasised that the challenge to Canadians was to reduce the 5 tonnes of GHG emissions each citizen produces annually to 4 tonnes. The overall emission reduction goal set for the OTC in *Project Green* is 5 MT annually in the 2008-2012 period (see the latter's Annex 1, p.39).

¹⁰ See OTC Treasury Board Submission's Annex 2 titled One-Tonne Challenge & Climate Communications. Details on these two key components are presented in section 2.3.

as well as their willingness to take action. The desired long-term outcome was to reduce GHG emissions in line with the emission reduction objective mentioned above and by the period 2008-2012.¹¹

2.3 Program Approach and Audience

The OTC was a multi-faceted public education and outreach program involving two key components – a national marketing initiative and partnerships with key sectors of Canadian society.¹² The partnerships were also used to reach individual Canadians and were intended to create broad awareness of the Challenge and to provide Canadians with the support and opportunities they needed to take up the Challenge.

The national marketing initiative through advertising, information tools, e-marketing, media relations, and other marketing activities, aimed at creating broad awareness and participation in the OTC. It did this by communicating the benefits and importance of action, as well as the help available to consumers. A multi-media campaign ran from December 6, 2004 to March 31, 2005. The campaign included 60-second and 30-second television ads featuring Rick Mercer (English) and Pierre Lebeau (French); print ads in daily, community and ethnic newspapers and consumer magazines, targeted print ads, radio ads, WeatherNetwork vignettes, and advertising on MSN/Sympatico.

Other marketing activities included the distribution of the *Guide to the One-Tonne Challenge* (about 1.2 million copies were distributed over March 2004 – March 2006).¹³ The OTC program also operated the OTC Web site, which includes a GHG calculator, a pledge page, a tips guide section and an incentives and rebates database section. The latter section was intended to ensure that Canadians were aware of programs, products and services available to assist them in reducing emissions, including other relevant campaigns aimed at consumers. The Website has received about 4.2 million visits as of March 2006. The OTC program staff also participated in a number of events (e.g., home and car shows, local events during Earth Days and Environment Week) through its exhibit activities. Finally, the OTC was also being

¹¹ These outcomes were taken from the Treasury Board Submission's Annex 2. More detailed program outcomes may be found in the logic models that have been used by both departments in their dialogue on the way forward for the Program. Other pieces of documentation were also reviewed for the evaluation, including survey studies and other program reviews that have been conducted to assess program's progress in reaching its outcomes. These will be discussed in more depth in sections 3 and 4. The aforementioned logic models are found in the annexes of this report. **Annex 1a** presents the OTC logic model that was included in the document titled Public Education and Outreach – Performance Story (Draft 2, January 21, 2005). Other PEO logic models were also included in this document. The latter formed part of the horizontal results-based management accountability framework (RMAF) which was developed for a number of climate change initiatives receiving funding. This horizontal RMAF was never approved by Treasury Board. **Annex 1b** presents a subsequent version of the OTC logic model and was taken from the Performance Measurement Framework for the OTC, February 28, 2005. It was developed by both EC and NRCan. **Annex 1c** presents a more recent version of the OTC logic model which was taken from the OTC Business Plan and Management Framework which was updated in April 2005. It was developed and provided by EC. This logic model version is included as the Program's performance measurement efforts match more clearly with the immediate and intermediate outcomes stated in the model.

¹² The OTC documents included in the horizontal CC RMAF present the OTC program as a public education and outreach program. This description of program 'type' was also used by the recent TB Review of climate change programs/initiatives. *Project Green* in turn refers to the Program as a public education program. The TB Submission's Annex 2 refers to the program as social marketing program. In light of the intended role of partnerships in the program (i.e., more than about social marketing), the present evaluation continues to refer to the program as a public education and outreach program.

¹³ The Program also distributes the OTC flyer to encourage readers to obtain the full guide on how to reduce GHG emissions at home and on the road.

promoted by over 130 government and partner websites and a number of media partnerships have been developed.

The partnerships that the OTC has been fostering include:

- Hubs - 12 provinces and territories to bring together key stakeholders involved in the climate change community;
- Community partners - 41 across Canada to promote, through OTC funding, assistance to implement local challenges;
- Youth partners – 16 major environmental organizations, including the Youth Environmental Network, Sierra Youth Coalition, Environmental Youth Alliance and Clean Air Champions, to promote the OTC to youth ages 16-25 and others;
- Private sector partners - 28 partners including the financial community, manufacturers, retailers, and utilities to promote energy-saving products and services to their customers, and in some cases, to also promote the Challenge to their employees;
- Education partners - mostly educators to enable them, through the provision of teaching materials, to educate their students about the issue of climate change, actions to reduce emissions, and ways to get their families involved;
- Federal In-reach - over 25 different federal departments and organizations in the National Capital Region and across the country in order to reach out to federal employees on the Challenge. This network was built on established interdepartmental working groups such as the Federal House in Order and the Clean Air Day Working Group.

2.4 Program Management Structure

EC and NRCan shared leadership and accountability for the delivery of the OTC program. The program was designed jointly by both departments. While the overall management and responsibility of the marketing/advertising was equally shared across the two departments, the split in the management of the program's partnership components was based on each department's areas of expertise. NRCan was responsible for the education component and EC was responsible for the community and youth components. The remaining components hubs, private sector and federal in-reach were co-managed. In this case, the components were directed by teams of EC and NRCan officials, with the presence of other departmental officials where appropriate. It was agreed, however, that NRCan would lead on the private sector partnerships and that EC would lead on federal in-reach.

Transport Canada (TC) played a supporting role in the Program's delivery and received \$200,000 in funding through a Memorandum of Understanding (MOU) with NRCan. This MOU was developed to support the integration of TC's transportation demand management and alternative transportation programs into the OTC and to build relationships with its stakeholders to support the program.¹⁴ Regional EC offices also played a supporting role by

¹⁴ Originally, an interdepartmental Advisory Group, with representatives from relevant departments (Transport Canada, Health Canada, Industry Canada, Agriculture and Agri-Food Canada and others as required), was to provide support to the implementation of the Program. Only Transport Canada, however, has had a continued and collateral interest in the Program as is laid out in the MOU.

managing local community challenges and providing advice to provincial-territorial climate change hubs, and promoting the Challenge to their regional EC employees.

Within EC, until recently the OTC program was housed in the Climate Change Bureau. With EC's new organisational structure, it moved to the PEO Section of the Environmental Stewardship Branch. Within NRCan, the OTC program was housed under the Assistant Deputy Minister, Energy Technology and Programs as part of the Office of Energy Efficiency (OEE).

3.0 EVALUATION DESIGN

3.1 Purpose and Scope

The formative evaluation of the OTC program examined whether the Program is on track in leading Canadians to take actions to reduce GHG emissions.¹⁵ As education and engagement are key levers in the achievement of a number of environmental results for Canadians, the evaluation also sheds light on the challenges of achieving an environmental goal with a public education and outreach program, and the potential for the OTC to lead Canadians to take actions to reduce GHG emissions.¹⁶

The following four evaluation issues were examined:

- e. **Relevance** assessed whether the OTC addressed actual needs.
- f. **Success** focussed on whether the OTC was on track to meeting its immediate and intermediate outcomes. These outcomes were taken from the logic model that may be found in **Annex 1c**. Moreover, as will be discussed in more detail in sections 3.2 and 4, these outcomes were also used in the survey work that the OTC program has conducted to assess Program performance.¹⁷ The evaluation also assessed whether the Program had the potential to achieve what it was ultimately intended to do, namely, lead Canadians to actions that reduce their annual GHG emissions.¹⁸
- g. **Design and delivery** investigated the extent to which the OTC was designed and delivered in the best possible way.
- h. **Cost-effectiveness** investigated whether the most appropriate and efficient means were used to achieve outcomes.

The evidence for this evaluation was collected between July 2005 and January 2006. The specific questions pertaining to each evaluation issue are presented in the OTC Evaluation Plan; the details of these are found in **Annex 2**.

¹⁵ This evaluation looked at the Program and its achievements over 2 years, namely from March 2004 to March 2006. It is important to note that while the OTC was launched on March 26, 2004 (i.e., after it was announced in August 2003), advertising support for the Program did not begin until December 2004.

¹⁶ Formative evaluations generally occur fairly early in the life of a program or initiative. The primary purpose is program improvement. It verifies what the program is about and how it is functioning, in terms, for example, of its components, targeted clients, intended "effort" or "dosage". Formative evaluations, like summative ones, may examine all intended outcomes. Hence, they ask whether the program is achieving early outcomes as well as whether the program is on track to achieve its ultimate outcome.

¹⁷ As mentioned in section 2.2, the evaluation also acknowledged other outcome-related documentation to assess program success.

¹⁸ Note that, in some instance, the evaluation refers to the Program's immediate and intermediate outcomes (i.e., awareness, understanding, and support) as public education outcomes.

3.2 Approach and Methodology

In accordance with best practices, the evaluation approach involved the use of multiple lines of enquiry, including:

Document and File Review

Policy and planning documents were reviewed. Key correspondence records and data systems were also reviewed. Finally, media monitoring provided information about the different perceptions that people may have about the Program. A full list of these documents and materials can be found in **Annex 3**.

Key Informant Interviews

Key informant interviews were conducted with federal government officials working on the OTC at EC and NRCan. These interviews were conducted between October 11, 2005 and January 27, 2006. **Annex 4** provides a list of federal government officials interviewed. **Annex 5** presents the interview questions and themes that were employed to facilitate interviewees' input.¹⁹

Key informant interviews with OTC program partners/stakeholders were also conducted. This part of the evaluation was conducted by Ipsos Reid and aimed at assessing the degree to which the OTC was fulfilling its intent and partners/stakeholders were satisfied with the initiative. **Annex 6** presents the interview questions that were asked.

Ipsos-Reid conducted 50 in-depth key informant telephone interviews with OTC partners/stakeholders. While the interviews contained some closed-ended questions in order to quantify some of the overall responses, the bulk of the research instrument is qualitative. This allowed respondents to elaborate on their reasons for being satisfied or dissatisfied and to comment on specific issues of direct concern to them.

The breakdown by type of partner/stakeholder is as follows: Communities (21); Youth (8); Hubs (5); Federal In-Reach (1); Private Sector/Business and Industry (9); Education (6).

In terms of recruitment, EC's Evaluation Division contacted partners/stakeholders in advance to notify them of the purpose of the interviews and request their participation. This was carried out by e-mail. Ipsos-Reid then contacted partners/stakeholders by telephone to schedule an interview session. Once an interview had been scheduled, Ipsos-Reid sent the interview guide upon request to provide an overview of what would be covered, the time to prepare for the interview, as well as confirmation of the date and time of the scheduled interview.²⁰ All (50) interviews were conducted from mid-November 2005 until mid-January 2006.

Surveys

The evaluation team originally planned to conduct a survey of a subset of the Canadian population to assist in its assessment of the OTC program's success in meeting its outcomes. However, this piece of research was deemed unnecessary given that the OTC program

¹⁹ Note that the interview guide used for conducting the interviews with EC regional staff was slightly adapted to better reflect the nature of their role in the management of the OTC program.

²⁰ The interviews were conducted by experienced Ipsos-Reid researchers. The interviewees were assured of the confidentiality of their comments, that is, all information collected through the interviews would be treated as confidential, and would not be identified by client or location. All stakeholders were contacted multiple times in order to schedule an interview.

conducted ongoing surveys that were relevant for this assessment.²¹ The evaluation team has hence drawn upon the results of some of this work, which was conducted by external consultants on behalf of the OTC program.²²

In 2003, when the OTC was not yet launched, a survey conducted by Decima (hereafter the 2003 Survey) aimed at establishing a baseline of public awareness, receptivity and actions taken in response to the OTC program, to provide a basis for evaluating its impact over time.²³ This survey also aimed at tracking the public's perception and actions as they relate to energy efficiency at home and on the road, and at assessing trends in public awareness and understanding of climate change issues, based on previous research.

Another survey, conducted in September 2004 by Environics Research Group, namely, the 2004 Phase I Tracking Survey (hereafter the 2004 Survey) aimed at measuring public awareness, receptivity and actions taken in response to the OTC program, and to compare with baseline measures from the 2003 Survey.²⁴ The 2004 Survey also aimed at assessing the federal government's major promotional campaign to create OTC awareness that was to be conducted from December 2004 through March 2005. As in the 2003 survey, the 2004 survey aimed to track the public's perception and actions as they related to energy efficiency at home and on the road; and assess trends in public awareness and understanding of climate change issues, based on previous research.

The overall objective of the more recent 2005 Phase II Tracking Survey (hereafter referred to as the 2005 Survey), also conducted by Environics Research Group, was to continue to measure the relative success of the OTC program in terms of its impact on awareness and attitudes towards the OTC.²⁵ **Annex 7** includes the interview questions that were asked in the 2005 Survey. As is the case for the 2004 survey, both tracking surveys assessed the achievement of the public education immediate and intermediate outcomes listed in **Annex 1c** (awareness of the OTC, understanding of how to reduce GHG emissions, support for the Challenge and willingness to take personal action to reduce GHG emissions). These surveys also assessed factors that are preventing individuals from reducing their GHG emissions by 20% and hence aimed to assess other reasons that could be preventing the program in achieving its ultimate goal.²⁶

²¹ The outcomes that were assessed in the survey work are best reflected in **Annex 1c** logic model's immediate and intermediate outcomes, namely, awareness of the OTC, understanding of how to reduce GHG emissions, and support for the Challenge as well as willingness to take personal actions to reduce GHG emissions.

²² Note that the OTC program has conducted a number of studies. The present evaluation however has focused on those pieces that are most relevant for the assessment of OTC outcomes. Other studies were conducted to gain feedback on the strengths and weaknesses of OTC publications, the OTC website and the on-line GHG calculator.

²³ This survey is titled: The One-Tonne Challenge Tracking Survey – Final Report (April 2003). This survey was based on telephone interviews conducted with a representative sample of 1,703 Canadians (18 years and older), conducted between March 20 and April 3, 2003.

