

Fostering Sustainable Business: CBSM as a Framework  
to Voluntarily Change Environmental Behaviours

by

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A thesis

presented to the University of Waterloo

in fulfilment of the

thesis requirement for the degree of

Master of Environmental Studies

in

Environment and Resource Studies

Waterloo, Ontario, Canada, 2017

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## **Author's Declaration**

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

## **Abstract**

This research investigates how governments can influence businesses to voluntarily change their environmental practices or “behaviours” by assessing two approaches: Voluntary Codes and Community-Based Social Marketing (CBSM). These approaches are grounded in different theories and are primarily applied to different audiences. While CBSM seems to be more widely known with a defined development process, it is primarily used to influence individuals and as such it is not clear how well it considers the complexities of business; whereas Voluntary Codes is less known but is focused on influencing businesses.

Understanding how to influence business behaviours is important, since their actions can have a negative impact on the quality of water, soil and air. Regulation can be effective, but there are many reasons why it may not be an option, leaving governments at all levels (federal, provincial and municipal) to rely on voluntary approaches to achieving environmental objectives.

CBSM, as an approach, has strong brand recognition, is used by many government departments, and has been promoted as applicable to influencing businesses as well as individuals. However, it seems that this approach has not yet been compared with Voluntary Codes, an approach that is focused entirely on influencing business, to determine how, or if, it might be enhanced when applying it in a business context.

Therefore, using qualitative research methods and key informant interviews, this study identified the components of effective voluntary business programs, assessed the CBSM approach relative to these components, and proposed opportunities to enhance the CBSM approach to address the unique considerations when influencing businesses.

## **Acknowledgements**

We made it! And it truly was a group effort. With twelve years from start to finish, I have a lot of people to thank and acknowledge: I had a phenomenal team.

**First and foremost, I want to thank those of you who have been with me right from the start, supporting me when I was “done”, and then cheering me on when last year I**

**spontaneously decided to finish it up:** Dave, it goes without saying, that I wouldn't have had the time or energy to focus if you hadn't been helping me. Josh, you were just wee when this all began and now you're tall than me- yikes! Mom and Dad, no words are enough. Martha and Bert and my family and friends, for your constant encouragement. Eric Hodgins and Nancy Kodousek, for supporting my professional growth and providing incredible opportunities to learn. Thank you to the Region of Waterloo for financial support. Dr. Jennifer Lynes for accepting me back (your persistence paid off!) and for challenging me; and now I look forward to challenging you on speed skates.

**Thank you to those of you who were there in the early days:** Bob Hodgins for helping navigate new territory; we did great work together! Ryan Kennedy and Bob Gibson for reviewing early drafts and concepts. And of course, those who agreed to be interviewed.

**And to those who added new energy through this victory lap:** Dan Murray for your insightful and speedy review times that helped me keep moving forward. Colleen Brown for being determined to create effective programs. It's a long journey.

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## Chapter 1 Introduction

The challenge in addressing environmental issues is that often there is not one organization or person solely responsible. Negative impacts on the environment are often the result of a collective action or inaction (World Wildlife Fund UK, 2008; Stern, 2000). Therefore, to mitigate these impacts, changes in behaviour from the collective are required (Daley, 2007; Koehler, 2007; Prakash & Potoski, 2007). This is easier said than done. Anyone who has tried to stop smoking or exercise more knows that even when you benefit directly, changing your behaviour is hard (Thaler & Sunstein, 2008). Trying to change someone else's behaviour can be even more challenging (Koger & Scott, 2007).

In some cases, government regulations and policies are effective at achieving the necessary changes (Yachnin, Gagnon, Guthrie, & Howatson, 2000; Government of Canada, 1998); however, this is not always an option (Gibson, 1999; Daley, 2007; Borck, 2008). Regulating behaviour change may not work depending on the changes required because the government may not have the authority or political desire to regulate or it may not have the resources to enforce regulations (Lyon & Maxwell, 1999). In such situations governments, whether federal, provincial or municipal, often rely on voluntary approaches to change behaviours (Koehler, 2007; Lyon & Maxwell, 1999).

There are many different approaches to encouraging voluntary adoption of new behaviours (Lyon & Maxwell, 1999; Yachnin, Gagnon, & Guthrie, 1999) and the target group (e.g. businesses or individuals) for behaviour change may influence the choice of approach selected. This thesis will focus on two such approaches: 1) Voluntary Codes which is primarily used to influence business behaviour (World Wildlife Fund UK, 2008; Lyon & Maxwell, 1999), and 2) Community-Based Social Marketing (CBSM) which is predominantly used as a tool for individual behaviour change but has, in a limited capacity, been used to influence business

behaviours (McKenzie-Mohr, 2000; McKenzie-Mohr, Lee, Schultz, & Kotler, 2012). A familiar example of a Voluntary Code is the Forest Stewardship Council (FSC) which certifies wood produced from environmentally and socially sustainable forest sources (Cadman, 2011), while CBSM has been used to create the anti-idling initiatives in Waterloo Region and Toronto.

Both Voluntary Codes and CBSM approaches have been used by governments to initiate voluntary changes in behaviour; however, they have emerged from different disciplines – Public Policy and Social Psychology, respectively - and therefore, are anchored in different literature and theoretical understandings. Governments at all levels continue to face environmental challenges, including impacts to the quality of water, soil, and air, and in the absence of regulations, or to complement regulations, they will continue to use voluntary approaches to influence behaviours.

Both approaches have demonstrated successes and limitations to influencing behaviours; however, this study looks at these two approaches in the context of influencing behaviours of businesses, specifically. There is no evidence in the literature that these two approaches have previously been compared. By using a qualitative approach to investigate both Voluntary Codes and Community-Based Social Marketing, this study seeks to: 1) identify the components of effective voluntary behaviour change programs aimed at businesses; 2) assess the CBSM approach and its mechanisms to achieve the components of effective voluntary behaviour change programs aimed at business; and 3) analyze opportunities to enhance the CBSM approach for influencing businesses to undertake voluntary environmental changes. This research will contribute to both the academic and practical aspects of behaviour change program development.

This chapter provides the context for this research study in the following four sections:

- **Section 1.1:** To ground this research in a practical example of the challenges facing governments and their ability to influence business behaviours, this section examines the catalyst for this research: the Region of Waterloo Water Services' attempts to develop a program to reduce the use of de-icers by local businesses to protect the quality of drinking water supplies. Although this is not a case-study, it is used as a narrative to illustrate the practical applications of this research.
- **Section 1.2:** To set this research in the context of voluntary behaviour change literature, this section identifies the problem statement, research objectives and contributions.
- **Section 1.3:** To provide an overview of this research approach, this section highlights the key components of the methodology which is examined in detail in Chapter 3.
- **Section 1.4:** To facilitate understanding of the organization of this thesis, this section outlines the structure.

### **1.1. The Catalyst for this Research**

In the early 2000s, the Region of Waterloo was investigating opportunities to reverse the increasing chloride concentration trends identified in municipal drinking water sources. These increases were attributed to the seasonal application of road salt, used to manage snow and ice to attain safe levels of service on roads, sidewalks, parking lots and private roads (Region of Waterloo, 2005). Although chloride is not associated with human health impacts it can impact the taste of the water (Environment Canada, 2006) and the Ontario provincial government has set a maximum acceptable concentration levels for chloride in the municipal water supply. Therefore, to protect the quality of the water supply the Region needed to decrease use of winter salt within the community (Lobe, 2007).

At that time, the local road authorities were identified as the primary source, responsible for 90-95% of salt applications nationally (Environment Canada, 2004). The Region's Water Services staff worked with the Region's and area municipalities' transportation departments to

reduce their salt application rates without compromising safety (Region of Waterloo, 2002). With the use of new technologies, innovative products and operational efficiencies, they were able to make some improvements (Region of Waterloo, 2005). However, more needed to be done because the chloride concentrations continued to increase (Riversides Stewardship Alliance and Sierra Legal Defence Fund, 2006).

In 2005, the Region conducted focus groups to understand salt use practices, attitudes and expectations of institutional, commercial and industrial property owners and managers and residential homeowners (PMG Consulting, 2005). This research began the Region's efforts to engage these sectors and initiate salt reduction programs within the broader community – beyond the transportation departments. However, within Canada, the Region was not aware of other municipalities pursuing salt reduction efforts beyond the transportation departments (Hourdebaigt, 2006; Lobe, 2007). Environment Canada made it clear they had no intention of pursuing salt reduction programs or mechanisms for these sectors beyond the creation of "Best Management Practices for Salt Use on Private Roads, Parking Lots and Sidewalks" pamphlet they had produced (Hourdebaigt, 2006; Lobe, 2007).

The Region had attempted to gather local application data (Lobe, 2006; McKenzie-Mohr & Associates, 2006) by surveying contractors, it proved challenging to get a defensible assessment of the amount of salt applied on parking lots and sidewalks for various reasons, including the diverse sizes of companies applying salt; the lack of record-keeping; and the reluctance to share records (McKenzie-Mohr & Associates, 2006). While research from Minnesota and New Hampshire estimated that salt application contributions from sources other than public roads, was 24% and 43% respectively (Sander, Novotny, Moheni, & Stefan, 2007; Sassan & Kahl, 2007), both estimates were considerably higher than Environment Canada's initial estimate (Environment Canada, 2004).

Faced with the context of a lack of comprehensive data on the impact of salt application across various surfaces the Region faced a decision. The Region could maintain the status quo until data confirmed the contribution of salt applied on parking lots and sidewalks, or action could be taken. The Region decided to take action based on the need to reduce salt applications from all contributing sectors, regardless of their exact contribution ratio (Lobe, 2007).

Regulating the use of salt was not a feasible at the time for the Region of Waterloo (Lobe, 2007) for several reasons. At the time, it wasn't clear what they could regulate due in part to limited understanding of salting best practices as well as the liability concerns associated with regulating salt use (PMG Consulting, 2005; Riversides Stewardship Alliance and Sierra Legal Defence Fund, 2006; Lobe, 2007). In addition, the Region's authority to regulate these activities under the Municipal Act was not straight-forward; however, the enactment of the Ontario Clean Water Act (2006) promised new authority for regulating and enforcing activities to protect the quality and quantity of municipal drinking water supplies. To use this new authority, the Region would have to wait until the locally-developed, science-based Source Protection Plans<sup>1</sup> were approved by the Ontario Minister of Environment. Given the uncertainty about the outcomes and timing of the technical work and policy development, the Region determined that a voluntary approach was the appropriate approach to begin changing salting practices.

The Region had two voluntary financial incentive programs, the Rural Water Quality Program (RWQP) encouraged farmers to improve their operations; and the Business Water Quality Program (BWQP) encouraged businesses to improve their chemical storage and handling practices. The RWQP was, and continues to be, effective at achieving behaviour

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<sup>1</sup> Source Protection Plans (SPP) are developed for each watershed throughout the province of Ontario in accordance with the Clean Water Act (2006), associated regulations, and technical rules. The policies which affect the Region of Waterloo are in the Grand River Source Protection Plan (Lake Erie Source Protection Authority, 2016).

change with farmers participating in the program and adopting the new behaviours (Hodgins, 2005). However, even though the BWQP was modelled after the RWQP it was struggling to get the attention of the business community, so with low participation rates the program was discontinued in 2005 (Middleton, 2006). This emphasized the challenges of engaging businesses in voluntary environmental behaviour change.

CBSM was suggested to engage business by colleagues in Public Health, Waste Management and Transportation Planning who had experience and success using CBSM to create customized, targeted approaches. Water Services staff completed the introductory and advanced CBSM workshops and hired McKenzie-Mohr and Associates to initiate the research-intensive process by identifying target behaviours. The research revealed 20 potential behaviours and recommended further analysis to prioritize the behaviours and reduce the number of target behaviours (McKenzie-Mohr & Associates, 2006).

CBSM was being considered in parallel with other voluntary program models because there was little case literature demonstrating CBSM's effectiveness at effectively changing business behaviour. Therefore, staff were also looking at programs, which seemed to accommodate the complexities of different business operations and the variability of the applicable behaviours, including for example the Integrated Pest Management program and the Canada-Ontario Environmental Farm Plan.

In the end, staff developed a certification program, Smart About Salt (Lobe, 2007), using an evaluation tool allowing businesses to assess and identify the behaviours which needed to be changed. The CBSM research was not continued rigorously; however, the concepts (e.g. barrier/benefit analysis) were considered throughout the design of the Smart About Salt program, including promotional strategies (Lobe, personal notes), and the program was launched in 2007.

Since 2007 and the launch of the Smart About Salt program, partnerships and working groups have formed among municipalities, Conservation Authorities and industry organizations to address rising concerns about winter salt impacts, particularly on commercial and institutional properties, resulting in collaborative research on application rates (Fu & Omer, 2010) and best management practices (Freeman Associates, 2016). Local concerns about chloride are no longer limited to drinking water, there are also concerns about the impact on local trees (Thompson, 2016) and river health (Grand River Conservation Authority, 2014).

In addition, since 2007, two significant changes have occurred for the Region and its policy and program implementation approach to influencing salt-related behaviour change of businesses:

- The Smart About Salt program was transferred in 2010 to a new not-for-profit organization, Smart About Salt Council, which administers the program nationally (Lobe, 2009). This was in response to requests for the program to be available outside Waterloo Region. The Region continues to be involved with the program, with a staff member acting as President of the Board of Directors (Smart About Salt Council, 2017).
- The approval of the Lake Erie Source Protection Plan, which provides the Region with the authority and legal requirement to regulate the salt use on public and private properties (excluding most residential properties) in source water protection areas (Lake Erie Source Protection Authority, 2016).

The Region continues to engage all sectors within the community to address this water quality issue in an effort to reduce reliance on salt for winter maintenance practices. Even though they now have regulatory authority under the Source Protection Plan, this is limited to a focused number of properties, and may not be fully implemented until 2026. Enforcement of

winter maintenance practices will be a challenge; therefore, the Region continues to develop voluntary strategies to influence the salting practices of businesses.

In 2007, at the time of the Smart About Salt program launch, many Region staff, and their municipal and Conservation Authority colleagues responsible for program development and marketing initiatives had been trained to use the CBSM approach as a model for program development; however only a few were aware of the voluntary initiatives literature<sup>2</sup>. They wondered why this was and how it could influence the impact of their environmental objectives when targeting businesses. However, there was no research that compared the CBSM approach with the voluntary initiatives approach.

This realization led to the initiation of this research in 2007 with the goal to help municipal and conservation staff effectively and efficiently engage business to achieve local environmental objectives. Now in 2017, this research is still relevant, not only for the Region of Waterloo where voluntary business behaviour changes are still necessary to reduce chloride concentrations, but for other municipalities and Conservation Authorities which also are noticing the environmental impacts of salt and wanting to influence local business behaviours.

Understanding how to influence businesses is still relevant, not just for salt reduction but for many environmental issues, from energy reduction to waste management. Therefore, this research will contribute a practical benefit to staff tasked to rely on voluntary policy tools to encourage businesses to meet environmental objectives. Although the research question and objectives arose during the development of the Smart About Salt program and to support other Regional salt-reduction programs, they have application beyond this context. This research will not only provide direction and insight for the Region and their salt reduction initiatives, it will

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<sup>2</sup> This was based on my experience working at the Region and with municipal colleagues and Conservation Authority staff.

provide benefit to other municipalities, Conservation Authorities, and levels of government needing to influence environmental behaviours of businesses.

## **1.2. Research Objectives and Contributions**

So how can governments influence voluntary environmental behaviour changes among business? Businesses can have negative impacts on our environment (Torres-Rahman, Baxter, Rivera, & Nelson, 2015; Montague, 2003) and regulation isn't always an option (Gibson, 1999; Daley, 2007; Borck, 2008), as was the case for the Region of Waterloo and the salt issue. This reality, coupled with the Region staff's familiarity with the CBSM approach to developing voluntary programs for individuals, led to identifying the problem, or opportunity, to investigate CBSM as an approach to developing voluntary programs for businesses.

To answer this question, I am investigating two approaches to creating behaviour change programs: CBSM and Voluntary Codes, from the social marketing and voluntary initiatives fields, respectively. The selection of these two approaches was influenced by both my practical experience working in municipal government and my graduate studies learning about voluntary approaches to behaviour change.

At the Region of Waterloo Water Services, I worked with colleagues across multiple departments, in other municipalities and government agencies, who were familiar with CBSM, had learned the methodology through workshops, and/or had experience following the defined step-by-step process. Even though it was suggested it could be applied to businesses as well (McKenzie-Mohr & Associates, 2006), CBSM was primarily being used for residential initiatives.

When I began my graduate studies, I was introduced to the "voluntary initiatives" literature and I was intrigued that my colleagues were not familiar with this field of study.

Anecdotally, they were familiar with certification programs, such as EcoStar and ISO, but they did not recognize a specific process to follow to create an effective program. It did not have the similar level of name recognition as CBSM; however, it was entirely focused on influencing businesses. “Voluntary initiatives” encompasses a large number of terms and program-types, which can be categorized in some of the following ways: by the party who initiated the effort, such as industry-initiated, government recognition, government-industry partnerships; by the nature of the effort, such as challenges, product-labeling, and Voluntary Codes; or by descriptive qualities including parties involved and type of agreements (Webb, 2007; Gibson, 1999; Borck, 2008; Bondy, 2003; Higley, Convery, & Lévêque, 2001).

For the purposes of this research, Voluntary Codes was selected for two reasons: 1) it is defined by the Government of Canada, both in terms of its application and its program development; and 2) the Smart About Salt program, developed by the Region of Waterloo and the catalyst for this research, could be characterized as a Voluntary Code. Voluntary Codes are examined in greater detail in the next chapter.

Social marketing, a transdisciplinary field, draws on theories from marketing and psychology, demonstrating the benefit of bridging two different, yet parallel, fields of study. Lee and Kotler (2008) identify six prominent behaviour change theories which have informed the development of social marketing: Stages of Change Model, also known as Transtheoretical Model (Prochaska & DiClemente, 2005); Social Norms Theory (Cialdini, Kallgren, & Reno, 1991); Health Belief Model (Hochbaum, Rosenstock, & Kegels, 1952); Theory of Reasoned Action (Fishbein M., 1979); Social Cognitive Theory (Bandura, 1977); and Social Exchange Theory (Homans, 1961). Social marketing is used to influence human behaviour to make society healthier and safer, from decreasing smoking rates to increasing use of bike helmets.

Within social marketing, CBSM is positioned and has emerged as the model to use to influence environmental behaviours, such as energy reduction or recycling; therefore, CBSM was selected as the social marketing component of this study. In addition, it was used by Region staff when they were developing the Smart About Salt program. CBSM will be explained in more detail in the next chapter.

While these two fields of study - Voluntary Codes and CBSM – both provide an approach to influencing behaviours, they are grounded in different theories and are primarily applied to different audiences: Voluntary Codes to influence business and CBSM to influence individuals. Yet these two fields of study seem to have not yet been compared and while CBSM seems to be more widely known with a defined development process, it is not clear how well it considers the complexities of business, whereas Voluntary Codes is less known and is focused on the business context.

This realization led to a few questions, such as: Are there lessons about how to influence business that can be learned from Voluntary Codes? Are these addressed in the CBSM approach or is there an opportunity to enhance it for the business context? To answer these questions, I identified the following three research objectives for this study:

- **Research Objective 1:** Identify the components of effective voluntary behaviour change programs aimed at business by assessing the Voluntary Codes approach.
- **Research Objective 2:** Assess the CBSM approach and its mechanisms to achieve the components of effective voluntary behaviour change programs aimed at business.
- **Research Objective 3:** Analyze opportunities to enhance the CBSM approach for influencing businesses to undertake voluntary environmental changes.

