

A photograph of a man and a woman sitting at a table, looking at a laptop and some papers. There are two white mugs and a plate of fruit on the table. The image is partially covered by a large green circle and a smaller white circle.

Home Energy Renovation Resources for Saskatoon Homeowners

Use this booklet as a starting point to increase the energy efficiency of your home.

From financing options to renovations to appliance upgrades, this booklet helps you get started on your journey to utility bill savings and increased home comfort.

HOME ENERGY SAVING TIPS

Low/No Cost Tips

- ✓ Set your dishwasher to air-dry
- ✓ Wash clothes in cold water
- ✓ Use a clothesline to dry laundry
- ✓ Replace lights with LED fixtures
- ✓ Add low flow sink/shower aerators
- ✓ In winter, use a car block heater timer set to 2 hours before use
- ✓ Reduce summer AC use by using a fan and opening windows at night

Renovations aren't the only way to improve energy efficiency. Small changes can add up to big savings!

Moderate Cost Tips

- ✓ Get a condensing (ventless) dryer
- ✓ Replace old fridges and freezers with new ENERGY STAR models
- ✓ Seal obvious air leaks around doors, windows, pipes, and vents
- ✓ Install a drain water heat recovery pipe
- ✓ Get a programmable or smart thermostat and set it lower at night and when out of the house during the day
- ✓ Use small appliances for cooking (like a microwave or air fryer) when possible, over large ones (like an oven)

Big Impact Retrofits

- ✓ Replace an inefficient furnace/boiler with a new ENERGY STAR model or with a heat pump
- ✓ Install an energy recovery ventilator (ERV), then seal all air leaks
- ✓ Replace single/double-pane windows with ENERGY STAR triple-pane low-e argon filled windows
- ✓ Add insulation to walls, attics, and floors
- ✓ Get a heat pump water heater or air conditioner
- ✓ Install rooftop solar



