

Affordable & Efficient

Towards a National Energy Efficiency Strategy for Low-Income Canadians

When it's really cold outside, many low-income families are forced to choose between buying groceries and paying the energy bill. Canada needs a national strategy to address energy poverty.

- Joyce Potter, President, Canadian Housing and Renewal Association

Acknowledgments

This background paper was produced by the Canadian Housing and Renewal Association (CHRA - www.chra-achru.ca), a national non-profit organization that promotes access to adequate, affordable housing for low- and modest-income households, and seeks to heighten awareness of affordable housing issues through research, advocacy, networking and communications. Financial assistance was provided by Canada Mortgage and Housing Corporation (CMHC) through Affordability and Choice Today (ACT - www.actprogram.com), a housing regulatory reform initiative delivered by CMHC, the Federation of Canadian Municipalities (administrator), the Canadian Home Builders' Association, and CHRA. Additional support was provided by the Green Communities Association (GCA - www.gca.ca), Canada's national umbrella group for community-based non profits that deliver environmental programs and services.

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About this paper

This discussion paper, *Affordable & Efficient*, has been prepared for delegates to the national symposium, *Affordable Efficient Housing: Towards a National Energy Efficiency Strategy for Low-Income Canadians*, 3-4 February 2005, Halifax, Nova Scotia. We hope that this paper provides useful background information to delegates, and helps to stimulate focused discussion.

Affordable & Efficient reflects the growing concern about the cost of residential energy and other utilities for those who can least afford to pay. As these costs grow, they reduce the supply of affordable and acceptable housing and undermine the well-being of low-income Canadians. At the same time, the energy that is used inefficiently in low-income housing is a major environmental concern, as a source of emissions that cause smog and contribute to global climate change.

Affordable & Efficient addresses the following:

- who is being seriously hurt by high energy and other utility costs in Canada? how pressing is the problem?
- what are the impacts of energy-related poverty?
- how has this problem been addressed to date in Canada? what are the strengths and weaknesses of these remedies?
- what can we learn from programs in the U.S. and the U.K.?

Several key policy issues are identified to help generate debate and feedback.

The outcome of discussions at the *Affordable Efficient Housing* symposium will be recorded and incorporated into a subsequent version of this paper, as part of a process of building consensus about the action needed to address energy use in low-income housing as both a social and environmental concern.

The authors consider this an early draft and will be pleased to receive any information or perspectives that will help us to develop a more complete, accurate, well documented, and compelling policy document - and one which is more reflective of conditions in all parts of Canada.

The background paper and policy symposium build on the work of the Canadian Housing and Renewal Association in developing a comprehensive national affordable housing framework strategy.

Energy poverty in Canada

Daniel Street of St. John's is 51. He lives alone on social assistance. The Department of Human Resources, Labour and Employment (HRLE) pays his rent and provides him with approximately \$162 every two weeks to cover all other expenses, including his telephone bill, clothing, groceries and electricity. Daniel said he's been having trouble making ends meet. His power bill is now more than \$800 in arrears. Consequently, HRLE is deducting \$100 of the \$162 he gets every two weeks to pay the bill until it's paid in full. That will leave him with \$124 a month to live on. Daniel's health is failing due to complications from diabetes. He is unable to walk more than a few steps and rarely leaves his small apartment.

- *The Telegram* (St. John's, NL), January 20, 2005

In the United Kingdom, where the impact of energy costs on low-income earners has received public attention for a number of years, the term "fuel poverty" has been adopted to describe conditions in which households "cannot afford to keep warm at reasonable costs." For purposes of the U.K government's fuel poverty program, households that spend more than 10 per cent of their income on combined utilities are eligible for assistance.

In Canada, the Ontario-based Low Income Energy Network¹ has recently used the similar term "energy poverty" to describe those who suffer a disproportionate burden of energy and other utility costs. In Ontario, the lowest income quintile - one in every five households - spend on average 12 per cent of their income on utilities, while the average Ontarian spends only 4 per cent.² Across Canada, average spending on utilities (water, heating fuel and electricity) for all households increased by 7 per cent during 2003 - from \$1,860 to \$1,990 - while spending on heating fuel was up 13 per cent to \$730.³

Energy costs are a serious contributing factor in high shelter costs. In 2001, 15.8 per cent of households in Canada were in core need (30.4 per cent among renters; 8.6 per cent among owners) - that is, they fell below one or more of adequacy,

¹ LIEN, established in 2004, comprises the Advocacy Centre for Tenants Ontario (ACTO), Canadian Environmental Law Association (CELA), Community Social Planning Council of Toronto, Income Security Advocacy Centre (ISAC), Toronto Disaster Relief Committee, Toronto Environmental Alliance (TEA), Share the Warmth (STW).