This research will make contributions to the academic literature and practitioner resources. It will contribute to the existing literature on both Voluntary Codes and CBSM. Based on the existing literature I organized the components of effective voluntary behaviour change programs aimed at business into a new framework, and created a parallel one for the CBSM approach to facilitate analysis. In addition, the analysis of the CBSM approach relative to the components of effective voluntary behaviour change programs aimed at business resulted in a proposed framework for CBSM, which incorporates business-specific considerations. Practitioners and program development staff will benefit by this research and recommendations so they can create programs that effectively change the behaviour of businesses within their communities to protect their local environments using a research-based, step-by-step process.

### **1.3. Research Overview**

The research objectives were undertaken using a qualitative methodology relying on informant interviews as primary source of data collection. Informants were selected to represent the two study areas (Voluntary Codes and social marketing) and four different perspectives (academic, business, consultant/practitioner and policy maker). Informants were recruited by email and interviewed in-person or by phone (land-line or internet). This research was initiated in 2010, with all but one of the interviews taking place at that time; however, the final interview was conducted in 2016. Interviews were transcribed and then analyzed using the deductive thematic framework, which was established from the literature review. The research was designed to limit the impact of barriers to access, politics, unethical behaviour, and influence of researcher bias.

## 1.4. Thesis Structure

This thesis is presented in five chapters:

- **Chapter One – Introduction** provides the context for this research.
- **Chapter Two – Literature Review** summarizes the academic literature on public policy tools to put the voluntary tools in context and explores Voluntary Codes and CBSM and the fields from which they emerged.
- **Chapter Three – Research Methods** outlines the methodology used for the research, including the approach to data collection and analysis. In addition, this chapter identifies the research considerations and limitations.
- **Chapter Four – Results and Discussion** presents the results of the informant interviews and discusses the emerging themes and findings to create a deeper understanding of how to influence the environmental behaviours of business.
- **Chapter Five – Summary** concludes the research by revisiting the research objectives and contributions and identifying opportunities for further research.

## **Chapter 2 Literature Review**

### **2.1. Introduction**

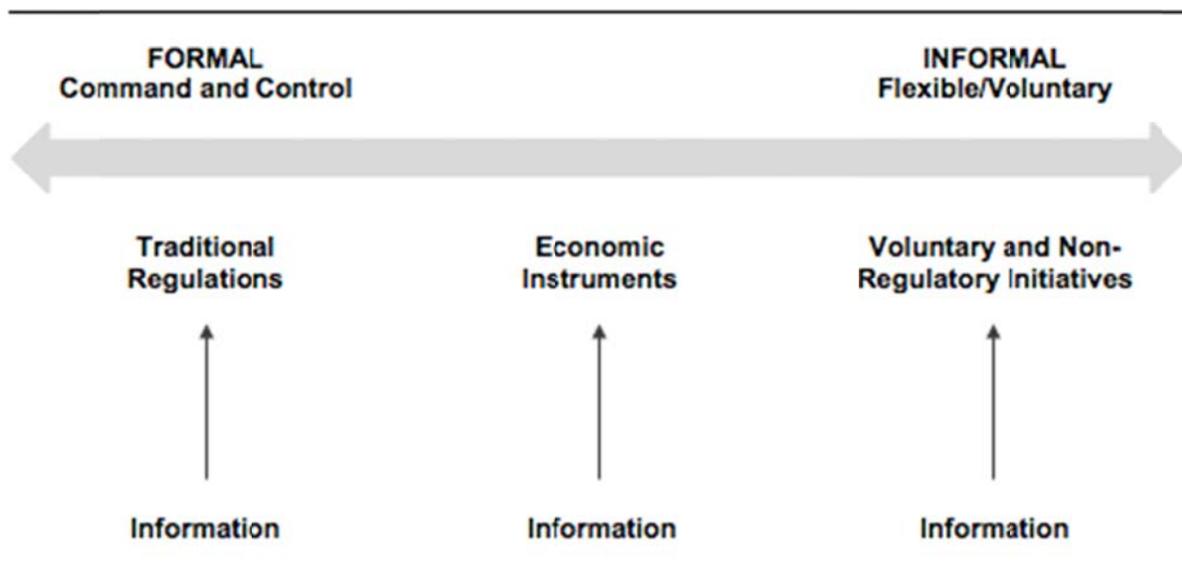
To resolve environmental problems within society, governments at all levels, have a suite of policy tools available to bring about positive change (Yachnin, Gagnon, Guthrie, & Howatson, 2000). The policy tools sit on a spectrum that ranges from regulatory and economic tools to non-regulatory (voluntary) tools. However, regulatory and economic mechanisms are not always available or desirable (Yachnin, Gagnon, Guthrie, & Howatson, 2000).

Non-regulatory policy tools that are initiated and led by a government body have emerged from different disciplines. The policy tool “Voluntary Codes” has emerged from the public policy discipline, whereas the policy tool “Community-Based Social Marketing (CBSM) programs” has emerged from social marketing and social psychology (McKenzie-Mohr, Lee, Schultz, & Kotler, 2012). To analyze opportunities to enhance the CBSM approach for influencing businesses to undertake voluntary environmental changes, this chapter explores the use of non-regulatory (voluntary) policy approaches to provide context for both Voluntary Codes and CBSM and then examines each approach in more detail to gain a better understanding.

The objective of this chapter is to examine each approach, first in context within its respective field of study, examining the approach to program development and exploring the characteristics of effective programs. Therefore, this chapter is presented in three parts: the first part explores voluntary programs within the spectrum of public policy tools laying the foundation for the following two sections; the second part identifies the components of effective voluntary behaviour change programs aimed at business by assessing the Voluntary Codes approach. The third part assesses the strengths and limitations of the CBSM approach to voluntary program development and its mechanisms to achieve the components of effective voluntary behaviour change programs aimed at business.

## 2.2. Non-Regulatory Approaches to Manage Environmental Objectives

The spectrum of policy approaches to address environmental objectives range from regulatory to non-regulatory tools, as illustrated in Figure 2-1: Spectrum. On the left side of the figure there are the formal “command and control” tools, described as “traditional regulations”. On the right side of the figure, the other end of the spectrum, there are the informal, “flexible/voluntary” tools, described as “voluntary and non-regulatory initiatives”. In the middle, between regulatory and non-regulatory are the “economic instruments”. All of these policy tools require “information” to support the delivery and effectiveness.



Source: The Conference Board of Canada (Yachnin, Gagnon, Guthrie & Howatson, 2000, pg. 5)

**Figure 2-1: Spectrum of Public Policy Tools**

Each of these policy tool categories (regulatory, economic, non-regulatory, information) encompass a suite of specific policy instruments (Yachnin, Gagnon, Guthrie, & Howatson, 2000), for example:

- **Regulatory:** bans, limits, quotas, standards and land use guidelines
- **Economic:** pollution taxes, accelerated depreciation, road tolls, tradable emissions permits, grants, debt-for-nature swaps and deposit refund schemes
- **Non-regulatory (voluntary):** negotiated agreements, memoranda of understanding, Voluntary Codes and voluntary challenges
- **Information:** education and training, technical assistance, public information campaigns, pollutant release inventories

The comprehensive list of voluntary and non-regulatory approaches can be overwhelming because of the variety of terms (Bondy, 2003; Gibson, 1999; Webb, 2007; Moffet & Bregha, 1999), including, but not limited to:

- Self-regulation
- Voluntary initiatives
- Voluntary Codes
- Environmental charters
- Voluntary accords
- Voluntary agreements
- Co-regulation
- Covenants
- Negotiated environmental agreements

There are different ways to categorize non-regulatory initiatives by descriptive qualities including parties involved and type of agreements as shown in Table 2-1 modified from Kernaghan Webb and Associates (2007); by the nature of the effort, such as challenge, product-labeling, Voluntary Codes; or by the party who initiated the effort, such as industry-initiated, government recognition, government-industry partnerships (Webb, 2007; Gibson, 1999; Borck, 2008; Bondy, 2003; Higley, Convery, & Lévêque, 2001).

**Table 2-1: Types and Examples of Voluntary Codes**

Types	Examples
<p><b>Unilateral commitments by single company</b> no agreement/quid pro with/from other party such as government or NGO or community</p>	<p>During extremely hot weather, and in response to public requests from energy producers, a grocery store agrees to lower energy consumption by reducing air conditioning consumption and lighting during peak energy periods</p>
<p><b>Unilateral commitments by industry associations on behalf of their members</b> not done in exchange for certain benefits from other party such as government or NGO or community</p>	<p>Canadian Chemical Producers' Association Responsible Care Program (as originally conceived, because originally there were no MOUs or agreements between CCPA and governments concerning Responsible Care)</p>
<p><b>Vertical supply-chain programs</b> where one firm requires others it does business with to participate in an initiative</p>	<p>Automobile manufacturers requiring that their suppliers are ISO 14001 Certified</p>
<p><b>Multi-stakeholder, market-based agreements in which government is not involved</b> where firms commit to change their behaviour with third party verification</p>	<p>Forest Stewardship Council certification program, Marine Stewardship Council certification program</p>
<p><b>Multi-party, market-based agreements in which government is involved</b> where firms commit to change their behaviour with third-party verification</p>	<p>Environmental Choice Eco-Logo program and Energy Star</p>
<p><b>Non-market-based government-industry (and others) agreements with a regulatory focus</b> where industry agrees to certain "beyond regulatory compliance" conduct in exchange for certain government benefits</p>	<p>Ontario's Environmental Leaders Program, and federal Environmental Performance Agreements</p>

Source: Webb ( 2007, pg. 4)

While these non-regulatory approaches to influencing behaviours may be diverse, as policy tools, they provide value and benefit to governments, business and society as a whole.

Voluntary programs, broadly defined for this section, can be a positive component of a policy mix when they are designed effectively. These types of initiatives can derive a variety of benefits for government agencies, for the firms and organizations involved as well as for the

public. This section looks at how each of these agencies can benefit from the use of voluntary programs.

### **Benefits to Government Stakeholders**

Governments are reducing regulatory initiatives in an effort to reduce program costs. Proponents of voluntary programs argue they may achieve greater environmental results as corporations will create solutions through greater efficiencies and financial payback; while the government can also save money without requiring the development and enforcement of regulations (Government of Canada, 2016; Iannuzzi, Jr., 2002; Prakash & Potoski, 2007; Prakash & Potoski, 2006).

One of the prevailing assumptions is that provided with adequate benefits, participants will act in their own self-interest. In addition, there is an expectation that there will be a “spill-over effect” which means that the firm will engage in other similar activities and that it may create a normative effect in which other firms will engage in similar behaviours (Government of Canada, 2016) although this has been questioned (World Wildlife Fund UK, 2009).

When governments elect to use voluntary approaches whether in lieu of or as a complement to regulatory mechanisms, Moffet and Bregha (1999) emphasize that government has a strong role and responsibility during the development of the program to promote a rigorous program and ongoing achievements. They suggest that governments should:

- Provide a threat of regulation to drive “voluntarism”
- Ensure accountability by establishing an auditing, monitoring and enforcement process
- Level the playing field: Facilitate information exchange to enable small companies to participate
- Educate consumers

- Encourage funding and partnerships within and for the industry program
- Provide support in the way of education and/or incentives

Some environmental issues, such as water and air pollution, cross political boundaries and jurisdictions. Therefore, a municipal or provincial government may not have adequate authority to regulate or enforce the industry. In these situations, Voluntary Codes provide a mechanism for these agencies to influence the industry sector without over-stepping their authority. Governments must proceed with caution in their support of a voluntary measure, as there may be potential liability issues and it could generate public suspicion (Moffet & Bregha, 1999). In addition, it is important to consider the people who are designing and running the program. They can have an integral impact on the ultimate success of the program based on their capacity to build trust and earn the respect of the target businesses and other stakeholders. To emphasize the importance of experience and expertise, Webb (2007, p. 35) states: "If they are to work, [Voluntary Codes] are not areas that can be handed off to junior staff."

### **Benefits for Business**

Voluntary programs are typically designed to achieve broad-scale reductions of environmentally destructive behaviour which is generally achieved by attracting a large number of businesses to participate. There must be benefits derived by the business to motivate them to participate in the absence of regulatory requirements. Prakash and Potoski (2006) describe these benefits as 'private benefits' which accrue to the individual firm.

These private benefits may include public recognition (Government of Canada, 2016; Iannuzzi, Jr., 2002), preferred vendor status and improved market share. In addition, firms may benefit from greater flexibility in how they meet the standards in contrast with regulations which may prescribe the methods. Firms may also benefit financially from efficiencies developed through the program.

Prakash and Potoski (2006) also describe "club benefits" which are those benefits that are realized by the collective group of all firms that participate in a voluntary program. This may include preferred rates for insurance or other products and group reputation.

### **Benefits for Society**

The benefits that are accrued through voluntary programs to society as a whole are derived from the achievement of the public policy objectives which result in reduced levels of pollution and therefore improved environmental conditions (or at least deterred degradation of conditions). In addition, the public will benefit from the "spillover effect" which assumes that the changes made by business may lead to a better understanding by the public as well as further behaviour change in competitors.

The public, which can include individuals, clients, will quickly be able to identify desirable firms with whom to contract business.

## 2.3. Voluntary Codes

### 2.3.1 Introduction

Voluntary Codes, as established earlier, are a non-regulatory approach to influencing the behaviour of businesses. Although they can go by many different names, such as guidelines, voluntary initiatives, codes of practices and codes of conduct (Government of Canada, 1998), for the purposes of this study and for clarity and consistency, Voluntary Codes is used. However, while there is not a universal definition of “Voluntary Code” (Wood, 2006), we do see similarities and themes emerge from these definitions. Below are three examples highlighting the variations in the definitions:

- “...specific standards of conduct for an industry including how to deal with its members and customers. These codes only apply to those who sign up to them.” (Australian Competition and Consumer Commission, 2016)<sup>3</sup>
- “...commitments undertaken by one or more polluters or resource users, in the absence of an express legal requirement to do so, prescribing norms to regulate their behaviour in relation to their interaction with the environment.” (Wood, 2006, p. 230)
- “...are codes of practice and other arrangements that influence, shape, control or set benchmarks for behaviour in the marketplace. They encourage companies and organizations to conduct themselves in ways that benefit both themselves and the community. They can also serve as a sign to consumers

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<sup>3</sup> This refers to a webpage, therefore there is no page number reference.

that the organization's product, service or activity meets certain standards.”

(Government of Canada, 2016)<sup>4</sup>

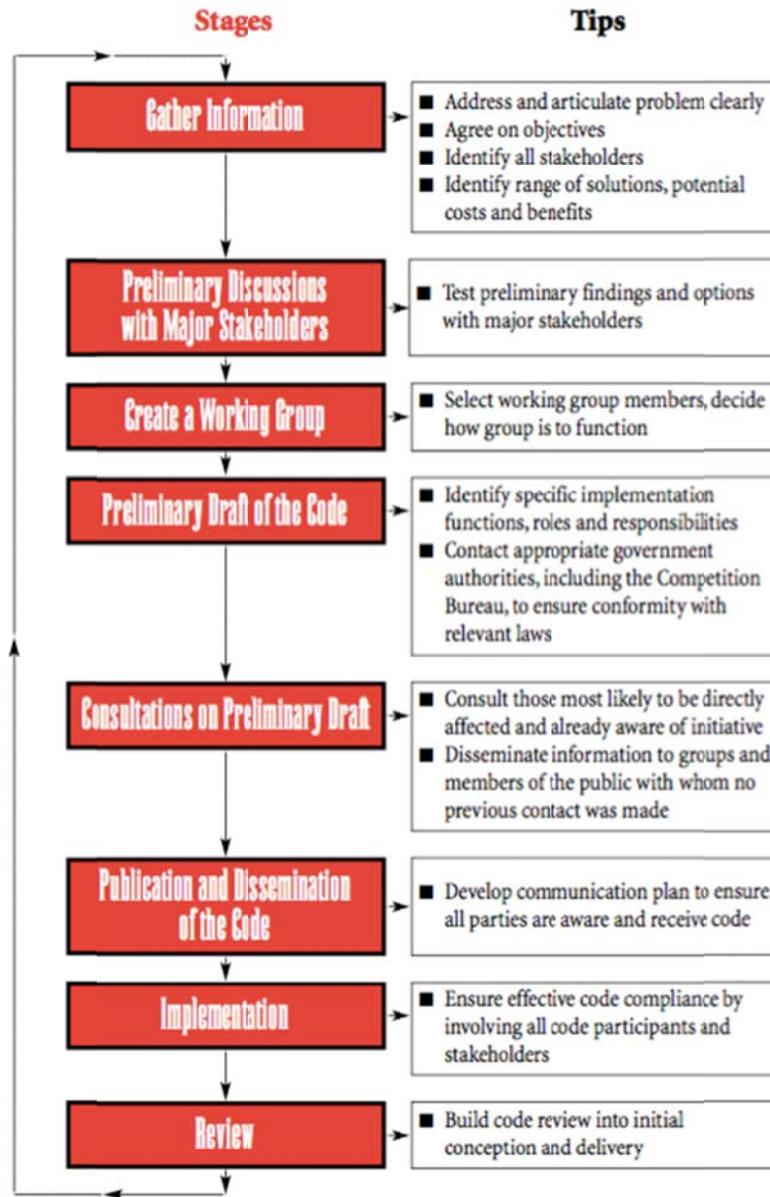
To explore Voluntary Codes, this section is presented in three parts. The first part identifies a recommended program development process. The second part discusses the strengths and limitations of the Voluntary Codes. Part three focuses on developing a framework for effective voluntary behaviour change programs aimed at business. This third component acts as a synthesis of the literature on this topic.

### **2.3.2 Approach to Code Development**

Voluntary Codes and their development processes are as varied as their definitions. However, the Voluntary Code development process shown in Figure 2-1: Spectrum, published by the Canadian government (Government of Canada, 1998), has stood the test of time and is still promoted unrevised on their website (Government of Canada, 2016). However, the guide cautions that even with strict adherence to this or other process models, an effective Code cannot be guaranteed because there are many competing factors which influence behaviour choices and they may not all be able to be considered or incorporated into a program. The process follows a logical sequence of steps yet assumes an iterative process with “feedback from later to earlier stages”.

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<sup>4</sup> This refers to a webpage, therefore there is no page number reference.



\* While the process outlined here appears linear, in practice, there may be feedback from later to earlier stages.

Source: Government of Canada (1998, p. 15)

**Figure 2-2: Voluntary Code Development Process**

### 2.3.3 Strengths and Limitations of Approach

The strengths of Voluntary Codes are derived primarily from the promised benefits to the stakeholders, including individual firms and the collective, government and society as a whole (Government of Canada, 1998; Iannuzzi, Jr., 2002; Prakash & Potoski, 2006). In addition, the development approach of Voluntary Codes is flexible and allows for and requires input from a variety of stakeholders to reflect the unique circumstances and meet the behaviour change objectives.

However, Voluntary Codes are subject to a host of challenges that must be overcome in order to achieve the program objectives (Haufler, 2003). The most significant hurdle is the ability to design effective programs to engage and enable behaviour change. Morgenstern and Pizer (2007, p. 184), in their book, Reality Check, concluded that:

*“voluntary programs can affect behaviors and offer environmental gains but in a limited way...none of the case study authors found truly convincing evidence of dramatic environmental improvements. Therefore, we find it hard to argue for voluntary programs where there is a clear desire for major changes in behavior”.*

What is causing this inability for voluntary programs to meet their objectives and improve environmental performance? There are two primary ways in which a program is vulnerable to failure (Prakash & Potoski, 2006):

- **Limited use:** The Olsonian Dilemma occurs when the program is unable to attract many members, which can create a negative reinforcing cycle.
- **Establishing credibility:** Shirking occurs when a firm formally adopts standards but fails to implement them, which negatively impacts the goodwill and credibility of the program.

