

The Human Factor: The Critical Role of Collaborative Community Engagement and Community-Based Social Marketing in Achieving Sustainable Urban Neighbourhoods

1.0 Introduction

Context – The Sun Holistic Planning Process

The “Sustainable Urban Neighbourhood (SUN) Holistic Planning Process for Developers” (September 2005) sets out a generic methodology for developing a complete and integrated implementation plan for achieving sustainability at the neighbourhood scale. The SUN Holistic Planning Process is now being applied to the Emerald Hills Urban Village pilot project in Alberta, Canada to demonstrate that community sustainability can be achieved for a new “greenfield” urban development.

The authors of the SUN Holistic Planning Process have identified that, while innovative neighbourhood design and “green” technology will be mainstays of a SUN development, fostering sustainable behaviour and collaborative community engagement among future residents is equally fundamental to the long-term success of a sustainable development initiative. Without community buy-in and participation – *the human factor* – a neighbourhood implementation plan, no matter how technically sound or innovative, will have little likelihood of achieving its sustainability goals.

The SUN Holistic Planning Process features a seven-phase approach that a developer can follow to create an implementation plan for achieving neighbourhood-scale sustainability. The process is guided by four *sustainability objectives* (defining the key sustainability outcomes to be achieved) and six *strategic guidelines* that outline the administrative and organizational approach to developing a SUN. Two of the *strategic guidelines* include:

- **Bottom-up collaborative participation** – Fully engaging stakeholders and the future community in a collaborative process to develop, build and create a sustainable community; and
- **Enabling and fostering sustainable behaviour** – applying the concepts and principles of Community-Based Social Marketing to empower future residents to adopt and practice sustainable behaviours in their day-to-day lives.

Purpose of this Paper

This paper is intended as a background resource for both developers and stakeholders who are now engaged (or will become involved) in planning a sustainable community using the SUN Holistic Planning Process. It is specifically designed to build on and enhance the current community engagement and behaviour change components of the existing SUN process, and focuses on application of this process to the Emerald Hills Urban Village project.

Specifically, the purpose of the paper is threefold:

- To define and elaborate on the importance of *collaborative community engagement* in designing a SUN project and in facilitating effective ongoing community engagement once the community has been built;
- To describe the approaches of *Community-Based Social Marketing* and how these methods can be applied to encourage and empower future residents of a SUN community to adopt and practice sustainable behaviours; and
- To recommend how these two key concepts can be applied initially to effectively address the “human factor” in implementing the SUN Holistic Planning Process for the Emerald Hills Urban Village pilot project.

This paper is also designed to build the foundation for future work to recommend specific community engagement and Community-Based Social Marketing approaches and strategies for use in Emerald Hills, and ultimately, to recommend how the SUN Holistic Planning Process can be enhanced based on learnings from this pilot project.

2.0 Collaborative Community Engagement

It is now widely recognized by governments and project proponents alike that citizens can bring important local knowledge, values and vision to new developments, and provide insight into the often necessary tradeoffs required to find balance among environmental, social and economic priorities. Designing liveable and sustainable communities is no longer solely in the bastion of the developer and city planners, but now extends to those who will live and work in these new communities.

Experience from North America, Australia and Europe has also shown that meaningful citizen involvement and participation is fundamental to residents’ perspectives on the functionality and desirability of their communities, and ultimately to longer-term community sustainability. The communities that are the showcases of sustainability have benefited both from community input into their design, as well as the creation of thriving networks that enable participation in community decision processes once these communities have been built.

What is Collaborative Community Engagement?

For the purposes of this paper, *collaborative community engagement* refers to the effective participation of stakeholders and future residents in the community planning and design exercise, including: visioning, goal and objective-setting, technologies and techniques to be used as well as the physical layout and attributes of the community. Once the site is developed, these participants would become key advocates for the community’s successful future. In other words, with the exception of final decision-making, external players would be invited and encouraged to fully participate in all aspects of the work.

