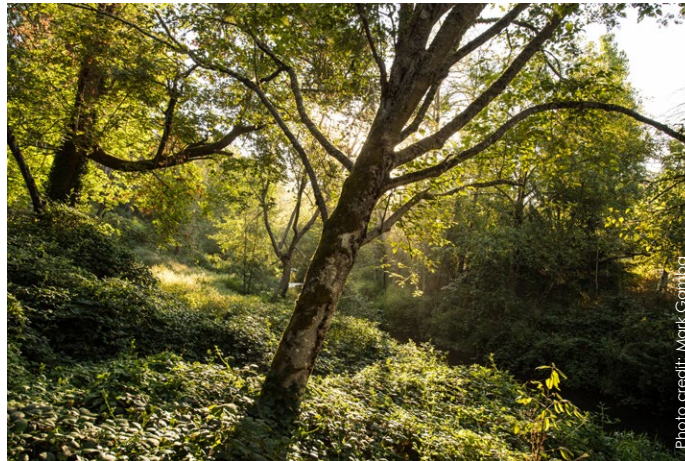




CITY OF MILWAUKIE

Milwaukie Community Climate Action Plan



Household Strategies

Let's do our part for our climate and our community

What is a Climate Action Plan?

Milwaukie's Climate Action Plan is our roadmap to preparing for and reducing the impacts of climate change. The plan was co-created by Milwaukie residents, partners and City staff between 2017-2018. It includes strategies for all of us—our government, households, businesses and organizations—to join together and address this challenge.

This document explains our climate action goals and ways you, your family, neighbors and friends can help us reach them. It's going to take all of us working together to reduce our carbon footprint and preserve our quality of life for current and future generations.

Why must we act?

Our climate is changing—and quickly. Climate change is caused by air emissions created from combustion and gases that escape into the atmosphere. These emissions (called greenhouse gases or GHGs) act as a glass greenhouse around the planet, reflecting heat back towards Earth and raising global temperatures.

Want more? Read the full plan

More information on the planning process, our community carbon footprint and City-led actions is available in the complete Climate Action Plan.

Read it now 

Our rapidly changing climate impacts our city and the entire planet. We're already witnessing more extreme weather and climate events in our region—hotter summers, more wildfires, increased flooding risk and more. If we do not change, we will face the following:

- **Population growth:** People throughout the United States will likely migrate north, seeking bearable temperatures and available water.
- **Hotter summer temperatures:** By 2100, average summer temperatures will be 10-12°F warmer than today.
- **Increased wildfire impacts:** By 2040, we can expect a 400% to 500% increase in the number of acres burned by wildfire in Oregon—that's around 74 Milwaukies worth of land area! As we've experienced in recent years, this can dramatically reduce our local air quality.
- **Lower water volumes in the summer:** As our mountain ranges experience more rain and less snow, there will be less snowpack to melt and feed our streams and rivers in the spring and summer. By 2040, our waterways will experience about 50% of their current flow in summer, effecting fish, hydroelectric power, and water-based recreation.
- **Higher flooding risk in the winter:** Our waterways, including the Willamette River, will be much more likely to flood due to increased rain volumes and rising sea levels.

Acting together early will allow us to create a stronger local economy, take care of those that might be struggling and preserve what is unique and special about Milwaukie. If we all do our part, we can show that towns like ours can be climate action leaders.

Our role in climate change

The average American family emits about 80 metric tonnes (2,200 lbs) of greenhouse gases each year from our cars, electricity, heat, air travel and the materials we buy. The figure below shows how much volume a metric tonne of greenhouse gases actually fills (this volume is averaged for all locations on Earth throughout all times of year as pressure and volume of gases vary by elevation and with the daily weather). With 126.22 million households in the United States alone, these emissions add up quickly to fill the atmosphere.

