

# Going Green



## A homeowner's guide to solar energy

More and more Canadians are taking steps to change to a cleaner and greener lifestyle. Generating your own renewable energy is a great way to go green!

One renewable energy source is the sun. Solar energy – light and heat from the sun – can be converted into electricity using solar panels. By installing solar panels to supply electricity to your home or cottage, you can reduce your impact on the environment and save money.

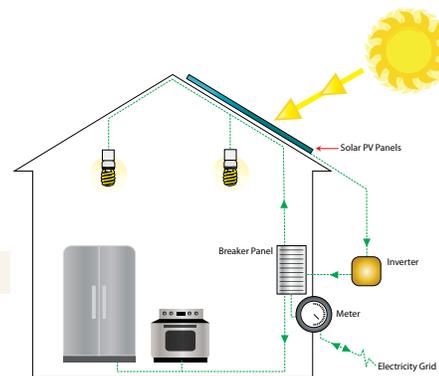
### 5 benefits of going solar

Why install solar panels on your home? Here are five good reasons:

- **You can save money.** By installing solar panels you will reduce the energy that you use from the electrical grid, which means you don't have to buy as much. In some provinces you can even sell your solar-produced power to your utility provider, earning money for the energy you produce.
- **You can increase the value of your home.** A home that costs less to run may be worth more.
- **They're low-maintenance.** Solar panels require little maintenance and typically last more than 25 years.
- **You can reduce your energy footprint and impact on the environment.** Solar power is a renewable, natural energy source that is non-polluting.
- **You'll be diversifying our energy supply.** To meet increasing energy demands, Canadians need to diversify our energy supplies beyond conventional sources such as oil, coal and gas.

### How do solar panels work?

Solar panels, also called solar photovoltaic (PV) systems, collect and convert sunlight into electricity. These systems can be tied to your current electrical grid or be off-the-grid to provide self-sufficient electricity.



### Getting started

#### Step 1: Assess

- Review information provided in your electricity bill or contact your local utility provider to determine your yearly household electricity usage in kilowatt hours.
- Ask a qualified contractor to provide an assessment of the suitability of your home for solar energy generation. The contractor can assess your roof's solar potential, determine the amount of energy that can be produced, identify suitable products, and provide a quote for installation.
- To find a qualified contractor, contact your local utility provider or visit the Canadian Solar Industries Association at [www.cansia.ca](http://www.cansia.ca).
- Research provincial and municipal environmental incentive programs.
- Compare how much electricity you currently use against how much electricity your solar panels will produce to assess your potential for savings.
- Contact your local utility provider to discuss what approvals and permits you require. Some utilities will also require specific insurance for the system.
- Contact your municipality to determine what permits are required – if any.

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## Step 2: Plan

Meet with TD to discuss financing options for your renewable energy project. Financing for solar panels purchased through a qualified building contractor and installer is available through TD Financing Services at [www.tdfinancialservices.com](http://www.tdfinancialservices.com). Purchase CSA®-approved solar panels for your home and you will be eligible for a cash rebate for your Home Equity Line of Credit.

- Hire a qualified contractor to install your equipment and complete an electrical safety inspection of your project. Ask for references and make sure the contractor is licensed.
- Review your contract carefully so that you clearly understand the responsibilities and terms.

## Step 3: Installation

- Work with your contractor and utility provider to connect your system and understand how to operate and maintain it.
- Make sure that all permits and inspections are complete.
- Confirm any administrative details required to receive environmental incentives or link into utility programs.

## Step 4: Enjoy!

- Take pride in the fact that you are reducing your energy footprint and impact on the environment, enhancing the value of your home, and helping to diversify our electricity supply.

**The Earth receives more energy from the sun in just one hour than the world uses in a whole year. By harnessing this energy, you can make a difference. TD is here to help. Visit your local TD Canada Trust branch today to discuss your options to install solar panels on your home.**

**To find out more, visit [www.td.com/renewableenergy](http://www.td.com/renewableenergy)  
or contact us at 1-866-389-8888**

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## Glossary of terms

**Electrical grid** – a system for delivering electricity from a utility provider to homes and businesses.

**Off-the-grid** – a system that runs on renewable energy sources independent of a conventional public utility.

**Kilowatt hour (kWh)** – a watt measures a unit of power, a kilowatt (kW) is a thousand watts. A kilowatt hour (kWh) is a thousand watt hours. Most electricity bills are measured in kWh.

**Renewable energy** – obtained from natural resources that can be replenished or renewed within a human lifespan, such as biomass, geothermal, hydro-electric, solar and wind. Renewable energy sources have less environmental impact than conventional energy sources such as oil or coal.

**Solar cell (photovoltaic cells)** – a device that converts the energy of sunlight directly into electricity.

**Solar energy** – comes from the sun and is turned into electricity and heat. The sun's energy is harnessed by solar panels - which run generators - providing electricity.

**Solar panel (photovoltaic panel)** – a panel that contains a number of solar cells (photovoltaic cells).

**Solar system (photovoltaic solar system)** – produces electricity directly from sunlight using solar cells (photovoltaic cells).