Others argue that the presence or absence of key design qualities can be attributed to program deficiencies limiting the success of the program (Government of Canada, 1998; Iannuzzi, Jr., 2002):

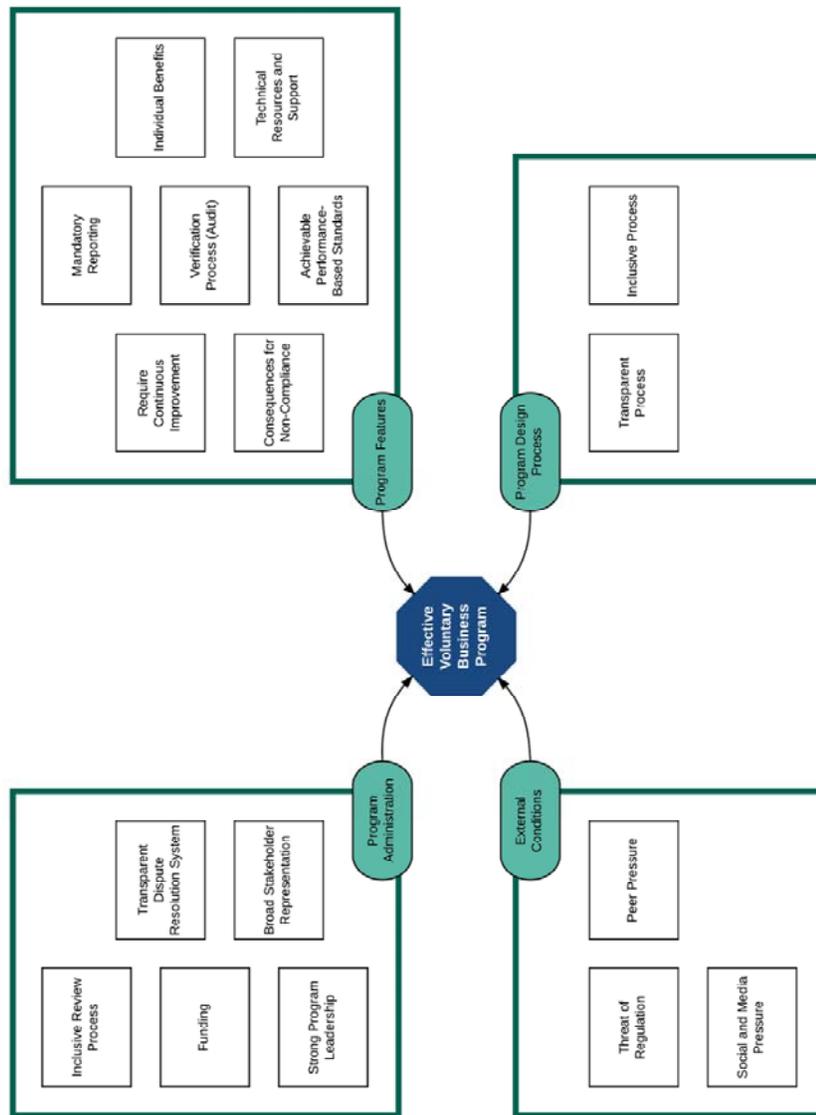
- Lack of clarity can mislead and/or frustrate the intended audience
- Negative publicity and/or loss of trust in business or sector
- Potential to be anti-competitive
- May permit “free-riders”
- Lack of transparency and/or access to decision-making breeds suspicion and scepticism due to (potentially) limited stakeholder involvement
- Lack of incentives or adequate motivations

#### **2.3.4 Framework of Components of Effective Voluntary Behaviour Change Programs Aimed at Business**

The Voluntary Codes literature assesses programs to identify key elements, such as consequences of non-compliance and conditions, including threat of regulation, which contribute to achieving the behaviour change objectives. One of the objectives of this thesis was to identify the components of effective voluntary behaviour change programs aimed at business by assessing the Voluntary Codes approach, this was organized into a framework (Figure 2-3) to facilitate assessing the CBSM approach and its mechanisms to achieve these components.

A framework was developed based on the themes that emerged from the literature review. A synthesis of best practices and lessons learned led to identifying the following four components as integral contributors to the success of a voluntary program: program design process, program administration, program features, and external conditions. The framework illustrates the contributing factors to effectively influencing business behaviours.

This section examines the details of each of the four components and the qualities of effective voluntary business programs.



**Figure 2-3: Components of an Effective Voluntary Program Framework<sup>5</sup>**

<sup>5</sup> Compiled by author based on literature review sources

## **1 Program Design Process**

The process used to design a Voluntary Code can contribute to the success of a Voluntary Code; however, the process is rarely mentioned in case studies (Cohen, 2004), which makes it challenging to learn from effective and ineffective examples. Having said that, there have been two foundational characteristics that will help to build a credible, participatory and accountable program: transparent and inclusive process.

### **Transparent Process**

To build credibility and accountability, the design process should be transparent. Transparency, in this context, means that design process decisions are documented and are publically available. The process is developed in advance and then followed diligently, disclosing deviations and rationale for the deviation (New Directions Group, 2007).

### **Inclusive Process**

Stakeholders, including the public, should be consulted in all stages of design and implementation (Moffet & Bregha, 1999). This helps to identify all the issues and ideas early on and throughout the process. In fact, it may help with getting “buy-in” from potential participants, if they are engaged throughout the process (Windatt, 1999).

All stakeholders, where possible, should be represented equally. This can lead to challenges of how to define stakeholders, invite participation, and provide access to participation. However, these obstacles require thoughtful consideration to ensure that those who will be impacted by the decision have the ability to provide input. This could include circulating drafts of the Voluntary Code for maximum engagement. In fact, funding should be available to facilitate broad participation, because without an inclusive process, the Code may lack credibility or acceptance.

In addition, clearly defined roles and responsibilities for stakeholders is an important component of an inclusive process, as well as ensuring that stakeholders have the capacity to execute those roles and responsibilities (New Directions Group, 2007; Webb, 2007).

## **2        *Program Features***

A Voluntary Code, even when designed using an inclusive and transparent process, which does not have the following features may not be effective at attracting participants or achieving the environmental objectives. There appears to be general agreement within the literature that a strong Voluntary Code will have clear objectives and standards, monitoring and enforcement and offer sufficient benefits to overcome barriers leading to motivation to participate (Government of Canada, 1998; Iannuzzi, Jr., 2002; Prakash & Potoski, 2006).

### **Achievable Performance-based Standards**

Voluntary Code standards should be performance-based to achieve environmental objectives (VanNijnatten, 1999; New Directions Group, 2007; Moffet & Bregha, 1999). This will allow for flexible approaches to achieving the goals within different types of businesses. In addition, this may lead to more efficient, innovative or economical solutions (Purchase, 2004). Some Codes, for example the chemical industry's Responsible Care program, moved from principles to targets (Moffet, Bregha, & Middlekoop, 2004). When the targets are specific, achievements can be verified by the Code participant or external auditors (Moffet, Bregha, & Middlekoop, 2004; Windatt, 1999), it can reduce the incidents of disputes.

In addition, the standards should push the industry forward and companies beyond their current practices. As Gibson (2000, p. 13) points out, Voluntary Codes should “aim for net gains, not just mitigation of continuing damage”.

Webb (2007, p. 33) cautions, “You’ve got to be careful that you don’t make voluntary programs so procedurally and substantively onerous that no one wants to join.”

However, the standards must also be achievable. While it is important that the standards push the industry to improved behaviours and actions, if the standards are too strict, the program may not be attractive and therefore not effective. However, if the standards are not challenging enough, then the program may not be considered credible and may not achieve the desired environmental objectives (Harrison, 2004).

### **Individual Benefits**

When benefits are realized by those who are participating in the Code and not just generally to the group as a whole, then compliance is increased. Benefits may include reduced costs, improved public image, competitive advantage, and more favourable rates from banks or insurers (VanNijnatten, 1999; New Directions Group, 2007; Moffet, Bregha, & Middlekoop, 2004). Although Hornung (1999) cautions that public recognition is a weak benefit. Increasing the benefits to the participants reduces the likelihood of “free riders”, firms who accrue benefits without participating (Purchase, 2004; Prakash & Potoski, 2007).

### **Technical Resources and Support**

In addition to the above-mentioned individual benefits, the availability of technical resources and support help to increase participation and may improve adoption of the behaviour. Resources and support can take different forms, depending on the Code, from “how-to” guides and access to industry experts (Hornung, 1999) to financial incentives

(Ward & Ha, 2012). In addition, establishing a culture of sharing among participants, can be beneficial for the overall effectiveness of the Code. This allows and indeed encourages participants to share information, technology and management. Moffet, Bregha, & Middlekoop (2004) highlighted how a collaborative spirit was achieved within the competitive environment of the Canadian Chemical Producers Association.

### **Require Continuous Improvement**

Effective Voluntary Codes, those that achieve their environmental objectives, require continuous improvement from participants (New Directions Group, 2007). Programs should expect and plan for incremental evolution and improvements (Moffet, Bregha, & Middlekoop, 2004). This approach is important to allow for time to build peer pressure and the culture of change. An incremental approach should help achieve a balance between rigorous standards and participation rates. Continuous improvement could take the form of re-verification, succession planning to ensure ongoing commitment, research and education opportunities or revising targets to improve environmental performance (Moffet, Bregha, & Middlekoop, 2004).

### **Mandatory Reporting**

Reporting on the achievements of Code participants builds credibility, transparency, accountability and rigour into the Voluntary Code. With publicly-available reporting, meaning accessible to the public, competitors, and government, target-based standards, the reports can be verified, informally and formally (Purchase, 2004; Moffet, Bregha, & Middlekoop, 2004; VanNijnatten, 1999; New Directions Group, 2007). Reports should be completed and submitted regularly and should be independently verified. Mandatory reporting promotes quality participation in favour of quantity participation (Hornung, 1999).

### **Verification Process (Audit)**

Compliance verification or auditing is important for the credibility of the program and its claims, especially when reporting is based on self-reports (New Directions Group, 2007; Moffet & Bregha, 1999). Where possible, to build credibility, audits should be conducted by a trained authority. With the performance-based standards, audits will be more objective and therefore credible. It is recommended that auditing reports are made available to the public (Prakash & Potoski, 2007).

### **Consequences for Non-Compliance**

Sanctions or penalties need to be established and enforced if a firm is found to not be compliant with the standards. There are examples of membership being revoked and therefore, access to the benefits of Code participation being removed as part of the sanctions (Moffet, Bregha, & Middlekoop, 2004).

## **3 External Conditions**

The conditions within the marketplace and the regulatory environment can influence a company to participate in a Voluntary Code. Depending on the circumstances, the conditions may be influenced by the Voluntary Code sponsors, but in other cases, these are completely independent conditions. However, the more of these conditions that are present, the more likely a Voluntary Code will attract participants and achieve the environmental objectives (Government of Canada, 1998).

### **Threat of Regulation**

Regulations can be more expensive for a company to comply with and in many cases, are more prescriptive than Voluntary Codes, making Voluntary Codes more desirable (Webb, 2007; Morgenstern & Pizer, 2007). However, if there is no threat of regulation, there may not be sufficient motivation for a company to voluntarily participate in

the Code. Therefore, a threat of mandatory compliance, whether it is a new law, regulation or trade sanctions, can improve the effectiveness of a Voluntary Code (Government of Canada, 1998).

It is interesting to note that while the threat of regulation can influence the effectiveness of a Voluntary Code, in some cases the Voluntary Code can impact the law. Webb and Morrison (2004) note that during Code formation, all parties “need to thoroughly explore and understand the legal implications of Voluntary Code arrangements before undertaking or participating in such initiatives.”

### **Social and Media Pressure**

Companies may face pressures from their customers, clients, stakeholders and the general public to improve their environmental performance. When a company is in closer contact with their final customer, it can have a more direct impact than when the supply chain is longer and they are farther removed (Prakash & Potoski, 2006). And if the social pressure is featured in the media, it can further compel a company to participate in the Voluntary Code to improve their image and competitive advantage (Prakash & Potoski, 2006; Rhone, Stroud, & Webb, 2004; Webb & Morrison, 2004).

### **Peer Pressure**

Companies may feel pressure from their industry peers, or internal staff, to improve their environmental practices when the industry as a whole is subject to social and media pressures about their environmental image and record (Prakash & Potoski, 2006). If peer pressure can be orchestrated, it can build participation in the Voluntary Code and reduce “free riders” (Moffet, Bregha, & Middlekoop, 2004). When peer pressure is coupled with tangible support, for example, a larger company assists or influences a smaller company within the supply chain (Windatt, 1999) or through regular meetings of member companies

it is possible to “create an atmosphere of mutual accountability” (Moffet, Bregha, & Middlekoop, 2004).

#### **4 Program Administration**

Effective Voluntary Codes have these program administration characteristics: secure funding; transparent dispute resolution system; strong program leadership; broad stakeholder representation; and an inclusive review process. Each characteristic is important for different reasons and contributes to at least one of the qualities which define effective Voluntary Codes. This section examines each of these four characteristics.

##### **Dispute Resolution System**

Conflicts are inevitable, and for a Voluntary Code to be considered credible, accountable and transparent, a clearly articulated and understood dispute resolution system is required. Purchase (2004) identifies key qualities of a dispute resolution system:

- Independent: decisions are made by non-partisan judges or a panel
- Accessible: anyone can bring forward a complaint
- Transparent: decisions and rationale for those decisions are published and available for review

##### **Strong Program Leadership**

Leadership and dedicated personnel are important at the program level but also at the company level. As Webb (2007, p. 35) stated, “successful, sophisticated [Voluntary Codes] necessitate involvement of successful, sophisticated personnel.” As noted before, they advise against delegating leadership responsibilities to junior staff. Moffet et al (2004, p. 203) agree and emphasize that effective Voluntary Codes require “sustained, senior-level leadership.” When the right people are at the helm, they will be able to pursue

opportunities and sell the program because of their own capacity and credibility (Webb, 2007).

### **Broad Stakeholder Representation**

Not only should the program be designed with input from stakeholders, but it should also continue to be administered with oversight by a group representing the various stakeholders. In fact, Purchase (2004, p. 83) argues, “At a minimum, participation should include all those without whom the Code would be inoperative or ineffectual.”

As an example, the governing body of Canada’s Forest Stewardship Council (FSC) has four chambers – social, environmental non-government agencies, commercial, and aboriginal - each with equal voting power. (Rhone, Stroud, & Webb, 2004)

There is recognition that how stakeholder is defined and rights are distributed will vary from Code to Code and indeed, may vary throughout the life of the Code to reflect changes within the industry and objectives of the Code (Purchase, 2004).

### **Inclusive Review Process**

Continuous improvement for participants is a feature of effective programs; however, it is also an important feature of the program administration (New Directions Group, 2007). Programs should be reviewed and updated regularly according to the same inclusive design principles discussed above in Inclusive Process on page 27.

## **5 *Qualities of Effective Voluntary Behaviour Change Programs***

There are many approaches to evaluating Voluntary Codes (Cavanagh, 2000; Sethi, 2000), in fact Bondy (2003) identified 19 for her research on Voluntary Code evaluation approaches. Given the wide variety of Voluntary Codes and the diversity of application of these Codes it follows that there are a large number of methods and approaches to

evaluating the effectiveness of these initiatives. However, what we can learn from these diverse methods and approaches are the qualities of effective programs.

To understand how these qualities link to the individual components of the framework (Figure 2-3), I developed Table 2-2 to show the relationship between the framework components and the quality to which they contribute.

**Table 2-2: Linking Components and Qualities of Effective Business Programs**

QUALITIES	DESIGN		FEATURES							CONDITIONS			ADMINISTRATION			
	Transparent Process	Inclusive Process	Achievable Standards	Individual Benefits	Technical Resources and Support	Requires Continuous Improvement	Mandatory Reporting	Verification Process (Audit)	Consequences for Non-Compliance	Threat of Regulation	Social and Media Pressure	Peer Pressure	Dispute Resolution System	Strong Program Leadership	Broad Stakeholder Representation	Inclusive Review Process
<b>Credible</b>	X	X	X				X	X	X				X	X	X	X
<b>Transparent</b>	X		X				X						X			X
<b>Accountable</b>	X	X	X			X		X	X				X		X	X
<b>Accessible</b>			X	X	X										X	X
<b>Rigorous</b>			X			X	X	X	X				X		X	X
<b>Participatory</b>		X		X	X								X		X	X
<b>Results-oriented</b>			X	X			X	X							X	X
<b>Attractive</b>	X	X	X	X	X					X	X	X		X	X	
<b>Sustainable</b>										X	X	X	X	X		X

Compiled by author based on literature review sources

## **2.4. Community-Based Social Marketing (CBSM)**

### **2.4.1 Introduction**

Community-Based Social Marketing (CBSM) uses a research-based process to achieve voluntary behaviour change with a specific emphasis on sustainable environmental behaviours. CBSM is based on social science research which shows that community-level initiatives which address barriers and benefits of target behaviours can be most effective (McKenzie-Mohr, Lee, Schultz, & Kotler, 2012). CBSM was developed and marketed by Doug McKenzie-Mohr as a way to share the social science academic research with program planners, so they could use it to design and implement more effective programs. (McKenzie-Mohr, 2000)

CBSM, although primarily rooted in social psychology, has also been informed by social marketing (McKenzie-Mohr, 2000; McKenzie-Mohr, Lee, Schultz, & Kotler, 2012). Social psychology identifies the factors that contribute to human behaviour, whereas, social marketing identifies strategies to influence these factors and by extension influences human behaviour. CBSM has been used to develop a range of programs to encourage environmentally-sustainable behaviours and has been used as a tool for businesses to change their behaviour from within, such as office recycling initiatives.

To assess the CBSM approach, this section is presented in three parts. The first part explores the social psychology and social marketing disciplines to provide the context for the CBSM program development process which is discussed in the third part. The second part examines the strengths and limitations of CBSM, while part three examines the components of effective voluntary behaviour change programs developed using CBSM.

## **2.4.2 Approaches to Behaviour Change**

To understand the CBSM program development approach, this section begins with the social psychology literature which leads into the social marketing literature, culminating in a discussion about the CBSM program development process.

### **Social Psychology**

Social psychology is a social science discipline that bridges the gap between psychology and sociology and in fact exists as a sub-discipline of both psychology and sociology. Where psychology examines the behaviours of individuals and sociology examines the behaviours of societies, social psychology examines the behaviours of individuals within societies (McLeod, 2007; Boyd, 2016; Branscombe & Baron, 2016).

Branscombe & Baron (2016) defined social psychology as the scientific study of “all aspects of our behaviour with and toward others, our feelings and thoughts about them, and the relationships we develop with them” (Branscombe & Baron, 2016, p. x). Or more simply stated, it is “how people’s behaviors, thoughts and feelings change because of other people” (Boyd, 2016).

Numerous behaviour explanation theories have emerged from social psychology. Although these theories have been applied to understand health and social behaviours, the focus of the discussion below is related to their application to environmental behaviours and what they have contributed to the body of knowledge indirectly underlying the CBSM framework.

Initially many pro-environmental behaviour models assumed that people engaged in environmentally-destructive acts because they were not aware of the impact of their behaviour. The assumption then was that if those individuals knew more about the impacts of their behaviours, their attitudes toward the behaviour would change and they

would then change their behaviour, as illustrated in Figure 2-4 below. Therefore, many information-intensive campaigns were launched as an attempt to alter behaviour, but they did not capture the sophisticated and complicated connection between attitudes and behaviours (Kollmuss & Agyeman, 2002). However, we are still seeing campaigns reliant on providing information to change attitudes although we know that changing behaviour is significantly more complicated than that.



