



Thinking About **Retrofitting** Your Home?

EarthCare
Terre à cœur
S U D B U R Y

 Greater Grand
Sudbury



What is retrofitting?

Retrofitting refers to upgrading an existing home to be more energy efficient and even an energy efficient home can still take a few steps towards becoming a net-zero energy home. Home energy improvements can reduce your home's carbon footprint.

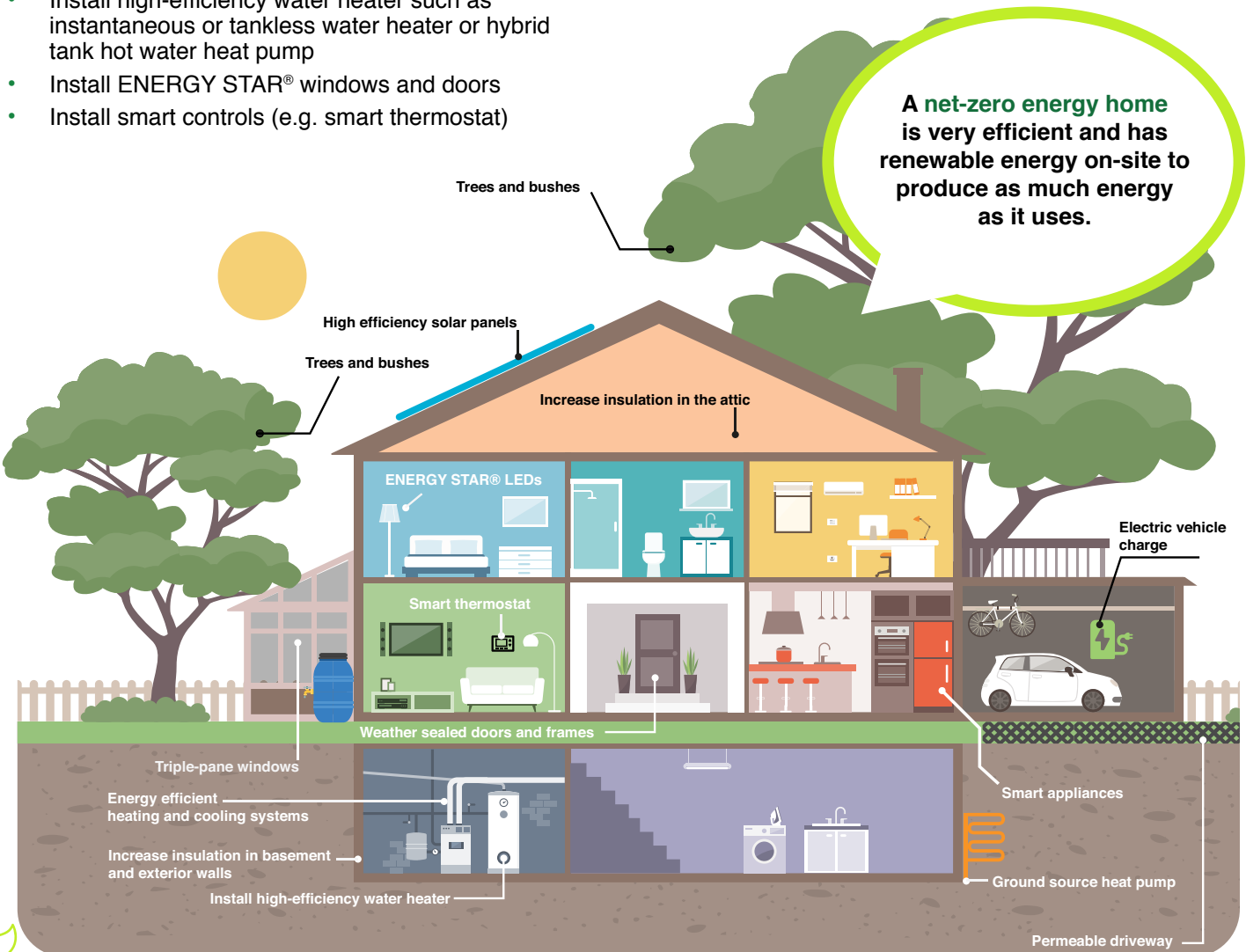
What are some retrofit project ideas?

Energy efficient and smart technologies can make your home more comfortable and save you money. Upgrades can be done in small steps over time or as part of a larger project.

Typical home energy improvements include:

- Seal cracks in walls, doors, and windows
- Increase insulation in the attic, basement and exterior walls
- Install high-efficiency ENERGY STAR® heating and cooling systems (e.g., furnace or boiler, air or ground source heat pump, air conditioner)
- Install high-efficiency water heater such as instantaneous or tankless water heater or hybrid tank hot water heat pump
- Install ENERGY STAR® windows and doors
- Install smart controls (e.g. smart thermostat)

- Upgrade lighting to ENERGY STAR® LEDs
- Replace appliances with ENERGY STAR® and WaterSense products
- Examine roof options for solar photovoltaics or cool roof technology
- Install ENERGY STAR® heat recovery ventilator and energy recovery ventilator
- Install drain water heat recovery systems
- Develop an energy efficient landscape that can reduce your heating, cooling and lighting costs through shade, windbreak and stormwater management
- Install energy battery storage
- Install electric vehicle charge





Why should I retrofit?

