



# Fostering Sustainable Behavior

COMMUNITY-BASED SOCIAL MARKETING

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### Preface

This online book details how to uncover the barriers that inhibit individuals from engaging in sustainable behaviors. Further, it provides a set of “tools” that social science research has demonstrated to be effective in fostering and maintaining behavior change. Each of these tools in and of its own right is capable of having a substantial impact upon the adoption of more sustainable behaviors. Collectively, they provide a powerful set of instruments with which to encourage and maintain behavior change. This online guide also details how to design and evaluate programs. The strategies detailed here, and the methods suggested in order to implement and evaluate them, form the basis of an emerging field that I refer to as “community-based social marketing.”

Community-based social marketing draws heavily on research in social psychology which indicates that initiatives to promote behavior change are often most effective when they are carried out at the community level and involve direct contact with people. The emergence of community-based social marketing over the last several years can be traced to a growing understanding that programs which rely heavily or exclusively on media advertising can be effective in creating public awareness and understanding of issues related to sustainability, but are limited in their ability to foster behavior change.

This guide will provide you with the information you need to incorporate community-based social marketing techniques into the programs you design. After reading this online book, you will have a new set of tools at your disposal which you can use to create effective community programs to foster sustainable behavior. This book is available for purchase from McKenzie-Mohr Associates.

We would like to acknowledge the contributions that many authors have made to the ideas that are expressed in this book. We have been particularly influenced by the writings of Gerald Gardner and Paul Stern, Stuart Oskamp, Deborah Winter and Eliot Aronson. We would also like to acknowledge the contributions that other authors have made to our thinking. A partial listing of these individuals includes: Shawn Burn, Robert Cialdini, Mark Costanzo, John Darley, James Dyal, Scott Geller, Marti Hope Gonzales, William Kempton, Wesley Schultz, Clive Seligman, Neil Wolman, and Ray de Young. You can find references to their work in the references section of the book as well as by conducting a search of the articles database. You may also find of interest two excellent books. For an indepth introduction to environmental psychology, see Gerald Gardner and Paul Stern’s book, “Environmental Problems and Human Behavior” published by Allyn and Bacon. For a fascinating introduction to social marketing and its application to social change, see Alan Andreasen’s “Marketing Social Change.”

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## Introduction

When my wife and I moved to Fredericton in 1993, we bought a composter for our backyard. During our first summer and fall in our new home we fed the composter diligently. However, by January a snow drift three feet deep stretched from our back door to the composter. I started off the month with good intentions, shoveling a pathway or trampling down the snow with a pair of winter boots that reached nearly to my knees. But by late January, when the temperature dropped to minus 30°F, I had had enough, and despite my good intentions, the organics ended up in the garbage can at the curbside. My environmental transgressions extend beyond seasonal composting. During the spring, summer and fall I bike to work. However, in the winter, which in Fredericton stretches from November through to early April, I take the taxi. I know that automobiles are a principal source of the carbon dioxide emissions that lead to global warming, so why don't I walk to work or take the bus? To walk to work takes approximately 30 minutes. While the exercise would be good for me, I would rather spend that time with my family. As for the bus, there is no direct bus route from our house to the university - making it slower to take the bus than it is to walk. Finally, the taxi costs only marginally more than bus fare, making it an even easier choice to take the taxi. While I am concerned about the possibility of global warming, my behavior for six months of the year is inconsistent with my concern.

These two anecdotes illustrate the challenges faced in making our communities more sustainable. Composting can significantly reduce the municipal solid waste stream, but only if people elect to compost. Mass transit can reduce carbon dioxide emissions, and urban air pollution, but only if people leave their cars at home and take the bus or train instead. People play an equally critical role in many other sustainable activities. Programmable thermostats can reduce home heating costs and also carbon dioxide emissions, but only if people install and program them. Water efficient toilets and low-flow shower heads can significantly reduce residential water use, but only if people have them installed. The purchase of environmentally friendly products can significantly affect our environment, but once again, only if people elect to alter their purchase habits.

### Information-Based Campaigns

Most programs to foster sustainable behavior rely upon large-scale information campaigns. These campaigns are usually based on one of two perspectives regarding changing behavior. The first perspective assumes that changes in behavior are brought about by increasing public knowledge about an issue, such as decreasing landfill capacity, and by fostering attitudes that are supportive of a desired activity, such as recycling. Accordingly, programs based on this perspective attempt to alter behavior by providing information, through media advertising, and frequently the distribution of brochures, flyers and newsletters.

### Attitude-Behavior Approach

Is it warranted to believe that by enhancing knowledge, or altering attitudes, behavior will change? Apparently not. Numerous studies document that education alone often has little or no effect upon sustainable behavior.

Here are several examples:

- In response to the energy crisis of the 1970s, Scott Geller and his colleagues studied the impact that intensive workshops have upon residential energy conservation.<sup>(1)</sup> In these workshops, participants were exposed to three hours of educational material in a variety of formats (slide shows, lectures, etc.). All of the material had been designed to impress upon participants that it was possible to significantly reduce home energy use. Geller measured the impact of the workshops by testing participants' attitudes and beliefs prior to, and following, the workshops. Upon completing a workshop, attendees indicated greater awareness of energy issues, more appreciation for what could be done in their homes to reduce energy use, and a willingness to implement the changes that were advocated in the workshop. Despite these changes in awareness and attitudes, behavior did not change. In follow-up visits to the homes of 40 workshop participants, only 1 had followed through on the recommendation to lower the hot water thermostat. Two participants had put insulating blankets around their hot water heaters, but they had done so prior to attending the workshop. In fact, the only difference between the 40 workshop participants and an equal number of non-participants was in the installation of low-flow shower heads. Eight of the 40 participants had installed them, while 2 of the non-participants had. However, the installation of the low-flow shower heads was not due to education alone. Each of the workshop participants had been given a free low-flow shower head to install.
- A study conducted in the Netherlands revealed that providing households with information about energy conservation did not reduce energy use.<sup>(2)</sup>
- High school students who received a six-day workshop that focused on creating awareness of environmental issues were found in a two-month follow-up to be no more likely to have engaged in pro-environmental actions.<sup>(3)</sup>
- Households who volunteered to participate in a ten-week study of water use received a state-of-the-art handbook on water efficiency. The handbook described wasteful water use, explained the relationship between water use and energy consumption, and detailed methods for conserving water in the home. Despite great attention being paid to the preparation of the handbook, it was found to have no impact upon consumption.<sup>(4)</sup>

The above studies document that information campaigns that emphasize enhancing knowledge or altering attitudes frequently have little or no effect upon behavior. The following studies provide further evidence of the ineffectiveness of this approach. If increasing knowledge and altering attitudes result in behavior change, we should expect measures of attitudes and knowledge to be closely associated with behavior. As shown below, however, there is often little or no relationship between attitudes and/or knowledge, and behavior.

- A survey of participants in a voluntary auto emissions inspection revealed that they did not differ in their attitudes toward, or knowledge regarding, air pollution compared to a random sample of individuals who had not had their car inspected.<sup>(5)</sup>
- When some 500 people were interviewed and asked about personal responsibility for picking up litter, 94% acknowledged that individuals bore a responsibility for picking up litter. However, when leaving the interview only 2% picked up litter that had been "planted" by the researcher.<sup>(6)</sup>

- Two large surveys of Swiss respondents found that environmental information, knowledge and awareness were poorly associated with environmental behavior.<sup>(7)</sup>
- In one study, individuals who hold attitudes that are strongly supportive of energy conservation were found to be no more likely to conserve energy.<sup>(8)</sup>
- An investigation of differences between recyclers and non-recyclers found that they did not differ in their attitudes toward recycling.<sup>(9)</sup>

While environmental attitudes and knowledge have been found to be related to behavior, frequently the relationship is weak or nonexistent. Why would attitudes and knowledge not be more strongly related to behavior? Consider the two anecdotes with which I began this chapter. I have attitudes that are supportive of both composting and alternative transportation. Further, I am relatively knowledgeable on both of these topics. Nonetheless, in both cases another factor, inconvenience brought on by winter, moderated whether my attitudes and knowledge were predictive of my behavior. In short, a variety of barriers can deter individuals from engaging in a sustainable behavior. Lack of knowledge and unsupportive attitudes are only two of these barriers.

### Economic Self-Interest Approach

The second perspective assumes that individuals systematically evaluate choices, such as whether to install additional insulation to an attic or purchase a low-flow showerhead, and then act in accordance with their economic self-interest. This perspective suggests that in order to affect these decisions, an organization, such as a utility, need only provide information to the public that something is in their financial best interest and consequently the public will behave accordingly. As with information campaigns that focus on altering knowledge and attitudes, efforts that have concentrated on pointing out the financial advantages of a sustainable activity, such as installing a low-flow shower head or adding insulation, have also been largely unsuccessful. Here are two examples:

- Annually, California utilities spend 200 million dollars on media advertising to encourage energy conservation. These advertisements encourage householders to install energy conserving devices and adopt habits, such as closing the blinds during the day, that will decrease energy use. Despite massive expenditures, these campaigns have had little effect on energy use.<sup>(10)</sup>
- In 1978, an act passed by the United States Congress brought into being the Residential Conservation Service (RCS). The RCS mandated that major gas and electric utilities in the United States provide homeowners with on-site assessments in order to enhance energy efficiency. In addition, homeowners had access to interest-free or low-cost loans and a listing of local contractors and suppliers. In total, 5.6% of eligible households requested that an RCS assessor evaluate their home.<sup>(11)</sup> Of those who had their home evaluated, 50% took steps to enhance the energy efficiency of their dwelling, compared with 30% for non-participants (the non-participants were households who were on the waiting list to have their homes assessed).<sup>(12)</sup> What types of actions were taken? In general, the actions were inexpensive and did not involve a contractor. Frequent energy efficiency actions included caulking, weather-stripping, installing clock thermostats, turning down the hot water heater, and installing a hot water heater blanket. These actions reduced energy use per household between 2% and 3%.<sup>(13)</sup> Given that millions of dollars were spent on the RCS, and that it is possible to reduce

residential energy use by more than 50%, an initiative that produces annual savings of 2-3% can only be seen as a failure.

Why did such a comprehensive program fail? In large part the RCS failed because it did not pay adequate attention to the human side of promoting more sustainable energy use. Those who designed this massive initiative assumed that homeowners would retrofit their homes if it was clear that it was in their financial best interest to do so. While this economic perspective does consider the “human” side of sustainable behavior, it does so in a very simplistic way. As a United States National Research Council study concluded, this view of human behavior overlooks “. . . the rich mixture of cultural practices, social interactions, and human feelings that influence the behavior of individuals, social groups, and institutions.”<sup>(15)</sup>

Information campaigns proliferate because it is relatively easy to distribute printed materials or air radio or television advertising.<sup>(16)</sup> Advertising, however, is often an extremely expensive way of reaching people. In one distressing case, a California utility spent more money on advertising the benefits of installing insulation in low-income housing than it would have cost to upgrade the insulation in the targeted houses.<sup>(17)</sup> As Mark Costanzo points out, “Although advertising is an important tool for creating awareness, it is wasteful to invest most of our efforts in an influence strategy that has such a low probability of success.”<sup>(18)</sup> The failure of mass media campaigns to foster sustainable behavior is due in part to the poor design of the messages, but more importantly to an underestimation of the difficulty of changing behavior.<sup>(19)</sup> Costanzo and his colleagues note that most mass media efforts to promote sustainable behavior are based on traditional marketing techniques in which the sustainable activity is viewed as a “product” to be sold. Advertising, they note, is effective in altering our preference to purchase one brand over another. But altering consumer preferences is not creating new behavior, rather it involves altering an existing behavior. As they indicate “These small changes in behavior generally require little expense or effort and no dramatic change in lifestyle (*p.* 526).” In contrast, encouraging individuals to engage in a new activity, such as walking or biking to work, is much more complex. A variety of barriers to walking or biking to work exist, such as concerns over time, safety, weather, and convenience. The diversity of barriers which exist for any sustainable activity means that information campaigns alone will rarely bring about behavior change.

To date, too little attention has been paid to ensuring that the programs we implement have a high likelihood of actually changing behavior. The cornerstone of sustainability is delivering programs that are effective in changing people’s behavior. If we are to make the transition to a sustainable future, we must concern ourselves with what leads individuals to engage in behavior that collectively is sustainable, and design our programs accordingly.

*An Alternative: Community-Based Social Marketing* Community-based social marketing is an attractive alternative to information intensive campaigns. In contrast to conventional approaches, community-based social marketing has been shown to be very effective at bringing about behavior change. Its effectiveness is due to its pragmatic approach. This approach involves: identifying barriers to a sustainable behavior, designing a strategy that utilizes behavior change tools, piloting the strategy with a small segment of a community, and finally, evaluating the impact of the program once it has been implemented across a community.

*Identifying Barriers:* If any form of sustainable behavior is to be widely adopted by the

public, barriers to engaging in the activity must first be identified. Community-based social marketers begin, then, by identifying these barriers. They do so using a combination of literature reviews, focus groups, and survey research. The barriers they identify may be internal to the individual, such as lack of knowledge regarding how to carry out an activity (e.g., composting), or external, as in structural changes that need to be made in order for the behavior to be more convenient (e.g., providing curbside organic collection).<sup>(20)</sup> Community-based social marketers recognize that there may be multiple internal and external barriers to widespread public participation in any form of sustainable behavior and that these barriers will vary for different individuals. For example, personal safety is more likely to be a concern to women as they consider using mass transit than it is for men. In contrast to the two perspectives just discussed, community-based social marketers attempt to remove as many of these barriers as possible. Practitioners of community-based social marketing further appreciate that a different constellation of barriers will exist for different activities (e.g., recycling, composting, alternative transportation). Social science research indicates that the barriers that prevent individuals from engaging in one form of sustainable behavior, such as adding insulation to an attic, often have little in common with the barriers that keep individuals from engaging in other forms of sustainable behavior, such as recycling.<sup>(21)</sup> Further, this research demonstrates that even within a class of sustainable activities, such as waste reduction, very different barriers emerge as being important.<sup>(22)</sup> That is, different barriers exist for recycling, composting, or source reduction. Since the barriers that prevent individuals from engaging in sustainable behavior are activity specific, community-based social marketers begin to develop a strategy only after they have identified a particular activity's barriers. Once these barriers have been identified, they develop a social marketing strategy to remove them.

*Behavior Change Tools:* Social science research has identified a variety of “tools” that are effective in changing behavior. These tools include such approaches as gaining a commitment from an individual that they will try a new activity, such as taking household hazardous waste to a collection depot, or developing community norms that encourage people to behave more sustainably. The techniques that are used by community-based social marketers are carried out at the community level and frequently involve direct personal contact. Personal contact is emphasized because social science research indicates that we are most likely to change our behavior in response to direct appeals from others.

*Piloting:* Prior to implementing a community-based social marketing strategy it is piloted in a small portion of a community. Given the high cost of implementing many programs, it is essential to know that a strategy will work before it is implemented on a large scale. Conducting a pilot allows a program to be refined until it is effective. Further, a pilot allows alternative methods for carrying out a project to be tested against one another and the most cost-effective method to be determined. Finally, conducting a pilot can be a crucial step in demonstrating to funders the worthiness of implementing a program on a broad scale.

*Evaluation:* The final step of community-based social marketing involves ongoing evaluation of a program once it has been implemented in a community. In conducting an evaluation, community-based social marketers emphasize the direct measurement of behavior change over less direct measures such as self reports or increases in awareness. The information

gleaned from evaluation can be used to further refine the marketing strategy as well as provide evidence that a project should receive further funding. The following chapters detail these four steps of community-based social marketing. Chapter 2 presents how to identify barriers to an activity. Chapters 3 through 8 introduce a variety of behavior change tools and provide advice on how to incorporate them into a program. Chapter 9 explains how to design a strategy and conduct a pilot, as well as how to evaluate a program in a cost-effective way once it has been implemented across a community. After reading these chapters, you will have the information you need to create programs that can have a substantial impact on the adoption of sustainable behavior in your community.



## Uncovering Barriers & Benefits

We each have hunches about why people engage in activities such as walking to work, recycling or composting. For instance, theories regarding personal motivations for recycling abound. Recycling, it has been suggested, is popular because it serves to alleviate our guilt for not making the more difficult and inconvenient changes toward sustainable living. This hypothesis suggests that curbside recycling is simply an antidote to the guilt we feel when, for example, just after placing our recycling container at the curb, we hop into our own personal global warming factory and head off to work. Other theories suggest that individuals recycle because it is convenient, those around us recycle, it makes us feel good about ourselves, or we are simply badgered into it by our children.

Hunches regarding what motivates people to engage in sustainable behavior are important. These personal theories need to be identified for what they are, however: simply speculation. Speculation regarding what leads individuals to engage in responsible environmental behavior should never be used as the basis for a community-based social marketing plan. Prior to designing such a plan you need to set aside personal speculation and collect the information that will properly inform your efforts. To create an effective community-based social marketing strategy, you must be able to sort through the competing theories and discover the actual barriers that inhibit individuals from engaging in the activity you wish to promote. Once you have this information, you are well positioned to create an effective strategy. The purpose of this chapter, then, is to introduce methods for uncovering barriers.

### Three Steps for Uncovering Barriers

Uncovering barriers involves three steps. You want to begin by reviewing relevant articles and reports. Following this review, focus groups are conducted to explore in-depth attitudes and behaviors of community residents regarding the activity. Building on the information obtained from the focus groups, a phone survey is then conducted with a random sample of residents. A phone survey can greatly enhance knowledge of the barriers to the behavior you wish to promote. If you have a consultant doing this research for you, it is wise to ask for an interim report at the end of these three steps in which information gleaned from the literature review is presented, results of the focus groups and phone survey are detailed, and promising social marketing strategies based on this research are identified. For organizations that typically have research done by consultants, this chapter is meant to provide information against which you can scrutinize proposals. If you are likely to do this work internally, this chapter will provide you with enough information to set out a clear research strategy. When combined with additional reading, this chapter will provide you with enough information to conduct your research in-house.<sup>(1)</sup>

#### **1. Literature Review**

Since the barriers to sustainable behavior are activity specific (see Chapter 1), the first step in designing a community-based social marketing strategy is to review relevant articles and reports. Prior to conducting your literature review, you should be clear on your mandate.