Source: Kollmuss & Agyeman (2002, p. 241)

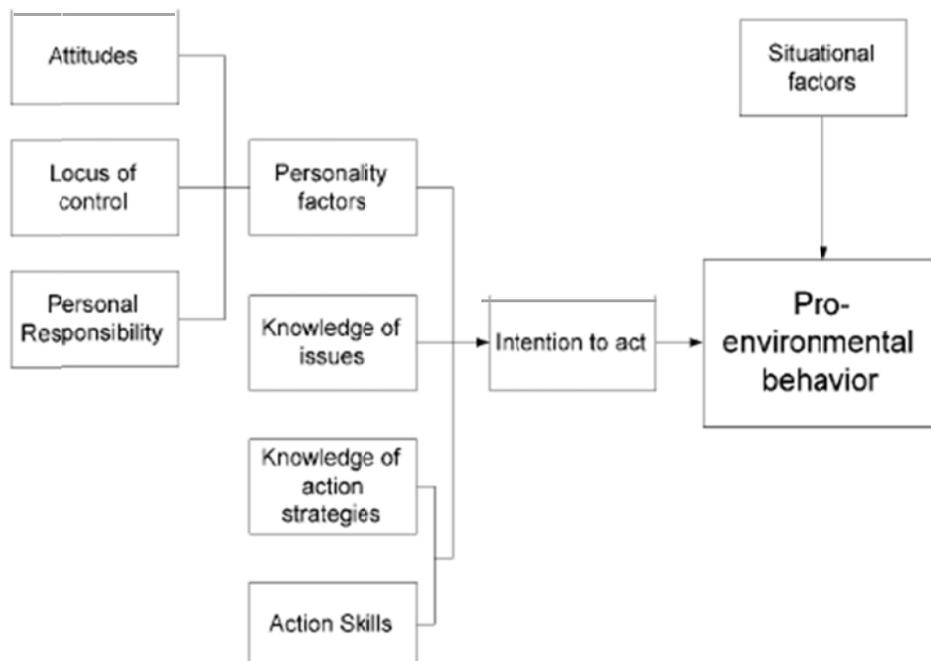
**Figure 2-4: A linear behaviour model**

Building on the early linear models, Fishbein’s and Ajzen’s (1975) (1980) *Theory of Reasoned Action* determined that while attitudes may influence one’s intention to act, they do not directly result in action. It was ascertained that societal norms in addition to attitudes impact intentions, which demonstrated that people do not act based on pure reason. Therefore, influencing attitudes alone is not sufficient to achieving behaviour change.

The Model of Responsible Environmental Behaviour (Figure 2-5) is significantly more complex than the linear behaviour models and the Theory of Reasoned Action. The Model of Responsible Environmental Behaviour has elements which resemble those we recognize as part of CBSM. As an attempt to understand and fill the gap between attitudes and behaviour Hines et al (1987) identified six variables, including “attitude” as one, which contribute to the “intention to act”:

- knowledge of issues
- knowledge of action strategies
- action skills (the ability to act)
- locus of control (perception of ability to create change)
- attitudes (weak link to behaviour)
- personal responsibility

The “intention to act” combined with external “situational factors”, such as economic, social and competing behaviours, influence “pro-environmental behaviour”.

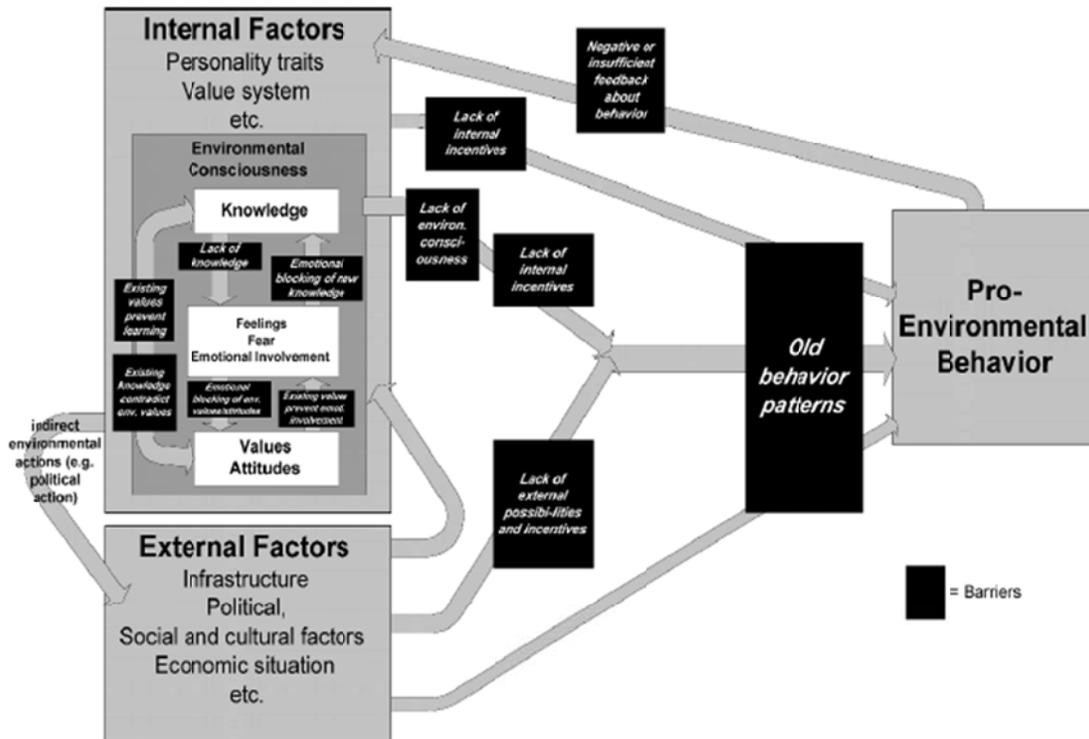


Source: Hines, Hungerford, & Tomera (1987) quoted in Kollmuss & Agyeman (2002, p. 244)

**Figure 2-5: Model of Responsible Environmental Behaviour**

Kollmuss and Agyeman (2002) concede the challenge of developing a model that adequately or accurately depicts the complexities of human behaviour; however, they created a diagram (Figure 2-6) as a visual aid to illustrate the intricate relationships between the factors which contribute to pro-environmental behaviours. Internal and external factors are distinguished from each other. Internal factors include personality traits; value system; and environmental consciousness (knowledge, feelings, fear, emotional involvement, and values and attitudes). External factors include infrastructure; political, social and cultural factors; and economic situation. Internal and external factors impact each other, as illustrated in the figure, and together may lead to pro-environmental behaviours, if the barriers can be overcome.

What is particularly interesting about this model is its inclusion of barriers, which is particularly useful because as Stern (2000, p. 419) notes, “Interventions do little or nothing until one of them removes an important barrier to change.” The model only identifies some of the many possible barriers (Kollmuss & Agyeman, 2002); however, “old behaviour patterns” are deliberately depicted larger than the other barriers to draw attention to this behaviour, not only because it is a “very strong barrier”, but also because they feel it is “often overlooked in the literature on pro-environmental behavior” (Kollmuss & Agyeman, 2002, p. 257).



Source: Kollmuss and Agyeman (2002, p. 257)

**Figure 2-6: Model of pro-environmental behaviour**

### Social Marketing

Social marketing has many definitions, as evidenced by the 14 definitions from “social marketing veterans”, including the International Social Marketing Association (iSMA) listed by Lee and Kotler (2015). The themes that emerge from the definitions are identified by Lee and Kotler (2015); they recognized that social marketing is about:

- “influencing behaviours” (accepting a new behaviour, rejecting a potential undesirable behaviour, modifying a current behaviour, abandoning a current undesirable behaviour, continuing a desired behaviour, or switch a behaviour)

- “utilizing a systematic planning process that applies marketing principles and techniques”
- “focusing on priority target audience segments”
- “delivering a positive benefit for individuals and society”

Social marketing, a term first coined by Philip Kotler and Gerald Zaltman in 1971 (Andreasen, 1994; Lee & Kotler, 2015), grew out of traditional marketing at a time when the discipline was under pressure to be more socially relevant and to contribute to social change (Andreasen, 1994).

Similar to traditional marketing, social marketing focuses on understanding the target audience through market research; uses tools to develop a strategy; and measures program success (Andreasen, 1994; Kotler & Lee, 2007). However, it differs in that instead of selling a product it is encouraging a behaviour (Andreasen, 1994; McKenzie-Mohr, 2000; McKenzie-Mohr, Lee, Schultz, & Kotler, 2012; Kotler & Lee, 2007).

The “tools” traditional marketers use are referred to as the 4Ps: product, price, place and promotion. These same tools are used in social marketing, although sometimes they are redefined (Lee & Kotler, 2015) to align better with social marketing, and other times, they have been renamed (goods and services; incentives/disincentives; convenience; and communication), while CBSM has added four additional tools: commitments, prompts, norms and social diffusion (McKenzie-Mohr, Lee, Schultz, & Kotler, 2012) as shown in Table 2-3 below. In addition, Peattie & Peattie (2003) argue that the 4Ps should be abandoned altogether to further distinguish social marketing from traditional marketing.

**Table 2-3: Comparison of Marketing "4Ps"**

<b>Traditional 4Ps</b>	<b>McKenzie-Mohr, Lee, Schultz, &amp; Kotler (2012)</b>	<b>Peattie &amp; Peattie (2003)</b>
Product	Goods and Services	Social Propositions
Price	Incentives/Disincentives	Cost of Involvement
Place	Convenience	Accessibility
Promotion	Communication	Social Communication
	Commitments Prompts Norms Social Diffusion	

Social marketing is an approach solely focused on behaviour modification.

Andreasen (2006, p. 137) asserts, "I do believe that social marketing, with its simple focus on behavior (any behavior), is sufficiently flexible to be used in a great many very different application areas. I am even tempted to argue that one does not need to immerse oneself deeply in all sorts of other methodologies – social marketing may be all one needs".

One of the greatest strengths of social marketing is its flexible and adaptable approach; it defines a methodology to fully customize a program for specific behaviours. Social marketing has primarily been used to influence behaviours related to public health, injury prevention, environmental protection and community issues. It has the potential to achieve both broad and narrow goals applied downstream (i.e. individuals) or upstream (i.e. businesses and government). Social marketing can also be applied to achieve structural changes to support the desired behavioural changes of individuals within society (Andreasen, 2006; Kotler & Lee, 2007).

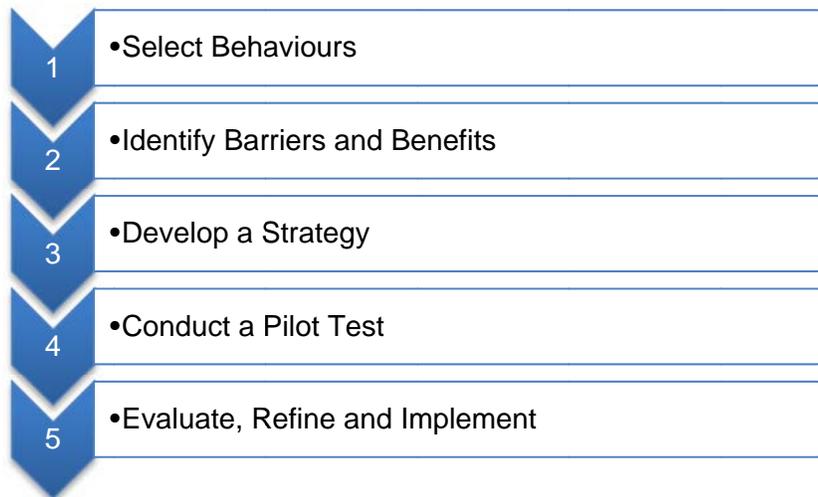
### **CBSM Program Development Process**

The CBSM program development process guides practitioners through five steps to develop a customized program (McKenzie-Mohr, 2000; McKenzie-Mohr & Smith, 1999; McKenzie-Mohr, Lee, Schultz, & Kotler, 2012):

1. Select the target behaviours: a single, end-state, non-divisible activity
2. Identify the barriers and benefits of the target behaviour
3. Develop a strategy: selecting the CBSM tools which will decrease the barriers to the sustainable activity and increase the benefits
4. Pilot test the program to make necessary changes before launching it
5. Evaluate the program to measure its effectiveness at achieving behaviour change

Projects using CBSM have been developed across five broad categories: agriculture, energy, transportation, waste and pollution, and water.

Behaviour change is fostered through the use of “behaviour change tools” - commitment, prompts, norms, communication and incentives - to achieve program objectives among individuals. A unique combination of tools may be used for each campaign, as the tools are selected based on the barriers and benefits analysis. Each of the tools is linked to a particular barrier-type. For example, if the barrier to a re-occurring activity is “forgetting”, then a well-placed reminder (prompt) may be sufficient to overcoming the barrier, whereas an incentive may not be effective. Therefore, matching the tools with the barriers is a critical step in the CBSM process. Studies have demonstrated that using a combination of integrated tools have resulted in much higher rates of behaviour adoption (Stern, et al., 1986; Stern, 2000)



**Figure 2-7: CBSM 5-Step Process to Changing Behaviours**

### **2.4.3 Strengths and Limitations of Approach**

#### **Strengths**

The strengths of social marketing for achieving behaviour change stems from its roots in traditional marketing, its adaptable approach, its singular focus, its growing bank of effective case studies and the increasing prominence of the community-based approach.

Social marketing techniques have been adapted from the private sector, which have sophisticated marketing practices which have been refined over many decades of enticing customers. Social marketing has benefited and will continue to draw on the advances realized by this sector. The field of social marketing has not yet fully capitalized on opportunities to influence “upstream” behaviours which is an opportunity to continue grow and improve societal behavioural change. (Andreasen, 2006)

One of the greatest strengths of social marketing is its flexible and adaptable approach; it defines a methodology to fully customize a program for specific behaviours. It

truly has trans-disciplinary opportunities to achieve both broad and narrow goals applied downstream (i.e. individuals) or upstream (i.e. businesses and government). Social marketing can also be applied to achieve structural changes to support the desired behavioural changes of individuals within society (Andreasen, 2006; Kotler & Lee, 2007; Institute for Social Marketing, n.d.).

Social marketing is an approach solely focused on behaviour modification. Andreasen (2006, p. 137) asserts, “I am not arguing the superiority of a social marketing approach over these alternatives, only the possibility that it may offer fresh perspectives. I do believe that social marketing, with its simple focus on behavior (any behavior), is sufficiently flexible to be used in a great many very different application areas. I am even tempted to argue that one does not need to immerse oneself deeply in all sorts of other methodologies – social marketing may be all one needs”.

Social marketing has amassed a collection of “successes” which continue to reinforce the strengths, adaptability and simplicity of this approach (Andreasen, 2006). In addition to the above-mentioned strengths of social marketing, there is the emergence of Community-Based Social Marketing, which not only packages the social marketing approach into a step-by-step process, but it defines the target audience as a community, which is considered in itself a strength because it generally involves direct person-to-person contact. This approach has been demonstrated to be particularly effective at achieving desired behaviour changes (McKenzie-Mohr & Smith, 1999).

### **Limitations**

Despite all the strengths of social marketing, there are several key obstacles which prevent it from being more widely used which can be sorted into two categories: (a) program development, and (b) broad implications.

McKenzie-Mohr and Smith (1999) articulate a set of challenges associated with developing a social marketing campaign:

- adequately addressing the complexity of the barriers to the activity
- resistance in oneself to complete the research required
- resistance in oneself to develop program based on assumptions
- resistance in oneself to complete a pilot project
- resistance among colleagues regarding time required to design and implement a thorough campaign

Kotler and Lee (2007) add an additional program development challenge: the ability to convince the target audience to modify their behaviour when the benefits may not be directly tangible or immediate.

The four major problem areas faced by the field of social marketing follow, as highlighted by Andreasen (2006):

1. "...lack of appreciation of social marketing at top management levels." Although widely used on the front lines, without top level support funding and resources are more challenging to procure.
2. "...poor 'brand positioning.'" due to a variety of definitions of social marketing, not adequately differentiated from its competition, perceived to be "manipulative" and not "community based".
3. "...inadequate documentation of and publicity for successes." even though there have been successes that can be identified as a result of social marketing efforts they are not publicized as such and therefore social marketing does not receive the credit or recognition it is due.

4. “...**lacks academic stature.**” Social marketing is not widely taught as a dedicated course, nor are there formal degree or specialization options. There is a slowly developing “foundation of conceptual and theoretical underpinnings”.

Of particular note though is Andreasen’s (2006) observation that social marketing is limited due to the perception that social marketing is not able to be applied to upstream behaviour change.

#### **2.4.4 Components of Effective CBSM Programs**

Programs which are considered exemplary models of social marketing have similar principles and have complementary characteristics which are attributed to the success of the programs at achieving behaviour change, irrespective of the specific target behaviour. The National Social Marketing Centre in the UK has produced an 8-point social marketing National Benchmark Criteria (2010) that is being used to help encourage and promote greater consistency in the use and application of social marketing:

1. **Behaviour:** Aims to change people’s actual behaviour
2. **Customer Orientation:** Focuses on the audience. Fully understands their lives, behaviour and the issue using a mix of data sources and research methods
3. **Theory:** Uses behavioural theories to understand behaviour and inform the intervention
4. **Insight:** Customer research identifies ‘actionable insights’ – pieces of understanding that will lead intervention development
5. **Exchange:** Considers benefits and costs of adopting and maintaining a new behaviour; maximises the benefits and minimises the costs to create an attractive offer

6. **Competition:** Seeks to understand what competes for the audience’s time, attention, and inclination to behave in a particular way
7. **Segmentation:** Avoids a ‘one size fits all’ approach: identifies audience ‘segments’, which have common characteristics, then tailors interventions appropriately
8. **Methods Mix:** Uses a mix of methods to bring about behaviour change. Does not rely solely on raising awareness

The above list is used for social marketing in general, whereas Table 2-4 below lists benchmark criteria specific to CBSM.

