A Toolkit for Affordability Driven Home Energy Efficiency Retrofits Through Local Improvement Charge Programs

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Outreach Analysis and Recommendations

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Notice

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Introduction

This document is part of a series of documents produced as part of Volta Research's CMHC funded "A Toolkit for Affordability Driven Home Energy Efficiency Retrofits Through Local Improvement Charge Programs" project, which aims to inform the way that municipalities and other entities define and create their single-family home energy efficiency LIC/PACE programs.

This document draws on the information collected by the Project Team during the literature review of LIC/PACE programs in North America. A review of our project partner's outreach methods for their programs, the City of Toronto Home Energy Loan Program, and the City of Halifax's Solar City Program, respectively, was conducted. Information regarding program outreach and communication was reviewed to identify programs' various outreach and communication methods and activities, variables impacting outreach and communication, and lessons learned. Recommendations for future outreach and communications methods were developed based on the program review and literature review findings.

Findings

Toronto Energy Efficiency Loan Program

All three Toronto energy efficiency retrofit loan programs – Home Energy Loan Program (HELP), High-Rise Retrofit Improvement Support (Hi-RIS) Program, and Energy Retrofit Loans Program – have dedicated web pages on the City of Toronto's website. These are the primary outreach platforms for each of the programs.

City staff have reported that a key issue HELP and its uptake amongst eligible residents remains awareness of existing programs and supports (City of Toronto, 2021). With new funding from the Federation of Canadian Municipalities (FCM), staff plans to increase engagement and develop accessible and multi-lingual educational and informational resources (City of Toronto, 2021). They also plan to identify partnerships with City and non-City partners to provide resources and support vulnerable populations to address this issue (City of Toronto, 2021).

Currently, City staff are engaging resident-led and community organizations focused on energy efficiency and promoting net-zero neighbourhood projects (City of Toronto, 2021). The City's BetterHomesTO program hosts a Bi-monthly Neighbourhood-Community-led Retrofit Initiatives Meeting for various community groups and other stakeholders. These bi-monthly meetings act as a touchpoint for relevant updates from the City, community groups, and other stakeholders and provide an opportunity for presentations on topics relating to residential retrofits (A. Foyle, Personal Communication, 2021). A need for greater homeowner education, engagement, and Improved program marketing and advertising has been identified to encourage more diverse participation in the program and support equity-seeking populations (City of Toronto, 2021). Initial steps to address this need include the launch of the BetterHomesTO website. This homeowner resource provides information on City and partner programs, options for improving energy efficiency, and the importance of a home energy evaluation by a certified energy advisor. Other BetterHomesTO resources include multi-lingual digital and print resources, bi-monthly retrofit webinar services, and a series of animated videos. Plans for additional resources include case studies, retrofit road maps, and other engagement and education opportunities. (City of Toronto, 2021)

The City also hosts introductory HELP events and webinars for homeowners and contractors to introduce them to the program, explain the approval and repayment process, and give an overview of eligible upgrades and retrofits (City of Toronto, 2022).

Funding from Natural Resources Canada was used to develop a standalone website, BetterHomesTo.ca, to promote their BetterHomesTO program. The BetterHomesTO website, developed in partnership with local utilities and other stakeholders, aims to help homeowners make their homes more “energy-efficient and climate-friendly” by providing information on (City of Toronto, n.d.):

- how, why, and when to get an EnerGuide home energy audit;
- technical and financial aspects of various home improvements;
- why all homes need to be net-zero, and what that means; and
- programs, incentives, and rebates.

Halifax’s Solar City Program

The SolarCity Program has a dedicated program webpage nested within the City of Halifax’s larger website (Halifax Regional Municipality, 2022). It contains links to a property owner guide, property registration to participate in the program, and a step-by-step guide to SolarCity participation. They also provide tips for choosing solar contractors and links to provincial rebate programs.

Interest in the program since its launch in 2016 has been considerable. Since then, 3,060 property owners registering their property for consideration and 654 Participant Agreements have been executed, totalling $17.80 million in financing for installing solar energy technologies (K, Boutillier, Personal Communication, 2021). The program has seen uptake across the municipality, with systems installed in all 16 of Halifax’s municipal electoral districts (Halifax Regional Council, 2021b). This project has also contributed to the growth of a competitive solar industry. In 2016, five solar contractors participated in the program, while in 2021, there were 32 active solar contractors (Halifax Regional Council, 2021b). Community engagement has been ongoing throughout the program – inquiries are accepted from potential participants by email or form. The program has undertaken marketing campaigns and conducted participant surveys for feedback (Halifax Regional Council, 2021b). Engagement with experts has also been ongoing throughout the design of the retrofit pilot program (Halifax Regional Council, 2021b).

