

# CHANGE

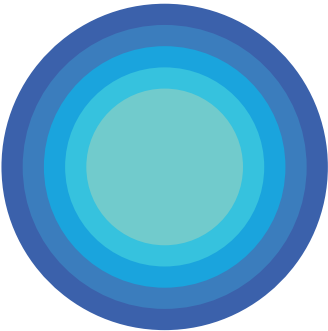
# HABITS

# FOR

# CLIMATE

YOUR GUIDE TO  
A SUSTAINABLE  
LIFESTYLE

Edmonton





Edmonton is part of global, social, economic, and environmental systems that support our quality of life—systems that are being disrupted by climate change.

Seven out of 10 Edmontonians believe we need to take action on climate change. What actions will you take to protect our quality of life?

The [Change Habits for Climate Guide](#) outlines a variety of ways to help you live a more sustainable lifestyle. Every action makes a difference, but to show you just how impactful your actions are, we developed a spectrum. It features over 30 actions that are rated from lowest to highest impact in reducing our total greenhouse gas (GHG) emissions. Find the impact ratings of the actions you're already taking and which ones you can start now to take your efforts to the next level.



*Look for the blue arrows in the margins to quickly identify some of the measured actions you can take to reduce your greenhouse gas emissions.*

**IMPACT RATING**



Each action is rated on a scale of 1 to 5 for how much it helps reduce greenhouse gas emissions.

Weather-proof your home ①	Set your thermostat to 17-21°C ①	Commute sustainably once per week ①	Dry your clothes naturally ①	Replace your showerhead and go low-flow ①
Open and close your blinds seasonally ①	Replace your faucet aerators ①	Carshare instead of owning a vehicle ①	Switch to a tankless water heater ①	Use fans instead of air conditioning ①
Cut your lawn using a solar or push mower ①	Wash your clothes in cold water ①	Leave your grass clippings on the lawn ①	Use a toaster oven for small meals ①	Drive better, drive smarter ①
Retrofit your drain with a DWHR unit ①	Replace your stove with an induction top stove ②	Purchase the most efficient washer and dryer ②	Switch to LED bulbs ②	Insulate your basement ②
Drive an electric vehicle ③	Install energy efficient windows ③	Insulate your walls ③	Vacation locally instead of abroad ③	Commute sustainably year-round ③
Work and play close to where you live ④	Install a high-efficiency furnace ④	Invest in renewable energy with a solar PV system ⑤	Upgrade your roof's insulation ⑤	Retrofit your building's envelope for efficiency ⑤

For more actions, join the movement at [change4climate.ca](https://change4climate.ca)

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# NATURE & BIODIVERSITY

The natural environment provides many services to Edmontonians. It gives us clean air to breathe and water to drink. It also provides opportunities for recreation, to enjoy nature, and to clear our heads. You can do many things to preserve existing natural areas or to create new ones around your home.

## Case study:

### Bringing a yard back to nature

Cherry Dodd is a nature lover and an active member of the Edmonton Native Plant Group. When she originally moved into her home, it had a typical Edmonton yard with a lawn, a shrub, one large tree, and one very small flower bed under the front window. Because she loves flowers, Cherry decided to dig up the lawn and replace it with native plants and regular garden perennials. While she didn't plan for her garden to be a habitat for wildlife, she now often sees many butterflies, birds, bees, and ladybugs in her yard.

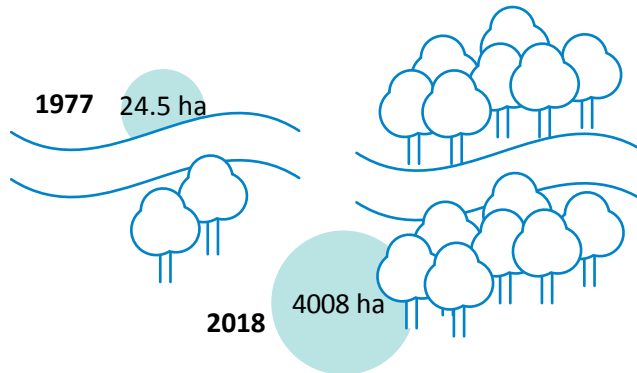
Cherry has a lot of advice for Edmontonians who are looking to create a more natural yard. One tip is to seek out places to get plants for free—for example, from neighbours or at events like seed and perennial swaps. Cherry believes that gardening doesn't have to cost a lot of money. She also believes that being environmentally friendly isn't hard: "I believe in being a lazy gardener and just sitting back and letting nature do most of the work." As native plants are suited to our climate, they are very resilient and don't need fertilizer. In fact, they prefer poor soil. And if planted in the right place, they require very little water.

When asked why she decided to naturalize her yard, Cherry says, "Lawns are boring. Flowers and trees are more exciting."



Photo credit: Cherry Dodd

## PROTECTED NATURAL AREAS HECTARES



## Create an eco-landscape



Eco-landscaping involves a number of practices that are easy on the environment and your pocketbook. It includes designing your yard to conserve water, planting selectively, collecting rainwater, watering wisely, backyard composting, mulching, grasscycling (leaving clippings on the lawn), and using a push or electric mower.

Eco-landscaping reduces waste, fertilizer, and chemical needs, conserves water, and cuts down on energy and yard maintenance costs. It also helps reduce greenhouse gas (GHG) emissions responsible for climate change.

The plant hardiness zone for Edmonton has changed from 3b to 4a. This is due to climate change and improved modeling techniques by Natural Resources Canada. When you're shopping in the garden centre, look for plants suitable for our zone.

[planthardiness.gc.ca](http://planthardiness.gc.ca)



Photo credit: Cherry Dodd



Photo credit: Edmonton Horticultural Society  
Jon D. Brehaut

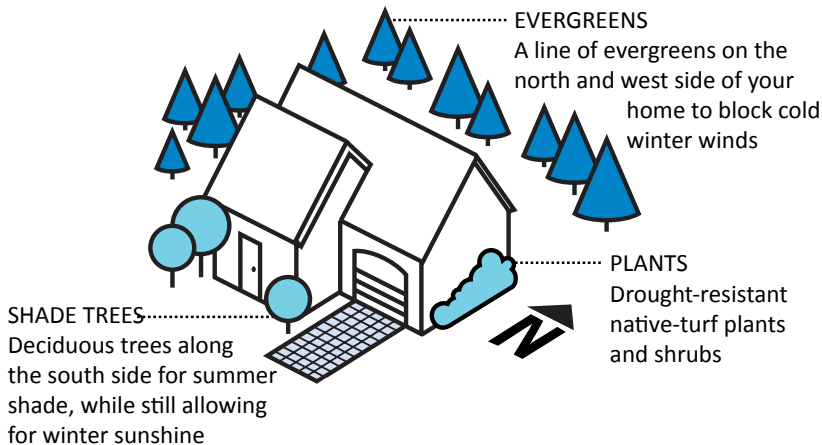
## Choose drought-resistant trees and plants



Choose heat-loving, drought-resistant trees and shrubs for a xeriscape (requiring little to no water) garden. Drought tolerant plants are better able to handle the hotter and drier summers expected for Edmonton's future climate. Remember that even hardy plants will need at least weekly watering while they get established during the first growing season.

[edmonton.ca/droughtresistantplants](http://edmonton.ca/droughtresistantplants)

## Place trees strategically



Be sure to plant trees a safe distance from the home to reduce fire risk and to prevent structural problems as they mature. Trees also help to reduce urban heat island effect and capture carbon to reduce GHG emissions.

## Collect rainwater



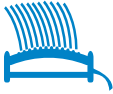
Use a cistern or rain barrel with a lid or screen to capture and store rainwater for irrigation or for topping up your fish pond. Using rainwater reduces run-off and the GHGs that come from producing tap water. Rainwater is also better for pet fish than tap water. A lid helps to keep the water clean and stop mosquitoes from breeding in it. Ensure that rain barrels are located at least 2 m away from your basement walls and are fitted with an overflow spout so that the barrel does not overflow and flood your foundation. For more information, visit: [epcor.com/products-services/drainage/flooding-flood-prevention/flood-prevention-homeowner-maintenance/Pages/rain-barrels.aspx](http://epcor.com/products-services/drainage/flooding-flood-prevention/flood-prevention-homeowner-maintenance/Pages/rain-barrels.aspx)

You could also plant a rain garden to soak up stormwater and naturally water the plants. Rain gardens should be located at least 3 m away from the home to avoid



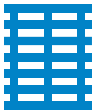
overloading the foundation weeping tile drainage. For details on rain gardens, visit: [epcor.com/learn/efficiency-conservation/outside/Pages/installing-a-rain-garden.aspx](https://epcor.com/learn/efficiency-conservation/outside/Pages/installing-a-rain-garden.aspx)

## Water the lawn early in the morning



More than half of the water applied to lawns can be lost to evaporation and run-off due to overwatering. Watering during the cool part of the day reduces losses to evaporation. A single, deep watering—2.5 cm (1 inch) once every 7 to 10 days—is more effective than several light waterings. Adding compost or 12 to 15 cm (5 to 6 inches) of good-quality topsoil will help hold water and fertilizer, reducing your need for watering.

## Set up a backyard compost



Compost your kitchen scraps (for example, eggshells, cores, and peels) and yard waste to reduce waste and produce your own natural fertilizer and soil conditioner. Composting is easy and can reduce GHG emissions for a family of three by more than 125 kg per year. Reducing your household waste means less waste will need to be collected, transported, and processed.