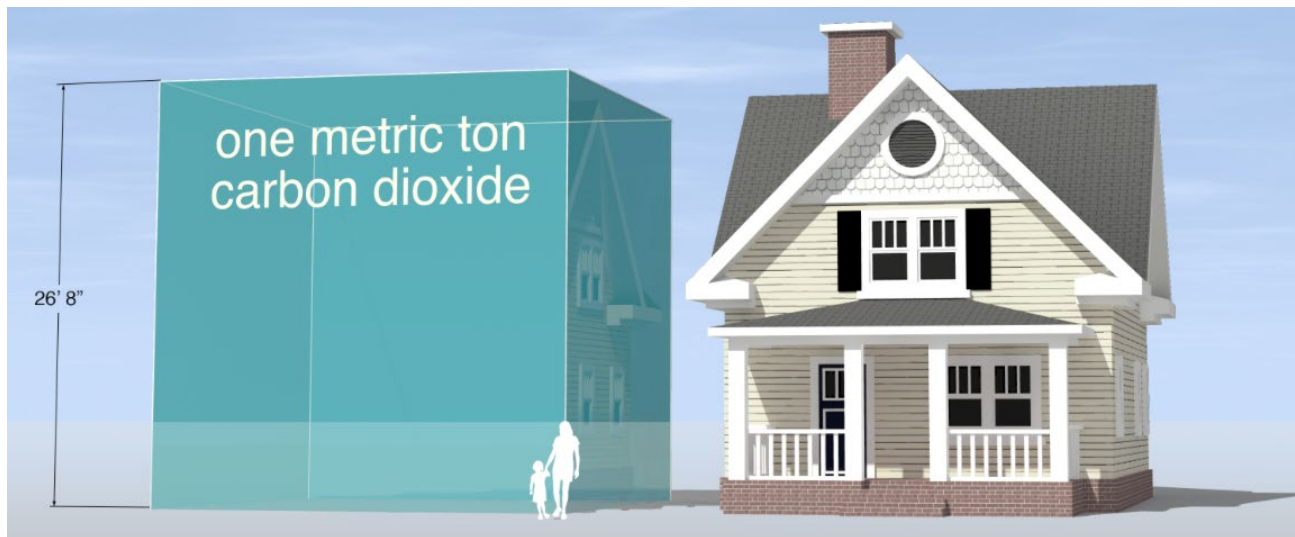


Photo credit: Mark Gamba



Photo credit: Mark Gamba

Smoky conditions in Milwaukie in 2018



CARBON FOOTPRINT

The total inventory of direct and indirect greenhouse gas emissions resulting from household, business, organization and government activities.

How am I contributing to climate change?

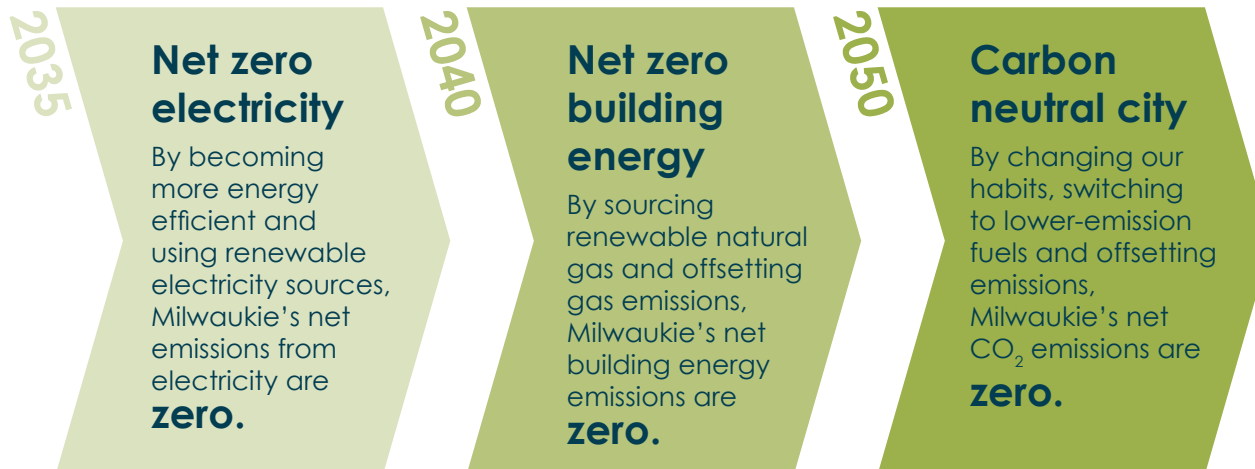
Calculate your own household carbon footprint online →

Our climate action goal: By 2040, Milwaukie's buildings will have no net emissions, and by 2050, we will be a fully carbon neutral city.

