



Policy Flaws

At Eco-Sense we have repeatedly observed policies that act as barriers to sustainable building and development. One of our goals is to help influence policy to more effectively address the needs of the public to live more sustainably and to reduce individual and community carbon footprints. Natural resource use and consumer behavior are impacted directly by policy. Unfortunately most policy is derived out of industry input, thus skewing the intended effects.

Home Protection Office – new home warranty

In BC all new construction has to be registered with the Home Protection Office. The underlying reason is to track builders/developers and provide consumer protection in ensuring those liable for faulty workmanship are held accountable.

In an effort to perform this function, which is simply a tracking function, all builders must be licensed with the HPO. Part of the licensing criteria is that as a builder you have to be covered by one of the four insurers in BC that provide new home warranty insurance.

The insurance companies are very conservative on what construction systems they will cover. Cob is not one of them. So in the face of everyone trying to promote viable, affordable, sustainable options, innovators in the Straw Bale and Cob building industry are left out. This means that you can not become a builder for this method of construction. All that can be done is to assist a home owner to build their home.

The home owner will still have to register and pay their \$425 for the paperwork that records that their owner built home is not covered with new home warranty insurance.

This places builders that engage in these activities at risk if they take on too much responsibility in assisting a home owner. It inevitably slows down the acceptance of sustainable construction.

Grants (The economics of incentives)

Grants for low flush toilets, for energy efficient clothes dryers, efficient washing machines and dishwashers, and changing incandescent light bulbs to compact fluorescents all support the replacement of existing appliances and fixtures.

Despite what these grants are perpetuating and what the public thinks is being addressed - using less, what is actually occurring is completely the opposite. These grants suggest that we should replace (functioning) appliances with more efficient appliances. The policy takes no account of what energy goes into making the appliances, shipping them, storing them, and marketing them. The incentives actually promote consumerism/consumption, and they avoid behavioural change.

The policies should be focused on incentives to support using what we have more efficiently. It is behavioral change we need to address. Without behavioral change we will continuously keep updating our (functioning) stuff. This is another example of planned obsolescence.



All these grants are paid for by the industry that profits from them and this explains why there is no grant for using a clothes line and no grant for washing dishes by hand. There are also no grants for new inexpensive technologies, super efficient appliances with no CSA sticker, or items that last too long like LED lighting. There are only grants if there is money to be made.

Behavior and habits are hard to change, and seem to be most notably influenced when forced either through social pressure or economics. Policies and grants should reflect making it easier to live without more stuff.

Canadian Mortgage and Housing Corporation (CMHC) programs

Equilibrium is a national housing demonstration initiative, led by CMHC, which brings the private and public sectors together to develop homes, and eventually communities, which address occupant health and comfort, energy efficiency and renewable energy production, resource conservation, reduced environmental impact and affordability while opening the home to the public for educational purposes. This program has our Eco-Sense home written all over it.

To qualify you have to be a builder/developer, meaning that in BC you have to be licensed with the HPO, meaning you have had to qualify for insurance with a new home warranty insurer.

Due to the above point, we can not become a licensed builder/developer. This removes our eligibility to apply to this program.

Truly sustainable homes which utilize local sustainable materials (earthen buildings) do not qualify as a builder/developer. The program is flawed at its core as true innovation demonstrating sustainability is exempt.

If the intent is to educate the policy makers and industry on viable, healthy, and sustainable alternatives, then not including true innovators demonstrates a bias against innovation and affordability. This is another example of a program driven by industry with unachievable goals due to policy voids.

Affordable housing and sustainability

Affordable housing means that the majority of the population can afford the home either by renting or owning. A more sustainable home means that it has a smaller ecological footprint to build the home and to live in the home.

Both of these ideals point to smaller homes, simpler more efficient homes, and less stuff in the home. Fact: There is not a lot of profit to be made here and if we allow industry to be the sole driving force these objectives will not be met.



Building for life

A home requires a lot of energy to build and is a large carbon footprint. Policy should require that all new homes last longer than the average human life. Industry will not lead in this department as there is no financial incentive to make buildings last. This is up to communities who care about their kids and their grandchildren.

CSA (Canadian Standards Association)

CSA certification impacts acceptance of new technologies into Canada. Certification is designed to ensure that a product is safe, and in so doing provides inspectors in Canada (building, plumbing, electrical) a stamp of assurance that a product is safe.

The CSA is primarily made up of voluntary membership from industry. Simple and affordable solutions that exist alongside more highly manufactured products will not be able to compete. CSA certification is very costly.

Two problems arise from this. First off, any local, affordable and simple solution will not undergo the CSA certification process as the costs are too great.

Secondly, with the introduction of new technology, the CSA policies developed by the prior industry advocates are hard to change as new technology present competition for the older technology and may result in older technologies losing market share.

There are examples present within two areas that we focus on. Solar hot water and grey water.

With the Solar hot water, there are evacuated tubes (new technology) that are available for government grants, yet there is a lack of CSA policy therefore no certification. This is present despite the fact that most have been certified by other agencies (in other countries) with equal if not more rigorous safety standards.

With grey water, a simple homemade worm biofilter is not worth having tested, as all functions of safety and performance are basic. No money to be made means no CSA certification.

To address these issues and allow technologies that are new, inexpensive or simple be recognized by inspectors, the certification process must be changed.

Our first suggestion is to review the procedures of the CSA, most notably done by the NRC as they govern the policy that the CSA has to abide by.

Second in light of the first not occurring, is to allow equivalencies from respected agencies outside the country be accepted, and for these equivalences be allowed until CSA certification for new technologies catches up, at which time a CSA policy takes precedence over the equivalency.

And third, simple technologies for simple systems can be dealt with within the code, allowing for greater opportunity for variances or “alternative solutions”. In saying this, the building codes must be revamped to include more safety objectives and functions around sustainable alternatives (like grey water handling and composting toilets).



Community and family living

Zoning changes to support increases to density for extended families and community creation.

Density bonuses need to be given to community group and families; NOT to land developers which are looking to maximize profits; profits which then leave the community.

Creating community and supporting extended family groups are essential parts of creating affordable sustainable housing.

Summary

Although there are many challenges to building truly affordable and sustainable housing the obstacles are easy to identify. Policy changes at all levels of government are required. Barriers will not be removed if they are left solely to industry as individuals will continue to profit and societal goals will continue to fail.

If it's not affordable... It's NOT sustainable.

Ann and Gord Baird