If your position involves promoting mass transit over driving, then your literature search is already well defined. However, if you have a broad mandate, such as promoting residential energy or water conservation, to expedite your search you will need to further clarify your mandate before proceeding. Residential energy conservation, for example, can include behaviors as diverse as weather-stripping, adding additional insulation, installing clock thermostats, closing and opening windows, installing compact fluorescent bulbs, or planting trees.

There are four sources of information that you will want to tap into for your literature search.

- Thumb through trade magazines and newsletters for related articles. Often these articles are summaries of more extensive reports and can be good leads for where to search for in-depth information.
- You will want to find out what reports have been written on the topic by other communities. These reports are often difficult to obtain but are well worth the effort. Begin by contacting organizations that act as information clearinghouses for the behavior you wish to promote. For example, contacting the United States National Recycling Coalition, the Recycling Council of Ontario, or the Waste Watch Centre, can be invaluable if you are designing a waste reduction initiative.<sup>(2)</sup> If a relevant clearinghouse does not exist, call several well-connected individuals to trace down reports that have been prepared for other organizations.
- Search the databases of your local or closest university for related academic articles. Many of the articles that will be of interest to you can now be found by electronically searching databases. When you conduct these searches, pay particular attention to recent review articles that synthesize the current state of knowledge on the topic. At this site you will find a searchable database of academic articles on fostering sustainable behavior. You can search this database by behavior and/or the behavior change tools described in subsequent chapters. This website also contains a discussion forum where you can exchange ideas and ask questions of others who are involved in designing programs and/or conducting research in a particular area.
- Once you have reviewed the reports and academic articles that you have found, call the authors of studies that are of particular interest. Often these individuals will have pre-press publications that you will not be able to find elsewhere. Further, they may currently be engaged in research that can inform your efforts. Academics can be a particularly useful resource for tracking down research articles and reports that you may have missed in your previous searches. Mention the studies you have found and ask if there are other studies of which you should be aware. Often they will be willing to fax you a listing of relevant articles. Finally, ask if you can call back at a later point in your project to obtain further advice. Cultivating a good relationship with an academic who works in your area can assist you not only with keeping abreast of current literature, but also with issues related to analyzing your phone survey data and designing and evaluating your project.

Finally, if you are having the literature search done by consultants, ask that they search for relevant information in each of these four areas.

## 2. Focus Groups

The literature review will assist in identifying issues to be explored further with residents of your community through focus groups. A focus group consists of six to eight community residents who have been paid to discuss issues that your literature review has identified as important (when focus group participants are volunteers there is a strong likelihood that they are participating because they have a greater interest in the topic than others in the community). The participants for the focus groups are usually randomly chosen from the community. To select the participants, simply choose random phone numbers from the phone book. When contacting the potential participants, be sure to let them know how their names were selected. To ensure a good rate of participation, make it convenient for people to participate. Arranging transportation for participants and childcare can significantly increase participation rates. Remember, you want your focus group participants to be as representative of the community as possible. The more barriers that you remove to participating, the more representative your focus groups will be.

Avoid sending information packages prior to conducting focus groups. If you provide information prior to running the focus groups your participants will no longer be representative of your community.

Focus groups provide an opportunity to discuss in-depth the perceptions and present behaviors of community residents relevant to the activity you are planning to promote. To maximize what you can learn from the focus group, you should come to the meeting with a set of clearly defined questions that have been informed by your literature review. You will want to begin the session by informing the participants that they were chosen at random to provide your organization with information about the relevant behavior. You will also want to reassure them that there are no right or wrong answers for the questions that you will be asking them and that what you are most interested in is their perceptions. You will want to remind them that their responses are confidential. Since you will be steering the conversation through the set of questions that you have created, you will want to have a co-worker act as a note taker.

As the facilitator for the discussion it is important that you establish a supportive but firm role with the attendees. It is not unusual to have one or two members of a focus group attempt to monopolize the discussion and in so doing make other members feel that their comments are not important. Your role is to facilitate in such a way that less assertive members, or individuals who might have differing views, feel comfortable in speaking out. Prior to conducting your first focus group you will need to be comfortable with statements such as “I have received some very informative feedback from you, now I would like to hear what others have to say,” and “I understand that you feel strongly about this issue, but I also know that some people have very different views on this matter, would anyone like to share them?” These statements assure participants that even if there are some belligerent or overly talkative members, you are ensuring that views of other members will be heard. Remember that you are interested in people’s views unadulterated by any information that you might present in your subsequent program. Therefore, avoid sending information packages prior to conducting focus groups (handing them out afterward is fine). If you

provide information prior to running the focus groups, your participants will no longer be representative of your community.

When the focus groups are completed, you will want to summarize the comments that have been made. One effective technique is to tabulate the number of times that a specific comment was made, or agreed with, by members of the focus group. In general, you should pay close attention to comments that are made frequently (e.g., “I would compost, if I could be assured that it would not attract rodents”).

### **3. Phone Survey**

Focus groups are an essential step in enhancing your understanding of how community residents view the behavior you wish to promote. However, by themselves focus groups do not provide sufficient information upon which to base a social marketing plan. Focus groups are limited by the small number of participants, the impact that members of the focus group have upon one another, and the qualitative nature of the answers obtained. The small number of participants makes generalizing the results to the larger community unwise and, while interviewing participants in groups is cost-effective, members of a focus group can have a substantial effect on what opinions are expressed. Further, the qualitative data obtained in focus groups places considerable limits on the types of analyses that can be performed. Despite these limitations, focus groups provide valuable in-depth information about what issues residents see as important and also how they speak about the topic. As such, focus groups will help enrich your understanding of the activity you wish to promote, and ensure that a more comprehensive survey will be well constructed and that questions contained in the survey will be readily understood by the respondents.

Several methods are available for obtaining reliable information on the current beliefs and behaviors of community residents regarding the activity you wish to promote. These methods are person-to-person interviews, a mailed survey, and a phone survey. While personal interviews are capable of providing reliable and in-depth information, they suffer from two significant limitations; they are expensive to conduct and take a considerable amount of time to complete. To conduct person-to-person interviews, a random sample of residences would first be selected. Next, each of these homes would be mailed a letter introducing the purpose of the interview to them. Each household would then be called and, if willing, a time for an interview would be arranged. Paid interviewers would then travel to each home to conduct the interview. While this detailed process is occasionally warranted, conducting person-to-person interviews usually is an inefficient use of your resources.

In contrast, a mailed survey is much less expensive to conduct and the entire survey can be completed in a reasonable amount of time. However, mailed surveys have a major drawback: the number of people who will complete and return the survey, or what is referred to as the response rate, is often between 20% and 40%. Such a low response rate brings into serious question the representative nature or generalizability of the findings. Given the inconvenience of completing and mailing the survey, individuals who participate are likely more interested in your topic than those who elect not to participate. As a result, participants in a mailed survey provide an unrealistic picture of community attitudes and behavior.

Phone surveys have several advantages over mailed surveys and person-to-person interviews. First, compared with a mailed survey, it is possible to obtain a much higher response rate, providing a more accurate assessment of current community attitudes and behavior. While it is possible to obtain a much higher response rate, clearly not everyone will agree to participate. However, those individuals who choose not to participate can be asked to complete a brief refusal survey. A refusal survey consists of three to four questions that are also found in the complete survey (e.g., does your household compost). Further, the refusal survey normally takes no longer than half a minute to complete. Because the refusal survey is so brief, individuals who wish not to participate in the full survey frequently agree to complete the briefer refusal survey. By comparing responses of refusal survey participants with those of full survey participants, potential differences between participants and non-participants can be explored. If no differences exist between the two sets of responses, the results of the full survey can be more reliably generalized back to your community. If differences do appear, greater caution is warranted in generalizing the results. In addition to providing a higher response rate than a mailed survey and the opportunity to conduct a refusal survey, phone surveys are less expensive to conduct and can be completed in a much shorter amount of time than can person-to-person interviews.

Additional advantages of phone surveys include:

- Random-digit dialling of community residents is possible (ensures a random sample of community residents);
- Phone access to otherwise difficult-to-reach populations is possible (e.g., high rise apartments, rural households).

Phone surveys are relatively easy to staff and manage. Compared with personal interviews, fewer staff are needed, the staff need not be near the sample geographically, and supervision and quality control are easier.

### Seven Steps: Phone Survey

Items to include in your phone survey will be guided by your literature review and the focus groups. But how do you begin to write the survey? Writing a well-constructed survey takes time and patience. Here are some guidelines to make that process easier.

#### Step One: Clarify your Objective

Begin by writing a simple paragraph that describes what the survey is meant to accomplish. This paragraph has two purposes. First, it will force you to be clear on what the survey is to measure. Second, once you have it completed, you can show it to others involved in the project. You will be spending considerable time writing, conducting and analyzing the data from the phone survey. You want to make sure, before you begin this process, that those who have a stake in the results are all onboard regarding what the survey is to accomplish.

Following the example that I have used throughout this chapter, imagine that you are designing a community-based social marketing strategy for composting. You have two purposes: 1) To encourage people who are presently not composting to begin, and 2) To encourage seasonal composters to compost throughout the year. Given this background, your objective statement might read something like this:

Note that the objective paragraph for the survey indicates that there are two purposes, one of which is more important than the other. Giving priorities to different objectives of a survey can assist you later in deciding how many questions to devote to each task that the survey is to perform. Also note that comparisons between three groups are called for. In other words, your sample will need to contain three groups: year-round composters, non-composters and seasonal composters

### Step Two: List Items to Be Measured

Once you are happy with your “survey objective statement,” the next step is to create a list of items that “might” be included in the survey. Note that at this time you are not concerning yourself with writing questions, only with determining the “themes” that will be covered in the questionnaire. Most of the items on your list should come from what you have learned from your literature review and from your focus groups. Once you have created a comprehensive list, organize it into logical groupings. Place items related to behavior together, group attitude items together and similarly group demographic topics. Finally, once you have grouped the items on your list, you are ready to check each item against your “survey objective paragraph.” You want to determine for each item on your list if it furthers the purpose of your survey. In other words, does it help to determine any of the goals laid out in your objective statement? If it doesn’t, it should be eliminated. When you have your list finalized, you are ready to begin writing the survey.

### Sample Objective Statement:

This survey’s primary purpose is to determine what factors distinguish year-round composters from individuals who never compost. A secondary purpose is to determine which factors distinguish year-round composters from seasonal composters.

### Step Three: Write the Survey

In writing the survey, you will want most, if not all, of your questions to be closed-ended. Open-ended items are difficult to analyze and greatly extend the length of your survey. Keep in mind that you will want to be able to complete your whole survey in 10 minutes or less. To be able to ask as many questions as possible in a short amount of time, you will want to use only a few types of scales in your survey.

Six or seven point scales are preferable to three, four or five point scales, in that they provide for a broader range of answers. Having a broader range is important, when most people are likely to be clustered at one end of the scale or the other. It is likely, for example, that on a four point scale most people would respond with a “3” or “4” regarding how frequently they recycle glass and food cans. However, when the scale is expanded to six items, answers will be more dispersed. Whether you use a six or seven point scale will depend upon whether you wish to provide respondents with a midpoint. Using an odd-numbered scale provides a midpoint that allows respondents who are divided in how to respond to select this option. However, the midpoint may also be selected by respondents who are unsure of how to answer. Whichever option you select, stay with it throughout the survey, to avoid confusion for respondents.

### Questions about Questions:

Is this a question that can be asked exactly as written?

Is this a question that will mean the same thing to everyone?

Is this a question that people can answer?

Is this a question that people will be willing to answer?

Note also that only the endpoints are spelled out for each scale (e.g., in question #1 “1-never” and “6-all the time”). Providing just the endpoints lessens the length of time that it takes to read the survey to the participants. Further, it allows you to assume that the distance between each of the items on the scale (e.g., 4 to 5) is equal. If you provide labels for each of the items on the scale, the respondent can no longer infer that the distance between each of the items is equivalent. For example, we understand that the distance between 5 and 6 is equal to the distance between 4 and 5. However, we can't assume equivalence with labels (e.g., Is the distance between “6-strongly agree” and “5-moderately agree” the same as the distance between “5-moderately agree” and “4-mildly agree”?). Because the distance between the scale items is no longer equivalent when you apply labels, there are more limitations placed on how you can subsequently analyze the data.

Finally, note that instructions to the surveyor are typed in capital letters to distinguish them from what is to be read to the respondent.

You should not have to write the whole survey yourself. You may wish to include questions that were part of other surveys (just seek permission before doing so).

Further, you can use the demographics items in other surveys as guides for your demographic section (see sample demographic questions). Finally, as you write your survey, you will want to ask four questions of each question in your survey.

### Step Four: Pilot the Survey

Once the survey has been written, pilot it with 10 to 15 residents. During the pilot, the wording and order of questions in the survey can be scrutinized. Questions that respondents find confusing or difficult to answer can be rewritten before the full survey is conducted. Further, the pilot ensures that each survey can be conducted in under 10 minutes.

Miscalculations regarding the length of time that it takes to contact respondents or complete the survey can be very costly when it comes time to conduct the survey. Your pilot will help you to ascertain that your budget is realistic. Do not include the data you obtain from the pilot with the data you obtain from the actual survey.

### Step Five: Select the Sample

Once you have completed the pilot and made whatever revisions are necessary, you are ready to obtain your sample. At this point you have two options. First, you may decide to have the survey completed by a survey research firm. Prices vary significantly, so shop around, but you can expect to pay at least \$20 U.S. for each survey completed (in 1997 dollars). This price will include all charges, including conducting the survey, the refusal survey, and entering the data into a spreadsheet for data analysis.

If you decide to conduct the survey yourself, you may wish to have a firm provide you with a list of randomly derived residential phone numbers for your community. How many people should you sample? There is no easy answer to this question and here is where cultivating a good relationship with an academic working in the field can be of assistance. The size of the sample and how it is obtained will determine how confident you can be in your results. However, there is one other issue that will determine the sample size needed. Certain types of statistical analyses require a minimum number of participants for each barrier investigated (usually 10 to 12). Therefore, if you are designing a survey to look at composting, and you have 20 different barriers that you wish to explore simultaneously, you will need to complete roughly 200 surveys (20 X 10).

### Step Six: Conduct the Survey

If you are doing the survey “in-house,” you will need to train the people who will be making the calls. Click here for a set of instructions that you can use with your callers survey instructions.

### Step Seven: Analyze the Data

Many of the current statistical packages, such as the Statistical Package for the Social Sciences (SPSS) make analyzing data much easier than it was even a few years ago. Obtaining descriptive statistics, frequencies, and comparing means is now as simple as pulling down a menu and selecting the variables and analysis that you want. Gone are the days in which you had to write complex computer instructions to analyze data. The result is that basic statistics are now within reach of virtually everyone. However, you will want to go beyond obtaining the means and frequencies to lay the groundwork for your community-based social marketing campaign.

If you glance back at the survey objective statement, you will notice that the survey had two purposes: distinguishing between composters and non-composters; and distinguishing between year-round composters and those who compost seasonally. To answer these two questions requires multivariate statistics; such as multiple regression, discriminant analysis or logistic regression. Multivariate statistics allow you to determine the factors that distinguish householders who compost from those who do not, and also enables you to analyze the relative importance of these factors. For example, a recent study that I conducted with a former student, Laurie Beers, utilized discriminant analysis and revealed the following five factors were most important in distinguishing year-round composters from non-composters.

(3) Note that these factors are presented in order of importance:

- Those who composted reported a greater desire to reduce the amount of waste they produced than did non-composters.
- Non-composters perceived composting to be a more unpleasant activity than those who composted (e.g., they associated it with unpleasant odors, flies, rodents).
- Composters perceived the activity to be more convenient than did those who did not compost.
- Those who did not compost believed that they did not have the time to compost.
- Composting households reported recycling glass and cans more frequently.

Knowing which factors are most important in distinguishing individuals who have adopted a sustainable behavior from those who have not is an essential first step in developing a community-based social marketing strategy. The above results provide a clear indication of some of the barriers that would need to be surmounted to encourage more people to compost. For example, perceptions that composting is unpleasant, inconvenient and involves a significant investment of time are important issues that a community-based social marketing strategy would need to address.

Analyzing the data using multivariate statistical techniques is an essential aspect in the development of a sound marketing strategy. Less sophisticated statistical approaches such as calculating means or correlations are limited in their ability to provide information on the relative importance of the factors that lead individuals to engage in the behaviors of interest to you. Unless you or someone else in your organization has a background in statistics, you will want to obtain assistance at this point. Many graduate students are trained in multivariate statistics and with a few phone calls you should be able to find someone who will do your analyses for you. Don't be daunted at this point. While the statistical techniques that are needed require someone who is statistically sophisticated, as can be seen above, the results of these analyses can be presented in a straight-forward, understandable format.

If you are having a consultant do this work for you, you should ask for a report at this point that details the results of the focus groups and the phone survey. Further, based upon these results, request that the report detail promising social marketing approaches.

### Some Closing Thoughts

Identifying barriers is an essential first step in designing a successful program. While significant pressures exist to skip this step, the simple truth is that it is impossible to design an effective strategy without identifying barriers. In our experience, the four most common reasons for skipping barrier identification include:

- belief that the barriers to the activity are already known,
- time pressures,
- financial constraints, and
- managerial staff who do not support conducting preliminary research.

Believing that the barriers to an activity are already known is very difficult to guard against. By our very nature we develop theories about why people behave as they do. If we didn't, we would find it very difficult to understand and interact with others. This tendency to develop theories about the behavior of others, can lead to a strong sense of self assurance that the barriers to an activity are already well understood. Research in social psychology convincingly demonstrates, however, that once we have developed a "hunch" we tend to pay attention to information that supports our view, and discount or disregard information that would contradict it. As a consequence, we can come to believe very strongly in our own personal theories even though they may have no factual basis. To be an effective community-based social marketer requires a healthy dose of skepticism about your own and others' personal theories.



Conducting preliminary research to identify barriers takes time. In a well organized project you can expect the identification of barriers to add two to four weeks to the development of a strategy. However, the length of time required to identify barriers pales when compared to the time and effort involved in having to design and deliver a new program if the first is unsuccessful. Similarly, while identifying barriers adds to the expense of delivering a program, there is a high return on investment given the much greater likelihood of delivering a successful program.

