

August 2009

## **How to Build Green for a Healthy Future**

by Michael Buzzelli

Canadians know that our built environment – homes, offices, factories, roads and infrastructure – holds the key to an environmentally sustainable and healthy future. The energy and environmental demands of the built environment will undergo substantial changes in the years ahead. Several pressures exist: looming carbon cap and trade legislation, shrinking energy resources and, perhaps most importantly, evolving attitudes toward our consumption and production patterns.

One-third of Canada’s energy use goes to running our homes, offices and other buildings. The federal government’s Office of Energy Efficiency reports that a corresponding one-third of our current greenhouse gas emissions come from the built environment. This is a large proportion that can be addressed in both the short and long term by modifying how we build and how we use our homes and offices.

Green building and development (GBD) faces a classic policy paradox: we collectively agree that improvements are needed in the built environment but we are caught in a whirlwind of information and debate about how to move forward.

We are motivated by widespread adoption of green ideals but stymied by issues related to implementation. There is confusion over whether a technological or behavioural approach should be prioritized. “Greenwashing” (the overuse of “eco” and “green” labeling and branding, particularly where there are no environmental benefits) also adds a layer of doubt over green building benefits. And, depending on the region, over 10 green building standards – such as LEED or R-2000 -- currently exist in Canada. How do builders choose among them in bringing new homes to the market? Which standard(s) should serve as the model in retrofitting houses and buildings? How do consumers choose?

A range of stakeholders are implicated in the questions asked here. Municipalities are closest to the construction and design process given their front-line role in issuing permits and approvals. Builders and developers, from which the leaders and risk-takers will emerge, provide the built environments that we occupy and use. And of course consumers, whether the household or the office building tenants, will also be concerned with the built environments that they occupy.

Given the range of technical complexity (innovation), the economic costs and potential risks involved, and the range of stakeholders, how can we move the GBD agenda forward? How do we encourage GBD risk-takers and early leaders while at the same time protecting the public interest?

Canadian Policy Research Networks recently released a report, [\*Green Building and Development as a Public Good\*](#), which documents the range of options for implementing GBD, and concludes that collaborative governance structures in particular are critical for advancing GBD effectively and efficiently.

The report also suggests that there is no single approach or fixed set of “solutions” to the provision of green built environments. We need locally sensitive means of building green rather than uniform regulation or a mandated system that may negate or disregard region-specific issues.

GBD involves multiple stakeholders because it is new, complex and involves risk. Risk-spreading may be necessary for new and bold developments that achieve the greatest rewards. We are at the beginning of the GBD “product life cycle,” and risk-takers and leaders should be encouraged while, at the same time, safeguarding the public interest.

Industry champions will emerge but will find little incentive to take the lead or remain out front if GBD plans are consistently forestalled and if they can revert back to standard building methods, materials and products.

Since consumer demand is key, home owners also need to understand the clear benefits, including return on their investments. For example, according to the US Department of Housing and Urban Development, property values rise on average by \$20 for every \$1 of utility savings.

Specifically, governance structures involving co-operative and collaborative approaches will need to be developed so that our communities can adapt to delivering alternative kinds of built environments. A policy development framework is needed, providing a balance between higher-level guidance, knowledge sharing and codevelopment, and the municipal scale of administration and action.

A GBD strategy must be regionally relevant and harness many of the initiatives already under way, and at the leading edge, in the region. The region needs to devise a method for promoting, but not punishing, risk-taking. Leadership is key and it should also be fostered within and across organizations.

Local areas must work to develop their governance structures to encourage and put into (best) practice GBD strategies and methods. Cities, builders, consumer groups and others will have to work through the as yet unseen plans, challenges and opportunities in delivering environmentally and energy-sustainable built environments.

Municipalities – particularly those new to GBD – will find the first steps the most prohibitive. While local areas will have their own particular circumstances and opportunities, relevant lessons from other jurisdictions may be lost if we do not think of mechanisms for ongoing, consistent and informed exchange. The wider community of municipalities and higher levels of government can and should nurture the process. Higher-order knowledge development and transfer is therefore equally important.

GBD should be viewed holistically; should capitalize on existing regulation while also developing incentives and should build on existing strengths and best practices. We also need the right measurements developed in order to monitor progress and assess outcomes.

The path to greener built environments is barely marked and obstacles remain. A significant part of the story will pivot on the local and collaborative efforts that will at first develop slowly and then be taken for granted as the new “normal.”

One might say that the future inevitably will be green, though how quickly we get there will depend on how we plan for it now.

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*This commentary was originally published in the [Hill Times](#) and reprinted in [rabble.ca](#).*