

Conversation on conservation

When you think of the things in our culture that are TABOO what comes to mind. Cannibalism? Incest? How about conservation? Or to put it bluntly; the transition away from a capitalist growth economy.

This is a taboo subject in the mainstream media and we simply need to go there. It is encouraging for us that there are small pockets of people starting to talk about transitioning to a sustainable carbon free lifestyle and what this look likes. It looks wonderful; and we would argue that this new life is what most of us dream about down deep in our core values.

The common misconception suggests that this fossil fuel free future means going backwards to a day without toilet paper, without joy, and endless grueling labour. This profound misconception is not only wrong but could actually create the future we fear.

Here at eco-sense on tours we discuss our sustainable energy systems, but not before having the **conversation on conservation**. Conservation first is the most powerful simple action that we have. Simply choosing to use less energy in our daily lives will have profound effects on our own individual lives and rippling effects throughout our community and local economies.

Most of us have an irrational fear attached to giving up stuff. We also have a real blurry line differentiating needs from wants.

LIFE PRIORITIES

Lets first examine our **priorities in life**: For us the top five broad categories are pretty easy. Your list may be a bit different.

1. Food and water (nutritious, and healthy)
2. Shelter (comfortable, safe, affordable)
3. Love (Family/Friends/Community)
4. Health
5. Purpose

Next, we can examine our **Needs** and **Wants**. Think about the last three things that you spent money on...what were they? Do they support one of your life priorities? If not they may fall into the category of WANT. Wants are not bad, they are just different than NEEDS. The first step is to become aware of the difference between Needs and Wants.

The interesting irony here that we discovered for ourselves is that fulfilling some of our WANTS may actually be negatively impacting some of our NEEDS. As an example, let explore the TV. This purchase may lead to more debt, more hours at a job you don't like, more time sitting on your butt becoming a couch potato, more cravings for marketed junk food, higher electricity bills, lower self esteem, less time with your family, less time sleeping, more hours being mindlessly entertained leading to distraction of

important social issues, more EMR exposure, a higher carbon footprint, more environmental destruction to ensure there is enough electricity to run your TV, more landfilled electronic garbage giving cancer to the kids who dig through it, a bigger house to accommodate a TV area, less time socializing, less time volunteering, increased programming as what to think, less quiet time to ponder the subtleties of life, less time growing food, less time preparing home cooked meals, etc. So in summary, **for us**, a TV would actually erode ALL of our top 5 priorities for life. This makes us stop and question our WANT for a TV...**why do we want something that potentially degrades ALL of our needs?**

This then leads us back to the bigger **conversation on conservation**. We have been consulting on the energy design system for a group of clustered houses. The eight homes are planning to have a solar PV system with a grid tie to BC Hydro. The goal of this group is to reduce their carbon footprint, demonstrate sustainability, and create community resiliency. They ideally would like to be net zero electricity, which means that their solar PV system produces all of their annual electricity. They are however concerned with the higher cost of sustainable electricity generated from solar PV. For their entire system they would be paying approximately 4 times the current rate for BC Hydro electricity. This is more than most families are comfortable with. But if we step back and look at the bigger picture beyond this initial upfront cost, we realize that if electricity cost this community four times more, they may choose to consciously rearrange some of their NEEDS and WANTS to balance some of their higher goals. The beauty is that we individually are in control to the rearranging of NEEDS and WANTS,,, its all mindset, and we own our own minds.

Here is an excerpt of our advise to this clustered housing group.

Something else to consider here.... using solar PV in a net zero application would cost approx. 4 times more than just being connected to BC Hydro (per kWhr). (\$24 per month as apposed to \$90-100 in a home with dramatic conservation and only using 10kWhrs/day). This seems expensive... but when the full costs are factored in, things change. For example the higher cost for electricity will encourage energy conservation, (it is likely that a home not paying the true cost of energy will not conserve as much). The energy conscious "consumer" may choose not to buy items like a microwave, toaster, hair dryer, cordless phone, wireless, ipods, blackberries, desk top computers, big screen TV's, cell phones, etc, and in not doing so will likely save more \$\$\$ per month not buying all these consumer goods.