Approaches to community engagement vary widely. Selection of the approach depends largely on the type and nature of the project. The following section discusses three

levels of citizen participation and concludes that a collaborative community engagement approach is best suited for Emerald Hills.

Rationale for a Collaborative Community Engagement Process in Emerald Hills

There are scores of examples of community-based planning processes across the Canada that collaboratively engage governments, institutions, economic interests, relevant stakeholders, and the general public in planning for sustainable communities. These examples generally focus on existing neighbourhoods, communities or cities. Often, processes are established when a community is under stress, and are implemented as a means to respond to existing urban issues such as: traffic gridlock; waste management; resource depletion, energy issues; water quality problems; beach closures; air quality, community safety; among others. Other times, communities are engaged in planning for a future state or condition, such as community improvement plans or projects.

With a new “greenfield” community like Emerald Hills, the opportunity for stakeholder involvement is particularly appealing, as it enables stakeholders – some of whom may choose to be future residents – to help shape the “clean slate” and contribute to sustainability plans and processes before the community is built.

Mechanisms to engage communities in planning processes and implementation programs can vary widely. Generally, three levels of engagement can be identified.

Public consultation processes are always proponent driven and inform the public about proposals that have been developed by a government agency or developer and invite comments. Typically, these processes encourage reaction to pre-developed proposals, and invite responses. This approach is usually selected when a proponent is reasonably clear on the direction it wishes to take, and there is little opportunity for members of the public to influence the outcome in a substantive way.

Public participation processes are widely used, and generally rely on the government authority to lead the process and engage participants at specific stages of the project. These processes begin with problem definitions, and assume that their rationale, study approaches and conclusions represent the basis for community agreement. More often than not, these processes become controversial and the issues and differences of opinion are not easily resolved. The values and priorities of the planners or proponents can vary widely from those of the residents and businesses in any given community. Resolutions are frequently obtained by controversial votes at the elected representatives level or worse still, by an arbitration board that has little or no interest in the social, economic or ecological merits of issues and proposals.

Other more progressive processes feature ***collaborative, community-based, participatory planning***, where the proponent (while still the final decision maker) participates fully in the process along with diverse stakeholders who exchange information, explore common ground and negotiate in an attempt to achieve a common perspective and shared outcome. These processes typically begin with the development of a collective vision statement, an understanding of the current context, followed by ‘backcasting’ or strategic planning to achieve the collective vision. As a result of these collaborative, participatory planning processes, the future plan or product generally

reflects the input and vision of many, rather than of a few. Stakeholders are an integral part of the project organization, and have a stake in its outcome.

Some examples of effective, collaborative community-based processes are listed in the table below. For the sake of brevity, the reader is referred to the references for details on each program.

Examples of Collaborative, Community-Based Planning Approaches

- Local Agenda 21 Committees¹
- Atlantic Coastal Action Plan “Sharing the Challenge”²
- Canada’s Model Forest Program³
- Transportation Planning: Context Sensitive Design⁴
- USEPA - Green Communities Program⁵

Support for collaborative community planning appears to be universal in sustainable development projects and programs. An excellent example is found in “Participatory Planning for Sustainable Communities” prepared for the Office of the Deputy Prime Minister, UK.⁶ The findings were based on an extensive review of academic and professional literature and a survey of participatory planning exercises across the globe. A clear message from this paper is that there is a need to recast planning from the traditional “We have a plan, what do you think about it?” to active integration of the aspirations and intentions of other players into the preparation of the plan and its structures for implementation. These processes offer the opportunity to arrive at a shared commitment to the plan and to its implementation.