**Learn more
about ENERGY STAR®**

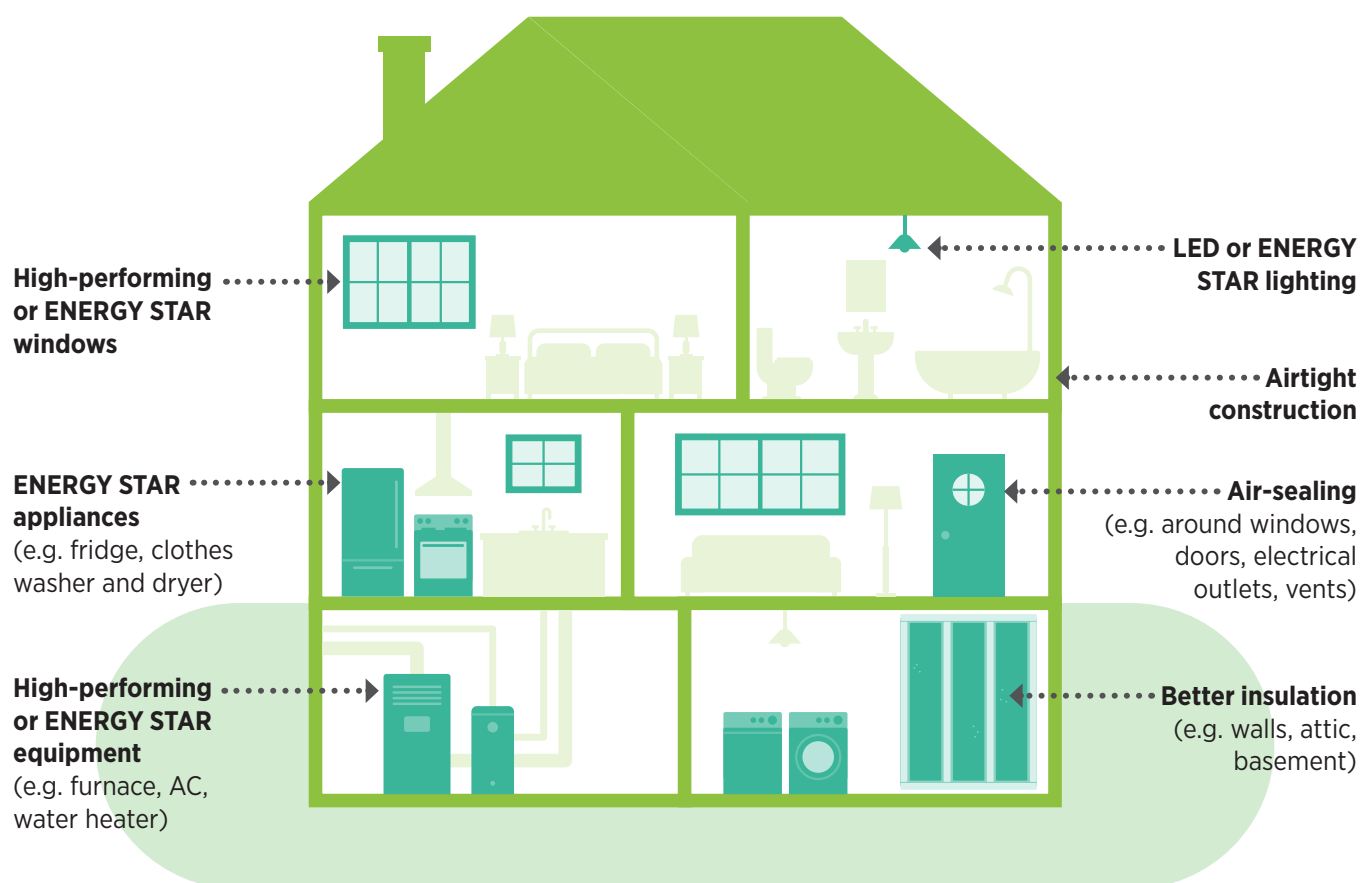


WHAT MAKES A HOME ENERGY EFFICIENT?

An energy efficient home combines various design features and high efficiency equipment to make a home more comfortable, more prepared for a changing climate, and cost less to heat and cool.

The graphic below from Natural Resources Canada shows the features of an energy efficient home.

Learn how to make homes more energy efficient, more valuable, and more comfortable at nrcan.gc.ca/homes



The Canada Greener Homes Loan offers interest-free financing to help Canadians make their homes more energy efficient and comfortable.

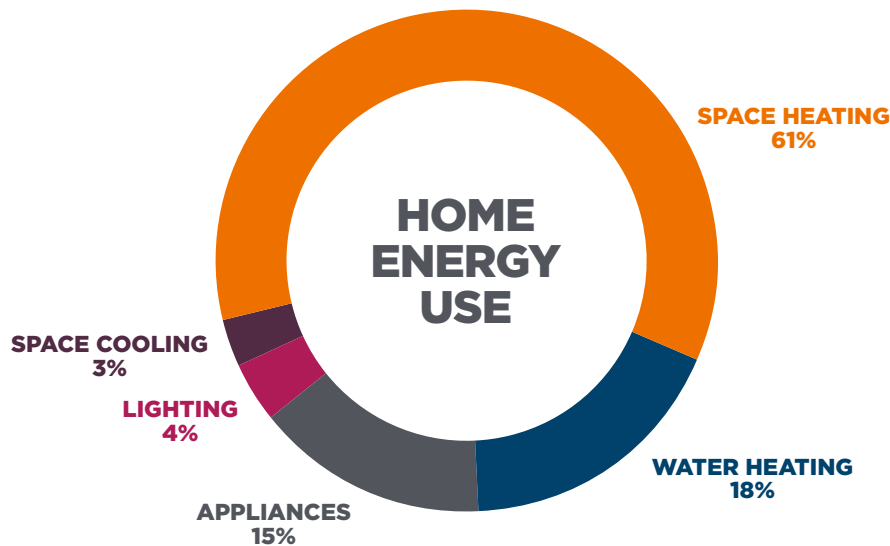
The loan can help you finance eligible retrofits that are recommended by an energy advisor and that have not yet been started.



Learn more:

Stop paying to heat the outdoors!

Insulation, air sealing, and triple-pane windows can make a big difference in your utility bills.