Building support among managerial staff will often involve dealing directly with the above three concerns. Time and cost concerns can often be dealt with by noting, as discussed above, that identifying barriers will usually save both time and money by lessening the likelihood of having to mount multiple campaigns. Managers, like everyone else, develop theories about behavior and are just as prone to believe that they already know the barriers to the activity you are to promote. There is a strong likelihood that they may ascribe to either the attitude-behavior or economic self-interest approaches discussed in the previous chapter since these perspectives are widely accepted. Finally, arrange, if possible, for managerial staff to read this guide or attend a workshop on community-based social marketing. In Canada, where the first edition of this book has been widely read, and workshops on community-based social marketing have been attended by a large number of managers, community-based social marketing is increasingly being specified by management as the method by which programs must be delivered.

Once you have identified the barriers to the activity you wish to promote, you will want to consider what behavior change tools you can use to overcome these barriers. Chapters 3 through 8 introduce a variety of tools that you can incorporate into the programs you design.



## Tools › Commitment › From Intention to Action

Imagine being approached and asked to have a large, ugly, obtrusive billboard with the wording “DRIVE CAREFULLY” placed on your front lawn. When a researcher, posing as a volunteer, made precisely this request, numerous residents in a Californian neighborhood flatly declined.<sup>(1)</sup> That they declined is hardly surprising, especially since they were shown a picture of the billboard almost completely obscuring the view of another house. What is surprising, however, is that fully 76% of another group of residents in this study agreed to have the sign placed on their lawn. Why would over three-fourths of one group agree, while virtually everyone in the other group sensibly declined? The answer lies in something that happened to the second group prior to this outlandish request being made. The residents who agreed in droves to have this aberration placed on their lawn were previously asked if they would display in the windows of their cars or homes a small, 3 inch sign that said: “BE A SAFE DRIVER.” This request was so innocuous that virtually everyone agreed to it. Agreeing to this trivial request, however, greatly increased the likelihood that they would subsequently consent to having the billboard placed on their lawn.

Are these findings a mere anomaly? Apparently not. In another study a researcher, identifying himself as a member of a consumer group, called and asked householders if he could ask them a few questions about their soap preferences.<sup>(2)</sup> A few days later the same researcher called back asking for a much larger favor: “Could I send five or six people through your house to obtain an inventory of all the products in the house?” The caller carefully explained that this “inventory” would require searching through all of their drawers, closets, etc. Having agreed to the smaller request only a few days earlier, many of the householders apparently felt compelled to agree with this much larger and more invasive request. Indeed, over 50% agreed, more than twice as many as among householders who had not received the prior request. These surprising findings have now been replicated in a variety of settings. In each case, individuals who agreed to a small initial request were far more likely to agree to a subsequent larger request. For example:

- When asked if they would financially support a recreational facility for the handicapped, 92% made a donation if they had previously signed a petition in favor of the facility, compared with 53% for those who had not been asked to sign the petition.<sup>(3)</sup>
- Residents of Bloomington, Indiana, were called and asked if they would consider, hypothetically, spending three hours working as a volunteer collecting money for the American Cancer Society. When these individuals were called back three days later by a different individual, they were far more likely to volunteer than another group of residents who had not been asked the initial question (31% versus 4%, respectively).<sup>(4)</sup>
- A sample of registered voters were approached one day prior to a U.S. presidential election and asked: “Do you expect you will vote or not?” All agreed that they would vote. Relative to voters who were not asked this simple question, their likelihood of voting increased by 41%.<sup>(5)</sup>
- Ending a blood-drive telephone call with the query: “We’ll count on seeing you then, OK?” increased the likelihood of individuals showing up from 62% to 81%.<sup>(6)</sup>

- Individuals who were asked to wear a lapel pin publicizing the Canadian Cancer Society were nearly twice as likely to subsequently donate than were those who were not asked to wear the pin.<sup>(7)</sup>

## Understanding Commitment

Why does agreeing to a small request lead people to subsequently agree to a much larger one? When individuals agree to a small request, it often alters the way they perceive themselves. That is, when individuals sign a petition favoring the building of a new facility for the handicapped, the act of signing subtly alters their attitudes on the topic. In short, they come to view themselves as the type of person who supports initiatives for the handicapped. When asked later to comply with the larger request, giving a donation, there is strong internal pressure to behave “consistently.” Similarly, saying that you “think” you would volunteer for the Cancer Society, vote in an election, give blood or wear a lapel pin, alters your attitudes and increases the likelihood that you will later act in a way that is consistent with your new attitudes.

Consistency is an important character trait.<sup>(8)</sup> Those who behave inconsistently are often perceived as untrustworthy and unreliable. In contrast, individuals whose deeds match their words are viewed as being honest and having integrity. The need in all of us to behave consistently is underscored by an intriguing study on a New York City beach. In this study, a researcher posing as a sunbather put a blanket down some five feet from a randomly selected sunbather. He then proceeded to relax on the blanket for a few minutes while listening to his radio. When he got up he said to the person beside him, “Excuse me, I’m here alone and have no matches . . . do you have a light?” He then went for a walk on the beach, leaving the blanket and radio behind. Shortly afterward, another researcher, posing as a thief, stole the radio and fled down the beach. Under these circumstances, the thief was pursued 4 times out of 20 stagings. However, the results were dramatically different when the researcher made a modest request prior to taking the walk. When he asked the person beside him to “watch his things,” in 19 out of the 20 stagings the individual leapt up to pursue the thief. When they caught him some restrained him, others grabbed the radio back, while others demanded an explanation. Almost all acted consistently with what they had said they would do.<sup>(9)</sup>

The need to behave consistently is further supported by findings that a substantial amount of time can pass between the first and second request, and that the second request can be made by a different individual. That considerable time can pass between the two requests provides further evidence that complying with the initial request alters the way we see ourselves in an enduring way. That we will comply with a second request initiated by a new person suggests that these changes are not transitory; otherwise we would only feel bound to comply if the second request were made by the same person who had made the initial request.

## Commitment and Sustainable Behavior

As detailed above, commitment techniques have been shown to be effective in promoting a diverse variety of behaviors. This community-based social marketing tool has also been shown to be effective in promoting sustainable behavior. Here are several examples (citations for additional studies can be found by clicking on “Articles” in the column on the left):

- In research carried out with Pacific Gas and Electric, home assessors were trained to

make use of commitment strategies as well as other community-based social marketing techniques.<sup>(10)</sup> The assessors were trained to secure a verbal commitment from the householder. For example, the householder might be asked: “When do you think that you’ll have the weather-stripping completed? . . . I’ll give you a call around then, just to see how it’s coming along, and to see if you’re having any problems.” These subtle changes in how the assessment was presented resulted in substantial increases in the likelihood that householders would retrofit their homes. In fact, using community-based social marketing methods resulted in three to four times as many people electing to retrofit their homes.

Commitment techniques have also been applied in the retail sector. In this study, small retail firms were randomly assigned to either a “mild commitment,” “strong commitment” or “control” condition.<sup>(11)</sup> In the “mild commitment” condition the names of the firms were published every other month along with information about the energy conservation initiative. In the “strong commitment” condition not only the names of the firms were published, but also the extent to which they had (or had not) saved energy. In all three cases, companies received information on steps they could take to reduce energy use and received a free energy audit. While the three groups did not differ in the amount of electricity they consumed, the two commitment conditions used significantly less natural gas than did the control group. Importantly, firms in the “mild commitment” condition used less natural gas than firms in the “strong commitment” condition. Informal comments from the owners of the companies in the “strong commitment” condition suggest that they felt trapped by the public disclosure of their initial lack of success in saving energy and that they subsequently stopped attempting to save energy. It is important to note that in this study there was no explicit commitment pledge. The researchers assumed that having their names publicly displayed would enhance commitment, but they did not directly ask for a commitment.

Commitment has also been used to promote bus ridership. Individuals who did not ride the bus were assigned to one of three conditions. In the “information only” condition, participants received route and schedule information and an identification card that allowed ridership to be monitored. In the “commitment condition,” participants made a verbal pledge to ride the bus twice a week for four weeks, while in the “incentive condition,” participants were given ten free bus tickets and were informed that they could receive more tickets when they had used the initial tickets. Finally, in the “combined condition,” participants both made a pledge to ride twice a week for four weeks and received free tickets. Each of the three conditions increased bus ridership. However, participants in the “commitment only” condition rode the bus just as frequently as the participants in the “incentive condition” and the “combined condition”. Importantly, these effects were observable during two follow-ups, conducted at three and twelve weeks after the intervention.

- In a unique study, homeowners were mailed either a shower flow restrictor along with a pamphlet on energy conservation or just the pamphlet alone.<sup>(12)</sup> Homes that received the shower flow restrictor in addition to the pamphlet were not only more likely to install the restrictor, an obvious finding, but were also more likely to engage in the other conservation actions mentioned in the pamphlet (e.g., lowering the temperature on their hot water heaters, installing setback thermostats and cleaning their furnaces). Apparently having installed the shower flow restrictor altered how these individuals perceived themselves. In

short, they came to see themselves as the type of person who is concerned about energy conservation and, as a result, carried through with the other actions suggested in the pamphlet.

- Obtaining a signed commitment increased curbside recycling in Salt Lake City, Utah, more than receiving a flyer, a telephone call or personal contact alone.<sup>(13)</sup>

## Building Commitment into Your Program

A variety of studies have clarified when the community-based social marketing tool, commitment, is likely to be most effective. Written commitments appear to be more effective than verbal commitments.<sup>(14)</sup> In a study that investigated the impact of verbal versus written commitments, households were assigned to one of three groups. In the first group, homes simply received a pamphlet underscoring the importance of recycling newspaper. In the second group, households made a verbal pledge to recycle newsprint, while in the third group, households signed a statement in which they committed themselves to recycle newsprint. Initially, the households who made either a verbal or written commitment recycled more newsprint than households who received only a pamphlet. However, only the households who committed themselves by signing the statement were still recycling when a follow-up was conducted.

Whenever possible, ask permission to make a commitment public. The dramatic impact that public commitments can have is illustrated in a study in which either a private commitment to conserve electricity and natural gas was obtained or a public commitment in which names would be published in the local newspaper. Those who agreed to a public commitment saved significantly more energy than did householders who were in the private condition. Even after the researchers informed the participants who had agreed to a public commitment that their names would not be published, they continued to save energy. While the names were never publicized, simply asking for this permission brought about a 15% reduction in natural gas used and a 20% reduction in electricity used. Importantly, these reductions were still observable 12 months later.<sup>(15)</sup> Public commitments are likely so effective because of our desire to be consistent. In short, the more public a commitment, the more likely we are to honor it.

Seeking commitments in groups can also be effective. When the economic and environmental benefits of recycling were explained to members of a retirement home, and they were asked to make a group commitment, there was a 47% increase in the amount of paper recycled.<sup>(16)</sup> The authors suggest that group commitments are likely to be effective in settings where there is good group cohesion. This suggests group commitments are likely to be effective in well established groups in which individuals care how they are viewed by other members of the group.

Commitment can be increased not only by seeking a verbal or written pledge, but also through actively involving the person. In the Pacific Gas and Electric study mentioned above, home assessors were trained to actively involve the homeowner in the assessment.<sup>(17)</sup> Homeowners were asked to peer into the attic to inspect the insulation level, to place their hand on an uninsulated water heater, etc. After being involved in this way, homeowners are more likely to see themselves as committed to energy conservation.

Commitment strategies have been criticized as too labor intensive to warrant implementing on a broad scale.<sup>(18)</sup> However, implementing commitment as part of a home visit, as was done in the Pacific Gas and Electric study, is a viable option. Further, asking for a commitment when a service is provided, such as delivery of a compost unit or a water efficiency kit, is a natural opportunity to employ this strategy. Two other strategies are worth considering in making use of commitment. First, existing volunteer groups can be used. In one study, Boy Scouts asked residents to sign a statement agreeing to participate in a community recycling program. Those households who were asked to sign the statement were much more likely to participate than was a control group who was not asked (42% and 11%, respectively).<sup>(19)</sup>

Commitment strategies have also been shown to be effective when community “block leaders” implement them. A block leader is a community resident who already engages in the behavior that is being promoted and agrees to speak to other people in their immediate community to help them get started. In this study, block leaders approached homes and used a variety of community-based social marketing strategies, including seeking a verbal commitment, to encourage the household to begin recycling. The homes who were visited by a block leader were more than twice as likely to recycle than was a group who received flyers.<sup>(20)</sup>

Commitment can also be made cost-effective by asking people who commit to trying a new behavior to ask others to make a similar commitment. In an important study, residents who had been previously identified as putting their grass clippings at the curbside for disposal, were assigned into three groups. The first group was approached and asked to make a commitment to leave their clippings on their lawn, while the second was asked to make a commitment to grass cycle and to ask their neighbors to do the same. The “commitment only” request had no effect on grass cycling. However, those who were asked to speak to their neighbors, as well as make a personal commitment to grass cycle, increased not only their own grass cycling but also that of their neighbors. Importantly, these findings were still observable 12 months later.

Commitments should be sought only for behaviors which people express interest in doing. Hence, if a block leader approaches a home and asks if the residents are interested in composting, commitment should only be sought if the household expresses an interest in the activity. Indeed, research suggests that commitment will not work if the person feels pressured to commit. In order for commitment to be effective, the commitment must be voluntary.

Earlier in this chapter we suggested that one of the reasons for the dramatic impact of small requests upon subsequent behavior was that responding to a small request alters how we see ourselves. If how we see ourselves is an important predictor of how we will act in the future, it makes sense that programs to promote sustainable behavior should actively assist people to see themselves as environmentally concerned. Support for this assertion comes from a study that investigated the impact of assisting people to see themselves as charitable.<sup>(21)</sup> In this study, householders were approached and asked if they would make a donation to the heart association. Half of the individuals who volunteered to make a donation were thanked and told, “You are a generous person. I wish more of the people I met were as charitable as you,” while the other half were simply thanked. One to two weeks later these same individuals were approached by another individual and asked if they would donate money to Multiple

Sclerosis. Not only did more of the “generously labeled” people give money to Multiple Sclerosis, they also gave more - fully 75% more. This research suggests that when possible we should be helping people to see themselves as environmentally concerned. For example, when encouraging someone to try a new activity, such as composting, we should begin by pointing out the other positive sustainable behaviors that they are already involved in.

Finally, commitment is most effective when combined with other community-based social marketing tools. In particular, whenever community-based social marketing tools are utilized they should be combined with the principles of effective communication discussed in Chapter 6. For example, in a project to increase recycling in an apartment complex, residents were randomly assigned to one of four groups: feedback only, public commitment only, feedback and commitment combined, or a control group.<sup>(22)</sup> Residents in the feedback and public commitment groups did not increase the amount of paper they recycled. However, residents in the “feedback” and “feedback and public commitment” groups significantly increased the amount of paper they recycled (26% and 40%, respectively).

### A Checklist for Using Commitment



In considering using commitment, check that the following guidelines have been followed:

- Emphasize Written over Verbal Commitments

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- Ask for Public Commitments

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- Seek Group Commitments

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- Actively Involve the Person

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- Consider Cost-Effective Ways to Obtain Commitments

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- Use Existing Points of Contact to Obtain Commitments

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- Help People to View Themselves as Environmentally Concerned

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- Don't Use Coercion (Commitments must be freely volunteered)

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- Combine Commitment with other Behavior Change Techniques

Below are a variety of examples of how commitments can be used to foster sustainable behavior.

## **EXAMPLES: USING COMMITMENT TO FOSTER SUSTAINABLE BEHAVIOR**

### **Waste Reduction**

- When distributing compost units, ask when the person expects to begin to use the unit and inquire if you can call shortly afterward to see if he/she is having any difficulties.
- Ask households who have just been delivered a compost unit to place a sticker on the side of their recycling container indicating that they compost.
- Ask people as they enter grocery stores to wear a button or sticker supporting the purchase of products that have recycled content or are recyclable (see also Chapter 5 on norm development).

In retail outlets, place decals on household hazardous waste containers that provide information on where HHW can be taken for proper disposal. Partner with retail outlets to have customers sign the decal committing themselves to taking unused amounts of the product to the depot for proper disposal.

### **Energy Conservation**

- As mentioned previously in this chapter, when conducting a home assessment, invite the homeowners to participate.
- Conclude a home assessment visit by asking when they expect to complete activities such as weather-stripping or installing a programmable thermostat. Call back to help homeowners troubleshoot any problems they had with installation.

### **Water Conservation**

- Ask households to sign a pledge form committing themselves to watering their lawn on odd or even days based on their house number.
- Ask homeowners to make a commitment to raise the height of their lawnmower, thereby reducing evaporation and the need for lawn watering.
- In going door-to-door with water efficiency kits (toilet dams, faucet aerators and low-flow shower heads), ask homeowners who wish to take the kit to make a public commitment to install it (e.g., have their names advertised in the newspaper).



## Transportation

- Ask commuters to sign a public commitment that they will take mass transit once or twice a week for a specific period of time (see the study on bus ridership in this chapter).
- Ask vehicle owners to commit to turn their car off while waiting to pick someone up. Provide a prompt that they can affix to their windshield or dashboard to remind them to turn their engine off (see the next chapter on prompts and the case studies for examples of this approach).
- Ask car owners to publicly commit to checking their car tire pressure once a month. Provide prompts at gas stations reminding people to check their tire pressure. Have gas attendants also commit to reminding people to check their tire pressure.

In conclusion, obtaining a commitment is a powerful way of increasing public participation rates in sustainable behavior. When combined with other community-based social marketing strategies, commitment further enhances the likelihood that your community-based social marketing strategy will be effective. In the next chapter, we will see how prompts can be used to remind people to engage in sustainable behavior.



## Tools › Prompts › Remembering to Act

Many people have bought cotton shopping bags to use in place of the plastic bags stores provide. While we expect that the people who have bought these bags prefer to use them whenever they shop, we also expect that like ourselves, they frequently leave them behind in the house or car. The problem is not a lack of motivation to use the bags, but rather simply forgetting to bring them.

Numerous actions that promote sustainability are susceptible to the most human of traits: forgetting. Turning off lights upon leaving a room, turning down the thermostat in the evening, checking the air pressure in our tires and selecting products that have recycled-content while shopping are just a few of the many actions that we are apt to forget to do. In some cases, innovations such as a programmable thermostat can free us from the burden of continually remembering to carry out an activity. Most repetitive actions, however, have no simple “technological fix.”