While these examples exemplify the importance of effective collaborative planning and community engagement between all interests (including governments), and demonstrate how these processes can result in positive action, they are also reflective of how the planning practice continues to evolve across the globe. There are three main reasons for this change, including:

- Public distrust of planning based on past practices leading to expensive and controversial hearings and/or delays or problems with project implementation;
- Governments’ desire to move towards sustainable development thus highlighting the need for improved co-ordination between different sectors (e.g. transport, housing, economic development, environment, etc.), and between different scales of policy and action; and

¹ United Nations Department of Economic and Social Affairs, Division for Sustainable Development – Agenda 21. <http://www.un.org/esa/sustdev/documents/agenda21>

² Environment Canada: <http://www.atlantic-web1.ns.ec.gc.ca/community/acap>

³ <http://www.mf.ncr.forestry.ca>

⁴ New Jersey, Department of Transportation www.state.nj.us/transportation/eng/CSD

⁵ EPA Green Communities. <http://www.epa.gov.greenkit>

⁶ Participatory Planning for Sustainable Communities – Office of the Deputy Prime Minister. <http://www.odpm.gov.uk/index.asp?id=1143436>

- A recognition amongst governments and non-governmental organizations that sustainable development requires consensus building and collaboration with stakeholders and citizens to heighten the prospects for progress towards sustainability.

In Canada, the Prime Minister’s External Advisory Committee on Cities and Communities recently published “Integrated Community Sustainability Planning – A Background Paper”⁷. This paper reflects on the importance of community and stakeholder involvement, and the roles each sector can play in approaching the question of how best to achieve sustainable communities.

In summary, there is a strong case to be made for utilising a collaborative, community-based planning and implementation approach, with an integrative, community-based management and implementation framework. These reasons can be summarized as follows:

- Minimize contentious issues, in particular with regulatory approvals;
- Incorporate/achieve vision of multi-players;
- Incorporate citizen knowledge;
- Build capacity in communities planning for sustainable development;
- More successful, community-buy in for implementation of a sustainable community by meeting the priorities of the public;
- Cost effective in the long run;
- Typical approach in state-of-the art sustainability projects and programs;
- Helps to provide basis for a sustainable community;
- Promotes project legitimacy in the eyes of the citizens, and provide verification of the effectiveness to government actions;
- Good public relations for the developer/proponent partners – enhances the marketability of housing products.

Emerging from this review is that the principal premise underlying “good” sustainable community planning is that the processes are not **problem-centred**, but instead, they are all **mission-directed**. These successful processes all begin with establishing a community-centred vision and plan for the desired future, and include clear and effective methods to measure progress. As a result, excellent, supportable and sustainable results are achieved.

⁷ Prime Minister’s External Advisory on Cities and Communities. Planning for Sustainable Canadian Communities Roundtable. September 21-23, 2005.

General Guidance for An Effective Community Engagement Process in Emerald Hills

The SUN Holistic Planning Process defines a 7-phase process, but lacks a defined organizational framework and specific activities for implementation of this process. As noted earlier, key to success is an integrative organizational framework that includes the proponent working with key sponsors and interest groups from the outset.

The SUN process contains a number of activities relating to stakeholder engagement at various phases. A key component of this is a stakeholder group that is engaged during the process. At this early stage of the process, the scope and extent of stakeholder and community engagement and communications has yet to be defined.

Our research and experience suggests that stakeholders, interest groups and citizens should be engaged at each step of the process. The following Planning Process Roadmap depicts a standard approach to integrative community-based planning. This process roadmap is generally reflected in the SUN process.

Collaborative Planning Process Roadmap⁸

1. Identification and engagement of stakeholders and citizens; Establish inclusive organizational structure

Collaborative Activities:

2. Develop integrated participatory planning process
3. Understand the problem: problem identification, determine “big picture” and goals, establish measures of success, develop indicators
4. Analyze trends – uncovering and analyzing trends and projections
5. Explore design options – seek design solutions to problems, form options, address identified goals and issues
6. Assess impacts – direct and indirect impacts form alternative actions, fiscal, environmental, socio-economic, traffic
7. Choose the best implementation structure
8. Identify Strategies – voluntary activities; local laws; financial instruments; performance standards; growth planning
9. Prioritize options – analysis choose among alternatives
10. Obtain commitments and develop implementation plan
11. Implement plan – utilize implementation tools
12. Monitor and update – set up a monitoring program for goals and review continually

We have set out below a series of preliminary recommended actions to be taken to ensure that the SUN Holistic Planning Process meets its strategic guideline to ensure “bottom-up collaboration participation”. Each step is linked to a SUN phase, and as such, can be readily integrated with the process.

