SUSTAINABILITY AT HOME

A toolkit

Decision-making help for your everyday choices

Acknowledgements

This toolkit was created by:

the Natural Step

light house

David Suzuki Foundation
SOLUTIONS ARE IN OUR NATURE

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Congratulations on Re-thinking Your Home!

Your home is one of over 1.5 million households in the province of British Columbia[1]. Every action - small or large - in one of these homes, if repeated, could be powerful. Many people like you are creating healthy, comfortable and affordable spaces to call home. Together with your neighbours and others across the province, you can lead the change toward a more sustainable future – starting right in your very own home.

The word sustainability has become part of everyday language. It's been used to describe everything from energy generation projects to recycling your tin cans. But what does it mean? In 1987, the United Nations World Commission on Environment and Development defined sustainability as "meeting the needs of the present generations without compromising the ability of future generations to meet their needs." This toolkit is designed to help you put this big picture concept into practice by giving you a **framework for making decisions in your home that improve health, increase efficiency, save money, and make your community a better place to live.**

[1]Natural Resources Canada – BC Stats: Household Estimates and Projections - http://www.bcstats.gov.bc.ca/DATA/POP/pop/dynamic/households.asp

To begin, imagine all of the natural resources your house requires: water, energy, food, building materials, and methods to transport yourself and your things. By changing the way you make household decisions you can contribute to increased environmental sustainability. In turn, you will see direct benefits to your family, your community, the planet and your pocketbook. **Your choices make a difference.**

For example, by choosing to paint a room with non-toxic and eco-certified materials (such as Volatile Organic Compound-free paints), you're doing much more than changing the room's colour. You are reducing your exposure to potentially toxic chemicals while supporting an emerging industry that values social, environmental as well as economic benefits.

Many of the ideas in this toolkit come from examples of British Columbians who have already made changes in their homes, and who have made a positive impact in their own communities. **Their success shows how you can begin to make these changes.**

Sustainability at Home will provide you with the tools you need to understand and talk about our sustainability challenge, offer some ways to think through everyday household decisions and provide tips to be implemented room-by-room in your home. In the following pages you will also find dozens of resources to look deeper into the issues that matter to you most. The helpful checklist at the end of the toolkit will help you start making changes and to track your successes.

For those ready for an extra challenge, you will also learn about the benefits of green home renovation projects and how to transform simple tips into a way of enriching the community around you.

The benefits of sustainability

- **Save money** over both the short and long-term by making your home more energy-efficient
- **Increase the resale value of your home**
- **Enjoy greater comfort** in your home as you create a **healthier**, more efficient space
- **Contribute to the preservation of BC's biodiversity** by minimizing your impact
- **Help slow or reduce the effects of climate change**
- **Help BC strengthen its leadership position by moving Canada toward a sustainable future,** one that supports social well-being, ecological health, and economic vitality

The Big Picture: Sustainability

Sustainability is about inventing the future we want to live in. The choices individuals make at home and as part of a larger community affect news headlines every day: stories about climate change, water scarcity, housing shortages, contaminated food and air pollution. These stories are elements of a bigger picture that is unfolding.

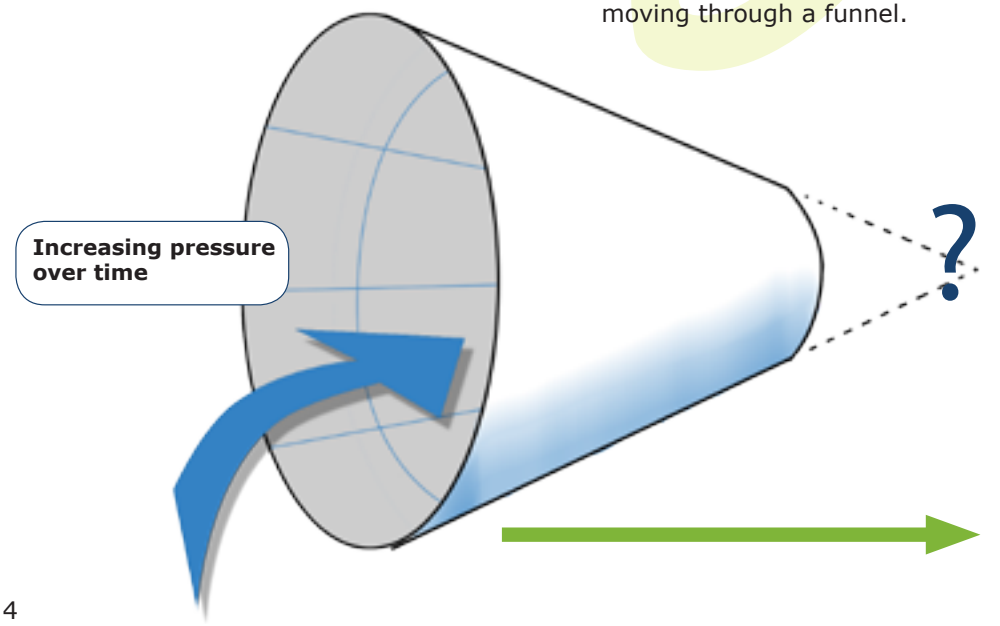
For example, in British Columbia, **we are increasing our**:

- Land consumption
- Water consumption
- Population growth
- Demand for housing

And **we are also reducing our**:

- Fish stocks and forests
- Available freshwater
- Air quality
- Affordable housing

Visualize these challenges as society moving through a funnel.



The walls represent increasing pressures on us. These pressures include examples like growing demand for resources and ecosystem services (such as water filtration, flood control, climate regulation and soil stabilization) and the declining capacity of the earth to provide those resources and services. It also includes the social tensions resulting from inequality and human rights abuses.

These pressures continue to grow over time. Right now, much of BC's economic growth reduces the amount of pure water, farmland, clean air, forests and natural diversity for present and future generations.

Practicing sustainable solutions means joining together as a community to maintain economic prosperity without degrading the environment, our health, education or cultural integrity.

Becoming sustainable challenges us to live our lives making decisions today that do not compromise the opportunity for future generations to enjoy a rich quality of life.

Bold move

British Columbia's bold move

In July 2008, BC introduced a carbon tax to help fight climate change by reducing the province's greenhouse gas (GHG) emissions. It was the first of its kind in North America. This bold move was possible because British Columbians reasoned that it is unfair to make future generations pay for the things we are using now.

To learn more about the BC carbon tax, visit www.fin.gov.bc.ca/scp/tp/climate/carbon_tax.htm.

4 Root Causes of Un-sustainability

A group of international scientists have determined the four root causes by which we negatively impact the earth's ability to sustain human life and the ability of future generations to meet their needs. The four root causes are:

1 We dig stuff out of the earth's crust (such as heavy metals and fossil fuels) and allow it to build up in natural systems faster than nature can cope.

2 We create and use synthetic or persistant compounds and chemicals (such as pesticides for plants and fire retardants in carpets) that build up in natural systems faster than nature can cope.

3 We continuously damage natural systems and the free services they provide (such as climate regulation and water filtration) by physical means at a rate faster than nature can regenerate (for example, over-harvesting forests and paving wetlands).

4 We create and live in societies in which many people cannot meet their basic needs (for example, food, meaningful employment or affordable housing).

Hundreds of leading corporations and organizations around the world are using these four root causes of unsustainability to help them make strategic decisions that reduce financial risk and support innovation. Individuals can also incorporate these principles into how they live at home.

The remainder of this toolkit will give you tips to help you do just that.

Calculating your footprint

The Ecological footprint is a tool to calculate how much of the planet's resources you use. Calculate your own footprint and check out the Global Footprint Network: www.footprintnetwork.org.

To learn more about the four root causes of un-sustainability and the science behind them, check out The Natural Step Sustainability Primer www.naturalstep.ca/toolkits.

Everyday Decisions

Achieving sustainability means living within the earth's ability to support us indefinitely.

If sustainability is about meeting our collective needs and living within natural limits, how do you know if your personal decisions are helping to achieve that? What does 'success' look like for you in your home?

For most people, the ideal home is probably:

- Healthy to live in
- Comfortable and attractive
- Within easy access of work and play
- Affordable to operate and maintain
- Connected to a thriving neighbourhood and community
- Efficient in how it uses energy, water, materials and space

To achieve our ideal home, it helps to know how our decisions relate to the root causes of unsustainability, and what opportunities there are to make more sustainable choices. The tools and tips that follow address the six categories to the right and will help you make sustainability at home a reality.

Utilities

Utilities are basic services such as water, electricity and gas, or anything that fuels, heats and cools your home.