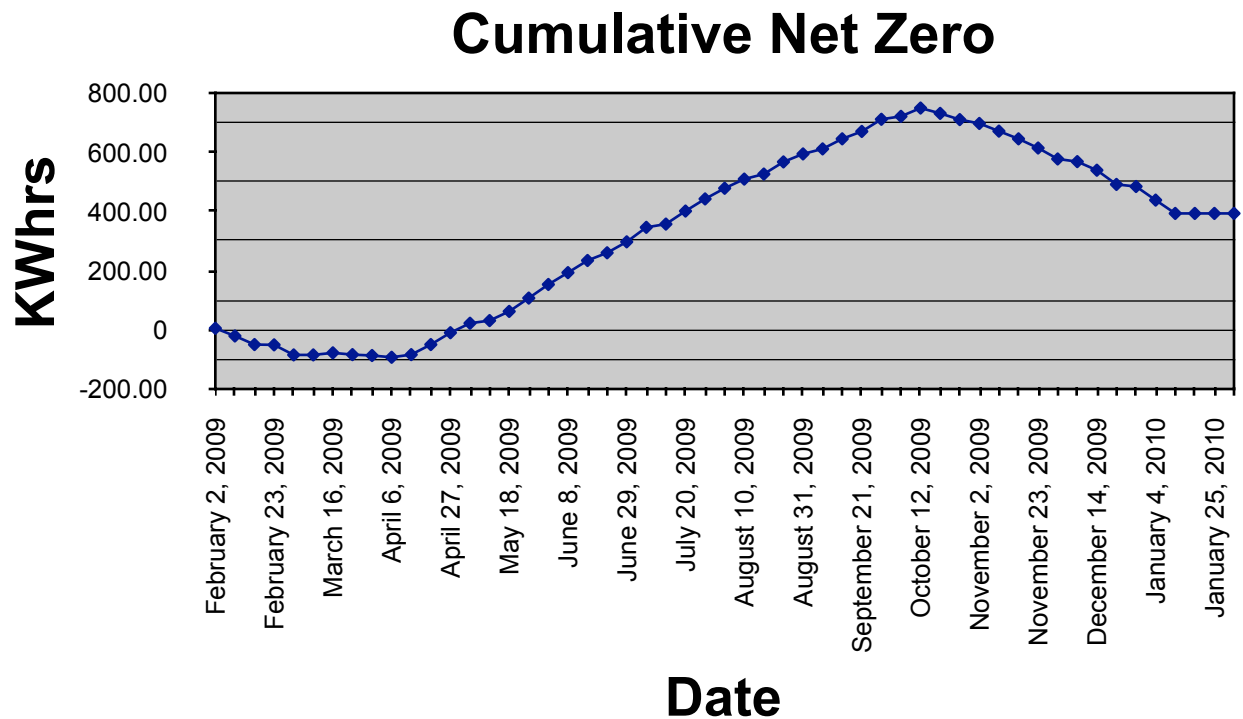
To add to this, all this stuff comes with a large ecological footprint including the raw material extraction, shipping, processing, shipping, manufacturing, shipping, packaging, shipping, distributing, shipping, retailing, shipping, disposal, shipping, landfill, shipping, toxic chemical leaching, cancer, health care costs, etc. Living carbon neutral is supported by consuming less stuff, which is motivated/encouraged by paying the full costs of sustainable energies. So in summary, in our opinion, going net zero with solar PV would result in community

members actually saving money... less exposure to EMR... and more time hanging out with friends (as opposed to hanging out with stuff).

Four years ago we set out to live a more reasonable life, where we touted the benefits through our slogan "Less life stuff... more lifestyle".

Geeky Energy Stuff

Here at Eco-Sense for two families (6 of us) we use 5.75 kWhrs/day. This number does not include our cooking or our heat source, but it does include our hydronic heating pumps and controls. Have a look at this graph. It shows that we have 3 more weeks to go for keeping track of our energy for one year (Feb 1, 2009 to Jan 31, 2010) and we still have produced about 400 kWhrs more than we have consumed... so even if it rains for the next three weeks we will still be net zero. We are still waiting for our cheque from BC Hydro... I don't think anyone has ever been a net provider before.



