



DESMOG CANADA
CLEARING THE PR POLLUTION

The Unsexy Climate Solution That's a Total No-Brainer

By [Jimmy Thomson](#) • Wednesday, March 23, 2016 - 16:16



There's a new kind of building going up in an old East Vancouver neighbourhood. An eight-storey, 85-unit rental housing development is nothing new for a city that is constantly being torn down and built higher, but an apartment here comes with a perk.

“You could technically heat that apartment with a hairdryer,” says Ed Kolic, the developer behind The Heights, the new Passive House-certified development. When completed, it will be the biggest of its kind in Canada, second only to a new building in New York.

Low-energy houses like this could make a serious dent in Canada's carbon emissions, cutting up to 2.7 per cent from the total, while simultaneously becoming an engine for economic growth.

“In all of the climate change literature globally, the quickest and fastest way to take action on climate change is to look at the energy use in buildings,” says Charley Beresford, director of the Columbia Institute.

The federal budget, released Tuesday, provides nearly \$750 million for investments related to energy efficiency.

“It’s quite a refresher from a Harper budget,” says Karen Tam Wu, director of the Pembina Institute’s buildings and urban solutions program. “What we want to see is, how will the government take the dollars that have been allocated to energy efficiency in buildings and actually incentivize uptake of green buildings at an accelerated rate?”

The largest single pot of money to come out of the budget for these improvements is a \$573 million commitment to improve the energy and water efficiency of social housing over the next two years.

“We’re going to have to scale this to major energy upgrades across the country, so by focusing on a social housing initiative, it’s a great way to pilot this idea at a smaller scale,” Tam Wu told DeSmog Canada.

The government has earmarked \$128.8 million for Natural Resources Canada to ramp up its energy efficiency standards for products, buildings and vehicles.

A further \$40 million will go towards improving the climate resiliency of buildings — meaning buildings like Kolic’s, with their insulation-focused design, may come into fashion in places that are facing intensified winter storms, such as Eastern Canada.

Provincial Governments Lag Behind in Regulations

But provincial governments, with a few exceptions, haven’t yet provided the mechanism that would allow municipalities to push their residents toward more efficient homes.

The Columbia Institute released [a report](#) last week calling for provinces to make it easier for municipalities to provide up-front cash for homeowners to retrofit their homes.

If home energy retrofits sound like an un-sexy way to fight climate change, wait until you hear the name of what could be the best shot at achieving that: Local Improvement Charge (LIC) enabling. Despite the name, though, it’s a powerful tool.

Basically what LIC means is that municipalities can loan homeowners the money to improve the insulation in their homes, then gradually make the money back through increased property taxes. It’s an existing system that local governments use to make other improvements, like fixing a sidewalk, then recouping the cost from the people who benefit.

In Halifax, where an LIC program has been piloted, 388 homeowners saved an average of about \$14,000 over the lifespan of their new systems (about 25 years). A similar program in Nelson, B.C., (albeit with repayments going to the electrical bill rather than property taxes) resulted in 35 per cent less energy use for the retrofitted homes; nearly 40 per cent of them took advantage of loans to do it. And Manitoba Hydro claims to be on track to retrofit a whopping 86,992 homes by the end of the year under its 15 year-old Power Smart Residential Loan program.

Retrofit Investments Deliver Bang For Buck on Jobs

In return, the municipalities get to help meet their climate targets — but there's evidence for another benefit to supporting green building projects. Depending on which study you read, for every million dollars invested in building retrofits, somewhere from [between 13 and 17 jobs](#) are created. That's compared to about five jobs created for every million dollars invested in fossil fuel projects.

A report commissioned by Natural Resources Canada, *Energy Efficiency: Engine of Economic Growth in Canada*, found that savings on heating costs meant that for every dollar invested in energy efficiency, another \$3 to \$5 would be added to the economy. Overall, the report says, this could mean hundreds of thousands of new jobs in multiple sectors as the savings make their way through the supply chain.

There's another way all levels of government can take advantage of efficiency gains, Tam Wu says.

"What all levels of government should be doing is leading by example," she says. "And that's what we want the provincial government to do, by setting a bold target for what level of emissions reductions we can achieve through our buildings."

Municipalities Lead the Way on Efficiency

Regulations have been moving faster at the municipal level. Vancouver, for example, requires that to rezone a lot for a new development, the proponent has to build the new building to demanding LEED Gold or Passive House standards. Even remote Bella Bella, where most of the electricity comes from diesel generators, a new modular building Britco built in the Lower Mainland and shipped to the Central Coast community takes the energy equivalent of six light bulbs to heat.

"[Britco] had never done that before," says Tam Wu. "That kind of energy savings just totally makes sense in remote communities."

The private sector overall seems ready to respond to increased demand, and that demand has shown to be easily created by incentives from all levels of government.

In Brussels, which developer Kolic cites as inspiration for his Vancouver development, new EU regulations forced the city to get serious about efficiency. With new funding and the spin-off businesses that created, Brussels quickly went from hopelessly inefficient and outdated to having 5,000 new buildings meet the Passive House standard.

"It went from having the worst standard of energy efficient buildings to becoming a world success story within a period of ten years," Tam Wu says.

Link: <http://www.desmog.ca/2016/03/23/unsexy-climate-solution-total-no-brainer>