Relationship to four root causes: Production of utilities often contributes to **overloading the atmosphere with gases** from burning materials we dig out of the earth, as in the case of natural gas used for heating homes and generating electricity. This can lead to a **progressive physical impact on natural systems**. These are two of the root causes of unsustainability.

Opportunity: Use less and save money. There are simple conservation methods and devices that can help you get started. Investing in the energy efficiency of your home has high returns.

Ask yourself

Can I reduce my use of this utility?
When you conserve the amount of water, gas or electricity you use, you reduce the impacts associated with its production and delivery. For example, burning less fossil fuels will introduce fewer poisonous compounds into the environment and particulates into our air. Reducing your use of water can be as simple as choosing to sweep your driveway rather than powerwash it.

Can I get the same utility service another way?
Some of the services associated with utilities — particularly electricity — can be supplied from renewable resources such as solar, geothermal, or wind.

Can I be more efficient in the way I use my utilities?
There are simple, inexpensive devices such as faucet aerators and low-flow showerheads to help you reduce water usage. In many homes a $2000 investment in wall insulation can result in over 18% energy savings and allow you to access $1500 or more in government energy efficiency rebates. The resulting $500 investment can be paid off in energy savings and reduced energy bills in under three years, all while increasing the comfort of your home.

Transportation

Transport includes all of the ways you move yourself and your goods from place to place. It could be driving, walking, cycling, taking transit, train, boat or plane. In thinking about transportation, consider the location of your home relative to public transit, green space, places of recreation, work and shopping – all of which will impact your quality of life.

Relationship to the four root causes: Many modes of transportation depend on the burning of fossil fuels, meaning mobility is related to **materials we dig from the earth's crust**. Our impact is magnified by the **continual build-up of compounds that natural systems struggle to cope with** — like sulphur dioxide and nitrous oxides. Directly and indirectly they can harm natural systems and affect human health.

Opportunity: Cycle instead of driving, carpool, or use public transit. Walking and biking will reduce your monthly fuel bills and it's good exercise.

Ask yourself

Can I stay close to home?
Can you find the goods you need nearby? Visit your local businesses to see what's available. What you need is probably closer than you think. Plan your journeys with an eye on efficiency and make one trip instead of several.

Do I have to drive?
If you must go, can you get there without driving? Give yourself enough time to walk, bike, and check out your local transit schedule on-line. It will save you the worry about where to park and save you money too. If you have to drive, carpool. More people per litre of fossil fuel burned means greater efficiency for you and fewer emissions. You can also enjoy the carpool lane!

Do I really need to go?
Sounds obvious, but it's a question worth asking. We're used to hopping in our cars and going somewhere at the drop of a hat. Next time, before you slide the keys in the ignition, consider if you need to go at all.

Shopping

Shopping refers to anything we buy, from food to furniture to toothpaste.

Relationship to the four root causes: What we buy is made from **materials from the earth's crust, and synthetic compounds that we create**. Both of these can build up in natural systems **faster than nature can cope**. In addition to the resources needed to make goods, think about the **wages and working conditions** of workers.

Opportunity: Choose what you buy carefully. Reading labels and claims will help you vote with your dollar, reduce your environmental footprint, and support worker's rights at home and abroad.

Ask yourself

Do I really need it?
An obvious but rarely asked question. Does it need to be new? Can you rent, share or borrow? The most sustainable choice is buying only what you need!

How or where was it produced?
Look for a label, a tag or ask the seller. Support your local economy when possible.

Is it durable?
Knowing about the materials and their lifespan is key. Ask yourself how long the product will be useful to you. This is often where cost and durability come head to head.

What am I supporting by making this purchase?
Every time we use our wallets, we are voting with our dollar. Does this company share your values? Have they made a commitment to being more sustainable? If you don't know, do some research to find out.

What can I do when it's no longer needed?
Some companies practice cradle to cradle, taking the whole lifecycle of the product into consideration and alleviating the stress on our landfills. If they don't, ask yourself: how can the product be safely reused, recycled or disposed of? Does the company or manufacturer supply replacement parts, a recycling or take-back program? For example, there are mattress and fridge buy back programs.

Waste

Waste is everything you throw away. It can come from things you buy and don't use (such as packaging), but it can also be energy inefficiencies (for example, heat loss through cracks in your home).

Relationship to the four root causes: Landfills are being filled up and more space is needed to handle our waste. This contributes to a root cause of unsustainability because **natural systems are degraded when we create new landfills**. Once waste arrives at the landfill, we also **risk leaching harmful chemicals and compounds into the land, air and water.**

Opportunity: There is no such thing as waste in natural systems. It's a term that's only relevant in human systems. Mimicking nature as much as possible is a first step to reducing the amount of waste we create. Reducing our overall consumption is obvious, but we can also reuse, reclaim or repurpose items before we even get to recycling!

Check out the Composting Council of Canada for more information and directions on how to get started www.compost.org/backyard.html.

Ask yourself

Can I reuse or repair this?
Save time and money by simply reusing something you already own. Can you repair what you already have and stop something from entering the waste stream?

Is my trash someone else's treasure?
Bartering, swapping and traditional garage sales are an easy place to start. You can also drop off items at your local thrift store, donate to local charities or access a host of on-line trade, swap and sell communities.

Can I recycle this?
From cell phones to batteries to paint, many goods can be recycled nowadays. If you can't repair, reuse or sell something, it's likely recyclable – and will create value as your garbage becomes something new. Find a depot or drop-off centre near you. Also, look to see if the product or packaging is recyclable or made of recycled materials before you buy.

Do I have to throw this out?
Composting is a perfect example of how to keep organics out of the traditional waste stream. Whether you have a big yard or a small balcony, everyone can compost. Diverting organics from the landfill reduces greenhouse gas emissions associated with decomposing waste. And if you've ever bought a bag of soil, you'll wish you started this money saving venture a lot sooner!

Health

Health refers to the mental, physical and emotional wellbeing of yourself, your family, neighbours and even perfect strangers. Increasingly, people understand that the health of our environment and our personal health is linked.

Relationship to the four root causes: When the balance of the earth's systems is compromised — by digging up, dumping into or degrading the environment — **your own well-being is affected**. It might directly impact your health. For example, a decline in air quality can lead to a rise in asthma. Your **health and well-being can also be impacted when you feel unsafe, undervalued or disconnected** from your community.

Opportunity: Maximize the health benefits of the space you call home. For example, use non-toxic products to create a healthy home environment. By maximizing natural lighting you'll make your home more enjoyable and save on energy costs. Give back to your community to help create a vibrant, flourishing neighbourhood that everyone can enjoy.

Ask yourself

How does this affect my health?
A huge number of products on the market today contain chemicals that are either harmful to human health or have never been tested for human safety. Become a savvy label reader and choose safer, non-toxic alternatives. You may even consider simple, safe and cost effective ways to make your own home cleaning solutions.

How healthy and comfortable is my home?
Maintaining a healthy home means looking at how each part affects the whole. For example, ventilate your home to maximize air flow and control humidity, and reduce exposure to toxins or allergens such as mould. (See page 32 for more on seeing your house as a system.)

See page 38 for information on Sustainability Labels for the Home. You'll find a list of labels that will help you identify safer, healthier and greener products.

Participation

Participation is your involvement in the community. It could be with your neighbours, co-workers, community groups, or even a local politician.

Relationship to four root causes: Getting involved in your community and sharing knowledge with others is important. **Helping others understand and overcome the root causes of unsustainability** by showing them ways to make better decisions, or together tackling barriers, will create a ripple effect throughout your community and beyond.

Opportunity: There are infinite ways of getting involved in your community. Maybe you prefer to start small with a few friends around the kitchen table. Or go big by organizing a community-wide event. Whatever you do, remember to have fun and share your enthusiasm with others.

Ask yourself

Who needs to know about this?
It's likely not just yourself or your family that has encountered a specific hurdle. Start with a group you feel most comfortable talking to, maybe it's your soccer club, local businesses or a few neighbours. Bring your message of hope, inspiration and urgency to people on your list, starting with the most approachable and working to the most influential.

How can I share?
Connecting with members of your community can be fulfilling and fun! How you choose to get involved depends entirely on you. Think about your skills and your passion – public speaking, writing, working with your hands, making music, etc. – and how you can incorporate that activity into a way of giving back to the community.

With the background above and the tips that follow, you can begin to change the decisions you make at home.

Whole House

Can I reduce my use of this utility?