²⁴ This survey is titled: The One-Tonne Challenge Tracking Survey Fall 2004 - Phase 1 (October 2004). A telephone survey with a representative sample of 3,100 Canadians (18 years and older) was conducted between September 10 and 26, 2004. Comparisons to previous research are provided, throughout the report to place the results of this survey in a broader historical context, which includes the results, among others, of the 2003 Survey.

²⁵ This survey is titled: 2005 One-Tonne Challenge Tracking Survey – Phase II (November 2005). Its specific objectives are similar to those undertaken under the 2004 Phase I Tracking Survey. This survey was also conducted by telephone with a representative sample of 3,118 Canadians (18 years and older) was conducted from September 16 until October 10, 2005. The questionnaire was based on the 2004 Survey, with changes incorporated and new questions added where relevant.

²⁶ Explicit reference to the OTC emission reduction target is made throughout the 2005 Survey.

Program Mapping

A list of other programs/initiatives was compiled to gain a full picture of the OTC program and, in particular, to assess its intended integration/link across related programs/initiatives “to help individuals reach their one-tonne objective”.²⁷ **Annex 8** presents this list of programs/initiatives at both the federal and provincial and territorial levels. This list, while not exhaustive, also indicates the extent to, and way in which the federal, provincial and territorial governments have invested in the area of GHG emission reduction programs/incentives that are directed at Canadian citizens.

4.0 EVALUATION ISSUES AND ASSOCIATED FINDINGS

The following are the findings from the questions developed to assess respective evaluation issues.²⁸

4.1 Relevance

The evaluation has found that a public education and outreach program like the OTC is relevant as it addresses Canadians’ need to receive better information on the issue of climate change to allow them to make informed decisions about their use of energy and resources in their daily activities as well as the products they consider purchasing. Such a program may also tap into a considerable GHG emission reduction potential.

The 2005 Phase II Tracking Survey concluded that while Canadians’ concerns about climate have increased over the past year, this issue continues to lag behind air pollution, which is the number one top-of-mind environmental issue facing the country.²⁹ While the survey reports that 20% of Canadians now say they are extremely concerned about the issue of climate change, the majority of Canadians have yet to become truly engaged at a personal level (e.g., driving less, switching to alternative forms of transportation, reducing home energy use). The report indicates that this may be tied to key characteristics of the climate change phenomenon, all of which contribute to the public’s uncertainty and complacency. These include most notably, the lack of tangible evidence of environmental or health impacts to date, uncertainty about long-term ramifications, and the absence of a toxic or chemical dimension (the vernacular standard for environmental problems). For these reasons, climate change poses unique challenges in terms of establishing it as a priority for action at the individual level.

Nevertheless, while the greatest shift in awareness and understanding about climate change occurred in the late 1990s, today we are seeing a major shift in Canadians’ sense of

²⁷ See Annex 2 of the OTC Treasury Board Submission.

²⁸ See **Annexes 2, 5, and 6**.

²⁹ The 2005 Survey asked Canadians to identify the most important environmental issue facing Canada today (unprompted, without offering choices). See **Annex 7’s** question 1. Air pollution was mentioned by about one-quarter of Canadians (23%). Climate change was mentioned by 17% of Canadians surpassing water pollution which was identified by 11% of Canadians. The 2005 Survey indicated that the relative prominence of the environmental concerns identified by Canadians has often fluctuated with the profile they receive in the Canadian media. In this respect, the Survey attributes the increase in the concerns about climate change over the past year to the widespread media attention devoted to Canada’s ratification of the Kyoto Protocol.

responsibility to take personal action.³⁰ In 1998, 54% of Canadians who had heard about climate change felt there was something they could do about it. By 2001, that number had jumped to 68%. Today 77% of Canadians acknowledge that there are steps they can take to reduce their own GHG emissions.³¹ This proportion, however, has remained essentially static since 2003. In this light, a public education program like the OTC can help Canadians identify the role that they may play in climate change, in particular, by making Canadians more aware of their lifestyle and consumption patterns that are contributing to climate change and the benefits accruing to the actions.

The focus of the OTC on engaging citizens is also relevant given they are a key component of Canada's fight against climate change. There is considerable potential to reduce GHG emissions by individual Canadians. Together, individual Canadians are responsible for about 30 percent of Canada's GHG emissions. According to the estimates provided in the *2002 Climate Change Plan for Canada* as well as was posted on the OTC Website, most of these emissions – about half – come from the transportation sector. The remainder come from heating and cooling homes, hot water, appliances and lighting. These emissions are heavily driven by the ways that individual Canadians use energy and resources in their daily activities as well as by the products that they purchase. The OTC program was established to address this source of emissions. It called on all Canadians to reduce the GHG emissions that they produce and hence do their part in achieving Canada's climate change objectives.

Finally, by stimulating consumer demand for new and more energy efficient products, one is directly contributing to the market transformation that is called upon to effectively achieve Canada's short-term and longer-term climate change goals. Indeed, supporting the development and diffusion of those GHG-reducing consumer products involves a market demand component in addition to a market supply one. In this sense, public education is an integral part of the market transformation equation. The links between public education and market transformation to achieve environmental sustainability are central themes under both EC and NRCan mandates.³²

4.2 Success

The OTC was on track to achieving its public education outcomes. In terms of achieving the ultimate outcome of emission reductions, it appears that the OTC was faced with a number of challenges to deliver clear and attributable GHG emission reductions. It also appears that a program like the OTC would require complementary measures to provide additional motivators for taking action to reduce GHG emissions.

³⁰ In this regard, the November 2003 study conducted by Phoenix Strategic Perspectives Inc. and titled *The One-Tonne Challenge Branding Concepts Research* is worth noting. Six focus groups were conducted to assess potential branding concepts for the OTC. The focus groups also assessed potential names for the challenge (i.e., One-Tonne Challenge vs. Climate Change Challenge), tagline options, and a TV ad concept intended to assess the appeal of a one-tonne challenge as a concept. It found that the latter concept was an interesting and motivating goal to Canadians. Focus group participants liked the idea of being asked to reduce their GHG emissions by one tonne.

³¹ See the 2003, 2004 and 2005 Surveys.

³² The role of consumer demand in market transformation is well established in both departments' Report on Plans and Priorities.

Canadians' Awareness

The 2005 Phase II Tracking Survey or 2005 Survey indicates that awareness of the OTC has dramatically jumped from 6% (established in the 2004 Survey) to 51%.³³ Those who said they had not heard of the OTC (49% of the total population) were read a two-sentence description of the initiative to measure prompted recall.³⁴ Of this group, one in five (19%) recognized the OTC. When combined with unaided responses, the 2005 Survey indicates that 60% of Canadians are now aware of the OTC to date.

The 2005 Survey indicates that the level of awareness has increased significantly over the previous year. In contrast to the 2004 Survey which was conducted six months after the launch of the OTC in March 2004, the 2005 Survey was conducted after the program's national promotional campaign to create public awareness of the OTC, which ran from December 2004 through March 2005. Awareness, in particular, was mostly related to the national television ad campaign. Among those who have heard of the OTC (prompted and unprompted responses), 72% of the survey respondents identified television as the main source of information about the Program. This result is up 30 points since the 2004 Survey. This dramatic increase in the proportion identifying television as the primary source is, according to the 2005 Survey, attributed to the campaign's television commercials featuring Rick Mercer and Pierre Lebeau. These commercials are also used to explain the dramatic jump in Canadians' awareness of the OTC.³⁵

Those who have heard of the OTC were also asked if they knew which group, organisation or agency was the source of the information that they had seen or heard. Overall, respondents (both prompted and unprompted) are most likely to link the OTC with the Government of Canada. Just over 40% mention the federal government as the source of the information.

Canadians' Understanding

The OTC was generally understood by Canadian citizens, although there is little variation in understanding since 2004. Specifically, 78% of surveyed respondents in the 2005 Survey who recalled hearing about the OTC (unaided responses) understood the initiative. Among these respondents, the OTC appeared to be "well recognized in general terms as a program designed to reduce emissions and/or energy use". This proportion is up 6 points since 2004. Top mentions, by order of importance, include: conserve energy/reduce consumption (26%), reduce GHG effect/emissions (22%), reduce by one tonne (19%), reduce pollution/emissions – general (15%), reduce garbage/waste (15%). Finally, a small proportion (5%, down 3 points from 2004) continues to mention specific methods of reducing energy use such as vehicle-related actions or recycling.³⁶

³³ Survey participants were asked if they had ever heard of something called the "One-Tonne Challenge" without further prompting of what this was about. See question 20 in **Annex 7**.

³⁴ See question 24 in **Annex 7**.

³⁵ Respondents in the 2005 Survey mention newspaper (21% down 7 points), radio (17% up 5 points) and the internet/web (5% down 1 point) as the sources of the information they had seen or heard.

³⁶ See question 21 in **Annex 7**.

Canadians' Support/Participation in the OTC

In terms of the support that Canadians have for the OTC as well their willingness to take personal action to reduce GHG emissions, the 2005 Survey found that more than half (54%) of respondents who were aware of the OTC considered themselves to be actively participating in it. This is up five percentage points since 2004. Overall, this translates into one-third (32%) of the total sample (including those who were aware of and have never heard of the OTC) claiming to be participating in the OTC. This is up 25 points over the previous year.³⁷

In terms of the interest in participating in the OTC among the non-participants (those who have not yet participated in the OTC or 68% of the total population) in the coming years, the 2005 Survey found that the majority mention some willingness to participate in the OTC, "at least in principle".³⁸ This is consistent with the trend over the previous two years. More specifically, the 2005 Survey reports that more than half of this group said they were very (17%) or somewhat (39%) likely to attempt the OTC, down slightly over the previous year. More than one-third (36%) said they were not very or not at all likely to participate. Finally, the 2005 Survey also notes that the overall interest in taking the OTC continues to be higher for those who are most concerned about climate change (67%), and those who have already made the most effort towards reducing their energy use at home or on the road.

While survey respondents expressed an interest in participating in the OTC in the coming year, the 2005 Survey indicates that "a majority of Canadians continue to believe it will be difficult to personally meet the OTC target of a 20 percent reduction in the coming year". Among those not currently participating in the Challenge (68%), nearly two-thirds say achieving the goal will be very (19%) or somewhat difficult (45%), while one-third say it will be not very (21%) or not at all difficult (11%), and 5% say they are unsure or it depends.³⁹ The report mentions that these results are also consistent with those recorded in the previous two years. Furthermore, the perceived difficulty of achieving the goal of a 20 percent reduction in the coming year remains most evident among Canadians with higher household incomes (73%), homeowners (69%) and those owning vehicles (65%). This survey result corroborates the responses to the key informant interviews conducted for this evaluation. It thus appears that the Program was having less of an impact on those Canadians that are emitting relatively more GHG emissions.

The 2005 Survey also found that participants in the OTC (32% of the total population) were overall positive in their experience so far for them to reduce their own personal contribution to GHG emissions by 20 percent. More precisely, six in ten said it had not been very (34%) or not at all difficult (24%), while four in ten said it had been somewhat (33%) or very difficult (6%). Consistent with the results above, Canadians who do not own vehicles (76%) were far more likely to say it had not been difficult compared to 56% of those who do. Moreover, households with incomes below \$25, 000 (68%) were also more apt to say that the achievement of the goal had not been difficult. This appears to indicate that the program was reaching those that can be brought on board more easily.⁴⁰

³⁷ See question 31 in **Annex 7**.

³⁸ See question 32 in **Annex 7**.

³⁹ See question 34 in **Annex 7**.

⁴⁰ Several key informant interviews with OTC program officials have also indicated that the program was reaching the "converted".

As in the 2004 Survey, the 2005 Survey asked individuals about six specific types of barriers that might constitute reasons why people they know would not participate in the OTC.⁴¹ Consistent with the results found last year, a lack of information about how to reduce their personal contributions to GHG emissions is most likely perceived to be a significant barrier to participation in the challenge. Four in ten Canadians (42%, down 6 points) said that most people would not take up the challenge because they did not know enough about how to reduce their personal contributions to greenhouse gas emissions. One-third of respondents (33%, down 3 percentage points) said others are unlikely to participate because they perceived the OTC as too inconvenient or time-consuming. Moreover, significant minorities think other people are unlikely to participate because of the perception that their own participation will not make a difference to climate change (28%, down 1 percentage point), or due to the perceived costs associated with making the necessary changes (26%, down 7 points). The report indicates that those who are unlikely to participate said so because “they are (or perceive themselves to be) already energy efficient”. By comparison, one in five Canadians think people will not take the challenge because they are not sufficiently interested or concerned about the environment (22%), or because they have already reduced their energy use as much as possible (19%).

OTC – A Public Education and Outreach Program

The review of relevant official documents indicates that the OTC was portrayed and communicated as a public education and outreach program rather than a mitigation one.⁴² For instance, Project Green states that “... the OTC is a public engagement effort that will help move Canadians from concern to action.” More recently, the criteria used to assess the performance of the OTC under the TBS-led review of the climate change program also supports the idea that the OTC be treated as public education and outreach program rather than a mitigation one.

Furthermore, despite the fact that the GHG emission reduction target accompanied the program in most of its key messaging opportunities, past and current OTC activities have focused on achieving its public education related outcomes. The resulting performance measurement strategies that have been developed and maintained draw heavily on the monitoring of these outcomes only. Hence, following both the past treatment of the OTC as a public education and outreach program as well as the nature of its activities and accompanying performance measurement strategies, the OTC was, in practice, treated more as an opportunity for Canadians to set a personal goal for action than an actual emission reduction target.

GHG Emission Reduction Measurement Challenges

Various measurement issues challenge a program like the OTC in accounting for emission reductions. First, reaching consensus on what is measured, how and by whom in a program that was highly dispersed (regionally, departmentally) and deployed through various partners

⁴¹ The identified barriers preventing Canadians from meeting the individual GHG emission reduction target of one tonne originate from question 36 in **Annex 7**. This question of the survey, like some others, was phrased in relation to an appropriate reference group, since people may be more honest about obstacles facing other people than themselves.

⁴² Indeed, the link of the OTC to the GHG emission annual reduction target of one tonne in the past climate change plans (2002 and 2005) has been the source of the ongoing discussions between OTC program officials at NRCan and EC.

with goals and mandates of different natures is highly unlikely. This measurement issue was raised by many interviewees who took part in the OTC partner/stakeholder key informant interviews.

