

Homes for an Alternate Lifestyle

From Straw-bale to Tiny Houses, we investigate sustainable, off-grid living.

Living “off-grid” certainly doesn’t mean you have to endure a life without modern conveniences. Instead, a combination of conservation and renewable resources can free you from your monthly utility bills. Living off-grid enables you to reside in places that are remote, in the suburbs or even in the heart of Canada’s largest cities. Here’s a look at some of the options for living off-grid that Canadians are already enjoying.

Tiny Houses

Nestled in the verdant hills of Northumberland County in Ontario, this nifty [tiny house](#) is completely self-sufficient. Electricity is provided by the 1kW Solar PV system that saves energy to the battery bank for when the sun isn’t shining. Water is sourced from a rain-catchment system which is stored in a cistern. Tiny houses rely on their small size for energy conservation, but can integrate systems like grey water and [composting toilets](#) to keep resource use to a minimum. Some tiny houses are built on trailers, and can be moved from place to place. Building small keeps costs down and reduces the carbon footprint of your home. You can get free tiny house plans [here](#).

Net-Zero Homes

These are the deluxe options when looking to live off-grid, and don’t usually require huge changes in lifestyle. [Net-zero homes](#) produce as much (and sometimes more) energy than they consume. This means that renewable energy sources, like wind, geothermal and solar, power the home. Net-zero homes focus on conservation through creating a home that is energy-efficient with advanced insulating techniques. Energy-efficient mechanical ventilation as well as heat-recovery ventilation systems and drain-water heat recovery systems work to reduce energy needs. The home is extremely energy efficient,

which means it uses very little electricity for heating and cooling. Excess energy is usually fed back into the grid to provide the homeowner with a source of income. Net-zero homes may cost more to construct but, in the long-run, these costs are offset by freedom from your monthly bills.

Straw-bale Homes

Homes made of straw bales are incredibly well insulated and can expect insulation values of [R-30 to R-35](#). The R-value represents the insulating ability of your wall system. The higher the R-value, the better the wall and since the average is around R-14, straw-bale homes are significantly better insulated. For a full explanation [see here](#). The walls are framed with lumber, then stuffed with straw bales and finished with plaster. Straw-bale homes are sustainable because they utilize locally-sourced, renewable materials and they use less energy for heating and cooling. Straw-bales reduce the cost of the home and are [naturally fire-retardant and resistant to earthquakes](#). Straw-bales homes are popular in Canada and you can see several examples [here](#) and [here](#).

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