Save money, save energy. Programmable thermostats cost about $50 and only take 20 minutes to install. You stand to save 10% or more on home heating costs. While your home is occupied set the thermostat between 19- 21°C. You can also experiment reducing the temperature depending on the season and your family's comfort level.

How can I share?

Seal the deal. Throw a weather stripping party with your friends. Start by reading *Keeping the HEAT* by Natural Resources Canada. If you combined all the "heat leaks" in an average Canadian home, you would have a hole the size of a basketball! Proper weather stripping and caulking of doors and windows can reduce heating bills by a whopping 25%. This investment will pay off faster than almost any other home improvement, even if your house is already well insulated.

What am I supporting by making this purchase?

Invest green, invest ethically. You're saving your money, so make sure the institution you're banking on is making investments that protect nature. The Rainforest Action Network's Climate Friendly Banking campaign (www.climatefriendlybanking.org) calculates the carbon footprint of some of Canada's major financial institutions. Don't like how they're using your money? This resource makes it easy to make the switch. Ask your bank or financial advisors about ethical investment options.

Do I have to drive?

Hail a hybrid. Need a taxi? Don't call any old company. Use a fleet that can send a hybrid vehicle to pick you up. You can also rent hybrids or join a car co-op that has them.

Did you know?

According to a 2008 Statistics Canada report, Canadian households are responsible for 13% of the nation's 24.5% increase in greenhouse gas emissions from 1990 to 2004. "Gas-guzzling SUV's get a lot of blame for creating pollution and causing climate change, and rightly so. But the average home in North America and other parts of the industrialized world actually causes more than twice the greenhouse gas emissions of the average vehicle."

–David Suzuki's Green Guide, p.21

How healthy and comfortable is my home?

Take a deep breath. British Columbians typically spend an average of 90% of their time indoors. Indoor air quality has been shown to cause and/or exacerbate a wide array of health effects like allergies, asthma, lung cancer, respiratory infections, ear, nose, and throat irritation and inflammation. We need clean air inside and out. Indoor plants will add colour and vitality, as well as naturally clean the air in your home. For tips on which plants help clear the air, check this list of the top ten www.hgtv.ca/green/outdoors_10plants.aspx.

How does this product affect my health?

Steer clear of these furnishing features

- Flame retardants: the most common being polybrominated diphenyl ethers or PBDEs. They are synthetic chemicals that persist in the environment, having appeared in food, household dust, and human breast milk. PBDEs are known as neurotoxins and have been linked to birth defects and reproductive damage.
- Stain and water repellency: contain perfluorinated chemicals, a likely carcinogen, a hormone disrupter known to cause birth defects and developmental problems.
- Dust mite free: will contain a miticide, a chemical to kill dust mites and is considered to be a neurotoxin.

Do I really need this product?

Fine furnishings. Refurbish existing furniture or buy second hand to keep waste out of the landfill. When buying new, look for locally produced or those made from recycled materials. An added bonus is when the materials are recyclable themselves.

Success story

After seeing another huge hydro bill for her almost all electric home, Gene Graham realized that it didn't matter how many light bulbs she replaced in her home, how many times she hung her clothes out to dry, or if she put six sweaters on to keep warm. Her bill told her that she and her husband lived in a house too large for two. So the "for sale" sign went up on Gene's lawn, and they purchased a cozy condo close to her husband's work with a ludicrously low hydro bill. For Gene, the David Suzuki Nature Challenge means more than driving the speed limit to get where she wants to go. She is taking ownership of how she lives.

Check Out!

One Change is a not-for-profit organization that empowers people to believe that **simple actions matter** and to make smart choices that protect the environment. Check out their list of actions at www.onechange.org.

Kitchen

Do I have to throw this out?

Black Gold. Your garbage is about 40% organic waste. Composting keeps all that waste out of the landfill. Don't use garburators, as sending food waste down the drain overloads sewage and septic systems with too much organic matter. Plus, it's a misuse of drinking water and energy.

Bag it. Reusable shopping bags cut down on your need to use petroleum-based plastic bags from the store. Keep spares in the car and one at the office. Go bagless at home, lining only one trash bin with a compostable or biodegradable bag. Be sure to wash your cloth bags to prevent the spread of germs.

Buy bulk. It's cheaper and uses less packaging. You can even keep reusing the same plastic bag and twist tie with the code and product name already engraved!

The tap is where it's at. In BC alone, a total of 478 million plastic bottled drinks were sold in 2007, almost doubling the sales of 2002. Avoiding bottled water will reduce health risks from chemicals that leach out of plastics, keep bottles out of the landfill and save you money. Instead, put a filter on your tap or in your fridge. See Toxic Free Canada's new campaign to get Canadians off single-use bottled water at www.toxicfreecanada.ca.

Success story

Quest Food Exchange diverts 5.77 million pounds of surplus food from landfills each year, a total of $7.12 million worth of food. Quest fills and empties their 575 square metre warehouse each day, providing food to hundreds of social service agencies in the region and feeding 40,000 people a month. Despite this, they are capturing less than 1% of food being wasted. That means there is lots of room for growth. For more, visit www.questoutreach.org.

Can I reduce my use of this utility?

Ice cold. Set your refrigerator and freezer to the most efficient temperatures: refrigerator from 2°C to 3°C (35°F to 37°F) and freezer to -15°C (5°F). Maintain stand-alone freezers at -18°C (0°F). You can use a thermometer to check temperatures and adjust settings as needed. Vacuum the cooling coils at the back of your older refrigerator regularly for improved performance.

Load it up. Run your dishwasher full. Let dishes air-dry or use the economy setting. Don't waste water prewashing or rinsing; most dishwashers are up for the challenge.

How can I share?

Promote the low-hanging fruit. Let your friends and neighbours know about the easiest things they can do to start on the path of sustainability at home, such as reducing waste and implementing energy-saving measures. For example, once you start composting, share those skills with someone you know. Help them get started and show how easy it really is.

How will this affect my health?

Sticky business. The toxic particles and gases emitted from conventional stovetop cookware made of Teflon and other non-stick coatings can stay in the body forever. Applied to everything from frying pans to pizza boxes to microwave popcorn bags, exposure to these dangerous toxins should be avoided altogether. Use alternative cookware made of stainless steel, cast-iron or non-PFOA, non-stick coating.

Can I be more efficient in the way I use my utilties?

Be an Energy Star. Look for the ENERGY STAR symbol (on products from dishwashers to furnaces). These products must meet or exceed technical specifications that ensure they are among the most energy efficient on the market. For more, visit www.oee.nrcan.gc.ca/energystar.

How or where was this item produced?

Fresh is best. Join a food cooperative in your neighbourhood that supplies organically grown produce and sustainably raised meat. Eating foods in season guarantees they're packed with flavour and high in vitamins and minerals. Buying locally produced food is good for BC's economy. It also reduces packaging, fossil fuel use for transport, and you'll know where it came from.

Check Out!

- Use Eat BC's Local Food Finder to find restaurants, farms, grocery stores, and accomodations in your community www.eatbc.com.
- Farmers' markets operate in every corner of our province. Find one near you at www.bcfarmersmarket.org.
- *The 100-Mile Diet: A Year of Local Eating* is a book by Alisa Smith and J.B. MacKinnon about their one-year experiment in local eating. Also, visit their website for more on their inspiring eating adventures and to find out more about what's seasonally available in BC www.100milediet.org/bc-seasonality-chart.

Bedroom

Bedroom

How or where was this item produced?

Go organic. Choose organic cotton bedding and clothing. Conventional cotton uses about 25% of the world's insecticides and more than 10% of the pesticides. Many farmers who work on cotton plantations in the developing world face health risks associated with over- and on-going exposure to agrochemicals.

How does this affect my health?

Sleep easy. Most mattresses are made using synthetic materials originating from petrochemical derivatives called flexible polyurethane foam. Some mattresses contain flame-retardants (PBDEs) to mute the foam's high flammability. Mattresses made in Canada generally won't contain flame-retardants, but ask. Avoid purchasing permanent press or wrinkle free sheets, clothing and curtains; they likely contain resins with formaldehyde, a cancer-causing Volatile Organic Compound (VOC).

How can I share?

Swap it up. If you're weary of your garments, call some friends and organize a clothes swap. Your old is their new. If you haven't already, try out consignment, vintage, and thrift store shopping. You'll get a keen eye for what looks good on you and find some amazing one-of-a-kind outfits.

Did you know?

"In Canada, there are over 23,000 chemicals registered for production and use, and the majority have not been tested for their impacts on human health, wildlife or the environment. Even chemicals that are known to cause cancer and other health problems are permitted for use by industry and consumer products. Each year, an increasing volume of toxic chemicals is released into the Canadian environment."