Halifax is developing a retrofit pilot program that would be administered similarly to Solar City. To ensure program accessibility, a need was identified to provide homeowners with more assistance between the standard initial energy audit and the completion of retrofits (Halifax Regional Council, 2021b). Most homeowners do not have the time or expertise to find reliable contractors to complete the suggested retrofits (Halifax Regional Council, 2021b). Halifax will explore the feasibility of a 'navigator' role for the program who would act as project manager and be the primary contact for advice and education (Halifax Regional Council, 2021b). Additionally, they would be responsible for coordinating all sub-trades, financing, and rebate approvals. A

retrofit pilot program will be initiated for a limited number of homeowners and administered by Solar City has been recommended to Council (Halifax Regional Council, 2021b).

Variables Impacting Outreach and Communication

The findings of an extensive review of academic and grey literature concerning LIC/PACE programs in North America revealed three main variables impacting effective outreach and communication of energy efficiency programs. These variables can both act as a challenge and barrier for program administrators ***and*** also motivate potential participants.

Household Perceptions, Values, and Social Influences

Household perceptions and values can be influenced by numerous inaccurate, irrational, or unrealistically optimistic factors - this can result in the perception that certain technologies, energy efficiency programs, or related policies are costly, risky, or unproven, leading to low engagement in these programs (Bell & Kalvas, 2018; Chen, Xu, & Day, 2017; Drehobl & Casstro-Alvarez, 2017). Unfamiliarity with certain technologies, the concept of energy efficiency retrofits, or lack of knowledge of potential benefits can also be a barrier to participation (Bell & Kalvas, 2018; Chen, Xu, & Day, 2017; Drehobl & Casstro-Alvarez, 2017).

Alternatively, social variables, including internal values and perceptions, sustainability concerns, and environmental attitudes, can influence and motivate people to participate in energy efficiency projects (Adachi, 2009; Chen, Xu, & Day, 2017).

Demographics

Demographics, including income, age, gender, household size, education level, and language, can influence the participation rate in energy efficiency programs (Brown, Soni, Lapsa, & Southworth, 2020; Das, Richman, & Brown, 2018; Gamtessa, 2013; Sovacool, Kivimaa, Heilscher, & Jenkins, 2017). The following household characteristics were found to result in a lower likelihood of a retrofit investment or technology adoption (Brown, Soni, Lapsa, & Southworth, 2020; Gamtessa, 2013; Sovacool, Kivimaa, Heilscher, & Jenkins, 2017):

- large household size
- High-income households (as energy costs may comprise a smaller share of their monthly expenses)
- high school-level education or higher
- non-English speakers
- age (some seniors have an ‘unlimited access’ mindset with regard to energy use)

Getting the attention of and gaining access to participants, and having the opportunity to explain the program, is a crucial challenge. It can be more pronounced for low- to medium-income (LMI) households, which can be even more challenging to reach due to language barriers, limited internet access, and limited established communication channels between programs administrators and LMI (Heeter, Bird, O'Shaughnessy, & Koebrich, 2018).

However, demographics such as age, gender, income, knowledge and experience, and social context can ***positively*** affect personal energy decision-making. Those engaging in energy efficiency retrofits tend to be older and wealthier, while retrofits focused on improving indoor comfort are more common amongst elderly populations and parents of young children (Ferguson, 1993; Schwarz & Taylor, 1995; Scott, Parker, & Rowlands, 2001). Knowledge and experience, or energy literacy, are also positively correlated with participation in energy efficiency programs, particularly among low-income households (Hernández & Bird, 2012).

Lack of Awareness and Accessibility of Program Information

Lack of awareness and accessibility to program information, including feasibility and costs of the program, existing subsidies, regulations, and policies, may dissuade potential applicants and hinder program uptake (Adachi, 2009; Bell & Kalvas, 2018; Andrews & Poe, 2019). Asymmetric information, “poor marketing,” and ineffective outreach strategies can also hinder program participation rates (Adachi, 2009; Cirpriani, McDiarmid, & Behan, 2020; Gillingham, Newell, & Palmer, 2009; Ross, Jarrett, & York, 2016).