² *Survey of Household Spending, 2003: Detailed average household expenditure by household income quintile, Ontario.* Statistics Canada. Catalogue 62F0032XDB.

³ *The Daily - Survey of Household Spending 2003,* Statistics Canada, Dec 13, 2004.

suitability or affordability standards developed by Canada Mortgage and Housing Corporation (CMHC) and have incomes too low to allow them to seek acceptable dwellings.⁴

Housing is generally deemed affordable if shelter costs do not exceed 30 per cent of household income. (Statistics in Canada are inconsistent with respect to including utilities in shelter costs. CMHC annual rent surveys for example do not distinguish whether utilities are in or out of the rent information.) However, between 1990-2001, rising shelter costs, and the loss of over 300,000 affordable units renting below \$500 (affordable to low wage incomes below \$20,000), means that many of Canada's rental households are facing a severe burden - with 735,000 households (one in five) paying more than 50 per cent of their income on shelter (including 290,000 paying more than 100 per cent).⁵

Energy poverty affects all categories of low-income housing, including:

- **private landlord housing** - tenants who pay their own utilities, and tenants whose utility costs are included in rent
- **social housing** - similar to private housing, insofar as tenants bear utility costs directly or indirectly⁶
- **owner-occupied** - low-income homeowners who own their own homes, but cannot afford operating costs

Of the 12.2 million households in Canada in 2003, two thirds were owner-occupied (65.7 per cent) and one third rented (34.3 per cent), while social housing represented five per cent of the total existing stock.⁷

Energy poverty primarily reflects lack of income. But in addition, low-income housing often has higher than average energy costs as a function of the generally lower quality of the housing, i.e., lack of insulation and draft-proofing, and less efficient furnaces and other appliances. The owners either can't or won't invest in energy efficiency upgrades that would help to bring down energy costs. In cases where

⁴ *Exclusion from Acceptable Housing: Canadians in Core Housing Need*, The Observer (December 2004, Vol. 7, No. 2), Policy Research Initiative. Affected groups include: lone seniors over 65, single parents with children under 18 living at home, recent immigrants, and aboriginal households.

⁵ *Moving Forward: Refining the FCM Recommendations for a National Affordable Housing Strategy*, Federation of Canadian Municipalities, October 2004.

⁶ Includes housing cooperatives, home to 90,000 households in Canada, CMHC, 2001, *Cooperative and Non-Profit Housing*, research report.

⁷ *Home Truths: Why the Housing System Matters to All Canadians*, Andrew Jackson, CHRA, 2004.

tenants pay utilities bills directly, private owners often lack the incentive to invest in building retrofits or a new high-efficiency furnace.

Further, at least in Ontario, households in the lowest income quintile are twice as likely as the average household (26.8 per cent versus 14 per cent) to heat with electricity - the most expensive heating source.⁸ Electric heating is prevalent even in social housing, where historical funding formulae encouraged installation of heating systems with the lowest capital costs, using the heating source that now unfortunately has the highest operating cost.⁹

As energy and other utility costs increase - in some cases, sharply - the impact on those with low-incomes increases correspondingly. For example, the price of heating oil in Québec soared from 29 cents per litre during 1998-1999, to 52 cents in January 2001, an increase of 79 per cent.¹⁰ Once again during the winter of 2004-2005, Canadian households that rely on oil heating have endured record high costs, prompting several provincial governments to offer heating rebates this winter as a short-term solution. The volatility of energy prices and lack of month-to-month predictability is also a source of insecurity for low-income households.

Canada's Energy Policy, prepared by Natural Resources Canada, states that "most observers expect energy prices, on average, to be higher in the early part of this decade, and certainly higher than in the 1990s."¹¹

Further, as Canadian municipalities struggle with aging water and sewer infrastructure, the cost of these services - once minimal on a per capita basis - is now becoming a sizable portion of utility costs in many jurisdictions. This paper focuses on energy costs, but rising water and sewer charges must also be seen as a growing factor in the affordability issue. According to the National Round Table on the Environment and the Economy, unmet water and wastewater infrastructure needs in Canada were \$38-49 billion in 1996, and capital costs for the following 20 years will be in the order of \$70-90 billion. These costs will inevitably be reflected in higher water and sewer charges.¹²

⁸ *Backgrounder, Low Income Energy Network*, January 20, 2005.