Our Climate Action Plan sets out an ambitious but achievable goal for our community. This goal is informed by the latest recommendations from the United Nations International Panel on Climate Change (IPCC) and advice from other climate experts. To avoid devastating global outcomes, the IPCC states we must become carbon neutral by 2050, meaning we must reduce or offset the greenhouse gas emissions from our buildings, our vehicles, and production of materials entirely. After 2050, we'll have to keep working to pull greenhouse gases out of the atmosphere and into our soils, our vegetation, our oceans, through mass plantings of trees and new technologies that convert greenhouse gases into minerals.

What does this mean for us? We must start now on our journey to carbon neutrality. Along the way, we will meet these key benchmarks:

- By 2035, Milwaukie's buildings will have **no net emissions from electricity**.
- By 2040, Milwaukie's buildings will have **no net emissions from all energy and heating sources**.
- By 2050, Milwaukie will be a fully **"carbon neutral"** city.



CARBON NEUTRAL

Carbon neutral refers to offsetting or sequestering as much carbon as we emit.

Equity and Climate Action

Climate impacts are disproportionately created by those with more means, while the impacts are borne more by the people with fewer means. This strategy encourages those that have more means to take extra care to reduce their carbon footprints so that others in our community and around the world can lead healthier and safer lives.

Many of our climate action strategies aim to reduce our local—or “sector-based”—emissions. These are the emissions generated within Milwaukie plus the electricity we import. However, we are also responsible for emissions generated outside of Milwaukie producing and moving the food, goods and materials we buy—referred to as “imported” emissions. In other words, making a difference on climate change will require us to not only change the way we heat and power our homes and vehicles, but also think about what we buy, too.

How will we get there?

Through the Climate Action Plan, the City of Milwaukie has committed to working on 52 strategies across six different climate action areas. These are steps City leadership and staff can take to spearhead efforts, mobilize partners or support regional, collaborative action. Actions fall into three different categories:

- **Mitigation actions** that will reduce the emissions that come from producing energy to make our goods, grow our food, transport us around and keep us warm and cool
- **Adaptation actions** that will prepare us for changing physical conditions
- **Sequestration actions** that capture carbon and pull greenhouse gases out of the atmosphere

To learn more about the City-led actions, read the complete [Climate Action Plan](#).



LOCAL—OR “SECTOR-BASED”—EMISSIONS

Emissions generated inside of a community's geographic boundaries plus imported electricity



IMPORTED—OR “CONSUMPTION”—EMISSIONS

Emissions produced outside of a community's geographic boundaries producing and transporting the goods and materials consumed by our community members



How far do City-led actions get us toward our goals?

The good news: City-led actions in our Climate Action Plan help us reduce our local emissions by 73% compared to our 2016 carbon footprint. In fact, City-led actions set us on a course to reduce our local emissions *ahead* of the pace needed to reach carbon neutrality by 2050.

The challenge remaining: City-led actions do not get us all the way to our climate action goals. We will all need to do more to close the 27% gap by 2050.

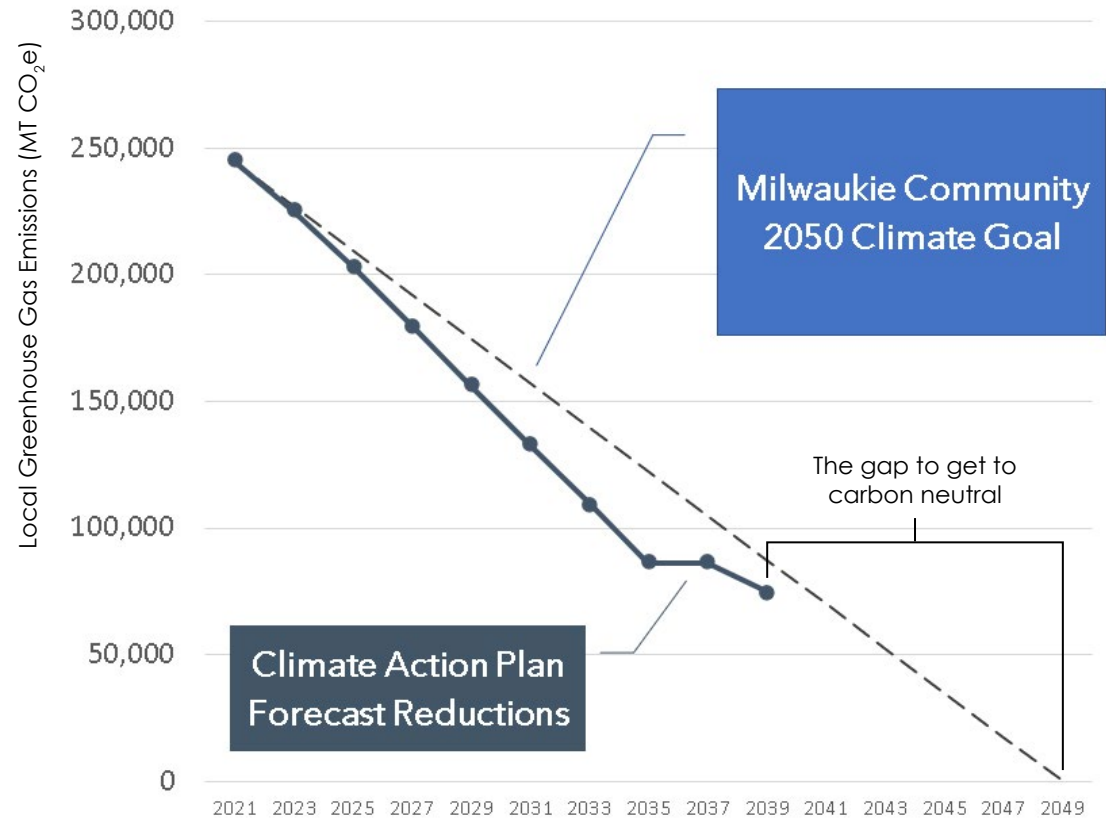
Closing the gap: What can Milwaukie households do?

