

A Low-Income Housing Energy Efficiency Retrofit Program for Ottawa

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Overview

Providing assistance to low-income households for energy retrofits would help families better cope with increasing energy costs and time-of-use electricity rates, while at the same time helping the Province eliminate polluting power sources such as coal. It would also improve the quality of Ottawa housing stock and provide many secondary social and economic benefits.

There is a great opportunity for the City of Ottawa to implement a city wide program to assist low-income families.

First, the Province of Ontario has just announced a new low-income energy strategy that directs the Ontario Power Authority (OPA) and the Ontario Energy Board (OEB) to implement conservation and demand management (CDM) and Demand Side Management (DSM) programs directed at helping low-income households with energy efficiency and conservation measures.¹ Ottawa Hydro and gas provider Enbridge Gas will be required to deliver these programs as part of their legal CDM and DSM targets to be set later this year by the OEB under the *Green Energy Act*.

Second, there is growing evidence across North America and Europe that successful low-income retrofit programs depend on strong partnerships with local community groups and social agencies to market the program. Ottawa already has many of these partnerships. The City's EnviroCentre has a track record of helping low-income and social housing residents working with Hydro Ottawa and Enbridge Gas. Community Associations meet regularly to discuss environmental issues, and Ecology Ottawa is developing a network of community groups working on energy issues.

Recommendations:

Ecology Ottawa is recommending that the City of Ottawa immediately begin discussions with the EnviroCentre, Hydro Ottawa, Enbridge Gas, community groups and social agencies on the implementation of an energy efficiency retrofit and appliance efficiency program for low-income housing in 2011.

The program would provide free audits and a package of upgrade measures, and provide low-interest long-term on-bill financing for furnaces and appliances. The program would be coordinated by the City's EnviroCentre and build on the

¹ The Low-Income Energy Network. "Energy Minister gives 'green' light to low-income energy programs." Press release. 6 July 2010. www.lowincomeenergy.ca/2010/07/energy-minister-gives-%E2%80%9Cgreen%E2%80%9D-light-to-low-income-energy-programs/. Accessed February 2011.

current Enbridge Gas Distribution weatherization program. The program would utilize the recently announced low-income electricity efficiency programs to be delivered by Ontario local distribution utilities, including Hydro Ottawa. A community approach would be used similar to the successful programs run by Manitoba Hydro and several US States. This would involve close partnerships with community associations and social agencies to “market” the program, and street-by street implementation of projects.

The Business Case

1. Homeowners with low or fixed income are the first to be hit by increasing energy and electricity costs but have not been able to benefit from federal/provincial grants requiring upfront investments.
 - Energy costs can constitute as much as 20% or more of a household’s income.
 - Low-income housing is often in need of repair and improvement so are less efficient than other housing,
 - Yet low-income residents do not have access to the capital or loans needed to upgrade their homes and reduce energy costs.
2. The introduction of smart meters and time-of-use rates will also affect low-income households more than other residents as they have fewer opportunities to shift energy use.
 - Low-income households often have time constraints (young children coming home from school, overlapping shift work, etc.)
 - Older appliances cannot be programmed to operate at off peak times.
 - These appliances are also less efficient than newer models.
3. Low-income households can best be helped to cope with these issues, not by providing an income supplement, but by upgrading housing and appliances through the following measures:
 - Add attic and basement insulation
 - Basement sill plate sealing and draft proofing
 - Replace windows with high efficiency windows and seal air leakage
 - Replace doors and weather-strip
 - Replace gas furnace with high efficiency furnace
 - Replace refrigerator with new more efficient models
 - Replace clothes washer with front load model with timer
 - Replace high use light fixtures with compact fluorescent lamps and fixtures
4. Financial assistance and concessional financing of these measures can be provided to low-income households in ways that require no cash outlay and result in immediate reductions in energy bills:

- Provide turn key free audit and free package of upgrades including installation of insulation, efficient light fixtures, weather-stripping, sill plate sealing, replacement of the worst windows and doors.
- Provide on-bill or property tax based low interest financing for new efficient appliances and furnaces so that savings are greater than payments and homeowners see lower bills immediately. Loan guarantees can enable longer terms.

5. Improvement of low-income housing has many other benefits:

- Improves the quality of Ottawa housing stock
- Improves the air quality and health of residents
- Provides local employment

6. Experience in other jurisdictions has shown that conventional marketing approaches used to promote and implement housing retrofit do not work well in low-income homes. Innovative community partnerships are needed.

A review of low-income energy programs across North America and Europe by the University of Victoria Environmental Law Centres sets out best practices for these programs and makes recommendations for successful partnerships with local community and social agencies.²

Experience in Manitoba ³ and other provinces and US states has shown that low-income residents only participate in efficiency programs if community and social agencies are partners in the program. This community approach is often delivered on a street by street basis. A community-wide approach is critical for mobilizing participation as well as reducing costs by as much 50 per cent.

Community wide retrofits are also a crucial part of the UK Warm Homes plan that focuses on low-income postal codes, and creates capacity and economies of scale to offer services to the “able to pay” market as well.

The US is also committed to a community-wide approach, starting with a major 25-city pilot currently under way (integrating low-income and able to pay programs).

Both the U.S. and the U.K. view the task as too big and too urgent to continue one house at a time. Whole communities need to be tackled at once.

² Maine McEachern, Jill Vivian. “Conserving the Planet—Without Hurting Low-Income Families.” University of Victoria Environmental Law Centre. April 2010. <http://www.elc.uvic.ca/press/energy-poverty-report-May2010.html>. Accessed February 2011.

³ Manitoba Hyrdo. http://www.hydro.mb.ca/your_home/lower_income.shtml.

Implementation of an Ottawa Low-Income Housing Retrofit Program

The City of Ottawa should coordinate the delivery of a low-income home energy program in cooperation with EnviroCentre, Ottawa Hydro, Enbridge Gas Distribution, and appliance retailers. Programs would be delivered by:

- Fully trained delivery teams of certified contactors for audits and retrofit coordinated by EnviroCentre based on its success to date with the Enbridge Gas Distribution: Low-Income Home Weatherization Retrofit.
- Working partnerships with community associations and social agencies to market the program and do community scale upgrades (e.g. street by street) in each neighbourhood.

Components offered to each home would include:

- Free EnerGuide Rating System audit, label and upgrade report
- Free upgrade package of insulation, sealing, lighting and some windows
- On bill or property tax based financing for more efficient appliances and furnaces with loan guarantees to enable longer “pay as you save” terms

Funding would come from Provincial allocations to meet CDM and DSM targets under the recently announced Provincial low-income energy strategy, plus contributions from the annual dividend of Hydro Ottawa.