

Climate Action Plan

This document provides an executive summary of Gresham's Climate Action Plan. This document provides highlevel descriptions of the background information on climate action, how the Climate Action Plan was developed, and the strategies to reducing emissions and building resilience.

Climate Action Plan Executive Summary



CITY OF GRESHAM

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Gresham's Climate Action Plan is a technical work plan that will guide the City of Gresham and Gresham Community as we work together to respond to the impacts of climate Change.

This document provides an executive summary of the Climate Action Plan and gives high-level information on the plan's background, how it was developed, and the strategies for reducing emissions and building climate resilience.

Table of Contents

- What is the Gresham Climate Action Plan?
- Climate Change and Gresham
- Project Timeline
- Community Engagement
- How We'll Get There
 - o Buildings and Energy
 - Urban Form and Transportation
 - Solid Waste and Consumption
 - o Community Health and Economic Resilience
 - Natural and Built Environment
 - o Internal City Operations
- What's Next?
 - o Community Engagement Moving Forward
 - o Performance Targets
 - Progress Report



Gresham Climate Action Plan Executive Summary

What is the Gresham Climate Action Plan

The Gresham Climate Action Plan is a comprehensive work plan that guides the City of Gresham and the Gresham Community in efforts to reduce greenhouse gas emissions and to adapt to changing climate conditions. This plan provides strategies and actions that will reduce Gresham's carbon footprint and build resilience in the face of extreme weather and hazardous climate. While the Climate Action Plan is its own plan, it references other current plans and programs in Gresham, placing a climate lens on work that is already happening. By doing this the Climate Action Plan unites related efforts towards achieving a common goal.

Climate Change and Gresham

Studies have shown that the large-scale release of greenhouse gases, such as CO2 and methane, into the atmosphere by human activities is causing the global climate patterns to shift. As greenhouse gases accumulate in the atmosphere, they trap and retain heat for long periods of time and cause the global average temperatures to rise. In addition to warming the atmosphere, greenhouse gas emissions cause global ocean water temperatures to rise as CO2 is easily absorbed by water. Warmer air and water mix to create more extreme and unstable climate patterns.



Annual CO2 Peak and Temperature



At the local level, this is experienced as shifts in weather patterns towards conditions that are hazardous for the health of community members, the local economy, the natural environment, and manmade infrastructure.



In Gresham, this has been experienced through more frequent and intense heat waves, wildfire and smoke, and severe ice and rainstorms. Further studies have shown that as the impacts of these events accumulate, Gresham's local climate will begin to shift towards being more like that of the Sacramento Valley in California.



Gresham's own yearly contribution to climate change was evaluated in a Community Greenhouse Gas Emissions Inventory in 2018. This inventory provided a thorough study of the daily activities in Gresham that release CO2, methane, and other greenhouse gases.

This inventory found that in 2018, Gresham emitted 2,133,122 metric tons of CO2 from activities that include energy use, transportation, waste, industrial processes, and the consumption of goods and services. For scale, one metric ton of CO2 takes up as much physical space as a 1,500 square foot house. The amount emitted by Gresham in 2018 is



roughly the amount of CO2 absorbed by 2 million acres of U.S. forestland – an area that is close to 150 times the size of Gresham.



Figure 8: 2019 Community Local + Imported Emissions

This greenhouse gas emissions inventory provides a snapshot of Gresham's emissions at a specific point in time and provides a baseline to compare progress against in reducing emissions. This inventory also accounts for all emissions generated locally, from within Gresham's geographic boundaries, and those that are 'imported', generated elsewhere by the production and transportation of goods that are ultimately consumed and disposed of in Gresham.

Project Timeline

To develop a community-wide climate action plan, the City of Gresham commissioned extensive studies of the community's greenhouse gas emissions, commonly referred to as emissions inventories, as well as an assessment of the changes to the natural environment that Gresham is likely to experience because of climate change. These studies identified the major sources of greenhouse gas emissions in Gresham, as well as key areas where the community is vulnerable to natural hazards.





Community Engagement

Gresham's Climate Action Plan envisions the use of strong community partnerships to create climate solutions that are ambitious, innovative, and equitable. This vision was put into action through a two-year-long community engagement that supported neighbors, businesses, and community leaders to participate in the shaping of climate action strategies.