## Spread mulch



Cover the soil surface around your outdoor plants with compost, shredded bark, or other organic material. Mulching in the spring reduces weeds and the need to water. Mulching in the fall protects plants against winter. Mulch can also create a habitat for beneficial insects, which reduces the need for pesticides. Inorganic mulches such as rock or gravel can raise soil temperature, scorching plants and drying out the soil. Landscape fabric is generally not recommended as it can suffocate plant roots. Keep landscaping mulch beds moist if possible, to reduce fire risk during hot and dry conditions in the summer. Provide a minimum of 45 cm (18 inch) distance between landscaping mulch beds and your house.

## Add topsoil

For better plant survival and health, increase depth of topsoil by 30 cm (12 inches) in grassed areas and 60 cm (24 inches) in shrub beds. Check out other Low Impact Development techniques at: [epcor.com/products-services/drainage/flood-mitigation/Pages/low-impact-development.aspx](https://epcor.com/products-services/drainage/flood-mitigation/Pages/low-impact-development.aspx)

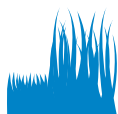
## Use a push or electric mower

CUT YOUR  
LAWN USING  
A SOLAR OR  
PUSH MOWER



Consider using a manual push or electric mower. A typical gas-powered mower produces 48 kg of GHG emissions in a season and as much air pollution as a car driven 550 km.

## Grasscycle



Leave grass clippings on your lawn when you mow. Clippings will quickly break down, helping your lawn retain moisture, adding nutrients, and reducing the need for fertilizers. Keeping grass out of your organics bin by grasscycling can reduce your household's GHG emissions by more than 500 kg per year. It also eliminates the need to transfer the clippings, saving both time and money.

Grass height of 6 to 8 cm (2.5 to 3 inches) is best for good root development and moisture retention. Try not to cut more than a third of the leaf blade. Always use sharp mower blades—clean cuts help grass recover better after mowing. Learn more at: [edmonton.ca/gobagless](https://edmonton.ca/gobagless)

## Learn more

See some different ways you can compost. Visit the John Janzen Nature Centre compost school or take a workshop: [edmonton.ca/compostschool](https://edmonton.ca/compostschool)

## Guard against invasive species

Invasive species are species that live outside of their natural area. They can disrupt non-native ecosystems, reduce agricultural production, and damage infrastructure. Some can even harm human health. Invasive plants reduce native vegetation. They can cause long-term changes in soil and reduce available plants for wildlife such as deer, birds, and insects. In water, invasive mussels can attach to any hard surface and clog up pipes. Removal costs are very high and could affect the cost of water.

Most invasive species are first brought to a new area by humans, on purpose or by accident. Areas with high population densities, like the city of Edmonton, are main points of entry for invasive species in a country or province.

We can all help prevent the introduction and spread of invasive species by following these tips:

- Before you buy plants for your yard, make sure they are not invasive species.
- If you buy a new house, check the yard for invasive weeds and get rid of them right away.

- The Alberta Weed Spotter smartphone app can help you to identify and report dangerous species.
- When you visit another country, clean your boots and clothes before you come home.
- Avoid transporting firewood with bark or storing elm wood.
- Avoid releasing domestic animals into the wild (for example, fish from aquariums).
- Clean, drain, and dry your boat when you take it out of the water.

[edmonton.ca/pests](https://edmonton.ca/pests) | [edmonton.ca/weeds](https://edmonton.ca/weeds) | [abinvasives.ca/resources](https://abinvasives.ca/resources)

## Manage pests using Integrated Pest Management (IPM)

Integrated Pest Management (IPM) practices use natural methods to keep pests at bay and to minimize pesticide use in your yard.

Plant a variety of native perennials, shrubs, and trees. A range of native plants that give nectar at all times through the growing season can help to attract natural enemies of plant pests.

You can also create habitat for native pollinators and predators of pests. Here are a few things to try:

- Build a pollinator block that houses bees and wasps that will forage for pollen or hunt for insect pests, such as aphids, in your yard.
- Plant a butterfly garden to attract other pollinators.
- Hang bird feeders and provide water sources to encourage a wider range of birds to come to your yard in winter.
- Build a bat box.

Healthy grass helps to reduce pest problems in your lawn. Here are few tips for a healthy lawn:

- Add compost to the soil. It adds nutrients and helps hold water.
- Remove thatch in the spring so that water, air, and nutrients can go into the soil.
- Mow at about 6 cm (2.5 inches) to help your lawn retain water and grow strong roots.
- Water your lawn deeply to the roots. Apply 2.5 cm (1 inch) of water once a week in a single watering.

- Aerate when your lawn is compacted so water, air, and nutrients can go to the roots.
- In fall, top your lawn with a thin layer of compost or topsoil, grass seed, and slow-release fertilizer to keep nutrients levels up.
- Regularly inspect your lawn for weeds and remove them right away before they go to seed.

[edmonton.ca/goodgrowing](https://edmonton.ca/goodgrowing)

## Root for Trees

Edmonton needs more trees! We want you to help us plant more trees to double the size of our urban forest. The goal of the Root for Trees initiative is to increase tree planting within the city through continued partnerships with corporations, individual residents, and community groups. The target of this initiative is to plant an additional 30,000 trees annually on public and private land.

Whether you participate as a family or individual, school, community group, or business, you can make a difference. Celebrate trees at our special events, and participate in our tree planting projects.

[edmonton.ca/rootfortrees](https://edmonton.ca/rootfortrees)

## Check out Tree Map

This online interactive map is an inventory of the trees in Edmonton's urban forest owned by the City.

[data.edmonton.ca/Environmental-Services/Trees-Map/udbt-eiax](https://data.edmonton.ca/Environmental-Services/Trees-Map/udbt-eiax)

## Celebrate Front Yards in Bloom

The Front Yards in Bloom recognition program is all about celebrating Edmontonians' efforts to beautify our neighbourhoods. There are categories for natural and edible front yards.

[edmonton.ca/frontyardsinbloom](https://edmonton.ca/frontyardsinbloom)

# FOOD & AGRICULTURE

The food we eat is a major source of the carbon emissions we create. Whether it is grapes from Chile or garlic from China, it takes a lot of energy and emissions to get a foreign product to our kitchens in Edmonton. Many Edmontonians are recognizing that food and urban agriculture are an important opportunity to decrease emissions and increase sustainability and quality of life in their communities.

**fresh: Edmonton's Food and Urban Agriculture Strategy** imagines how new approaches to food and urban agriculture can make Edmonton an even better place to live, work, play, and invest.

## Case study:

### Jasper Place High School

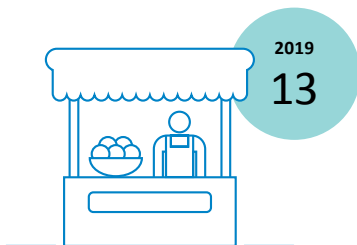
Something different is growing in the schoolyard at Jasper Place High School. Created by teacher, permaculture designer, and master gardener Dustin Bajer, the JPHS permaculture program allows students to grow local food in an ecologically sound way.

The program focuses on hands-on learning. Students gain experience in aquaponics (growing fish and plants together in tanks), indoor herb propagation, and managing a food forest.

The food produced by the permaculture program is used by the school's culinary arts program.

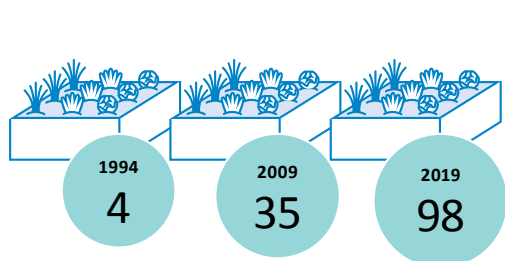
## EDMONTON'S FARMERS MARKETS

Markets



## EDMONTON'S COMMUNITY GARDENS

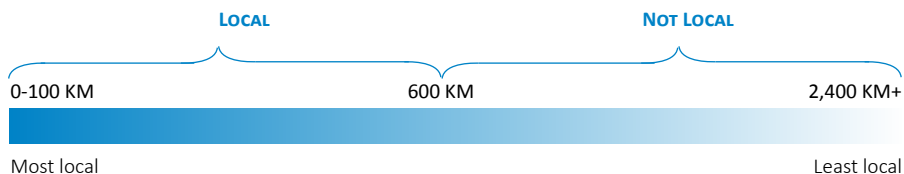
Gardens



## What is local food?

A few questions determine what is and what is not local: Who owns the company and where is it headquartered? Where do production, processing, and distribution take place? And where does the labour force live?

### SHADES OF LOCAL



## Visit farmers markets

Farmers markets are probably the best and easiest place to purchase local food. The policy at most markets in Edmonton is that the food sold at the market must be produced by the person selling it.

So if you are buying whole vegetables or fruit, you know the person you're buying that food from had a hand in growing it somewhere close to the city. Some markets allow out-of-province vendors, like orchards in British Columbia (BC). This lets us purchase apples, peaches, and pears from BC instead of somewhere much further.

## Substitute imports with local products

Whenever possible, try to replace foreign imports with domestic products. At the grocery store, think about things you can buy that are produced locally. For example, buy your grains, meat, and vegetables—which can easily be grown in Alberta—at the farmers market and use those precious food miles for things that we can't grow here, like mangoes, avocados, coffee, and chocolate.

## Grow your own food

### Set up a garden

At the turn of the last century, almost all of the food consumed in the Edmonton region was grown here. Having a large garden was commonplace.