**Table 2-4: CBSM Benchmark Criteria**

CBSM Steps	Benchmark Criteria
<p><b>Step 1. Selecting Behaviours</b></p>	<ul style="list-style-type: none"> <li>• Clearly identifies target audience</li> <li>• Selects behaviours that are both non-divisible and end state</li> <li>• Evaluates list of selected behaviours for potential impact, penetration and probability</li> <li>• Limits number of behaviours to target in any given CBSM campaign (e.g. not more than five to six behaviours)</li> </ul>
<p><b>Step 2. Identifying Barriers and Benefits</b></p>	<ul style="list-style-type: none"> <li>• Conducts research on barriers and benefits for each of the potential segments in the target group</li> <li>• Identifies and distinguishes between barriers and benefits that are internal versus those that are external to the target segments</li> </ul>

CBSM Steps	Benchmark Criteria
<p><b>Step 3. Developing a Strategy</b></p>	<ul style="list-style-type: none"> <li>• Creates strategies that are appropriate for the barriers of the behaviour(s) being promoted and reduce the benefits of the behaviour(s) being discouraged</li> <li>• Develops commitment tools that: 1) emphasize written over verbal, 2) seek commitments in groups, 3) actively involve the individual, 4) avoid coercion, 5) help people to view themselves as environmentally-concerned, and, 6) are public and durable</li> <li>• Develops prompts that are: 1) noticeable, 2) self-explanatory, 3) presented in close proximity to where the action is taken, and 4) encourage positive behaviours rather than discouraging negative behaviours</li> <li>• Engages well-known and well-respected people to be part of the campaign</li> <li>• Encourages the use of norms that are visible and reinforced through personal contact</li> <li>• Develops communication tools that are: 1) captivating, 2) tailored to the target audience, 3) uses credible sources, 4) appropriately frames the message and, 5) makes message easy to remember</li> <li>• Establishes incentives/disincentives that: 1) reward positive behaviour, and 3) are visible</li> <li>• Initiates convenience strategies that attempt to address external barriers</li> </ul>

CBSM Steps	Benchmark Criteria
<p><b>Step 4. Conducting a Pilot</b></p>	<ul style="list-style-type: none"> <li>• Develops a pilot that can be compared with baseline measurements</li> <li>• Utilizes a control group</li> <li>• Whenever possible, participants are randomly selected and then randomly assigned to strategy or control groups</li> <li>• Whenever possible, evaluates strategy effectiveness through unobtrusive measurements of behaviour change rather than through self-report</li> <li>• Focuses only on the strategies that can be implemented at a broad scale</li> </ul>
<p><b>Step 5. Evaluating Broadscale Implementation</b></p>	<ul style="list-style-type: none"> <li>• Measures activity prior to implementation and at several points afterwards</li> <li>• Utilizes evaluation data to retool strategy and/or provide feedback to community</li> </ul>

Source: Lynes, Whitney, & Murray (2014, p. 116)

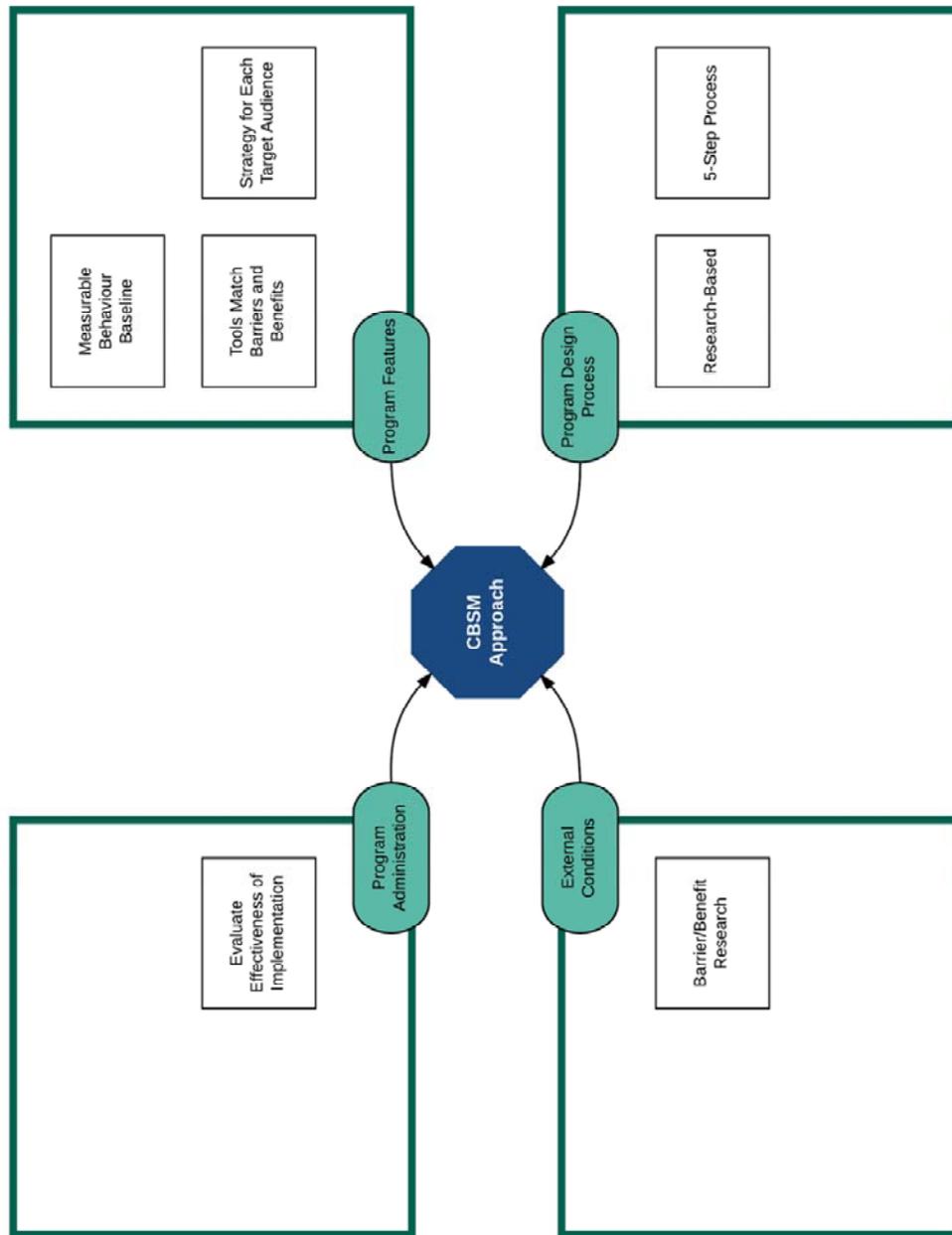
## 2.5. Summary

When regulating behaviours of individuals or organizations is not an option, governments may rely on voluntary policy tools to encourage the desired behaviours.

Voluntary Codes and programs designed using CBSM are tools available to achieve environmental behaviour change objectives. However, these two tools have emerged from different disciplines, resulting in different program development approaches and different strengths and limitations.

The development processes for Voluntary Codes and CBSM share common elements. Both are iterative models that acknowledge the requirement for stakeholder consultation, planning and testing to effectively influence behaviours. Both models follow similar steps: researching, stakeholder consulting, planning, testing, implementing, and evaluating leading to revisions and refinements.

There are fundamental differences between these approaches, particularly with respect to their approach to program development. Therefore, to assess and analyze opportunities to enhance the CBSM approach for influencing businesses, I organized the CBSM components to parallel Figure 2-3: Components of an Effective Voluntary Program Framework. Using the same four categories – Administration, Features, Design Process, and External Conditions – and organized the principles of the CBSM approach into the appropriate category, resulting in a contribution to the literature.



**Figure 2-8: CBSM Arranged to Compare to Effective Business Program Framework**

The two frameworks, when compared side-by-side, reveal how differently these two tools are considered in the literature. The Voluntary Code literature emphasizes the features of the Code resulting in seven specific components within this category; whereas the CBSM literature emphasizes the program-development process and is much less prescriptive about any of these four categories. This is evident when comparing these two figures, the Voluntary Code framework has sixteen distinct components within the four categories, whereas the CBSM framework has only seven. In addition, these components are not necessarily equivalent, as they are articulated in the language of their literature; however, it is an indication of how differently these two tools have emerged.

The Voluntary Codes components are explained in detail in section 2.3.4 and this section highlights how the CBSM framework differs.

- **Administration:** The CBSM literature doesn't explicitly discuss administration, which doesn't indicate that these are not important; however, they are not emphasized in the literature. However, the CBSM process includes evaluation of implementation effectiveness, which is an on-going administration responsibility.
- **External Conditions:** The CBSM literature addresses external conditions for success in the context of barrier and benefit analysis of the desired and competing behaviours. Social marketing programs are designed to create the conditions for success by overcoming the barriers to success, so "threat of regulation" and "peer pressure" may be considered in that context, but are not explicitly identified.
- **Features:** The CBSM literature does not explicitly identify key features, as the Voluntary Codes literature does. Instead, it specifies high-level outcomes, such as "tools match barriers and benefits" and "measurable behaviours". This is directly linked to the flexible, customized principle of the CBSM approach.

- **Design Process:** This area is the primary focus of the CBSM literature, which clearly articulates the importance of evidence-based, stakeholder research as the foundation to any program. The five-step program design process is rooted in research, including the pilot-testing phase, which is a critical element of the CBSM approach.
- **Qualities:** Effective CBSM programs and effective Voluntary Codes identify similar qualities such as clear goals, stakeholder participation, testing and monitoring and the need to address motivation (benefits). However, the Voluntary Codes literature identifies additional qualities such as transparency of decision-making, verification auditing, mandatory reporting and sanctioning. These are issues which are not relevant to individual-focused programs typically developed using the CBSM approach.

Assessing the CBSM approach and its mechanisms to achieve the components of the effective voluntary behaviour change programs aimed at business revealed a number of similarities and differences between these approaches. One key question is how could the CBSM approach be enhanced to influence businesses to undertake voluntary environmental changes. The following chapter outlines the methodology used to explore this question.

## Chapter 3 Research Methods

### 3.1. Introduction

This chapter outlines the qualitative research methods, data collection approach (interviews with industry and academic experts), as well as the deductive analysis framework used for this study and is presented in four parts. The first part describes the qualitative research methods; the second part articulates the design of the data collection techniques, with particular focus on selecting the informants and developing the interview guides; the third part addresses the analysis of the data collected through informant interviews; and the fourth part identifies the limitations and challenges of this research.

### 3.2. Research Approach

This research used a qualitative approach and methodology because it is appropriate for studies that seek to understand processes (Denzin & Lincoln, 2013; Gummesson, 2000), which of course this study seeks to do. In fact, Gummesson (2000, p. 35) states, “qualitative (informal) interviews and observation provide the best opportunities for the study of processes”. To that end, qualitative interviews were conducted to explore the program development processes emerging from Voluntary Codes and CBSM and allow for a comprehensive analysis and comparison of the findings.

The following criticisms and challenges associated with qualitative research methods were considered through the research design (see Section 3.5.2 Considerations for details):

- **Politics and barriers to access:** Qualitative research relies on information from individuals and/or organizations, documents and situations which may be blocked due to lack of funding to perform the research or lack of consent to participate from the organization or individuals (Gummesson, 2000).

- **Ethics:** Qualitative research typically involves contact with people and therefore there are concerns about the ethical treatment of the individuals and/or groups who are studied. There are concerns about “harm, consent, deception, privacy, and confidentiality of data” (Punch, 2014, p. 43) which can jeopardize research credibility and findings.
- **Awareness of bias:** There are weaknesses associated with this method, such as bias attributed to question design and response interpretation; inaccuracies of information provided by interviewee; and the concept of reflexivity which states that an interviewee may provide answers that he/she thinks the interviewer wants to hear (Yin, 2016).

### **3.3. Data Collection**

#### **3.3.1 Introduction**

A qualitative study was conducted using informant interviews with individuals who could provide insight into changing behaviour of individuals and businesses. These interviews were used to address the research objectives one and two: to assess the program development frameworks of Voluntary Codes and CBSM identified from the literature review. Interviews were selected as a data collection method because of the ability to focus on the specific topics pertinent to the research study, in fact Yin (2003, p. 89) professes that interviews are “[o]ne of the most important sources of...information”.

#### **3.3.2 Informant Selection**

To select the informants, a matrix (Table 3-1) was created which identified the two fields of study - Voluntary Business Programs (VB) and Social Marketing (SM). This was an intentional decision, to provide additional insights into the findings instead of limiting informants to those with only Voluntary Code or CBSM experience. In addition,

informants represented four different perspectives – Academic (A), Business (B), Consultant/Practitioner (P), and Policy Maker (PM).

**Table 3-1: Informant Selection and Perspective Matrix**

Perspective	Study Area	
	Voluntary Business Programs (VB)	Social Marketing
Academic (A)	X	X
Business (B)	X	X
Practitioner (P)	X	X
Policy Maker (PM)	X	X

The intention was to identify at least one informant from each perspective and study area resulting in a range of theoretical knowledge and practical experience. Within qualitative studies, there are no clear recommendations for an appropriate number of informants, the consensus seems to be “it depends” (Baker & Edwards, 2012) and in fact, Guetterman (2015) recommends based on his research that the number of informants is less important than the selection of the informants themselves. This is supported by Denzin (2012) and Pathas (1995) who suggests that one interview is sufficient, particularly when the goal is not empirical generalization, but rather “uniquely adequate” (p. 50) to fit the case at hand. Therefore, given the exploratory nature of this research and the intention to learn from the unique perspectives of these individuals 14 informant interviews was concluded to be sufficient. The informants were identified based on the knowledge and personal connections (research advisor and researcher) of prominent, appropriate and credible individuals within each field of study and perspective.

Some informants were able to provide insights from multiple perspectives or areas of study (as shown in Table 3-2). For example, two academics in the field of social marketing also have experience as practitioners developing programs and therefore were

able to provide both perspectives. While, the policy maker, was able to speak about both study areas due to his experience developing voluntary programs for business, and behaviour change programs influenced by social marketing. These individuals were able to enrich the research with their understanding of both the practical and theoretical aspects and the realities of developing programs using different models, respectively.

**Table 3-2: List of Informants Recruited for Interviews**

Informant Code	Perspective				Study Area	
	A	B	P	PM	VB	SM
P-VB-1						
B-VB-2						
A/P-VB-3						
A-VB-4						
P-SM-5						
A-SM-6						
B-VB-7						
PM-VB/SM-8						
P-VB-9						
P-VB-10						
P-SM-11						
B-VB-00						
A-VB-00						
A/P-VB-12						
<b>TOTALS</b>	<b>5</b>	<b>3</b>	<b>7</b>	<b>1</b>	<b>9</b>	<b>5</b>

**Acronym Definitions**

- **Perspectives:** A – academic; B – business; P – practitioner; PM – policy maker
- **Study Area:** VB – Voluntary Business Program; SM – Social Marketing

**Informant Code Key:**

- Perspective - Study Area - # (note: “00” indicates not interviewed)
- Multiple perspectives or study areas are separated by “/”

### **3.3.3 Recruitment Approach**

Selected informants were contacted by phone or email to invite them to participate. They were provided a letter that outlined the objectives of the research and confirmed that the research plan had been reviewed and approved by the University of Waterloo Office of Research Ethics (see Appendix A for a sample letter). In addition, the letter included a consent form, which participants were asked to read and sign to confirm their willingness to be interviewed and agree to the terms outlined. In some cases, informants interviewed by phone verbally provided their consent before the interview proceeded.

Informants were assured that their identities would be kept confidential and that they could withdraw from the study at any time. However, informants did agree to anonymous quotes from the interview transcriptions.

To accommodate the researcher's schedule informant interviews were requested in a staggered approach. Six informants were contacted in March 2010; four in May 2010; three in July 2010; and one in August 2010. One of the initial informants was not available for an interview in 2010 and in October 2016 when the research resumed was invited again to participate and agreed; therefore, twelve of the fourteen requested interviews were conducted.

### **3.3.4 Interview Design and Process**

The interviews were designed to follow the format of a guided discussion, using prompts where needed or appropriate. The interview guides were used to ensure that all issues were covered; however, they were not rigidly followed, thereby allowing the interviewer to explore emerging concepts and themes raised by the informant.

Each interview guide was customized for each informant to match their perspective and study area, but they all included three parts: opening; selected themes; and

conclusion. The opening questions were used to put the interviewee at ease and to understand their experience and perspective in more detail. This was followed by theme-based questions selected for the informant’s study area(s) (Table 3-3) and perspective(s) (Table 3-4).

**Table 3-3: Interview Themes based on Study Area**

<b>Study Area</b>	<b>Themes</b>
<b>Voluntary Codes</b>	Role of Voluntary Codes as a Policy Tool Developing Voluntary Codes Motivations and Barriers Contents of Codes (Objective, Standards and Procedures, Monitoring and Reporting, Auditing, Consequences) Administration and Leadership Conditions of Success Implementation Behaviours Contributing Factors to Effective Voluntary Codes
<b>(Community-based) Social Marketing</b>	Practical Limitations Social Marketing in Context Social Marketing compared to CBSM Social Marketing used to Influence Businesses Multiple Behaviours versus Single Behaviours CBSM mechanisms to achieve Successful Voluntary Characteristics

**Table 3-4: Interview Themes based on Informant Perspective**

<b>Perspective</b>	<b>Themes</b>
<b>Business</b>	Drivers and Motivation for Change Spill-over Effect in Practice Implementing Voluntary Initiative
<b>Academic and Practitioner</b>	Program Audience: Businesses versus Individual Policy Options: Regulatory versus Non-regulatory Strategies to Engage Business Opportunities to Influence Businesses CBSM mechanisms to achieve Successful Voluntary Characteristics
<b>Policy Maker</b>	Program Audience: Businesses versus Individual Policy Options: Regulatory versus Non-regulatory

In addition, Discussion Sheets (see Appendix A for a sample) were created and used as a tangible reference during most of the face-to-face interviews. A Discussion Sheet was customized for each informant, included lists and/or tables of the key variables for effective voluntary business programs, including ideal qualities, contents and conditions for success. However, the 2016 interview Discussion Sheet was the Effective Voluntary Program Framework (Figure 2-3). Informants were given the opportunity to write, draw, add or delete items as they felt appropriate.

### 3.3.5 Interviews Conducted

In 2010, fourteen interviews were requested by the researcher. Eleven informants granted interviews, two were unavailable within the original research timeframe, and one did not respond. Five interviews were conducted over the phone, four took place in the informant’s office, and two were in other mutually-agreed-upon locations. All informants were interviewed one-on-one. Each informant provided written or verbal consent to participate in the research and agreed to permit exact quotes to be used in reports generated from the research. In 2016, when the research was resumed, one of the unavailable informants was invited again, and granted an interview. The interview was conducted on-line by using gotomeeting.com.

**Table 3-5: Summary of Informant Interviews Conducted**

Informant	Interview Requested	Interview Conducted	Interview Format		
			In Person	Phone	N/A
P-VB-1	March 11, 2010	May 25, 2010			
B-VB-2	March 11, 2010	May 28, 2010	Office		
A/P-VB-3	March 11, 2010	May 06, 2010	Office		
A-VB-4	March 11, 2010	April 30, 2010	Office		
P-SM-5	March 11, 2010	May 24, 2010			
A-SM-6	May 13, 2010	August 12, 2010			
B-VB-7	May 13, 2010	May 26, 2010			

Informant	Interview Requested	Interview Conducted	Interview Format		
			In Person	Phone	N/A
<b>PM-VB/SM-8</b>	May 13, 2010	May 20, 2010			
<b>P-VB-9</b>	May 13, 2010	May 21, 2010	Office		
<b>P-VB-10</b>	July 28, 2010	August 11, 2010			
<b>P-SM-11</b>	July 28, 2010	August 12, 2010			
<b>SA</b>	July 28, 2010	-			
<b>JC</b>	August 10, 2010	-			
<b>A/P-VB-12</b>	March 11, 2010 October 24, 2016	December 1, 2016		Online call <sup>6</sup>	
<b>TOTALS</b>	<b>14</b>	<b>12</b>	<b>6</b>	<b>6</b>	<b>2</b>

### 3.4. Data Analysis

#### 3.4.1 Recording and Transcribing

All interviews conducted in 2010 were recorded with a digital audio MP3 recorder. The interviews ranged in length from 26 minutes to 95 minutes, with a median length of 55 minutes. The interview conducted in 2016 was recorded by gotomeeting.com. The recording included both an audio (the interview) and video (the screen-sharing) component.

The first three interviews conducted were transcribed verbatim (not including pauses, stammers, and other measures because the level of analysis would not incorporate these measures) by the researcher. The remainder of the interviews conducted in 2010 were transcribed verbatim by one of two recent University of Waterloo graduates hired by the researcher.

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<sup>6</sup> Used the online software gotomeeting.com to connect by voice and to share our screens.

The interview conducted in 2016 was transcribed by a third University of Waterloo graduate. He was provided with samples of the 2010 transcriptions as a guide for expectations regarding the formatting and indicating the elapsed time.

### **3.4.2 Analysis Framework**

The interview transcripts were analyzed using the Deductive Thematic Framework (Table 3-6) based on Figure 2-3: Components of an Effective Voluntary Program Framework presented in the literature review. The transcripts, although originally created in Microsoft Word, were copied into Microsoft Excel for the analysis. All the transcripts were saved into one spreadsheet but in their own individual tab. The name of the speaker was identified in the left-most column, then their comments, with the next columns indicating the Theme and then the Sub-theme as applicable. If the comment did not relate to one of the themes then a “-“ was marked in the column to indicate that it had been analyzed, but did not link to one of the themes.