⁹ A likely moderating factor affecting the absolute level of energy costs in low-income housing is the smaller per capita living spaces, which would require less energy to heat and cool.

¹⁰ *Proposal for a Canadian Low Income Energy Efficiency Program*, Équiterre, Vivre en ville, Green Communities Association, 2001.

¹¹ www2.nrcan.gc.ca/es/es/policy_e.cfm, January 2005.

¹² *Municipal Water Pricing 1991-1999*, Environmental Economics Branch, Environment Canada, 2001.

Impacts of energy poverty

Youth are facing the same struggles as the adult population when it comes to living on fixed low incomes and trying to contend with the high cost of utilities. Within the last year hydro rates in Newfoundland have increased 9.9 per cent alone. When you factor in the continued high cost of oil, whether a young person is paying their own utilities or the landlord is offering utilities included and raising the rent, more and more of a limited income is being taken from basic necessities.

- Sheldon Pollett, Executive Director, Choices for Youth, St. John's, Newfoundland and Labrador, 2005.

High energy costs and low incomes are a painful combination. In the cold winter months, when energy bills can sometimes be greater than rent, poor families have to choose between food, clothing, and keeping themselves warm.

They may be forced to live in moderate to extreme discomfort. Health can be affected. According to CHRA, housing is a vital platform for individual health and well-being. "Housing in disrepair leads to higher risks of injury and accidental death in the home and unhealthy, indeed sometimes fatal, exposure to extremes of heat and cold. Exposure to dampness, moulds, fungus (e.g. from poor insulation ... poor heating and ventilation systems) can cause a wide range of pathologies, including asthma and other respiratory diseases."¹³

Failure to pay utility bills leads to shutoffs.¹⁴ In cases where gas for heating is shut off, residents resort to electric heating using ovens and substandard electric space heaters - a safety hazard. In the U.S., 120,000 fires are caused annually by supplemental heaters. These fires kill 600 people every year, and represent 22 per cent of all residential fires.¹⁵

¹³ *Home Truths: Why the Housing System Matters to All Canadians*, Andrew Jackson, CHRA, 2004.

¹⁴ The Low Income Energy Network estimates that over 50,000 Ontario households have their energy disconnected annually. Shaun Loney, Director of Energy Policy, Government of Manitoba, reports an estimated 5,000 natural gas disconnections in Manitoba in 2004 as a result of non-payment. Further, there have been steady increases in the bill payment delinquency rate and eventual disconnects since 1997, a period that has noted a tripling of natural gas commodity prices. "Natural gas heating costs for low-income families has become problematic."

¹⁵ *Your Home Fire Safety Checklist*, U.S. Consumer Product Safety Commission (CPSC Doc #4556).

Inability to pay utilities is a contributing factor to homelessness, which itself is a growing crisis in Canada, despite a prosperous economy.¹⁶

In addition to the impact on tenants, energy poverty is a major burden for Canada's social safety net. Social housing providers that pay occupant energy costs are squeezed because they are unable or reluctant to pass growing costs onto their tenants, and governments won't cover these increased costs. For example, Ontario's social housing providers collectively spend an estimated \$500-\$750 million per year on energy, which has been among their fastest rising and most volatile operating costs.¹⁷ Governments, social agencies, and charities are under increasing pressure to support those who cannot pay.

A variety of incidental health and social welfare costs flow from energy poverty and spread their consequences into the institutional support system (health, social assistance, corrections, etc.) and onto the taxpayers. There is no one solution to the problem of poverty but thoughtful energy and affordable housing policies could make a major contribution.

Finally, energy use in low-income housing is also a serious environmental concern. As in all Canadian housing, the energy consumed for heating and appliances results in environmental damage, including fossil fuel emissions that contribute to photochemical smog, and that add to greenhouse gas emissions (GHGs). The Kyoto Protocol comes into force globally in February 2005 and Canada must live up to its GHG emissions reduction commitments by 2008 to 2012. As a signatory to the Protocol, Canada has agreed to reduce its GHG emissions to 6 per cent below 1990 levels.

Between 1990-2002, residential energy consumption in Canada rose 9 per cent, with 17 per cent of Canada's GHG emissions inventory coming from this sector.¹⁸ The Federal Climate Change Action Plan includes the goal of retrofitting 20 per cent of Canada's existing houses by 2010, reducing GHG emissions by 1.5 million tonnes.

¹⁶ National Housing and Homelessness Network, Toronto Disaster Relief Committee, A submission to the House of Commons Standing Committee on Finance Pre-Budget Discussions for 2005, November 23, 2004.