The environmental benefits of gardening include increased biodiversity and animal habitat, less use of pesticides and fertilizers than in commercial agriculture, and fewer food miles because the food did not need to be shipped. Growing food at home also contributes to resilience by relying on yourself and trading with your neighbours for food in the event of disruptions to our local and global food supply or delivery. The City supports and promotes turning your front lawn into a food garden, too. Visit VegInstead! to learn more: [edmonton.ca/veginstead](http://edmonton.ca/veginstead)

There are many ways to learn about vegetable and fruit gardening. Edmonton Public Library has a lot of excellent books for the first-time gardener. You can also check out groups like Prairie Urban Farm or Sustainable Food Edmonton for workshop listings.

Find out the best planting dates for the Edmonton area: [almanac.com/gardening/planting-calendar/AB/Edmonton](http://almanac.com/gardening/planting-calendar/AB/Edmonton)

### **Join a community garden**

Edmonton has many community gardens that operate independently. If you're a new gardener, a community garden is a great way to meet other gardeners who you can ask for advice and swap seeds with.



Community gardens bring many benefits to Edmontonians:

- Providing recreation for people of all ages
- Making neighbourhoods more beautiful
- Producing healthy food
- Creating community spirit
- Sharing gardening knowledge and experience

The City of Edmonton supports community gardens by:

- Providing municipal land (with Partners in Parks agreements)
- Offering community leagues advice and help with coordination
- Funding Sustainable Food Edmonton

Contact Sustainable Food Edmonton to find the community garden nearest to your home, get in touch with a specific garden, or learn how to start a new community garden.

Before starting your community garden project, please contact your local Community Recreation Coordinator for more information.

[edmonton.ca/communitygardens](http://edmonton.ca/communitygardens)

[edmonton.ca/communitydevelopmentinneighbourhoods](http://edmonton.ca/communitydevelopmentinneighbourhoods)

## Buy organic

Buying organic food has many ecological benefits. It encourages healthy soil structure, reduces run-off of pesticides and herbicides into waterways, cuts energy use by reducing chemicals that require fossil fuels, and promotes biodiversity.

## Buy imperfect produce

Many vegetables and fruits are discarded because their size, shape, or colour are not “right”. Buying these items uses food that might otherwise go to waste.

## Plan more, waste less

According to the United Nations Food and Agriculture Organization, close to half of all of the food produced worldwide is wasted. Careful meal planning can help you cut down on food waste.



Plan out your meals for the week and buy exactly what you will need to make them. If a recipe calls for two apples, buy just two apples instead of a whole bag. Shopping in the bulk aisle can help you buy exactly the right amounts. Try to avoid impulse purchases at the grocery store, especially for perishable items.

If you do end up with fresh produce and leftovers that you won't have the chance to eat before they go bad, freeze them to use at a later date.

[edmonton.ca/foodwaste](https://edmonton.ca/foodwaste)

## Store it right

Extend the life of your food by making sure it's stored in the correct location. Not all parts of your fridge are the same temperature—the coldest part of the fridge is usually the bottom shelf while the door is the warmest part. Take advantage of your humidity-controlled drawers and separate produce that is prone to wilting from produce that prefers low humidity.

Have some veggies that have gone limp? A quick soak in ice water for 5 to 10 minutes is often enough to revive those bendy carrots or limp lettuce.

Learn more about proper food storage and ways to waste less at:

[lovefoodhatewaste.ca](https://lovefoodhatewaste.ca)

## Buy sustainable seafood

According to UN Food and Agriculture, about one-third of fish stocks are overfished and over half are maximally sustainably fished. There are many guides and apps that can help you select ocean-friendly seafood options.

## Eat less meat

Scientific studies have shown that a large portion of global carbon emissions come from livestock production. Livestock production also uses a lot of water.

To help cut emissions, why not start off your week with meatless Mondays? When you do eat meat, choose chicken or pork, which have less impact than beef, and purchase from a local producer to reduce food miles. Many local producers practise free-range and organic agriculture, methods that cut down on the greenhouse gases that are produced per kilogram of meat.

## Buy products with less packaging

A lot of our food comes packaged in cardboard, plastic, or Styrofoam™. One way to avoid waste from packaging is to purchase whole foods and raw ingredients to cook from scratch. Farmers markets are good places to buy food without unnecessary packaging. You might also consider buying low-waste brands. For instance, some brands of cereal are only packaged in plastic bags, not a plastic bag and then a box; and shampoo bars and toothpaste tablets have little to no packaging.

## Preserve your bounty

Did you harvest a bumper crop from your garden or get a good deal on a case of fruit from the farmers market?

Consider preserving these summer delights to eat later on in the year. Canning, drying, freezing, and pressing are all preservation methods that will cut down on food waste. They also reduce packaging waste because the containers for preserved foods are often reused. Be sure to follow the proper food safety practices, particularly when canning, to ensure your food is safe to eat.

## Keep bees and hens

Urban beekeeping produces honey, a local sweetener that can be used to replace sugar. The bees also help to pollinate flowers.

In 2015, the City of Edmonton passed a bylaw that allows Edmontonians to keep backyard bees.

Urban hens provide a local source of eggs and meat. They eat organic food waste scraps, are pest managers, and can help to fertilize your yard naturally.

The City of Edmonton launched the Urban Hen Keeping Pilot Project to study the potential issues and concerns that are associated with keeping urban hens. In May 2019, with appropriate regulations, care, and management of urban hens in place, the limit on the number of permits issued was lifted.

[edmonton.ca/bees](http://edmonton.ca/bees)

[edmonton.ca/hens](http://edmonton.ca/hens)



# WATER

In Edmonton, all the water we drink and use to brush our teeth comes from the North Saskatchewan River through EPCOR's Rossdale and E.L. Smith Water Treatment Plants.

Once the water is used, it is treated at EPCOR's Gold Bar Wastewater Treatment Plant and returned to the same watershed. Your daily activities can affect the water quality in the North Saskatchewan River. We need to remember that we all live downstream of someone and try to follow "good neighbour" practices.

## Case study:

### What is a rain garden?

A rain garden, also known as a bioretention, is a planted area designed to soak up stormwater run-off from rooftops, driveways, and other impermeable areas.

Replicating the natural hydrological (water cycle) processes, rain gardens filter contaminants and reduce the run-off flowing out onto the streets or into the sewer systems.

Rain gardens are:

- Adaptable in size and shape.
- Landscaped with a variety of plants to fit the surroundings.
- Dry most of the time.
- Expected to have standing water during storms and are emptied within 48 hours.

For more information on rain gardens, visit: [epcor.com/learn/efficiency-conservation/outside/Pages/installing-a-rain-garden.aspx](https://epcor.com/learn/efficiency-conservation/outside/Pages/installing-a-rain-garden.aspx)

For other types of low impact development, visit: [epcor.com/products-services/drainage/flood-mitigation/Pages/low-impact-development.aspx](https://epcor.com/products-services/drainage/flood-mitigation/Pages/low-impact-development.aspx)

## Protect your watershed

Here are some things you can do to help protect your watershed:

- Use environmentally friendly products whenever possible. See the section on environmental certifications in the Sustainable Purchasing chapter for ways to identify these products.
- Compost or mulch yard waste to keep it out of waterways.
- Prevent soil erosion by landscaping to minimize run-off into the storm sewer system.
- Wash your car at a dedicated car wash instead of on your driveway. Some car washes reuse water multiple times, and this water is treated afterward.
- Prevent leaks from motor vehicles by performing regular maintenance. When it rains, all of the oil that has leaked out of vehicles gets washed into the storm sewer system.
- Dispose of your hazardous materials at collection facilities. Hazardous materials include used batteries and motor oil.
- Whenever possible, avoid using fertilizer, pesticide, and herbicide.
- Avoid using in-sink garbage disposal systems, which overload the water treatment facilities.

Another way you can help is by participating in citizens' groups to protect the watershed, or form your own watershed group. If you want to form your own watershed team, EPCOR and the North Saskatchewan Watershed Alliance can support your efforts.

### **What is a watershed?**

A watershed is the area of land that drains into one body of water. A watershed can be as small as the area of land that drains into a pond, or as large as the area of land that drains into a major river system.

## Watch what you flush

### Trash it, don't splash it!



As society uses more convenient, disposable products, EPCOR is dealing with sewer clogs caused by items that were never meant to be disposed of in the sewer system.

Some of the items being discovered in sewers are listed below.

Even if the packaging claims that these items are flushable, they usually aren't and cause sewer and pump blockages resulting in backups that can be costly for homeowners.

- Dental floss
- Disposable diapers
- Baby/cleaning/ facial wipes
- Cotton swabs
- Pharmaceuticals/medicine
- Feminine products (including tampons)

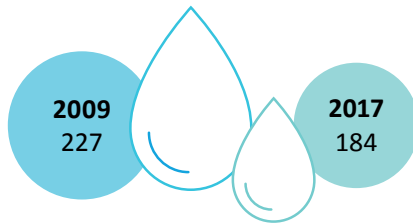
### Keep chemicals out of the watershed

Wastewater treatment facilities are not designed to remove most medicines, personal care products, and household hazardous wastes. As a result, these products will be returned untreated into our lakes and rivers.

Avoid using products with micro-beads and return unused pharmaceuticals to any local pharmacy for proper disposal. You can take household hazardous wastes to any Eco Station ([edmonton.ca/ecostation](http://edmonton.ca/ecostation)).