–Toxic Nation

Can I be more efficient in the way I use my utilities?

Sweet dreams. Before bed, turn down your thermostat to about 15°C. The same rule can apply when you leave the house. You will save 10 to 15% on your total energy bill.

Can I reuse or repair this?

Good as new. Remember those pants that popped a button? That shirt with the stain? Fix 'em up and you'll have a whole new wardrobe you probably forgot about.

Check Out!

- Reduce your cancer risk and protect your family from environmental toxins. Check out Toxic Free Canada's Cancer Smart Consumer 3.0: The Guide www.leas.ca/CancerSmart-Consumer-Guide.htm.
- Read *Slow Death by Rubber Duck* by Rick Smith and Bruce Lourie on toxins in the home.
- The Georgia Strait Alliances Toxic Smart Guide, which is printed in Punjabi and Chinese, will help you reduce the impacts of toxic chemicals on your family and the environment www.georgiastrait.org/?q=node/371.

Living and Dining Rooms

Can I reduce my use of this utility?

Phantom power is scary. Your electronics – TV, VCR, DVD, etc. – use power even when you turn them off. Unplug to save money and energy. Use a power bar to make it easier; you'll only need to flip a single switch!

Can I reduce my use of this utility?

Screen savers do not save energy. In fact, they consume almost as much energy as a computer in use (most power consumption comes from the monitor). Turn off your computer monitor to save more money and energy.

Success story

Legacy North Shore is an independent non-profit society with the goal to help the North Shore become an exemplary and internationally recognized model for community sustainability. They started Cool North Shore 2009 to bring residents together to do something about global warming. At its heart is a goal to reduce the carbon footprint of participants and institutions in a short period of time. After a successful pilot in 2008, which involved 90 people in two evening Climate Change Cafes, they continued to reach a significant number of local citizens and institutions through various means. They will expand Cool North Shore by engaging the education, faith and business communities and offering a broader array of programming and support for individuals and institutions. For more on their work, check out www.legacynorthshore.ca/.

Did you know?

Electronic waste is the source of 70% of heavy metals (such as lead, arsenic, copper and nickel) found in our nation's landfills. If you feel you must upgrade your cell phone, ask your service provider how you can properly dispose of your old phone.

How does this affect my health?

Bust that dust. Most electronics contain flame retardants or PBDEs. Toxic dust is then sloughed off your TV or stereo, making its way into your indoor air. Dust regularly with a damp cloth. When making a new purchase, buy from companies who no longer use PBDEs. Greenpeace created an online guide to greener electronics at www.greenpeace.org/international/campaigns/toxics/electronics. Recycle old electronics or e-waste to keep hazardous compounds out of our water and landfills.

Play it safe. Toy recalls have you worried? Check out HealthyToys.org. They are the Consumer Guide to toxic chemicals in toys. They rank toys and list chemicals of concern. They have tested plastic and wood toys for lead, polyvinyl chloride and other harmful chemicals. Last year, 20% of the 1,500 toys they tested contained lead. Children's play jewellery ranked the highest. Choose toys made of natural materials like wood or organic cotton or wool.

How or where was this item produced?

Magic carpets. Before you buy a new area rug, find out where it was made. Ask your furniture vendor under what conditions your carpets were produced, and consider buying floor coverings from vendors that can prove safe and equitable working conditions for their workers.

Can I recycle this?

Close the loop. Electronics contain dangerous materials such as lead and mercury. Recycle your old televisions, computer monitors, and cell phones to keep hazardous compounds and chemicals out of the water and landfill. Some retailers offer battery recycling programs, such as Mountain Equipment Co-op, London Drugs, The Source, local computer shops, and more. If in doubt, ask wherever you buy batteries and electronics.

Check Out!

- You can recycle old televisions, computer monitors, fax machines, printers, laptops, desktop computers and more at Return-It Electronics. Visit www.encorp.ca for your local drop-off centre.
- You can also phone the BC Recyling Hotline at 604-RECYCLE (732-9253) in the Lower Mainalnd or 1-800-667-4321 (rest of BC) or email hotline@rcbc.bc.ca.

Bathroom

How or where was this item produced?

Keep more trees in the forest. Choose 'Post Consumer Waste' (PCW) recycled toilet and tissue paper. Trees logged in BC's forests are pulped and turned into disposable products such as toilet tissue, paper towels, junk mail and catalogues. Read labels and look for 100% PCW recycled paper which promotes energy conservation by reusing resources that have already been extracted. PCW content can vary from 10 to 100%. Choose the highest percentage. Also choose products that have been processed chlorine free. For more on PCW labels see www.davidsuzuki.org/files/NC/newsletter/nov08/makingsenseofpaperlabels.pdf.

How healthy and comfortable is my home?

Scrub it up. You can effectively clean your bathroom with vinegar and baking soda as a healthy alternative to chemical cleaners. They even tackle mould and mildew. For stubborn stains in tile and grout spray hydrogen peroxide, leave on for a few hours and wipe clean.

How does this affect my health?

Go natural. Avoid beauty products with parabens, phthalates (e.g. fragrance), triclosan, and synthetic dyes. Each day we smear and spray ourselves with personal care concoctions that contain potentially harmful chemicals, some of which have been linked to cancer, birth defects, learning disabilities and other major health problems. Lighten up your toxic load and find the best brands at Environmental Working Group's Safe Cosmetics website www.safecosmetics.org.

Did you know?

The average person uses 9-12 personal care products each day. This translates to about 126 different chemical compounds, which are barely regulated. As a mostly self-regulated industry, the companies, not Health Canada, perform the health and safety testing before products hit the shelves.

Can I be more efficient in the way I use my utilities?

Stem the flow. Install low-flow toilets and faucets. A faucet aerator alone can save up to 10 litres of water per minute. Water-efficient showerheads conserve energy without changing water pressure. During a 6-minute shower you could save as much as 108 litres of water. The amount of energy required to treat, deliver, then re-treat (as sewage) one cubic metre of your toilet water produces one kilogram of carbon dioxide. A low-flow toilet will reduce the amount of water you use and, indirectly, greenhouse gas emissions.

Can I reduce my use of this utility?

Wrap it up. Save money by insulating your hot water tank and set the thermostat lower. Every 5.5°C reduction saves up to 13% on your water heating costs.

Do I have to throw this out?

Safe disposal. Unused or expired prescription medication that gets flushed down the toilet will eventually find its way into streams and rivers (aka, our drinking water). Take old meds back to your local pharmacy for safe disposal. Not only are you eliminating the risk of an accidental poisoning in your home, but you're also playing a role in keeping our oceans and landfills free of pollution.

Check Out!

- To make easy, non-toxic and affordable green cleaners and cosmetics, visit www.queenofgreen.ca for how-to videos and recipes.
- Pick up a copy of *Ecoholic* by Adria Vasil for a complete guide to green products in Canada.
- Read *Not Just a Pretty Face: The ugly side of the beauty industry* by Stacy Malkan to learn of hazards in your personal care products.

Laundry Room

Can I be more efficient in the way I use my utilities?

Keep it cool. Up to 90% of the energy you use to wash clothes comes from heating the water. Wash all fabrics in cold water – they will keep their color longer and you'll notice the savings on your next utility bill.

How healthy and comfortable is my home?

Keep water out. More than half of all basements suffer from moisture issues, which can lead to mould growth and can cause respiratory problems. Find out if moisture is forming as a result of condensation or seepage. Most problems can be addressed by making sure water - like snow and rain - drains away from the home. CMHC provides useful information about humidity and moisture problems and outlines a number of different solutions to ensure healthy humidity levels in the home www.cmhc.ca/en/co/maho/yohoyohe/momo.

How does this affect my health?

Clean yet green. Conventional laundry detergents are full of ingredients like petro-chemicals, powdered enzymes, optical brighteners, synthetic dyes and fragrance. Look for biodegradable, fragrance-free, and non-toxic detergents that clearly list all ingredients, and use chlorine-free bleach. Look for products with the Ecologo label.

Did you know?

Fumes from slightly damp dry cleaning can contribute to indoor air pollution. Toxic chemicals like perchloroethylene, a carcinogen and respiratory irritant, evaporate from clothing into your home. If you must use conventional dry cleaning, remove the plastic bag and hang clothes outside to speed up the evaporation of solvents. Avoid buying clothes that need to be dry cleaned or look for eco-friendly dry cleaners.

How can I reduce my use of this utility?