¹⁷ *Social Housing Services Corporation Energy Management Program: Business Plan*, EnerLife, August 2004.

¹⁸ *Human Activity and the Environment*, The Daily, Statistics Canada, October 27, 2004.

Canadian responses to energy poverty

Now, since it is our first full winter in the building we realize the heating (electricity) is very high. Our electrical rates increased by 10 per cent in July. I see subsidies for heat as not really a solution. They have to be reissued and re-re-issued ... If the money was put into insulating and other needed work it would be a one time fix and the environment would benefit.

- Emma Rooney, Coordinator of Namasté Apartments, St. John's, Newfoundland and Labrador, January 2004.

Canadians are increasingly aware of the impact of high energy costs on low-income consumers, and they are concerned. There have been a variety of responses to date in an attempt to address this impact. Although these responses are well-intentioned, each needs to be assessed carefully for its impacts on low-income households, incentives to conserve energy, and climate action goals. For example, measures that relieve the economic pain for low-income households may not create any incentive to conserve. Conversely, measures that encourage conservation may not be accessible to low-income households.

Energy price caps

Energy price caps reduce the impacts of energy poverty by lowering energy prices. In November 2002, Ontario Premier Ernie Eves instituted a cap of 4.3 cents per kilowatt-hour on Ontario electricity prices, in sharp contradiction to his government's deregulatory agenda. Premier Eves also issued rebates for consumers hit with huge electric bills and prohibited utilities from cutting off power to customers with arrears.

Price caps have several defects. If they maintain prices below actual costs of production, the deficit must be made up through subsidies. In the case of Ontario, the cost of the cap added \$918 million dollars to the government's utility debt.¹⁹

Price caps are very blunt instruments: they provide those who can afford to pay the true energy costs with the same subsidy as those who can't. Thus, from a social policy point of view, much of the subsidy is not targeted to those who need it.

¹⁹ *New power caps ease taxpayers' burden*, Colin Perkel, Canadian Press, [The National Post](#), June 22, 2004.

Equally important, as environmentalists point out, below-cost prices discourage conservation and encourage over-consumption, adding to the environmental impacts of energy use. This is also bad economics. Price caps encourage inefficiency and the demand for more energy at ever-higher marginal costs of production.

Energy bill rebates

Energy bill rebates - cheques or bill credits to energy consumers - can provide immediate relief. In theory at least, they are able to target low-income consumers; and if rebates are combined with higher retail prices for energy, they don't encourage over-consumption, because consumers get a price signal that encourages them to cut their energy use.

Rebates can be a necessary and valuable means of easing the immediate impacts of high energy prices. But once they are spent, the benefit is lost. Rebates are an expensive solution that does not provide long-term relief.

In 2000, Canada's federal government provided \$1.3 billion in energy rebates to all Canadians eligible for a GST or HST refund - 8 million Canadians in 4 million households. The one-time rebate amounted to \$125 to \$250 per household. In this case, implementation problems were reported, and the rebates did not always reach target recipients.

In November 2004, Newfoundland and Labrador announced a \$3.5 million Home Heating Fuel Rebate Initiative that offers low-income residents an energy rebate of \$250 to help with winter heating costs. Residents apply by proving low-income eligibility. The program targets those using heating fuel - furnace fuel, stove oil, and propane - and was criticized for excluding the majority of households relying on electricity that were subject to a 9.9 per cent rate increase in July 2004.²⁰ Nova Scotia's new \$16 million Keep the Heat program features one-time rebates combined with modest retrofit assistance (furnace tune-up coupon, and a chance to win an energy savings kit).²¹

Energy assistance

Energy assistance programs are operated by utilities, government social assistance agencies, community groups, and charities such as Share the Warmth. Like food banks, these programs are designed to address individual household crises when, due to a particularly high bill or other circumstance, a

²⁰ A 0.5 per cent rate reduction was introduced January 1, 2005.

²¹ According to the Nova Scotia Department of Energy, the budget for the efficiency component is approximately \$180,000.

household is unable to meet the financial demands of energy bills. As such, energy assistance programs provide invaluable relief. However, like food banks, they aren't intended to provide a long-term or repeated solution to cash shortages - although there is often a demand placed on them to do so. They are ill-suited to address permanent and widespread conditions of rising energy prices and income shortfalls.

Energy efficiency programs

Conservation is the fastest, cheapest and cleanest solution to our electricity crisis, but the up-front investments are often out of the reach of low-income consumers.

- Keith Stewart, Smog and Climate Change Co-ordinator, Toronto Environmental Alliance.