## WATER USED PER PERSON PER DAY

Litres



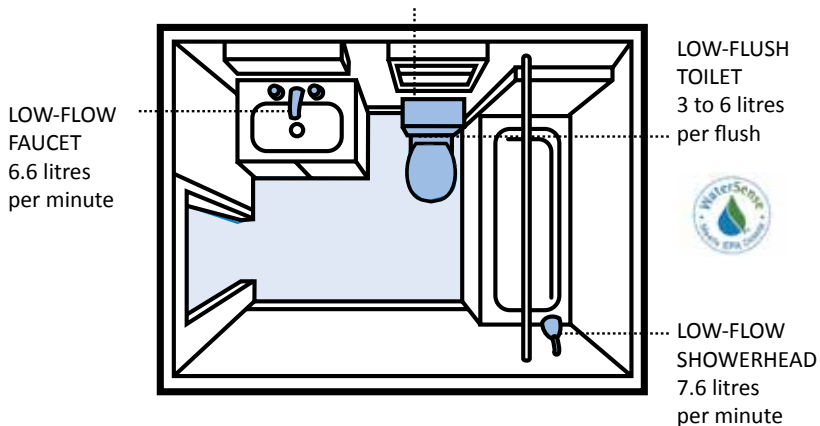
## Conserve water

According to EPCOR, the average single-family household in Edmonton uses 15,100 litres per month, or 225 litres per day. For more information on water conservation, visit: [epcor.com/learn/efficiency-conservation/Pages/default.aspx](http://epcor.com/learn/efficiency-conservation/Pages/default.aspx)

Keep a bottled supply of drinking water ready for emergencies—at least four litres of water per person, per day, for at least three days. For more information on how to prepare for a water or power outage, visit: [epcor.com/outages-safety/outages/prepare/Pages/default.aspx](http://epcor.com/outages-safety/outages/prepare/Pages/default.aspx)

Here are some quick tips to help you lower your day-to-day water consumption:

- Fix any leaky fixtures and regularly check your toilets, pipes, and faucets. Undetected leaks can account for up to 14% of a typical family’s water usage, and they can waste hundreds of litres of treated water in a year.
- Put a jug of water in the fridge so you don’t have to run the tap to get cold water.



- Turn off the tap while brushing your teeth.
- If you handwash dishes, don't leave the tap running to rinse.
- Scrape excess food off your dishes instead of rinsing them before loading the dishwasher.
- Wash only full loads in both the clothes washer and dishwasher, and use the lightest setting you can.
- Use a broom, not a hose, to clean your driveway.
- Install a rain barrel. In a year with regular rain patterns, a rain barrel (or barrels) can meet almost all your water needs for gardens and outdoor cleaning. You don't have to pay for rainwater, and it's much better for the environment than watering your plants with treated water!

PURCHASE  
THE MOST  
EFFICIENT  
WASHER AND  
DRYER

REPLACE  
YOUR FAUCET  
AERATORS

Replacing your appliances can also help.

- Replace an older washer and dryer with high-efficiency models.
- Reduce the amount of water used per flush by installing a low-flush toilet.
- Install low-flow faucet aerators and showerheads.

REPLACE  
YOUR  
SHOWERHEAD  
AND GO  
LOW-FLOW



### Toilet leak test

In just minutes, you can find out if your toilet is wasting thousands of litres of water due to a leak.

Here's how:

1. Remove the tank lid, then flush.
2. After the flapper/tank ball drops and the tank refills, add several drops of dark food colouring.
3. Wait at least 20 minutes without flushing.

If any trace of colour appears in the toilet bowl, there is a leak.

Leaks often occur at the flapper valve, which is simple and inexpensive to replace. Your local hardware store can recommend the best valve for you.

Source: EPCOR Water

# AIR

The quality of the air we breathe has a major effect on our health. The decisions we make every day in our homes and businesses affect the quality of the air we breathe. We are all responsible for keeping our air clean to maintain healthy communities, healthy ecosystems, and a sustainable economy for the future.

## Case study:

### Citizen science in air quality monitoring in Edmonton



**Alberta  
Capital  
Airshed**

Air quality in the Edmonton region is monitored by eight stations. The data from these stations is used to calculate the air quality health index daily.

The Alberta Capital Airshed (ACA) is a group made up of government, non-government organizations, and industry representatives. It monitors air quality, provides air quality information to the public and other stakeholders, and promotes education and awareness of air quality issues.

The ACA and the City of Edmonton would like to partner with residents in a citizen science initiative. They have made AirBeams—handheld monitoring devices—available to individual residents and organizations like schools and community leagues. Data collected using the monitors is uploaded to an online map: [habitatmap.org/aircasting](https://habitatmap.org/aircasting). The monitors and software are made available through a non-profit group called HabitatMap that aims to help citizens improve the environment in their city.

[edmonton.ca/  
airquality](https://edmonton.ca/airquality)  
[capitalairshed.ca](https://capitalairshed.ca)



Photo credit: Aryn Machelles



## Improve indoor air quality

The average Canadian spends a lot of time inside at home, work, or school. The air quality inside of these buildings is not always as good as outside. It may contain pollutants from cooking, paints, chemical cleaning agents, air fresheners, perfumes, or just poor ventilation. We can help improve indoor air by simple measures like having more plants. Plants absorb carbon dioxide and emit clean oxygen. Some plants also purify the air.

### Plant species that promote clean air:

Areca palm

Reed palm

Dwarf date palm

Boston fern

Janet Craig dracaena

English ivy

Australian sword fern

Peace lily

Rubber plant

Weeping fig



Photo credit: KENPEI  
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Photo credit: Digigalos  
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Photo credit: Mokie  
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[creativecommons.org](http://creativecommons.org)  
via Wikimedia Commons

### Here are some other things that you can do to improve indoor air quality:

- Use HEPA filters in vacuums and air cleaners.
- Keep the humidity level between 30 and 50%.
- Do not idle cars, lawnmowers, or other engines in the garage, especially if the garage is attached to the house.
- Use exhaust fans in kitchens and washrooms.
- Buy low volatile organic compound (VOC) paint, flooring, and furniture.
- Avoid smoking inside.

- Choose low-emitting household and personal cleaners and detergents that have been certified as green by a third party (see the Sustainable Purchasing chapter).
- Minimize the use of harsh cleaners, solvent-based cleaners, or cleaners with strong fragrances.

### DAYS WHEN AIR QUALITY HEALTH RISK IS LOW Percentage



### Help improve outdoor air quality

The Edmonton Capital Region is currently not meeting federal standards for fine particles in the air. Since 2010, two monitoring stations in the region have consistently reported levels above the national standard. Exposure to these levels can have immediate and long-term health effects.

For more information on air quality, visit [edmonton.ca/airquality](http://edmonton.ca/airquality).

We can all take actions to improve air quality in Edmonton:

- Limit the burning of wood in backyard fires, fireplaces, and wood stoves. If you do have a fire, be sure to burn dry, untreated wood. Stoves should meet the Canadian Standards Association emissions standards.
- Drive less. Transportation causes about 32% of the emissions in Edmonton. Plan your vehicle trips wisely, rideshare, and walk, cycle, or use transit whenever possible.
- Follow Air Quality Advisories issued by Alberta Health Services during days of poor air quality occurring in Edmonton due to wildfire smoke. Plan for modified outdoor activities when outdoor air quality is poor. Visit: [alberta.ca/air-quality-and-health.aspx](http://alberta.ca/air-quality-and-health.aspx)
- You can also set up your own wi-fi enabled Air Quality Health Index Light Bulb to inform you about Edmonton's current air quality. See instructions at: [edmonton.ca/sites/default/files/public-files/AQHI-Light-Bulb-Setup-Guide.pdf](http://edmonton.ca/sites/default/files/public-files/AQHI-Light-Bulb-Setup-Guide.pdf)

DRIVE BETTER  
DRIVE SMARTER

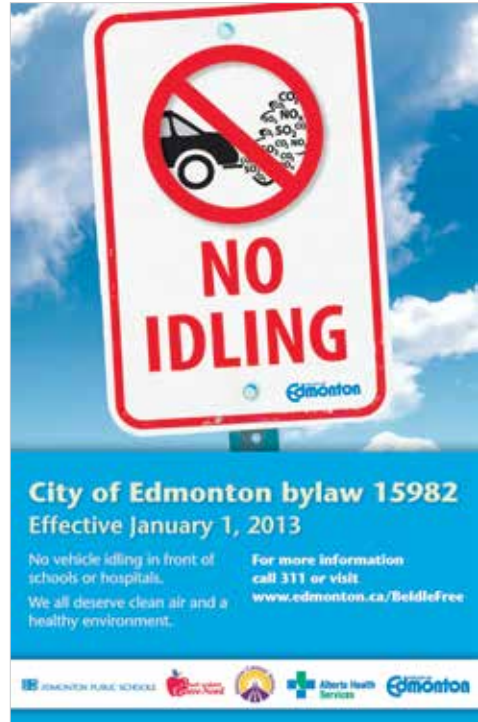
## Be idle free

### What is idling?

Idling means letting your car run when you are not driving. Unnecessary idling costs Canadians millions of dollars every year, and it's a major contributor to climate change.

### What can you do to reduce idling?

- Download our Be Idle Free resources to start your own Be Idle Free campaign: [edmonton.ca/beidlefree](http://edmonton.ca/beidlefree)
- Be more aware of the amount of time you idle.
- Reduce “warm-up” idling to 60 seconds before driving away—just make sure your vehicle’s windows are clear. Wheel bearings, steering, suspension, transmission, and tires only warm up when the vehicle is moving. It typically takes at least five kilometres of driving to warm up these components.
- Turn your engine off if parked for more than 60 seconds during reasonably warm weather (above -10°C).
- Avoid using a remote car starter during reasonably warm weather (above -10°C).
- If you’re stuck in traffic, using a drive-through, picking up someone at school, or waiting for a train to go by, shut off the vehicle. Ten seconds of idling uses more fuel than restarting your engine.