Renovate for maximum energy efficiency and comfort starting with the City of Saskatoon's Home Energy Renovation Resources.

Saskatoon.ca/RenoResources



 **City of
Saskatoon**

Energy use stats from Natural Resources Canada Energy Fact Book 2023-24

Are you STRESSED ABOUT BILLS?



We can help.

Our **Energy Assistance Program** can improve your home and save you money—up to \$230 a year!

HOW IT WORKS

1. Apply online at **saskpower.com/energyassistance**
2. A Home Energy Coach will come to your home. You'll get simple tips on how to save energy and receive free energy upgrades like:
 - Smart thermostat
 - ENERGY STAR® LED light bulbs
 - Smart power strip
 - High-efficiency showerheads
 - Aerators for kitchen and bathroom faucets
 - Drying rack
3. Your home uses less energy so you have lower utility bills.
4. This program has limited space—apply today!

WHO CAN APPLY

- Customers of SaskPower, Saskatoon Light and Power, or Swift Current Light and Power
- People who own or rent a single-detached home or semi-attached home (If you're renting, you'll need the consent of your landlord to participate)
- Participants must live in the home year-round, have the power bill in their name, and have a household income of \$70,000 or less

"There are so many small ways to save and they're all right under our noses! It took someone like this energy coach to point them out to me. The process was eye opening to me and it was great to have this specialist come into my home and provide this all to me for free!"

- Chris Tessmer



Visit **saskpower.com/energyassistance** or scan the QR code to learn more and sign up.



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or scan the QR code to learn more.



ENERGY EFFICIENCY HOME EVALUATION (ENERGY AUDIT)

What is an *EnerGuide Energy Efficiency Home Evaluation* or an “energy audit”?

- An *EnerGuide Energy Efficiency Home Evaluation*, or energy audit is an in-person assessment of your home to understand its energy performance. The home is given an EnerGuide rating that indicates how much energy your home uses compared to other homes.
- The energy audit is completed by a professional energy advisor who will complete a blower door test to measure the air-tightness of your home as well as looking at your insulation, your heating and cooling equipment, and review other information about your home’s energy performance.
- The energy advisor will take photos of the outside of your house, mechanical systems (furnace, air conditioning, etc.), attic space, and any wood-burning appliances for quality assurance and record keeping.
- After your audit is complete you will receive the following:
 - ▶ An EnerGuide rating and label
 - ▶ A homeowner information sheet
 - ▶ A Renovation Upgrade Report
- For more information on energy audits, you can visit [Natural Resources Canada Website](https://www.naturalresources.ca).



What do they cost?

- Energy audits done by a certified EnerGuide advisor typically cost \$500–600 for the pre-project energy audit and \$300–400 for the post-project energy audit. The cost may be higher for large homes.

Why should I get an energy audit?

- To participate in the Canada Greener Homes Initiative, you are required to have two EnerGuide energy audits.
- The first audit is conducted before your renovation or home upgrades occur, and then a second audit is conducted after the work is complete. The goal is that the second evaluation shows an improvement over the first.
- If you have completed an energy audit on your home within the past two years, the pre-project energy audit can be skipped.

What are the benefits of an energy audit?

- After a pre-project audit, a certified EnerGuide advisor will give you unbiased, customized advice on upgrades for your home that will have the greatest impact on energy use, home comfort, utility bills, and reduction in pollution (greenhouse gases).
 - ▶ The results of an energy audit can help you set priorities for renovations based on your customized needs and budget.
- Post-project audits protect HELP participants by checking your list of planned upgrades against the work that was completed, before contractors are paid.
- Audits will also provide data to the City to help City staff create new programs for residents and measure greenhouse gas reductions..
- Auditing data can also help the City map out which areas have received an audit, so they can incentivize energy audits in areas of the city which lack this information.



HOW TO CHOOSE A CONTRACTOR

Here are some tips for selecting a contractor, tradesperson or renovator:

1. Find trustworthy professionals.

- Collect recommendations from someone you know and trust.
- Look for businesses with proof of the following:
 - ▶ Registered corporation in Saskatchewan.
 - ▶ Workers Compensation Board compliance.
 - ▶ General liability insurance of at least \$2M.
 - ▶ Registration with a third-party warranty organization.
 - ▶ Safety training.
 - ▶ GST Registration Number.