Energy programs attempt to go a step further than rebates or energy assistance and provide permanent relief to high energy bills through measures such as building envelope improvements, heating system upgrades, education, and change-outs of energy- and water-consuming appliances.

Some examples of existing Canadian low-income energy efficiency programs are reviewed briefly in an appendix to this paper. They include programs supported by governments, utilities, and community organizations.

Although retrofits can cost up to several thousand dollars a unit, they can achieve significant net lifetime savings. They can also reduce bills, in the order of a quarter to a third of space heating costs. And research suggests that retrofits are more cost-effective than rebates or bill assistance. Retrofit investments continue to generate bill savings over the lifetime of the measure, while rebates or assistance provide one-time relief.²²

Energy efficiency programs cannot provide immediate relief to the hundreds of thousands of Canadians who face energy bill problems today. But they are an important part of a comprehensive approach to energy poverty.

Many governments around the world support energy efficiency programs because they reduce energy-related emissions and impacts while also alleviating the stress on

²² See *Results of Modeling a Proposed National Low-Income Energy Efficiency Improvement Program: Economic, Environmental and Employment Impacts*, prepared by Philippe Dunskey, Helios Centre for Sustainable Energy Strategies, for Équiterre, Green Communities Association, and Vivre en ville, February 2001.

low-income households. Retrofits are primarily investments that simultaneously repair the past and prepare for the future.

Utilities also benefit because of administrative savings gained through reduced bad debt and increased customer satisfaction and retention. By reducing the energy cost burden for low-income households receiving income support, provincial governments can stretch their social assistance dollars further.

For municipalities, benefits include safer buildings, improved social well-being, sustainable neighbourhoods and communities, more efficient use of infrastructure, and help in climate goals.

Besides lowering bills for low-income Canadians and improving housing affordability, energy efficiency programs create healthier and more comfortable in-home environments, improve tenant well-being, and help to conserve the scarce resources of housing providers and social agencies.

Energy efficiency programs also create jobs.²³ And they help to upgrade and add value - and useful life - to some of Canada's poorest housing stock.

Towards a national strategy for Canada

Canada has some excellent residential energy efficiency programs, but generally not targeting the needs of low-income residents. This section of the paper provides a preliminary review of low-income programs in the United States and the United Kingdom, to provide a benchmark of what could be done here in Canada. We also describe some of Canada's existing residential energy efficiency programs, followed by an account of recent efforts to promote a national Canadian response to energy poverty that will reduce energy costs in low-income households.

International experience

United States. Canada has much to learn from the United States, which has invested heavily in affordable energy efficiency through two longstanding popular and successful programs that target low-income consumers.

²³ For example, the LIEEP report (ibid), projects a net gain of 10,000 person-years of employment as a result of the LIEEP proposal.

Before any work was done, my electric bill for the previous month was \$200.33, after weatherization my current bill is only \$105.68.

- Mother of three, quoted on the U.S. Weatherization Assistance Program website, 2004.

The Weatherization Assistance Program,²⁴ with \$280 million a year in federal funding, has provided free energy audits and retrofitting services to more than 5.3 million low-income families since its inception in 1976. WAP provides weatherization (comprehensive retrofits), with no upfront costs to low-income consumers. Funds are transferred to the state level, and services are delivered by community groups.

The program costs about \$2,672 per home and delivers ongoing average savings of \$275 per year (or 31 per cent). Priority is given to the elderly, the disabled, and families with children. Native Americans are also eligible. The U.S. Department of Energy website reports that each dollar invested in weatherization returns \$3.71 in energy and “non-energy-related benefits,” including the creation of 8,000 jobs across the country in a range of local home service industries.

Another U.S. initiative, the Low Income Home Energy Assistance Program, (LIHEAP) arose in reaction to the OPEC oil embargo in 1973. The \$1.8 billion (annual) federal program is state-administered and helps pay winter heating bills or summer cooling cost for low-income residents. States can spend up to 15 per cent of LIHEAP funds on energy efficiency measures. By leveraging private funding to supplement federal grants, LIHEAP has forged new alliances between the government, businesses, gas and electrical utilities and community-based social service organizations.