To ensure consistent use of the themes and therefore the analysis, the researcher created look-up tables (LUT) on a separate tab, using the Themes and Sub-themes. These LUTs were then used to create drop-down boxes in the Theme and Sub-theme columns. Therefore, if a comment related to the “Administration” theme, it would be selected from the drop-down list in the Theme column and the choices in the Sub-theme column would be limited to those associated with “Administration” as shown in the table below.

When a comment was associated with a specific theme, it was marked as noted above, and the most applicable transcription text was bolded. In addition, if the researcher wanted to record additional thoughts she populated the “Notes” column. This ensured that

as she continued to review and examine the transcripts she could build on these notes, which ranged from questions to observing connections.

By using this approach to analyzing the data, the researcher was able to quickly filter and sort the comments to identify emerging trends, including diverging and converging comments.

**Table 3-6: Deductive Thematic Framework**

<b>Theme</b>	<b>Sub-theme</b>
<b>Administration</b>	Secure Funding Leadership Program Review Process Stakeholder Representation Dispute Resolution System
<b>Design Process</b>	Inclusive Transparent
<b>Program Features</b>	Continuous Improvement Reporting Benefits Sharing Resources/Support Performance Standards Verification Consequences
<b>External Conditions</b>	Threat of Regulation Social Pressure Peer (Industry) Pressure

### **3.5. Research Considerations**

#### **3.5.1 Considerations: Time Gap**

A significant limitation of this research is the gap in time between when the research was initiated and interviews conducted relative to when the transcriptions were analyzed

and discussed. The research was paused in fall 2010<sup>7</sup> and resumed six and a half years later in spring 2016. Although in some respects this poses some limitations with respect to the changes in the fields of study; it could in some ways be considered an advantage, with the researcher gaining additional experience and perspective to bring to the analysis of the interview transcripts. In addition, the gap in time permitted a key informant to participate, which provided an important perspective on the research and therefore the conclusions.

### **3.5.2 Considerations: Research Approach**

In Section 3.2 Research Approach, three potential challenges were identified that needed to be addressed in the research design. Therefore, the following paragraphs specify how each challenge was acknowledged and how the research approach minimized the potential impact of these challenges:

#### **Politics and Barriers to Access**

Prospective informants were identified early-on in the planning process and were initially contacted to request participation. Although the issue of gatekeepers did not arise, the names of known persons to the researcher and advisor were used to gain access to the prospective informant.

The unpredictable nature of political impacts was overcome by connecting with prospective informants early-on in the process and to identify any potential conflicts that would impede their ability to participate in the study.

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<sup>7</sup> The research was paused in the fall of 2010 by the researcher for personal reasons; however, when the circumstances changed the researcher contacted her academic advisor in the spring of 2016 to request completing the research. The request was considered and granted because the research question continued to be relevant and provide academic and practical contributions.

### **Ethics**

The University of Waterloo, in 2010, required that all research projects involving humans must submit a research proposal to be reviewed for any potential ethically questionable practices. Ethics approval was required prior to conducting the research. This project was subject to these requirements and received authorization to proceed. Confidentiality will be maintained for all study participants with the exception of Doug McKenzie-Mohr.

### **Awareness of Bias**

To limit the impact of bias in interview question design and analysis the researcher consulted with experienced advisors in preparation for the interviews and throughout the analysis phase to minimize the impact of bias.

## **Chapter 4 Results and Discussion**

### **4.1. Introduction**

This chapter presents the results and discusses the key findings of this qualitative study which sought to assess two approaches from different fields of study: Voluntary Codes and Community-Based Social Marketing (CBSM) to identify the components of effective voluntary behaviour change programs aimed at business and analyze opportunities to enhance the CBSM approach for influencing business behaviours. This chapter is presented in two parts: the first part presents the results from the informant interviews using the deductive thematic framework, identified in the research methods, as the organizational structure; and the second part discusses themes which emerged from the interviews.

### **4.2. Results from Informant Interviews**

The CBSM process can result in programs which effectively influence the environmental behaviours of business. However, it is not without its limitations and challenges as it currently exists and is promoted. What can CBSM learn from the Voluntary Codes field, which in its application focuses entirely on business and in its literature, analyses these programs to identify key components and characteristics of effective voluntary behaviour change programs aimed at business.

This section answers this question with the results of the informant interviews, all of which were analyzed using Table 3-6: Deductive Thematic Framework. In the sub-sections below, based on the four key themes: Administration, Design Process, External Conditions, and Features, the results are presented.

#### **4.2.1 Administration**

The Effective Program Framework identifies four key components for effective program administration: secure funding; transparent dispute resolution system; strong program leadership and an inclusive review process. None of these components are explicitly identified or discussed in the CBSM model; however, McKenzie-Mohr was supportive: “I would suggest that [it] could stay broadly as it is.”

##### **Funding**

Secure funding is critical to the success of programs, especially those which require a consistent effort and sustained presence. This characterizes many behaviour change programs, particularly those which aim to influence the behaviour of business. “If you don’t have funds, you don’t have the people doing what needs to be done. It’s floundering.” (P-VB-1)

Five informants identified the importance of funding throughout the life of the program. At the program development phase, inadequate funding may result in inadequate market research, which creates the foundation for the program and sets the stage for success. “I’m not as worried about money for promoting and communicating as I am worried about money for doing the research.” (P-SM-5)

For one of the informants, the initial funding was critical to get the program established, but he developed his program based on a “social entrepreneurship model” (P-VB-9) to eliminate the reliance on unpredictable grants. And his organization needed to demonstrate they were “financially viable” before some grantors were willing to provide funding. “Ongoing, long-term funding; it’s not just year-by-year. For the program to be successful, we felt that we needed to have multiple year funding commitment.” (PM-VB/SM-8)

However, when the program administration doesn't have a sustainable funding model, then the entire program can be in jeopardy. Funding can be a challenge when it comes to monitoring (A-VB-4) which can impact the program credibility, one of the key characteristics. Therefore, it is important the program is financially viable.

### **Leadership**

Strong program leadership can dramatically impact the effectiveness and longevity of a program. Five informants commented on the impact of leadership on the success of a voluntary program. This could be appropriate regardless of the tools used to influence behaviour change. Therefore, this should be included in the CBSM model.

When it comes to leadership, the informants recognized that often the bulk of the work is left to a few core individuals, as A/P-VB-3 states, "...it always comes down to there's two, three, maybe four people who lead everything and...the bad part about being one of the leaders is you do most of the work." In fact, B-VB-7 noted his concern and cautioned, "You can't leave things to people like me who have full-time jobs to remember to do it."

Therefore, the people in leadership positions need to have the time to do this work, but not only that they need to be the champions. A/P-VB-3 clearly articulated this point: "That's why I stay on...I don't want the program to die and I have to keep pushing it until it's really encoded in the DNA." (A/P-VB-3)

P-VB-1 had a similar insight but from a different perspective: "When [former program administrator] got off the program...there wasn't someone who was absolutely pushing on a day-to-day basis...Now there's not a champion. There are people concerned about [the program], but not championing it to the point of day-to-day and I think [the program] is

floundering.” In addition, he stated, “The program can’t be dependent upon one champion because when they change, the program will invariably fail because it’s not institutionalized.”

### **Review Process**

Regular, formal program reviews are an integral part of continuously improving the program and the standards, whether the review occurs on a continuous basis or an annual schedule. “There is a volunteer committee that is continuously improving it...because of the constant review it just keeps getting better.” (B-VB-2)

B-VB-7 noted their review results in “decisions [being made] about whether the standards are still correct.” It allows the leadership to include new practices and push the industry forward. For example, B-VB-7 indicated that “something that everybody does...is not really worth keeping...it should be changed and something tougher put in.” P-VB-1 emphasized the importance of measures of success and tracking against these measures to monitor the program.

Inclusive review process, the commitment to regularly assess the program with appropriate stakeholders, with the expectation to continually improve the program is appropriate regardless of the tools used. Therefore, this should be included in the CBSM model.

### **Stakeholder Representation**

P-VB-10 linked the inclusion of stakeholders to credibility and legitimacy from the participation of the business community “whether it be partners or sitting on our steering committee or sitting on our project team.” And B-VB-2 noted that their “industry committee [was] made up of government officials, employers, employees and other groups”.

Some of the issues regarding stakeholder representation in the program administration are similar to challenges of an inclusive program design process, for more insights on that, see page 73.

### **Dispute Resolution**

Transparent dispute resolution is important if and when a Voluntary Code is required, but CBSM may identify less expensive and easier methods of influencing business behaviour. Therefore, this particular component is not applicable to all CBSM programs.

Two different perspectives were identified from the two informants who discussed dispute resolution. One who has had experience and clear process and the other who doesn't feel this is necessary.

For B-VB-7, although they have not been required to resolve disputes often, they do have a process to follow when there is a dispute between the verifier and the applicant, although it is unclear how transparent or formal it is. “We take information from both sides...and if I need technical expertise, I will go to [national-level organization] and seek them out to get clarification. Then I will make a choice and I will let the verifier and applicant know.”

On the other side, for an organization which does not offer certification, they feel “there’s no need for any dispute resolution” because the program framework lays out “what the rules of the game are.”

#### **4.2.2 Design Process**

The Effective Program Framework identifies two components to design an effective Voluntary Code: transparent and inclusive process. While these two components are not explicitly identified in the CBSM literature, this section suggests how they may be incorporated. Initially McKenzie-Mohr stated, “CBSM can surely fit within the program design process.” He suggested embedding into that box the CBSM steps: behavioural selection, barrier/benefit research, program development and piloting.

##### **Inclusive**

An inclusive process may be important, but it is complicated in practice and raises a multitude of questions. Questions such as “who should participate?” But beyond that it raises the question about credible input. Seven informants provided insight into this issue.

A-VB-4 identified the underlying challenges of an inclusive design process: “who counts as a stakeholder and are they all equal? And you can categorize anything in a variety of ways. Is this the public? Public has also subdivisions. Do you count each subdivision as one of the equal?”

While A/P-VB-3 acknowledged that it can be a challenge and dismissed it as an excuse to not try: “So if somebody said ‘It is a perfect process’ the answer is probably not, but who cares?”. A/P-VB-3 provided a lot of insight into how he attempts to create an inclusive process which starts with identifying the key stakeholders, but more specifically the “right stakeholders”.

A-VB-4 agrees that some stakeholders are more crucial than others, and that some are more distant. A-VB-4's approach to address this is to start with a "long list...of all our possible stakeholders" and ask "what are the top three or four that we're really focused on? Is it customers? Is it employees? Is it regulators? Is it capital markets and finance people? Whoever it is you figure out who are the top players...whoever it is you make sure their names are in there. Almost in order of importance."

When pulling together individuals to represent your group of stakeholders, A/P-VB-3 seeks out "people who are smart but don't share my opinions" and "thoughtful individuals who are willing to listen". At the end of the day, "it's got to represent a range of people across Canada, a range of disciplines and they've got to be cooperative people."

These characteristics will help with the inevitable challenge that A-VB-4 identified: the need to compromise. "For this to work you would have to have compromises...and they come out with a conclusion that they have all sort of grit their teeth and signed."

But once they have a draft, they invite other groups to provide critical comment on it, including "NGO[s], Canadian task force on churches and corporate social responsibility, Greenpeace, teachers, academics, people from government."

A-VB-4 also cautioned that each case is specific. So the discussion of stakeholders, who is at the table, need to be designed around the specifics of the case: "Any of the things that will work in one case won't work well in another."

For P-VB-9, B-VB-2 and P-VB-10, their process focused less on a broad range of stakeholders and primarily on representatives from their target business community, and in one situation it was exclusively members who provided input. However, they have hired external people to facilitate strategic planning sessions.

There is a connection between the “inclusive” characteristic identified in the Components of an Effective Voluntary Program Framework and “co-creation” concept which is emerging from the social marketing literature. In both cases, the people for whom you are designing a program are participating in the actual design of the program, and this is seen as generating many benefits. However, McKenzie-Mohr cautions, “simply because something is co-creation based does not mean it will lead to good outcomes.”

He is concerned that an inclusive process could be prioritized over “bringing good behavioural science knowledge into the development of our programs.” Because people have a lot of misconceptions about what will work and what will not, based on their personal experience and, without behavioural science knowledge, the temptation to skip the foundational research steps of the CBSM approach may be too great.

Even when behavioural scientists are part of the inclusive program design team, “it is difficult to succinctly present behavioural science knowledge”. So even though it is possible to develop programs through an inclusive process, it also needs to be a rigorous process to ensure that behavioural science knowledge is infused into the program.

McKenzie-Mohr also added that when considering who to involve in an inclusive process, consideration must be given to representation, so that “the voices of those people who are most concerned and the people who are most willing or wanting to be involved” are not the only voices at the table. Therefore, an inclusive process is recommended but with significant caveats.

### **Transparent**

A transparent process is particularly appropriate when a government agency is creating the program. Being clear and communicating with the community about the decision-making process and the research being undertaken allows interested parties to

understand how and why the decisions are made. This will facilitate acceptance of the approach, even if it doesn't directly impact behaviour change.

In the end this topic only emerged with two informants. A/P-VB-3 referenced the impact of transparency in the context of developing an annual report. Although it wasn't part of their program design process, when the report was released, it included a group of the individuals who provided input, what their recommendations were and how the recommendations were addressed or not. "People who wanted to be involved could see how their involvement influenced the program." (P-VB-1)

In addition, P-VB-1 linked transparency with ownership: "They see where they had influence." He described their approach to transparency, which included teaching people about the program, asking for input and then sharing how the comments influenced how the program was developed.

#### **4.2.3 External Conditions**

The Effective Program Framework identifies three external components which improve the success of a Voluntary Code: threat of regulation, social pressure and peer pressure. While these may be conditions conducive to effective Voluntary Codes, they may not be as relevant for a program developed using the CBSM approach. The incorporation of specific behaviour changes, without an overarching program (i.e. Code), may not be impacted by any of these three components. In addition, these components are not necessarily something that the program can influence, but rather may have an influence on the program; for example, the CBSM approach through the barrier/benefit analysis would identify which, if any, of these external conditions would influence the desired behaviour change. Therefore, these may be considered as additional "tools" for the CBSM toolbox.

### **Threat of Regulation**

Seven informants confirmed that knowing the government may step in to regulate an activity or industry was a driver for their action. They provided insight into their concerns about regulation. A/P-VB-3 and B-VB-7 both expressed concern that regulation costs more for the industry. However, B-VB-7 also thought that regulation was more expensive for governments because of the additional costs “to police and then you have to punish. These are the things you have to do. We’re of the opinion that those things are not necessary.”

While B-VB-7 argued, “Because it’s harder for [government] to understand the differences that you have to face.... well we do this every day so we are [in] a better position to identify for government the best practices and...we can help to get our industry to be better and better, and in line with government agendas.”

However, B-VB-2 offered a unique perspective. His industry “saw regulation coming” and accelerated the development of their own program. “We said, ‘If we create this...accreditation program, then at least we’re raising the bar to a level that was beyond anything else in North America.” He indicated that “the thing that was misunderstood is that we always wanted the government to make it mandatory...because it has more credibility.” But by developing the standards, they were able to influence the regulations.

### **Social Pressure**

Social pressure can influence an industry to act to improve their reputation. Social pressure, as A-VB-4 notes, affects leaders within an organization, not just from the market system, but they can be influenced by their personal and professional relationships, such as staff, neighbours, Rotary Club or investment clubmates.

A-VB-4 cautions that social pressure can also be a barrier to change, particularly when you have companies at opposite ends of the spectrum: on one side, you may have a company that is “highly stressed by 15 new demands since Christmas, jobs are insecure” and on the other side “people are...looking for something new and interesting to do.”

Market influences certainly carry weight and can influence change. A-VB-4 indicated the impact of the banks on the ultimate voluntary programs for the chemical industry. “The banks didn’t want to lend them money and then take over some contaminated site.”

Consumers can also influence the actions of an industry as noted by both B-VB-7 and P-SM-5. In fact, P-SM-5 claims, “The best way to influence business practices is to have the consumer be the one who is actually choosing by where they buy and what they buy. They are actually voting with their feet and with their dollars.” Even when we think of “consumers” as tenants this can have a big impact states B-VB-7: “The market had driven our members to look for ways of telling their tenants that they are doing environmentally responsible things. We are filling that need for them.”

### **Peer Pressure**

There was only one specific reference to peer pressure and it was from P-SM-5, in the context of a CBSM tool she could use as a benefit to influence a business: “increase their business or steal market share from the other guy”.

#### **4.2.4 Features**

The Effective Program Framework identifies seven features of effective Voluntary Codes: achievable performance standards; individual benefits; technical resources and support; requires continuous improvement; mandatory reporting; verification process (audit); and consequences for non-compliance.

Ironically, while this is the quadrant of the Effective Program Framework and Voluntary Code literature that is the most prescriptive and instructive about effective Voluntary Codes, this is the quadrant that Doug McKenzie-Mohr had the most difficulty with for those very reasons. If the strength of CBSM is rooted in its flexibility - its approach to match behaviours, audiences, barriers and benefits with tools that will maximize behaviour change - then this list of features seems restrictive and presumptuous.

So, if CBSM identifies that a Voluntary Code or certification process is the best way to influence a desired collection of behaviours, then this list of features would be appropriate. But in the absence of a rigorous, authentic CBSM research-oriented approach, these features are functionally irrelevant. As McKenzie-Mohr asked, “If you want to get people in a business setting to turn off computer equipment, do you really need mandatory reporting? Do you need a culture of sharing? Do you need a verification process? Or do we simply need prompts that are also commitments?”

The program features section of Figure 2-3: Components of an Effective Voluntary Program Framework had the greatest divergence with the CBSM approach, as McKenzie-Mohr stated, “I’m always a little bit anxious about pulling out program features and specifying them.” And he explained the source of concern, “I think that type of thinking can actually lead us to designing programs that are more complicated or expensive than they have to be.”

It became apparent that from his perspective, that he considered the listed program features as “tools” that could be effective when aligned with the corresponding barrier or benefit. He felt that listing the program features was presumptive, “The barriers to behavioural change are so behaviour specific that to imagine that there is a broad range of things that have to be done to foster any specific behavioural change does not match the literature.”

### **Continuous Improvement**

Five informants indicated that the expectation of continuous improvement is embedded into their programs. A/P-VB-3 concedes that it’s “not an absolute measure, it is ‘are we getting better or worse?’”.

P-VB-10 sees continuous improvement as a benefit to get more “companies around the table” and that they can “start at any level”. For his program, he notes, they help companies meet their own internal goals and do not require members to reach specific targets. This approach was echoed by P-VB-9.

Whereas B-VB-7’s program, which does certify and test to specific standards, has a three-year cycle, which he claims “encourages them to do better the next time they certify”. And as mentioned in the Administration-Review Process theme, their program standards are reviewed regularly and revised to push the industry to better practices.

For B-VB-2's program, to maintain certification, members must attend education sessions to demonstrate continuous improvement.

### Reporting

Only three of the informants mentioned reporting as part of their program. However, within these three responses there were divergent approaches: A/P-VB-3 and P-VB-9 advocate for clear, transparent reporting, while P-VB-10's program, tracks the efforts of companies based on meetings, it does not require formal reports from the companies.

For A/P-VB-3, the reports are an important instrument to disclose “the good news with the bad news. You've got to talk about fines, accidents, missed targets...though you do start with the positives and lead into the negatives, outstanding challenges, here are the reasons why and here is what we are going to do about it.” He advocates for clear reporting because from a reputational perspective, “it's the cover up that kills you.”

For the program P-VB-9 administers, he sees the reporting as critical for accountability in the absence of regulatory accountability because the “companies are still going to the community. And we're publishing in the Record and on our website these commitments.”