Tow the line. An electric clothes-dryer can generate more than 6 pounds of greenhouse gases with every load; a clothesline generates zero. Hang-drying helps clothes last longer and smell better (sunshine is also a natural anti-bacterial and kills dust mites). It can save the average household about $100 per year in energy costs. Even in the winter you can get crisp sheets outside or set up a drying rack inside.

Check Out!

- Check out David Suzuki's Queen of Green planet-friendly suggestions for getting rid of stains at www.queenofgreen.ca.
- Calculate water use at www.h2ouse.net.
- Be aware of how air contaminants can affect your health. Check out CMHC's indoor air quality resources www.cmhc.ca/en/co/maho/yohoyohe/inaiqu/index.cfm.

Garage

Is my trash someone else's treasure?

Reduce, reuse, recycle. Use recycled building materials for your next renovations. Find stone, tiles, bricks, flooring, and more at salvage yards and junkyards. Add personality and value to your home, help create a market for recycled goods, and encourage others to recycle too. Habitat for Humanity's ReStores accept and resell quality new and used building materials www.habitat.ca/restoresc648.php.

Can I reduce my use of this utility?

Retire that second fridge. Refrigerators are one of the top energy-guzzling appliances in the home. Parting with that full size 15-year-old fridge will save you $120 a year and prevent about 240 kilograms of greenhouse gas emissions. BC Hydro will give you $30 to take away your extra beer fridge www.bchydro.com.

How does this affect my health?

Don't inhale. Wood dust from treated or composite wood products can contain hazardous chemicals that are harmful to your health. Make sure your garage or workshop is well ventilated, and wear a mask or use tools with integrated dust collection systems. Open windows or the garage door and vacuum sawdust as you go. Additionally, all paints, solvents and other chemicals stored in your garage need to be in tightly sealed containers.

Did you know?

- If Canadians stopped idling just three minutes a day, over a year we would collectively save 630 million litres of fuel. That's $945 million in fuel costs (at $1.50/L) and 6.3 billion kilograms of GHG emissions. www.idlefreebc.ca.
- Recycle all beverage containers. You'll stop new materials from being mined and processed. Recycling can contribute to reducing 126,000 tons of CO_2 equivalent in BC's atmosphere, the equivalent of taking 27,000 cars off BC's roads for a year. You also save enough energy to power 41,000 BC homes for a year.

Do I have to drive?

Drive green. Instead of arriving at work harried and stressed out from driving, consider carpooling. You'll save money, arrive more relaxed, and reduce your personal greenhouse gas emissions. Enjoy the view from the carpool lane too. Register with a carpool near you or start one with your co-workers and neighbours who share a similar commute www.carpool.ca/welcome.asp.

Can I recycle this?

Wheel them in. Find out how to recycle your car tires and learn about their second life www.tirestewardshipbc.ca.

What can I do when it's no longer needed?

Give it away now. Most of us have too much stuff. Stuff that needs dusting. Stuff that needs fixing. Stuff that clogs up our basements and garages. Make someone in your community happy by posting items you no longer need and bartering online at www.freecycle.org, www.swapsity.ca, or www.craigslist.org.

Success story

After taking the David Suzuki Nature Challenge, Veronika Polanska and her family of Burnaby, BC made some real changes in their household. They started by equipping their home with energy saving light bulbs and turning off the computer every night. They also have taken their car off the road. In its place, they purchased a second bicycle and a bike trailer, which converts to a stroller for Veronika's daughter. And they didn't stop there! By renting a community garden lot, they are now growing a portion of their own food.

Check Out!

- Find one of the 100 depots for Hazardous Waste Disposal near you to drop of your pesticides, flammables or participate in a paint exchange www.productcare.org/BCZoom.html.
- Idle Free BC helps develop idle reduction programs and provides information to the public about the economic, environmental and health costs of idling. Visit their website at www.idlefreebc.ca.

Backyard

Do I have to throw this out?

Compost it. Backyard compost makes a nutrient-rich fertilizer that helps soil retain its moisture. Not only will there be fewer truck loads going to the landfill but your plants will love it. You'll also save money by avoiding chemical fertilizers which can end up in our drinking water.

Can I reduce my use of this utility?

Plant green. Save green. Deciduous trees shade windows in the summer while letting sun shine through in the winter. Plant them on the west and east sides of your home. Coniferous trees can help ward off winter winds. Plant them to fight off prevailing winds, often on the north side.

How can I share?

Pay it forward. Share your backyard with someone who would like to turn it into a vegetable garden. Then you can divvy up the fruits of your shared labour. See www.cityfarmboy.com for great trips on designing and building urban vegetable gardens.

How or where was this item produced?

Hit the deck. Use composite material such as paving stones, a cement neoprene pad or fake wood decking from recycled plastic for your outdoor deck. They are very low maintenance. Avoid CCA (chromate copper arsenate) treated lumber. Although CCA-treated lumber is no longer sold at retail, suppliers still make it available to contractors, including those operating in BC.

Did you know?

Lawn and garden watering make up almost 40% of total household water use during the summer. Rainwater from your roof is ideal for irrigating your garden and lawn. Simply install a rain barrel or two for storage. For help on building rain barrels, visit www.cityfarmer.org/rainbarrel72.html.

Can I be more efficient in the way I use my utilities?

Every Drop. Save water by xeriscaping, a water conserving approach to landscaping. You will use up to 50% less water and enjoy native plants better adapted to your area. If you have a lawn, water in the evening and use a soaker hose instead of a sprinkler. About half of the water used on lawns is lost to evaporation or run-off due to over-watering. Building a rain garden is another technique. For more on sustainable approaches to water use in BC, visit www.waterbucket.ca.

How does this affect my health?

Grow green. Choose organic or non-toxic alternatives to pesticides. Pesticides used to kill insects and weeds in your yard work a little too well: they don't discriminate! They also expose us to a frightening list of health effects, like increased risks of cancer, Parkinson's disease, birth defects and organ damage. Nature-friendly insecticidal soaps, biological controls such as nematodes and alternative gardening techniques can replace toxic chemical sprays. Check your local gardening supply store for non-toxic alternatives, which are widely available.

Check Out!

- Find plants native to your region www.evergreen.ca/nativeplants.
- Naturescape BC is about restoring, preserving, and enhancing wildlife habitat right in your own backyard www.naturescapebc.ca.
- City Farmer is an excellent resource on everything outdoors, from worm composting to natural lawn care www.cityfarmer.org.
- If you rent, West Coast Environmental Law has a guide called *Pesticides in Your Home*, giving practical and legal options for tenants who would prefer to live in a pesticide-free residence www.wcel.org/resources/pesticide_guides/pesticides_home_english.pdf.
- See what the City of Vancouver is doing by innovating its food policy, which includes having backyard hens, hobby beekeeping and expanding community gardens http://vancouver.ca/commsvcs/socialplanning/initiatives/foodpolicy/projects/index.htm.

Make Your Next Renovation a Green One

It's not sustainable, or affordable, to retrofit and renovate your home over night just to take advantage of available green products. However, when something finally does need replacing these ideas will keep you on your course toward sustainability.

Focus on design and save money. The best way to ensure that your project is affordable is through good design. It is much less expensive and time-consuming to identify and remedy problems on paper than mid-stream in the construction stage. Just a few hours of a professional architect's time can save hundreds, or even thousands of dollars in construction change orders. Also, have your plans reviewed by a professional energy efficiency expert to identify the design elements and products that can make your home as energy efficient as possible. When considering the design of your renovation, ask yourself how your decisions help reduce your contribution of the four root causes of unsustainability. (For a reminder of the four root causes, see page 6.)

Downsize and upgrade. Smaller renovations disturb less land during site work, and use fewer materials and energy throughout the construction and operation of the home. This reduces the ecological footprint of your home, and reduces the damage to natural systems. The money you save can be spent on incorporating special features that will increase your home's overall efficiency, comfort, and beauty.

Integrate good ideas. Integrated building design means bringing together the entire renovation team at various stages of the project to share ideas and identify readily achievable green design goals. This can save both money and time on your project.

To help you prioritize, we've listed these renovation ideas in order of importance (or where the biggest impact will be felt):

1. **High performance building envelope.** By building with better windows, an air tight envelope, and better insulation, the size of the heating equipment needed for your home can be significantly reduced, not to mention your heating bills. The benefits of upgrading an older inefficient heating system cannot be underestimated. There are huge financial savings to be gained.

2. **When you're building, build passive.** Paying attention to solar orientation (where and when your home receives

Check Out!