Two-thirds of the families receiving LIHEAP assistance have annual incomes under \$8,000 a year (2005 figures) including seniors, the disabled, families with children, and aboriginals. The program is backed by a coalition of advocates from the social service agencies, utilities and energy industry trade associations who advocate for federal funding and improvements.²⁵

The United Kingdom. Britain’s Fuel Poverty Strategy, or Affordable Warmth, is another impressive energy-efficiency policy targeted to the needy. Established in 2001, the strategy sets an ambitious deadline of 2010 for achieving the Government’s goal of eradicating fuel poverty among households most vulnerable to cold-related ill health: seniors, the disabled, and families with children. Households that pay more than 10 per cent of their income on combined utilities are eligible for assistance. The

²⁴ Weatherization includes a wide variety of energy efficiency measures that encompass a building’s heating and cooling systems, its electrical system, and electricity consuming appliances. See: www.eere.energy.gov/weatherization.

²⁵ LIHEAP Report to Congress, 2005, www.acf.dhhs.gov/programs/liheap/states.

British Government is trying to address the root causes of poverty by “improving energy inefficient housing, reducing fuel bills and by tackling low incomes.”²⁶

Affordable Warmth is linked to the UK’s Kyoto commitment. The program has helped 800,000 vulnerable households since its inception in 2001.²⁷

Canada’s residential energy efficiency programs

More than 17 per cent of energy consumed in Canada is used to run our homes. Building an energy-efficient home or undertaking energy-saving renovations can mean savings for households as well as helping the environment.

- Honourable John Efford, Canada’s Minister of Natural Resources, November 18, 2004

At the national level, Canada’s existing residential energy efficiency programs are largely targeted at relatively well-to-do homeowners. The federal government’s EnerGuide for Houses is a sophisticated and effective home energy advice and rating service that is partially subsidized by the federal government, but retails for at least \$100. To benefit from this service, occupants must also invest their own money in energy retrofits.

In August 2003, the federal government announced a \$74.9 million Home Energy Retrofit Grant Program that provides cash payments to homeowners based on measurable home efficiency improvements.²⁸ While the program has been quite successful at creating incentives for ownership retrofits, it excludes tenants. And since more than two thirds of Canada’s housing affordability problem is found in the rental sector, we clearly need a more inclusive approach.²⁹ Further, most low-income homeowners are effectively excluded from the program because of the requirement to pay for EnerGuide ratings and retrofits before receiving an incentive payment.³⁰

²⁶ The UK Fuel Poverty Strategy, *2nd Annual Progress Report*, 2004.

²⁷ The UK Department of Trade and Industry’s Energy Group, *The U.K. Fuel Poverty Strategy*, 2001, www.dti.gov.uk/energy/consumers/fuel_poverty/strategy.shtml.

²⁸ According to Natural Resources Canada, the non-taxable grants have ranged from \$116-\$3,348 (average \$620) and reduce greenhouse gas emissions by an average 3.6 tonnes per home annually.

²⁹ *Affordable Housing in Canada: In Search of a New Paradigm*, TD Economics Discussion Paper, TD Bank Financial Group, June 2003.

³⁰ Unfortunately, opportunities are being lost to incorporate conservation opportunities – and our Kyoto obligations – into Canada’s affordable housing initiatives, including the \$1 billion

A new Canada Mortgage and Housing Corporation (CMHC) program will benefit home-buyers with limited means. Through its Mortgage Loan Insurance for Energy Efficient Homes, CMHC now offers a 10 per cent refund on its mortgage loan insurance premium for buying, building, or retrofitting a home or multi-unit residential building with energy efficiency measures. The new program is intended to encourage developers and owners to construct new energy-efficient buildings or retrofit existing ones for increased energy efficiency. The refund is based on the EnerGuide for Houses rating system.

CMHC has also changed the scope of the \$384 million Residential Rehabilitation Assistance Program (RRAP), adding energy efficiency to its existing mandate of helping to ensure building code compliance, including basic safety and structural integrity. RRAP will now provide grants for energy-saving retrofits for low-income homeowners, as well as private and non-profit affordable housing and shelter providers. The effectiveness of the new role for RRAP will be partly contingent on additional funding for this over-subscribed program.

The call for a Canadian low-income program

The federal government is committed to making quality homes that are environmentally-friendly and energy-efficient a real option for all Canadians.

- Honourable Joe Fontana, Minister of Labour and Housing, November 18, 2004

Housing and environmental activists in this country have been joining in the call for Canada to catch up with the U.K. and the U.S.

Low Income Energy Efficiency Program (LIEEP)

In 2001, Montreal-based Équiterre, Québec City-based Vivre en ville, and the Canada-wide Green Communities Association proposed a national Low-Income Energy Efficiency Program (LIEEP).

LIEEP was a five-year federal strategy to invest \$347 million in energy-efficiency improvements and education, targeting 645,000 low-income households. The

Affordable Housing Program commitments, and the \$405 million National Homeless Initiative. The federal government has promised a further \$1.5 billion toward affordable housing.

proposed package included education, EnerGuide for Houses, and draft-proofing and insulation for the most inefficient homes.