# ENERGY

We can conserve energy by making upgrades to our houses, like adding insulation and replacing windows. But we can also decrease household energy use just by making simple changes to what we do in our homes each day.

## Case study:

### Reaching net zero

Architect Shafraaz Kaba lives with his wife, Serena, and their son, Adar, in a net-zero house that they designed and built overlooking Edmonton’s river valley. A net-zero house is designed to be very energy efficient and to generate as much electricity as it uses over the course of a year.

Although the house is energy efficient, they are still careful with their everyday energy use.

For example, they turn out the lights when they aren’t in a room. They also have energy-efficient appliances like an induction stove.

Serena and Shafraaz conserve energy to ensure a healthy planet for Adar and future generations.

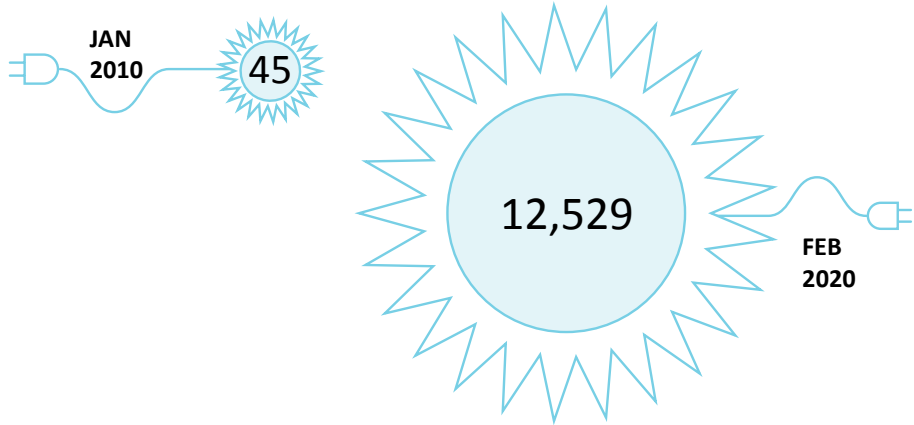
And Adar stays involved too: “I turn off the power bar to all my gaming devices!” he says. “And I really like how we rely on the sun to heat our house and not a furnace!”



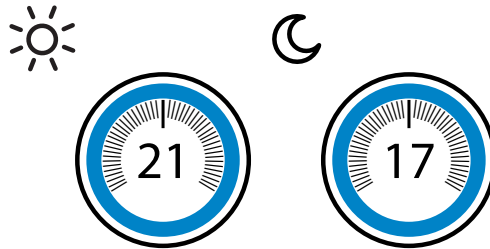
Photo credit: Shafraaz Kaba

## EDMONTON SOLAR PHOTOVOLTAIC CAPACITY (CUMULATIVE)

Kilowatt hours



## Keep warm with less energy



A programmable thermostat lets you set the furnace to turn down automatically at times when you don't typically need as much heat (for example, at night and when everyone is away at work or school) and to turn it up when you do.

You can also change or clean your furnace filter monthly during the cold season to improve efficiency. For better air flow and heat distribution, make sure there's no furniture blocking your heat vents.

And instead of turning up the heat when you feel a little chilly, consider putting on a sweater. Adding rugs or carpets to a space can also help keep you warm.

For more ways you can be energy efficient, visit: [changeforclimate.ca](https://changeforclimate.ca)

SET YOUR  
THERMOSTAT  
TO 17-21  
DEGREES  
CELSIUS

## Use a fan instead of air conditioning

USE FANS  
INSTEAD OF AIR  
CONDITIONING



Air conditioning uses a tremendous amount of energy. Fans can provide comfort and air movement on hot summer days, and they use far less energy than air conditioning. Better yet, if there is a cool breeze, open a window.

## Let the sun in...or keep it out!

OPEN AND  
CLOSE YOUR  
BLINDS  
SEASONALLY



You can use the sun's energy to heat and light up your house when it is cold and block it from your house when it is warm and sunny. Simply open your blinds on sunny, winter days and close them on hot, summer days.

## Get the most out of your appliances

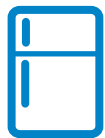
USE A TOASTER  
OVEN FOR  
SMALLER  
MEALS



Always try to use the right appliance for the job. Heating up something small? Consider using the toaster oven instead of the full-size oven. Smaller appliances such as toaster ovens, microwaves, and slow cookers use less energy than the stove, even if cooking takes longer.



Unless you need a specific baking temperature, you can begin heating your food right when you turn on the oven instead of waiting for it to preheat. When using the stove top, matching pots and pans to the right size of burner and using lids also save energy.



There is no need to keep that fridge cooler than the suggested setting or to use the heat-dry setting on your dishwasher. If possible, run the appliance only when there is a full load, maximizing energy efficiency. Some appliances even come with

eco-setting suggestions, such as the cold water setting on your washer. These will help you use less energy.

Basic maintenance to ensure appliances are working as efficiently as possible can also cut down on electricity costs. Examples include vacuuming the coils at the back of your fridge, ensuring the seals on your fridge and stove are tight, and draining the sediment from the bottom of your hot water tank.

When you need to replace an appliance, look for the Energy Star® symbol. Energy Star is a voluntary labeling program to identify and promote energy-efficient products.

WASH CLOTHES  
IN COLD WATER

## Take a bite out of vampire power



Phantom or vampire power is electricity used by a device when it is turned off. This wasted power is responsible for up to 10% of home electricity use. An easy way to avoid this problem is to plug your devices into a power bar and turn the bar off when not in use. Some power bars can leave one or two items fully powered while automatically shutting off the others when not in use.

Energy Star products are the lowest consumers of vampire power when they are in standby mode. To find the most energy-efficient electric appliances, check out: [natural-resources.canada.ca/energy-efficiency/energy-star-canada/energy-star-products/why-buy-energy-star/13604](https://natural-resources.canada.ca/energy-efficiency/energy-star-canada/energy-star-products/why-buy-energy-star/13604). But remember, even with energy-efficient appliances, it is still better to unplug them or turn off the power bar when they're not in use.

## No-power alternatives

There are many instances where there are alternatives to using electricity. Use the stairs not the elevator. Use a clothesline instead of a clothes dryer. Use hand-powered kitchen tools such as manual mixing beaters, coffee grinders, juicers, and can openers. Sit by a window to take advantage of natural light instead of turning on the lights. Use a push mower to mow your lawn.

DRY YOUR  
CLOTHES  
NATURALLY

## Make easy upgrades and adjustments

### Insulate pipes

Insulating hot water pipes keeps the water in the pipes warmer. That way, less water needs to be heated to bring hot water to a faucet.

### Adjust your hot water

Check to make sure your water heater is set to 49°C (120°F) to prevent unnecessary energy drain.

### Install caulking and weatherstripping

Keep cold air out of your home by caulking and weatherstripping around windows and doors. You can also insulate around wall sockets and light switches on walls that back onto the outdoors.

WEATHER-  
PROOF  
YOUR HOME

## Save computer power



Laptops, being smaller, use less energy than desktop computers. But whichever you have, you should set the computer to go into standby or sleep mode whenever it hasn't been used for minutes.

If you're away from the computer for an extended time, it's best to turn it off (including the monitor if you're using a desktop).

## Adjust the lighting

SWITCH  
TO LED  
BULBS



The best energy-saving device is the light switch. Try to get into the habit of turning off the lights when a room is not occupied. Consider using LEDs, which are more energy efficient and longer lasting. Also, think about how many bulbs you actually require in a room. Task lighting, such as a reading lamp, can focus light only where you need it.

Lighting controls such as automatic timers, motion sensors, and dimmer switches can also help reduce electricity usage.

## Get an energy audit

If you're not sure how you can use energy more efficiently, consider having an energy audit done in your home. Watch an energy auditor at work and see how an audit can help reduce your home's utility bills and environmental impact.

[edmonton.ca/energyauditvideo](http://edmonton.ca/energyauditvideo)

## Buy sustainable power

In Alberta, we have the option of purchasing our electricity from a number of retailers. Some of these retailers offer energy produced in renewable ways, using technologies such as solar, wind, and hydro.



# TRANSPORTATION

## Get around sustainably

We are shaping an Edmonton that will meet the needs of our diverse and growing urban and regional population. Our transportation priorities must take into account increasing environmental concerns, as well as the ongoing investment needed to maintain our transportation infrastructure.

The City of Edmonton's City Plan aims to encourage Edmontonians to get around in ways that are sustainable in the long term. That means shifting away from single-occupant cars toward cycling, walking, ridesharing, or public transit.

Sustainable transportation choices support healthy, vibrant, and livable communities.