Fortunately, “prompts” are effective in reminding people to engage in sustainable behaviors. A prompt is a visual or auditory aid which reminds us to carry out an activity that we might otherwise forget. The purpose of a prompt is not to change attitudes or increase motivation, but simply to remind us to engage in an action that we are already predisposed to do.

### Prompts and Sustainable Behavior

Prompts abound. Slogans, such as “Act Locally, Think Globally,” “Keep California Beautiful,” and “Don’t Be Fuelish,” are, as Gardner and Stern suggest, all designed to promote sustainable behaviors. Despite a prevalent belief that prompts such as these are effective in promoting sustainable behavior, nonexplicit prompts ordinarily have little or no impact.

Prompts that target specific behaviors can, however, have a substantial impact. Here are several examples:

- Scott Geller and his colleagues demonstrated the effectiveness of prompts in promoting the purchase of returnable soft drink bottles.<sup>(1)</sup> At two supermarkets and one convenience store the percentage of returnable bottles normally purchased was determined. After obtaining this baseline data, they distributed flyers at each of the three stores requesting that shoppers purchase soft drinks in returnable bottles. At the two supermarkets the prompts had no impact upon the purchase of returnable bottles. At the convenience store, however, the flyers increased the purchase of returnable bottles by 32%! Why were the flyers effective in the convenience store but not the supermarkets? For prompts to be effective they need to be delivered near the desired behavior. In the large supermarkets, where shoppers are buying many items, the delivery of the flyers likely occurred well before the purchase of soft drinks. In contrast, in the convenience store, where only a few items are conventionally purchased, the delay between the presentation of the flyer and the purchase of soft drinks was much shorter.

- Jeffrey Smith and Russell Bennett have shown that prompts can be very effective in discouraging people from walking across lawns.<sup>(2)</sup> At four separate locations 79% of pedestrians were found to cut across a lawn rather than taking a slightly longer pathway. However, when a sign with the message, “Do not cut across the grass,” was placed at these four sites, lawn-walking decreased by 46%. Lawn-walking was reduced even further when a second sign was added that said “Cutting across the grass will save 10 seconds.” Indeed, when these two signs were present, lawn-walking was reduced to only 8%.
- Litter receptacles serve as a visual prompt for the proper disposal of garbage. Simply making a litter receptacle more visually interesting was found to double the amount of litter deposited in one study and increase it by 61% in another.<sup>(3,4)</sup>
- Retrofitting older buildings is the most effective way to reduce their energy use, but for many organizations the cost of a retrofit is prohibitively expensive.<sup>(5)</sup> Simple lifestyle changes can, however, have a significant impact upon energy use, often with no capital expense. One such example involved encouraging university faculty to drop and tilt their blinds when they left their offices at the end of the day to reduce heat loss during the winter. Baseline data was collected by cleaning staff who recorded whether blinds were dropped and tilted correctly (concave surface of the blind tilted into the room to deflect heat back into the room). Faculty were encouraged to drop-and-tilt their blinds through a general written request from the university president and by having the cleaning staff leave a reminder on the desk of faculty who forgot to drop-and-tilt their blinds. These two simple methods increased the percentage of faculty who adjusted their blinds from less than 10% to roughly two-thirds.
- Compared to baseline, the introduction of more conveniently located recycling containers and the use of prompts increased the amount of newspaper recycled in three apartment complexes from 50 to 100%.<sup>(6)</sup>
- Following the introduction of verbal and visual prompts in a high school cafeteria, littering was reduced by over 350%.<sup>(7)</sup>
- Prompts have also been shown to have a substantial impact upon paper recycling.<sup>(8)</sup> In one department at Florida State University, a prompt that read “Recyclable Materials” was placed directly above a recycling container. The prompt indicated the types of paper to be recycled, while another prompt over the trash receptacle read “No Paper Products.” The addition of these two simple prompts increased the percentage of fine paper captured by 54%, while in another department the same procedure increased the capture rate by 29%.

These and other studies support the notion that to be effective, a prompt should be delivered as close in space and time as possible to the target behavior. Accordingly, place prompts to turn off lights on or beside the light switch by the exit. Similarly, prompts to purchase products that contain recycled content should be on the store shelf at the point of sale.

## Prompts and Source Reduction

Several initiatives to encourage source reduction are demonstrating just how effective prompts can be in promoting sustainable behavior.

The Minnesota Office of Waste Management has designed a program entitled SMART (Saving Money And Reducing Trash) that provides communities with various educational materials for shoppers. One element of this program is the “shelf talker.” Shelf talkers are prompts that identify products that reduce waste and save money. Similarly, the Champaign,

Illinois, Central States Education Center uses posters, flyers and shelf labels to indicate products that are environmentally friendly.<sup>(9)</sup> This program identifies items that either are recyclable locally, have less packaging, or are “safer-earth” products (e.g., non-toxic cleaners). Affixing 700 long-term labels throughout a store takes several hours, considerably less time than it takes to adjust the 17,000 price labels that, on average, are changed weekly. Analysis of supermarket store inventory suggests that the use of these prompts has shifted purchases to recyclable containers. The impact upon the purchase of “least-waste packages” and “safer earth products” has not yet been determined.<sup>(10)</sup>

In Seattle, Washington, a “Get in the Loop, Buy Recycled” campaign has been operating for several years.<sup>(11)</sup> Like the other initiatives, this program utilizes “shelftalkers” that identify products with recycled content. The program is advertised through television, radio and newspaper advertisements by both the King County Commission for Marketing Recyclable Materials and participating retailers. In 1994, 850 retailers in western Washington state participated.

Relative to the month preceding the launch of the 1994 campaign, sales of recycled-content products increased nearly 30%.<sup>(12)</sup> Sales of specific product categories have shown even more dramatic increases. For example, sales of recycled-content paper products have increased by 74%.

### Building Prompts into Your Program

Prompts can be effective for encouraging both one-time and repetitive behaviors that promote sustainability. One-time behaviors, as the name suggests, refer to actions that individuals engage in only once, but that result in an ongoing positive environmental impact (e.g., installing a clock thermostat, connecting a low-flow showerhead). Because these

#### A Checklist for Using Prompts



In considering using prompts, follow these guidelines.

- Make the prompt noticeable.

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- The prompt should be self-explanatory. Through graphics and/or text the prompt should explain simply what the person is to do (e.g., turn off the lights).

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- The prompt should be presented as close in time and space as possible to the targeted behavior (e.g., place a prompt to turn off lights directly on a light switch; place a prompt to purchase a product with recycled content directly below the product).

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- Use prompts to encourage people to engage in positive behaviors rather than to avoid environmentally harmful actions (e.g., use prompts to encourage people to buy environmentally friendly products rather than to dissuade them from purchasing environmentally

behaviors only have to be engaged in once, they are often easier to influence than repetitive behaviors, where an individual has to engage in an action repeatedly for there to be a significant environmental benefit (e.g., composting, source reduction). Given the difficulty of making lifestyle changes that promote sustainability, prompts may be of particular use in establishing and maintaining repetitive behaviors that favor sustainability.

Below are several examples of how prompts can be used to foster sustainable behavior.

## EXAMPLES: USING PROMPTS TO FOSTER SUSTAINABLE BEHAVIOR

### Waste Reduction

- Use “shelf talkers” at the point-of-sale to promote source reduction.
- Distribute grocery list pads that remind shoppers every time they look at their grocery list to shop for products that have recycled content, are recyclable, or have least-waste packaging.
- Place signs at the entrances to supermarkets reminding shoppers to bring their reusable shopping bags into the store. Also, distribute car window stickers with the purchase of reusable shopping bags; the stickers can be put on the window next to the car lock to remind people to bring their reusable bags into the store.
- Have check-out clerks ask consumers if they have brought bags with them.
- Affix decals to potentially hazardous household products during home assessments that indicate vividly (see Chapter 6) that the product must be disposed of properly. The decal should contain information on where to dispose of hazardous waste and a contact number.
- Attach a decal to the side of recycling containers indicating what can be recycled. When what can be recycled changes, simply place a new decal over the old one.
- Attach a decal to compost units indicating organics that can be composted and the basics of composting. Better yet, since neither what can be composted nor the basics of composting changes, require that this information be stamped directly onto the compost unit.

### Energy Conservation

- Affix decals directly to light switches to prompt that lights be turned off when rooms are vacant.
- Affix removable decals to the dashboards of new cars prompting drivers to turn off their engines while parked.
- Use signs to encourage drivers to turn off their engines while parked in locations where drivers frequently wait (schools, train stations, loading docks, etc.).
- Affix decals to dishwashers and washing machines encouraging that they only be used when there is a full load.
- Affix decals to all appliances which indicate the relative energy efficiency of the appliance (e.g. indicate the second price tag). This is presently done for major appliances in Canada.

### **Water Conservation**

- To encourage lawn watering on odd or even days, ask each homeowner for permission to place a tag on the outside water faucet.
- Arrange with local retailers to attach decals to lawnmowers that encourage householders to raise the level of the lawnmower. Additionally, this decal can encourage that the grass clippings be left on the lawn (mulched) as a natural nutrient.
- Have homeowners place an empty tuna can in the garden (to measure adequate watering). When the can is filled with water the garden or lawn has been adequately watered.
- Attach decals to dishwashers and washing machines in retail stores encouraging full loads.
- Attach decals to low-flow toilets and shower heads indicating that they save water and money.

### **Transportation**

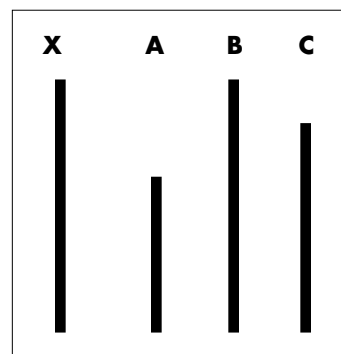
- Encourage motorists to turn off their engines while waiting to pick someone up by placing signs in common waiting areas (train stations, bus depots, school parking lots, etc.)
- Use prompts along with commitments to encourage car owners to have their car engines regularly tuned-up and their tires properly inflated.





## Tools › Norms › Building Community Support

Imagine that you have agreed to participate in an experiment on visual discrimination. Upon arriving for the study, you are asked to take your place at a table at which five other participants are seated. As you take your seat, the experimenter explains that this study will involve making perceptual judgments regarding the lengths of four lines. He then projects an image on the screen at the front of the room. On the left side of the screen there is a line labelled “X.” On the other side of the screen are three lines, labelled “A,” “B” and “C.” Your task, he explains, is a simple one: to select which of lines “A,” “B” or “C” is equivalent in length to line “X.” The experimenter then proceeds to show a variety of slides. For each slide the other participants and you are asked to select the line that is equal to “X.” After several slides, you are beginning to yawn and wonder how someone ever received a grant to conduct this research.



On the next slide, however, something unexpected happens. In response to the set of lines to the left, the first participant selects line “C” as the line that is equal to “X.” You rub your eyes and look again. Yes, she did say “C” - but clearly that is wrong, you think to yourself. Your train of thought is broken as the next participant also reports that line “C” is equal to “X.” After the third, fourth, and fifth participants also select “C” you begin to question your own visual abilities, mentally make a note to have your eyes checked and then utter what a moment ago was unthinkable. “Line C,” you hear yourself saying, “is the correct choice.”

When Solomon Asch conducted this study, approximately 75% of the participants altered their answers at least once to concur with the incorrect answers of others in the group (who, as you have by now surmised, were accomplices of the experimenter).<sup>(1)</sup> Perhaps you are thinking that these visual discriminations were difficult enough to lead participants to really question their selections. Unfortunately, they were not. When participants were left on their own to select which of the three lines was the correct match, the correct line was selected 99% of the time.

Asch’s research is both surprising and troubling. In response to the findings, Asch wrote: “That reasonably intelligent and well-meaning young people are willing to call white black is



a matter of concern.” Asch’s findings are not unique, however. In a variety of settings, people have been found to alter their answers to be in line (no pun intended) with normative, though clearly incorrect, answers given by others.

What is fascinating about Asch’s study, and other research on conformity, is that the tasks are often completely inconsequential. In the larger scheme of things, it simply doesn’t matter which of the lines is equal to “X.” Nonetheless, people looked to the behavior of those around them to determine how they would respond.

Asch’s research underscores the important role that other people have upon our own behavior. To date, too little attention has been given to the significant impact that norms can have upon the adoption of sustainable behavior. If we are to make the transition to a sustainable future, it is critical that we are able to develop a new set of societal norms that support sustainable lifestyles. This chapter will introduce you to research which demonstrates the powerful influence that norms have upon behavior, and provide guidelines for integrating the use of norms into the programs you deliver.

## Social Norms and Sustainable Behavior

During the 1930’s, both American and Canadian farmers were losing dramatic amounts of topsoil from their fields. In response to this crisis, the U.S. government distributed brochures which detailed the problem and suggested actions, such as planting trees as wind screens, that could be taken to slow the loss of topsoil. Like the information campaigns discussed in Chapter 1, this attempt to influence the behavior of farmers was a dismal failure. When it was clear that farmers were not changing their agricultural practices, the government tried a new approach that involved working directly with a small number of farmers. These farmers received direct assistance in adopting practices that would slow erosion. It was reasoned that farmers might be more apt to adopt new approaches if these new approaches were first modelled by a farmer in their area. Modelling a new technique, such as installing wind screens or alternative methods of tillage, it was believed, would be far more compelling than dryly describing the technique in a pamphlet. Further, it would encourage local farmers to discuss the new technique and, if they observed that it was working successfully on a local farm, increase the likelihood that they would adopt it themselves. Unlike the information campaign, this approach was far more successful. Neighboring farmers observed the changes that these farmers were making, discussed them with them, and adopted similar practices once they saw the results. As a consequence, these new agricultural practices spread quickly.<sup>(2)</sup>

More recently, several studies have documented the impact that modelling and social norms can have upon individuals engaging in sustainable behavior. At the University of California, Santa Cruz, athletic complex, the male shower room had a sign that encouraged that the showers be turned off while users soap up.<sup>(3)</sup> More specifically, the sign read: “Conserve water: 1. Wet down. 2. Water off. 3. Soap. 4. Rinse.” This sign apparently had little effect on behavior. On average, only 6% of users were found to comply. One possibility was that people simply didn’t see the sign. However, a survey of a random sample of students demonstrated that 93% were aware of the sign and its message.

Elliot Aronson and Michael O’Leary reasoned that students might be far more likely to comply with the sign if they observed another student following its instructions. To test this possibility, an accomplice entered the male shower room in the athletic complex and proceeded to the back of the room and turned on the shower. When another student entered, the accomplice turned off the shower, soaped up and then turned on the shower once more to rinse off. All of this was done with his back to the other student and without eye contact. When the accomplice modelled water conservation in this way, the percentage of students who turned off the shower to soap up shot up to 49%. Further, when two accomplices modelled water conservation, the number of people who followed suit rose to 67%. It is important to note that the changes in behavior observed in this study were not brought about by punitive measures. No “shower police” intervened if students did not turn off the shower while soaping up (Note that two community-based social marketing strategies are employed in this study: prompts (the sign) and norms. While the sign by itself was ineffective in altering the behavior of those using the shower room, when it was combined with the norm, behavior changed dramatically. When possible, look for opportunities to use more than one community-based social marketing tool at a time). As is further evidenced in the following study, in many situations it is sufficient to make a community norm salient by modelling it in order to have a substantial impact upon behavior.

Picture yourself leaving the local library and walking toward your car in the parking lot. As you get closer to your car, you notice that someone has left one of those annoying flyers under not only your windshield wipers, but everyone else’s as well. You remove the flyer and crumple it up, but do you toss it on the ground? We are well aware that most of the people who are going to read this book will take the flyer home and put it in their recycling container, but what would “most other” people do in this situation? The answer, it turns out, depends upon what those around them do. In a series of ingenious studies, Robert Cialdini and his colleagues placed flyers on every windshield in a library parking lot.<sup>(4)</sup> In one condition, as library patrons made their way back to their cars an accomplice walked past, picked up a littered bag and placed it in a garbage can. In the control condition, the accomplice simply walked past and did nothing. What impact did these simple acts have upon the library patrons? For those who observed the littered bag being picked up and thrown in the garbage, virtually no one littered the flyer. However, when the accomplice simply walked past and left the bag on the ground, over one-third threw the flyer on the ground! In a related study, Cialdini and his colleagues removed the human model and simply manipulated the number of flyers that were strewn about in the parking lot. When the parking lot was littered with flyers, the library patrons littered as well. However, when only one flyer was littered in the parking lot, patrons littered significantly less.

### Using Norms Effectively

Clearly, perceived norms can have a substantial impact upon behavior. How might they best be used to promote sustainable behavior? To answer this question, it is useful first to consider two distinct ways in which norms affect behavior: compliance and conformity. In compliance, individuals alter their behavior to receive a reward, to provoke a favourable reaction from others, or to avoid being punished. The change in behavior occurs not because the person believes that the behavior is “the right thing to do,” but rather because there is a tangible consequence for not doing the behavior. Compliance tactics, such as bottle deposits

or charging user fees for waste disposal, are effective as long as the rewards or punishments are in place (see Chapter 7). Once the rewards and punishments are removed, the gains made by using compliance tactics are often lost. While compliance techniques can have substantial impacts upon behavior, often they are not cost-effective to administer. In contrast, conformity that occurs due to individuals observing the behavior of others in order to determine how they should behave can have long-lasting effects.

Where possible, then, programs to promote sustainable behavior should attempt to communicate what are accepted behaviors. For example, communicating that the vast majority of people living in a community strongly believe that it is important to reduce waste, and that they demonstrate this belief through participating in curbside recycling programs, can be an effective way to bolster recycling as well as to introduce other waste reduction programs such as composting and source reduction. By stressing the very high participation rates in blue box recycling, clear messages are sent regarding the perceived importance of waste reduction to others.

To be effective, the norm must also be visible. Certain sustainable behaviors, such as composting, are almost invisible in a community. Unlike blue box recycling, which demonstrates a community norm every time people put their containers at the curbside, composting happens in the backyard, out of view. How can composting be made more visible? Attaching stickers that proclaim “This Household Composts” to the side of the recycling or garbage container can help to create and maintain a community norm for composting each time these containers are taken to the curbside.