2. Collect at least three quotes for each project you are hiring a contractor for.

This allows you to compare pricing as it may vary from different businesses.

3. Check references and qualifications.

- Ask for references and check them or read reviews on google, Facebook, the Better Business Bureau, trustedaskatoon.com and other places.
- Verify contractor qualifications. It is your responsibly to ask for proof of GST numbers, liability insurance, safety training, and warranty information.
- Check if they have additional designations that may be beneficial to your project, such as the [Certified Professional Renomark® Renovator \(CPRR\)](#) designation through the [Saskatoon and Region Home Builders Association](#). The CPRR designation means these certified renovators have met the highest industry standards by completing mandatory education and safety training, and offering third-party warranty protection.

4. Hire the contractor of your choice and sign a contract.

Before you sign the contract:

- ▶ Read the contract carefully and understand what it says.
- ▶ Make sure that the contract describes exactly what you want and what you have been promised.



RESIDENTIAL SOLAR MAP

Are solar panels right for your home?

Explore Saskatoon's solar map, a self-serve tool that helps you understand the financial and environmental benefits of your home's solar potential. Learn about your roof's yearly usable sunlight hours and get an estimate of solar panel space available. Check available incentive programs and contact a local installer using the quote template provided.

Is solar a good fit in Saskatoon?

Compared to other provinces, Saskatchewan has the most natural factors that influence the amount of energy that a solar system can produce. Saskatoon offers an ideal climate for solar photovoltaic (PV) energy production with over 2,260 hours of bright sunlight per year.

Read about the Solar Map in the Saskatoon StarPhoenix

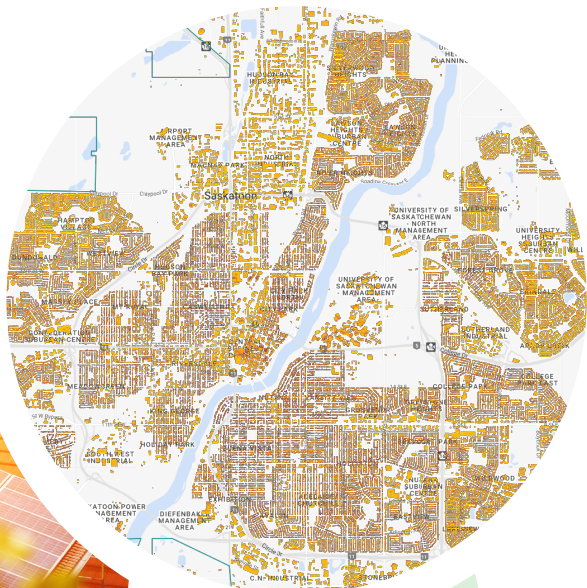
<https://solar.myheat.ca/saskatoon>

Do solar panels work in our cold climate?

Yes! Solar panels are power tested to work best at 25°C and will decrease 0.3-0.5% in efficiency per degree (hotter or colder). Direct sunlight can heat the panels well beyond the recorded air temperature, so colder, sunnier days can optimize the efficiency of solar panels, and the reflection of sunlight from surrounding snow can increase power production.



Read what The StarPhoenix
had to say about the Solar Map



ENERGY MAP

What's your score?

The Home Energy Map is a digital tool that helps you understand the energy performance of your home and connects you with resources to get started on efficiency renovations that can increase comfort and decrease utility bills.

It provides a virtual audit estimate of your home's annual energy consumption under standard conditions, without the time and expense of an in-person energy audit.

Just like home appliances have energy labels that indicate how efficient they are, this map provides a digital energy score for Saskatoon homes. The lower the score, the more efficient the energy use in that home.

Saskatoon homeowners can create an account, update their home specs using the questionnaire, and get a customized retrofit roadmap to guide the renovation process.