⁸ Adapted from the Orton Family Foundation. <http://www.smartgrowthtools.org>

It is outside the scope of this paper to recommend specific guidance or community engagement mechanisms to the SUN Emerald Hills team at this time. This will be possible after additional best practices research is completed, the SUN stakeholder analysis is applied, and specific engagement strategies have been recommended.

Step 1: Establishing A Collaborative Administrative Framework - Phase 1/2

There is a clear need to establish an integrated community-based organizational framework at the outset to begin work on both the technical and community aspects of the planning process.

Enabling mechanisms for collaborative processes normally rely on the development of a collaborative and cascading administrative structure such as:

- Management Committee – including developer and government partners with assistance from consultants – this committee has overall responsibility for the process;
- Multi-Stakeholder Committee – participates in work planning, establishment of goals/objectives/visions, etc., and provides input and advice and each stage of the process. This committee should be supported by the management committee and its consultants;
- Sub-committees – involving management committee and stakeholders to work on specific tasks or challenges, and reporting through the multi-stakeholder committee to the management committee;
- Public Engagement – conducted through workshops, seminars, and other mechanisms prior to key decisions being made. Results are fed to the multi-stakeholder committee;
- Community Participation – engaging residents, businesses and institutions that live and work in Emerald Hills (once it is built).

To facilitate this, the following activities need to take place:

- Develop mandate and terms of reference for Management Committee and Multi-Stakeholder committee;
- Identify Stakeholders;
- Recruit stakeholders and convene orientation meeting to explore terms of reference, work planning; etc.
- Include in work planning all facets of collaborative process roadmap.

Step 2: Developing a Collaborative Stakeholder and Community Engagement Process – Phase 1/2

Once the multi-party organizational framework is established, and the work planning process is underway, organizers will need to design, develop and implement broad based stakeholder and community engagement and communications plans. In developing these plans the organizers will need to select the most effective tools and techniques from a range of options. Methods used will vary over the duration of the planning and implementation process, and be driven by the goals and objectives of each phase.

A Community Engagement and Communications Plan will need to be developed at the outset of the process. This Plan should contain:

- Overall goals and objectives that are to be achieved;
- Segmentation of work tasks, and identification of engagement and communications requirements geared to specific audiences and their needs;
- Clear definition of integration and linkages between community engagement and Community-Based Social Marketing activities;
- Evaluation mechanism to measure and evaluate the success of each component of the work.

In developing these plans, it is essential to understand what motivates people to participate in developing a sustainable urban community initiative, and to identify the most effective methods of communication. The stakeholder committee is expected to make a significant contribution to this work, along with the CBSM work described in Section 3 of this paper.

Step 3: Selecting Tools and Techniques for Engaging Citizens in Sustainable Urban Neighbourhood Planning – Phases 1/2

The Community Engagement and Communications Plan will need to select from a wide range of tools and techniques and address two key stages:

- Stage 1: Planning for Emerald Hills;
- Stage 2: Living in Emerald Hills

There are a number of typical tools and techniques that can be broadly categorized into three groupings:

- **Participation:** Workshops, seminars, town halls, focus groups, public information centres;
- **Participation and Feedback:** Web-based communications and consultation mechanisms such as e-dialogue, electronic surveys, telephone surveys, etc.;
- **Communications:** Print materials such as posters, newsletters, and flyers.

Each mechanism will need to be “purpose-driven”, and designed to the selected audience, phase of the project, and outcomes required.

Selecting Appropriate Community Engagement Tools

A typical evaluation tool to assist organizers in selecting appropriate tools could address the following questions:

- Does the proposed engagement tool:
 - Achieve the goals and objectives for this phase of the process?
 - Reach out to all those who have or may have an interest in the project?
 - Provide timely and consistent opportunities for meaningful participation and involvement in the planning process?
 - Address stakeholder needs at each stage of the process?