And for the energy geeks out there (and we know there are lots of you) here are some total energy figures for our family.

Total Energy inputs - Energy numbers:

Note these numbers include the activities for two living unit residences, a wood working shop, and irrigation for food gardens.

We produce approximately 75-80% of our food, inclusive of all our canning for the year, all our breads, jams, salsas, ketchup, pickles, even our crackers. Most households purchase foods processed elsewhere, canned elsewhere, shipped and are reliant on energy produced somewhere else that is not accounted for in a households daily/yearly

energy consumption numbers. So in observing these numbers, realize that it includes a huge amount of food processing on site... except for beer.

Energy can be analyzed in many formats; here we have based them on exterior square footage which is approximately 2450 ft².

Total energy used per ft² = **9.719 kWhrs/ft²** (for average house in BC 15.48 kWhrs/ft²)

Breakdown:

wood gasification	16998 kWhrs =	6.938 kWhrs/ft ²
Solar thermal collection	2874 kWhrs =	1.173 kWhrs/ft ²
Electricity	2050 kWhrs =	0.836 kWhrs/ft ²
Cooking Propane (2 kitchens)	1890 kWhrs =	0.771 kWhrs/ft ² (to be altered to a biogas system in future, or offset via additional wind power or solar PV generation)

Green Building, Sustainable Building

This is such a big topic as these terminologies have been corrupted and twisted so that they mean very little and are quite confusing. What's the big difference? Here is a table we created to **sort it out in our minds**. Let us know what you think? We have really generalized here. Truly sustainable building is AFFORDABLE... We just need to start **BUILDING it, LIVING it, and LOVING it!**

	Regular	Green	Sustainable
Cost	\$\$\$	\$\$\$\$\$ (I'm worth it)	\$
Embodied Energy	EEEEEE	EEEE	E
Toxic materials	XXXXXX	XXX (not in my home but OK somewhere else)	Non Toxic
Local materials	Whatever from wherever	Imported high end finishing, some local	mostly local
Construction garbage	High	High! Buy offsets.	Low
Carbon footprint for operations	High	Medium	Low
net zero energy	Net zero What?	maybe some sustainable energy	Yes

	Regular	Green	Sustainable
Water conservation	WHY?	Minimal	Net Zero
Lifespan	70-80 years	70-80 years	300+
Complexity	some simple, some complex	Very complex, can't fix very much	some simple, some complex
Resource Recovery	What?	Yuk!	100%
Occupants Habits	What? That's my business.	What? I'll buy offsets!	low carbon lifestyle
System integration	What's that?	minimal	Fully integrated

What about the economy?

So what happens to the economy when we stop buying all that stuff. In our case we still buy some stuff, more used items, more local items, more low carbon items, more sustainable items built to last, local food, local entertainment, local services, super energy efficient electronics that can be fully recycled, etc. Basically, our life carries on just fine. We spend more money on some items, and simply don't have or want other items. Our economies become relocalized with people actually transitioning to fill these new market niches. Instead of young kids working in fast food joints, maybe they work on a local farm.

The Eco-Sense Economy

We still continue to scrape by and are happy as our needs are met. Gord is working on a green basement suite renovation, a little project at a neighbors, and we are still doing a few private tours. Gord had a great tour with some CRD folks who are interested in the little cob bathroom with composting toilet. We continue to do consulting for a few families that are building sustainable earthen homes and are thoroughly enjoying this work and the people. Most of our time is still spent with volunteer work and our own chores. There are some really interesting big projects in the works though, but way too early to see how they will develop.

Anyone thinking about a composting toilet like ours in their Home? Garage? Garden? Check out this link to learn more about how we can help.

<http://ecosenseliving.files.wordpress.com/2010/01/humanure-brochure.pdf>

Its "Closing Time... and we are stumbling onto "The Road to Hell"

This was our New Years entertainment... or should we more aptly describe it as a wake for 2009. Blessed with a Little Leonard Cohen and then Chris Rea.

The year both ends and starts with assessing a segment of our culture that we challenge you to try to avoid.