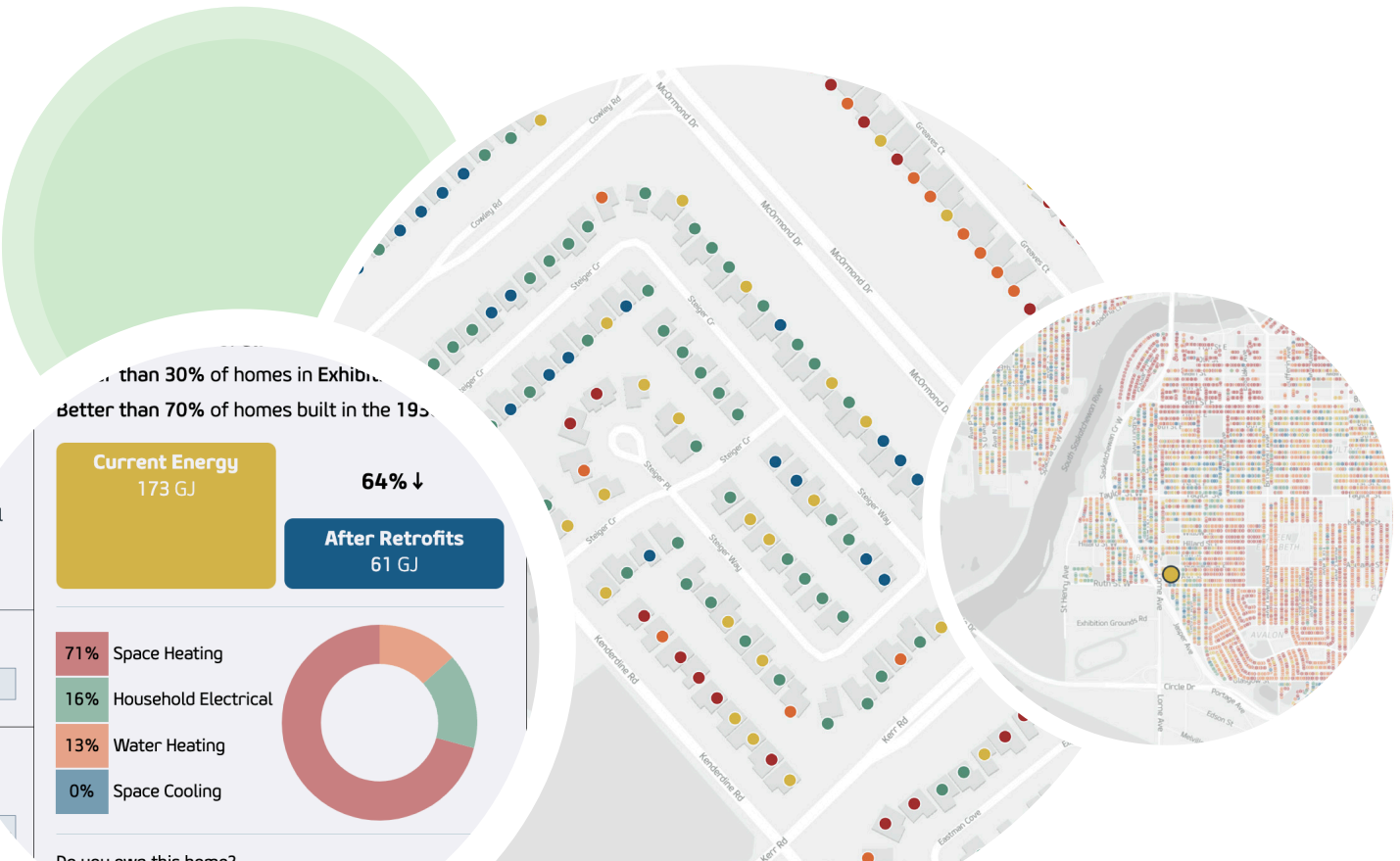
It's easy!

1. Find your home on the map.
2. Click the button "get your retrofit roadmap" and provide your property tax roll number; this unlocks a questionnaire that provides you with a customized renovation roadmap for your home.
3. Review the roadmap for information like which upgrades are the best bang for your buck and estimated costs/savings for specific retrofits.