A second measurement issue concerns the risk of double counting the emission reductions resulting from OTC program activities. This risk is considerable given that the OTC also aimed to make Canadians more aware of programs and services that assist them in reducing their emissions. The issue here is that most of these programs and services, at least those at the federal level (and generally housed under NRCan's OEE), are already accountable for an emission reduction target of their own.

There is also evidence indicating that the OTC was fairly successful in increasing the uptake of a number of these federal programs (e.g., EnerGuide for Houses Retrofit Incentive, EnerGuide fuel consumption label, ENERGY STAR symbol promotion programs).⁴³ For example, the OTC radio ads which focussed on EnerGuide for Houses contributed to the tripling of bookings for house evaluations from 2,700 in February 2005 to 8,700 in March 2005.⁴⁴ According to *Project Green*, it was estimated that continued funding of such programs through 2012 could have yielded up to 40 Mt of GHG emission reductions annually in 2008-2012 period. It also indicated that there was interdependency between the various mechanisms that it proposed (i.e., Climate Fund, Partnership Fund and other climate change programs).⁴⁵ In this context, attributing any portion of the results of these programs to the OTC would have indeed been difficult.

4.3 Design and Delivery

Overall the OTC was well designed and delivered to achieve its public education outcomes in terms of its two key components, namely a national marketing initiative and partnerships with key sectors of Canadian society. Moreover, OTC partners were satisfied with their involvement in the OTC indicating that it was consistent with their respective mandates and goals and enabled the delivery of their own programs/activities. In particular, having a national and high profile brand like the OTC provided more credibility to their own local activities.

⁴³ The EnerGuide for Houses Retrofit Incentive (under the OEE's residential program stream) was designed to help homeowners reduce their energy consumption by offering grants for people who improve the energy rating of their houses. The EnerGuide fuel consumption label is one of many other programs under the transportation stream aimed at encouraging private motorists to make energy-efficient purchases. The label, intended to remain on new vehicles until they are sold, shows the city and highway fuel consumption ratings and an estimated annual fuel cost for that particular vehicle. The international ENERGY STAR symbol is promoted under the OEE's Equipment Program which helps Canadians make energy-efficient choices when buying, selling or manufacturing energy-using equipment. The symbol identifies the most energy-efficient products in their class. Products that qualify to carry the ENERGY STAR symbol meet premium levels of energy efficiency. Most ENERGY STAR labeled products are 10 to 50% more efficient than the minimum regulated standard in Canada.

⁴⁴ The radio ads feature the OTC and the EnerGuide for houses grants and incentives. They were part of the OTC multi-media campaign.

⁴⁵ For that reason, *Project Green* indicated that the MT and dollar ranges set out in its Table 1 do not give an accurate representation of total emission reductions and costs.

Evidence indicates however that there were missed opportunities in terms of: a) separating some partnerships and/or better defining their respective roles and b) complementing the OTC activities with additional tools (e.g., incentives, regulations) that could enhance the impacts of the program. The evaluation has also found that the messaging efforts of the OTC were not consistently integrated across other key related programs/initiatives, including those at the provincial/territorial levels.

OTC Program Components

The selection of OTC program components including the partnership component was based on a number of successes and lessons learned from the CCAF-PEO. In particular, there was a move away from the funding of individual projects to a more targeted approach that developed strategic alliances with partners and used marketing activities to help point Canadians to the services and programs offered by the federal government and these partners. In particular, the resulting partnership component outlined in section 2.3 and also presented in **Annex 1c**, reflected the keen interest of key stakeholders throughout the evolution of CCAF-PEO activities. The evaluation has nevertheless found that there are still some missed opportunities.

In particular, responses provided by a number of key informant interviewees (from both program officials and relevant partners) have indicated that the work under the education component (i.e., activities/material for primary school students) should have been better integrated with the youth component (i.e., activities/material for high school and post-secondary students within and outside of the formal education system). The premise behind these two components was that the specific audiences that they addressed will one day become important Canadian consumers, and hence producers of GHG emissions. The work under the youth component involved a number of outreach activities that were undertaken with a number of youth organisations. In contrast, the work under the education component involved the development, by the lead OTC program officials and educators, of teaching materials. The latter were intended to educate students, among other things, about the issue of climate change, actions to reduce emissions, and ways to get their families involved. These materials, however, were being developed in isolation to the activities that were undertaken directly with youth.

In this respect, a key concern raised by several of the youth partners who were interviewed, was the lack of youth-specific support materials. Development of youth-oriented versions of existing materials (OTC booklet specific to youth) was suggested, as was the development of multimedia materials that could have more resonance with Canadian youth. There were also several references to a lack of cooperation from the local public school system (i.e., in terms of the lack of formal school involvement and support). In this respect, youth partners indicated the need for mechanisms to assist program coordinators in communicating with the public school system. Youth partners have also generally indicated that the education of youth was one of the primary goals for many youth organisations involved in the OTC.⁴⁶ Finally, several respondents felt the OTC program's national youth programming budget was insufficient to support a national program.

Respondents within the education partnerships have also corroborated the need for further integration with the youth component. In particular, many educators mentioned the need for

⁴⁶ Other goals mentioned included the creation of leaders on the issue within the youth community.

materials to be tailored to the multi-faceted audiences with which educators are faced, from kindergarteners to teenagers. In another respect, reference was also made to a lack of communication between the federal government and the provincial education departments. This was perceived by the educators participating in the key informant interviews as a source of conflict and a stumbling block to program success. In this regard, interest in exploring better communication and cooperation between the federal government representatives and provincial education ministries was also expressed, for example, to better link the OTC education materials (e.g., teacher kits and education resources) to the provinces' curricula.⁴⁷

The evaluation has also found that the work under the community component, which provided funding for community-based projects resembled projects undertaken under an EC initiative called EcoAction Community Funding. The resemblance concerns more specifically the latter's special emphasis on local climate-change-based projects. As indicated previously, EcoAction picked up where the CCAF-PEO left off in the area of soliciting proposals and providing leveraged funding for innovative and community-based projects. Originally designed to support community groups with projects related to clean air, clean water and nature, the program was restructured in 2003 to place special emphasis on climate change and align itself with the OTC. Half of EcoAction's annual budget was reserved for OTC-theme projects, the other half was allocated to the original three aforementioned program themes (i.e., clean air, clean water and nature).⁴⁸

Accordingly, and as confirmed by OTC program officials, EcoAction projects benefited from the national marketing efforts of the OTC program, and for its part, helped to further the reach of the OTC advertising by integrating OTC messages and products in its activities. However, the evaluation has not found any clear justification of why similar streams of projects were operating under different programs, in particular, given the natural links between the climate change and the other three environmental goals.⁴⁹ Indeed, as evidenced by the OTC documentation, the OTC was also leading Canadians to take on much broader goals than the one of just reducing GHG emissions.

Other Tools

The OTC, as a public education and outreach program, offered information to Canadians about how and why they should act as well as directed them, through partnerships and advertising, to locally available mitigation programs and energy-efficient products.

⁴⁷ Note however that the linking of the OTC educational material with the provincial and territorial curricula was one of the OTC program's funding requirements which was based on a 'request for proposals' process. Moreover, educational proponents seeking funding were asked to provide Program officials with a letter of support from their provincial ministries of education.

⁴⁸ The EcoAction Community Funding Program was allocated a budget of \$17.5 million for 5 years (A-base). In total, 91 projects were funded through EcoAction in the fiscal years of 2003/04 and 2004-05. This information is contained in the horizontal climate change RMAF, mentioned previously.

⁴⁹ It is important to note here that such links are most evident in the area of transportation. For example, in measuring Canadians' awareness and attitudes towards climate change, the 2005 Survey indicated that consumers are more apt to identify the need to reduce their use of energy on the road (principally by driving less and switching to alternative forms of transportation). The survey report explained that this connection can be tied to the fact that most Canadians seem to have made the link between vehicle use (and their own vehicle use) and air pollution, and by extension GHG emissions. By comparison, however, the survey report also indicated that the public is less cognizant of how other forms of energy consumption (e.g., in the home) might contribute to climate change, and that this connection appears to have lost ground since 2004.

There is consensus among OTC partners who participated in the key informant interviews on the need and importance of the objective of leading Canadians to take actions. However, one main concern of the OTC partners was the challenges in moving Canadians' from awareness to action. There is overall recognition that the OTC should have be complemented by additional measures (e.g., economic instruments, regulations) in order to motivate timely action and in order for the Program to be successful. Respondents have indicated that actions needed are long term, and behaviour change is acknowledged to be a difficult goal. The support and appeal for government incentives is strong.

Although the Program was acknowledged to be creating awareness, many respondents indicated that it could have been improved in order to have a greater impact. In particular, several OTC partners sensed that with the public education means alone, the OTC was only capturing those who are already converted. Several OTC partners referred to the insufficiency of the 'OTC brand' to lead to action and identified a number of reasons why more tools were needed. The latter concerned, for example, the need for a rebate program to offset the initial costs of purchasing energy efficient products/infrastructure, the need to minimise disruption of day-to-day life, and the need to address a larger segment of the Canadian population.

Finally, focus group research conducted to assess the overall appeal of the OTC Web site (i.e., its ease of use, likes/dislikes, and areas for future improvement) suggested that the "Incentives and Rebates" section of the Web site should be given more prominence as "many (Canadians) are only likely to make changes to their habits and lifestyles if it will be reflected on their utility bills or in their pocketbook....Also as money is a big motivator, the potential to save money should be stressed in relevant areas (of the Web site)."⁵⁰

Integration

The evaluation found that there was evidence of integration and cohesiveness of public education messaging between the OTC program and other federal programs such as those undertaken by the OEE and the activities undertaken by the OTC's own partners. Indeed, this was facilitated by the latter's clear climate change focus, although some OTC partners have expressed some suggestions for further coordination. The opportunities for enhanced integration and/or cohesiveness of messaging between the OTC and other programs/initiatives, particularly those at the provincial/territorial levels were less straightforward, however. The evaluation has investigated such programs/initiatives given the national stature of the OTC program.

The links between the OTC program and the work that is conducted under the community-based projects that the OTC supported are clear. Community respondents who participated in the evaluation's key informant interviews indicated that they were often involved in administering environmental programming within their community prior to the OTC program and found the national nature of the advertising and branding program to be a definite enhancement of their previous efforts. Also mentioned in this context, was the notion of making local programming easier by the fact that community projects could build on a national program and the national awareness that accompanies it. Respondents from this OTC component, however, also generally indicated the need for more locally and/or regionally produced support materials and advertising tie-ins.

⁵⁰ This study is titled: OTC Promotional Flyer and Website Testing (Fall 2004) and was prepared by EKOS Research Associates. The research involved a total of 10 focus group discussions in Halifax, Montreal, Toronto, Calgary and Vancouver.

Consistent with the community component's assessment of the OTC messaging, it is also worth noting that several private sector partners participating in the key informant interviews indicated that there appears to be more credibility in the eyes of the consumer if there is alignment with the federal government. These partners, however, also expressed a desire for better communication of national advertising details so retailers could piggy-back on that advertising with their own messaging. Indeed, addressing such a suggestion would involve working around a number of institutional constraints, including federal advertising rules which are not as flexible as those in the private sector. Furthermore, other respondents indicated the need for industry-specific information as well as the potential for competition between the OTC brand name and those that already exist within specific industries, which could confuse the customer.

The links between the OEE programs and the OTC program are also clear. Both programs are aimed at producing the same benefits, including reduced GHG emissions, a healthier environment, financial savings and conserved energy resources. Indeed, the OEE's emphasis on "leading Canadians to Energy Efficiency at Home, at Work and on the Road" in ways that benefit both the environment and the economy is also central to the OTC. It is important to note however that OEE programs are much more broadly based than the OTC and mine deeper into market transformation.⁵¹ The OTC pointed individuals to OEE programs as a way to meet the one-tonne goal. In turn, OEE programs reminded their clients (who are the same as those of the OTC, namely Canadian citizens) that their own programs could help them meet the OTC. A number of lines of evidence, including links to each others' websites, key informant interviews with OTC program officials, and publication material, indicate that much effort was undertaken to coordinate and mutually reinforce the two programs.

Moreover, like the OTC, the OEE also provides information and activities to Canadian citizens mainly through its Outreach Program. The OEE's Outreach Program provides information and activities to encourage Canadians to integrate energy efficiency into their energy-use decisions. It includes the OEE Web site, various publications and information resources, exhibits and advertising (through television, radio and print).⁵² The OEE's work in youth and education seeks to create greater awareness of climate change and the need for energy efficiency among young Canadians.⁵³ In this respect, the links between the OTC and the OEE programs were multiple. Furthermore, the responses from the key informant interviews with OTC program officials indicated that there was a sustained effort to explore further synergies between the two programs.

The same, however, could not be said about related provincial/territorial programs/initiatives, which, given the national stature of a program like the OTC, is to be expected. For example,

⁵¹ For example, according to the State of Energy Efficiency in Canada – Report 2005 (p.14), the OEE uses, among other policy instruments, direct financial incentives to encourage investment in energy-efficient buildings and building retrofits in order to stimulate more rapid deployment of energy-efficient technologies and practices. The OEE also uses regulations that set minimum performance standards to eliminate less energy-efficient products from the market.

⁵² Note that the OEE Web site has two key audiences – the Canadian public and business/industry. It provides details on OEE programs, offers practical energy conservation advice to consumers, businesses, governments and institutions, and has links to hundreds of related sites including the OTC.