An independent analysis determined that LIEEP would be more effective at poverty alleviation than rebates, with about double the total economic benefits. Other demonstrated benefits included long-term energy savings, 10,000 person years of employment, and greenhouse gas emissions reductions of 4 million tonnes.

The LIEEP initiative found some support within government, but was unsuccessful. Proponents concluded that a national low-income energy efficiency program could not succeed solely on the basis of its contribution to GHG emissions reductions. Instead, a national program needs to be sold on the basis of multiple *co-benefits*, including economic, social, housing and health benefits as well as the environmental benefits, and it needs to have the active support of the organized constituencies for these concerns.

This is an example of a beautiful win-win ... and CMHC should help give favour to such strategies.

- John Godfrey, Parliamentary Secretary to the Prime Minister for Cities, April 2004, responding to a question about a National Affordable Housing Energy Efficiency Program, at CHRA's Congress, Vancouver.

National Affordable Housing Energy Efficiency Program

In 2003, a renewed effort was launched to establish a national low-income energy efficiency program, this time known as NAHEEP - the National Affordable Housing Energy Efficiency Program (NAHEEP).

The design of NAHEEP has not yet been specified, beyond the notion of a national program to improve the energy efficiency of low-income housing. (See: www.gca.ca for more on NAHEEP.) This is an intentional move by the proponents who wish to first engage stakeholders before proceeding to a full proposal concept.

A crucial breakthrough has been endorsement of the need for a national strategy by housing and anti-poverty groups as well the environmental community. The growing list of endorsers includes the Canadian Housing and Renewal Association, the Ontario Non-Profit Housing Association and the Affordable Housing Association of Nova Scotia, as well as a number of local housing organizations. The City of St. John's and the City of Toronto have also endorsed, and the Federation of Canadian Municipalities national affordable housing strategy articulates support for the

concept.³¹ For a complete list of endorsements to date, see the list in your symposium package, or visit www.gca.ca.³²

Issues for discussion

The Aboriginal tradition is to honour and respect our environment. Protecting our rivers, forests and living places is a sacred trust. Today this includes the air we breathe and the atmosphere that surrounds Mother Earth. As housing providers, we must also ensure efficient, and cost effective strategies are in place to keep rents low and modest for the families we house. Balancing our protection of Mother Earth with our mandate to provide families with truly affordable shelter must go hand-in-hand."

- George Devine, Executive Director, National Aboriginal Housing Association, Ottawa, January 2005

To stimulate and focus discussion among delegates at the Halifax symposium - and to maximize productivity - the following topics are posed as a starting point for discussion.

³¹ The FCM's revised national affordable housing strategy, *Moving Forward* (October 2004), recommends integrating emerging energy efficiency initiatives with affordable housing - including RRAP, infrastructure investment (FCM Green Municipal Funds) and initiatives such as the proposed National Affordable Housing Energy Efficiency Program.

³² The proponents, Équiterre and Green Communities, plan to continue efforts over the coming year to engage a wide range of stakeholders in dialogue about the need for a national program and principles for its design. A project team has been established that includes representation from Natural Resources Canada, Canadian Housing and Renewal Association, Federation of Canadian Municipalities, Canada Mortgage and Housing Corporation, Human Resources and Skills Development Canada (National Secretariat on Homelessness), and the Low-income Energy Network.

1. Are high energy costs in low-income housing an urgent priority for your organization? Why?
2. Is there a need for federal government leadership on this issue (as opposed to leaving it in the hands of provincial and municipal governments, utilities, community organizations and others)?
3. If a national program is established, how should program delivery be structured? For example, the U.S. model combines federal leadership with state level delivery. Is this appropriate or would some other model work better?
4. How should the selection of retrofits be determined? Can we come up with a standardized menu of measures, or should we require energy audits?
5. How do we include private sector rental housing in an energy retrofit program?
6. How do we address the needs of multi-unit residential buildings, including high rises?
7. What regulatory changes would help to improve the energy efficiency of low-income housing? What changes are needed to rent control legislation?
8. Who needs to be included as a partner in the program, and how should they be involved? What contribution should we expect from partners such as provinces, utilities, social housing providers, private landlords, community organizations ...
9. How can residents best be involved and empowered? What is the role of education? Should tenants be responsible for their own energy and utility bills or should they be paid by landlords? Should there be a component that supports do-it-yourself measures by low-income residents?
10. Who should be responsible for on-the-ground delivery of programs - government? utilities? non-profits? for-profit businesses? ...
11. How do we maximize the cost-effectiveness of program delivery (e.g., avoid cream-skimming and cherry picking)?