[edmonton.ca/sustainabletransportation](http://edmonton.ca/sustainabletransportation)

START  
COMMUTING  
SUSTAINABLY  
ONCE A WEEK

COMMUTE  
SUSTAINABLY  
YEAR-ROUND

VACATION  
LOCALLY  
INSTEAD  
OF ABROAD

### Case Study:

#### Helping people cycle



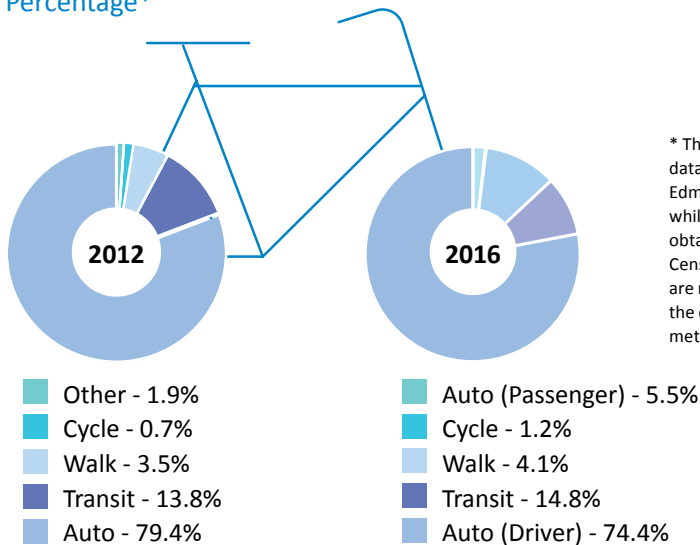
Bike Edmonton is a non-profit organization run by Edmontonians who are committed to promoting cycling in our city. It offers many services for individuals who are looking to start cycling or to increase their safety and comfort on the road. Bike Edmonton organizes presentations for workplaces and community groups on cycling to work, helps to map out bike routes for individuals, and holds workshops on do-it-yourself bike maintenance and riding topics.

Bike Edmonton runs two community bike shops in Edmonton: Bike Edmonton Downtown and Bike Edmonton South. At these shops, you can get help tuning up your bike, buy an affordable used bike, or purchase new parts for your bike.

[bikeedmonton.ca](http://bikeedmonton.ca)

## MODE OF TRANSPORTATION FOR COMMUTE TO WORK

Percentage\*



\* The 2012 commute to work data was obtained from the Edmonton Municipal Census while the 2016 data was obtained from the Federal Census. Direct comparisons are not recommended given the different data collection methods used.

## Cycle



The City of Edmonton is actively working to create a comprehensive cycling network for Edmontonians. There are already many great mixed-use paths, on-street bike lanes, and river valley trails that cyclists can use to get around our city. Riding your bike can often be faster for shorter trips, and you don't have to find and pay for parking.

Cycling has many personal benefits: it's convenient, it saves money, it helps reduce stress, and it's good exercise. Leaving your car at home and travelling by bike also has many benefits for the community and the environment. It helps to improve air quality in our city and to combat climate change because it's a zero-emission mode of transportation. It also reduces traffic, which means fewer idling cars.

And finally, cycling is fun! Nothing can make you feel the joy of childhood again like jumping in the saddle.

To learn more about how to use our bike routes, visit:

[edmonton.ca/cycling](http://edmonton.ca/cycling)

[edmonton.ca/transportation/cycling\\_walking/bike-routes-how-to](http://edmonton.ca/transportation/cycling_walking/bike-routes-how-to)

[edmonton.ca/bikemap](http://edmonton.ca/bikemap)

## Walk



Walking is another healthy and environmentally friendly way to get around. It reduces traffic congestion and also helps keep your neighbourhood safe by putting eyes on the street.

Here are some ways you can get yourself and your community walking more.

### Start a walking school bus for your local school

A walking school bus is a group of children, led by a parent or adult volunteer, that walks to and from school together. It's similar to a regular school bus in that it has a set route with set stops to pick up students along the way. A walking school bus has many benefits. It gets kids active, improves air quality, reduces congestion, and increases traffic safety around school zones. It's also an easy way for busy parents to volunteer in the school community.

[shapeab.com](http://shapeab.com)

### Get strolling with a community walking group

This is another great way to get active and to give residents a first taste of what it is like to walk around their community. It might be more enjoyable and take less time to walk to that local coffee shop or grocery store than you thought!

### Walking Resources

The City of Edmonton has a number of resources to help you find walking trails, historical tours, and safe walking tips. Find resources at:

[edmonton.ca/walk](http://edmonton.ca/walk)

## Rideshare



Save money and reduce the stress of your everyday commute.

Ridesharing means prearranging a ride with someone who lives close to your home and works in a similar location. Ridesharing once a week can save you more than 10% of your commuting costs.

You can also create a van pool for kids' sports and lessons. This will reduce resource use and emissions and give busy parents a break from having to drive kids back and forth.

[edmonton.ca/transportation/driving-rideshare](http://edmonton.ca/transportation/driving-rideshare)

DRIVE AN  
ELECTRIC  
VEHICLE

## Carshare

Carshare services like Communauto allow you to rent a vehicle for a short amount of time. It can help ease congestion, avoid wasted gas, and reduce your GHG emissions by 10%. Plus, you'll save on all operating, parking, insurance, and maintenance costs by only using a carshare vehicle when you need one.

[alberta.communauto.com/edmonton](http://alberta.communauto.com/edmonton)

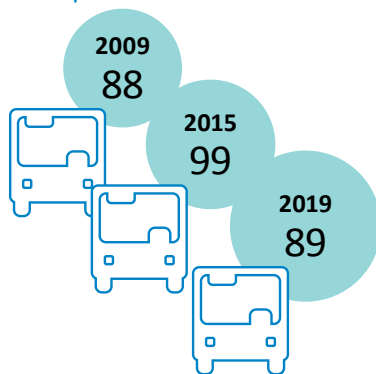
## Take transit and LRT



Hop on board and let someone else do the driving! As Edmonton grows, light rail transit (LRT) and buses are two very important strategies for reducing congestion, improving air quality, and getting people around quickly and efficiently.

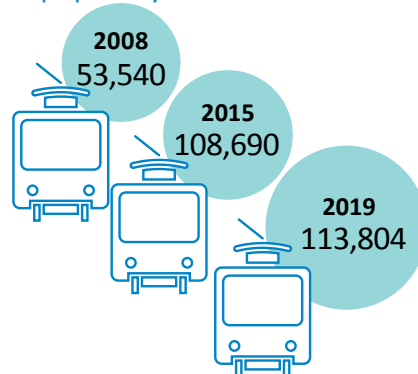
### TRANSIT RIDERSHIP

Per capita



### AVERAGE DAILY LRT BOARDINGS

Trips per day



Plan your trip with the ETS Trip Planner: [edmonton.ca/takeETS](http://edmonton.ca/takeETS)

Track your bus anywhere, anytime from your phone or computer. All ETS buses can be tracked in real-time, using the recommended tools—ETS Live® Bus Finder, Transit app, or Google Maps.

[edmonton.ca/ETSLive](http://edmonton.ca/ETSLive)

In partnership with Edmonton employers, the ETS@Work program offers employees up to a 24% discount on a regular adult monthly pass.

[edmonton.ca/ETSatwork](http://edmonton.ca/ETSatwork)

You don't have to give up your car entirely to use transit. Try park and ride!

[edmonton.ca/parkandride](https://edmonton.ca/parkandride)

Also, remember that bikes are allowed on buses and LRT.

[edmonton.ca/bikesonETS](https://edmonton.ca/bikesonETS)

You can also try electric scooter rentals or ride-sharing services to get to your destination, many of which operate in Edmonton.

[edmonton.ca/bikesandscooters](https://edmonton.ca/bikesandscooters)

## Transit-oriented development

Transit-oriented development (TOD) is an exciting approach to achieving Edmonton's vision of a more compact and sustainable city, where more people walk, cycle, and use transit.

TOD brings together housing, shopping, and employment along a network of walkable and bikeable streets within a five-minute walk in any direction of a transit station (approximately 400 m).

Over the next 30 years, TOD has the potential to transform neighbourhoods around LRT stations and transit centres into vibrant hubs of mixed-use activity.

### How TOD can benefit residents:

- Increased transportation choices
- Fewer and shorter car trips
- Lower personal transportation costs
- Easy access to daily needs
- Improved health through increased physical activity

### How TOD can transform the city:

- Increased transit ridership and revenue
- More efficient use of infrastructure like LRT, sewers, and other services
- Reduced air pollution and energy use
- Revitalization of neighbourhoods
- Greater possibility of aging in place

# SUSTAINABLE PURCHASING

Every day, we purchase goods and services to fulfill our needs. Our purchasing decisions can have a huge impact on the environment, greenhouse emissions from production and transportation, and waste. The following tips can help you make environmentally friendly purchasing decisions.

## Case study:

### Sustainable purchasing at the University of Alberta



In 2011, the University of Alberta began to change the way that goods and services were purchased on its campuses. It created a set of sustainable purchasing principles that take into account social, economic, and environmental considerations for buying everyday goods. In 2018, it furthered this work to encourage suppliers to the university to prioritize sustainability, by publishing its Sustainable Procurement Guidelines and Supplier Code.

The university's principles and guidelines include recycled content, third-party certifications, durability, energy efficiency, and excess packaging. The university has already had many successes in applying these principles.

For example, the University of Alberta has been designated as a Fair Trade Campus since 2018, its preferred supplier for printing is certified by the Forest Stewardship Council (FSC), and all cleaning chemicals must have third-party green certification.

[ualberta.ca/vice-president-finance/supply-management-services/sustainablepurchasing/index.html](http://ualberta.ca/vice-president-finance/supply-management-services/sustainablepurchasing/index.html)

## Sharing economy

A sharing economy allows people to borrow or rent items instead of buying them. The oldest and most popular example of a sharing economy is the library ([epl.ca](http://epl.ca)), where one book is read by hundreds of people over the course of its life.

A newer example of the sharing economy is car sharing, where a fleet of cars are shared by people who pay for the time they use them.

Another example is tool lending libraries, where you can borrow a drill to use for a day or two instead of having to buy one.

[edmontontoollibrary.ca](http://edmontontoollibrary.ca)

If you're a non-profit group, you can rent recreational equipment from the Edmonton Federation of Community Leagues.