Throughout 2022, technical experts and community leaders attended workshops that each addressed a topic related to their areas of expertise, such as community health or energy. These workshops helped refine draft strategies into realistic courses of action with specific steps for implementation. Overall, ten workshops were held and attended by over 100 community partners and technical experts.

These refined strategies were brought to the wider community in the fall of 2023, in workshops that the entire community was invited to attend. Here, workshop participants were guided through the different chapters of the Climate Action Plan and asked to give feedback on the strategies and input on how the strategies should be prioritized. With the support of community partners, one of these workshops was held entirely in Spanish to engage with Gresham's large Spanish-speaking community. Overall, these workshops were attended by a total of 150 people.

In addition to workshops, a 10-question survey was made available online to reach community members who were unable to engage in-person. Like the workshops, the survey questions asked for input on how strategies should be prioritized. With the support of community partners, this survey was translated into Spanish, Farsi, Russian, Somali, and Swahili, and received 157 responses.

How We'll Get There

This plan is organized into six chapters that are based on the major sources of emissions identified in Gresham's community greenhouse gas inventory, and the major areas of vulnerability identified in the assessment of Gresham's natural environment.





Buildings and Energy

- Increase the supply of renewable energy sources to the community.
- Support the development of community-scale renewable energy generation and battery storage.
- Support access to energy efficiency in all buildings.
- Develop a green buildings framework.

Urban Form and Transportation

- Integrate a climate equity approach into City planning.
- Support dense, mixed-use developments with a diversity of housing options near transit.
- Support electric vehicle charging throughout the community.
- Support a diversity of low-carbon travel options.

Solid Waste and Consumption

- Create opportunities to bring food scrap collection to residential solid waste service customers.
- Implement commercial food scrap collection requirements.
- Support access to repair and reuse services.

Community Health and Economic Resilience

- Support the creation of an early warning system for hazardous conditions.
- Create a community heat strategy.
- Support access to emergency services, services, and locations during hazardous conditions.
- Increase access to weatherization resources.
- Support workforce development opportunities in climate action projects.

Natural and Built Environment

- Maintain and improve tree canopy throughout the community.
- Update City tree code to support improved tree canopies.
- Support a network of air quality monitors.

Internal City Operations

- Supply City buildings with 100% renewable energy.
- Achieve 100% net-zero emissions in City buildings.
- Use strategic energy management in City buildings.
- Increase renewable energy production at the Wastewater Treatment Plant
- Increase use of electric vehicles in City fleet and expand charging at City buildings.



Co-Benefits

In addition to reducing emissions and building resilience, the strategies of this plan provide additional benefits to the community's well-being.

- Reduced Pollution Burden
- Economic Inclusion and Cost Savings
- Equitable Access to Critical Infrastructure
- Community Health and Safety

Possible Progress



Based on current trends in emissions and possible actions, Gresham could possibly reduce its 2050 greenhouse gas emissions by 62.5%. It is important to note, however, that this projection is based on the combination of current opportunities to reduce emissions, available technology and other factors that include:

- Current opportunities to reduce emissions and available technology in energy, transportation, and waste.
- Gresham being able to secure carbon-free electricity and low-carbon natural gas innovations by 2040.
- Continued improvements in passenger and heavy-duty vehicle fuels
- A 27% decrease in food waste from both upstream and downstream sources.
- Increased access to energy efficient, dense housing that is located near transit.



What's Next?

Community Engagement Moving Forward

- Creating this plan is just the beginning of the journey for addressing Gresham's contribution to climate change.
- The City and community must work together to implement the developed strategies. This will require ongoing community engagement on a project-by-project basis.

Performance Targets

- Developing performance targets for every chapter of this plan is important to build a clear path toward Gresham achieving it's climate goals.
- Performance targets set achievable expectations of progress and serve as steppingstones toward higher-level goals.
- Setting performance targets require an organization-wide effort to ensure that they are ambitious, realistic and cost effective.

Progress Report

• The City will need to measure, analyze and report on the progress of the Climate Action Plan. Progress metrics help assess how well strategies are achieving their intended outcomes and the overall goals of the plan.