Addressing this issue is crucial to program uptake. Awareness of energy efficiency programs and their incentives and benefits (through campaigns, social networks, and locally trusted sources) are motivating factors that can encourage consumers to make initial contact and participate in the program (Craig, 2016; Gillingham & Bollinger, 2017; O'Dwyer, 2013; Stern et al., 1986).

Outreach from community-based groups can play an essential role in promoting and outreach for energy efficiency programs. It can help improve participation as the groups often already have established relationships within the community and existing levels of trust with residents (Adachi, 2009; Andrews & Poe, 2019; Bell, Nadel, & Hayes, 2011; Sanchez, Levine, & Tajima, 2018).

Lessons Learned

The following takeaways are important considerations for LIC/PACE programs when formulating outreach and marketing strategies to communicate programs features and recruit candidates to participate in the programs:

- Establishing and reaching the intended audience through easily understandable and credible communication methods is essential to minimize the potential participants' difficulty and risk in making energy efficiency investments (Stern, et al., 1986).
- As a first step, program designers and administrators must identify clear program goals and target audiences (Dunsky Energy Consulting, 2013; Drehobl, Chikumbo, & Tanabe, 2018). This will assist in developing the outreach and communications strategy.
- When designing programs, socio-demographic variables should be considered. These factors can motivate or hinder participation in energy efficiency programs, especially among low-income households and seniors (Chen, Xu, & Day, 2017; Gamtessa, 2013; Parker, Rowlands, & Scott, 2005). These are also important factors to consider when developing outreach and communications strategies.

- Program designers and administrators must consider potential participants' education and background and expand information to facilitate participation among vulnerable populations in these programs (Cluett, Amann, & Ou, 2016; Craig, 2016). For example, participants from vulnerable groups (including low-income families, those with lower education levels or no formal qualifications, and those who have household members with a long-term health condition and disability) are likely to need more help to know how to access and proceed with their application or use the new technologies (Sovacool, Kivimaa, Heilscher, & Jenkins, 2017). This could entail technical experts providing educational components in marketing campaigns (Cluett, Amann, & Ou, 2016; Craig, 2016).
- Engaging and training community groups or community champions can help ease communication between program administrators and potential applicants. Programs with promoters or champions who also are participants in these programs (e.g., solar ambassadors who install solar panels through the solarize program) are more successful at persuading people to participate as actions are more influential and credible than words alone (Kraft-Todd, Bollinger, Gillingham, Lamp, & Rand, 2018).

Recommendations

Outreach and communication widely affect a LIC/PACE program's success. Specific outreach and communication activities and channels may be necessary to target different demographics. Each audience may have needs to be addressed in outreach materials and marketing campaigns - recognizing the target audience's unique needs and challenges and designing a marketing program accordingly is essential for increased success (Dunsky Energy Consulting, 2013). Statistics Canada's most recent census data and forward sortation areas (FSAs) for the proposed program's service area can be used to identify predominant demographics in a program's proposed service area, such as age, percentage of low-income occupants, education levels, and dominant languages spoken.

When developing outreach and communications materials, program designers and administrators must consider that household perceptions and values influence how a program is received. Barriers may be encountered in promoting the programs based on these perceptions and values, which need to be considered and addressed in developing messaging and content for their programs. Prioritizing outreach within harder-to-reach groups, such as LMI households, should be considered when developing outreach and communications plans.

Since social influence can affect homeowners' decision-making regarding LIC/PACE programs, program designers and administrators should consider exploring partnership opportunities for outreach and work with local community groups, not-for-profits, and contractors. A key factor of program success is to actively engage contractors and other professional organizations to educate them about the program and help promote co-marketing opportunities within the communities they work.

Local demographics should be studied to inform the development of outreach and communications materials. Program designers and administrators should consider developing communications and marketing materials in the most predominant non-English languages for the areas they serve. This information can be easily identified using Statistics Canada's most recent census data and FSAs for the proposed program's service area. This is particularly beneficial for communities with high energy cost burdens/poverty levels and could see significant benefits from participating in LIC/PACE programs. Using simplified language should also be prioritized to address issues of energy literacy that may be prevalent in some communities. Program designers and administrators should also ensure materials are available in various formats to ensure accessibility to a broader range of demographics.