Thinking about fighting climate change and reducing your carbon footprint may be daunting at first. But even small changes to the way you live, work, travel and play can lead to major results when combined with similar decisions and actions made by your fellow Milwaukians.

The following pages direct you to resources to learn more and start making a difference. Some actions you can start today; others will take more planning. The City of Milwaukie is here to support you as you commit to climate action.

Have ideas or questions? Get in touch with us at milwaukieoregon.gov/sustainability/climateactionplan.

Projected emissions reductions from City-led actions and strategies



HOME ENERGY AND EFFICIENCY



These strategies will help your household reduce emissions from the energy used to power your homes, run your appliances and build new structures.



Buy green electricity

Switch to renewable and cleaner energy sources to power your home

[Enroll in PGE's Green Source program](#)



Start using Smart Energy

If you have natural gas, learn how to reduce your use and offset the rest

[Enroll in NW Natural's Smart Energy program](#)



Give your house a quick efficiency makeover

Switch to LED light bulbs and put on low flow faucet and shower heads to reduce hot water consumption

[Learn the easy changes you can make from the Energy Trust of Oregon](#)

Go tiny! Live in a smaller house or apartment

[Learn about the environmental benefits of downsizing](#)

Look for the ENERGY STAR label when upgrading home appliances

[See how much energy you could save with the ENERGY STAR calculator](#)

Wash your clothes in cold water

[Learn more from coldwatersaves.org](#)

Insulate and weatherize your home

[Learn how from the Energy Trust of Oregon](#)

When reroofing, choose a lighter color or reflective roof

[Learn the benefits from the Global Cool Cities Alliance](#)

Switch from natural gas or propane heat to electric heat pumps

[Read more from the Union of Concerned Scientists](#)

Participate in demand response programs

[Enroll in PGE's programs today](#)

Consider developing an accessory dwelling unit on your property

[Get the latest info from the City of Milwaukie](#)

PERSONAL TRANSPORTATION



These strategies will help your household reduce emissions from the vehicles we use to travel around our community for work, play or errands.



Reduce your air travel

Consider alternative travel options that are less impactful

[Learn more about the impact of air travel from the New York Times](#)

If possible, telecommute or carpool to avoid transportation emissions

[Discover carpooling connections from Drive Less Connect](#)

Bike, walk or take public transit to work

[Get all the info you need from Metro](#)

Consider ridesharing, bike-sharing and scooter-sharing opportunities rather than owning a car if they are carbon neutral, electric or hybrid

[Learn the latest from Metro](#)



Buy carbon credits to offset your impact

Can't avoid the trip? Buy a credit to help mitigate the impact

[Check out the options on Terrapass](#)



Choose a green vehicle

Consider an electric vehicle, hybrid or car with high mileage-per-gallon

[Learn how you could save money through the Oregon Clean Vehicle Rebate Program](#)

REDUCE, REUSE, RECYCLE



These strategies will help your household reduce emissions from the things we buy and use such as goods, food and the major materials of daily life.