For norms to be effective they need to be internalized by people. That is, people need to view the behavior which the norm prescribes as the way they “should” behave. Several studies demonstrate that it is possible to influence the acceptance of such norms. Joseph Hopper and Joyce McCarl Nielsen believe that an important motivation to recycle is the belief that it is simply the “right thing to do” (a norm), despite the fact that it takes time

## A Checklist for Using Norms



Follow these guidelines in using norms:

- The norm should be noticeable;

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- As with prompts, the norm should be made explicit at the time the targeted behavior is to occur (e.g., Upon entering a supermarket, customers could be greeted by a prominent display that indicates the percentage of shoppers who purposely select products that favour the environment); and

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- As with prompts, when possible use norms to encourage people to engage in positive behaviors rather than to avoid environmentally harmful actions.

and can be inconvenient. Further, they expect that this norm is most likely to develop through direct contact between people rather than through campaigns that rely upon prompts or information alone. To test these assumptions, the authors arranged for a sample of homes in Colorado to be divided into three groups.<sup>(5)</sup> In one group, households were visited by a volunteer block leader who spoke with them about curbside recycling, encouraged them to recycle, and then provided a prompt (reminder notice) several days before the monthly recycling collection date. In contrast, in the prompt group, households received a reminder notice a few days before the collection day, while in the information group households received a flyer that described the recycling program, indicated what items were acceptable and provided the collection dates. Those households who were visited by a volunteer block leader recycled nearly a third more often than households who received prompts and nearly three times as often as the homes who received the information flyer (further evidence of the ineffectiveness of information-based campaigns in bringing about behavior change). Not only were the volunteer block leaders most effective in altering behavior, but they alone had an impact upon norms. In comparing survey results from before and after this campaign, households who were visited by a block leader were more likely to report that they felt upset if they discarded recyclable materials and that they felt an obligation to recycle these materials. The prompt and information strategies had no impact upon these beliefs.

Many anti-littering campaigns have as their central message that littering is simply not acceptable behavior. When Oklahoma City initiated an anti-littering campaign in 1987, community norms regarding littering changed substantially. Prior to the campaign, 37% of the community indicated they would feel guilty if they littered. Two years following the campaign that figure had risen to 67%. The number of people who believed they would lose the respect of others if they littered nearly tripled in the same time period.<sup>(6)</sup>

Finally, normative strategies are likely to be particularly effective when people are being asked to change their behavior or adopt a different lifestyle. In these cases, behavioral research suggests that direct contact in which social norms, modelling (see Chapter 6), and social diffusion (see Chapter 6) occur may be particularly important.<sup>(7)</sup>

Below are a variety of suggestions for using norms to promote sustainable behavior.

## USING NORMS TO FOSTER SUSTAINABLE BEHAVIOR

### Waste Reduction

- Affix a decal to the recycling container indicating that “We Compost.”
- Affix a decal to the recycling container indicating that the household buys recycled products.
- Ask supermarket shoppers to wear a button or sticker which shows their support for buying products that are recyclable or have recycled content (note that agreeing to wear a button or sticker also increases the likelihood that they will actually shop for these products - see Chapter 3).

### **Energy Conservation**

- Attach gas mileage bumper stickers to very fuel- efficient cars.
- Attach decals to energy-efficient products in stores which indicate the number of people who believe it is important to purchase products that are more environmentally friendly.

### **Water Conservation**

- Communicate the percentage of people who comply with municipal requests to restrict summer water use.

### **Transportation**

- Communicate the number of people in an organization who use mass transit, car pooling, walking or bicycling to get to work.



## Tools › Communication › Effective Messages

The morning that I began to write this chapter, my four year-old daughter and I had breakfast together. She often uses breakfast as a time to plan what we will do together when I return from work. At four, she has already mastered many of the finer points of persuasion. She understands that to persuade me she must first secure my attention. Further, she realizes that she must compete with her sister, my wife, the radio, the morning newspaper and my own preoccupations, if she is going to obtain a commitment to do one of her favorite things when I return from work.

She usually secures my attention by asking that I sit with her at the children's table in our kitchen. This table has only two chairs, is secluded in a corner and, given its small size, places us very close together. Further, the table is too small an area upon which to open the morning paper. From her perspective, the setting is perfect.

Once I am sitting at the table and she has my full attention, the real persuasion occurs. In the summer, my daughter has three activities that she prefers above all others: going for a hike at a nearby beaver pond, having a picnic and swim at the wading pool, or going to the playground down the street (which just happens to be very close to the best place to get ice cream in Fredericton).

She rarely begins by suggesting all three options. Instead, she begins with the most preferred and least likely, going to the beaver pond. She understands that we will only go to the beaver pond once or twice a week, so on any particular day she has little chance of persuading me to go there with her. Nonetheless, she always starts with the beaver pond. When I begin to explain why we can't go to the beaver pond (we were there yesterday), she cuts me off by saying: "I've got a deal for you. We won't go to the beaver pond, but we can go to the wading pool and have a picnic." On that particular evening, we have a friend coming for dinner and so the picnic is ruled out. Finally, she strategically turns to her third option: going to the playground down the street. Unconsciously she understands that she has the upper hand as she has already conceded the beaver pond and the wading pool. As a skilled negotiator, she knows that it is my turn to make a concession. Once she realizes that I am beginning to say yes, she closes the deal by suggesting that after the playground we can get some of the ice cream that I like (she makes no mention of her having any). As soon as I agree, she immediately says: "It's a deal, then?" As I acknowledge that "it's a deal," she gets up from the table to tell her sister that we are going to the playground after supper (making my commitment public), and then for ice cream, while I am left to ponder how once again I have been out maneuvered by a four year-old who is only going to become more skilled with age.

Much of human communication involves persuasion. Whether done by a four year-old or a marketing firm, the aims are the same: to influence our attitudes and/or our behavior. The transition to a sustainable future will require that the vast majority of people be persuaded to adopt different lifestyles. How can we most effectively persuade people to adopt lifestyles

supportive of sustainability? The purpose of this chapter is to outline some of the critical aspects of effective persuasion.

## Use Captivating Information

All persuasion begins with capturing attention. Without attention, persuasion is impossible. In a review of pamphlets and flyers produced by governmental agencies and utilities on energy conservation, Paul Stern and Elliot Aronson found that most of the reviewed materials did not meet this most basic requirement.<sup>(1)</sup> The material reviewed was inconspicuous, boring or both.

How do we capture the attention of those we wish to persuade? While ideally we would like to sit them down at a very small corner table, where we know we have their undivided attention, we have to resort to other means. One of the most effective ways to ensure attention is to present information that is vivid, concrete and personalized.

There are a variety of ways in which information can be made vivid, concrete and personal. For example, in a home energy audit a home assessor might utilize the householder's utility bills in describing money that is being lost by not retrofitting. Further, the assessor can provide information about similar people who have installed resource-conserving devices or describe "super-conservers" who have been exceptionally effective in reducing resource consumption.<sup>(2)</sup>

The power of vividly presented information has been demonstrated in a unique experiment carried out in California.<sup>(3)</sup> Marti Hope Gonzales and her colleagues trained nine of Pacific Gas and Electric's home assessors to present information in a manner that was psychologically compelling (they were also trained to seek a commitment; see Chapter 3). Normally, assessors provide feedback to the householder regarding energy efficiency by noting the absence of insulation in a basement or attic, cracks around windows or doors, etc. However, in this study the assessors were trained to present this same information vividly. Below is an example of what the assessors were trained to say:

You know, if you were to add up all the cracks around and under these doors here, you'd have the equivalent of a hole the size of a football in your living room wall. Think for a moment about all the heat that would escape from a hole that size. That's why I recommend you install weatherstripping . . . And your attic totally lacks insulation. We professionals call that a naked attic. It's as if your home is facing winter not just without an overcoat, but without any clothing at all. (p. 1052)

Writing on the importance of presenting information vividly in home assessments, the authors state:

"Psychologically, a crack is seen as minor, but a hole the size of a football feels disastrous. The fact that they encompass the same area is of interest to an engineer; but in the mind of the average homeowner, the football will loom larger than the cracks under the door. Similarly, insulation is something with which most people lack experience, but the idea of a

naked attic in the winter is something that forces attention and increases the probability of action (p. 1052).”

Similarly, in describing the amount of waste produced annually by Californians, Shawn Burn at the California Polytechnic State University depicts the waste as “enough to fill a two-lane highway, ten feet deep from Oregon to the Mexican border.”<sup>(4)</sup> Clearly, her depiction is much more vivid than simply saying that Californians each produce 1,300 lbs. of waste annually.

Why is vivid information effective? Vivid information increases the likelihood that a message will be attended to initially, a process called encoding, as well as recalled later. That is, information that is vivid is likely to stand out against all the other information that is competing for our attention. Further, because it is vivid, we are more likely to remember the information at a later time. This last point is critical, since if the information is only remembered fleetingly, it is not likely to have any long-lasting impact upon our attitudes or behavior.

### Suggestions for Presenting Information Vividly

- Research that has investigated public understanding of resource use demonstrates that the public has a poor understanding of household resource consumption.<sup>(5,6)</sup> Householders grossly overestimate the resources used by visible devices such as lighting and greatly underestimate less visible resource consumption (e.g., water heaters and furnaces). Indeed, in one study homeowners were found to believe that lighting and hot water heaters consumed an equivalent amount of energy. This lack of understanding is reasonable, given the dearth of information that utility bills provide regarding home resource use. This void of information has been compared to going grocery shopping and discovering that none of the items that you wish to purchase have price tags.<sup>(7)</sup> All that you receive when you go through the checkout is a total for the items purchased. You are left on your own to estimate the cost of each item. To overcome this lack of information and the public’s bias toward visible sources of energy use, create a graph that shows the percentage of home energy use by item. Rather than using bars for the graph, instead replace each bar with a picture of the item itself (furnace, water heater, major appliances, lighting, etc.). By presenting information in this vivid format, you enable householders to clearly see where they should be putting most of their efforts to reduce energy use.
- To vividly portray the amount of waste generated by a community, consider using a well-known local landmark. For example, the amount of waste Toronto generates could be described relative to the SkyDome.
- Use brightly colored door-hangers rather than flyers or bill inserts. Flyers and bill inserts are frequently ignored. Door hangers that are well designed have a higher likelihood of being noticed.
- To bring attention to the amount of water that is used for lawn watering, prepare a chart like the one described above for energy use that depicts the amount of water consumed for lawn watering, showering, cooking, etc. Lawn watering will dwarf the other items.
- Life magazine recently vividly portrayed our consumptive lifestyles by taking all the possessions of an American family and placing them on the front lawn of their house. Next to this picture was a picture of a family from the Third World, once again with all of their possessions placed in front of their home. The contrast in lifestyles and the attendant



impacts upon the environment were blatant. In our society, differences in consumption between the wealthy and the poor can be similarly displayed.

Once you have found a way to gain the attention of your intended audience, you next need to consider who your audience is.

## Know Your Audience

Before you craft the content of your message, and decide when and how you will present it, you need to know the attitudes, beliefs and behavior of your intended audience. In reality, rarely do you have just one audience. The messages that you develop will need to be tailored to the different segments of your community that you wish to reach. For example, a program to decrease the purchase of household hazardous waste (HHW) and increase the incidence of household hazardous waste being taken to a depot for disposal might target several different audiences. Preliminary research would need to determine if those who purchase HHW differ based upon the type of product (e.g., household cleaner versus motor oil). Further, you would need to know who would be most likely to collect HHW in the household and who would be most likely to take it to the depot.

Clearly, what is seemingly a relatively straightforward program has the potential to have multiple audiences for whom messages will need to be developed. To develop an effective program, therefore, you need to gather as much information as possible about the target audiences to determine how best you can communicate your messages to them. Gathering this type of information is frequently done through the use of surveys and focus groups (see Chapter 2).

A further reason for knowing your audience is provided by the following example. Imagine that you wish to advocate that people adopt simpler, less consumptive lifestyles. You need to know both how receptive people are to such a message as well as how many people would presently describe themselves as living such a lifestyle. A phone survey can be used to gather this information. Phone surveys and focus groups will also allow you to gauge the level of support for a variety of more and less extreme messages regarding less consumptive lifestyles. In doing this preliminary research, you are trying to find a message that has moderate support. Note that if you have the resources to target your message to different sectors of the community, you will need to determine the level of support within each of these sectors (e.g., the elderly, single parents, etc.). Why concern yourself with finding a message that has general support? Obviously, you don't want a message that is fully supported, or you will simply be communicating what people already believe. However, you do not want to present a message that is too far removed from the beliefs of your audience. If your message is too extreme, your audience will actually become less, rather than more, supportive after hearing your message. In summary, then, you want to tailor your message so that it is slightly more extreme than the beliefs of your audience. Messages that are just slightly more extreme are likely to be embraced. Over time, it is possible to move people's attitudes and beliefs a great deal. However, you will need to have the patience and resources to do this one small step at a time.

## Use a Credible Source

Who presents your message can have a dramatic impact upon how it is received. In general, the more credible the person or organization delivering the message, the more influence there will be upon the audience.<sup>(8)</sup> The impact of credibility upon sustainable behavior is demonstrated in a simple, but elegant study. In this study, two groups of homes received an identical pamphlet on energy conservation. In one case, the pamphlet was enclosed in an envelope from the State Regulatory Agency, while in the other the envelope was from the local utility. Prior research had shown that the State Regulatory Agency was viewed as more credible than the local utility, but would simply enclosing the same pamphlet in the two different envelopes have an impact upon home energy use? Yes. Those householders who received the pamphlet from the State Regulatory Agency carried out more of the advocated changes than did the householders who received the identical pamphlet from the local utility.<sup>(9)</sup>

How do you determine who will be credible for your audience? One method is to use a survey to determine the credibility of several different spokespersons or organizations (see Chapter 2). A simpler method, however, is to search for organizations or individuals who are well known for their expertise in the area and have the public's trust. Perceived credibility appears to be based primarily on these two attributes. You might also consider having your initiative endorsed by a number of credible individuals. Endorsement from several sources is more likely to be effective since some individuals will be more credible to some segments of the public, and other individuals will be more credible to others.

Once you have decided “who” will deliver your message, you next need to concern yourself with “what” will be communicated.

## Frame your Message

Interestingly, how you present, or “frame,” the activity you are trying to promote is very important. Most sustainable activities can be presented positively (You should compost because you'll save in garbage collection user fees), or negatively (If you don't compost you'll lose money by having to pay more to have your garbage collected). Understandably, most organizations gravitate toward presenting positive rather than negative motivations to engage in a new activity. But should they? Apparently, no. Messages which emphasize losses which occur as a result of inaction are consistently more persuasive than messages that emphasize savings as a result of taking action.<sup>(10)</sup>

## Carefully Consider the Use of Threatening Messages

Few public issues lend themselves better to threatening messages than sustainability. Evidence abounds of the predicament we are in. Issues such as species loss, global warming, ozone depletion, and air and water pollution are just a few of the many assaults on the environment and consequently ourselves. However, is it wise to use threatening messages in communicating with the public? There is no simple answer to this question, but here are some of the issues you should consider. First, literature in the field of stress and coping suggests that we need to first appraise an issue as a threat before we are likely to take appropriate action.<sup>(11)</sup> Rachel Carson's *Silent Spring*, for example, demonstrates the importance of communicating imminent threats to a wide audience. However, to be effective threatening messages need to communicate more than just the threat we face. In response to a threat, people have what

Richard Lazarus refers to as two broad coping strategies. Lazarus' research suggests that individuals respond to threats by using either problem-focused coping or emotion-focused coping. Problem-focused coping, as the name suggests, refers to taking direct action to alleviate the threat. In the case of global warming, problem-focused coping would entail using alternative transportation, increasing the energy efficiency of your home, etc. In contrast, emotion-focused coping might involve ignoring the issue, changing the topic whenever it is raised in conversation, denying that there is anything that can or needs to be done, etc. Whether someone uses problem-focused coping or emotion-focused coping appears to be determined by their perception of how much control they have to right the problem. If we perceive that we have a significant amount of control, we are likely to use problem-focused coping. If we perceive that we have very little, we are likely to use emotion-focused coping. Further, research that I have conducted suggests that regarding global issues, our perception of how much control we have is largely determined by our sense of community.<sup>(12)</sup> If we feel that in concert with others we can have an impact, we are likely to act. If, however, we feel little common purpose, we are likely to perceive that there is little we can do personally.

Threatening or fear arousing messages need to be combined with clear suggestions regarding what people can do to reduce the threat.

Using threatening messages, then, needs to be carefully considered. It is important that your audience understand the gravity of the situation. However, if you are not able to at the same time engender a feeling of common purpose and efficacy in dealing with the threat, your message may cause people to avoid, rather than constructively deal with, the issue.

In summary, threatening messages are a necessary part of directing people's attention to crises. However, they are likely to be counter-productive if they are not coupled with messages that are empowering. Further, repeatedly presenting a threatening message can cause people to habituate to the message. Once people understand the "crisis," it is wise to move primarily or exclusively on to dealing with the solution.

### Decide on a One-Sided versus Two-Sided Message

All issues have more than one side. However, in developing persuasive communication, should you address just one or both sides? The answer, as with most things in life, is "it depends." If you are presenting your communication to an audience that has little comprehension of the issue, you will be most persuasive if you present just one side. However, if you are communicating with an audience that is aware of both sides of the issue, then you need to present both sides to be perceived as credible. As with the content of the message, deciding on a one-sided versus two-sided message once again underscores the importance of knowing your audience.

Presenting two sides of the issue has an additional advantage. By presenting the opposing viewpoint, and providing the counter-arguments to this viewpoint, it is possible to "inoculate" your audience against alternative views.

Finally, where possible, you will want to demonstrate that there is a win-win solution to the problem. Some environmental issues, however, do not lend themselves well to such a solution (e.g., cutting old-growth forest). In these cases, you will likely be best served by presenting both sides of the issue.

### Make your Message Specific

When crafting your message you will want to ensure that the actions that you advocate are clearly articulated. Messages that describe actions to be taken in clear, straightforward steps are more likely to be understood and followed. For example, rather than simply suggesting that households weatherstrip, you need to clearly show each of the steps that are involved in weatherstripping a door or window.