- Enable the proponent to effectively communicate to the audiences, and openly discuss proponent views and community values?
- Enable success to be measured?
- Is the engagement tool:
 - Cost effective?
 - Motivational?
 - Transparent?
 - Accountable?

3.0 Community-Based Social Marketing

The transition to a sustainable future will require sweeping changes in behaviour. For example, residents of Emerald Hills will need to engage in activities as disparate as recycling, planting native species, and purchasing local food. Whether the focus is Emerald Hills or other communities in Canada, sustainability simply is not possible unless we are able to persuade large numbers of individuals and organizations to adopt behaviours that are sustainable.

Information-intensive Programs

Past attempts to foster sustainable behaviour have focused nearly exclusively on providing information. These information-intensive programs are based on the premise that providing information will result in people choosing to engage in behaviour in accordance with their newly acquired knowledge. Such programs are usually based on one of two perspectives on promoting behaviour change.

Attitude-Behaviour Change Approach

The attitude-behaviour change perspective suggests that increasing public awareness of an issue, such as an overburdened landfill, will change attitudes toward an associated activity, such as recycling. Further, it is believed that once attitudes change, behaviour change will follow.

Program managers who subscribe to this perspective provide information to the public through the media, advertising and the distribution of booklets, flyers and/or newsletters. Although a popular approach to behaviour change, a large body of research does not support its effectiveness. For example, in one study householders volunteered to participate in a program on water use.⁹ Each household received a booklet on using water efficiently. Even though the booklet had been well prepared, it did not affect water use. A plethora of other studies have reached the same conclusion – the simple provision of information rarely changes behaviour.¹⁰

⁹ Geller, E. S., Erickson, J. B., & Buttram, B. A. (1983). Attempts to promote residential water conservation with educational, behavioral and engineering strategies. *Population and Environment*, 6, 96-112.

¹⁰ McKenzie-Mohr, D. & Smith, W. (1999). *Fostering sustainable behavior: An Introduction to community-based social marketing*. Gabriola Island, B.C.; New Society.

While changing attitudes and increasing knowledge are often necessary, they are usually not sufficient to cause a change in behaviour.

Economic Self-Interest Approach

While some information-based campaigns attempt to influence attitudes, others emphasize that certain behaviours, such as reducing kilometres travelled, are in a household's economic self-interest. Program managers who base their initiatives on this perspective believe that humans are motivated by financial self-interest, and once presented with such information, will behave in accordance with their new found knowledge.¹¹ Based on this perspective, if motorists are informed that keeping their tires properly inflated will reduce fuel costs, they should promptly change their behaviour. As with the attitude-behaviour change approach, projects based on this perspective have frequently been ineffective. For example, Californian utilities annually spend 200 million dollars (U.S.) advertising the financial advantages that are associated with energy conservation.¹² These campaigns have had little effect upon energy use.

While there is little evidence of information-intensive effectively changing behaviour these approaches are, nonetheless, popular. Multiple reasons exist for their popularity, despite their lack of effectiveness. As suggested by McKenzie-Mohr and Smith, these reasons include the following:¹³

- Often the individuals who deliver environmental programs subscribe to either the attitude-behaviour change or economic self-interest perspectives without realizing their limitations, or they utilize these approaches because they are familiar with them;
- Programs that are delivered using these perspectives are often not evaluated and, as a result, fail to provide feedback regarding the lack of behaviour change that occurred;
- Commercial advertising is ubiquitous. Given its prevalence, it is easy to assume that if the provision of information through advertising works for business it should also work for encouraging sustainable behaviours. Commercial advertising works in large part because the task of the commercial advertiser is substantially easier. Commercial advertising's purpose is to change consumer preferences. That is, advertisements encourage the public to prefer one product, such as a type of vehicle, over another. Changing preferences for products that the public is already interested in purchasing is substantially easier than creating and maintaining a new behaviour, such as walking to work;
- Because of the number of people that information-intensive campaigns reach, these programs are often politically expedient. That is, both governmental and nongovernmental organizations can be viewed by the public as addressing an environmental problem, despite the fact that this method of communication is likely having little or no impact on behaviour; and
- Those who deliver information-intensive programs underestimate the difficulty of

¹¹ Archer, D., Pettigrew, T., Costanzo, M., Iritani, B., Walker, I. & White, L. (1987). Energy conservation and public policy: The mediation of individual behavior. *Energy Efficiency: Perspectives on Individual Behavior*, 69-92.

