

## Green Renovations

No matter the size and scope of your renovation project, there are many things that can be done to “green” it, making your home more energy-efficient and environmentally responsible. A professional renovator can explain the possibilities and help you decide on the best choices for your project.

- An energy audit of your home may be a good place to begin. It will provide a precise snapshot of your home’s energy performance and opportunities for improvement, such as replacing the furnace with a high-efficiency unit, upgrading windows or “draft-proofing” the house. There may be energy-efficiency measures you can build into your current renovation plans, or you may decide to expand your plans to take advantage of rebate and incentive programs offered by governments at all levels. The audit should be performed by a licensed energy advisor.

For information on grants and how to find an energy advisor, go to [www.oeenrcan.gc.ca](http://www.oeenrcan.gc.ca) and follow the ecoEnergy Retrofit links.

- If your mechanical systems (i.e. heating, cooling or ventilation systems) are getting old, this may be a good time to replace them. Today’s new high-efficiency systems will start saving you money from day one. They also provide a more comfortable living environment for you and your family and, as an added bonus, they take up less space—for instance, a high-efficiency furnace, combined with a high-efficiency hot water tank or on-demand water heater, eliminates the need for a chimney.

There is a whole range of new types of systems on the market, such as on-demand water-heaters and combination hot water/heating systems. Renewable energy systems (e.g. solar and geothermal) are also becoming increasingly popular. Your renovator or a heating contractor can provide information and advice on systems that may be suitable for your renovation.

- Upgrading your windows can make a big difference to your energy bills as well make your home much more comfortable. New doors and upgraded insulation can further improve your home’s performance and comfort. If door and window replacement is beyond the scope and budget of your home, caulking and sealing to reduce air leakage can still deliver a noticeable improvement.
- The air in your home is an integral part of the living environment. Protect your family’s wellbeing by installing a heat recovery ventilator to keep the air clean and avoid moisture problems. Use low-offgassing paints, glues, cabinets, counters, and so on, to minimize the toxins that are emitted into

the air, and hard-surface and easy-to-clean flooring to avoid dust accumulation.

- Environmentally responsible products and materials cover an immense range, from wood from sustainably managed forests to carpeting made from recycled pop bottles to locally produced building components (less energy, fewer emissions in transportation). Choosing the most appropriate green materials may sometimes be a matter of trade-offs, determining which environmental aspects should be given most weight, in addition to price, performance, durability and other considerations. Your professional renovator can help you determine which green products and materials may be most suitable for your project.
- Water conservation is an essential part of greening your home. As possible, replace old toilets with low-flush or dual-flush units (you may be eligible for a rebate; call your municipality for information), and install new low-flow faucets or flow-restrictors. Beyond these relatively modest measures, you may want to talk with your renovator about rainwater collection for inside and outside water usage and grey-water capture for recycling water.
- If your renovation involves exterior work, decking or landscaping, there are many things you can do to reduce the environmental impact. Window awnings and plantings of trees and shrubs to shade your home in the summer will reduce the need for air-conditioning. Light-colored surfaces for driveways and walkways absorb less heat than dark surfaces such as asphalt. Composite decking materials are easy to work with, durable and save on wood, paint or preservatives. Cut down on watering by landscaping with native and hardy plants and using plenty of mulch.

*This backgrounder has been prepared by the Canadian Renovators' Council of the Canadian Home Builders' Association.*