

Awareness development for an energy management program for social housing in Canada

Scott McKay, Anshuman Khare*

Athabasca University, 301-22 Sir Winston Churchill Avenue, St. Albert AB, Canada T8N 1B4

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Abstract

Social housing organizations compete with other social causes for limited public and private sector funding. While the environmental impact is important, it must be recognized that for most social housing organizations the most appealing aspect of an energy management program is the reduction in operating costs through reduced energy consumption. In order to secure financial resources for an energy management program, organizations will need to identify and address stakeholder perspectives in the formulation of ‘marketing’ strategies. The ‘marketing’ of an energy management program would be aimed at illustrating the substantial financial savings that can be achieved by increasing energy efficiency in social housing units. The bonus of an energy management program is the contribution towards environmental conservation and initiatives such as the Kyoto Protocol, as increased efficiency in energy usage and the subsequent reduction in overall energy consumption in social housing units contributes to reducing Canada’s greenhouse gas emissions.

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1. Introduction

Energy conservation is an economical and environmental issue that organizations face in today’s world. For most, the concern is based more on economical than environmental concerns. However, with initiatives such as the Kyoto Protocol being discussed, governments and organizations will face a social and business responsibility to reduce energy consumption and greenhouse gas emissions.

In Canada, the residential sector now accounts for 6% of the total greenhouse gas emissions. In 1990 residential greenhouse gas emissions were 8.2% [1]. The reduction is attributed to energy efficiency improvements in appliances, heating equipment, and the thermal characteristics of houses [2].

On an individual basis a typical 2000 ft² home requires 120 GJ of heat to last through an average Calgary winter if built before 1990, with newer construction standards that is reduced to 90 GJ [3]. The potential energy usage and cost savings for individuals can be transferred to organizations that house multi-families or individuals in row housing, duplexes, or apartments. The combined increase in energy efficiency and cost savings on a multiple factor for the number

of households affected in an organization would equate to substantial energy and cost savings across the country.

Throughout Canada non-profit organizations are involved in social housing for low-income seniors and families. In many cases non-profit organizations manage the day-to-day issues of the units while provincial, federal, or municipal governments have ownership and oversee legislation. Traditionally, for most organizations, utilities have been an area where there is limited control over costs and minimum effort has been made to reduce utility consumption by residents or make older buildings more energy efficient.

Social housing in Canada is in a state of change as the federal and provincial governments review their role and change the existing funding and ownership structures across the country. The federal government is presently removing itself from ownership of units and moving towards a flat rate funding agreement with provinces and territories. Traditionally, each province has managed social housing its’ own way, and there may not be any direct correlation between the operations from one province to another. Many provinces are changing their method of management to more direct municipal and non-profit involvement and ownership and less direct involvement by the provincial government. As a result of these changes, the future is likely to see more responsibility to local municipalities and boards of directors of non-profit organizations for social housing units. With a

* Corresponding author. Tel.: +1-780-4187533; fax: +1-780-4592093.
E-mail address: anshuman@athabascau.ca (A. Khare).

local emphasis on operations, the cost and consumption of energy is more likely to be an issue that will need to be addressed. Senior management referred to in this document encompasses the present provincial staff involved in social housing for provinces and territories that are not moving to local ownership and operations, as well as the boards and directors of non-profit organizations and local municipal representatives for areas where the shift in social housing is occurring.

An energy management program for social housing would have to consist of two distinct phases—first, “marketing” that would initiate fund raising, allocations, and approval of the energy management initiative; and second would be the “implementation and follow through” of an energy management program to reduce energy consumption and long-term utility costs. Overall, the energy management program would contribute towards resource sustainability through modifying construction standards of units and encouraging wise energy practices by residents. The major issues to be addressed during the various phases of the program would be marketing strategy, capital and resident initiatives.

For implementation of an energy management program the emphasis is on the application of environmental strategy in order to achieve energy conservation and reduce utility costs. The five elements of a successful environmental strategy are based on the work of Piasecki et al. [4] in “Environmental Management and Business Strategy.” This will allow for a coordinated approach to environmental management as organizations encourage commitment, implement environmental audit and information systems, identify performance measures, and report results.

Reducing environmental impacts and the footprint that we leave is a responsibility for all individuals, organizations and governments. The energy management program will present an approach to reduce utility costs and consumption, while contributing to resource sustainability and targets set in the Kyoto Protocol (Kyoto Protocol, Article 2.1.(a).(i) states that each party shall enhance energy efficiency in relevant sectors of the national economy [13]). It will create a win-win situation for non-profit organizations, politicians, taxpayers, and the environment.

2. Defining environmental strategy for non-profit organizations

Strategy in the non-profit sector is often dictated by external factors that organizations have little control over. Political will, economic conditions, public perception and reception, all contribute to the overall atmosphere that organizations must deal with. Traditionally, many social housing organizations have been reactive to these external factors rather than taking a proactive approach.

In the present political climate, government spending is centered on health and education. Social housing has not been a priority and is unlikely to be a priority. In order for

housing to get funds for an energy management program, it will have to align itself with the issue of ‘the environment’ and aggressively market the benefits to stakeholders.

Piasecki et al. [4] refer to three kinds of strategic advantages in environmental management ([4], p. 103):

1. *Opportunity advantage*: When you have an early lead in a technical skill base or approach, and when others are not yet ready to replicate.
2. *Terrain advantage*: When the convention of science and law support your direction of growth, as does your market position.
3. *Moral advantage*: When the public and the press constantly want your “corporate” position. This is about image and prestige.

For social housing, the opportunity advantage is to demonstrate a form of competitive advantage over other social causes through alignment with environmental issues and financial returns on investment. Piasecki et al. [4] refers to an environmental opportunity advantage as “When a company reinvents the traditional product rules of an entrenched industry usually dependent upon stability and slow change, then you are seeing an example of a strategy that recognizes environmental ‘opportunity advantage’” ([4], p. 103). With an emphasis on environmental construction standards and resident consumption patterns social housing will present a non-traditional approach to low-income property management. The risks, are public and political backlash for spending public funds, while the rewards are far reaching as they deal with capital improvements that will extend the useful life of buildings, reduced energy costs and consumption, and a lifetime use of good energy practices by residents (regardless of where they live).

Terrain advantage is one that has to be addressed through the marketing of the energy management program as social housing is not a top priority for governments or the public and therefore the relative market position could be described as weak. By tying the marketing campaign into moral advantage housing has a chance to improve its’ positioning. Moral advantage can be used in several ways:

- Political forces can use an energy management program as an illustration of the government participating in environmental management and contributing to worldwide targets as defined in papers such as the Kyoto Protocol.
- The public can be shown that government is serious about environmental management and is prepared to incur some costs in the short term to protect Canadian society though long-term gains in reduced greenhouse gas emissions.
- The program would show a long-term proactive perspective by the government and non-profit organizations.
- Families who move out of social housing will have learned good energy management practices to better prepare them for ‘market’ rentals—a lifetime of environmental awareness and good practices will have been introduced to a segment of the population.

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