Input from the CHRA national symposium, 3-4 February 2005, will be incorporated into subsequent versions of this paper, with the goal of refining policy and promoting action.

Conclusion

We are at an exciting moment in Canada, in which new alliances are being forged between organizations and constituencies toward a common cause of maximizing the efficiency - and minimizing the operating costs and environmental impacts - of affordable housing for low-income Canadians in this country.

Canada finds itself in the position of being some three decades behind the U.S. in responding to the challenge of energy poverty. The good news is that we have the opportunity to learn from the experiences from those who have gone before us in the U.S., U.K. and elsewhere, combined with made-in-Canada insights and solutions, to develop a second-to-none national program.

Housing and environment are both high on the agenda at this time. The need is great - but so is the opportunity to contribute to the simultaneous objectives of increasing housing affordability for low-income Canadians, extending the physical life and value of existing housing stock, improving the health of indoor environments, and reducing greenhouse gas emissions.

The CHRA symposium, *Affordable Efficient Housing*, is an important step in developing a new coalition of Canadians from many sectors and many parts of the country, who will work together to find solutions to energy poverty. Canada has proud traditions of public concern for those in need, and for the natural environment. It's time to bring those traditions to bear on addressing the suffering and need of those who "cannot afford to keep warm at reasonable costs."

Appendix: Canadian energy poverty programs

TCHC has conducted retrofit programs for semi and detached houses - in all cases the tenants report greater comfort in living, lower utility bills and therefore better economic circumstances. In high-rise retrofits that allowed operating savings to be used to perform other capital upgrades, surveys taken after energy retrofit work resulted in very positive feedback and better living conditions for tenants."³³

- Derek Ballantyne, CEO of Toronto Community Housing Corporation, January 2005

Toronto Community Housing (www.torontohousing.ca):

Canada's largest public landlord (and North America's second largest), Toronto Community Housing Corporation (TCHC) has developed a partnership with a community non-profit organization, GreenSaver (www.greensaver.org), to retrofit a large portion of Toronto's social housing portfolio. The program will make a significant contribution to the reduction of CO₂ emissions in Canada's largest city.

The program, launched in 2004, consists of EnerGuide for Houses audits and energy retrofits and is being implemented to all of TCHC's 800 scattered houses, with the long-term goal of expanding to 5000 row houses. TCHC is home to about 164,000 low- to moderate-income tenants in 58,500 households. An initial 2002 pilot program of approximately 60 audited TCHC properties delivered an average 35 per cent reduction of space heating requirements; a three tonne cut in CO₂ emissions per house per year; and improved quality of life. As part of the program, tenants also learn about energy conservation as it relates to heating, cooling, and appliance and lighting use.

Québec's Energy Efficiency Agency. In 1996, Québec's Energy Efficiency Agency piloted a low-income energy conservation education and draft-proofing program delivered with utilities and community organizations like Équiterre (www.equiterre.qc.ca), using EnerGuide for Houses. The program was renewed in 1999 and is increasingly under-written by Hydro Québec. The main features are weather-stripping and education.

Average space heating savings for the participants were 29 per cent. To put that in context, if a family was paying \$500 per month for heating (a common amount in Peterborough), the energy efficiency retrofits would reduce the cost to \$355, saving \$145 per month. While that may not seem like a huge amount to some, to others it is a substantial amount for groceries and other costs. It has

³³ Derek.Ballantyne@torontohousing.ca.

been reported to us that the project made a real difference to the lives of the participants.

- Sue McGregor Hunter, Manager, Peterborough Green Up, January 2005

Curve Lake First Nation. In 2002, Peterborough Green-Up (www.greenup.on.ca), a community non-profit in Peterborough, Ontario undertook low-income energy efficiency project with nearby Curve Lake First Nation. The project achieve three times the projected savings of 10 per cent, and also addressed indoor air quality. Residents reported many health benefits.

Saskatchewan, HomeFirst. Saskatchewan's HomeFirst Initiative, launched in 2004, is a five-year plan to invest \$200 million in affordable housing, with \$25 million going towards new affordable housing and renovation grants for low-income households. As part of this bigger strategy, 10,000 low-income families will benefit from a new housing supplement and 3,000 homes receive energy efficiency or conservation grants of \$1,500 per home. This program was developed by a variety of community partners including low-income and moderate-income families, seniors, First Nations and Métis people special needs and northern residents.