- See the Canadian Mortgage and Housing Corporation's website to download resources on home renovations www.cmhc.ca/en/co/renoho.
- Visit Light House Sustainable Building Centre www.sustainablebuildingcentre.com.
- Post a question at www.grist.org.
- For books about downsizing and remodeling visit www.notsobighouse.com.

direct sun or is shaded) and natural airflow, known as passive solar design, can significantly reduce your need for more expensive mechanical heating systems. For example, strategically placing windows on south and and west-facing walls can substantially reduce heating costs while reducing your requirement for artificial lighting fixtures, all of which will reduce negative environmental impacts.

3. **Bold and beautiful.** Any renovation will require purchasing materials. Use locally harvested and/or produced products made from renewable resources to reduce the distance these products have to travel and damage to natural systems. By selecting building materials and finishes that are durable and which require little maintenance, you will save money in the long run. It will also reduce the amount of materials sent to landfills.

Some examples include:

- **Carpets** are comfortable for the home environment, however they can act as a trap for dust particles, bacteria, and mould spores. New carpets can contain various chemicals used in the manufacturing process that will off-gas and become airborne, affecting your indoor air quality. For a healthier carpet, look for natural fibres like wool rug areas or carpet that have been certified under the Carpet and Rug Institute Green Label. (See page 37 for more information on this and other sustainability labels.)

- **Cork** is antimicrobial, resistant to mould and mildew and is a naturally sustainable resource. Cork flooring is now offered in much coloration, and in both planks and tiles.

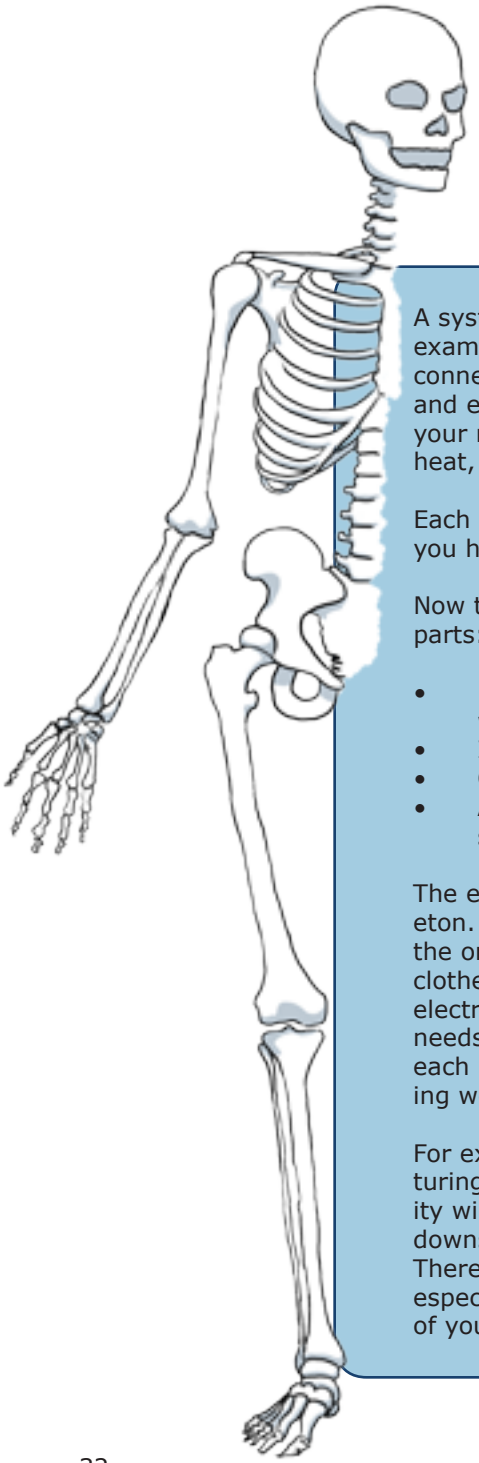
- **Bamboo** is a fast growing, renewable resource that is a very hard and dimensionally stable. Floors made from bamboo can be used in any area of the home where you might use a wood floor. You can also find bamboo cabinetry as an alternative to pressed woods.

- **Linoleum / Marmoleum** is a natural product made from linseed oil, wood flour, rosin, jute and limestone. Because Marmoleum is a natural organic product, its performance is enhanced by time, as exposure to air serves to harden and increase its durability.

- **Finishes** should include natural alternatives. Look for natural oil/wax based finish for wood floors and interior woodwork (such as the Broda Pro-Thane line and Osmo Hardwax Oil). Use low-toxicity water-based caulking for caulking joints in wood, metal, masonry, tile and ducts. This caulking should only be applied to clean, dry surfaces. Keep in mind some products are better than others. Ask a professional!

Remember, green renovations are good for you and they will get you more bang for your buck. Green buildings sell and rent for higher prices, attract tenants more quickly, and reduce tenant turnover.

These are but a few of the many ways that a green renovation can save you money, increase the net worth of your investment and make your home more sustainable.



Seeing your house as a system

A system is a set of parts forming a complex whole. For example, your body is a very sophisticated system of interconnected parts. Your heart pumps blood around your body, and exchanges oxygen for carbon dioxide with your lungs; your nerves run throughout your body enabling you to sense heat, cold, feel textures, pain and pleasure and so on.

Each part of your body plays an essential role in keeping you healthy.

Now think of your house as a system with interconnected parts:

- Building frame and its components (walls, furnace, windows)
- Inputs (energy, water, furniture)
- Outputs (garbage, heat, gases, sewage)
- Activity inside the house (heating, cooking, eating, sleeping)

The envelope of your home is like your body's skin and skeleton. The equipment and appliances in your home are like the organs in your body. Your home's finishes are like the clothes you wear, and the services (such as water, gas and electricity) are like the food you eat. Just as your body needs sufficient nutrition, exercise and sleep to stay healthy, each part of your home needs to be integrated and functioning well in order for the whole system to be healthy.

For example, a house that performs well as a system featuring a tight, well-insulated building envelope, high quality windows, and passive solar strategies will allow you to downsize or even eliminate your home's cooling equipment. Therefore, anytime you make changes to your home – and especially when doing renovations – it's important to think of your house as a system.

Going Deeper:

Changing the World Around You

"Each person, group or organization working towards a different world may seem powerless and insignificant but all of them can add up to a force that can become irresistible."
~David Suzuki~

Times have changed and we understand more than ever before the importance individuals play in societal change. The sustainability challenge we all face will not be met without unprecedented leadership. What the world needs now, more than ever, are role models, champions, and people who are willing to stand up and make a difference.

You do not have to be part of an organization to inspire change in your community. You and other members of your household can change the world beyond your home one step at a time.

Individual choices

Start with what you love. These days we are inundated with information about how to go green. But where do you start? Any successful journey of change will begin with thinking about what you love. Choose one issue to focus on. Starting with something you are passionate about (for example, cooking or cycling) is key. Then when you encounter challenges, you will be more likely to see it through and find creative solutions. Remember that every positive step you take helps you to reduce, and eventually eliminate, contributions to the four root causes of unsustainability.

Read, watch, listen. Once you have a focus, it is easier to grow the scope of what you know. Build on what you read and hear. This is where individuals' creativity can shine. For example, you could conduct an energy-use assessment of your house to see how greater efficiencies can be made, or research sustainable products and information on material recycling in a closed-loop approach. Think about how what you read, watch and hear relates to the four root causes of unsustainability, and all the ways you can incorporate change toward sustainability in your life.

Community Action

Be boldly normal. Current research (including those conducted by the Obama presidential campaign) shows the most trusted advisors in people's lives are not experts like scientists and politicians; they are people just like you. Share your experience with others, including the hurdles you had to overcome. People will identify with others who share the same obstacles that they do. Modelling new behaviour alone is one of the most powerful ways to influence the behaviours of others.

Normalizing behaviour. We are creating a 'new normal' for Canada – sustainable living is becoming a way of life. People often change only when they feel sufficient social pressure to do so. Recycling is a good example: blue boxes are an obvious social cue. Nobody wants to be labelled as the only person on the block without a blue box. Also, one person bringing reusable bags might be viewed as an eccentric. But when almost everyone is using them, you feel out of the loop without one. An important way to leverage the impact of your behaviour is to communicate how many people have already changed. Research shows people do not want to be behind the curve. Motivation comes from the perception that they are in the majority and not a laggard.