### Make Your Message Easy to Remember

All actions that support sustainability require reliance upon memory. Some activities, such as recycling, make substantial demands on memory. In asking someone to recycle, we are requiring them to remember how to recycle (commingled versus separated, whether items have to be washed, etc.), when to recycle, and what to recycle. Research suggests that failing to address the role that memory plays can significantly harm the success of a program.<sup>(13)</sup> Stuart Oskamp has demonstrated, for example, that recycling programs which make it easy to remember how to recycle, by having the recyclable items commingled rather than separated, have higher participation and substantially higher capture rates (note that this effect might also be due to greater convenience).<sup>(14)</sup> Further, programs that make it easy to remember when to recycle, by having recycling occur on the same day as garbage collection, also report higher participation rates.<sup>(15)</sup> Finally, the public can find it quite difficult to remember what to recycle. Many curbside recycling programs have extensive lists of recyclable items. Indeed, when I once asked the project team who had developed the promotional and educational recycling materials for a large municipality to name all of the items that could be recycled, none could. Research suggests that the public knows the main items that can be recycled (glass, cans, newspaper), but has a great deal of difficulty in remembering many other items. In contrast, remembering what to compost is significantly easier. People can create a simple memory device, or heuristic, to guide them in remembering what to compost (if it is food waste or yard waste it is compostable, as long as it is not meat, oil or dairy). In contrast, no simple memory device will work for recycling since there is no unifying theme that unites all the items.

One of the simplest ways to remove the burden that a sustainable activity can place upon memory is through the use of prompts. Remember that to be effective the prompt needs to be presented as close as possible to where the activity is going to occur (see Chapter 4). Affixing a prompt to the side of a blue box meets this criteria of proximity and may be more useful than providing prompts that are affixed to a fridge (it may be advantageous to provide both since some households do not collect recyclables in their blue box). Similarly, attaching a prompt to a kitchen organics catcher can make it easy for people to remember what can be composted, and cut down on contamination rates.

Remember, unless we make it easy for people to remember how, when and what to do, it is unlikely that a program will be very successful.

## Provide Personal or Community Goals

Providing targets for a household or a community to reach can be effective in reducing energy and water use and increasing waste reduction. A national survey of the directors of 264 U.S. recycling programs revealed that those cities that had set community recycling goals were more successful than those that had not (clearly, these programs likely differed in other important ways as well).<sup>(16)</sup>

## Emphasize Personal Contact

Research on persuasion demonstrates that the major influence upon our attitudes and behavior is not the media, but rather our contact with other people. That is not to say that the media are without influence. Advertising can be effective in two ways. First, it is effective when the objective is to increase market share by switching the public from one brand of a product to another.<sup>(17)</sup> Increasing market share is a relatively easy process, given that the consumer is already committed to purchasing a type of product and there are few impediments to altering brand loyalties. Second, the media have an indirect effect by influencing the topics that we discuss. For example, the media may not directly influence you to be more energy efficient. However, if you watch a documentary on global warming, and subsequently discuss it, the conversation you have may convince you to make your home more efficient.

## Model Sustainable Behavior

Whether the contact is made personally or through the media, one of the more effective methods for increasing adoption of a sustainable behavior is to model the behavior we wish others to adopt. Modelling involves demonstrating a desired behavior.<sup>(18)</sup> Modelling can occur in person or through television or videotape. For example, studies have documented significant reductions in energy use in response to either a taped or live broadcast that demonstrated simple conservation methods and mentioned the financial benefits to be gained from carrying them out.<sup>(19, 20)</sup>

## Foster Social Diffusion

The adoption of new behaviors, such as recycling and composting, frequently occurs as a result of friends, family members or colleagues introducing us to them. This process is referred to as social diffusion.<sup>(21, 22, 23)</sup> Social diffusion has been shown to be a factor in the installation of clock thermostats as well as solar water heaters. While social diffusion appears to be a powerful process, it has been greatly underutilized in attempts to promote sustainable behavior. Two studies discussed earlier demonstrate the potential of social diffusion. Recall that when farmers had received direct assistance with alternative farming practices, they were much more likely to influence others to adopt similar practices than were information-based campaigns. Similarly, homes that made a commitment both to grasscycle and to encourage neighbors to do the same changed not only their own behavior but also the behavior of the neighbors.

In developing a community-based social marketing strategy, look for opportunities to foster social diffusion. One simple method is to advertise the names of people who have made a commitment to carry out a new activity, such as walking to work. By advertising the names not only do you increase the commitment of the individuals whose names are advertised, but

you also provide an opportunity for those who recognize someone's name to approach that person and ask about the activity, thereby fostering social diffusion.

### Community Block Leaders

Commitment, modelling, norms and social diffusion all have at their core the interaction of individuals in a community. Commitment occurs when one individual pledges to another to carry out some form of activity. Modelling results when we observe the actions of others. Norms develop as people interact and develop guidelines for their behavior, and social diffusion occurs as people pass information to one another regarding their experiences with new activities. Recent research has documented that it is possible to harness these processes in order to have a significant impact upon the adoption of sustainable behaviors. By making use of community volunteers, or block leaders, Shawn Burn has demonstrated the powerful and cost-effective impact that some of these factors can have.<sup>(24)</sup> Working with city officials in Claremont, California, she arranged to have homes that were not recycling randomly divided into three groups: the first received a persuasive appeal delivered by a block leader, the second received a written persuasive appeal, and the third was a control group. Both the persuasive appeal delivered by the block leader and the written persuasive appeal made use of the same message. The control group homes were not approached and served as a comparison for the other conditions. In the condition in which a persuasive appeal was delivered by a block leader, homeowners were approached by individuals from their community who were already recycling. These "block leaders" delivered a persuasive appeal and left orange recycling bags with the homeowner. In the persuasive message alone condition, homeowners received a written version of the same message and the collection bags. In the 10 weeks that followed the delivery of the messages, the results firmly supported the block leader approach as being most effective. An average of 28% of the homes visited by the block leader recycled weekly, compared with 12% for those who received only the written appeal, and only 3% for the control group. Further, over 58% of those households in the block leader condition recycled at least once in the follow-up, compared with 38% for the written appeal and 19.6% for the control group. The text of the appeal was, as follows:

"As a U.S. citizen you probably show your support for our country by voting and paying taxes. Beyond this you may feel that there is nothing more that you can do. However, there are things that you can do. One of these is participation in Claremont's recycling program.

Californians alone produce some 40 million tons of refuse a year - enough to fill a two-lane highway, ten feet deep from Oregon to the Mexican border. Currently, the average person in the U.S. produces about 1,300 lbs. of solid municipal waste a year. Most of this trash goes into landfills, and it is estimated that if present trends continue, nearly all of L.A. County will be without refuse disposal capacity by 1991. RECYCLING uses wastes instead of filling up landfills. RECYCLING extends resource supplies. RECYCLING IS EASY . . . SIMPLY PUT NEWSPAPERS, ALUMINUM, AND GLASS INTO SEPARATE BAGS AND PLACE AT THE CURB ON YOUR REGULAR TRASH COLLECTION DAY. Recycling makes a difference and recycling is happening. Over 80% of Claremonters favor the city's recycling program and other cities are calling to ask how Claremont does it. Help us do it, please recycle."

Note how the appeal has made use of several of the principles described above. It has been made vivid (a two-lane highway, ten feet deep from Oregon to the Mexican border), a

moderate threat has been used (L.A. County will be without refuse capacity by 1991), the proposed actions are clear and specific (put newspapers, aluminum and glass into separate bags and place at the curb on your regular collection day), the effectiveness of the actions is stressed (recycling makes a difference) and an appeal to norms is made (over 80% of Claremonters favor. . .). In addition to the content of the message, those that were visited by a block leader would have likely been influenced by several other factors that have been discussed above. For example, the block leader was able to obtain a commitment, served as a model, provided evidence of community norms, and assisted in diffusing the innovation (recycling) throughout the community.

Note that this strategy need not be limited to recycling. It could have similarly been used to promote a variety of activities, such as composting, source reduction, energy conservation or water efficiency.

### Provide Feedback

Effective communications involve more than simply presenting information to persuade people to adopt a new activity or making it easy for them to remember what, when and how to do the activity. To be fully effective, information about the impact of newly adopted activities needs to be presented as well. Numerous studies document the impact that providing feedback can have upon the adoption and maintenance of sustainable behavior. Here are several examples:

- Posting signs above aluminum can recycling containers that provided feedback about the number of cans that had been recycle during the previous weeks increased capture rates by 65%.<sup>(25)</sup>
- Households were mailed monthly letters that indicated the extent to which they had been able to reduce energy use over the same month during the previous year. In a letter that was sent separately from their bill, they were provided both with the reduction in kWhs and cost. This simple procedure reduced energy use by nearly 5% compared to comparable periods during the previous two years. Further, this study included a control group of households who never received this feedback. During the period of time in which the households who were receiving feedback were reducing energy use, the control households increased energy use.
- Households who received daily feedback on the amount of electricity they consumed, lowered energy use by 11% relative to physically identical households who did not receive feedback.<sup>(26)</sup>
- Households who received weekly group feedback on the total pounds of paper they had recycled, increased the amount recycled by 26%.<sup>(27)</sup> When weekly feedback was combined with public commitments there was a 40% increase.
- When residents of the Midland-Odessa (Texas) area were provided with daily evening television feedback and conservation tips they reduced gasoline usage by 32%.<sup>(28)</sup> Further, three months after ending the feedback, gasoline usage was 15% lower than it had been prior to the program.

This chapter has provided a variety of methods by which you can enhance the effectiveness of the communications you produce. In creating future communications, use this checklist as a guide.

### A Checklist for Effective Communications



- Make sure that your message is vivid, personal and concrete.

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- Using techniques described in Chapter 2, explore the attitudes and behavior of your intended audience prior to developing your message.

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- Have your message delivered by an individual or organization who is credible with the audience you are trying to reach.

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- Frame your message to indicate what the individual is losing by not acting, rather than what he/she is saving by acting.

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- If you use a threatening message, make sure that you couple it with specific suggestions regarding what actions an individual can take.

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- Use a one-sided or two-sided message depending upon the knowledge of your audience regarding the particular issue.

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- Make your communication, especially instructions for a desired behavior, clear and specific.

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- Make it easy for people to remember what to do, and how and when to do it.

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- Integrate personal or community goals into the delivery of your program.

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- Model the activities you would like people to engage in.

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- Make sure that your program enhances social diffusion by increasing the likelihood that people will discuss their new activity with others.

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- Where possible, use personal contact to deliver your message.

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- Provide feedback at both the individual and community levels about the impact of sustainable behaviors.







## Tools › Incentives › Enhancing Motivation

When Seattle, Washington began to charge residents for waste disposal based upon the number of cans of garbage they put at the curbside, the impact was remarkable. Prior to the introduction of user fees in the early 1980's, Seattle residents averaged 3.5 cans of garbage per household each week. By 1992, however, the average number of cans each household put out per week had been reduced to only one.<sup>(1)</sup> This astonishing decrease was brought about by providing a clear monetary incentive for people to reduce waste and by making it easy for them to divert by recycling.

Incentives, whether financial or otherwise (e.g., social approval), can provide the motivation for individuals to perform an activity that they already engage in more effectively, such as recycling, or to begin an activity that they otherwise would not perform, such as composting. This chapter will provide evidence of the impact of incentives in promoting waste reduction, energy efficiency, and alternative transportation. Finally, it will provide some general suggestions on the use of incentives.

### Incentives and Waste Reduction

Incentives have been used primarily to promote waste reduction through two methods: user fees for garbage collection and deposits for beverage containers.

### User Fees and Waste Reduction

A growing number of North American cities have implemented user-fee systems for garbage disposal. While significant differences exist in the methods used, reviews of user fee systems clearly indicate that they dramatically reduce the amount of waste going to landfill, and provide additional motivation for households to recycle, compost and, perhaps, source reduce.

Here are several examples:

- When San Jose, California introduced a user pay program in which residents were charged based upon the size of the container they placed at the curb, the impact was a 46% decrease in waste sent to the landfill, a 158% increase in recyclables captured, and a 38% increase in yard waste collected. There was no charge for curbside recycling and yard waste was collected at the curbside.<sup>(2)</sup>
- The Capital Regional District in British Columbia began to charge households for placing more than one bag or container at the curb in January of 1992. Under this program there was a 21% reduction in waste going to the landfill and a 527% increase in recycling capture rates. Curbside recycling was a free service to residents and yard waste had to be taken to a depot.<sup>(3)</sup>
- Worcester, Massachusetts introduced a program in which residents purchased bags for their garbage. This program resulted in a 45% reduction in the waste stream, with recycling responsible for 37% of the waste stream diversion. Residents were not charged for recycling nor for dropping off yard waste at a collection center.<sup>(4)</sup>

- Sydney Township, Ontario introduced a user pay system in which residents received 52 free tags to place on garbage bags, with extra tags costing \$1.50 Canadian each. Sydney Township carefully monitored the impact that introducing this initiative had upon their waste stream. Relative to the previous year, garbage sent to the landfill was reduced by 46%, weight of blue box recyclables increased by 26%, and the amount of kitchen waste being backyard composted rose to 50%. The introduction of user pay also decreased the amount of HHW placed in garbage by 50%.<sup>(5)</sup>

## Beverage Deposits

Another form of incentive is bottle deposits in which consumers pay an additional charge for purchasing beverages and then receive a portion of the deposit back when they return the container. Several studies indicate that deposits on beverage containers have a substantial impact on littering:

- The introduction of bottle deposits has been associated with a 68% reduction in litter in Oregon, a 76% reduction in Vermont, and an 82% reduction in Michigan.<sup>(6)</sup>
- When beverage container deposits were introduced in New York State, analysis of a highway exit and a section of a railway track in New York revealed that there was a 74% reduction in litter of stamped 5-cent deposit returnable bottles and cans along the highway exit and 99% reduction along the railway track.<sup>(7)</sup>

## Incentives and Energy Efficiency

Two forms of incentives have been used to promote energy efficiency in residential dwellings; alterations to the price of energy and financial incentives to make a home more energy efficient. Electricity rates in North America have traditionally not favored energy efficiency.

<sup>(8)</sup> Gerald Gardner and Paul Stern note that as home owners and businesses use more energy, the cost they paid decreased, providing little incentive to be efficient (this is referred to as a declining-block rate). Two alternatives to declining-block rates are flat rate systems in which consumers pay the same amount for each kilowatt-hour or “a lifeline rate” in which the cost of electricity increases with greater consumption. A third alternative involves charging higher rates for peak usage times. It costs more to produce electricity at peak usage time due to the need to use additional generating plants, which are often less efficient. Homeowners who have been charged two to eight times as much for peak usage have altered their energy use activities, such as when they run a dishwasher.<sup>(9)</sup> However, research suggests that peak usage charges need to be carefully explained if they are going to be maximally effective.<sup>(10)</sup>

Substantial reductions in energy use, from 30 to 50%, are possible if homes are retrofitted to make them more energy efficient. Utilities have offered grants and subsidized loans as incentives to encourage homeowners to invest in energy efficiency retrofits. Qualification for these programs usually requires that a home be subjected to an energy audit. The auditor inspects the home and makes suggestions to the homeowner regarding what improvements should be made to make the home more energy efficient, and provides a grant or loan application and a list of qualified local contractors. Programs such as this have been introduced by a large number of utilities and have produced some consistent findings.<sup>(11)</sup> In general there is a preference for rebates and grants over loans (though loans are sometimes preferred by households with higher incomes) and, not surprisingly, larger incentives

cause larger numbers of households to access a program. Paul Stern and his colleagues have demonstrated that large financial incentives are more likely to result in a retrofit than smaller incentives, but that non-financial factors play an important role in the success of a program. Particularly, it appears that size of the incentive has little impact upon whether a household requests an audit, but has a substantial impact once an audit had been conducted upon whether the homeowners go through with a retrofit. Whether people request audits is influenced primarily by the quality of the communications that are used to advertise the program (see Chapter 6).

### Incentives and Transportation

The trends in single-occupant automobile use in North America are distressing. The number of single-occupant cars on the road is increasing and each year those cars are being driven greater distances.<sup>(12, 13)</sup> Automobile use is closely related to pollution in cities as well as to increases in carbon-dioxide (the principal greenhouse gas) in the atmosphere.

To understand the increase in automobile use, it is important to understand the incentives and disincentives that are associated with car travel and its more sustainable alternative, mass transit. Peter Everett and Barry Watson have catalogued the relative incentives and disincentives for these two forms of transportation.<sup>(14)</sup> Automobile use, they suggest, is associated with shorter travel time, prestige, arrival/departure flexibility, privacy, route selection, cargo capacity, predictability, delayed costs, and enjoyment of driving. Driving a car has a much shorter list of disincentives, including traffic congestion and gas and maintenance costs. In stark contrast, the incentives for mass transit, they suggest, include making friends and having time to read. The disincentives involve exposure to weather, discomfort, noise, dirt, surly personnel, long walks to stops, danger (crime), immediate costs, unpredictability, small cargo capacity, limited route selection, crowds, limited time flexibility, low prestige and long travel time. While Everett and Watson's list is not exhaustive, it nonetheless clearly underscores why so many people elect to drive; compared to the alternatives, the advantages far outweigh the disadvantages.

To steer (pun intended) people away from their reliance upon automobiles depends on altering the balance of incentives and disincentives between driving a car and other more sustainable forms of transportation. A variety of possibilities exist for doing this, many of which have been tried by municipalities in North America and Europe. Numerous communities have introduced laneways that can only be used by multiple-occupant cars or buses. This approach directly targets the convenience of shorter travel times that are associated with single-occupant car use. Similarly, "traffic calming" has been employed in some European cities on residential streets to achieve the same end of increasing the travel time for automobile use. Traffic calming can be accomplished in a variety of ways including converting two-way streets to one-way, reducing the speed limit, or physically altering the design of the street in residential areas to make it more difficult for cars to navigate the street.<sup>(15)</sup>

In response to the energy crisis in the 1970's, frequent efforts were made by companies to increase car pooling. These efforts often focused on changing the balance of incentives and disincentives for single-occupant car use. In reviewing two of the main strategies in promoting car pooling, Scott Geller and his colleagues found that companies that matched

employees with others who lived nearby increased car pooling from 7 to 30%.<sup>(16)</sup> Providing preferential parking to vehicles that carried multiple passengers was even more effective, increasing ride sharing from 22 to 55%.