Check out the Energy Map:
Saskatoon.ca/EnergyMap



**Read about the Energy Map
on Global News**



AIR SEALING YOUR HOME

Air sealing is one of the most essential, yet cost-effective ways to improve the comfort and energy efficiency of your home. Air sealing is the process of finding and sealing the air leaks throughout the building envelope of your home and should always be considered when performing upgrades. Air sealing helps block the movement of air through cracks, holes, or other gaps throughout the attic, walls, basement, and crawlspaces, and helps ensure that moisture does not enter the insulation or building envelope.

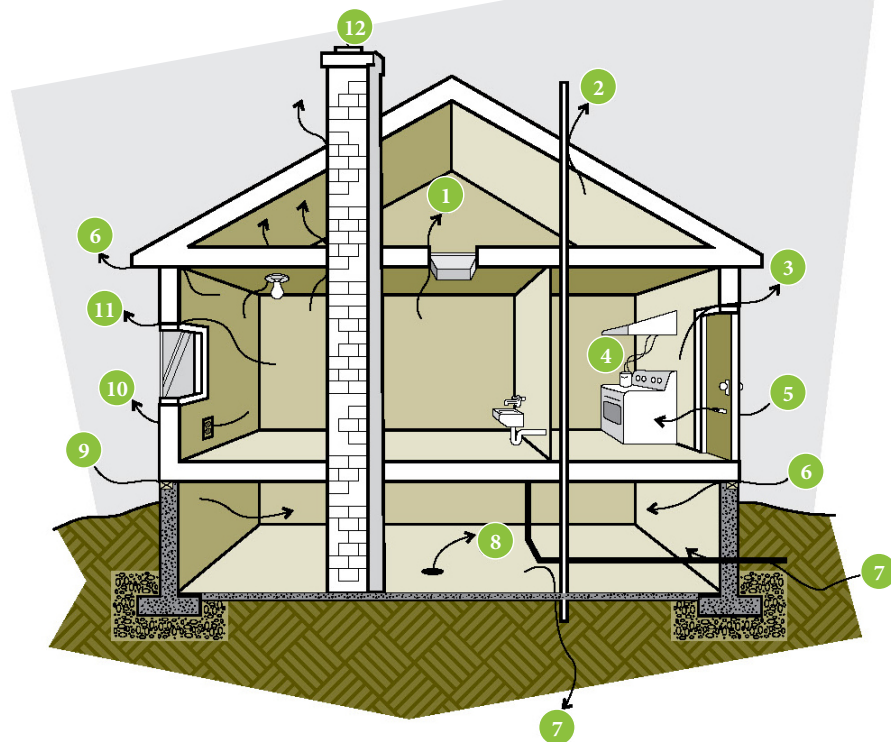
Air leaks occur where there is a hole or crack in the building envelope causing a pressure difference. In a typical residence, air leaks may account for between 25 and 40 percent of the energy used for heating and cooling. Air leaks typically occur around windows and doors, cracks in the walls, and in areas that are harder to see such as penetrations in the attic for plumbing, wiring, lighting, and ductwork, or in areas where foundation and walls typically meet.

Benefits of Air Sealing

Air sealing your home may provide many benefits including:

- Reducing heating and cooling costs
- Improving the durability of your home
- Increasing the comfort of your home by reducing drafts, cold air, and unwanted noise
- Decreasing moisture and condensation by eliminating warm air from entering gaps and cracks in the walls, attics, and basement, which can also lead to mold and mildew problems
- Improving air quality by reducing incoming outdoor air pollutants, dust, radon, and unwanted insects or pests

Common Air Leak Locations



WHERE TO LOOK

Key locations to check for leaks:

1. attic hatch
2. ceiling penetrations into the attic
3. door
4. exhaust vent
5. mail slot
6. sill and header
7. service entry
8. floor drain
9. foundation crack
10. electrical outlet
11. window
12. chimney



Learn more about
air sealing

Figure 1:
Key leakage locations in the home
Courtesy of [Natural Resources Canada](#)

Measuring Airtightness

Before sealing any leaks in your home, it is important to have a registered Energy Advisor perform an EnerGuide audit, which includes a Blower Door Test, and determines how much air flows through your home. Airtightness is measured by placing a depressurizing fan inside one of the doors and pulling air outside of the home to force exterior air to come back in through any holes, cracks, or gaps, and measuring the flow of the incoming air with a pressure gauge. Air leakage is measured in air changes per hour at 50 Pascals (ACH@50Pa). The fewer air changes per hour, the more air-tight the building envelop is.