Organize an event. Now that you've become a normal expert modelling behaviour on a daily basis, it is time to take your insights to the street! Organize a workshop for your friends and neighbours. You may be surprised at how many people appreciate your efforts and will even lend a hand. Activity ideas could be hosting a 100 mile dinner or a green spa workshop. Discuss how your suggested changes help reduce and eliminate contributions to the four root causes and how they are bold moves towards sustainability. Mastered the friendly crowds? Now reach out to your other spheres of influence like your soccer team, church group, or colleagues.

Check Out!

For more ideas on how to help create change at home, in your workplace and in your community check out these links:

- The David Suzuki Foundation www.davidsuzuki.org/.
- Bob Willard's Sustainability Champion's Guidebook www.sustainabilityadvantage.com/products/suschamps.html.

Policy Change

Influence the influencers. At the end of the day, we need to make it easy for people to live sustainably and remove the barriers to personal change. The political sphere and the marketplace can either facilitate or impede sustainable behaviour. As citizens and savvy consumers, we need to communicate societal needs. First, be clear who you need to speak to: it could be a letter to your federal Member of Parliament about an issue that affects all Canadians, a call to your local councillor to rid your city of an ancient by-law prohibiting clotheslines, or a chat with the grocery store manager down the street to request that they source sustainable seafood.

When thinking about how to approach decision-makers, traditional avenues like petitions, marches and town halls still exist, but they are definitely not the only way to influence policy. Making a phone call, scheduling a face-to-face coffee meeting or inviting a decision-maker to an event are other means to initiate policy change. Keep the big picture in mind and think of how you can promote change on the ground.

There are endless possibilities for specific actions to help move toward sustainability. Overall, remember how important it is to:

Become a sustainability champion:

All it takes is passion and commitment. Find the issue you are most passionate about and get organized.

Advocate for change:

Write letters, make phone calls, run for political office, start a new business, take a risk. Unleash the sustainability champion within you!

Continuing the Journey

If you've done everything recommended in this guidebook and completed the checklist on page 41, congratulations! You have made some significant changes where you've probably already noticed financial savings and you may be feeling healthier too. **You may also be asking what more you can do.**

Lots! The path to sustainability is a long one. To help get you there, keep these things in mind as you make household decisions:

Remember that you are part of a system

Everything you do will impact something else. Try to imagine how your decision will affect other parts of the system, and take action understanding that your sphere of consequence will inevitably be larger than your action.

Think about your vision for an ideal home and lifestyle

Consider creating a vision for your household. Ask yourself, "If my household were totally sustainable, what would that look like?" Involve other people that live in your house to help you create this vision. Invite your neighbours to brainstorm together. Ideally, you won't contribute to the four root causes of unsustainability (see page 6) – but other than that, you can do whatever you want. Be creative!

Identify actions to move you toward your ideal

These actions can be anything that take you toward your ideal of a sustainable household, in any or all of the six areas of shopping, transport, utilities, waste, health and participation. To figure out which actions to take first, consider if they are:

- Moving you in the right direction
- Able to be developed further by acting as stepping stones for future actions
- A good return on investment.

The decisions you make in your home will affect the future of your community, the province and the country.

You are not alone

There are thousands of people realizing the excitement, financial savings, and improved health associated with moving their household toward sustainability. Consider volunteering in your community to help build relationships and create groups to support each other in the transition toward sustainability.

Celebrate your successes

Every change that you make with an eye to becoming more sustainable is reason to celebrate! Give yourself a pat on the back for your foresight in 'avoiding the walls of the funnel.' (See page 4 for a description of the funnel.)

Continue to ask yourself, "what next?"

When you ask this question it will help you be clear about how the results of your decisions can be stepping stones for other steps down the path to sustainability.

Sustainability is about nothing less than deciding the future of our world. We all share the privilege and responsibility of making choices in our lives. It is up to each of us to create a future we can be proud of passing on to future generations, while enjoying all the riches a sustainable lifestyle offers.

Sustainability Labels for the Home

There are some key things to consider when selecting building products and household items to ensure validity of sustainability claims made by manufacturers. Not forgetting budget and availability, you may want to ask yourself the following questions when choosing building materials and household products:

1. Is it manufactured in a socially and environmentally friendly manner?
2. Can it be re-used or recycled?
3. Is the product manufactured with clean energy?
4. Is the product energy-efficient?
5. Is it durable? And last but not least,
6. Is it locally manufactured?

Consumers can avoid greenwashing by looking for products with widely accepted environmental standards. The following two pages provide a list of the most common standard setting and certification organizations. For each label, consider which of the root causes the label alerts you to. Turn the page to learn more about each of the labels below.

Chlorine Free Products Association

The Chlorine Free Products Association certifies paper and tissue products meeting its multi-attribute standard. www.chlorinefreeproducts.org

EcoLogo™ Environmental Choice Program

EcoLogo is North America's oldest and most widely known environmental leadership standard. EcoLogo contains 120 environmental standards and almost 7,000 certified products. www.ecologo.org

ENERGY STAR

Products in more than 50 categories are eligible for the ENERGY STAR. They use less energy, save money, and help protect the environment. www.energystar.gov

Fairtrade

Fairtrade is an alternative approach to conventional trade and is based on a partnership between producers and consumers. Fairtrade offers producers a better deal and improved terms of trade. This allows them the opportunity to improve their lives and plan for their future. Fairtrade offers you a powerful way to reduce poverty through everyday shopping. www.fairtrade.net

Forest Stewardship Council (FSC) Certified Lumber

FSC certified wood products are obtained from sustainably harvested forests. FSC also certifies environmentally preferable papers based on a multi-attribute approach. www.fscus.org

Carpet and Rug Institute

The Green Label and Green Label Plus testing programs, overseen by independent labs, are designed for architects, builders, and facility managers who want assurances that carpet and adhesive products meet the most stringent criteria for low chemical emissions and help improve indoor air quality. Currently, carpet, cushion and adhesives as well as vacuum cleaners are tested in these programs. www.carpet-rug.org

Certified Organic Associations of BC (COABC)

COABC is an umbrella association for certification bodies which provides certification accreditation and leadership in the development of organic food production throughout British Columbia and Canada. The COABC was created in 1993 to administer the BC Certified Organic Program, to ensure program credibility, facilitate domestic and international trade, and to promote the overall growth of the organic food community in BC. www.certifiedorganic.bc.ca

Green Seal
Green Seal standards provide leadership criteria for the development of many types of products and services. This certification is required by Leaders in Energy and Environmental Design (LEED) for paints and sealants. www.greenseal.org

Green-e
Green-e certifies sources of renewable electricity and renewable energy credits generated from clean energy sources such as wind, solar or small-scale hydroelectric. It also certifies products that were manufactured in facilities using renewable energy. www.green-e.org

GreenGuard
Green Guard focuses exclusively on indoor air quality issues and certifies products and materials that are low emitting. Its website includes certified products in more than 15 categories, many of which focus on building materials, including adhesives, furniture and flooring. www.greenguard.org

Leaping Bunny
Leaping Bunny provides you with a cruelty-free compassionate shopping guide for personal care products. They identify Canadian companies that don't test on animals. www.leapingbunny.org

U.S. Department of Agriculture (USDA)
The USDA developed a fixed set of standards that must be met by anyone using the "organic" label in the United States. These standards were issued in December 2000, after 10 years of research and development. "Organic" means that antibiotics, genetic engineering, and most synthetic pesticides and fertilizers have not been used. It also means that animals have been fed a 100% organic feed with no growth hormones, and have had access to the outdoors (except for chickens). www.usda.gov

What's hype and what's right

Shifting consumer preference toward "green" products has some manufacturers making vague and misleading claims about their degree of eco-friendliness. A study tested more than 2,000 self-described environmentally friendly products in North America, finding only 25 were indisputably "sin free." The rest were actually greenwashing. About 98% of items labeled natural or environmentally friendly were in fact lying. Make sure you purchase the highest quality "green" goods by looking for certification like the Green Seal or Environmental Choice labeling.

Resources for BC Residents

General Home Information

1) **www.cmhc-schl.gc.ca/en/co/**
The Canadian Mortgage and Housing Corporation provides useful information for any aspect of homeownership including buying, renting, maintaining, and renovating. Information is also available for mortgage loan insurance and financial assistance.

2) **www.thegreenguide.com/green_home/**
Green Home Makeover videos presented by National Geographic and thegreenguide.com. Interesting and simple informative videos about the steps homeowners can make their home healthy and eco-friendly.

Sustainable and Green Building

3) **www.sustainablebuildingcentre.com**
Light House Sustainable Building Centre provides a resource centre that connects British Columbians with the inspiration, information, services and skills they need to implement sustainable building solutions.

