

ENERGY

Saving Energy

The cottage is equipped with energy-saving products that make the most of the modest amount of power generated by the solar/wind system.

Energy Efficient Lighting

The cottage is lit by a combination of quartz-halogen spot lights (30 percent more efficient than incandescent bulbs) and compact fluorescent lights (80 percent more efficient than incandescent).

Energy-Saving Appliances

The appliances in the cottage have exceptionally low energy demand. The refrigerator, for example, consumes 80 percent less energy than a conventional model.

Building Design

The cottage was designed with various R-2000 energy-efficient concepts to maximize heat retention.

High Levels of Insulation

Heating and cooling demands are reduced by above-average levels of insulation (R-12 foundation walls; R-22 walls; R-32 ceiling).

Airtight Construction

A continuous air-vapor barrier prevents air leakage.

Energy Efficient Windows and Doors

Windows filled with low-E gas and insulated window triple the R-value of the windows.

Water and Energy-Efficient Landscaping

Strategic placement of trees protects the cottage from cold winter winds and the hot summer sun, while drought-resistant plants and shrubs help to reduce or eliminate watering.

EFFICIENCY



Education Programs

Highlights:

Over 50 curriculum-linked educational programs for elementary and secondary school students.
Solar and Wind Energy Workshops.



KORTRIGHT
Centre for Conservation 



The Renewable Energy Demonstration Cottage is a part of the Toronto and Region Conservation's long term vision to develop the Kortright Centre for Conservation.

KORTRIGHT IS OPEN DAILY

10:00am- 4:00pm

Follow the signs:
Take Highway 400 to Major Mackenzie Drive
(at Canada's Wonderland), go west three
kilometres to Pine Valley Drive, then south
for one kilometre.

FOR MORE INFORMATION CALL

905-832-2289

OR VISIT OUR WEBSITES

www.kortright.org
www.trca.on.ca



Ontario

 TORONTO AND REGION
Conservation

The Renewable Energy
Demonstration Cottage



KORTRIGHT
centre

 TORONTO AND REGION
Conservation
for a Living City



The Renewable Energy Demonstration Cottage

The Renewable Energy Demonstration Cottage is an energy-efficient building that relies solely on renewable forms of energy to provide all its heating and electrical needs. As environmental awareness grows, people are recognizing the consequences of wasting energy. Through the use of renewable energy and energy-efficient products, we can all help reduce our demands on the planet.



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Solar/Wind Electricity

In Ontario, most residents have easy and affordable access to electricity. For residents living in areas remote from the electrical grid however, it can be costly to have hydro installed. Fortunately, there is an alternative. The Renewable Energy Demonstration Cottage uses a solar/wind electrical system that is practical, reliable, cost-effective, and environmentally friendly.

The cottage gets its energy from a 165-watt photovoltaic (solar electric) system and a 400-watt wind generator. These two systems charge a bank of batteries, which in turn provide electricity to operate lights, a refrigerator, water pump, television, radio and other appliances.

Solar Water Heating

Solar water heating panels convert the sun's energy into heat to provide hot water for the cottage.

Solar/Wood Heating

Renewable energy is also used to heat the cottage. A combination of passive solar heating and a high-efficiency wood stove keeps the cottage warm during the cold winter months.

POWER SUPPLY CONTROL



LOADS



GENERATORS



STORAGE