⁵³ For example, the kindergarten to Grade 12 stream builds around the annual *Energy and the Environment* calendar, which is produced in cooperation with the OEE's stakeholders and education community (oee.nrcan.gc.ca/calendarclub). At the post-secondary level, the OEE's Outreach Program builds links using such tools as its Energy Ambassadors competition (oee.nrcan.gc.ca/corporate/awards/ambassadors/index.cfm).

the evaluation's review of programs/initiatives in Ontario discovered an initiative called the Conservation Challenge, which challenges individuals in all sectors of the province, to reduce their energy consumption by 10% by 2007.⁵⁴ In particular, all Ontario residents are invited to play a part in ensuring that the province's electricity supply is managed effectively and that it manages the development of new power sources to meet demand. The Conservation Challenge Web site refers to the recent heat waves, which "have shown that there is an urgent and ongoing need to conserve electricity because the demand is increasing faster than supply".⁵⁵ While energy conservation was also key in the OTC, the evaluation found that the Conservation Challenge did not refer to the OTC.⁵⁶ The evaluation did however find that a companion campaign centered on the distribution, free of charge, of electricity-saving compact fluorescent light bulbs (CFLs) door-to-door, Project Porchlight, did refer to the OTC.⁵⁷ There does not appear, however, to be any reference to the OTC in the media campaign that supports the Project. This media campaign encourages people to save electricity starting with replacing one regular incandescent bulb with a CFL.⁵⁸

Indeed, considerable differences were found in the key motivators for the OTC and the Conservation Challenge. In particular, the Ontario program is driven by sustainable energy supply considerations, while the OTC was driven by climate change through reductions in GHG emissions. The provincial government's emphasis on a more sustainable energy supply is the key driver behind the provinces' efforts in the area of conservation and energy efficiency. In particular, while "saving money, protecting the environment and supporting a healthy Ontario electricity system" are presented as important benefits of these efforts, the link to the issue of climate change is not mentioned.⁵⁹ For example, Ontario's Ministry of Energy, incorporates a Web site which offers similar guidance to the OEE and OTC sites in terms of actions that individuals can take to conserve energy. In particular, the Ontario Ministry of Energy's Web site targeting Ontario consumers includes, among other materials and activities, a number of guides (e.g., Energy Savings Tips Guide, Heating and Cooling your Home Conservation Guide, Energy-Savings Guide) as well as a calculator for electricity cost calculations. The evaluation's examination of these informational guides and tools did not mention the OTC in particular and the issue of climate change in general.⁶⁰ Again the key motivation factors here are about "conserving energy and saving money".

Another provincial example that is provided as evidence of the lack of integration of the OTC with related programs/initiatives is the one provided by the Quebec government's effort, through the provincial major electricity utility supplier Hydro Quebec, in the area of energy efficiency. Following the examination of documentation supporting this particular effort, the evaluation has found no link to the OTC. More particularly, Hydro Quebec's Web site for its residential customers also contains a number of information materials, tools and activities to

⁵⁴ The Conservation Challenge is managed by the Conservation Bureau, which is a division of the Ontario Power Authority (OPA). The latter is responsible for ensuring an adequate, long term supply of electricity in Ontario, which is associated with the province's continued growth and prosperity.

⁵⁵ Further information on the Conservation Challenge can be obtained by visiting its Web site:

<http://www.conservationbureau.on.ca/>.

⁵⁶ Note that the OTC Program was however engaging other large OTC utilities in Ontario. The Program was also working with a national electrical association to involve all utilities.

⁵⁷ Project Porchlight has distributed 10,000 CFLs door-to-door, and 40,000 CFLs through a major retailer. Details on the initiative can be found at: <http://www.onechange.org/>.

⁵⁸ The media campaign involved both television and newspaper coverage. See, in particular, <http://www.onechange.org/pdf/post-ed.pdf> and <http://www.onechange.org/pdf/citizenmayeda.htm>

⁵⁹ See <http://www.energy.gov.on.ca/index.cfm?fuseaction=conservation.legislation>

⁶⁰ Further information can be found at: <http://www.energy.gov.on.ca/index.cfm?fuseaction=english.conservation>

help its customers save energy.⁶¹ These include most notably, an interactive questionnaire (Energy Wise Home Diagnostic) which provides personalised recommendations and advice on how to save energy, information on the advantages (i.e., savings on electricity bill) of energy efficient products such as CFLs and Energy Star appliances, information on Hydro Quebec subsidies/grants to improve the energy efficiency of its customers' existing and new homes.⁶² Furthermore, the evaluation review of the public utility's information newsletter HydroContact, sent regularly to residential customers (and also accessible on-line) indicates that current and previous issues did not refer to the OTC.⁶³ This newsletter provides information, including tips and advice on how to keep the electricity bill "under control", how to make the home more energy efficient, and consumer promotions for the installation of electronic thermostats and for the purchase of Energy Star appliances.

As is the case with the Ontario example, while the link to the environment is generally made, the key emphasis once again is on conserving energy as well as the electricity bill.⁶⁴ In fact, Hydro Quebec's main marketing brand called Energy Wise directs Hydro Quebec customers to the latter goals. The Energy Wise logo can be found on all of Hydro Quebec's promotional and informational materials. Energy Wise in particular features Mr. Socket which "sets Hydro Quebec customers with a challenge to be energy wise" (i.e., conserve energy and keep the electricity bill under control). Hydro Quebec is also currently conducting a province-wide media campaign (mainly TV ads) to encourage citizens to reduce energy. It is important to note here that, with the exception of a few targeted advertisements conducted by OTC which encouraged Canadians to take action directly through the uptake of a particular OEE program, the general call to action under the national multi-media campaign (that ran from December 6, 2004 to March 31, 2005) was to obtain a copy of the *Guide to the One-Tonne Challenge* through a 1-800 phone number or the Government of Canada climate change Website (which led to the OTC Web site).

Finally, while the evaluation has reviewed programs/initiatives in only two provinces, the examples of other (past and current) programs/initiatives focussing on the Canadian citizens at both the federal and provincial levels (found in **Annex 8**) are an indication of the interest of different jurisdictions in designing climate change/energy related programs that are targeting individual Canadians.

4.4 Cost-effectiveness

As discussed under the evaluation issues of success and design and delivery, the public education and outreach means that the OTC program was using to increase Canadians' awareness, understanding and support for the Challenge is shown to be appropriate and efficient. However, other complementary measures would enhance the degree to which Canadians citizens take timely action to reduce their GHG emissions.

⁶¹ Hydro Quebec's residential customers Web site can be found at: <http://www.hydroquebec.com/residential/index.html>

⁶² Note that Hydro Quebec indicated in its Web site that its grant for improving the energy efficiency of existing homes was "twice the amount of the federal EnerGuide (for Houses Retrofit Incentive) program".

⁶³ All issues of the information newsletter are provided at: <http://www.hydroquebec.com/residential/archives.html>

⁶⁴ The connection to such goals can be found throughout Hydro Quebec's 2005 Annual Report which can be downloaded at: http://www.hydroquebec.com/publications/en/annual_report/2005/index.html

The program would have benefited from other complementary measures that would help Canadians to take action on climate change. Indeed, over the past years the Canadian mindset around climate change has progressed along a continuum from awareness, to understanding, to believing there is something they can do about it. However, moving from awareness to motivating action and changing behaviour is a long-term process as experience in anti-smoking and related campaigns demonstrate.⁶⁵

Indeed, in light of the survey results regarding difficulties in engaging Canadians on a personal level (i.e., given the characteristics of the climate change phenomenon, which contribute to the public's uncertainty and complacency and discussed under the evaluation issue of relevance) as well as the responses from the key informant interviews with the OTC partners, the time it will take to bring about the needed changes in lifestyles and consumption patterns by relying only on public education and outreach means appears to be comparatively greater in the case of the OTC than in the case of anti-smoking campaigns. The impacts of smoking, for smokers and non-smokers, are well-established and numerous (e.g., illness, disability and premature death).⁶⁶ In contrast, the impacts (e.g., environmental, health, financial) of actions that individuals can take to reduce GHG emissions are more diffused in space and in time.⁶⁷

Moreover, the 2005 Survey results have indicated that the principal barriers to participation on the part of Canadians continue to be the lack of information on how to reduce GHG emissions and the perceived inconvenience and difficulties in actually reducing emissions. Collectively, these pieces of evidence (e.g., survey results, key informant interviewee responses, acknowledged challenges in changing behaviours) indicate that there are opportunities to further influence Canadians through additional means that may affect behaviour more directly. Without this, the OTC would likely capture those already on board, hence greatly limiting its reach. Indeed, several OTC program officials and OTC partner interviewees have reflected to the need to increase the reach of the program.

The recent National Strategy to Reduce Tobacco Use in Canada also recognises the need to use multiple means to effectively address tobacco use. In particular, the use of public education, policy and legislation (as a form of intervention) is included as one of the Strategy's key directions. The priorities for action include the recognition of the role that price mechanism plays in influencing behaviour and the need to further enforce legislation by adopting a comprehensive approach. Indeed, a number of different tobacco control laws have been introduced at different times and within different jurisdictions across Canada.⁶⁸

⁶⁵ This time analogy (i.e., changing behaviours) with anti-smoking campaigns is taken from the public education and outreach documentation that was provided in the horizontal climate change RMAF.

⁶⁶ See the *National Strategy to Reduce Tobacco Use in Canada* which is covered in more detail in footnote 66.

⁶⁷ It should be noted that despite three decades of experience with tobacco control, both in Canada and internationally, it has taken a long time to change smoking behaviours. The *Physicians for a Smoke-Free Canada* (PSC) has estimated that Health Canada has spent about \$400 million for tobacco control from 1994-95 to 2004-2005. Tobacco control expenditures were generally spent on a number of areas of activities including public education and mass media which has represented a large portion of overall funding. The PSC is a national health organisation of Canadian physicians which was founded in 1985. The goal of the PSC is the reduction of tobacco-caused illness through reduced smoking and reduced exposure to second-hand smoking. The PSC's funding estimates and other information can be found through the organisation's website: www.smoke-free.ca.

⁶⁸ A full list of tobacco legislation introduced across Canadian jurisdictions may be found at the Canadian Council for Tobacco Control website www.cctc.ca. The *National Strategy to Reduce Tobacco Use in Canada*, established in 1999, provides a framework for action and builds on recent evidence of effective interventions. The five strategic directions outlined are: policy and legislation; public education; industry accountability and product control; research; and, building and supporting capacity for action. The paper describing the *Strategy as well as the*

In 2000, the OECD recommended that Canada “move forward with the wider use of economic instruments to prevent pollution and conserve natural resources, in association with regulatory instruments and other instruments, such as voluntary agreements, to support more cost-effective implementation of policies”. Indeed, while this recommendation comes from the OECD’s examination of Canada’s past use of economic instruments to achieve its environmental goals, the recommendation also comes from a wide array of research pieces that the OECD has been conducting across its member countries.⁶⁹

In particular, in one of its research papers that address unsustainable patterns of consumption, the OECD examined the use of measures to influence consumer demand.⁷⁰ The report provides an overview of the broad array of policies and policy instruments which OECD Member countries are already using or are considering using to influence consumer demand for certain goods and services. These include a wide range of regulatory, economic and social policy instruments, as well as other actions by government, such as capital investment and the use of the land-use planning system. Such actions often form part of Member countries’ strategies to tackle major environmental problems, such as climate change. This report reviews currently available information on the success of Member country initiatives in influencing consumption patterns. The report identifies steps for the OECD and for its Member countries both to improve knowledge of policy initiatives and to take more effective action to influence consumption patterns.

The unique challenges in moving Canadians from awareness to GHG emission reducing actions, the perceived inconvenience and difficulties in doing the latter (e.g., need for incentives to offset potential costs of actions and/or increase benefits of actions), the lessons learned from analogous behavioural-changing initiatives (i.e., National Strategy to Reduce Tobacco Use), and the ongoing recommendations by the OECD on the wider use of economic instruments, in association with regulatory instruments and other instruments (i.e., voluntary agreements, public education), are the reasons provided to enhance the cost-effectiveness of achieving the outcome of encouraging Canadians to take personal actions to reduce their GHG emissions.

5.0 CONCLUSION

The evaluation found that a public education and outreach program like the OTC is relevant as it addresses Canadians’ need to receive better information on climate change to allow them to make informed decisions about their use of energy and resources in their daily activities as well as the products they consider purchasing. Indeed, the evaluation found that the key

Strategy’s Progress Reports (from 1999 to 2005) can be downloaded at the following Health Canada website: www.hc-sc.gc.ca/hl-vs/pubs/tobac-tabac/index

⁶⁹ See, for example, *Environmental Performance Review of Canada*, OECD (2004), *Environmentally Related Taxes: Issues and Strategies*, OECD (2001), and *Individual Household Behaviour and Environmental Policy*, OECD (2005). A vast number of other leading organisations in Canada have also echoed the OECD’s call for increased use of market-based instruments. These include most notably, the Canadian Council of Chief Executives, the Fraser Institute, the Green Budget Coalition, the Suzuki Foundation, and the National Round Table on the Environment and the Economy (NRTEE). For a more detailed discussion on economic instruments, see the NRTEE’s State of the Debate Report titled: *Economic Instruments for Long-term Reductions in Energy-based Carbon Emissions* (2005).

⁷⁰ See *Towards Sustainable Consumption Patterns – A Progress Report on Member Country Initiatives*, OECD, March 1998.

characteristics of the climate change phenomenon (i.e., lack of tangible evidence of environmental or health impacts to date, uncertainty about long term ramifications, and the absence of a toxic or chemical dimension) contributes to the unique challenges in terms of establishing it as a priority for action at the individual level. Moreover, the fact that Canadian citizens are responsible for about 30 percent of Canada's GHG emissions makes them a key component of Canada's fight against climate change. Finally, public education has a role to play in stimulating consumer demand for new and more energy efficient products, and hence is directly contributing to the market transformation that is called upon to effectively achieve Canada's short-term and longer-term climate change goals. In this light, a public education program like the OTC can help Canadians identify the role that they may play in climate change, in particular, by making Canadians more aware of their lifestyle and consumption patterns that are contributing to climate change and the benefits accruing to the actions.

The OTC was on track to achieving its public education outcomes. First, the level of awareness of the OTC increased significantly over the previous year (from 6% established in the 2004 Survey to 60% in the 2005 Survey – unaided and aided responses). Second, the OTC was also generally understood by Canadian citizens, although there has not been much variation in understanding since 2004. Specifically, 78% of surveyed respondents in the 2005 Survey who recalled hearing about the OTC (unaided responses) understood the initiative. These respondents indicated that the OTC is “well recognized in general terms as a program designed to reduce emissions and/or energy use”. Thirdly, Canadians generally supported the Challenge and are expressing willingness to take personal action to reduce GHG emissions.