Marketing plays an essential role in improving participation and engagement. To effectively reach the target audience, energy-efficiency program administrators need to know through which channels their target audience gathers information, whom they trust to assist them with making decisions, and which messages influence them to join the program and become more energy-efficient (Dunsky Energy Consulting, 2013). Multiple strategies and approaches can be used to extend the reach of program marketing and delivery:

Formation of partnership with third parties: (market push mechanisms or co-marketing approach). Marketing collaboration with a third party (e.g., local healthcare organizations or community-based organizations) that regularly contact homeowners can help program

administrators reach key communities, target audiences, and hard-to-reach customers (Cipriani et al., 2020; Gilleo et al., 2017). The most promising partners are trusted and have frequent touchpoints with the target audience to leverage existing outreach efforts and channels (Heeter et al., 2018). Other local actors for co-marketing may include contractors, suppliers, installers of insulation, home improvement retailers, building supply stores, energy auditors, architects, building professionals, and local influencers (Cipriani et al., 2020). This strategy requires partner training on program details and benefits, providing them with marketing materials and listing these partners on the program website (Cipriani et al., 2020).

For example, to connect LMI customers, approaching them with a bundle of several related programs and using existing outreach for associated offerings, such as efficiency programs, can be effective. These partners often are known within the LMI community and can have the trust of community members, which is important for gaining participation (Heeter et al., 2018). These partners include community LMI groups, existing LMI programs, and housing authorities or providers (Heeter et al., 2018).

Focus marketing and outreach on a specific segment of the market. Targeting various segments through marketing and outreach efforts can help program administrators better reach customers. A successful strategy will help decision-makers in different segments understand the potential cost and benefits of an energy efficiency program for their properties (Ross et al., 2016). For example, it may be best to reach customers with lower education levels with more straightforward messages, such as basic educational information about renewable energy technologies (Heeter et al., 2018).

Messaging strategies. Effective messaging is vital to high participation in energy efficiency programs (Ross et al., 2016). Investments and improvements to properties must provide owners with benefits to encourage them to invest and implement energy efficiency measures. While energy savings and energy cost reductions are the primary benefits typically marketed by programs, programs must also market the non-energy benefits (e.g., thermal comfort, indoor air quality) resulting from energy efficiency improvements (Ross et al., 2016). However, messaging that emphasizes only the benefits may increase skepticism of the program's legitimacy among customers (Heeter et al., 2018). Instead, messaging should convey the benefits and costs of the program. Messaging with cost information reinforces the program's legitimacy and reduces perceived risks. With transparent cost structures, customers can see there are no hidden contractual terms that could hurt them in the long term (Heeter et al., 2018). In addition to the multiple benefits of energy efficiency and costs of the program, messages need to include actionable guidance—clear steps to learn more about program services and information on how to enroll (Ross et al., 2016).

Use of effective communication methods (Market pull). Using appropriate communication methods to outreach to each segment of the market can improve awareness and engagement with the program (Heeter et al., 2018). Special events, community campaigns, and community programs are some effective channels. Utility companies may be good partners because they can raise awareness with promotional material, bill inserts, and website links (Cipriani et al., 2020). Utilities may also be able to help target the program to neighbourhoods with high utility

costs or higher usage rates. Community groups, such as faith communities, sustainability-focused organizations, and schools may be able to help communicate the benefits of energy efficiency retrofits and the energy efficiency programs such as LIC/PACE financing (Cipriani et al., 2020; Dunsky Energy Consulting, 2013; Gillingham & Bollinger, 2017; Heeter et al., 2018). Face-to-face contact (door-to-door canvassing or neighbour-to-neighbour communications) is another effective method for contacting potential participants (Dunsky Energy Consulting, 2013). This method can concentrate on a neighbourhood scale for a limited timeframe to maximize the impact (Dunsky Energy Consulting, 2013).

Energy literacy promotion. Low-income households can be more proactive if they have an expanded knowledge base regarding energy conservation efforts through retrofit projects. Policies promoting greater awareness of energy conservation, ways to lower utility costs, and a basic understanding of how energy works and renewable energy technologies help reinforce a shift toward higher energy efficiency. These efforts can be facilitated with the help of non-profit and community-based agencies or utility companies that offer discounted rates and other services/benefits for those experiencing financial hardship (Hernandez & Bird, 2010).

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