### Benefits

Five informants identified various benefits of participating in voluntary programs and each identified multiple benefits. These four benefits were identified consistently and although they may be mutually-reinforcing, or as A-VB-4 described “have multiple positive spill off effects”, they were mentioned as distinct benefits:

- **Good for Business:** All five informants confirmed that participation must always make business sense, so demonstrating the business case or the business proposition is critical.

- **Building a Legacy:** All five informants mentioned legacy building in some capacity, although the phrasing ranged from: “getting recognition for work already doing”, “saving the world”, and “doing the right thing”.
- **Enhancing their Reputation:** All five informants agreed that how the company was perceived was a driver for participation. So whether it was protecting their reputation relative to their industry or their brand in the eyes of customers or clients, enhancing their reputation is important.
- **Engaging Employees:** Three of the five informants specifically identified the benefits of happy and engaged employees as a significant benefit to participating in voluntary programs. In fact, A/P-VB-3 recalled a conversation in which he had identified the above three benefits and the president and CEO of a large international corporation responded, “You know what, it’s none of those. The number one is employee engagement. I believe by doing this...our employees will be happier and want to come to work, will be more productive, and we will have lower turnover.”

### Sharing

Two informants discussed sharing as part of their programs. For P-VB-10, this was an effective part of the program, whether it was demonstrating installed projects or facilitating sessions for companies in an industry facing common problems. However, B-VB-2’s program included a formal mentorship component, which he admitted, “sounded great, but it just didn’t work.”

### Resources

Two informants shared the types of resources that participants can access through their programs, including educational forums, technical workshops, and reduced rates on training.

### Verification

Five informants discussed verification (including enforcement) within their programs, which ranged from the absence of any form of verification to mandatory three-year audits.

- **No verification:** P-VB-9's program does not audit because they have commitment-based targets. They rely on self-reports, which are also not confirmed.
- **Community monitoring:** As A-VB-4 suggests that "using the people who care most" to monitor. This may be effective when there isn't funding for an audit process.
- **Audit some companies:** PM-VB/SM-8 explains his understanding of verification, "you don't have to be 100% enforcement, you just have to have enough to demonstrate to the community that you're enforcing it...so you can set your own thresholds about how much to enforce."
- **Audit all companies every three years:** To get rid of "free riders", A/P-VB-3's program requires all member companies' performance to be audited every three years.

While P-VB-1 emphasized the impact that verification and enforcement can have on a program: "You need systems in place to catch [the bad actors] ...there's got to be an audit program. [...] you need to go out and visit these guys and do a proper audit. You can't just do a desk top monitor."

### Consequences

Six informants discussed consequences to non-compliance in their programs and as in verification; there was a range of responses:

- **Embarrassment:** For both A/P-VB-3 and P-VB-9, although there are no sanctions or penalties associated with non-compliance, the consequence of non-compliance is being embarrassed and damaged reputation within their industry and/or community. As A/P-VB-3 explains, “If they’re not meeting the standard...they have to respond to it. If they don’t respond satisfactorily, it goes up...to the board of directors which will never happen because there is no president and CEO that’s going to sit there being embarrassed by 29 other presidents and CEOs.”
- **Removal from program:** For B-VB-2, if there are three unresolved issues, then the company is removed from the program. When issues are raised, there is a process to deal with them, but if a company chooses to not address them, they no longer have access to the benefits of the program. P-VB-1 agreed that there needs to be a process to remove “bad actors” from the program
- **Regulation:** A-VB-4 raised this as a potential consequence from a public policy perspective, for example, if an industry sector is not sufficiently participating in the voluntary program, then regulation may be the consequence.

### 4.3. Findings

Assessing the CBSM approach and its mechanisms to achieve the components of effective voluntary behaviour change programs aimed at business revealed that CBSM is well-positioned to influence the voluntary business behaviour changes. The supporting arguments are discussed in this section in five parts.

The first part demonstrates how the CBSM approach, as a flexible approach, could identify a Voluntary Code as the appropriate mechanism, but depending on the desired behaviour change may result in another approach. The second part discusses how active the CBSM field continues to be and how known it is beyond social marketers. Part three examines how CBSM is able to address both business as an entity and as groups of individuals to influence change. While part four examines how CBSM can address the complexities of business operations by grouping behaviours. Finally, the discussion wraps up with an examination of the obstacles facing CBSM when it comes to effectively influencing voluntary business behaviour change.

#### 4.3.1 CBSM could lead to a Voluntary Code

CBSM's research-based approach to selecting tools to influence behaviours could lead to a Voluntary Code, but may also identify tools which may be less complicated or expensive to implement and administer (A/P-SM-12). Voluntary Codes may, in some cases, be an unnecessarily complicated approach to achieving the desired environmental business behaviour changes. The following excerpt from the interview with A/P-SM-12 provides additional context:

*Leanne: One of the challenges, having worked with businesses around a certification-type program, is then how to make it rigorous and desirable for businesses to participate and one of the things I am taking away from our conversation today is, depending on the behaviour change, that*

*certification is less important if you go through that rigorous [CBSM] process there may be more effective ways to change that behaviour.*

**A/P-SM-12:** *Or there might be simpler or less costly ways. Having said that I am a pretty strong advocate in my workshops of using certification processes as a way to often significantly motivate businesses to change.*

*[...]*

**Leanne:** *So, in that particular instance then if we think about that as a certification program that was used to change behaviour of a certain industry of businesses, when we look back at the program features, does that change your perspective on those or does that stay consistent with what you said before?*

**A/P-SM-12:** *I think it stays consistent because if you know that motivation is lacking on the part of businesses, it does not necessarily say certification. There could be a whole number of different types of ways that we might enhance the motivation. [...] I think we have to look very closely to what the barriers are and the motivations and based on that and try and work through what makes most sense in this particular context.*

CBSM as a program development model is a framework: a framework which provides constraints and guidance in the form of a process, and yields flexibility to create a customized program to achieve the desired outcomes. When the CBSM process is followed systematically – behaviours selected, target audiences identified, barriers and benefits analyzed, behaviour change tools chosen – effective programs are developed. Not only are the developed programs effective at changing the specified behaviours, but they can also be less expensive to implement and administer.

One of the strengths of CBSM, according to A-SM-6: “The big advantage is that it works.” And he continued, “If you go through this process: if you identify a specific behaviour, if you focus on a target population, if you look at barriers and benefits, if you develop it using tools of change, and if you evaluate it. It works. I mean that is really the big thing.”

A/P-SM-12 confirmed the perspective found in the literature and articulated in many of the informant interviews: “One of the strengths of CBSM is that it’s a process. It’s not telling people what to do. It’s...a process that [people] can use to work out what they need to do” to achieve behavioural change objectives. In the absence of a systematic process, program staff may select ineffective and/or unnecessarily expensive approaches to encourage behaviour change.

Without a clear understanding of the audience or their barriers to engaging in the activity, program staff may default to methods that may not get the attention of the target audience or be appropriate for the behaviours required to change. This could lead to complicated and ineffective programs. There may be less expensive options, which are more effective at achieving behaviour change. Therefore, using the Voluntary Codes approach without assessing other approaches could lead to developing an unnecessarily complicated, expensive approach which may not be effective at influencing the desired behaviours (A/P-SM-12).

#### **4.3.2 CBSM is an international brand and is known beyond social marketers**

CBSM, as a framework for developing environmental programs, is well known in many countries around the world, but especially in Canada. CBSM continues to be an active field of study with workshops offered internationally, even after 30 years, a community of practitioners and academics actively participating in forums and contributing to the literature. In addition, the interviews revealed that CBSM was known even to those informants not identified as social marketers.

P-SM-11 articulates how widely the CBSM framework is used to modify environmental behaviours, “...tons of people have been through these workshops and from every sector - water, energy, waste, transportation...”. McKenzie-Mohr recalls how it

all got started, “The [National Round Table on the Environment and the Economy] published the first edition of the book, which was sort of this large booklet, and they sponsored me doing five workshops across Canada. And I remember saying to my wife, ‘I really feel I exhausted people’s interest in this topic, at least in Canada.’”

McKenzie-Mohr noted, “I was certainly interested in seeing people get access to knowledge in the social sciences around the program delivery, but to that point everything I had written was in academic journals other than [a] brief article for the Ministry of the Environment. Literally the National Round Table made it possible for me to start getting the word out to Canadians at least.”

Over 30 years after those initial five workshops, McKenzie-Mohr has trained approximately 70,000 people in CBSM workshops throughout the world, and continues to be in demand, demonstrating that people’s interest has not yet been exhausted. And that he has succeeded in introducing practitioners to social science academic research. A/P-VB-12 confirmed that training workshops have been held in the United Kingdom, Ireland, “a couple countries in Europe, but not many”, Hong Kong and pretty extensively in North America, Australia and New Zealand.

A-SM-6 was introduced to A/P-VB-12 in the early 1990s as a doctoral student and less than a decade later was using CBSM for a series of projects funded by the California Environmental Protection Agency. Not only has A-SM-6 used the framework, but he has also conducted workshops throughout the United States to train practitioners, adding to the extent and reach of the CBSM model.

In addition to building capacity throughout the world through training, McKenzie-Mohr has facilitated a community of practice through his website. He acknowledges that the 70,000 registered users could be misleading, when in reality there are approximately

5,000 active users receiving the “daily digest” and approximately 1,000 receiving the “weekly digest”. He is preparing to launch a new version of the site, with additional features to help people connect with each other, specifically those who are working on the same behaviour changes.

CBSM is known throughout the world and not only by academics and consultants, but by practitioners and bureaucrats. With over 70,000 people in many of countries having taken the CBSM workshops taught by Doug McKenzie-Mohr, and countless others who have taken courses with other CBSM experts or in university courses CBSM has become a familiar term and trusted process. Courses are currently offered internationally.

Primarily the people attending training workshops, observed A/P-VB-12, are “mostly municipal and regional...there certainly is a sprinkling of people from provincial, state and federal levels, from NGOs [non-governmental organizations] but as you know, most of the environmental programs in Canada and elsewhere are delivered at the local level.”

So, it was unexpected that five of the seven informants interviewed for their expertise and experience working with businesses and/or Voluntary Codes, were also familiar with CBSM (it wasn't mentioned with the other two non-CBSM informants). Although they didn't have a comprehensive understanding of the nuances, they were familiar with the principles and the steps to program development. The following two factors may have contributed significantly to the name recognition and familiarity of CBSM as a model:

- CBSM had a champion, Doug McKenzie-Mohr, who spread the word through his workshops and networks
- CBSM is well-defined, both in terms of its process and its application, whereas, Voluntary Codes, has a range of definitions, a variety of program development

processes and, at least within Canada, no specific champion ensuring the people who develop programs are familiar with the program development process.

#### **4.3.3 CBSM can address both the business as an entity and as groups of individuals**

All five informants who discussed CBSM as a framework to influence voluntary environmental behaviours from business agreed that it could be effective for influencing business behaviours. P-SM-11 asserted that “in an industrial, commercial, institutional setting, the CBSM message [is] going to be one tool in a tool box that you’re going to use to address a whole range of things going on the facility.” P-SM-11 also suggested that a “collection of similar behaviours” which are repeated across different types of industries could be grouped. Specifically, using CBSM for businesses, identifying similar behaviours found across different facilities is key. “I’m saying it can work very, very well if used as part of a collection of tools and if it’s used...in a really focused, well thought out way.”

##### **Business as entity**

P-SM-5, who primarily approaches behaviour change using the social marketing model, and not necessarily the CBSM framework, discussed how she would try to influence business behaviours. She focused on identifying businesses “that would be most ready for action relative to the behaviour” to establish “some norm and...some peer pressure to jump on board”. P-SM-5 references some of the CBSM tools, which she has alliterated them as “prompts, pilots, pledges and perceived norms” to expand the list of social marketing Ps from four to eight.

A-SM-6, who has extensive experience using and teaching the CBSM framework, acknowledges that businesses “operate under a different set of principles than do individuals”, and specifically identifies that “most businesses...exist under the profit

assumption”. This can make it particularly challenging if you are “asking them to engage in a voluntary action if it comes with a financial cost.”

So essentially the business case, which the informants unanimously agreed is important for influencing businesses, can be established by evaluating the barriers and benefits. Where the benefits (i.e. business case) might include “it’s good for our image or it’s good for our brand and we’ll attract more customers because of it” (A-SM-6).

Regarding the nine characteristics of an effective voluntary business program, A-SM-6 said, “they may or may not be associated with behaviour change and the CBSM approach would say ‘Let’s find out, let’s figure out which of these or if there’s something outside of that that is stopping people or serves as a barrier for people to do this thing.’”

A-SM-6 also indicated that a sustainability program or plan was “fine as an umbrella strategy”, there is still a need to “structure specific activities that target individual behaviours” to achieve success. He emphasizes that once there is an “umbrella strategy”, a series of campaigns targeting specific behaviours over a period of time will have the most impact. And each campaign would be developed following the CBSM principles, by isolating the specific behaviours which will have the highest impacts and probability of change.

However, McKenzie-Mohr does acknowledge that developing CBSM programs for business can add complications and challenges that often don’t happen at the residential level. Even though “at the level of actual program delivery sometimes these things get easier” with business, “at the level of doing barrier/benefit work it can be more complicated.” In addition, McKenzie-Mohr raised concerns about the impact on effectively delivering pilot studies when the target audience is small, which can be the reality when targeting businesses, particularly one sector. He recommends program designers ask

themselves, “How do I select [businesses] randomly and how do we do barrier/benefit research in a way that it doesn’t [contaminate] the pilot stage?”

“Specificity” is how McKenzie-Mohr summarized the challenges. And he adds, “At the business level, if we are not specific enough about who it is that we are potentially targeting, my worry is that we will identify barriers that are not applicable enough” to the sub-groups within the target business groups. For example, small companies with a few employees will have different barriers and benefits compared to large companies with more staff and financial resources.

### **Business as a group of individuals**

Achieving environmental behaviour targets within a company requires the efforts of many individuals within an organization. So, although there are barriers and motivations at the corporate level to commit to changes, the reality is that to effectively implement the changes, the success lies at the individual level. As PM-VB/SM-8 articulates from his experience with implementing a voluntary business program:

*Even within the layered structure of a business, even if you get the CEO or the President on board, you haven’t necessarily got the Board of Directors, you haven’t necessarily got the Chief Financial Officer and you haven’t necessarily got the HR and the unions or the Health and Safety person or anybody else at some level who is actually implementing these programs [...] My understanding is that it needs to be top-down at the same it’s bottom up and if the two aren’t coming at it with the same approach from both ends then it doesn’t work. And that is what we found. We knew the CEO at one company, but the health and safety guy and the guys on the floor you couldn’t influence them enough in order to get them to develop a plan to get back up to him. Or maybe he didn’t have enough interest in doing it. Or usually we knew the Health and Safety Manager or the Environmental Manager and he just had a limited budget and that was it and wasn’t able to think about things in a broader way.*

For example, if the goal is to reduce energy use within an organization, the organization's leadership would commit to specific targets within a defined time period. But to achieve these commitments, it relies on individuals within the organization to change their behaviours. In this example, it could be turning off computers, turning off lights, operating equipment at different times of the day, installing new equipment or any number of other behaviours.

Not only would each of these behaviours have different barriers and benefits, which would need to be considered; but the different groups within the organization (e.g. office staff versus factory staff) would also need to be considered for each behaviour.

P-VB-9, who has a limited understanding of CBSM but works extensively with the business sector, agreed that there is an opportunity to influence behaviours at work, especially "when it comes to employee engagement." From his perspective, "behaviour change at a workplace is very similar to behaviour change at home", recognizing the role of individual behaviour change to achieve the corporate entity behaviour changes.

In fact, McKenzie-Mohr states, "In many, many cases it's easier to change people's behaviour in [work] situations than it is at the residential level." He believes the proximity of people in work environments can improve the impact of "descriptive social norms and social diffusion".

This is one of the strengths of CBSM: to create a customized approach which diminishes the barriers and enhances the benefits of the desired behaviour for each target group. Whereas, the Voluntary Code approach focuses on the corporation as a whole and really at the leadership within the organization. How will they get commitment to achieve specific targets and how to hold the organization accountable? This is why mandatory reporting and auditing are critical components of an effective Voluntary Code.

But when it comes to actually making the necessary changes within their organization once a commitment is made, modifying the behaviour of the necessary staff members there is little-to-no direction.

McKenzie-Mohr believes that there are examples of CBSM working to impact business behaviours, but “they are just not as prevalent or visible” as residential programs. McKenzie-Mohr asserts that if the CBSM process is followed properly and executed diligently, it would lead to effectively influencing the behaviour of businesses.

#### **4.3.4 CBSM Myth-Busted: Behaviours can be grouped**

Business operations and behaviours can vary from business to business, which presents challenges when selecting a behaviour that is equally applicable to a range of businesses and that will result in the desired environmental outcomes. PM-VB/SM-8 articulated this reality: “For the [program name], again, we tried a similar approach dealing with stakeholders, the challenge, with the business group is the range of activities that what they’re doing is so much greater.”

However, this can be additionally complicated, when coupled with CBSM’s recommendation to target “one non-reducible behaviour” (McKenzie-Mohr & Smith, 1999) (McKenzie-Mohr, 2000). So, I asked McKenzie-Mohr how he sees this applying in a business context, where there are potentially multiple behaviours contributing to the problem.

To which he responded, “I would say that is a bit of a misnomer. It is one of the criticisms of CBSM...But I think it is a fair appraisal...given that we know that the barriers and to a lesser extend the motivations are specific to individual behaviour, we have to dig in and understand what those barriers are and motivations to specific actions and develop

unique strategies that target those barriers and benefits. But that should not be misinterpreted as meaning that we are only going after one behavioural change at a time.”

McKenzie-Mohr referenced literature on “decision fatigue” which reveals that people become overwhelmed when there are too many options, suggesting that the maximum number of behaviours to encourage at one time might be five or six.

Grouping compatible behaviours could help reduce this sense of overwhelm: “So when we are going after one-time actions, we are also thinking about what is repetitive that might go along with that. So, if we don’t do that, then people will engage in installing high efficiency showers and take longer showers, or energy efficient lights will get installed in businesses and people will keep the lights on” (McKenzie-Mohr).

To summarize, he stated, “I think that a way to rephrase that is we are focusing on one strategy for each behaviour...so we can focus on more than one behaviour at a time.”

#### **4.3.5 Obstacles CBSM faces when influencing businesses**

CBSM may be well positioned to influence the behaviour of business, because it is well-known, flexible, addresses the business entity and the individuals within it, and can address the complexities of business by grouping multiple behaviours. However, there are some challenges and limitations with CBSM as an approach that need to be considered, acknowledged and addressed for it be as effective as it could at influencing environmental behaviours.

CBSM’s process and adaptability is a strength, but it also contributes to its challenges for a couple of reasons. One challenge or limitation to developing effective programs using the CBSM model, whether for business or not, is following the five-step process. Ironically, the five-step process, is also one of its strengths, but when it is not followed thoroughly, the resultant program is compromised. A/P-VB-12, P-SM-11 and A-

SM-6 identified some of the challenges associated with following the CBSM framework. If the process is followed, it can effectively change the desired behaviours. However, five barriers were identified in the interviews to using the CBSM framework:

- **Lack of Practitioner Focus:** P-SM-11, who has worked with many practitioners, states, “People are busy, so for them to really stop and slow down and focus in on one behaviour that they want to change or one specific project they want to undertake can be very challenging.”
- **Lack of Funding:** P-SM-11 and P-SM-5 both noted that acquiring funding can be a real challenge, particularly for the preliminary and necessary market research.
- **Lack of Understanding of CBSM:** P-SM-11 illustrated this point: “Getting people who haven’t been through the workshops, that may come from an engineering background and not really understand marketing or social psychology, can be really tough...Conversely, if you’re working with people that are in the marketing field, like your communications group...when they hear the term CBSM, all they hear is the term “marketing” and so they think, ‘Well I already know about marketing and...what we do is put ads in the newspapers.’”
- **Easy to Skip Steps:** McKenzie-Mohr asserted that most programs, even those purportedly developed using CBSM principles do “not necessarily involve pure CBSM.” From his experience, he explains, “What we are seeing fairly frequently is that people will simply do step three [develop a strategy]. So, they will think about what are the barriers without doing the barrier/benefit research and they will imagine the type of program they might put in place.” He also stated concern that if people aren’t adequately conducting the foundational research they may select tools which are not cost-effective or even “foolish”. Whereas A-SM-6 identified lack of guidance around the barrier identification component as a barrier to using the

CBSM framework: “I think one area in particular that could use some refinement is around how to identify barriers and how to identify barriers. So, one of the cornerstones of CBSM is that you link your program to identified barriers, but how do you identify those barriers?”