The evaluation also found that the overall interest in taking the Challenge continues to be higher for those who are most concerned about climate change, and those who have already made the most effort towards reducing their energy use at home or on the road. A majority of Canadians, however, continue to believe that it will be difficult to personally meet the target of a 20 percent reduction in the coming year. The perceived difficulty remains most evident among Canadians with higher household incomes, homeowners and those owning vehicles. This evidence along with the responses from the key informant interviews conducted for this evaluation is an indication that the Program appears to have been less successful in having an impact on those Canadians that are emitting relatively more GHG emissions. In particular, the evaluation found that current participants in the OTC that were overall positive in their experience so far, represent Canadians who, for example, do not own their vehicles and with low incomes (i.e., below \$25,000), indicating that the program appeared to be reaching those that can be brought on board more easily.

The lack of information about how to reduce their personal contributions to GHG emissions was perceived to be a significant barrier to participation in the Challenge. The perception that the Challenge was too inconvenient or time-consuming, that individual participation will not make a difference to climate change, that there is little room for improvements (i.e., in terms of energy efficiency), and the low interest/concern have also been identified as barriers to action.

In order to achieve the ultimate outcome of emission reductions, it appears, however, that the OTC was faced with a number of challenges to deliver clear and attributable GHG emission reductions. The investigation of relevant official documents (Project Green, TB Review, OTC program activities) indicates that the OTC was portrayed, communicated and implemented as a public education and outreach program rather than a mitigation one. The 'OTC brand' was, in practice, treated more as an opportunity for Canadians to set a personal goal for action than an actual emission reduction target. Indeed, various measurement issues challenge a program

like the OTC in accounting for emission reductions. Reaching consensus on what is measured, how and by whom in a program that was highly dispersed and deployed through various partners, the risk of double counting, and attribution issues were presented as the key constraining factors.

Overall the OTC was well designed and delivered to achieve its public education related outcomes in terms of its two key components, namely a national marketing initiative and partnerships with key sectors of Canadian society. Moreover, OTC partners were satisfied with their involvement in the OTC indicating that it was consistent with their respective mandates and goals and enabled the delivery of their own programs/activities. Evidence indicates however that there were missed opportunities in terms of separating some partnerships and/or better defining their respective roles. This concerned, more specifically, the need to better integrate the youth and education components (i.e., to develop multi-faceted audience support materials, mechanisms to enhance communication/involvement). The interest in cooperation between the federal government representatives and provincial education ministries was also expressed (i.e., to better link the relevant education materials to the provincial/territorial curricula). The evaluation has also found that the OTC undertook community-based projects that were similar to those undertaken by EC's EcoAction Community Funding. However, the evaluation has not found any clear justification of why similar streams of projects were operating under different programs, in particular, given the natural links between climate change and the other three environmental goals that EcoAction funded projects are based upon (i.e., clean air, clean water, and nature).

The evaluation also found that there existed opportunities for more consistently integrated messaging efforts across other key related programs/initiatives, including those at the provincial/territorial levels. The evaluation found that there was evidence of integration and cohesiveness of public education messaging between the OTC program and other federal programs such as the OEE (e.g., mutually reinforcing programs) and the OTC's own partners (e.g., partners' activities can build on a national program and the national awareness that accompanies it, enhanced consumer credibility, alignment with federal government). Indeed, this integration and cohesiveness was facilitated by the partners' clear climate change focus. Some OTC partners expressed some suggestions for further coordination, including the need for more partner-specific produced support materials, better coordination between national advertising activities and those undertaken by partners, and to avoid the potential of introducing competing brands.

The opportunities for enhanced integration and cohesiveness of messaging between the OTC and other key programs/initiatives, particularly those at the provincial/territorial levels were less straightforward, however. This issue is of particular concern given the national stature of the OTC program. The evaluation's review of two provincial initiatives of relevance indicated that there were considerable challenges in integrating the overarching OTC message (i.e., reducing GHG emissions to combat climate change) with the initiatives established at the provincial/territorial levels (i.e., while emphasizing environmental benefits in general, the focus is on conserving energy and saving money). Moreover, evidence also indicates that (past and current) programs/initiatives focussing on Canadian citizens at both the federal and provincial levels are an indication of the interest of different jurisdictions in designing climate change related programs that are targeting the individual Canadian.

Finally, while the evidence collected in this evaluation indicates that the public education and outreach means that the OTC program is using to increase Canadians' awareness,

understanding and support for the Challenge is appropriate and efficient, the evidence also indicates that other complementary measures would enhance the degree to which Canadians citizens take action to reduce their GHG emissions. There is consensus among OTC partners who participated in the key informant interviews for this evaluation on the need and importance of the objective of leading Canadians to take actions. However, one main concern of the OTC partners was the challenges to the program in moving from awareness to action and that the public education means alone are not sufficient to capture those who are not already on board. There is overall recognition that the OTC should be complemented by additional measures (e.g., economic instruments, regulations) in order to motivate timely action and in order for the program to be successful. Respondents have indicated that actions needed are long term, and behaviour change is acknowledged to be a difficult goal. The support for government-supported incentives is strong.

The unique challenges in moving Canadians from awareness to GHG emission reducing actions, the perceived inconvenience and difficulties in doing the latter (e.g., need for incentives to offset potential costs of actions and/or increase benefits of actions), the lessons learned from analogous behavioural-changing initiatives (i.e., National Strategy to Reduce Tobacco Use), and the ongoing recommendations by the OECD on the wider use of economic instruments, in association with regulatory instruments and other instruments (i.e., voluntary agreements, public education), are the reasons provided to enhance the cost-effectiveness of the program, particularly in light of its aim to help Canadians take personal actions to reduce their GHG emissions.

As a public education and outreach program, the OTC offered information to Canadians about how and why they should act as well as directed them, through partnerships and advertising, to available mitigation programs and energy-efficient products. As such, a program like the OTC has the capacity to increase the uptake of a number of programs/initiatives and there is considerable potential to make Canadians aware of them.

6.0 LESSONS LEARNED

As mentioned in the introduction of this report, the Minister of NRCan confirmed, in a public news release entitled “First Steps Taken Towards Made-in-Canada Approach” (April 13, 2006), the Government of Canada decision to take a different approach with the OTC program. In light of this, no recommendations are made with respect to the Program other than to note lessons learned drawn from the evidence from the evaluation that would apply to the design of any relevant program.

Lessons Learned - To achieve GHG emission reductions, national public education and outreach (PEO) programs like the OTC need to be complemented by additional tools (e.g., economic instruments, regulations) to assist Canadians in reducing the GHG emissions that they produce. Moreover, given the existence of other related programs/initiatives, including those at the provincial/territorial levels, consistent and integrated messaging will be necessary. To this end, national public education messaging in the area of climate change should better account for other key motivators (e.g., energy conservation, financial, environment in general) that are driving many related undertakings.

The evidence collected in this evaluation indicates that there are opportunities to further influence Canadians in reducing the GHG emissions that they produce through additional means. Indeed, the unique challenges in moving Canadians from awareness to GHG emission reducing actions, the perceived inconvenience and difficulties in doing the latter (e.g., potential costs of incurring actions), the lessons learned from analogous behavioural-changing initiatives (i.e., National Strategy to Reduce Tobacco Use), and the ongoing recommendations by the OECD on the wider use of economic instruments, in association with other instruments (i.e., voluntary agreements, public education, regulations), are the reasons provided to justify the complementary nature of additional measures to address the environmental problem at hand.

Indeed, a number of tools may be of interest (e.g., tax breaks, rebates, low interest loans). However, in investigating their potential effectiveness, closer scrutiny should be given to how they may encourage Canadian citizens to reduce their GHG emissions (e.g., creating financial benefits). In this regard, the issue of how additional tools may help increase the reach to the PEO program's intended audience (i.e., those Canadians that are not already on board in the area of individual GHG emission reductions) merits closer investigation. Furthermore, the issue of how the tools may stimulate, for example, the demand for new GHG-emission reducing products and hence contribute to the transformation of the Canadian economy also merits closer investigation. Finally, the appropriate selection of tools should recognise the fact that provinces and territories have also been developing some of their own tools. Closer scrutiny should hence be given to these other options to ensure synergies across federal-provincial-territorial jurisdictions.

The evaluation has found that the integration and cohesiveness of public education messaging between the OTC program and other federal programs such as the OEE and the OTC's own partners was indeed facilitated by the clear climate change focus. The opportunities for enhanced integration and/or cohesiveness of messaging between the OTC and other key programs/initiatives, particularly those at the provincial/territorial levels were challenged by a number of elements and should hence be addressed. In particular, as per the evaluation's review of two provincial initiatives, the integration of national messaging should recognize the interest in emphasizing a number of different goals (e.g., environmental benefits in general, conserving energy, saving money), which are related to how different jurisdictions have been treating the issue of climate change as well as other energy-related issues. The fact that individual Canadians are also being targeted by a number of initiatives is another reason to enhance coordination.

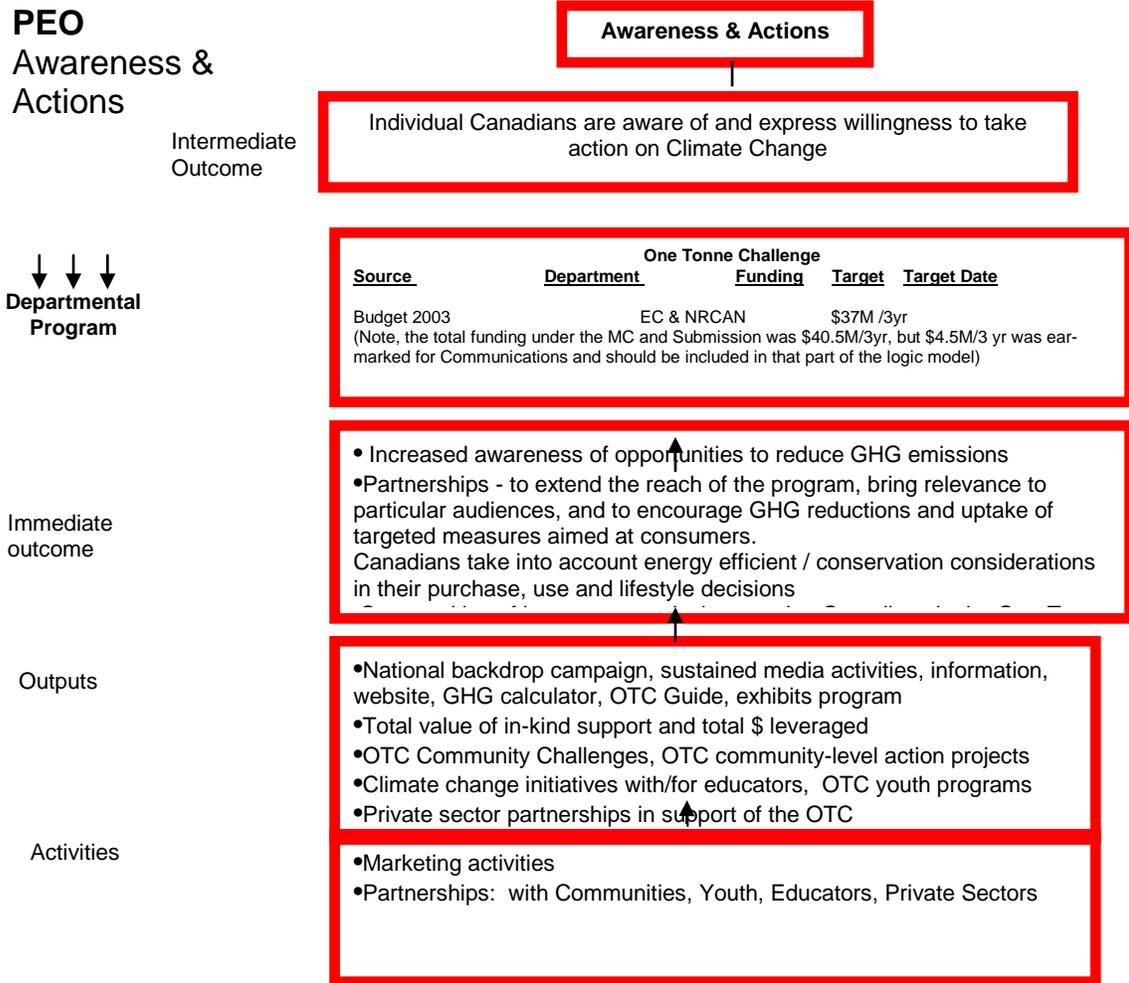
A public education and outreach program like the OTC should actively lead Canadians towards the uptake of initiatives/tools that are more directly aimed at changing behaviour. Accordingly, while performance measurement strategies should continue to focus on tracking progress regarding public education outcomes, effort should also be given to how such a program may increase the uptake of initiatives/tools that more directly lead Canadians to reduce their GHG emissions. The latter is particularly important given the evaluation's finding that many measurement issues challenge a program like the OTC in accounting for emission reductions.

7.0 MANAGEMENT RESPONSE

Learnings of this evaluation will be taken into account in the development of any future and relevant programs.