4) **www.metrovancouver.org/buildsmart**
BUILDSMART is the Lower Mainland's resource for sustainable design and construction information. Developed by Metro Vancouver, this program supports green building efforts by offering tools and technical resources.

Energy Efficiency and Utility Use

5) **www.bchydro.com/powersmart**
BC Hydro provides many incentives and grants to improve energy efficiency through their PowerSmart program. The website provides useful tips for homeowners to reduce electricity cost throughout the home. Also check out the Power Smart Resources section, which has a comprehensive list of resources that can help you deliver on energy-efficient and environmentally-friendly solutions.

6) **http://oee.nrcan.gc.ca/residential/personal/**
The Natural Resources Canada website is very comprehensive and includes all the information required for the homeowner to take advantage of the EcoEnergy Program.

7) **www.citygreen.ca**
City Green's Certified Energy Advisors help you discover the benefits of energy efficiency for your home, provide individualized retrofit plans and energy assessments for private homes, churches, multi-unit residential buildings and more.

Landscape

8) **www.evergreen.ca**
Evergreen is a registered national charity founded in 1991. They are a national non-profit environmental organization with a mandate to bring nature to our cities through naturalization projects. Evergreen motivates people to create and sustain healthy, natural outdoor spaces and gives them the practical tools to be successful.

9) **www.compost.org/backyard.html**
Composting Council of Canada serves as the central resource and network for the composting industry in Canada and, through its members, contributes to the environmental sustainability of the communities in which they operate.

General Sustainability and The Four Root Causes

10) **www.davidsuzuki.org**
Since 1990, the David Suzuki Foundation has worked to find ways for society to live in balance with the natural world that sustains us. The Foundation uses science and education to promote solutions that conserve nature and help achieve sustainability within a generation.

11) **www.naturalstep.ca**
For two decades, The Natural Step has been at the forefront of international research and dialogue about sustainable development. TNS is dedicated to connecting leaders and change agents with the inspiration and education they need to make real change for the long-term benefit of our environment, economy and society.

Sustainability at Home: Checklist

Achieving sustainability at home and lessening your environmental footprint won't happen over night. This checklist is designed to help you track your progress against the tips provided earlier in the toolkit, but it is also a small way to celebrate your successes. Don't forget, although this particular list is static, you will continue to learn about ways of making your home more sustainable.

Utilities

Ask yourself:

Can I reduce my use of this utility?
Can I get the same utility service another way?
Can I be more efficient in the way I use my utilities?

- ❑ Get an energy audit
- ❑ Research possible grant and rebate programs provincially and locally
- ❑ Install programmable thermostat
- ❑ Draft-proof windows and doors by weather stripping
- ❑ Buy energy efficient electronics and appliances
- ❑ Set the refrigerator and freezer to efficient temperatures
- ❑ Use the smallest appliance
- ❑ Only run the dishwasher when full
- ❑ Insulate hot water tank
- ❑ Set thermostat to a lower temperature when asleep or away from home
- ❑ Install low flow toilet(s)
- ❑ Install aerators to taps
- ❑ Plug electronics into power bars
- ❑ Unplug phantom power sucks
- ❑ Wash clothes in cold water and use the shortest cycle
- ❑ Hang clothes to dry
- ❑ Retire your second fridge
- ❑ Replace windows with the double pane variety
- ❑ Install automatic lighting controls
- ❑ Set up a rain barrel
- ❑ Research xeriscaping or rain gardening
- ❑ Switch from a sprinkler to a soaker hose
- ❑ Plant deciduous trees to provide shade in summer but allow sun through in the winter
- ❑ Other: _____

Transport

Ask yourself:

Do I really need to go?
Can I go somewhere local?
Do I have to drive?

- ❑ Look into hybrid taxi and car rental options
- ❑ Check auto-shares or car co-ops in the neighbourhood
- ❑ Walk, bike, or take transit to work or run errands
- ❑ Drive a fuel-efficient vehicle
- ❑ Turn off engine to stop idling
- ❑ Take at least one less flight a year
- ❑ Other: _____

Shopping

Ask yourself:

Do I really need this product?
How or where was this item produced?
Is it durable?
What am I supporting by making this purchase?

- ❑ Find a grocer that sells local food
- ❑ Join a food co-op
- ❑ Purchase organic and sustainably raised meat, poultry and dairy
- ❑ Find a Farmer's Market and go
- ❑ Eat foods when they are in season
- ❑ Purchase fewer paper products and only 100% PCW toilet paper and tissue
- ❑ Buy organic cotton linens & clothing
- ❑ Purchase non-toxic flooring options
- ❑ Purchase products that are local, and made of recycled or rapidly renewable products
- ❑ Eat meat-free meals a couple of days a week
- ❑ Other: _____

Health

Ask yourself:

How does this affect my health?
How healthy and comfortable is my home?

- ❑ Clean with non-toxic and ecofriendly cleaners
- ❑ Safely dispose of toxic home cleaning products (www.productcare.org)
- ❑ Avoid personal care products with parabens, phthalates (fragrance), triclosan and dyes
- ❑ Buy clothes without stain resistance, wrinkle free treatments and without flame retardants
- ❑ Dust to minimize PBDE laden dust
- ❑ Purchase the safest, non-toxic toys
- ❑ Use non-toxic, biodegradable laundry soap
- ❑ Do not use chlorine bleach
- ❑ Solve dampness issues in the basement
- ❑ Do not dry clean clothes with traditional PERC chemicals
- ❑ Hand wash "dry clean only" clothes and hang to dry
- ❑ Ventilate garage or workshop area, wear mask, vacuum dust
- ❑ Garden pesticide-free
- ❑ Use low or no-VOC paints and finishes
- ❑ Grow plants indoors
- ❑ Other: _____

Participation

Ask yourself:

Who needs to know about this?
How can I share?

- ❑ Hold a weather stripping party
- ❑ Host a clothes swap
- ❑ Start a carpool at work
- ❑ Grow a vegetable or herb garden & donate extras to those in need
- ❑ Teach a neighbour to compost
- ❑ Start a community garden
- ❑ Collect e-waste from neighbors and take them to the drop-off depot
- ❑ Let political representatives know where you stand
- ❑ Contact the media
- ❑ Other: _____

Waste

Ask yourself:

Can I reuse or repair this?
Is my trash someone else's treasure?
Can I recycle this?
Do I have to throw this out?

- ❑ Start composting
- ❑ Use cloth bags
- ❑ Buy bulk to reduce packaging
- ❑ Drink tap water instead of buying bottled water
- ❑ Safely dispose of medications
- ❑ Sign up for Red Dot to get off junk mail
- ❑ Use safe, non-toxic homemade solutions to get stains out of clothing and fabrics
- ❑ Recycle everything possible, including electronics and any materials coming out of a home renovation (such as drywall or wood)
- ❑ Use recycled materials for the next renovation
- ❑ Recycle unused cell phone(s)
- ❑ Recycle tires
- ❑ Check out swap, barter or trade communities online
- ❑ Donate old cupboards, sinks, and toilets to Habitat for Humanity's Re-Store
- ❑ Dispose of hazardous pesticides, paints and flammables responsibly
- ❑ Other: _____

Great work! Just remember that even when the checklist is complete, there is always more to do. Keep learning about new ways to make sustainable choices at home and share those ideas with your family, friends, and neighbours.

About Us

The Natural Step Canada (TNS) is a non profit organization founded with the vision of creating a sustainable society. For two decades, The Natural Step has been at the forefront of international research and dialogue about sustainable development. We are dedicated to connecting leaders and change agents with the inspiration and education they need to make real change for the long-term benefit of our environment, economy and society.

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The David Suzuki Foundation works through science and education to protect the diversity of nature and our quality of life, now and for the future. With a goal of achieving sustainability within a generation, the Foundation collaborates with scientists, business and industry, academia, government and non-governmental organizations. We seek the best research to provide innovative solutions that will help build a clean, competitive economy that does not threaten the natural services that support all life. An independent charity, the Foundation does not accept government grants and is supported with the help of some 40,000 individual supporters across Canada and around the world.

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Light House Sustainable Building Centre is an enterprising non-profit society dedicated to advancing and catalyzing sustainability in British Columbia's built environment. Visit us at the only green building Sustainability Showcase and Resource Centre in Canada to learn more about the benefits of green building or to develop your green building skills. We work to provide education, training and outreach programs to develop green building knowledge and skills; support public sector programs and private sector initiatives; and facilitate and accelerate market transformation and economic development activities for the sustainable building cluster in BC.

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