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Fostering energy efficiency in BC's rental housing

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Issue

Overcoming barriers to energy efficiency (EE) in rental units is a critical yet under-examined area for improved demand-side energy management. Rental units make up [16% of the province's housing stock](#)ⁱ, and a far higher percentage in BC's cities. These units are often older and less energy efficient products of Canada's [rental housing boom in the 1960s and 1970s](#)ⁱⁱ.

As noted in Briefing Note (BN10-17), "Overcoming Barriers to Residential Energy Efficiency", typical incentives to improve energy efficiency do not work in residential rental accommodation because landlords do not gain the private benefit of reduced utility bills, nor do they significantly profit from the indirect benefits like tenant attraction and retention, increased home value, and higher rent income--[Provincial vacancy rates are as low as 3%](#)ⁱⁱⁱ, there is [limited evidence that green improvements increase a home's value](#)^{iv} and [landlords have restrictions on raising rent by more than 2% above inflation](#) to cover renovation costs^v. Clearly, the costs and benefits of energy efficiency renovations need to be better aligned for landlords to overcome tenant/landlord split incentives and promote improved energy efficiency.

Background

Many jurisdictions across North America have recognized the ineffectiveness of typical efficiency incentives in the area of rental units and, consequently, have implemented targeted energy efficiency programs. There are strengths and weaknesses to each of these initiatives outlined in the chart below. In each of these initiatives the challenge is one of how to align the costs associated with energy efficiency retrofits and the return on investment and other benefits for all stakeholders.

Table 1: Energy Efficiency Mechanisms That Target Rental Units

Element	Description	Strengths	Weaknesses	Examples
Green Leases	Tenants and landlords create lease to reimburse landlords for the incremental costs of EE appliances.	Aligns costs and benefits of energy efficiency. Tenants repay lease with energy savings.	Complicated process limits interest in participation.	BOMA ^{vi} and Square Footage ^{vii} have developed green lease forms.
Renovation tax credits	Landlords receive transferable tax credits for EE renovations.	Reduces landlords' costs. Landlords (in the U.S.) can sell tax credits to third parties to monetize them.	Landlords still need to outlay cash for renovations; does not align costs and efficiency benefits.	The recent U.S. stimulus bill provided \$1500 in tax credits ^{viii} for "green" renovations.
Energy Efficiency Ordinances	All rental units are required to meet an energy efficiency standard.	Overcomes the split incentive problem.	Unpopular with landlords. Does not align renovations' costs and benefits. Enforcement costs.	Memphis ^{ix} and Boulder ^x have recently set up or are setting up energy efficiency ordinances.
Energy Efficiency Disclosure Ordinances	Landlords are required to disclose the average energy usage of their rental units.	Potential tenants can use energy usage in decision-making. Allows market to determine value of EE.	Regulations and low vacancy rate limit market's ability to promote EE renovations.	Austin's EE ordinance ^{xi} requires building owners to disclose units' energy usage upon sale.
Weatherization grants and incentives	Landlords receive grants and subsidies to install weatherization and energy efficient appliances.	Reduces landlord costs for renovations.	Landlords still need to pay for renovations. Does not align costs and benefits.	Seattle HomeWise program ^{xii} offers weatherization for rental units.

As shown in the table above, of the existing initiatives only green leases attempt to align the costs and benefits of EE renovations for rental residential units. However, in the jurisdictions in which they have been implemented, green leases [have proven too complicated to incentivize widespread energy efficiency renovations](#)^{xiii}. Other initiatives do not align EE renovations' costs and benefits—those who pay for the renovations do not accrue a proportional amount of their benefits. In some cases, such as Energy Efficiency Ordinances, landlords must bear the costs but only receive the uncertain, indirect benefits of renovations—an economically unattractive option. In other cases, governments or utility companies take on most of the costs, through issuing tax credits or grants. Although these incentives reap public benefits of reduced energy usage and carbon emissions, it is generally not at a rate competitive with purchasing carbon offsets. For instance, a renovation program that reduces a home's emissions by 2.22 tons (a 30% emission reduction from the average Canadian home average of 7.4 tons^{xiv}) could cost the government several thousand dollars depending on the nature of the subsidy. Offsetting that same 2.22 tons of emissions would only cost \$44 at current carbon pricing^{xv}.

To avoid the inefficiencies of the above energy efficiency programs, costs and benefits will need to be more closely aligned. Most importantly, the private benefit of reduced energy costs needs to be captured by those investing in the renovations.

Recommendations

One potentially effective means to align the costs and benefits is to revise BC's *Residential Tenancy Act* to make landlords responsible for tenants' utility bills. To compensate landlords for this added cost, they would claim a rent increase equal to the tenant's average monthly energy usage (multiplied by the current cost of energy). If landlords are responsible for energy bills, cost-effective EE renovations suddenly would become economically attractive, particularly if energy prices continue to rise, as improvements would lower landlords' own operational costs without lessening rental income.

In this scenario, there is the risk that removing tenants' direct responsibility for energy costs could increase their energy usage. However, this could be avoided by offering tenants incentives like rent rebates for achieving energy reduction targets. This type of initiative could create a win-win-win solution - where landlords and tenants benefit from lower energy and rental costs respectively, and the broader public benefits from lower energy usage (and, depending on the energy source, reduced carbon emissions). The information required to price rent effectively, based partially on energy usage, could be facilitated by and coordinated with BC Hydro's initiative to implement smart meters into all homes by 2012.

Despite the positive benefit of aligning the costs and benefits for rental housing, it is not a stand-alone solution to promote energy efficiency. Already, low EE renovation rates ([7% in Vancouver](#)^{xvi}) in owner-occupied residential units (which do not face the landlord/tenant split incentive) illustrate that other challenges like high up-front costs and risk aversion. Short home ownership periods also restrict energy efficiency renovations. This point is reflected in BN10-17 which recommended that governments and utility companies play a role in incentivizing and/or subsidizing audit and financing initiatives. One strong example of this is the recently passed [Pay As You Save](#) legislation which will provide energy efficiency financing for home renovations in British Columbia. This could catalyze energy efficiency retrofits in rental units and to partially offset the costs to landlords for the public benefits they generate from their renovations.

Conclusion

Incenting energy efficiency in residential rental units is a difficult challenge that is at the same time critically needed. The sheer size of this sector in BC (165,000 units^{xvii}) ensures that a successful strategy would significantly reduce energy usage and would enhance existing initiatives such as BC Hydro's PowerSmart Program. It could also have the benefit of lowering, through low energy usage and rebate incentives, rental expenses for tenants (who often only have 50% the income levels of homeowners^{xviii}).

Further research is necessary to determine the optimal economic, political and legal elements that will help lower the barriers to such an initiative. For example, establishing how best to determine rental increases associated with energy usage upon which the rental increase will be based, for instance, require further investigation. Achieving significant reductions in energy usage in a manner that is cost-effective for tenants, landlords, utilities, and governments should be the objective of a well-researched program.

Send relevant comments and queries to picsbp@uvic.ca.

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