Figure 2: Blower door test

Your EnerGuide audit report will provide you with a target to improve the airtightness of your home to achieve an improvement in the ACH@50Pa.

How To Air Seal Your Home

Air-sealing can be done by hiring a contractor or by doing the work yourself. Typically, the targets defined for your home will be achieved through the assistance of an air-sealing professional who can properly seal those hard-to-find places such as the holes, cracks, or gaps in the attic. Attics often have leaks at the chimney, vents, plumbing pipes, and electrical boxes which can account for substantial heat loss and can lead to a variety of moisture-related problems. Air sealing is and can often done in conjunction with insulation and/or vapor barrier upgrades.

There are many products available for air sealing including caulks, foams (spray foam, including expandable polyurethane and water-based foams), tension seal, felt, weatherstripping, gaskets, tapes, aluminum or stainless-steel door sweeps, and house wraps.

Common DIY areas for air sealing include:

- Caulking door and window frames.
- Weather-stripping doors and moving windows.
- Installing foam backers behind the outlet covers and child proof plugs to stop air coming out the outlet holes.
- Caulking or using spray foam to seal leaks around light fixtures, vents, bathroom fans, light fixtures, interior trim, open wall cavities, floors, ceilings, soffits over cabinets, furnaces, water heaters, and plumbing stacks.

What about Ventilation?

The Blower Door Test may also find that your home is sealed too tightly, if this is the case it may require additional ventilation. Furnaces, water heaters, fireplaces, and all fuel-burning appliances require air for combustion and need to be able to exhaust the products of combustion out of the house. Therefore, it is important to ensure that proper measures are taken because without proper ventilation, excessive water vapor and harmful combustible gases such as carbon monoxide can accumulate in your home.

To learn more about air sealing, please visit the NRCan Website.



Learn More:
NRCan Keeping the Heat In

Sources: [Natural Resources Canada](#), [U.S. Department of Energy](#), [U.S Environmental Protection Agency](#), and [HERA Edmonton](#).

Save Your Energy



Learn about the easiest ways to save energy and reduce your bills at saskenergy.com/ways-save, and check out our tips below!



Maintain Your Furnace

- Get your furnace serviced annually — you can book a SaskEnergy Network Home Heating Tune-Up appointment online!
- Clean or replace your furnace filter every 1-2 months.
- Save up to 8% on your annual heating costs by turning down your thermostat at night and while you're away.



Manage Your Payments

- Sign up for the Equalized Payment Plan (EPP) to have your annual natural gas costs split into 12 equal monthly payments.
- Sign up for an Online Account or get the SaskEnergy app to monitor your account and energy usage.



Keep Your Heat Where It Belongs



- Apply caulking to your windows and door frames.
- Install weather stripping on your exterior doors.
- Keep your heating vents and return air grilles clear so there's no interference with the flow of heat.



Compare and Save



- Check out the Energy Comparison Tool at saskenergy.com to find out which appliances in your home use the most energy. By comparing different fuel sources you'll see which options are the most environmentally friendly.




Reliable Energy. Sustainable Future.


Customers who have participated in our energy efficiency programs since 2017-18 are now saving more than 54,000 tonnes CO₂e emissions per year.

This is like taking approximately 12,000 vehicles off the road for a whole year!

Residential Equipment Replacement Rebate

- Find out if you're eligible to save up to \$1,000 when you switch to high-efficiency natural gas equipment in your home.
- Learn more or apply online at saskenergy.com/residentialrebate. 

Commercial Space and Water Heating Rebate

- Maximize your energy cost savings with high-efficiency natural gas water heaters, furnaces, boilers and more.
- Learn more or apply online at saskenergy.com/commercialrebate. 



If you're planning to make energy efficient upgrades to your home, there may be a rebate for that!

Check out saskenergy.com/rebates for a full list of rebates and programs.



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