Green Home Renovation

healthy homes for a healthy environment
WHAT IS A GREEN HOME RENOVATION?
It's an approach to home improvement with the goal of not only making your home look better, but making it work better—for both you and the environment. Want a healthier home? Lower utility bills? Reduced maintenance? A cleaner planet? With careful planning, you can create a home that combines beauty, efficiency, comfort, and convenience with health and conservation.

GREEN & SUSTAINABLE COMMUNITIES
A green renovation helps move our region toward sustainability. Sustainability is providing for our own needs, and for those of future generations. It means thinking about the impacts of our actions now, and years from now. A sustainable community has a thriving local economy, healthy environment, and good quality of life for all. Green renovation projects support this goal by buying from local businesses, and using goods and services that are non-polluting and respectful of our BC resources. A green renovation can strengthen community ties through an inclusive design process that involves neighbours and others potentially affected by design decisions. Design features such as front porches can encourage social interaction. Greener neighbourhoods have food, shopping, and public transport within walking distance, affordable housing, plus plenty of trees and parks. Consider sharing tools, hosting neighbourhood tree plantings, and beautifying roundabouts to enhance your community.

If you’re thinking about a home renovation project, you’re not alone. Canadians in the ten major cities of St. John’s, Halifax, Québec, Montreal, Toronto, Ottawa, Winnipeg, Calgary, Edmonton, and Vancouver spent close to $21.3 billion on renovations in 2008.

Given this level of investment, it makes sense to do things right, the first time. Your renovation goals may include making better use of living space, adding storage, replacing worn-out features, or simply personalizing your home.

A renovation involves a dizzying array of choices, but help is here! Vancouver’s Green Home Renovation series covers common topics:
- Overview
- Kitchen
- Bath & Laundry
- Roofing
- Landscape Materials
- Painting
- Lighting
- Salvage & Reuse
- Do It Yourself Energy Audit
- Hiring a Pro
- Green Home Buyers’ Guide
Why Consider a Green Renovation?

**Cost Savings**
Energy efficient or water saving designs and products reduce monthly utility bills. For instance, more energy-efficient than conventional washers, front-loading clothes washers can provide cost savings of up to $95 a year through reduced use of energy for water heating, and they can save 14,000 to 22,000 litres of water a year. The most efficient new appliances typically use 50 per cent less energy than the most wasteful models. Efficient and durable features can last longer and cost less to maintain in the long run.

**Health**
A green remodel can be good for you, physically and emotionally. Health-focused designs maximize fresh air and natural light, while reducing the risk of injury and asthma. According to Health Canada, air pollution is linked to varying degrees to a number of health concerns including: respiratory diseases (including asthma and chronic obstructive pulmonary disease), cardiovascular disease, allergies, neurological effects. Levels of air pollution inside a home can be 2-5 times higher than outdoor levels. Using low-toxic materials and good ventilation techniques can help to prevent problems like moulds, allergens and poor indoor air quality.

**Beauty & Comfort**
Inviting and attractive rooms reinforce the comforts of home. Natural materials, high quality lighting, and good design details make for pleasing spaces. Your home can be a refuge from the hectic—and sometimes polluted—world outside.

**Added Value**
Classic, well thought-out designs keep things from looking dated and hold their value over time. Homes designed to welcome various ages and abilities are marketable to a larger population (a key benefit for resale). And green elements also represent value; 65 per cent of British Columbians say they are willing to pay more for a home with green features.

**Ecological Benefit**
A home renovation is an opportunity to create a space that enhances the environment, instead of depleting it. With your green renovation project, you can be more resource efficient; minimize waste, and recycle what’s left over to reduce the amount of materials ending up in landfills. Recycling 70 per cent or more of construction waste is easily attainable in Vancouver. By choosing environmentally responsible products, you can protect forests, wildlife, and air and water quality. And, for every litre of water or kilowatt-hour of electricity you save, you reduce the amount of carbon dioxide (the greenhouse gas) entering the atmosphere.

What Does a Green Renovation Look Like?
TQ Construction’s renovation project (shown at right) features a variety of elements you might expect to see in a green renovation project:

1. Non-toxic sealants, paints, flooring, cabinetry and countertops
2. Hard surface flooring for easy cleaning and easy care
3. Abundant natural daylight
4. Locally extracted granite countertop
5. Light-coloured interior finishes allowing light to bounce around the home (i.e. white, low VOC paint)
6. Installed efficient lighting motion detectors
7. FSC salvaged fir hardwood floor
8. Natural linoleum for utility spaces
9. Water efficient fixtures

Photo right: Goodland Residence
Project Tips

Do Your Homework
Research helps you ask the right questions of retailers, your designer and/or contractor—and avoid costly mistakes if you are doing the work yourself. This Green Home Renovation series is a great place to start. Next, decide where you’ll need help. Find professionals with experience designing and constructing green. One resource is Light House Sustainable Building Centre’s green professional directory (www.sustainablebuildingcentre.com). Light House maintains a directory of green service providers, green building products and relevant industry and policy research. With any professional, review their portfolios and call references to make sure claims are backed up with evidence. Do this research and planning before you move forward with your renovation.

Expand Your Definition of Cost
Initial price gives only a peephole view of the true cost of a product or design over the lifetime of your home. A low purchase price may mean a good deal, or it may signify a lack of quality or durability. Or it may mean that some environmental, health, or social costs are not included in the price. A higher purchase price can mean a better deal in the long run: you can actually reduce the cost of living in your home by choosing resource-efficient fixtures (lowering monthly utility bills) and durable materials (requiring less frequent replacement).

Lenders are beginning to recognize the value of ongoing savings to the homeowner. The savings from a more efficient home can cover and even exceed the incremental addition to your mortgage payment, meaning the improvements pay for themselves, and then some.

BuiltGreen™ and REGREEN
BuiltGreen™ is a program that promotes green building practices to reduce the impact that building has on the environment. It benefits the homebuyer, the community and the environment and is an opportunity for everyone to make a home healthier, more efficient, and easier on the environment. Built Green™ has checklists for new single family homes and row homes, and can be found at www.builtgreencanada.ca. Points are tallied to designate the level of green achieved by the home: silver, gold or platinum. The more points attained, the higher the overall environmental and health performance of the home.

The US Green Building Council and the American Society of Interior Designers also have a resource called REGREEN Residential Remodeling Guidelines (www.regreenprogram.org). These guidelines, rather than a checklist rating program, were created to address the unique aspects of residential renovations, such as the existing conditions, the custom nature of the work and the occupant’s needs.

vancouver.ca/sustainability

The Green Home Remodeling Series was originally created by the Seattle Department of Planning & Development’s City Green Building Program. The Vancouver Sustainable Development Program acknowledges City Green Building for permission to revise these guides for use in Vancouver, B.C. The City of Seattle, and all other named contributors to the original document on which this guide is based, are not liable and the City of Vancouver takes all responsibility for any errors, omissions or other defects contained in this guide.

© 2010 City of Vancouver. Printed in Canada.

* Vancouver Green Capital is a registered trademark of the City of Vancouver.