Calculate your household carbon footprint

Learn more about where and how you are generating emissions—and get ideas to reduce your impact.

[Use the Oregon DEQ Carbon Calculator](#)



Offset your impacts

Purchase carbon credits for your household impacts to help mitigate emissions elsewhere

[Learn more about offsetting options from Terrapass](#)



Reduce food waste through meal planning

Shop smart and buy only what you need

Find [tips and tricks from Metro](#) and get inspired by [SaveTheFood.com](#)

Eat a plant-rich diet

[Buy local produce at the Milwaukie farmer's market](#)

Repair and reuse durable goods

[Learn about upcoming repair fairs](#)

Purchase used items and products at flea markets, garage sales, local and online marketplaces

[Find resources for buying and sharing re-used materials from the Rebuilding Center](#)

Sell, donate or recycle unwanted goods

Bring your items to a local [Habitat for Humanity](#) or [Goodwill donation station](#)

Share tools and other infrequently used items with neighbors

[Learn how to set up a community tool library](#)

Compost your food scraps and use in your landscape or dispose of them appropriately

Get composting [tips from Metro](#) and learn about the benefits from [Drawdown](#)

Buy local and consider emissions from shipping

[Read more about the environmental costs of shipping](#)

NATURAL RESOURCES



These strategies will help your household plan for the impact of climate change on our natural resources, including the urban forest and our water system.



Plant trees in your yard to provide shade and cooling in summer heat

Select climate adapted trees that don't interfere with power lines

Consult the [Milwaukie Tree Board](#), [Friends of Trees](#) and [PGE](#) with your tree planting questions



Landscape with drought-resistant, native or well-adapted plants

Consider seeking certified backyard habitat status

Learn more from [Metro](#) and [Audubon Portland](#)



Remove pavement and increase permeable surfaces

De-pave areas wherever possible to encourage stormwater infiltration onsite

Learn more about the [benefits of de-paving from the US EPA](#), and get the info you need on how to do it from [Depave.org](#)

Proactively prune and choose ice-resistant trees to reduce damage from ice storms

[Learn more from OSU Extension](#)

Install bioswales/rain gardens or rainwater diversion systems (“green infrastructure”) to reduce impact on the stormwater system

Get water management ideas from the [Clackamas Soil and Water Conservation District](#) and [OSU Extension](#)

Upgrade your appliances and install low flow faucets and shower heads to reduce water consumption.

[Get tips from the Regional Water Providers Consortium](#)

HEALTH AND SAFETY



These strategies will help your household stay healthy and safe as we experience the impacts of climate change.



Get involved with the Milwaukie Community Emergency Response Team (CERT)

Join your neighbors and receive training to prepare for potential disasters

[Learn more about CERT](#)



Attend Neighborhood District Association meetings

Learn from and educate others

[Find your association and meeting schedule on the City's](#)



Protect and improve your household indoor air quality

Consider updating your air filters and taking other steps

[Get air quality tips from the US EPA](#)

Develop a family emergency plan and accumulate essential supplies for home and your vehicle

[Get tips on making a plan from the Department of Homeland Security](#)

Include adequate water in your emergency kit

[Get the facts from the Regional Water Providers Consortium](#)

Learn how to get from your home or work to essential services to avoid potential hazards

[Learn how to make a disaster preparedness plan from the Red Cross](#)

When choosing a new apartment or home, consider fire, flood, heat waves, trees for shade, and landslides risks

[Get ideas for what to plan for from FEMA](#)

Looking forward: Committing to climate action

Working together to implement this plan, our community will be a leader, showing other cities it can be done.

The City is taking steps to truly commit to climate action, including:

- Hiring a Climate Action and Sustainability Coordinator to oversee implementation of the plan
- Partnering with other local and regional governments to influence local, state and federal climate policy activities
- Integrating the Climate Action Plan into the City's updated Comprehensive Plan
- Looking for opportunities to incorporate climate action within relevant City code
- Committing to updating the Climate Action Plan at least every five years and reviewing our community carbon footprint every two years
- Tracking our progress and publishing this data online

We encourage you to come forward with your ideas to strengthen and inform our community's climate action efforts. By acting together, we will make the City of Milwaukie a **flourishing city that is entirely equitable, delightfully livable, and completely sustainable.**