[efcl.booqable.shop](http://efcl.booqable.shop)

## Decide what you really need

Before purchasing a product, ask yourself the following questions: Are there alternatives to purchasing the product? Can something you already own be used instead? For example, you may be able to use a cleaning chemical for more than one purpose, or make something from things you have around the house.

If you can't find a substitute or make something on your own, could you borrow it from someone? For example, could you borrow a tool instead of buying one? Do you have things you don't use that you could trade for things you need? Is it something you can rent?

## Look for eco labels

When a product has an eco label, it means that a third party has extensively reviewed the product and confirmed its sustainability based on predetermined criteria. This reduces the guesswork for consumers and makes for a simple, sustainable purchase.

Some common eco labels are included on the next page. A full list of eco labels and their descriptions can be found at [ecolabelindex.com](http://ecolabelindex.com).

## ECO LABELS



**Eco Logo**  
Reduced environmental impact



**Green Seal**  
Reduced environmental impact



**Canada Organic**  
Contains at least 95% organic ingredients



**Energy Star**  
Energy-efficient equipment



**USDA Organic**  
No antibiotics, pesticides or other harmful chemicals used in production



**Fair Trade**  
Produced in improved living/working conditions in disadvantaged regions



**FSC Certified**  
Promotes environmental, social, and ethical management of forests

## Choose less paper and packaging

Try to purchase products with minimal packaging—for instance, bulk products instead of those that are individually wrapped.

When you buy products that come packaged in plastic, look for the recycling symbol on the pack. A lot of plastic packaging is made of mixed plastic sources and does not have this symbol because it is not recyclable.

Try to buy paper products and packaging that are FSC-certified or 100% post-consumer recycled. Buying products that contain a percentage of post-consumer waste helps reduce our consumption of natural resources.

Also, sign up to receive bills and statements electronically, and consider making payments online or through your mobile phone.

## Buy local

Buying local helps to support Edmonton's economy and encourages growth. You can buy local at farmers markets or some locally-owned shops. Find information on ways to buy local on a regular basis: [sustainablefoodedmonton.org/resources](https://sustainablefoodedmonton.org/resources)



## Buy used or second-hand

Another great way to cut down on our use of natural resources and energy and keep items out of the landfill is to buy used or second-hand products. Edmonton has an extensive network of thrift stores where you can purchase personal, recreational, and household items. Social media platforms and websites such as Kijiji also allow people to buy and sell used items. Often, you can save money by buying things that are slightly used instead of brand new.

## Make your own



Two generations ago, almost everything we used was made at home. It is very easy to make your own household cleaners and personal care products.

When you make your own products, you can reduce waste by using jars you already have at home. Also, homemade products are normally safe for the environment because they are chemically simple and non-toxic.

Search online for some good recipes for earth-friendly cleaning products.

## Mend and repair



Have a broken zipper on your favourite jacket? Rather than tossing it, consider taking it to a tailor for repair. Flex your sewing skills by repairing small rips and holes in clothing yourself. If you aren't confident with a needle and thread, events like Repairathons are a great option. They bring people together with clothing in need of fixing with people who know how to fix clothes.

Consider giving old furniture a tune-up with a new coat of paint, tightening up loose legs, or restoring and rehydrating wood with a coat of coconut oil.

Fixing your electronics may seem daunting, but simple repairs like replacing an old battery in a phone, or clearing out dust clogging up the cooling fan in a laptop, can add years to an old item. iFixit is a fantastic resource for electronic repairs, and they often sell the parts you need direct on the site.

[ifixit.com](https://www.ifixit.com)

## Tips for green holidays, meetings, and parties

### Gift ideas

When you are looking for a gift, try to shop for locally made goods, whether at a local independent store or a farmers market. One practical gift idea is a subscription to a weekly food box from a local organic farm. Or if someone is hard to shop for, you might consider donating to a charity for something that person cares about. For example, you could donate to the local animal shelter as a gift for a pet lover, or to a charity that provides lunches to schoolchildren as a gift for a teacher.

### Food and entertaining

If you are serving food at an event, try not to use disposable cups and plates. Instead, borrow extra dishes from neighbours and family members, or rent dishes from a catering service.

Making food from scratch using local and organic ingredients helps to reduce waste and food miles. If you are ordering food in, consider finding a caterer that uses local and organic food. Ask the caterer to bring your food in reusable dishes.

### Event logistics

Instead of using paper flip charts at a meeting, consider erasable white boards. You can also use a projector and screen to display materials such as the agenda so that you don't have to print them out.

And instead of using paper registration forms, you could register attendees electronically using one of many web-based services.

Encourage participants to bring their own:

- Reusable bag
- Water bottle or travel mug
- Reusable dish and cutlery
- Lanyard or name tag holder
- Portable electronic devices, such as iPads or laptops, for taking notes

# WASTE

Waste Services focuses on a healthy city and promotion of waste reduction to help protect the environment, conserve valuable resources, send less waste to landfill, and reduce greenhouse gas emissions.

Waste Services follows a Zero Waste Framework, which prioritizes waste reduction and reuse over diversion. Find it at:

[edmonton.ca/programs\\_services/garbage\\_waste/zero-waste-framework](https://edmonton.ca/programs_services/garbage_waste/zero-waste-framework)

## Reduce

Every Edmontonian has the power to reduce the waste they make at home and at work.

Reducing waste saves money, helps protect our environment and conserves valuable resources.

There are a few small changes we can all make to help reduce waste.

### Case study:

#### Reducing single-use waste

When Edmonton's Single-use Item Reduction bylaw came into effect, many businesses were already successfully implementing changes to reduce single-use items.

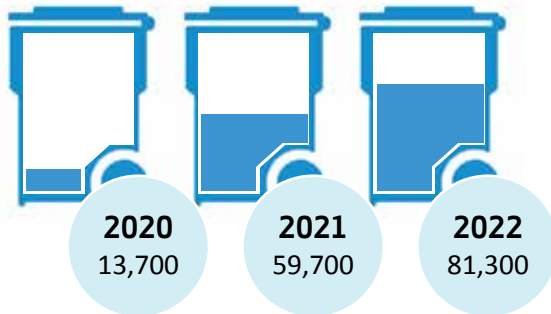
"I realized how much waste a small business creates, and how small changes can really add up to make a big difference," says Lesley Gruhn, owner of Anvil Coffee House.

Customers visiting Anvil are able to bring their own reusable cups, drink in-house from ceramic mugs, and even bring in reusable containers to buy their beans in bulk.

"We've had really positive feedback from customers. It really makes a difference that they can bring their own cup," says Gruhn. "Beyond reducing waste, customers just love the experience of drinking out of reusable cups. Coffee tastes better in a ceramic mug."

Learn more about how Anvil accepts customers' reusable mugs safely: [transforming.edmonton.ca/local-businesses-take-the-lead-on-reducing-single-use-waste](https://transforming.edmonton.ca/local-businesses-take-the-lead-on-reducing-single-use-waste)

## FOOD SCRAPS AND YARD WASTE PROCESSED Tonnes per year



### Reduce food waste

There are two kinds of food waste:

- Unavoidable: food-related waste that isn't typically eaten, such as banana peels, egg shells, coffee grounds, and bones
- Avoidable (also called wasted food): foods that could have been eaten before they were thrown away, such as spoiled food

You can reduce avoidable food waste by carefully planning meals and eating—and properly storing—leftovers. Learn more at:

[edmonton.ca/FoodWaste](https://edmonton.ca/FoodWaste)

You can put unavoidable food waste to use by putting it in your food scraps cart or composting at home.

### Composting



Composting at home is fun, easy, and builds healthy soil that helps your garden thrive. You can start simple and learn as you go. All you need is greens, browns, water, air, and a bin to keep them in.

No yard? No problem! For information to help you start composting in any space, visit: [edmonton.ca/Compost](https://edmonton.ca/Compost)

## Single-use items

The City of Edmonton has a bylaw aimed at reducing the use of single-use items like shopping bags, cups, napkins, straws, condiment packets, and more. For more information about the bylaw, and resources to help you reduce single-use items at community and charity events, visit: [edmonton.ca/SingleUse](https://edmonton.ca/SingleUse)

## Go bagless



Going bagless means simply removing the bag from your mower and leaving the clippings on the lawn while mowing your grass. It is the best practice to maintain a healthy lawn while saving yourself the time and effort required to bag the clippings. Learn more at: [edmonton.ca/GoBagless](https://edmonton.ca/GoBagless)

LEAVE GRASS  
CLIPPINGS ON  
THE LAWN

For more ideas on reducing waste, see the Sustainable Purchasing chapter.

## Reuse



Reuse means to use an item over and over again for the duration of its life.

Reusing items:

- Saves money
- Prevents usable items from going to landfill
- Conserves energy and resources

The City of Edmonton Reuse Centre currently offers reusable items to Edmonton residents free of charge. Individuals and businesses can also donate items to be reused by others.

Visit [edmonton.ca/ReuseCentre](https://edmonton.ca/ReuseCentre) to learn what the Centre does and doesn't accept, and sign up for waste reduction, repair, and crafting workshops.

For items that the Reuse Centre doesn't accept, visit [edmonton.ca/ReuseDirectory](https://edmonton.ca/ReuseDirectory) to find a local organization that will accept items in good condition.

## Residential waste collection

The City of Edmonton collects waste from all Edmonton homes. By properly sorting their recycling and food scraps, residents can help put their waste to beneficial use.

There are two types of waste collection service: curbside collection (used by single-unit residences and some row houses) and apartment and condo collection.

