

Milwaukie Community Climate Action Plan







Business and Organization Strategies

Help our community take on climate change

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 your business or organization can help us reach them. It's going to take all of us working together to reduce our carbon footprint, become a more efficient community and preserve what makes Milwaukie a great place to live, visit and do business.

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, algae blooms, 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 agriculture, 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 conduct our work more efficiently. If we all do our part, we can show that towns like Milwaukie can be climate action leaders.

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 Milwaukie. 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 working towards carbon neutrality now. 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 onsite combustion of fuels (gas, oil and propane).
- By 2050, Milwaukie will be a fully "carbon neutral" city.



Net zero electricity

By becoming more energy efficient and using renewable electricity sources, Milwaukie's net emissions from electricity are **Zero.**



Net zero building energy

By sourcing renewable natural gas and offsetting gas emissions, Milwaukie's net building energy emissions are **Zero.**



Carbon neutral city

By changing our habits, switching to lower-emission fuels and offsetting emissions, Milwaukie's net CO₂ emissions are **Zero.**



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 buildings and vehicles, but also think about selection of materials, 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.



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

How is my business or organization contributing to climate change?

Calculate your carbon footprint online ----



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.

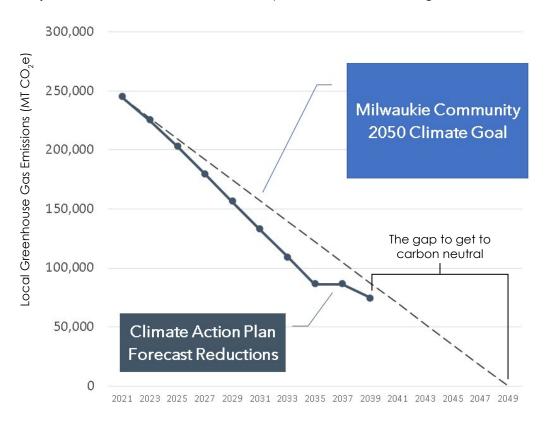
The challenge remaining: City-led actions do not get us all the way to our climate action goals. We will all need to do more to close the 27% gap by 2050.

Closing the gap: What can Milwaukie businesses and organizations do?

The following pages direct you to resources to learn how your business or organization can make 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



Mlilwaukie Businesses Getting to Work



Waverley Green Apartments are installing 400 kW of solar at their complex.



Casa de Tamales worked with Clackamas County to implement a food scrap composting program at their restaurant.



Blount International adopted a comprehensive Environmental Policy committing to reducing waste and conserving energy.

BUILDING ENERGY AND EFFICIENCY



These strategies will help your business or organization reduce emissions from the energy used to power your buildings, run your appliances and build new structures.



Buy green electricity

Switch to renewable and cleaner energy sources to power your business

Enroll in PGE's Green Future 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



Employ lean management strategies

Adjust the way your team works to reduce energy usage

Find a training at University of Portland

Get a building energy audit and evaluate conservation opportunities	Connect with the Energy Trust of Oregon
Switch from natural gas or propane heat to electric heat pumps	Read more from the Union of Concerned Scientists
Insulate and weatherize for hot or cool seasons	Learn how from the Energy Trust of Oregon
Upgrade lighting and install occupancy sensors or timers	Discover incentives from the Energy Trust of Oregon
When reroofing, choose cool or reflective roof	Learn the benefits from the Global Cool Cities Alliance
Look for the ENERGY STAR label when upgrading workplace appliances	See how much energy you could save with the ENERGY STAR calculator
Install smart power strips at workstations with three or more peripherals	Get the facts from the National Renewable Energy Laboratory
Install solar panels	Learn about incentives available through the Energy Trust of Oregon

VEHICLES AND FUELS



These strategies will help your business or organization reduce emissions from the vehicles you use to transport employees, goods and services.



Invest in green vehicles

If buying or leasing a new vehicle for your fleet, consider an electric, hybrid or high mileage vehicle

Learn how you could save money through the Oregon Clean Vehicle Rebate Program



Help your employees reduce their travel emissions

Use telecommuting and video conferencing when possible

Learn about telework options from the U.S. General Services Administration



Incentivize transit

Provide incentives or purchase passes for employees who choose to commute by public transit, alternative transportation or carpooling

Get all the info you need from Metro

Consult TriMet for the latest transit information Learn the latest from Metro
Learn the latest from Metro
Engage the Street Trust about possible commute clinic
Check out the options on Terrapass
Connect with PGE

Consult the National Idling

Reduction Network for ideas

Install showers in your workplace

Promote a "no idling" policy with

who deliver goods and services

your motor fleet and vendors

MATERIALS USE, PURCHASING AND RECOVERY



These strategies will help your business or organization reduce emissions from the supplies and materials you purchase and use.



Get certified as a Clackamas County "Leader in Sustainability"

Be recognized for your efforts to minimize waste, conserve energy and water, and invest in your employees and community

Learn more about the program from Clackamas County



Consider total cost of ownership

Select vehicles based on how much they will cost to maintain over their lifetime and their total emissions, not just upfront costs

Use the Department of Energy Vehicle
Cost Calculator



Implement "lean manufacturing" practices

Reduce material consumption and waste and improve your business' efficiency

Engage the Oregon Manufacturing
Extension Partnership



Fix equipment before replacing it

Unless there is a big energy or material efficiency gain, try to repair rather than replace

Take the pledge to fix it first!

Purchase durable and used products and inputs

Learn more about the importance of expanding the lifespan of office products from Oregon DEQ

Donate surplus electronics and furniture to charitable organizations

Consider donating to Goodwill or FreeGeek

Compost commercial food waste, particularly if a food business

Learn about food scrap collection options in Clackamas County

Prevent paper waste: Use centralized printers that are defaulted to double sided, and go paperless for invoicing, billing and payroll

Learn other ways to reduce paper waste from MIT

NATURAL RESOURCES



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



Plant trees around your building 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 droughtresistant, native or welladapted 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

Install bioswales/rain gardens or rainwater diversion systems to reduce impact on the stormwater system

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

Learn more from OSU Extension

Get water management ideas from the Clackamas Soil and Water Conservation District and OSU Extension

Get tips from the Regional Water Providers Consortium



PUBLIC HEALTH AND EMERGENCY PREPAREDNESS



These strategies will help your business or organization keep your employees healthy and safe as we experience the impacts of climate change.



Evaluate threats to your business from wildfire smoke, flooding and landslides

Get ideas for what to plan for from FEMA

Offer programs or education to employees on managing stress and mental health

Find resources from the
Employee Assistance Trade
Association



Protect and improve your business' indoor air quality

Consider updating your air filters and taking other steps

Get air quality tips from the US EPA



Prepare a resiliency plan for your company

Help keep employees safe in the event of a disaster

Learn more from the Oregon Health Authority

Looking forward: Committing to climate action

Working together to implement this plan, Milwaukie and our business community will be leaders, 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.