- **Hard to integrate into institutions:** Perhaps part of the reason that program developers skip steps is that CBSM is not yet institutionalized. Although there is a lot of interest in training, “we are a long way away...from any of this being institutionalized.” For his part, McKenzie-Mohr believes that if agencies like Environment Canada and Natural Resources Canada and their provincial counterparts institutionalized CBSM, they could better support “people [who are] designing and delivering behaviour change programs, so that grants basically get written in such a way that you are given the space to do behavioural selection, to do barrier/benefit research and to run pilots...we are a long way from there.”

## **Chapter 5 Summary**

### **5.1. Conclusion**

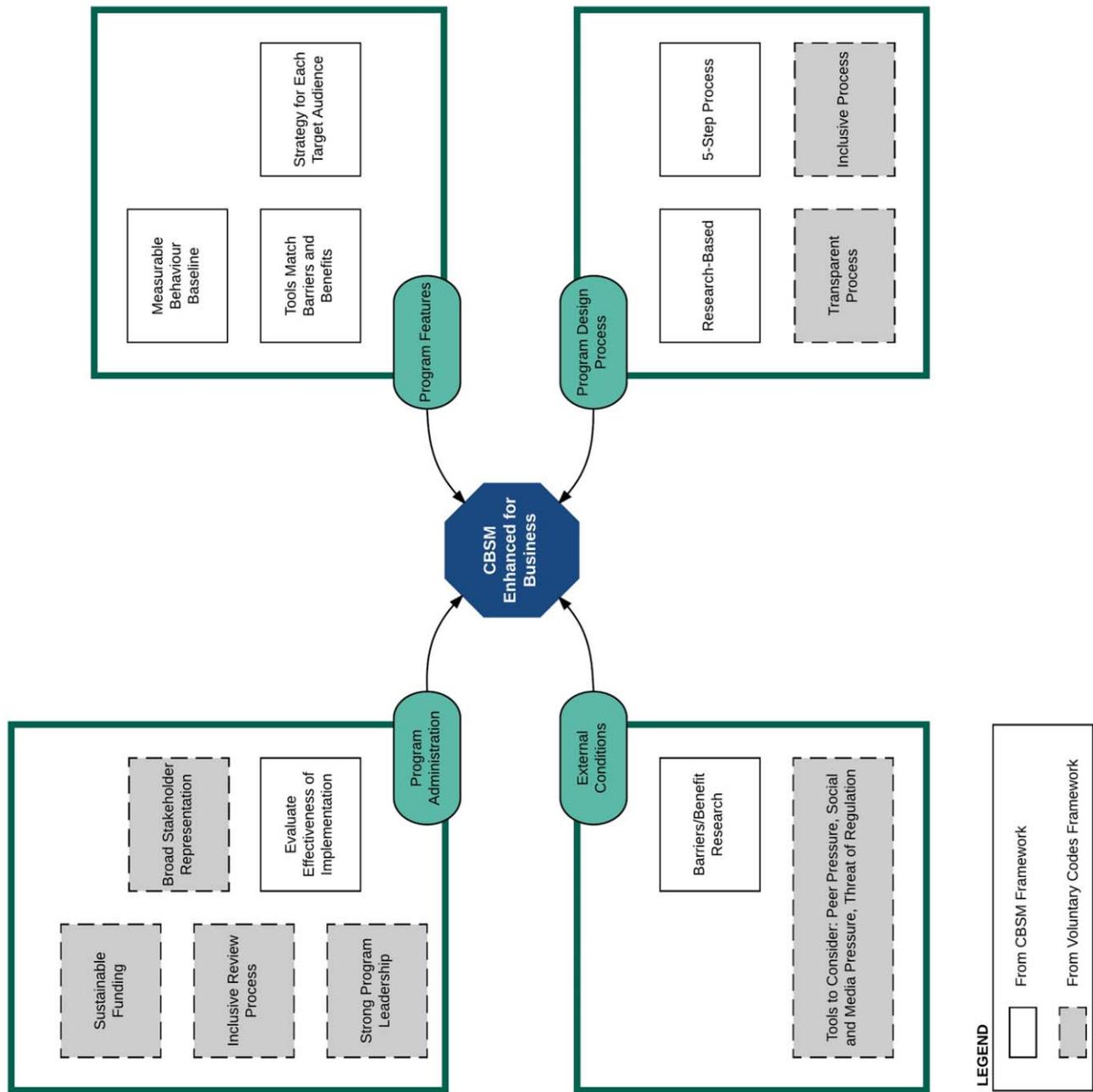
Through this qualitative study, I identified the components of effective voluntary behaviour change programs aimed at business by assessing the Voluntary Codes approach and used this as the basis for assessing the CBSM approach and its mechanisms to achieve these components. Through the analysis of the literature and the informant interviews, I identified that the CBSM approach has mechanisms which may lead to effectively influencing the voluntary behaviour of businesses, such as consequences (barriers). However, there are some components, which are not explicitly part of the CBSM approach, which could be included to further enhance the influence on businesses, for example transparent and inclusive program design processes. In addition, the research revealed that there are some components from the Voluntary Code approach, which are not applicable, including mandatory reporting and dispute resolution, because the CBSM approach may reveal alternate methods to achieve behaviour change. Table 5-1 summarizes the results of the analysis based on the deductive thematic framework.

The informant interviews also revealed key themes which emerged to support CBSM as an approach to influence businesses to voluntarily change their behaviour: CBSM may lead to a Voluntary Code; CBSM is an active field of study and is known beyond social marketers; CBSM can address both the business as an entity and as groups of individuals; and behaviours can be grouped. However, the CBSM approach also has some barriers which need to be considered for it to be used effectively to influence voluntary business behaviours: lack of practitioner focus; lack of funding; lack of understanding of CBSM; easy to skip steps; and hard to integrate into institutions.

**Table 5-1: Summary of Key Lessons from Voluntary Codes**

	<b>Add to CBSM?</b>	<b>Comments</b>
<b>Administration</b>		
Funding	Yes	Important for the success of any program
Leadership	Yes	Need a group of champions
Review Process	-	Already included in CBSM as evaluation
Stakeholder Representation	Yes	Need to be aware of the challenges
Dispute Resolution	Depends	Not applicable for non-Code programs
<b>Design Process</b>		
Transparent Process	Yes	Builds trust and ownership
Inclusive Process	Yes	Need to be aware of the challenges
<b>External Conditions</b>		
Threat of Regulation	Tools	Depending on the barrier/benefit research these may be appropriate tools to use
Social and Media Pressure		
Peer Pressure		
<b>Features</b>		
Standards	-	Already included in CBSM as clear behaviours
Individual Benefits	-	Already included in CBSM as benefits
Consequences	-	Already included in CBSM as barriers
Technical Resources	Depends	Not applicable for non-Code programs
Continuous Improvement		
Mandatory Reporting		
Verification Process		

However, it became clearer through this research that CBSM, in addition to being widely known with a defined program development process, is also well positioned to influence not only individuals, but also businesses, particularly when, as mentioned, voluntary approaches must be relied upon (Koehler, 2007; Lyon & Maxwell, 1999) to achieve environmental objectives. There are many different approaches to encouraging voluntary approaches of new behaviours (Lyon & Maxwell, 1999) and to mitigate the negative impacts on the environment from the collective action of businesses (World Wildlife Fund UK, 2008) it may be worthwhile to consider the components of an enhanced CBSM approach for influencing businesses to undertake voluntary environmental changes (Figure 5-1).



**Figure 5-1: Proposed Components to Enhance CBSM for Influencing Business**

## 5.2. Research Objectives and Contributions

This thesis investigated Voluntary Codes and CBSM approaches to influencing voluntary behaviour change. These two approaches are grounded in different theories and are primarily applied to different audiences: Voluntary Codes to influence business and CBSM to influence individuals. Yet these two approaches seem to have not yet been compared and while CBSM seems to be more widely known with a defined development process, it was not clear how well it considered the complexities of business, whereas Voluntary Codes is less known and is focused on the business context. This led to the following questions: Are there lessons about how to influence business that can be learned from Voluntary Codes? Are these addressed in the CBSM approach or is there an opportunity to enhance it for the business context?

To answer these questions, I pursued the following three research objectives:

- **Research Objective 1:** Identify the components of effective voluntary behaviour change programs aimed at business by assessing the Voluntary Codes approach.
- **Research Objective 2:** Assess the CBSM approach and its mechanisms to achieve the components of effective voluntary behaviour change programs aimed at business.
- **Research Objective 3:** Analyze opportunities to enhance the CBSM approach for influencing businesses to undertake voluntary environmental changes.

The research objectives were addressed using a qualitative methodology relying on informant interviews as the primary source of data collection. The interviews were analyzed using a deductive thematic framework, which was established from the literature review.

The first research objective of the study is addressed in Chapter Two and contributed the original framework to organize the components of effective voluntary behaviour change programs aimed at business.

The second research objective is addressed Chapters Two and Four incorporating findings from the literature and the informant interviews. It resulted in the original framework which arranged the CBSM components into groupings parallel to the Voluntary Codes literature to facilitate comparison.

The third research objective is addressed in Chapters Four and Five with an analysis of the opportunities to enhance the CBSM approach to influence businesses to undertake voluntary environmental changes. This resulted in the summary table and modified CBSM framework, which both identify the additional components to consider when seeking to influence businesses.

The results of this study may benefit practitioners and program development staff, particularly those who are familiar with and have experience using the CBMS approach, who need to influence environmental business behaviour to achieve local environmental objectives.

### **5.3. Suggestions for Further Research**

This research examined two approaches for which there is no evidence in the literature that they have previously been compared. Therefore, there are many opportunities to build on this exploratory research, including, but not limited to, the following four questions which emerged through the course of the study:

- If CBSM is the model used to influence environmental behaviours of business, what are the barriers and benefits that would indicate a Voluntary Code (i.e. certification program) may be appropriate?
- How can CBSM be used to address the barriers to using CBSM discussed in Section 4.3.5 as a program development model (whether influencing business or individuals)?
- In Section 4.3.4 the myth of CBSM's one behaviour approach was busted and accepted that when influencing business in particular, behaviours may need to be grouped. What are the best practices and guidance for packaging and grouping behaviours for business?

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## **Appendices**

### **Appendix A Sample Informant Recruitment Letter**

University of Waterloo

{Date}

Dear {participant's name}:

This letter is an invitation to consider participating in a study I am conducting as part of my Master's degree in the Department of Environment and Resource Studies at the University of Waterloo under the supervision of Professor Jennifer Lynes. I would like to provide you with more information about this project and what your involvement would entail if you decide to take part.

In 2007, the Region of Waterloo launched the Smart About Salt (SAS) program to achieve reduced application rates of de-icing salt on parking lots and sidewalks in an effort to protect the quality of the Region's underground drinking water sources. The SAS program was designed to accredit two sectors: the contractors hired to maintain the property and the owners/operators of the facilities. The program has effectively achieved support from the sector associations and the insurance industry. This support coupled with interest from contractors beyond the political boundary of Waterloo Region has led to the development of a not-for-profit corporation to administer the program within and beyond Waterloo Region.

The purpose of this research is to examine, analyze and define the SAS program development model and compare it with a theoretical program development framework.

**(Stakeholder Paragraph)** Therefore, I would like to include you to be involved in my study. I believe that because you are actively involved in the management and operation of your organization which has been involved in the SAS program, you are best suited to speak to the various issues, such as barriers and motivations to engaging in the behaviours, the level of involvement in the design of the program.

**(Staff Paragraph)** Therefore, I would like to include you to be involved in my study. I believe that because you were actively involved in the development of the SAS program, you are best suited to speak to the various issues, such as program development process.

**(Field Academic/Practitioner Paragraph)** Therefore, I would like to include you to be involved in my study. I believe that because you are prominent in the field of **{social marketing} {corporate voluntary initiatives}**, you are best suited to speak to the various issues, such as program development, critique and analysis.

Participation in this study is voluntary. It will involve an interview of approximately one hour in length to take place in a mutually agreed upon location. You may decline to answer any of the interview questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researcher. With your permission, the interview will be audio recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. Data collected during this study will be retained for five (5) years in a locked office in my supervisor's lab. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at [ldlobe@gmail.com](mailto:ldlobe@gmail.com). You can also contact my supervisor, Dr. Jennifer Lynes at 519-888-4567 ext. 35487 or email [jklynnes@uwaterloo.ca](mailto:jklynnes@uwaterloo.ca).

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I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes of this office at 519-888-4567 Ext. 36005 or [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca).

I hope that the results of my study will be of benefit to those organizations directly and indirectly involved in the study as well as to the broader research community.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours Sincerely,

Leanne Lobe

## CONSENT FORM

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read the information presented in the information letter about a study being conducted by Leanne Lobe and Dr. Jennifer Lynes of the Department of Environment and Resource Studies at the University of Waterloo. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the Director, Office of Research Ethics at 519-888-4567 ext. 36005.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

YES  NO

I agree to have my interview audio recorded.

YES  NO

I agree to the use of anonymous quotations in any thesis or publication that comes of this research.

YES  NO

Participant Name: \_\_\_\_\_ (Please print)

Participant Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_ (Please print)

Witness Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **Appendix B Interview Discussion Sheet Sample**

Please feel free to write, draw, add and delete as much as you like.

**1. Ideal Qualities for Successful Voluntary Initiatives**

- Credible
- Transparent
- Accountable
- Accessible
- Rigorous
- Participatory
- Results Oriented
- Attractive
- Sustainable
- 
- 

DEVELOPING VI	Ideal Quality Link
Equal stakeholder representation	
Funding available for participation	
Circulate drafts for comment to all stakeholder groups	

MOTIVATION	Ideal Quality Link
Ensure there are “private” benefits	
Provide technical resources and cultivate mutual sharing	
Understand and evaluate the motivations for participation	

IMPLEMENTATION	Ideal Quality Link
Program review schedule	
Incremental roll-out	

Please feel free to write, draw, add and delete as much as you like.

CONTENT OF CODES	Ideal Quality Link
<b>Objectives</b>	
Clearly articulated objectives, expectations, obligations and ground rules for all members	
<b>Standards and Procedures</b>	
Performance-based environmental objectives	
Progressive standards (beyond current practices)	
Achievable standards	
Specific performance standards	
Continuous improvement built into standards	
Standards should address stewardship (or life-cycle of product and service)	
<b>Monitoring and Reporting</b>	
Competitor, consumer, community monitoring and reporting mechanisms	
Independently verifiable reports	
Defined reporting schedule	
Publicly available reports	
Post-audit publicly available reports	
<b>Auditing</b>	
Compliance verification system	
Compliance audit schedule	
Trained and credible auditors	
Evaluate the performance-based objectives	
<b>Consequences for non-compliance</b>	
Non-compliance excludes firm from membership and therefore group benefits	
Sanctions or penalties need to be established and enforced	

Please feel free to write, draw, add and delete as much as you like.

ADMINISTRATION	Ideal Quality Link
Strong leadership at the program and company level	
Ongoing participation	
Secure funding	
Representation from all affected stakeholders	
Transparent dispute-resolution system	

**2. Optimum Conditions for Success**

- a. Support from regulatory system/Threat of regulation
- b. VI is appropriate method to achieve goals
- c. Clearly defined roles and responsibilities for stakeholders
- d. Social pressure/Media focus
- e. Potential for high-rate of compliance

## **Appendix C Interview Guide Samples**

{Practitioner - Social Marketing} - Semi-structured Interview

**1. Opening Questions**

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- a. Describe social marketing
  - i. Benefits of this approach
  - ii. Limitations
  - iii. Multiple behaviours vs single behaviours?
  - iv. Familiarity with CBSM? [Leanne - explain why CBSM is focus]
    - 1. Differences in approach
    - 2. Thoughts on CBSM?

**2. Social Marketing applied to Business practices**

---

- a. Experience using SM to change business practices?
- b. IF NO:
  - i. Are you aware of any examples where this has been done?
  - ii. Would your 10-step planning process work if the target audience was businesses and not individuals?
- c. IF YES:
  - i. Differences in the way you approach developing a program for business?
  - ii. Differences between the way you engage a business versus an individual?
    - 1. Motivations versus barriers/benefits?
    - 2. Development team?
    - 3. Strategies?

**3. Social Marketing and qualities and components of a successful voluntary program**

---

- [Leanne - Preamble about VI literature findings about successful voluntary programs]
- a. [Provide list by email]: Comments on this list from a SM or CBSM perspective? (links/connections, different terms)
    - i. Credible
    - ii. Transparent
    - iii. Accountable
    - iv. Accessible
    - v. Rigorous
    - vi. Participatory
    - vii. Results-oriented
    - viii. Sellable
    - ix. Sustainable
  - b. How would you achieve these in a SM or CBSM context?
  - c. Provide list of mechanisms
    - i. Could these or would these come out of a SM/CBSM approach?

**4. Interview Wrap-up**

---

- a. Any other comments?
- b. Are there any questions I should have asked you?
- c. Do you mind if I follow up if I need to?
- d. Others to interview?

{Practitioner - Voluntary Code} - Semi-structured Interview

**1. Opening Questions**

---

- a. **Tell me a little bit about {program name}**
  - i. how and why it got started
  - ii. goals/objectives
  - iii. membership levels - how it works
  - iv. Other “sustainable” initiatives/programs?
  - v. How did you know your program would work? Did you pilot it?
  - vi. How did you select the behaviours?
    - 1. Multiple behaviour vs single behaviour

**2. Understanding business motivations/opportunities to influence**

---

- a. **What has been your strategy to engage businesses?**
  - i. How do you sell it to them?
  - ii. How did you determine how to sell it to them?
- b. **From your experience, what does it take to convince a business to participate? (Who do you need to talk to?)**
- c. **What’s in it for them? Why do they participate?**
  - i. Tell me about the research about their motivations. Can I have a copy of the results?
- d. **What are some of the challenges you face by asking companies to participate voluntarily?**
- e. **Why are companies agreeing to go above and beyond current regulations?**

**3. Qualities and components of a successful voluntary program**

---

- a. **How would you describe the program? [PROMPT IF NEEDED]:**
  - i. Credible?
  - ii. Transparent?
  - iii. Accountable?
  - iv. Accessible?
  - v. Rigorous?
  - vi. Participatory?
  - vii. Results-oriented?
  - viii. Sellable?
  - ix. Sustainable?
- b. **Provide list of qualities**
  - i. Others to add? Remove?
  - ii. Identify top 3 in terms of importance
  - iii. If not included, why not?
- c. **How do you achieve this?**
- d. **Provide list of mechanisms**
  - i. circle the ones that are part of this program
  - ii. if not included, why not?
  - iii. Others to add?

**4. Interview Wrap-up**

---

- a. Any other comments?
- b. Are there any questions I should have asked you?
- c. Do you mind if I follow up if I need to?
- d. Members to interview?