ANNEXES

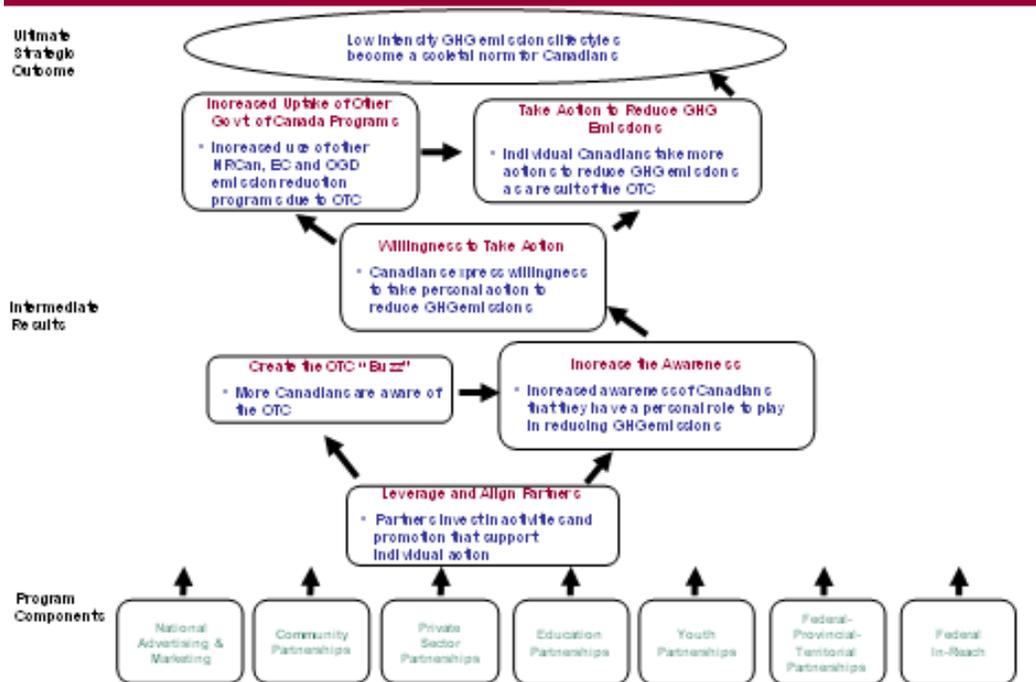
Annex 1a - OTC Logic Model - Public and Education Outreach⁷¹



⁷¹ This logic model was provided by the OTC program officials. It was included in the horizontal Results-Based Management and Accountability Framework (RMAF) which was developed for a number of climate change initiatives that also received funding. This RMAF was never approved by the Treasury Board Secretariat.

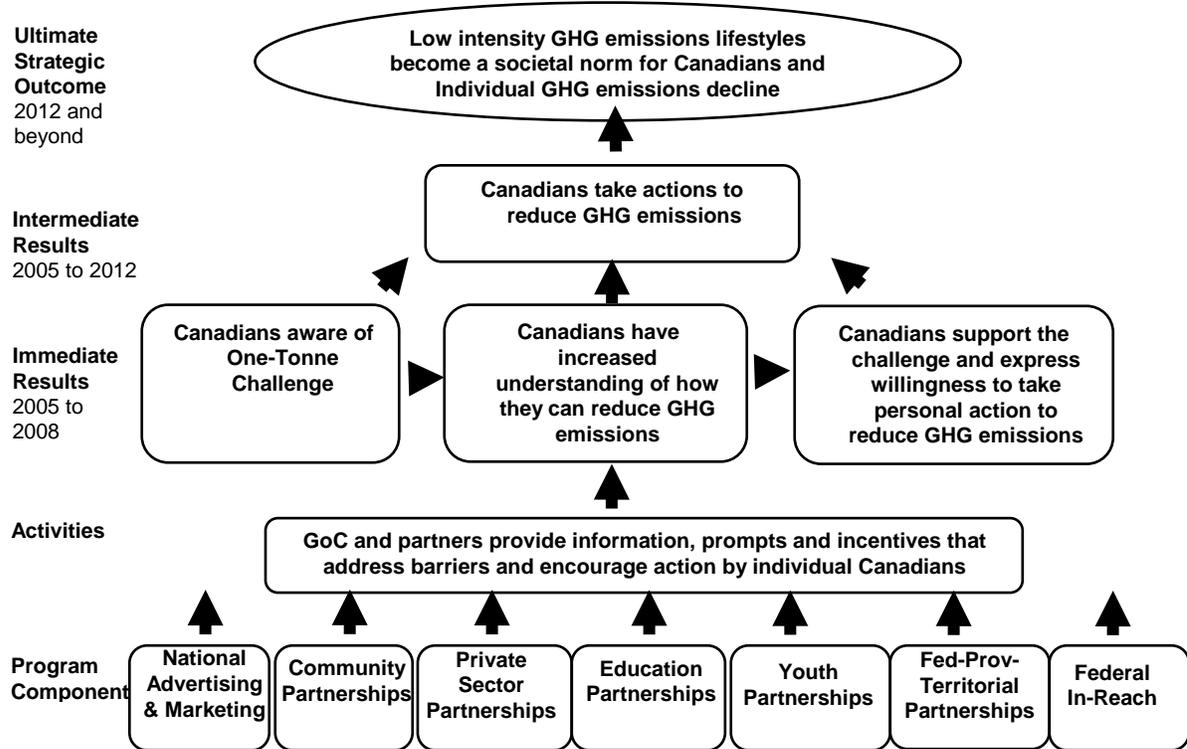
Annex 1b - OTC Logic Model - Performance Measurement Framework of the OTC⁷²

Results model for the One-Tonne Challenge



⁷² This logic model was taken from the Performance Measurement Framework for the One-Tonne Challenge, February 28, 2005. It was developed by both EC and NRCan.

Annex 1c - OTC Logic Model - OTC Business Plan and Management Framework⁷³



⁷³ This logic model was taken from The One-Tonne Challenge Business Plan and Management Framework, updated on April, 2005. It was developed and provided by EC.

Annex 2 - Evaluation Issues and Questions⁷⁴

Evaluation Issue: Relevance

Evaluation Question	Indicator(s)	Data Source(s)
Evaluation Issue: Relevance		
Does the OTC continue to be aligned with GoC and departmental plans and priorities?		
1. Is the program aligned with: <ul style="list-style-type: none"> o CESF? o Current GoC Climate Change priorities? o NRCan's current departmental plans and priorities? 	<ul style="list-style-type: none"> ▪ OTC objectives support the <ul style="list-style-type: none"> o CESF pillars o Climate Change Plans o NRCan's Report on Plans and Priorities 2005-06 	<ul style="list-style-type: none"> ▪ Review and comparison of OTC objectives (OPP, Business Plan); CESF (pillars/decks); Climate Change Plans (3); NRCan official planning documents, previous budgets (03-05) ▪ <u>Interviews with Climate Change Board Members</u> ▪ <u>Interviews with representatives from TBS, CESD, and OGD</u> ▪ Interviews with OTC directors and program managers, DG of Climate Change Bureau and <u>DG of Office of Energy Efficiency</u>

Evaluation Issue: Success

Evaluation Question	Indicator(s)	Data Source(s)
Evaluation Issue: Success		
Is the OTC on track to meeting its intended outcomes?		
2. Is performance data being collected against OTC activities/outcomes	<ul style="list-style-type: none"> ▪ Presence/implementation of performance monitoring strategy ▪ Data collected 	<ul style="list-style-type: none"> ▪ Review of performance measurement strategy, data system ▪ Interviews with OTC directors and program managers, DG of Climate Change Bureau and <u>DG of Office of Energy Efficiency</u>
3. Is the analysis of the performance data used to inform management decisions?	<ul style="list-style-type: none"> ▪ Management decisions that are based on performance information 	<ul style="list-style-type: none"> ▪ Meeting minutes/decisions
4. Is there evidence of the achievement of immediate outcomes? <ul style="list-style-type: none"> o Evidence on OTC awareness o Increased understanding on GHG reductions 	<ul style="list-style-type: none"> ▪ % of Canadians aware of OTC ▪ % of Canadians who can identify ways that they can reduce emissions as a result of OTC ▪ % of Canadians who 	<ul style="list-style-type: none"> ▪ Baseline, current, future survey research ▪ Website Statistics ▪ Media scan ▪ Interviews with OTC program managers and directors; DG of Climate

⁷⁴ The evaluation issues and questions were taken from Table 1 in the One-Tonne Challenge Evaluation Plan, November 2005. Required modifications to this table that were included over the course of the evaluation (e.g., to better reflect appropriate information sources, availabilities, program realities) are identified as follows:

- *Italic font style* indicates that the evaluation question and/or indicator and/or data source was added.
- Underline font style indicates that the evaluation question and/or indicator and/or data source was not be posed and/or used.

o Support for OTC	express support of/willingness to take action in the OTC	Change Bureau and <u>DG of Office of Energy Efficiency</u>
Evaluation Question	Indicator(s)	Data Source(s)
5. To better assess the environmental measurement challenges associated with an education and outreach program such as the OTC, the present evaluation asks whether there is evidence that the OTC program is on track to achieve its relevant outcomes? o Canadians take action to reduce GHG emissions	<ul style="list-style-type: none"> ▪ % of Canadians who take action (online/through partners/other) in the OTC (compare against those that expressed support) ▪ % change in GHG levels potentially attributable to the OTC ▪ Expert opinions on key measurement challenges in reducing GHG emissions (e.g. attribution, temporal dimensions associated with GHG reductions, household behavior and habits, access to other tools such as market-based instruments) 	<ul style="list-style-type: none"> ▪ Mapping of OTC programs/ partners ▪ Workplans by program component ▪ Baseline, current, future survey research ▪ Website statistics ▪ Interviews with OTC program managers and directors and DGs ▪ Review of existing databases (EC/NRCAN) ▪ Documented evidence on GHG reductions ▪ <u>Literature review</u>
6. Were there any unintended outcomes? o If so, what were the implications?	<ul style="list-style-type: none"> ▪ Presence of unintended outcomes ▪ Management actions and leanings 	<ul style="list-style-type: none"> ▪ Interview OTC program managers and directors ▪ <u>Risk assessment workshop data</u> ▪ Key informant interviews with stakeholders/partners ▪ Review of meeting minutes and correspondence

Evaluation Issue: Cost-Effectiveness

Evaluation Question	Indicator(s)	Data Source(s)
Evaluation Issue: Cost Effectiveness		
Are the most appropriate and efficient means being used to achieve outcomes?		
7. Are the program components maximizing their budgets in light of their respective targets/objectives?	<ul style="list-style-type: none"> ▪ Budget allocations per program component ▪ Targets/objectives achieved 	<ul style="list-style-type: none"> ▪ Budget ▪ Performance reports ▪ Workplans by program component ▪ Interview OTC program managers and directors

Evaluation Issue: Design & Delivery

Evaluation Question	Indicator(s)	Data Source(s)
Evaluation Issue: Design & Delivery		
Is the OTC being designed and delivered in the best possible way?		
8. How does the OTC compare to similar programs in other countries?	<ul style="list-style-type: none"> ▪ <u>Similarities/differences (e.g. means taken, selected outcomes, measurement strategies, tracking approaches) between Canada and other countries</u> 	<ul style="list-style-type: none"> ▪ <u>Multi-jurisdictional benchmarking through a media/internet scan</u> ▪ <u>Interviews with social marketing experts (1 5)</u>
9. To what extent is the program implemented as designed?	<ul style="list-style-type: none"> ▪ Actions implemented against planned program design 	<ul style="list-style-type: none"> ▪ TB submission, business plan, status/performance reports

<p>10. How were program components selected and designed?</p>	<ul style="list-style-type: none"> ▪ Presence of selection and design process/learnings 	<ul style="list-style-type: none"> ▪ Documents for selection process/learnings, correspondence ▪ Interviews with OTC program managers and directors
<p>Evaluation Question</p>	<p>Indicator(s)</p>	<p>Data Source(s)</p>
<p>11. Is the OTC effectively reaching its targeted partners/stakeholders?</p>	<ul style="list-style-type: none"> ▪ Reach per program component (partners/stakeholder coverage) 	<ul style="list-style-type: none"> ▪ Program component workplans (approach/targets) ▪ Interviews with OTC program managers and directors ▪ Interviews with OTC partners
<p>12. To what extent are partners/stakeholders satisfied with the program?</p>	<ul style="list-style-type: none"> ▪ Partner/stakeholder (communities, youth, private sector, educators, OGD) satisfaction 	<ul style="list-style-type: none"> ▪ Interviews with OTC partners ▪ Feedback-correspondence
<p>13. To what extent are Canadians satisfied with the program?</p>	<ul style="list-style-type: none"> ▪ Opinions from Canadians regarding the OTC 	<ul style="list-style-type: none"> ▪ Canadian feedback-correspondence received through the OTC website ▪ Reports from other polling exercises ▪ Feedback from partners/stakeholders ▪ Results from focus group research conducted by OTC program ▪ Media scan
<p>14. Does OTC present an integrated set of program/services to Canadians to help them take action to reduce GHG?</p>	<ul style="list-style-type: none"> ▪ Level of integration across program services (common, cohesive message; consistent approach; coordination) ▪ Expert opinion 	<ul style="list-style-type: none"> ▪ Interviews with OTC program managers and directors and DG ▪ Mapping of the OTC program (including various linkages to other programs) ▪ Interviews with OTC partners
<p>15. What are the suggested learnings and best practices from the OTC program experience?</p>	<ul style="list-style-type: none"> ▪ Identified learnings and best practices 	<ul style="list-style-type: none"> ▪ Interviews with OTC program managers and directors and DGs
<p>16. How does the OTC compare to other social marketing campaigns in Canada?</p>	<ul style="list-style-type: none"> ▪ <u>Similarities/differences (e.g. means/outcomes) between OTC and other social marketing campaigns (e.g. Participation, Anti-smoking)</u> 	<ul style="list-style-type: none"> ▪ Literature review ▪ Media scan ▪ <u>Interviews with social marketing experts</u>
<p>17. How well does the general governance/shared responsibility for OTC work?</p>	<ul style="list-style-type: none"> ▪ Opinions on OTC governance model ▪ Identified overlap/duplication ▪ Complementarity of objectives/activities 	<ul style="list-style-type: none"> ▪ Interviews with OTC program managers and directors and DGs ▪ Document and file review