¹² Pope, E. (1982, December 10). PG&E's loans aimed at poor miss the mark. *San Jose Mercury*, p. 6B.

¹³ McKenzie-Mohr, D. & Smith, W. (1999). *Fostering sustainable behavior: An Introduction to community-based social marketing*. Gabriola Island, B.C.; New Society.

changing behaviour.

Information provision as a method of changing behaviour fails for one simple reason - there are often a number of barriers to behaviour change. Since in almost all cases behaviour change requires more than simply altering an individual's level of knowledge, information-intensive campaigns will continue to be ineffective no matter how carefully they are prepared. To deliver a program that effectively encourages behaviour change necessitates that these barriers are understood and that the program removes these obstacles. Given the limitations of information-intensive programs, program planners have been increasingly utilizing an alternative approach, community-based social marketing.¹⁴ For example, when Community-Based Social Marketing approaches were utilized to reduce lawn watering in Durham Region, residential water use not only decreased by 26%, but this reduction has been maintained for over three years.¹⁵ Similarly, when community-based social marketing was applied to motorists idling their vehicles in Toronto, idling was decreased by 32%, while the length of time that motorists idled for was decreased by a staggering 73%.¹⁶

Community-Based Social Marketing

The effectiveness of Community-Based Social Marketing is due to its pragmatic approach. This approach involves: carefully selecting the behaviour(s) to be promoted, identifying the barriers and benefits to the behaviour(s); designing a strategy that utilizes behaviour change tools to overcome identified barriers and accentuate benefits; piloting the strategy with a small segment of a community; and finally, evaluating the impact of the program once it has been implemented broadly.

Since this approach is the foundation for fostering sustainable behaviour in Emerald Hills, it will be explained briefly and then recommendations will be provided regarding utilizing it.

Selecting Behaviours

Community-Based Social Marketing begins with the careful selection of the behaviour(s) to be promoted. This involves:

- listing all the activities under consideration. It is almost always the case that an objective, such as lowering carbon dioxide emissions, can be accomplished through fostering multiple behavioural changes. The first step is to list these disparate activities (see the following worksheet);
- determining the impact of each of these actions were they to be carried out. As an action can have several impacts, this consideration might involve determining the impact that each action might have upon both health and, for example, CO2 emissions;
- determining whether the behaviour is a one-time action, such as installing a

¹⁴ McKenzie-Mohr, D. & Smith, W. (1999). *Fostering sustainable behavior: An Introduction to community-based social marketing*. Gabriola Island, B.C.; New Society.