### Curbside collection

All curbside collection customers sort their waste into food scraps, recycling, garbage, and yard waste.

- **Food scraps** include all food waste, like fruit and vegetable peelings, spoiled food, and plate scrapings. They go in your green food scraps cart and are collected weekly from spring to fall, and every two weeks in winter.
- **Recycling** includes cardboard, paper, plastic containers, glass bottles and jars, metal food cans, and beverage containers. It goes in see-through blue bags and is collected weekly.
- **Yard waste** includes fallen leaves, grass clippings, and garden trimmings. It goes in double-ply paper bags or see-through plastic bags. Yard waste is collected twice in spring and twice in fall on specific days.
- **Garbage** includes food wrappers, worn-out clothing, diapers, and other household waste that cannot be recycled. It goes in your black garbage cart and is collected every two weeks.

### Apartment and condo collection

Most apartments and condos in Edmonton sort their waste into shared recycling and garbage bins. By 2027, all properties will have shared food scraps bins or carts as well. This implementation is currently underway.

To learn more about waste collection service, visit:

[edmonton.ca/WasteCollection](https://edmonton.ca/WasteCollection)

## Sorting your waste

WasteWise is the City of Edmonton's waste management app for residents. It helps residents with sorting instructions, collection schedules, customizable notifications, and more.

Download the mobile app or use it online at:  
[edmonton.ca/WasteWise](https://edmonton.ca/WasteWise)

## Waste Drop-off

### Eco Stations



Eco Stations are convenient waste drop-off sites for your batteries, electronics, household hazardous waste, and more. Hazardous waste is safely disposed of, dangerous substances are kept out of the environment, and many items are recycled.

Many items are accepted at no charge; other items require a fee.

There are four Eco Stations located throughout the city. To find hours, fees and locations, visit: [edmonton.ca/EcoStations](https://edmonton.ca/EcoStations)

### SUMMER HOURS

Monday-Saturday: 9 am to 6:30 pm  
 Sunday, holidays: CLOSED

### WINTER HOURS

Tuesday-Saturday: 9 am to 5 pm  
 Sunday, Monday, holidays: CLOSED

#### STRATHCONA

5150-99 Street



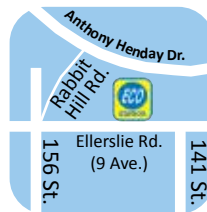
#### CORONATION

11440-143 Street



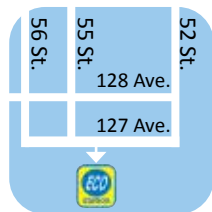
#### AMBLESIDE

14710 Ellerslie Road



#### KENNEDALE

5355-127 Avenue



## Recycling Depots



Edmonton's Community Recycling Depots are a convenient way to dispose of recyclables from your home or small business. Most locations are open seven days a week, 24 hours a day. Each bin has a label on the front to tell you what items should be placed in it. To find locations and accepted items, visit: [edmonton.ca/RecyclingDepots](https://edmonton.ca/RecyclingDepots)

## Big Bin Events

The City of Edmonton hosts Big Bin events for household items that can't be set out for regular waste collection. Several weekend events are held in various locations each year. Residents can drop off items such as old couches, chairs, mattresses, and appliances free of charge. Computers and other electronics will also be accepted for recycling. Learn more at: [edmonton.ca/BigBinEvents](https://edmonton.ca/BigBinEvents)

## Edmonton Waste Management Centre

The Edmonton Waste Management Centre (EWMC) accepts waste from residents and non-residential customers. Find accepted items and fees at: [edmonton.ca/EWMC](https://edmonton.ca/EWMC)

## Volunteer as a Master Composter Recycler

Master Composter Recycler volunteers are Edmonton's waste reduction experts. They volunteer by teaching friends, family, neighbours, and co-workers about sustainable waste habits.

This is a "learn and serve" volunteer program, offered annually. Volunteers complete 35 hours of free training, followed by at least 25 hours of volunteering.

Learn more and apply at: [edmonton.ca/MCRP](https://edmonton.ca/MCRP)



# EMERGENCY PREPAREDNESS

With climate related disasters occurring more frequently in Canada, now is the best time to prepare for emergencies. Being climate prepared means understanding what climate hazards to expect, how to mitigate them before they become an emergency, and how to respond in the event of an emergency.

## Shelter in Place

Preparing your home's resilience is a good starting point. Be prepared to stay at home for many hours or days in the event of an emergency. In the event you are required to leave your home, you should have a "grab and go" kit that will help you to survive outside of your home for an extended period. For examples of emergency preparedness kits, see the Personal Preparedness section below.

## Know your neighbours

Another tip that can be critical for survival is to know your neighbours. During an emergency situation, the first responder is not typically a trained First Responder but usually ends up being a friend or neighbour.

## Personal preparedness



Have passports, insurance documents, bank information, and other important documents in one place and ready to take in the event of an evacuation. Don't forget about your four-legged family members! Pet supplies, food, water, identification, and vaccination papers should all be ready to go as well.

For more information, visit: [edmonton.ca/emergencypreparedness](https://edmonton.ca/emergencypreparedness)

## Personal Preparedness Emergency Kits

### Home Kit

- Cash and credit cards—include small denominations
- Ready-to-eat and high-energy food
- Manual can opener
- Bottled water or water container with at least four litres per person per day
- Water-purifying tablets
- Lanterns, flashlights (with extra batteries), glow sticks
- Candles with matches
- Wind-up/battery-operated radios, extra batteries, and alternate heat sources
- First aid kit
- Whistle (for each member of the family)
- Portable or solar cell phone charger

### Vehicle Kit

- Extra clothing, including hats, gloves, and scarves in cool seasons
- Fully-charged cell phone and a cell phone car charger
- Blanket
- Ice scraper and brush in winter
- Windshield washer fluid
- Booster cables
- Basic tools including a shovel
- Sand or kitty litter
- First aid kit
- Reflective triangle
- Flashlight, glow sticks
- Small candle in a tin can and waterproof matches
- Non-perishable ready-to-eat, high-energy food
- Drinking water

## Evacuation Kit

- Emergency contact lists with phone numbers (for every member of your family)
- Photos of each member of your family
- Credit cards and cash—include small denominations
- Insurance and important documents, and copies of government identification on an external drive
- Prescription and non-prescription medications
- Special needs items for baby, elderly, disabled, pets
- Extra clothes
- Toiletry kit (for every member of your family)
- Rolls of toilet paper
- Whistle (for every member of your family)
- First aid kit
- Lanterns, flashlights (with extra batteries), glow sticks
- Candles and waterproof matches
- Wind-up/battery-operated radios, extra batteries, and alternate heat sources
- Bottled water or water container with at least four litres per person per day
- Water-purifying tablets
- Non-perishable food
- Manual can opener
- Sets of utensils (for every member of your family)
- Hand sanitizer
- Garbage and recycle bags
- Games/toys to pass the time

## Evacuation Pet Kit

- Photo(s) of your pet(s)
- Traveling bag or sturdy carrier and blanket
- Food, water, and feeding dishes
- Medications
- Extra leash/harness
- Disposable litter trays (aluminum pans)
- Litter or paper towels

## Climate Hazards



In addition to being ready for emergencies, different climate hazards come with their own unique issues that we need to be prepared for.

### Fire

- Avoid the area
- Store electronic copies of important documents safely
- Practise your home evacuation plan regularly with everyone who lives there
- Pack extra copies of important contact numbers and identification. Learn more about fireproofing your house at: [alberta.ca/firesmart](http://alberta.ca/firesmart)

### Severe Wind

- Ensure anything moveable in your yard or on your balcony is secured or sheltered from the wind gusts
- Hire arborists to thin tree crowns and reduce the opportunity for trees to become top-heavy and prone to blow down
- Prune older and weaker trees

### Flooded Streets

- Ensure you have an adequate supply of potable water in case water is shut off
- If there is a chance of home/basement flooding, store valuable materials in

waterproof bins and keep them off the floor

- Make sure you are not running your dishwasher or clothes washer or flushing toilets during a rainstorm since it can produce wastewater that may back up into your home. To learn more, visit [edmonton.ca/residential\\_neighbourhoods/documents/PDF/Homeowners\\_Guide.pdf](http://edmonton.ca/residential_neighbourhoods/documents/PDF/Homeowners_Guide.pdf)

### Power Outage

- Keep an emergency number handy to report the outage
- Keep these important items ready: back-up power (charged batteries, generator, portable solar charger), flashlights, extra blankets during winter, portable phone charger, crank-up flashlight and radio, manual can opener, and supply of high-protein foods that can be eaten cold
- Limit the number of times that fridges and freezers are opened to keep food from spoiling

## Climate Hazards

### Water Main Break

- Keep a bottled supply of at least four litres of water per person per day, for at least three days. For more information, visit: [epcor.com/outages-safety/outages/Documents/power-water-checklist.pdf](https://epcor.com/outages-safety/outages/Documents/power-water-checklist.pdf)

### Heat Wave

- Check on your neighbours to make sure they are coping during the heatwave
- If your home is not equipped with air conditioning or a cool basement, visit a nearby public space with your family to escape the heat

### Fire Smoke

- Inhaling smoke can be very hard on the respiratory system of those already suffering health issues, as well as the very young and the very old. Keep an eye on the Air Quality Health Index and learn how to protect yourself from poor air quality: [alberta.ca/about-the-air-quality-health-index.aspx](https://alberta.ca/about-the-air-quality-health-index.aspx)

### Pet Safety

- Keep your pets comfortable during an extreme weather event



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