Annex 3 - Documentation Reviewed

EQ#	Document Title	Date (if known)	Classification (e.g. secret)	Format (e.g. hard copy, electronic)
1	DRAFT-Outcome Project Plan: <i>Engaging Citizens in Emissions Reduction</i>	2005	Internal	Electronic Copy
1	Outcome Project Group Summary: <i>The Climate Change Plan is implemented</i>	2005	Internal	Electronic Copy
1/9	The OTC – Business Plan and Management Framework	April 2005	Public	Electronic Copy
1	Draft-Discussion Paper-A Competitiveness and Environmental Sustainability Framework-DECK	February 2005	Internal	Available on Infolane at http://infolane.ec.gc.ca/english/excellence_CESFDeck_Feb05_e.ppt
1	Individual Pillars-DECKS -Common slides -Decision making -Education & Engagement -Information -Science & Tech -Performance promotion	For July 29, 2005 (policy brief)	Internal	Electronic Copies
1	Moving Forward on Climate Change: A Plan for Honouring our Kyoto Commitment	April 13, 2005	Public	http://climatechange.gc.ca/kyoto_commitments/
1	Climate Change Impacts and Adaptation: A Canadian Perspective	2004	Public	http://adaptation.nrcan.gc.ca/perspective/to_c_e.asp
1	Climate Change Plan for Canada	November 21, 2002	Public	http://www.climatechange.gc.ca/english/publications/plan_for_canada/plan/index.html
1	Climate Change Action Fund: Final Report	April 2005	Public	Electronic Copy
1	Budget 2005	February 23, 2005	Public	http://www.fin.gc.ca/budtoce/2005/budliste.htm
1	Budget 2004 & Economic and Fiscal Update	March 23, 2004 November 16, 2004	Public	http://www.fin.gc.ca/budtoce/2004/budliste.htm http://www.fin.gc.ca/budtoce/2004/ec04_e.html
1	Budget 2003 & Economic and Fiscal Update	February 18, 2003 November 3, 2003	Public	http://www.fin.gc.ca/budtoce/2003/budliste.htm http://www.fin.gc.ca/budtoce/2003/ec03_e.html
1	NRCan's Official Documents -RPP	2005/2006	Public	http://www.tbs-sct.gc.ca/est-pre/20052006/NRCan-RNCan/NRCan-RNCanr56_e.asp

EQ#	Document Title	Date (if known)	Classification (e.g. secret)	Format (e.g. hard copy, electronic)
1/2/3 /4/11	PEO Performance Story-Draft	January 2005	Internal	Electronic Copy
2/3	OTC Performance Measurement Framework with Indicators	July/ Aug 2005	Internal	Electronic Copies
4/5	The OTC Tracking Survey-Spring 2003 (Baseline Data) Decima	April 2003	Internal	Electronic Copies
4/5	The OTC Tracking Survey-Fall 2004 (Phase I) Environics	October 2004	Internal	Electronic Copies
4/5/1 3	The OTC Tracking Survey-Fall 2005 Environics -Draft Survey Questions	In Progress, Draft	Internal	
5/14	All Over the Map: A Comparison of Provincial Climate Change Plans David Suzuki Foundation	2005	Public	Electronic Copy
7	OTC Resources 05-06		Internal	Electronic Copies
7/9	Status Reports	2004/5	Internal	Electronic Copies
7/11	Program Component Workplans		Internal	Electronic Copies
8	'Defi pour la terre' –French version of OTC		Public	http://www.defipourlaterre.org/
9	Treasury Board Submission		Secret	Hard Copy
9	OTC-MOU with Transport Canada			Electronic Copy
12	OTC Partner Research Ipsos Reid		Public	Electronic Copy
13	Evaluation of Email Submissions to Climate Change and OTC Websites Environics	May 12, 2005	Internal	Electronic Copy
15	OTC: Promotional Flyer and Website EKOS Testing-DECK	November 24, 2004	Internal	Electronic Copy
15	OTC Tips Guide Focus Group Study Phoenix	August 2004	Internal	Electronic Copy
15	OTC Promotional Flyer and Website Testing EKOS	Fall 2004	Internal	Electronic Copy
15	OTC GHG Calculator – Public Opinion Research Créatec+	July 27-Sept. 2, 2004	Internal	Electronic Copy
5/4/1 1/14	The State of Energy Efficiency in Canada – Report 2005	2005	Public	Electronic Copy
5/7/1 4/15	The OTC Branding Concepts Research - Phoenix Strategic Perspectives Inc.	November 2003	Public	Electronic Copy

EQ#	Document Title	Date (if known)	Classification (e.g. secret)	Format (e.g. hard copy, electronic)
5/7/1 4	Environmental Performance Report, OECD	2004	Public	Electronic Copy
5/7/1 4	Environmentally Related Taxes: Issues and Strategies, OECD	2001	Public	Electronic Copy
5/7/1 4	Economic Instruments for Long-term Reductions in Energy-based Carbon Emissions	2005	Public	Electronic Copy
5/7/1 4	Towards Sustainable Consumption Patterns – A Progress Report on Member Country Initiatives, OECD	March 1998	Public	Electronic Copy

Annex 4 - List of Interviewees

Interviewee	Position
<i>EC NCR Program Staff</i>	
1. Michel Gareau	Previous Community Component Lead of OTC, EC
2. Pat Dolan	Previous OTC Director, EC
3. Joan Pollock	A/ OTC Director, EC
4. Laura Di Paolo	OTC Program Manager, EC
5. Alex Manson	A/General Director Domestic CC Policy, Strategic Policy Branch, EC
<i>EC Regional Program Staff</i>	
6. Wendy Avis	Manager, Climate Change
7. Jean-Pierre Ricard	Projects Officer
8. Chris Feetham	Climate Change Outreach Specialist
9. Kim Colavecchia	Program Officer, EcoAction
<i>NRCAN Program Staff</i>	
11. Cathy McRae	Marketing/ Advertising, OEE, NRCAN
12. Debby Corbin	Business/Industry, Hubs, & Education NRCAN
13. Colleen Paton	Director NRCAN
<i>OTC External Partners/Stakeholders (50 key informant interviews conducted by Ipsos Reid)</i>	

Annex 5 - Interview Questions and Themes for Federal Government Officials

Interview Questions for EC/NRCan Program Staff

OVERVIEW QUESTIONS:

1. What is your experience with the OTC? Which areas of the OTC are you most familiar or involved with?
2. What is your understanding of the overall intent of the OTC?
3. What is your understanding of the intent of the specific program areas that you are involved in?

SPECIFIC QUESTIONS:

We have a few questions that we would like to ask with regard to the different evaluation issues covered in this evaluation.

Evaluation Issue – Relevance

4. Is the program aligned with your departmental plans and/or priorities?

Evaluation Issue - Success

5. Is there evidence of the achievement of immediate outcomes? (provide examples where appropriate)
 - Is there evidence of OTC awareness?
 - Is there increased understanding on GHG reductions?
 - Is there support for the OTC?
6. Is performance data being collected against OTC activities/outcomes? If yes, how, at what frequency, in what form is this collected?
7. Is the analysis of the performance data used to inform management decisions? If yes, how so?
8. In your view, what are the main environmental (i.e. GHG emissions reduction) measurement challenges associated with an education and outreach program such as the OTC? Do you have any suggestions on how these may be addressed?
9. Were there any unintended program outcomes? If so, how what were the implications?

Evaluation Issue - Cost-Effectiveness

10. Do you think that the OTC is being implemented in a cost-effective manner (i.e. are program components maximizing their budgets in light of their respective targets/objectives)?

Evaluation Issue - Design & Delivery

11. How were program components selected? What role did EC/NRCAN have in this process?
 12. Is the OTC effectively reaching its targeted partners/stakeholders (per program component)?
 13. Are partners satisfied with the OTC program?
 14. Does the OTC present an integrated set of program/services/tools to Canadians to help them take action to reduce GHG emissions?
 15. What are some learnings and best practices from the OTC program experience to date?
 16. How well does the general governance/shared responsibility for OTC work?
-

Interview Questions for OTC Regional Staff

OVERVIEW QUESTIONS:

1. What is your position within EC?
2. What is your experience with the OTC? Which areas of the OTC are you most familiar or involved with?
3. What is your understanding of the intent of the OTC?
4. What is your understanding of the intent of the specific program areas that you are involved in?

SPECIFIC QUESTIONS:

We have a few questions that we would like to ask with regard to the different evaluation issues covered in this evaluation.

Evaluation Issue - Success

5. Is there evidence of the achievement of immediate outcomes? (provide examples where appropriate)
 - Is there evidence of OTC awareness?
 - Is there increased understanding on GHG reductions?
 - Is there support for the OTC?
6. Is performance data being collected against OTC activities/outcomes? If yes, how, at what frequency, in what form is this collected?

7. Were there any unintended program outcomes? If so, what were the implications?

Evaluation Issue - Cost-Effectiveness

8. Do you think that the OTC is being implemented in a cost-effective manner?

Evaluation Issue - Design & Delivery

9. Can you tell me who your specific target audience is?

10. Is the OTC effectively reaching this audience?

11. Are these partners/stakeholders satisfied with the OTC program?

12. Is there a reporting process in place between yourself and the OTC program in the NCR?

13. What is your overall assessment of the coordination of this program with the work and activity of others? (e.g. integrated program/services, common message)

14. Do you have any suggestions for what could be done or done better by the One-Tonne Challenge Program to better help it achieve its goals?

Themes for Senior Management Strategic Interview⁷⁵

- Lessons learned from the OE in the area of partnership/collaborative arrangements between the federal government and P/Ts on climate change;
- The role of the OTC Program in supporting Project Green; and
- Key lessons learned/best practices in the overall management of the climate change file

⁷⁵ Note that this interview also covered themes covered under the Opportunities Envelope (OE) given the familiarity of the interviewee with both programs.

Annex 6 - Interview Questions for OTC Partners/Stakeholders

Conducted by Ipsos Reid

1. Are you a Private Sector Partner, a Youth Partner, a Provincial Partner, a Federal In-reach Partner, a Community Partner or an Education Stakeholder?
2. Could you tell me which federal government department you work with on this initiative? Is it? [READ LIST - Regional Environment Canada office- specify; Environment Canada Head Quarters; Natural Resources Canada; Other - specify]
3. Can you explain to me HOW your organization became involved in the program?
4. Can you explain WHY your organization became involved in the program?
5. And approximately when did your organization become involved in the One-Tonne Challenge Program?
6. Would you say your audience is local, provincial, or national in nature? (Local, Provincial, National)
7. Can you tell me who your specific target audience is?
8. Now thinking about the One-Tonne Challenge Program overall and your organizations involvement would you describe this as a very positive experience, a somewhat positive experience, a somewhat negative experience or a very negative experience? (Very Positive, Somewhat Positive, Somewhat Negative, Very Negative)
9. And why do you say that?
10. What would you describe as the STRENGTHS of the One-Tonne Challenge Program?

11. What would you describe as the WEAKNESSES of the One-Tonne Challenge Program?
12. Were the One-Tonne Challenge Program objectives made clear from the outset of your involvement? (Yes, No)
13. Can you tell me what the main objectives of the One-Tonne Challenge Program are?
14. Can you tell me what the specific objectives of your partnership/relationship on the One-Tonne Challenge Program are? That is, what does your organization hope to accomplish?
15. In your opinion will the One-Tonne Challenge Program lead Canadians to take actions to reduce greenhouse Gas emissions? (Yes, No)
16. What tools and information were provided to you by the One-Tonne Challenge program?
17. Would you say that the tools and information provided to you were very useful, somewhat useful, not very useful or not at all useful? (Very Useful, Somewhat Useful, Not Very Useful, Not at all Useful)
18. Do you have any suggestion for other tools or information that would be useful or suggestions to improve existing tools/information?
19. Was there an application process for you organization to become involved with the One-Tonne Challenge Program? [**Yes, No -IF YES CONTINUE IF NO SKIP TO Q 23**]
20. Would you say that you were satisfied, somewhat satisfied, not very satisfied or not at all satisfied with the application process? (Very Satisfied, Somewhat Satisfied, Not Very Satisfied, Not at all Satisfied)
21. And why is that? Can you provide an example?

22. Is there a reporting process in place between your organization and the One Tonne Challenge Program? **[YES, NO - IF YES CONTINUE IF NO SKIP TO Q 26]**

23. Are you able to comply with the reporting requirements? **[YES, NO - IF YES SKIP TO Q 26]**

24. And why can you not comply with the reporting requirements?

25. Do you collect performance data for your program? (Yes, No – If Yes Continue, if No skip to Q28)

26. Is this performance data shared with government officials? (Yes, NO)

27. What kinds of issues have you encountered during the performance measuring stage?

28. Have you received any funding from Environment Canada or Natural Resources Canada during your partnership/relationship? (Yes, No – If Yes Continue If No Skip to Q31)

29. How satisfied are you with the financial management process? Are you very satisfied, somewhat satisfied, not very satisfied or not at all satisfied? (Very Satisfied, Somewhat Satisfied, Not Very Satisfied, Not at all Satisfied)

30. And why is that? Can you provide an example?

31. How satisfied are you with the interaction and communication between the Program staff and yourself? Are you very satisfied, somewhat satisfied, not very satisfied or not at all satisfied? (Very Satisfied, Somewhat Satisfied, Not Very Satisfied, Not at all Satisfied)

32. And why is that? Can you provide an example?

33. Would you say that your involvement with the One-Tonne Challenge Program has been very effective, somewhat effective, not very effective or not at all effective at

achieving these specific objectives? (Very Effective, Somewhat Effective, Not Very Effective, Not at all Effective)

34. And why is that? Can you provide an example?

35. Do you have any suggestions for what could be done or done better by the One-Tonne Challenge Program to better help you achieve your goals?

36. Overall is there anything else that you feel the One-Tonne Challenge Program could do to get Canadians to take action to reduce greenhouse Gas emissions?

37. Do you have any final comments on the One-Tonne Challenge Program?

Annex 7 - Survey Questions for OTC Tracking Survey

Conducted by Environics

A. Climate Change

1. In your view, what is the most important environmental issue facing Canada today?

And now on a more specific topic . . .

2. Have you ever heard, read or seen anything about climate change, global warming or the greenhouse effect?
PROMPT FOR EACH TERM

01 - Yes, climate change

02 - Yes, global warming

03 - Yes, greenhouse effect

04 - No, to all three

SKIP TO Q.8

99 - DK/NA

SKIP TO Q.8

As you may know, the terms “climate change” and “global warming” are often used interchangeably. For purposes of simplicity, I will use the term “climate change” for the rest of this survey.

3. From what you know or have heard, what do you believe to be the main causes of climate change?

4. How concerned are you personally about the issue of climate change? Would you say you are

01 - Extremely concerned

02 - Definitely concerned

03 - Somewhat concerned

04 - Not very concerned, or

05 - Not at all concerned

VOLUNTEERED

99 - DK/NA

5. As far as you know, is there something that you can personally do to reduce your contribution to greenhouse gas emissions that cause climate change?