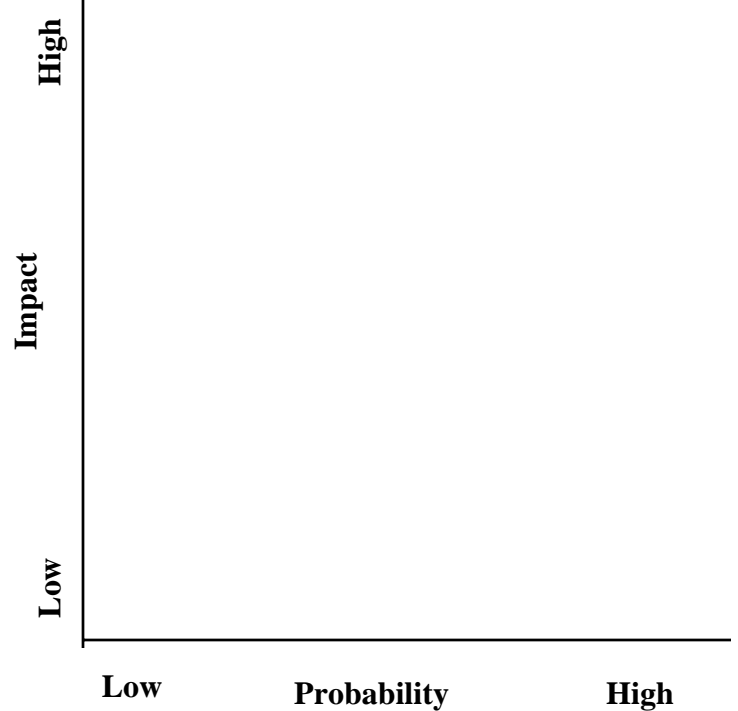
¹⁵ Canadian Mortgage and Housing Corporation (2000). Municipal water-use efficiency brochure. See also Durham Regions' web site at, www.region.durham.on.ca.

¹⁶ McKenzie-Mohr Associates and Lura Consulting (2001). *Turn it Off: Reducing vehicle engine idling*. Report prepared for the Government of Canada's Climate Change Action Fund.

- programmable thermostat or is repetitive, such as composting; and
- determining the probability that individuals will engage in the action.

Selecting Behaviour Worksheet

Specific Activity	Impact(s)
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	
5. _____	
6. _____	
7. _____	



The process set out above for selecting behaviours forces program planners to carefully consider their options before delivering a behavioural change program. Further, it draws attention to the fact that high impact behaviours are not always the most useful activities to promote (e.g., removing a lawn and replacing it with xeriscaping). Frequently, these behaviours have a low probability of individuals engaging in them. As a consequence, their actual impact is often very low. The chart also suggests that at times it may be beneficial to foster a behaviour that has a low impact but a high probability of individuals engaging in the action. Such behaviours can be particularly useful to promote when the public is not yet engaged in an issue, such as climate change. By encouraging the adoption of high-probability behaviours the public will often, as a consequence, become more predisposed to engage in more meaningful behaviours at a later time.

Identifying Barriers and Benefits

If a program is not designed to overcome the barriers that inhibit individuals from engaging in a specific behaviour as well as promote its benefits, it has little chance of success. Barrier and benefit identification normally involves the following:

- conducting a literature search to determine what, if anything, is already known about the barriers and benefits for the behaviour;
- using qualitative methods, such as focus groups and observation, to learn in-depth information about the barriers and benefits; and
- using quantitative methods, such as surveys, to systematically identify barriers and benefits and their relative importance.

Once the barriers and benefits for a behaviour have been determined, a Community-Based Social Marketing strategy is devised that removes the most important barriers and amplifies the benefits.

Tools of Behaviour Change

Research in the social sciences has identified a variety of tools that are effective in promoting behavioural change, especially when used in combination with one another to overcome identified barriers and amplify benefits.

Commitment. When an individual agrees to a small request, such as placing a sticker on their window pledging to not idle their vehicles, the impact is often dramatic. For example, when individuals who had an audit done of their homes agreed to have their names published in the newspaper, a year later they were using on average 15% less natural gas and 20% less electricity (householders who received an identical audit but were never asked to have their names placed in the newspaper did not reduce their energy use).¹⁷

Prompts. An effective way to prevent people from forgetting about sustainable behaviours is to use visual or auditory aids that are presented in close proximity to the behaviour to be promoted. For example, when prompts were placed on store shelves in front of products that had recycled-content, the purchase of these items increased by 27%.¹⁸

Norms. When people observe others behaving in environmentally responsible ways, such as taking household hazardous waste to a depot for proper disposal, they are more likely to do the same. Despite the fact that norms often have a powerful impact on behaviour, few programs have stressed the development of community norms that support sustainable behaviour.¹⁹

¹⁷ Shippee, G. E., & Gregory, W. L. (1982). Public commitment and energy conservation. *American Journal of Community Psychology*, 10, 81-93.