Boo embodies the pure unbridled spirit of a middleman as he eyes up the soft cushion Ann sits upon as she is getting a massage and thinks to his dog-self... "If it is good enough for Ann... It's better for me!" He then resorts to usury (oops), using "middleman spirit" and some brute force to remove her from the cozy spot to obtain his own massage sitting in Ann's warm spot. Boo seems to feel it best to get some of the good stuff, at the expense of someone, usually Ann. As we begin to rant about middlemen keep in mind one difference between Boo and those of non-productive use... Boo barks at birds, trees raccoons, chases rabbits and most importantly irritates our next door neighbor meaning he is doing something productive and thus is deserving of food.

Is there middlemen in the eco-system? I am sure you could argue mycelium (fungi) act as a connection between plants and subsurface biospheres exchanging nutrients and information. But we would suggest they are productive, like Boo. Unlike fungus we see middlemen as an object of disconnection, created for convenience that extracts a toll at all the links of exchange. Every unproductive link in the chain exerts a cost that is evident in the markets/economy right on through the rest of society. This month, the month of consumer hangover we question the cost of middlemen.

The iconoclast middleman... the banker, makes entries into an ledger account, the first as a liability of the monies loaned, the next two as an asset being your ass, and the interest charged on your ass. The toll of providing you with this psychological construct/idea of monetary value, is that monetary value has to be extracted from somewhere else, at some cost to pay back the interest. To begin, money is an artificial human construct, created by the banks on paper... unfortunately when we pay back "interest" we don't have the same ability. We have to extract value from some form of capital, somehow.

With a growth economy based on another human construct called GDP, extraction of value comes from either the natural resources or the social resources (usually the have-nots)... or most likely both. These resources are real... they are natural and thus called "Natural Capital".

Whether we are seeking to pay our interest to the banker or grow our GDP we extract more from the resources, but of course we don't pay money for them. In addition we use these natural resources and dump the waste so quickly there is no time for it to regenerate back into anything healthy. This would mean that there should be both environmental and social waste as evidence. For those of you who wear diamonds... every hear of blood diamonds? Ouch... and my birthstone is a diamond!

Two more examples for those who see this as a stretch. First observe slavery in the USA, wherein people were extracted from their ecosystem, forced into labour to produce “items” allowing the “masters” to pay off their “debt” and acquire new found wealth. The social cost... is seen in African countries... is seen in the USA. Oh yeah this is Canada, we didn't support the slave trade... but we did invade and pillage the First People's of the land; and then we can look to the abuse of the chinese labourers for the railroads and then initiate laws to outlaw their cultural acts. Oh and then there is that nasty period of colonialisation like the British in India. And what of the child labour in China and India to produce our shoes, our kids stuffed toys... Oops we were supposed to keep it to two examples... that's six. Oh and I forgot to mention Shell oil and Union Carbide's cyanide gas, Tar Sands, Exxon Valdez.

The more that an unproductive hand exhort tolls from the system, the more we have to generate a way to cover the loss. This is where relocalizing our economies, simplifying our needs and wants, and dealing direct with the productive farmers and skilled trades helps transition in a direction away from the rape and pillage paradigm of Capitalism.

Links for the month

A video link we enjoyed was the keynote speech by David Korten delivered to a less than excited audience at the Trinity Institute. We're not religious, but this guy really had some great points and is an excellent presenter giving clarity to many of the issues...definitely worth the time. Skip the intro and questions to save time.

<http://www.youtube.com/watch?v=f3QJJcgAwi4>

Primatologist [Robert Sapolsky](#) speaks to on the Uniqueness of Humans, a TED Talks recorded in September 2009. A must see for anyone interested in what drives us primates to tackle impossible challenges.

http://www.ted.com/talks/robert_sapolsky_the_uniqueness_of_humans.html

If you're feeling really bad about the state of the world...you're not alone and it's ok to feel. Check out this short article in YES magazine by Joanna Macy.

<http://www.yesmagazine.org/issues/climate-solutions/the-greatest-danger>

All the best,

Ann and Gord

Build it, live it, love it