01 - Yes

02 - No SKIP TO Q.8

99 - DK/NA SKIP TO Q.8

6. And what kinds of things specifically do you feel you can do to reduce your contribution to climate change?

7. What do you feel would be the main benefits of your efforts to reduce the amount of greenhouse gases released into the atmosphere?

B. Energy Efficiency

I'd now like to switch topics . . .

8. Do you currently own or rent your home?

01 - Own
02 - Rent
99 - DK/NA

9. And what type of dwelling do you live in...?
READ LIST; RECORD ONE ONLY

01 – Detached, single-family home
02 – A condominium townhouse, rowhouse or apartment
03 – A freehold townhouse, rowhouse or semi-detached home
04 – An apartment building
VOLUNTEERED
99 - DK/NA

10. What steps, if any, have you taken in the past 12 months to reduce your consumption of energy in your home?
11. Which of the following steps have you or others in your household taken in the past 12 months?
READ LIST OF THOSE STEPS NOT MENTIONED IN Q.10.

a. Sealed leaks and drafts in your home
b. Added or replaced insulation
c. Replaced or upgraded windows in your home
d. Had an energy evaluation of your home
e. Installed energy efficient light bulbs
f. Purchased an energy efficient appliance
g. Set back your thermostat to use less heating/air conditioning
h. Turned off lights when not in use
i. Composted organic waste materials
j. Reduced your use of product packaging where possible
k. Replaced or upgraded your furnace

01 - Yes
02 - No
VOLUNTEERED
03 - Not responsible for/don't control that part of home
99 - DK/NA

RANDOMLY CHOOSE ONE ACTION NOT TAKEN OF Q11a, e or g ONLY (CODE 2). IF NONE, SKIP TO Q.13.

12. You mentioned that you have not [Q11 statement]. What is the main reason why you or others in your household have not taken this step in the past 12 months?
13. In your view, what are the main benefits of reducing energy use in your home?
14. Overall, what would you say makes it most difficult for you and others in your household to reduce the amount of energy you use at home?
15. I'd now like to ask about your transportation activities. What steps, if any, have you taken, in the past 12 months to reduce your gasoline consumption on the road?
16. And which of the following steps have you taken in the past 12 months?
READ LIST OF THOSE STEPS NOT MENTIONED IN Q.15.

- a. Reduced your amount of driving by using alternative means of transportation, such as public transit, cycling or walking
- b. Using a cleaner fuel in your vehicle, such as ethanol
- c. Purchased an energy efficient vehicle
- d. Regularly maintain proper tire pressure on your vehicle
- e. Driving no faster than the posted speed limit
- f. Avoided vehicle idling unless in traffic

01 - Yes
 02 - No
 99 - DK/NA

RANDOMLY CHOOSE ONE ACTION NOT TAKEN OF Q.16a, d or f ONLY (CODE 2). IF NONE, SKIP TO Q.18.

FOR INSERTION INTO Q17:

CHANGE STATEMENT D TO "...regularly maintained proper tire pressure on your vehicle"

CHANGE STATEMENT F TO "...avoided vehicle idling"

17. You mentioned that you have not [Q16 statement]. What is the main reason why you have not taken this step in the past 12 months?
18. In your view, what are the main benefits of reducing energy use on the road?
19. Overall, what would you say makes it most difficult for you and others in your household to reduce the amount of energy you use on the road?

C. One Tonne Challenge

Moving on to another topic . . .

20. Have you ever heard of something called "**The One Tonne Challenge**"?

01 - Yes
 02 - No SKIP TO Q.24
 99 - DK/NA SKIP TO Q.24

21. [IF YES] What do you understand "The One Tonne Challenge" to be?
 PROBE FOR SPECIFICS

99 – DK/NA

22. How did you first find out about this challenge? That is, where did you see, hear or read information about the challenge?
23. To the best of your knowledge, which group, organization or agency was the source of the information you saw, heard or read?

ASK Q.24-26 IF NOT AWARE OF OTC (Q.20 CODE 2 OR 99)

24. The "One Tonne Challenge" is a new initiative from the Government of Canada that challenges consumers to reduce their energy use and contributions to greenhouse gas emissions by one tonne, or about 20 percent. On average, each Canadian currently generates about five tonnes of greenhouse gas emissions each year.

Do you recall seeing or hearing anything about this new program?

- 01 - Yes
 02 - No SKIP TO Q.32
 99 - DK/NA SKIP TO Q.32

25. How did you first find out about this challenge? That is, where did you see, hear or read information about the challenge?
26. To the best of your knowledge, which group, organization or agency was the source of the information you saw, heard or read?

ASK Q.27 IF AWARE OF OTC (CODE 1 AT Q.20 OR Q.24). OTHERWISE SKIP TO Q.32.

27. [READ INTRO ONLY IF YES TO Q.20] The "One Tonne Challenge" is a new initiative from the Government of Canada that challenges consumers to reduce their energy use and contributions to greenhouse gas emissions by one tonne, or about 20 percent. On average, each Canadian currently generates about five tonnes of greenhouse gas emissions each year.

Do you recall ever seeing, hearing or reading any advertising about the One Tonne Challenge?

- 01 - Yes
 02 - No
 99 - DK/NA

28. There are a number of different communities across Canada that are running their own One Tonne Challenge. Do you know whether or not your town or city has a campaign that is encouraging people to take the One Tonne Challenge?

- 01 - Yes, community has OTC
 02 - No, community does not have OTC SKIP TO Q.30
 99 - DK/NA SKIP TO Q.30

29. Do you remember how, where or from whom you heard about your town or city's One Tonne Challenge?
30. Earlier you mentioned some actions you are taking to reduce your energy consumption. How important a reason was the One Tonne Challenge in your decision to take these actions?
 READ

- 01 – Very important
 02 – Somewhat important
 03 - Not very important
 04 - Not at all important
 99 - DK/NA

31. Do you consider yourself to be currently participating in the One Tonne Challenge?

- 01 - Yes SKIP TO Q.34
 02 - No
 99 - DK/NA

ASK Q.32 IF NOT AWARE OF OTC (Q2 OR 99 AT Q.20 AND Q.24) OR IF NOT PARTICIPATING (Q.31 CODE 2 OR 99). OTHERWISE SKIP TO Q.34.

32. How likely are you to make a start in taking this challenge in the coming year? Are you:
 REPEAT IF NECESSARY: To reduce your own contribution to greenhouse gas emissions by one tonne, or 20 percent

- 01 - Very likely
 - 02 - Somewhat likely
 - 03 - Not very likely
 - 04 - Not at all likely
 - VOLUNTEERED
 - 05 - Depends
 - 06 - Need to know more about it
 - 99 - DK/NA
- SKIP TO Q.34
SKIP TO Q.34
SKIP TO Q.34
SKIP TO Q.34

33. (IF NOT VERY/NOT AT ALL LIKELY/DEPENDS) Why are you unlikely to take this challenge?

ASK ALL

34. [IF PARTICIPATING IN OTC; Q31 CODE 1] How difficult has it been so far to reduce your own personal contribution to greenhouse gases by 20 percent? Has it been:

[IF NOT PARTICIPATING IN OTC; NOT Q31 CODE 1] How difficult do you think it would be to reduce your own personal contribution to greenhouse gases by 20 percent over the next year? Would it be:

- 01 - Very difficult
- 02 - Somewhat difficult
- 03 - Not very difficult
- 04 - Not at all difficult
- VOLUNTEERED
- 05 - Depends
- 99 - DK/NA

35. How likely do you think other families in your neighborhood will be to take up the One Tonne Challenge in the coming year? Do you think they will be [READ CATEGORIES] to do so?

- 01 - Very likely
- 02 - Somewhat likely
- 03 - Not very likely
- 04 - Not at all likely
- VOLUNTEERED
- 05 - Depends
- 06 - Need to know more about it
- 99 - Don' t know/No answer

36. There might be several reasons why people would not participate in the One Tonne Challenge.

Thinking about the kinds of people you know, do you think that most of them, some of them, or only a few of them would not take up this challenge because:

READ AND ROTATE - REPEAT QUESTION AS NEEDED

- a. They do not believe their participation will make a difference to climate change
- b. They find it costs too much money to make the changes necessary to reduce their greenhouse gas emissions
- c. They find it too inconvenient or time-consuming to participate
- d. They do not have enough information about how to reduce their greenhouse gas emissions
- e. They have already reduced their energy use as much as they can
- f. They are not sufficiently interested or concerned about the environment

01 – Most
02 – Some
03 – Few
VOLUNTEERED
04 - Depends
99 – DK/NA

D. Compact Fluorescent Light Bulbs (CFLs)

Turning to a slightly different topic...

37. Have you ever heard of something called compact fluorescent light bulbs?
IF ASKED: These are the light bulbs with a spiral or tube shape.

01 - Yes
02 - No SKIP TO Q.39
99 - DK/NA SKIP TO Q.39

38. Have you purchased any compact fluorescent light bulbs in the past twelve months?

01 - Yes SKIP TO NEXT SECTION
02 - No
99 - DK/NA

IF NO/DK AT Q.37 OR NO/DK AT Q.38, ASK Q.39. OTHERWISE, SKIP TO NEXT SECTION.

39. Compact fluorescent light bulbs fit in most light fixtures and use 75% less energy than regular light bulbs. Although they can cost several dollars more than regular light bulbs, they are made to last for at least five years. How interested would you be in using these light bulbs in your household?
Would you say you are:

01 - Very interested
02 - Somewhat interested
03 - Not very interested
04 - Not at all interested
VOLUNTEERED
05 - Depends
06 - Need to know more about it
99 - DK/NA

Annex 8 - OTC Relevant Program Mapping

OTC Federal Related Initiatives

Campaign	Originating From	Website
Auto\$mart	NRCAN-OEE	http://oee.nrcan.gc.ca/transportation/business/driver-educators.cfm?attr=8
Climate Change Teacher's Kit	CC-GoC	http://www.climatechange.gc.ca/english/teachers/kit.asp
Community Challenges	CC-GoC	http://www.climatechange.gc.ca/onetonne/english/communities.asp
Employee Awareness Toolkit (Business and Industry)	CC-GoC	http://www.climatechange.gc.ca/onetonne/english/business/toolkit.asp
ENERGY STAR [®] , EnerGuide and R-2000	NRCAN-OEE	http://oee.nrcan.gc.ca/residential/energy_star-energuide-r2000.cfm?attr=4
FleetSmart on the Road	NRCAN-OEE	http://oee.nrcan.gc.ca/transportation/business/documents/fleetsmart-newsletter/newsletter-Vol1-2005.cfm
Idle-Free Quiet Zone campaign	NRCAN-OEE	http://oee.nrcan.gc.ca/transportation/idling/material/truck-stop-idle-free-zone.cfm?attr=0
The One-Tonne Challenge	CC-GoC	http://www.climatechange.gc.ca/onetonne/english/index.asp?pid=50
One-Tonne Challenge for Youth		http://www.co2zilla.ca/home.html
The OTC Calendar Club (Kids)	NRCAN-OEE	http://oee.nrcan.gc.ca/calendarclub/oneTonne/oneTonne.cfm

This list was prepared by searching the OTC website <http://climatechange.gc.ca/onetonne/english/> and the NRCAN OEE website <http://oee.nrcan.gc.ca/> on January 5, 2006.

Provincial Initiatives that Relate to the OTC

Province	Commitment/Program
British Columbia	Improve energy efficient appliances; Promote alternative energy use; Provincial fuel tax has been removed from biofuel blends; Provide drivers in B.C. with information about reducing emissions through good driving habits and vehicle maintenance;
Alberta	Climate Change Central's new <i>Energy Solutions Alberta</i> office will provide a one-stop shop for information about energy efficiency and conservation opportunities for homes and small businesses; Will support CC Central's initiatives including: consumer education, energy labelling, vehicle anti-idling, pilot programs for replacement of household appliances
Saskatchewan	Offer rebates for purchase of energy efficient appliances; Created an Office of Energy Conservation (2002); Provide low interest loans to those wishing to convert to natural gas
Manitoba	Encourage the installation and use of ground source heat pumps to reduce reliance on fossil fuels; Information and pilot program for hybrid vehicles
Ontario	Green Tips section on their website: driving clean, grasscycle, vermicomposting; Energy conservation section on the website
Quebec	Promotion and implementation of an employer program fostering the use of mass transit; Completion of an outreach and information campaign. This type of campaign would focus on explaining the issues of greenhouse gases that specifically pertain to the transportation sector, on promoting ridesharing, walking, bicycling, and on encouraging the use of the wide range of transit services available to reduce individual trips.
New Brunswick	Energy efficiency initiatives; including the creations of an energy efficiency agency in 2006
Prince Edward Island	Hybird Rebates; Incentives and tax cuts

	proposed for retrofitting houses and businesses; propose the creation of an online best practices manual on energy awareness and conservation
Nova Scotia	Website refers you to the OTC under its taking action page
Newfoundland and Labrador	Government will develop an information campaign aimed at motorists to make them aware of linkages between climate change and auto usage; will establish idle free zones around public buildings; will partner with post-secondary institutions on climate change initiatives.
Yukon	Brochure on reducing home energy use and ideas for energy efficient savings; similar brochure on a transportation use
North West Territories	GHG Strategy that coordinates northern action to begin the control of GHG emissions
Nunavut	N/A

Sources:

- All Over the Map: A Comparison of Provincial Climate Change Plans-David Suzuki Foundation –see A.2.91 summary for each province
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http://www.env.gov.bc.ca/air/climate/cc_plan/actions.html
- Alberta: Albertans and Climate Change: Taking Action
<http://www3.gov.ab.ca/env/climate/docs/takingaction.pdf>
- Saskatchewan: Making it Work
<http://www.se.gov.sk.ca/environment/climatechange/KyotoPositionPaper.pdf>
- Manitoba: Kyoto and Beyond: <http://www.gov.mb.ca/est/climatechange/pdfs/final-mccap-sep-16-02.pdf>
- Ontario:
http://www.gov.on.ca/ont/portal/lut/pl.cmd/cs.ce/7_0_A/s/7_0_252/s.7_0_A/7_0_252/_/en?docid=EC001016
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- NWT: NWT GHG Strategy http://www.enr.gov.nt.ca/eps/pdf/NWTGHG_Strategy.pdf