¹⁸ Herrick, D. (1995). Taking it to the stores: Retail sales of recycled products. *Resource Recycling*.

¹⁹ Aronson, E., & O'Leary, M. (1982-83). The relative effectiveness of models and prompts on energy conservation: A field experiment in a shower room. *Journal of Environmental Systems*, 12, 219-224.
and Cialdini, R.B., Reno, R.R., & Kallgren, C.A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social*

Communication. Effective communication can mean the difference between a successful and an unsuccessful program. Some elements of effective communications involve capturing attention, tailoring the message to the audience to whom it is being delivered, and using credible spokespersons to deliver the message.

Incentives. When motivation to engage in a sustainable behaviour is low, incentives can have an enormous impact. For instance, in many communities the introduction of user fees has doubled recycling capture rates.²⁰

Convenience. When activities are made convenient they are far more likely to be carried out. For example, curbside organic collection in the Halifax Regional Municipality has resulted in participation rates above 80%.²¹ Emerald Hills will provide many opportunities to ensure that activities, such as recycling, are as convenient as possible.

Design and Evaluation

Effective programs systematically remove the most important barriers by using tools such as those described above. Once a community-based social marketing strategy has been designed it is scrutinized with focus groups and then piloted on a small scale. Conducting a pilot ensures that a program is effective before it is implemented broadly.

Community-Based Social Marketing Recommendations

Based on the process of Community-Based Social Marketing, the following recommendations are provided:

- That behaviours to be *potentially* promoted in Emerald Hills are first listed and then charted based upon information regarding their impacts and probability. Information regarding the probability of individuals engaging in a behavioural change are best ascertained from case studies from other communities;
- The long list of potential behaviours is culled based upon the intersection between probability and impact. While normally behaviours would be selected that are both high in probability and impact, behaviours may be chosen that are high in probability and low in impact when the behavioural change serves as foot-in-the-door to more meaningful changes at a later time;
- Research is then conducted on the selected behaviours to determine the barriers and benefits. In some cases this will involve a literature review when the activity is already well understood. In other cases, it will involve using a combination of the research tools set out above;
- When the efficacy of a behavioural strategy is unknown, it is piloted prior to being implemented throughout the community.

Psychology, 58, 1015-1026.

²⁰ Recycling Council of Ontario (1996). Implementing garbage user fees in Ontario. Toronto, ON: Author.

²¹ McKenzie-Mohr Associates (1996). *Halifax Regional Municipality Organic Cart Demonstration Project Survey Report*. Report prepared for the Halifax Regional Municipality.

4.0 Summary

In existing communities, past decisions dramatically impact the number of barriers that exist to fostering sustainable behaviour. For example, a lack of safe sidewalks dramatically impacts the number of children who walk and bike to school. In these cases, those trying to encourage sustainable behaviours have to cope with failures in initial planning that are often difficult, if not impossible, to overcome. The Emerald Hills Urban Village sustainable urban neighbourhood provides an unique opportunity to consider and systematically remove barriers to behavioural change during the design process before people move into a community. Decisions with respect to facilitating energy efficiency, modal transportation shifts, waste reduction, water efficiency, etc. are all best made before the neighbourhood is built. To this end, Community-Based Social Marketing can play a crucial role in ensuring the success of SUN developments in achieving their sustainability goals with Emerald Hills serving as a test case for future intentional communities.

In addition to fostering sustainable behaviours among community members, another important ingredient in achieving sustainability at the neighbourhood level is community engagement. Experience from North America, Australia and Europe has shown that meaningful citizen involvement and participation is fundamental to residents' perspectives on the functionality and desirability of their communities, and ultimately to longer-term community sustainability. Positive and effective engagement of future residents of the new Emerald Hills community is essential to the success of the pilot project. As such, it is important to plan for and integrate *both* community-based social marketing and community engagement approaches in developing and implementing the Emerald Hills pilot project.