Make your home more comfortable

- Retrofits can make your home more comfortable by reducing drafts and dampness and improving indoor air temperature in the winter and summer.
- Energy efficient and especially net-zero homes are also very quiet as they are more isolated from outside noise.

Help you age in place

- With lower heating and cooling bills and increased comfort, seniors are able to age in place easier in energy efficient homes.

Save money

- Retrofitting results in less energy being used to maintain temperatures and heat water. In turn, this can result in up to 40% savings on home energy and heating bills. Energy efficient homes also see a resale value of 3% more than comparable homes.

Reduce your carbon footprint

- In 2016, space and water heating (largely with natural gas) accounted for 68% of buildings emissions in Greater Sudbury. Retrofitting can help reduce these emissions by requiring less energy or switching energy sources.
- Addressing energy efficiency issues can result in up to a 30% reduction of home energy use.



I'm a tenant. What can I do?

Tenants who cannot control the temperature, windows or large appliances can still decrease their ecological footprint and energy costs by purchasing energy and water efficient small appliances (fans, dehumidifiers) and electronics (televisions, monitors). Tenants also qualify for some retrofit rebates and incentives. Choosing the right window covers and using them to maximize light, heat or cooling effects also reduces costs.

They can also talk to the landlord about the benefits of retrofitting the building through less maintenance, lower costs, improved image and making the rental property more attractive and comfortable for tenants.



Where should I start?

If you decide that retrofitting your home is the best option for you, here are some next steps you can take.

- Check with Natural Resources Canada (NRCAN), Enbridge Gas and saveonenergy.ca to see if there are current rebates or incentives available before you start.
- Consult a NRCAN Energy Advisor for an Energuide home evaluation. They can help identify issues in your home, give you an energy efficiency report and inform you of possible upgrades.
- Obtain a building permit if needed. Many retrofits, such as insulation and roof repairs, require a building permit. You can apply for one either in person or online with Building Services. Visit greatersudbury.ca/buildingpermits to learn more.
- Explore ways to make your renovation greener and healthier (e.g. request the use of non-toxic, low-VOC products, sustainably harvested wood products, etc.)
- Hire a licensed contractor. A contractor will be able to do the required work and help you navigate the retrofit and permit processes. Look for recommendations from trusted friends and family and aim for a minimum of two quotes.
- Ask for references from potential contractors and get contracts in writing.
- Ask contractors for their licence number and verify it at the Business Licence Lookup website. Call 311 for more details.
- Take before and after pictures!



Decrease your ecological footprint

Behavioural changes to conserve energy and water can also play an important role. Try turning off the tap while brushing your teeth, air-drying your clothes, biking or taking transit, buying an electric vehicle, and wearing warmer clothes and using blankets in the winter.





Do I need to hire a contractor?

Some upgrades, such as air sealing, can be done quickly and easily through DIY projects. However, bigger upgrades that involve furnaces, heat pumps or water heaters must be done by a licensed HVAC contractor. Be sure to ask for credentials, get 2-3 quotes and check reviews when choosing a contractor.

Provided By:

EarthCare Sudbury

EarthCare Sudbury is the City of Greater Sudbury’s sustainability program that works to enhance our environment, create a healthier community, and strengthen the local economy.

Contact Us

- 705-674-4455, ext. 4398
- earthcare@greatersudbury.ca

Greater Sudbury Resources

Coalition for a Liveable Sudbury

- liveablesudbury.org

Building Services

- 705-674-4455, extension 4278
- greatersudbury.ca/live/building-and-renovating

Public Health – Septic Systems

- 705-522-9200
- phsd.ca/health-topics-programs/sewage-systems/sewage-systems-application-permit-build-repair-change-system

reThink Green

- rethinkgreen.ca

Sudbury & District Home Builders’ Association

- 1 877-858-0468
- sudburyhomebuilders.com

Other Online Resources

Better Homes TO

- betterhomesto.ca

Environmental Defence - Get Retrofit

- environmentaldefence.ca/2018/02/13/home-energy-retrofit-faq

Canada’s Greener Homes Program

- nrcan.gc.ca/energy-efficiency/homes/canada-greener-homes-grant

Enbridge Home Efficiency Rebate Program

- enbridgegas.com/residential/rebates-energy-conservation

Enbridge’s Winterproofing Program, which offers free upgrades to income qualified homeowners.

- enbridgegas.com/residential/rebates-energy-conservation/home-winterproofing-program

SaveOnEnergy Energy Affordability Program, which offers free upgrades to income qualified homeowners

- saveonenergy.ca/For-Your-Home/Energy-Affordability-Program

Natural Resources Canada Energy Guide

- nrcan.gc.ca/energy-efficiency/homes/what-energy-efficient-home/welcome-my-energuide/16654

Goal 3 of the Community Energy and Emissions Plan:

The existing building stock is retrofit for 50% increased energy efficiency by 2040 and large buildings are routinely recommissioned.