Companies that match employees based upon the neighborhood they live in can substantially increase car pooling.

Despite these promising results, Gerald Gardner and Paul Stern suggest that there are three incentives that conspire against efforts to promote more sustainable forms of transportation in North America.<sup>(17)</sup> First, relative to many other countries in the world, the price of gasoline has remained low. Contrary to the trend in Europe of increasing reliance upon mass transit and ever more fuel efficient vehicles, Canada and the United States are moving in the opposite direction. Gardner and Stern report that Europeans pay a minimum of three times as much for gasoline, providing a strong incentive for them to seek alternative forms of transportation, such as railways, which they ride four to eight times as far each year. Second, both the United States and Canada have invested heavily in highway construction that makes it easier for people to live significant distances from where they work. Finally, third, in the United States, but not Canada, interest on mortgages is a tax deduction providing a powerful incentive for people to own single-detached homes in suburbs that are long distances from occupations. These three significant incentives, they suggest, make it difficult to promote alternatives to single occupant car use, and explain why efforts here have focused primarily on making cars more fuel efficient and less polluting rather than on moving people away from their reliance on the automobile.

### Creating Effective Incentives

Incentives can be an important component of a community-based social marketing strategy, particularly when motivation to engage in a sustainable behavior is low. Gerald Gardner and Paul Stern have provided guidelines for creating effective incentives (see Gardner and Stern for an indepth discussion of guidelines for creating effective incentives).<sup>(18)</sup>

### Closely Pair the Incentive and the Behavior

Incentives are usually most effective when they are presented at the time the behavior is to occur. For example, charging for the use of plastic shopping bags at the checkout brings attention to the cost of using disposable bags and increases motivation to bring reusable cotton bags. For example, at the supermarket at which I shop, the introduction of a 5 cent charge per plastic bag has resulted in approximately 60% of shoppers using reusable cotton bags or containers for their groceries.

### Use Incentives to Reward Positive Behavior

Research in behavior modification underscores the importance of using incentives to reward behavior we would like people to engage in. When sustainable behaviors, such as recycling, are rewarded with lower garbage disposal costs, the likelihood that people will recycle in the future increases. In contrast, disincentives, are often less predictable since the punishment suppresses an unwanted behavior but does not directly encourage a positive alternative. A concrete example of the relative effectiveness of incentives versus disincentives is provided by

research in littering which has shown that bottle deposits that reward people for not littering are far more effective than fines that punish people for littering.

### Make the Incentive Visible

When implementing an incentive carefully consider how you can draw attention to it. Remember that an incentive will have little or no impact if people are unaware of its existence. For example, the supermarket mentioned above drew attention to the incentive by simply having tellers ask if customers had brought bags from home or if they wished to buy plastic shopping bags. See Chapter 6 on communicating effectively and Chapter 4 on the use of prompts for additional information.

### Be Cautious about Removing Incentives

The following story illustrates the importance of keeping incentives in place once they have been introduced:

A grocer was having difficulty with a group of teenage boys who visited his store each day after school.<sup>(19)</sup> Shortly after the boys arrived, they would stand outside and verbally abuse the store owner and those who shopped at the store. Indeed, their behavior was so upsetting to some customers that they began to shop elsewhere. Realizing that his business was in jeopardy, the store owner came up with an ingenious plan. The next time the boys arrived, he waited for a few minutes after they began their verbal assault. He then said something that the boys, undoubtedly, thought was remarkable. Rather than criticizing them for their behavior, instead he applauded it. He told the boys that in fact they were so good at yelling obscenities at himself and his customers, he was going to give each of them five dollars. The boys, who likely were beginning to question the sanity of the shop owner, took the money and left shortly thereafter. When they returned the following day, the owner waited once again until they had hurled insults for a few minutes and then went out and congratulated them on their efforts. He added, however, that the store had not done quite as well as it had yesterday and that all he could afford to give each of them was a dollar. The boys grumbled a little bit, but nonetheless took the money. When they returned the following day, the same events took place, but with the man explaining that he could only afford to give them a quarter each. They grumbled even more, but once again took the money. On the fourth day, he let the boys yell and shout for quite some time before he went out. When he did, he explained that the store had done particularly poorly that day and that he could not afford to pay them anything. Without hesitation the teenagers replied that there was absolutely no way that they were going to yell obscenities each day after school if they were not going to get paid, and left.

This story illustrates the danger of introducing incentives to foster a sustainable behavior and then removing them. Many individuals engage in sustainable activities, such as recycling, because it makes them feel that they are making a positive contribution.<sup>(20)</sup> Similarly, the teenage boys originally showed up at the grocer's store each day after school because they enjoyed being obnoxious. When intrinsic motivations are replaced with incentives, or external motivations, internal motivations can be undermined. Just as the boys intrinsic motivations were jeopardized by the store owner paying them, so can the motivation to recycle be undermined if an incentive is introduced and then removed. In short, think carefully about introducing an incentive, such as user fees, if you believe that the incentive may be removed at some later time.

## Prepare for People's Attempts to Avoid the Incentive

Once when driving from Washington to Fredericton, I failed to heed the advice of a friend who had told me to give New York City, which falls directly between Washington and Fredericton, a wide berth. As I sat in a line of traffic that barely moved for several hours, I had ample time to observe the car-pool lane in which cars with multiple passengers were speeding by. I noticed that some New Yorkers demonstrated a great deal of ingenuity in avoiding getting stuck in the single-occupant lane, as several cars passed by with well-dressed mannequins riding in the car with them, allowing them to get to their destination quickly, while not having to deal with the inconvenience of carrying passengers with real DNA.

When preparing to use incentives keep in mind that people can be very creative in attempting to avoid them. In Victoria, British Columbia, for example, when user fees were introduced for residential garbage collection, some residents would carry their trash downtown and dump it in one of the city street waste baskets. The City of Victoria dealt with this problem by taking out classified ads in the newspaper naming these people and them to come down to City Hall to pick up their illegally dumped trash (illegal dumpers frequently left identifying information in their garbage). After running the classified ads for a short time, the practice of “carrying garbage to work” largely stopped.<sup>(21)</sup>

The most effective incentive programs anticipate how people will attempt to avoid engaging in the activity and plan accordingly. For example, bottle deposits demonstrate how an incentive, even when avoided (e.g., someone litters the bottle) can be effective if it rewards someone else to engage in the activity that another person did not want to.

## Consider the Size of the Incentive

Incentives need to be large enough to be taken seriously. However, past a certain point diminishing returns occur from increasing the size of the incentive. Study the impact that incentives of different sizes have had in other communities in arriving at the size of incentive for your program.

## Consider Non-monetary Forms of Incentives

While financial incentives have received the most attention, other forms of incentives can also be effective. For example, competitions between communities for HHW pick-up days can be used to increase motivation. Similarly, public recognition of individual or organizational actions which foster sustainability can be an important source of motivation.

## EXAMPLES: USING INCENTIVES TO FOSTER SUSTAINABLE BEHAVIOR

### Waste Reduction

- Place an additional charge on beverage containers that is partially refunded.
- Charge for the use of items such as plastic shopping bags and styrofoam cups.
- Use user fees to increase motivation to recycle, compost and source reduce.
- Attach a sizable deposit on HHW to provide the motivation necessary for individuals to take leftover products to a depot for proper disposal.

### Energy Conservation

- Introduce electricity rates that increase with use.
- Charge variable rates based upon time of use.
- Provide loans, grants or rebates for home energy retrofits.

### Water Conservation

- With new meters that can record time of use, charge variable rates based on time of use.
- Provide loans, grants, or rebates to foster the installation of low-flow toilets.

### Transportation

- Decrease the convenience of car travel by reducing speed limits, changing street patterns, and restricting lane use.
- Provide incentives for multiple occupant cars and mass transit by providing exclusive lanes that allow for faster travel times compared to single occupant cars.
- Provide preferential parking for multiple occupant cars.
- Provide matching services that make it easier for people to find other employees with whom they can carpool.







## Tools › Convenience › Making it Easy to Act

Chapters 3 through 7 identified a variety of tools to overcome barriers that reside with an individual to sustainable behavior. As powerful as these tools are, they will be ineffective if significant external barriers exist. If the behavior is inconvenient, unpleasant, costly or time-consuming, for example, no matter how well you address internal barriers your community-based social marketing strategy will be unsuccessful.

The first step to removing external barriers is to identify them. Using the literature review, focus groups and phone survey techniques outlined in Chapter 2, attempt to isolate what external barriers exist and what can be done to address the barriers you identify. The City of Boulder, Colorado, for example, identified that two significant barriers to mass transit usage were workers' concerns regarding how they would get home quickly in an emergency (e.g., a sick child that has to come home from school) and, for women, safety concerns about taking mass transit late at night. These two barriers were addressed by providing a free taxi service in either of these instances.

The role of external barriers is also evident with backyard composting. At present, approximately 30% of homeowners in the Province of Ontario participate in composting, compared with over 80% participating in curbside recycling. While many factors might explain these substantially different participation rates, it is likely that the inconvenience of obtaining a composter, and the perceived inconvenience of composting, are significant barriers. Indeed, in two studies that the first author has conducted in different Canadian cities, inconvenience was on both occasions one of the most significant barriers to composting.<sup>(1)</sup> Further, in comparing households who compost seasonally with those who compost throughout the year, the only factor which was found to distinguish these two groups was the perceived inconvenience of composting in the winter (remember the anecdote with which I began this book). Communities that provide curbside organic collection effectively eliminate several of the external barriers that exist for backyard composting. First, these communities directly provide households with containers or carts, removing the cost and inconvenience of obtaining a backyard composter from a store. Second, many of these communities provide kitchen organic catchers along with the curbside container, increasing the convenience of collecting organics. Because many of these containers often contain a prompt to identify what can be composted, learning to separate organics is also simplified. Third, unlike backyard composting, the process of curbside organic collection is nearly identical to that used for curbside recycling and garbage disposal (place in a container, take the container to the curb, periodically wash container). The similarity of this new behavior (curbside organic collection) to older, well established behaviors (recycling and garbage collection), simplifies what a household needs to learn in order to participate. The impact of making composting convenient and inexpensive by providing containers and curbside collection can produce dramatic results. In a recent evaluation of a curbside organic pilot, fully 99% of households participated. Indeed, the one household who was not participating, wanted to, but had not received a cart in which to place their organics.

It is important to assess whether it is realistic to overcome the external barriers you identify. To do this, it is useful to explore the success that other programs have had in promoting the same behavior and decide whether you have the resources to mount a similar program. Promoting the use of car pooling, mass transit, bicycling and walking as alternatives to single occupant car usage, as Boulder, Colorado has done, requires significant expenditures. In cases where the financial resources do not exist to make the new behavior more convenient, such as through building bicycle paths, consider instead making the behavior you wish to discourage less convenient and more costly. Multiple possibilities exist for making an activity such as single-occupant driving less convenient and more costly.<sup>(2,3)</sup> As described in the last chapter, many communities have instituted slower laneways on highways for single-occupant cars or have introduced traffic calming by turning two-way streets into one-way streets. Corporations have discouraged single-occupant car usage by charging more for parking for single-occupant vehicles and making the parking of these cars less convenient (e.g., farther from the building).

Making that activity you wish to discourage less convenient and more expensive can increase motivation for the behavior you wish to encourage. In short, you want to design a program that enhances motivation by making the sustainable behavior more convenient and less costly than the alternative, non-sustainable activity. As demonstrated in the previous chapter, incentives can be effectively used to enhance motivation.

Finally, it is important to note that some external barriers, such as inconvenience, are to some extent a matter of perception. When people have experience with an activity, they often come to see that activity as being more convenient than when they first began. In one study, as individuals gained more experience with recycling bottles they found it more convenient.<sup>(4)</sup> While strongly “perceived” inconvenience is unlikely to be overcome, tools such as commitment and norms may be used to overcome a more moderate perception of inconvenience.

In summary, because the nature of external barriers can vary dramatically across communities, strategies for removing these barriers will have to be tailored to each situation. Begin by identifying what external barriers exist and then seek information from other communities on how they have dealt with the external barriers you have identified. Next, determine whether you have the resources to implement similar initiatives. If you determine that you do not have the resources, you should seriously reconsider your options. As mentioned above, a community-based social marketing initiative that ignores external barriers is a recipe for failure.

In the table on the next page are some external barriers to sustainable behaviors and some possible solutions.

## EXAMPLES: USING INCENTIVES TO FOSTER SUSTAINABLE BEHAVIOR

### Waste Reduction

- It is too inconvenient to obtain a compost unit. Solution: Deliver compost units door-to-door as blue boxes were. When compost units are delivered for free, as they were in a pilot project in the City of Waterloo, Ontario participation rates can rival those for recycling programs.<sup>5</sup> In that pilot project, a door hanger was distributed to 300 homes informing residents that they had been selected to receive a free composting unit. Of the 300 homes that were contacted, 253 (or 84%) agreed to accept compost units. In a follow-up survey, 77% of these households were found to be using their compost units.
- When inconvenience for office recycling is overcome, the effects can be startling. Providing each office worker with a recycling container for fine paper can increase the amount of fine paper retrieved from a few percent to over 75%.
- It is too inconvenient to compost during the winter. Solution: Provide a curbside organic collection during the winter months in which organics are picked up free of charge. Charge during the spring, summer and fall for organic pickup to encourage composting during these months.
- It is difficult to identify products that are recyclable or have recycled content. Solution: Provide prompts that make their identification easier (see Chapter 3).
- The inconvenience of taking household hazardous waste to a depot results in little of this waste being diverted from the landfill. Solution: Provide semi-annual hazardous waste home pick-up dates. Pass a municipal bylaw which mandates that hazardous materials must carry a sticker indicating that the product is a hazardous waste and when the pick-up dates are in that area.

### Energy Conservation

- It is too expensive to upgrade insulation or install energy-efficient windows. Solution: Allow renovations to be paid through savings in energy use. To ensure quality work is done, have contractors provide warranties for energy savings.
- Homeowners lack the skills to install energy-efficient devices on their own. Solution: Use home assessments to instruct homeowners on how to install these devices.

### Water Conservation

- It is inconvenient to purchase and install toilet dams, faucet aerators and low-flow shower heads. Solution: Have home auditors install these devices during home visits.
- For many homes it is too expensive to install a low-flow toilet. Solution: Allow the cost of the toilet and installation to be paid for from savings in the water bill.

## Transportation

- It is inconvenient to use mass transit compared to driving a car. Solution: Alter the relative convenience by making driving less convenient (e.g., slower laneways for single-occupant cars, introduce traffic calming and one-way streets).



## Design + Evaluation

If a program is to be effective, careful consideration needs to be given to strategy development. This chapter will clarify how to design, pilot, implement and evaluate a community-based social marketing strategy.

The development of a strategy begins with identifying barriers to the desired activity, using the tools described in Chapter 2. The identification of barriers is followed by strategy. Once the strategy is complete, the next step is to conduct focus groups to obtain reactions to the proposed strategy. If the strategy receives positive reviews, you are ready to pilot. If not, you will want to make further refinements. In the pilot, you test the effectiveness of the strategy with a limited number of people. Essentially, you want to know, before you commit to using the strategy throughout a community, that it will work effectively. If the pilot is successful, you can be much more confident of success when you broadly implement the strategy. If the pilot is unsuccessful, then you need to make further revisions, and pilot again before broad-scale implementation and evaluation.

As can be seen above, the design of a community-based social marketing strategy is pragmatic; each step builds on those that precede it. Effective design will not only help ensure the success of a program, but can also serve one other important purpose; cementing funding support. Increasingly, funders are demanding that projects have a solid research foundation and be piloted before being implemented. The tools introduced in this chapter can help you to persuade your funders that your initiative is worth supporting.

### Design and Evaluation: An Example

To introduce the design and evaluation of a community-based social marketing strategy, a hypothetical program to foster the purchase of products with recycled-content will be used. Following this example, critical elements of design and evaluation will be outlined.

Imagine that preliminary research (see Chapter 2) has identified the following barriers to consumers purchasing products that have recycled-content:

- products are viewed as difficult to identify;
- shoppers forget to consider whether a product has recycled-content; and
- buying recycled-content products is not seen as the “right thing to do.”

Knowing that recycled-content products are difficult to identify suggests that prompts should be effective in promoting these purchases (see Chapter 4). That consumers forget to consider these properties when making a purchase also suggests that prompts may be an effective tool in promoting the purchase of products with recycled-content. Finally, that buying these products is not seen as the “right thing to do” clarifies that an effective strategy will need to foster supportive norms (see Chapter 5).

What might a community-based social marketing strategy look like which incorporates these behavior change tools? As mentioned in Chapter 4, prompts are most effective when presented at the time the activity is to occur. To encourage the purchase of recycled-content products, prompts would be placed on the store shelves directly below these items. To assist shoppers in easily identifying these products, a graphic design that visually suggests the importance of purchasing products with recycled-content would be used (see Chapter 4 for an example of such a prompt). The prompt would also contain a brief explanation of why buying products with recycled-content is important (remember that for a prompt to be effective, it needs to contain all of the information that is necessary for someone to act appropriately).

Occasionally it is possible to overcome two barriers to a sustainable behavior with one tool. In encouraging shoppers to select products that have recycled-content, the use of prompts makes it significantly easier to identify these products (the first barrier) and increases the likelihood that shoppers will remember to consider these characteristics (the second barrier).

How might community norms be established that foster purchasing recycled-content products? At the beginning of the promotion, asking shoppers to wear a sticker or button that said “I buy recycled” would likely help to establish the community norms discussed in Chapter 5. Asking shoppers to wear a sticker or a button as they enter the store will not only help to establish a norm favouring the purchase of these products and build commitment, but will also serve to highlight the campaign for these shoppers. Nonetheless, the sticker and button will only be worn for a short time before it will be removed. A more permanent way to establish community norms that support the purchase of these products is to ask householders to place a sticker on the side of their blue box that indicates that the household shops for recycled or recyclable products. The development of community norms can also be facilitated through the use of block leaders (see Chapter 6: Communication) who seek commitments from householders to purchase products that favour the environment and indicate how to go about doing so. Asking shoppers to wear a sticker or button not only assists in establishing these norms, but also bolsters commitment (see Chapter 3). Since people wish to behave consistently, agreeing to wear a button or sticker increases the likelihood that they will purchase recycled-content products.

Posters clarifying the meaning of these prompts, or “shelf talkers,” would be placed prominently throughout the store (particularly near entrances) In addition, pamphlets at checkouts and potentially a mobile video kiosk would be used to educate shoppers about the importance of selecting products with these characteristics.

The proposed social marketing strategy deals with each of the identified barriers to purchases of products with these characteristics. However, simply selecting and incorporating the tools discussed in this book into a community-based social marketing strategy will not ensure its success. Prior to implementing a strategy throughout a community, it should be tested through focus groups and a pilot.

## Focus Groups

While focus groups, as explained in Chapter 2, can be used to explore barriers to a behavior. Focus groups can also provide useful information on the appeal and acceptance of a proposed strategy. To obtain feedback on the above strategy, several focus groups of five to six individuals would be conducted. For each focus group, the purpose of the campaign would be explained and participants would be introduced to drafts of the proposed prompts, stickers (buttons), brochures, posters and video. Focus group participants would be asked whether these materials would capture their attention and if they are clear and easy to understand (see Chapter 6). Once feedback has been received on these characteristics of the materials, participants would be asked if they perceived any difficulties with the proposed strategy and if they had any suggestions for how it could be strengthened.

Following completion of the focus groups, responses to the proposed strategies would be tabulated to uncover any potential themes in participants' responses. Where warranted, the strategy would be refined based on the feedback received. After refining the strategy, the pilot is conducted.

## Pilot

Think of the pilot as a "test run," an opportunity to work out the "bugs" before committing to carrying out a strategy across a community. To pilot the above strategy, the store managers of two supermarkets would be approached and asked if they would be willing to participate. The two stores would need to be similar both in the demographics of their shoppers as well as in the products available (two stores of the same chain would be good candidates). By the flip of a coin, one of the stores would be randomly assigned to receive the community-based social marketing strategy, while the other would serve as a comparison (what is referred to as a control).

Prior to piloting the strategy, the rate of purchase for recycled-content products would be determined by examining the computerized inventory records for these items. Note that it is important to collect this data for both stores, since they may differ initially from one another. Also it is important to obtain this baseline data for a sufficient period of time (usually a month or more). Following the baseline period, the prompts, posters, buttons (stickers), pamphlets and video kiosk would be introduced in the intervention store. After introducing the strategy, the rate of purchase of targeted items would be monitored for several months to ascertain if the strategy produces a sustained impact upon the purchase of these products.

To determine whether the strategy alters consumer purchases, the purchase of the targeted items during the baseline period is compared to purchases during the intervention (seasonal adjustments may need to be made to these numbers to control for increased purchases around events such as Christmas). The success of the strategy cannot simply be determined by comparing the purchases of the targeted items for the two stores. The following example clarifies how to correctly determine the impact of the strategy. Imagine that after implementing the above strategy, the "intervention" store had sold 5000 units of recycled-content toilet paper, while the control store had sold only 3000. On first glance it appears that the community-based social marketing strategy has brought about a 67% increase in sales for this one item. However, such a conclusion assumes that the stores initially sold an



equal amount of recycled-content toilet paper, which is very unlikely. To determine the “real” impact of the intervention, the sales of toilet paper during the baseline period for both stores needs to be considered. Imagine that baseline data revealed that the intervention store had sold in the month prior to the intervention 2500 units of toilet paper and the control store had sold 2000. The real increase in sales that can be attributed to the intervention, 50%, would be determined as follows:

Intervention	$5000-2500 = 2500$
Control	$3000-2000 = 1000$
Real Impact	$2500-1000 = 1500$

If, when comparing inventory records prior to and following the implementation of the intervention, little or no change in consumer purchases is observed, then the pilot would need to be revised until significant changes in behavior were observed. Since in this proposed initiative the prompts are a central aspect of the campaign, it is natural to start by investigating them. By conducting in-store surveys with a random selection of shoppers, awareness and understanding of the prompts could be probed. If low recognition and understanding of the prompts was observed, then the prompts would need to be redesigned to be more prominent and clear. Further, the placement of the posters which explain the purpose of the shelf talkers should be examined. Did shoppers recall seeing the poster? Did they know what the posters said? If the answer to either of these questions is no, it is possible that simply changing the location and/or number of posters might address this problem. The point of the pilot is to identify and address these problems before launching the campaign throughout the community. You should plan on there being problems and build into your plans the opportunity to refine your strategy until it works well. On one project, I revised a pilot six times before I was able to produce the desired changes in behavior. While it was frustrating to have to make this many revisions, I was thankful that I was making the revisions to a pilot rather than to a larger project, for which the problems would have been much more difficult and expensive to rectify. Expect problems, plan for them; in the end, when you implement community-wide you will be rewarded for the time that you took to trouble-shoot.

### Community Implementation and Evaluation

When the pilot has successfully demonstrated that the purchase of these products can be substantially increased by the community-based social marketing strategy, it is ready to be implemented across the community. In implementing the initiative, advertising and local media can be used to create additional awareness that would have been undesirable during the pilot. In implementing this initiative throughout the community, limited advertising resources could be leveraged by creating public awareness through hosting media events to both launch the campaign and provide feedback on its success. Further, participating retailers could be encouraged to advertise the campaign in their own advertising, greatly increasing exposure (this is a requisite for some levels of involvement in the “Buy Recycled” campaign discussed in Chapter 4).

When implementing throughout the community, it is also important to build in a method to evaluate the impact of the initiative. In the hypothetical project described here, a random selection of retailers would be selected to participate in the evaluation. Baseline data from the electronic inventories of these stores would be obtained and then compared to changes that occurred in the purchase of the targeted products following the launch of the campaign. To provide a stable picture of the impact that this campaign had upon the purchase of these products, the average increase in the purchase of these products across the evaluated stores would be determined. This information not only serves as a critical test of the success of the initiative, but serves two other important functions. First, it is important to provide the community with feedback (see Chapter 6) regarding the impact that their changes in behavior has upon the environment. In other words, an element of a successful community-based social marketing strategy is providing feedback that reinforces changes that people have made. The media will often provide you with a cost-effective way of getting this information back to consumers, though other possibilities exist. One vivid and ongoing form of feedback is to provide shoppers in each retail store with a yardstick of their efforts. By setting up a display in which the percentage increase in the purchase of these products is updated on a regular basis, shoppers can be provided with an ongoing source of feedback and encouragement (the use of feedback can also help to establish a norm that favors this form of shopping). Second, as mentioned at the beginning of this chapter, program evaluation provides evidence of concrete results, which is most convincing to funders that a campaign is worth continued support.

### Design and Evaluation Principles

The preceding example demonstrated many of the critical aspects of designing and evaluating a community-based social marketing strategy. This section provides an overview of design and evaluation principles.

*Begin with Barriers:* The development of any community-based social marketing strategy begins with the identification of barriers. Using the methods outlined in Chapter 2, identify barriers to the activity you wish to promote prior to giving further consideration to designing a strategy. As you identify barriers, keep in mind that most activities consist of a variety of component behaviors. You need to know the barriers for each of these component behaviors if your strategy is to be effective.

*Prioritize the Barriers:* In identifying the barriers, use statistical analysis (multivariate approaches) to help you clarify which barriers are the most significant. It is likely that your research will identify a number of barriers and you will want to ensure that your limited resources are spent on overcoming the most important barriers.

*Select Tools that Match Identified Barriers:* To design an effective strategy, it is essential that the tools you select are tailored to the barriers you encounter. For example, if motivation appears to be a problem, consider the use of commitment (Chapter 3) or incentives (Chapter 7). If few people perceive the activity as the “right thing to do,” you will likely want to develop community norms using some of the strategies that are discussed in Chapter 5. If there is a lack of awareness or knowledge regarding the activity, you will want to incorporate many of the tools of effective communication that are discussed in Chapter 6.

*Scrutinize your Design with Focus Groups:* Prior to piloting your strategy, conduct focus groups to receive feedback on your proposed strategy. The information you obtain from these focus groups will often assist you in designing a more effective strategy.

*Use a Minimum of Two Groups to Conduct your Pilot:* When you conduct your pilot, you want to make sure that any changes you observe are the result of your intervention and not other events that are occurring in the community. To be certain that it is your intervention that is bringing about the changes you observe, always include a control group to which nothing is done. By comparing your intervention and control groups, you can be much more confident that your intervention was responsible for any changes you observe.

You may wish to have more than two groups. For example, as in many of the studies described in this book, you may wish to have one group receive a commitment strategy, a second receive feedback, a third receive a combination of the two, and a fourth act as a control. Keep in mind that pilots can often be quite inexpensive to conduct since the size of groups can be kept small (30 to 40 residences each). Including multiple groups in your pilot can help you determine the form that your strategy will take when you implement it across your community. For example, as a result of conducting a pilot on fostering car pooling, you may learn that obtaining commitments provides no additional benefit over assisting employees in identifying others who live in their neighborhood that they might drive to work with. As a result, your subsequent program would drop commitment as part of the strategy.

*Use Random Assignment:* When you conduct a pilot, you want to know that the group that receives your intervention is as identical as possible to the group that serves as the control. The only way that you can assume this is if the people are randomly assigned to be in one group or another. To randomly assign individuals or households to the groups you plan to use, simply place the names or addresses of all individuals in a hat and then pull them out assigning the first person or address to the first group, the second to the second group, etc.

*Make Measurements of Behavior Change a Priority:* In evaluating the effectiveness of a pilot, your primary concern should always be whether you were able to change the behavior that you set out to change. Where possible, don't rely upon people's self reports of their behavior; they can be unreliable. Obtain water records, ask to look in composters, examine weather-stripping, etc. You will also want to examine people's perceptions and attitudes, but don't see these as substitutes for examining actual changes in behavior.

*Revise your Pilot Until it is Effective:* It is tempting when a pilot is ineffective to assume that you know what went wrong and move directly to community-wide implementation. Keep in mind that pilots can often be conducted very quickly. Take the time to run another pilot to confirm that you are actually able to change behavior before you implement across a community. The extra time that you take to run the pilot may save you hundreds of thousands of dollars if your intuition has betrayed you.

*Evaluate the Community Implementation:* Prior to conducting your community-wide implementation, collect baseline information about the rate at which people are presently engaging in the activity you wish to promote. Where possible, use actual observations of

behavior or reliable records (e.g., water meter readings) rather than self-reports to establish this baseline. Once you have implemented your program, begin to collect data to ascertain its impact. Keep in mind that you will want to conduct these evaluations at different time intervals.

### Guidelines for Selecting Consultants

You may wish to contract out the design, implementation and evaluation of your program. Here are some suggestions to increase the likelihood that you end up with a consultant who has the necessary skills to use community-based social marketing. In the request for proposals ask that proposals:

- be based upon community-based social marketing methods;
- specify how barriers to the activity will be identified;
- clarify what behavior change tools might be used (e.g., commitment, prompts, norms, social diffusion, etc.);
- indicate how the strategy will be piloted;
- specify how the program will be evaluated once implemented throughout the community;
- provide evidence of competence in survey design, research design and data analysis (at least one member of the research team should have graduate level training in research methods and statistics); and
- provide evidence of familiarity with designing and implementing community-based social marketing strategies.

### Public Consultation

Community-based social marketing is based heavily upon public consultation. As explained previously, the process of designing a strategy involves obtaining information from the community at three separate times. First, just after conducting the literature review, focus groups are conducted to obtain in-depth information on perceived barriers to the behavior you wish to promote. Second, this information is supplemented by the phone survey, which provides more information about perceived barriers, attitudes and present levels of involvement in the activity. Third, the social marketing strategy is reviewed by another series of focus groups who provide feedback on the planned strategy. These three steps help ensure that the strategy you devise will be well tailored to your community.

This consultation should be part of the development of any community-based social marketing strategy. However, you may wish to add another opportunity for public involvement - active participation in determining the initial marketing strategy. Some organizations create a stakeholder consultation committee for this purpose. Whether you elect to create a stakeholder consultation committee, and if you do, when they become involved in the process is a matter of personal preference. My own preference is to create a stakeholder committee whenever the planned program is likely to be of special interest or concern (e.g., implementing user fees for garbage disposal), or when the activity you are attempting to promote is not well understood and hence you need input from as many sources as possible. It is often not necessary to create a stakeholder committee when neither of these two criteria are met.

If you decide to form a stakeholder committee, it can be formed at the outset (e.g., prior to the literature review) or after information from the literature review, focus groups and phone survey have been conducted. Once again, when you decide to form the committee is a matter of personal preference. I prefer to create the committee at the outset if the program has any potential to be controversial. In order to circumvent concerns about decisions being made without public input. On the other hand, early creation of the committee can make some initial parts of collecting information on barriers, such as the survey, torturous if not well managed. Don't place yourself in the position of writing a phone survey by committee. Do seek suggestions about potential topics that should be addressed in the survey, but avoid having the survey reviewed by the stakeholder committee.

Independent of when you elect to involve a stakeholder committee, you will need to decide beforehand what constraints will be placed upon the committee. For example, if council has made it clear that no subsidies will be provided for the installation of low-flow toilets, your committee needs to know at the outset what limitations have been placed upon the strategies that can be considered. If you are going to be acting as a facilitator for stakeholder meetings, remain impartial when receiving feedback from participants. Your role is to encourage constructive input on the design of a strategy. Remaining impartial will facilitate receiving the broadest feedback.

### The Final Report: Getting the Word Out

After conducting a literature review, running focus groups, writing, conducting and analyzing a phone survey, devising a strategy, scrutinizing it with focus groups and a stakeholder committee, piloting the strategy, revising the strategy, implementing it throughout the community and evaluating it, you should be finished, right? Wrong. Community-based social marketing is an emerging field that holds great promise for moving us toward a sustainable future. Take the time to write up a final report and make sure that people know about it (consider adding it to the cases database found at this site). Whether your community-based social marketing strategy was successful or not, others need to learn from your efforts.



## Conclusion

A colleague of mine, who designs ICI waste reduction strategies for a regional municipality, told me that while he was reading a draft of this book he grew increasingly uncomfortable. His discomfort, he explained, came from realizing that the tools and strategies set out here are more effective than the ones he was presently using and that he would have to change how he designed and delivered programs. He went on to explain that using community-based social marketing would involve relearning important aspects of his job and that he had grown comfortable with the tools that he has used for some time. Resistance to using community-based social marketing, he correctly pointed out, has to be overcome even by those who believe in its utility.

### Overcoming Resistance in Yourself

Clearly, the tools and strategies detailed in this book will initially require more work. Implementing a community-based social marketing strategy requires careful preliminary research, strategy development, piloting, implementation and evaluation. However, this attention to detail is in large part why community-based social marketing is often so successful. Following the steps described here can greatly increase the likelihood of your program being successful. For example: the literature review allows your program to build on the work of others; the focus groups and phone survey allow you to determine what barriers will need to be overcome in order to design an effective community-based social marketing strategy; piloting the strategy will allow you to test its impact and further refine the strategy to increase its effectiveness; and evaluating the program once it has been implemented across the community will allow you to speak with confidence regarding its impact and provide you with the data you need to ensure continued funding.

Program design and evaluation are critical components of community-based social marketing, but they are not unique to it. Increasingly, program design and evaluation are being mandated for a wide range of social programs. As governments are increasingly held accountable for the wise use of tax dollars, program design and evaluation will become the norm rather than the exception. Further, over time program design and evaluation reduce the cost and effort that has to be expended to foster sustainable behavior. Programs that are not properly designed and evaluated are frequently less effective. As a consequence, several programs often have to be developed and delivered to bring about the same change in behavior as one well designed program. In short, properly designing and evaluating a community-based social marketing strategy will initially entail more work on your part, but this effort will be rewarded both through greater impact and lower long-term costs.

### Overcoming Resistance Among Colleagues

The approaches detailed in this book are new and may be seen as unproven by your colleagues. How can you overcome their resistance? It will help if you prepare for some of the problems that you might encounter. You will need to be prepared to deal with concerns your colleagues will have over the length of time that it will take to design and implement

a community-based social marketing strategy. You will need to reassure them that the approaches outlined here are more likely to succeed, and as a result, resources and staff will be used more responsibly and effectively. Additionally, be prepared that some of your colleagues may not want to evaluate programs for fear that evaluation might produce negative results. You may also encounter resistance to community-based social marketing since using these approaches may be seen by some colleagues as an implicit admission that past initiatives were not designed as effectively as they might have been. Here are some suggestions for increasing support for community-based social marketing in your organization: ask colleagues to read this book (copies can be ordered online at this site); bring in a speaker to introduce community-based social marketing to your organization (McKenzie-Mohr Associates provides workshops on community-based social marketing: see Workshops); distribute articles that demonstrate the effectiveness of community-based social marketing strategies; ask someone who has successfully implemented a community-based social marketing strategy to come and speak to your organization about it; ask that current programs be rigorously evaluated and that the evaluation focus on behavior change rather than awareness of marketing messages. It is easy to believe that a program is working if little or no concrete data exists to measure its success. Be prepared that it may take a considerable length of time to overcome resistance from your colleagues. Indeed, you may put forward several community-based social marketing proposals only to find each of them rejected. Remember, as you advocate with resistant colleagues, you are slowly creating new norms regarding how programs should be carried out. You can be confident that eventually community-based social marketing strategies will replace the more traditional approaches discussed in Chapter 1 for one simple reason: They are more effective.

## Going Forward

As we move rapidly toward a world with twice today's inhabitants, and ever dwindling renewable resources, the tools and methods described here will become increasingly important. Community-based social marketing holds great promise in promoting sustainable behavior. The speed with which community-based social marketing supplants less effective traditional approaches will depend, however, upon the quick dissemination of successes and failures in using this new approach. As discussed in the chapter on effective communication, the adoption of new lifestyles is often the result of social diffusion. Similarly, the adoption of new techniques, such as community-based social marketing, occurs primarily through the informal sharing of information. I encourage you to actively discuss your efforts in using these new techniques with others, and to make use of the on-line discussion forum at this site. Through this forum, you have the opportunity to share your successes and failures in the use of community-based social marketing, and to learn from the experiences of others who are tackling similar problems. Each time we share information and refine our techniques, we collectively become a little wiser and move a small step closer to the sustainable future our children deserve.



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