

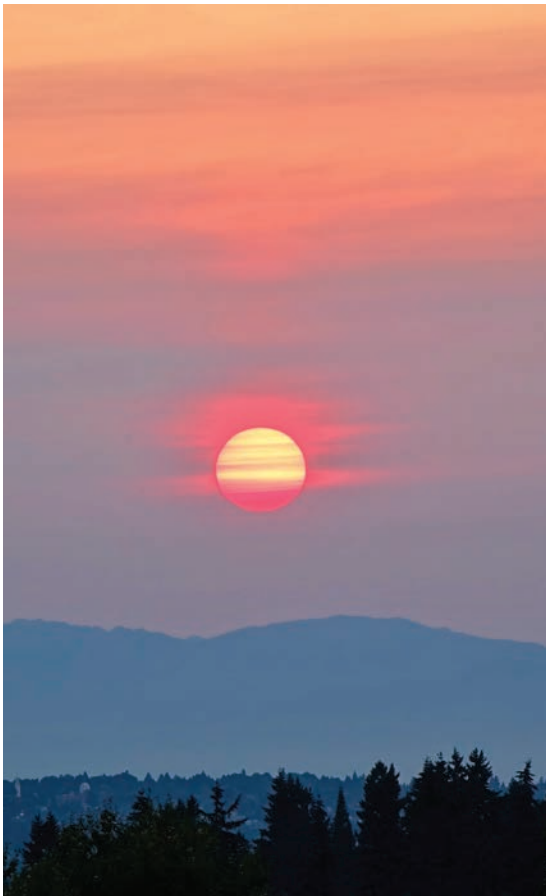


EXECUTIVE SUMMARY



Executive Summary

Taking decisive climate action has never been more urgent across the Pacific Northwest. People are already experiencing the economic and health impacts of changes to global climate patterns, including rising temperatures, changes in rainfall and river flow, and reduced snowpack. Communities with significant topography like Mercer Island may be at risk for landslides from intense rain events in the winter, in addition to localized flooding. Conversely, hotter, drier summers are making wildfire increasingly likely, even west of the Cascade Mountains. Air quality impacts from the persistent smoke plumes generated by regional fires are now all too familiar.²



According to experts at the University of Washington's Climate Impacts Group,³ there is no better example of the changes ahead than the unprecedented June 2021 heatwave that swept across the Pacific Northwest, resulting in record-breaking temperatures that climbed 30°F above average. Seattle exceeded 100°F for three days straight, reaching a peak of 108°F; Portland, Oregon reached 116°F. As one of the least air-conditioned portions of the United States (just 53% of housing units in the Seattle area),⁴ the region experienced a significant spike in heat-related deaths and illnesses. Exacerbated by an unusually dry spring, the extreme "heat dome" event created additional widespread impacts, including damage to road surfaces, shutting down light rail, power outages, and wildfires.

Unfortunately, heat events will become more common as average air temperatures are now anticipated to increase up to 5.5°F by 2050.³ Every action that communities take today will reduce the severity of future climate impacts, some of which are now unavoidable.

- 2 Extensive detail is available in the Pacific Northwest chapter of the Fourth National Climate Assessment, led by the National Oceanic and Atmospheric Administration (NOAA); U.S. Global Change Research Program. 2018. "Fourth National Climate Assessment." Chapter 24: Northwest. <https://nca2018.globalchange.gov/chapter/24/>
- 3 Climate Impacts Group, University of Washington. n.d. "Climate Mapping For A Resilient Washington." <https://cig-wa-climate.nkn.uidaho.edu/>
- 4 US Census Bureau, 2021. American Housing Survey <https://www.census.gov/programs-surveys/ahs/data/interactive/ahstablecreator.html>



The Washington State Legislature has recently passed legislation such as the Climate Commitment Act,⁵ which places an economy-wide cap on carbon to meet state greenhouse gas (GHG) reduction targets. The State also passed the Clean Energy Transformation Act,⁶ which will eliminate coal power from the electrical grid by 2025 and transition the state to 100% clean electricity by 2045.

Many of the actions required to reduce GHG emissions, improve resiliency, and protect the environment will occur at the local level. The Mercer Island Climate Action Plan (CAP) organizes and prioritizes strategies and actions to reduce GHG emissions and build on the long history of stewardship the community has already demonstrated. This history of climate action includes two successful rooftop solar promotional campaigns, commercial green building requirements in Town Center, very high rates of green power enrollment among residents, and the purchase of 100% wind energy to power all City government operations. The City has converted almost all street and parking lot lighting to LED and has been able to increase its tree canopy by 8% from 2007 to 2017; other milestones can be found on the City's sustainability webpages.⁷

In 2007, the City adopted its first GHG reduction targets in alignment with State goals. In 2011, Mercer Island became a founding member of the King County-Cities Climate Collaboration (K4C): this alliance of 22 local governments helps support climate solutions, share success stories, advocate for legislation, and coordinate multi-city initiatives to achieve shared climate goals and targets. Through the K4C, and guided by the King County Growth Management Planning Council's policies, the City of Mercer Island updated its GHG targets in 2022 to a reduction of **50% by 2030, 75% by 2040, and 95% by 2050**, compared to a 2007 baseline.



5 Washington State Department of Ecology. n.d. *Climate Commitment Act*. <https://ecology.wa.gov/Air-Climate/Climate-Commitment-Act>.

6 Washington State Department of Commerce. 2019. *Clean Energy Transformation Act*. <https://www.commerce.wa.gov/growing-the-economy/energy/ceta/>

7 The City of Mercer Island. 2022. *Key Sustainability Milestones*. <https://www.mercerisland.gov/publicworks/page/key-sustainability-milestones>.



Current GHG emissions (based on 2019 data, the last "normal" year before the COVID pandemic) are approximately **358,777 metric tons, or 14.7 Metric Tons per resident**. Calculations indicate that existing federal, state, and regional climate policies will reduce these emissions approximately 34% by 2030 compared to baseline levels. That leaves an additional reduction of 16% that must be achieved at the local level to meet the "50% by 2030" goal.



This CAP provides a long-term cohesive planning document that organizes 59 GHG reduction and adaptation actions and programs in a strategic manner, ranks implementation priorities, identifies a protocol for tracking progress on a regular schedule, incorporates extensive public input, and enhances the City's existing GHG Dashboard webpage.





PLAN FOCUS AREAS

The CAP is the product of months of data collection and analysis and engagement with community members, City leadership, and City staff that ultimately culminated in the development of strategies and actions across six focus areas, summarized below.

	Focus area	Future vision
	Cross-Cutting & Municipal	Community members and City government are informed and active in local climate action—working together to meet emission reduction targets.
	Buildings & Energy	Residents live and work in energy efficient buildings powered by clean, renewable energy.
	Transportation	Low-to-no carbon transportation options are safe, clean, accessible, affordable, and widely used.
	Consumption & Disposal	The community practices circular economy principles, reducing the amount of resources used, reusing and repurposing materials, and recycling and composting almost all of what's left.
	Natural Systems	The community protects, conserves, and restores our natural systems, landscapes, and habitats.
	Community Resilience	People and ecosystems are healthy, thriving, and can respond and adapt to climate change.



MITIGATION AND ADAPTATION

There are two types of climate strategies and actions in this plan—climate mitigation and climate adaptation actions. Both are important for addressing and preparing for climate change, and frequently one action addresses both mitigation and adaptation.

- **Mitigation** actions work to address the cause of climate change by reducing GHG emissions and increasing carbon sinks (e.g., transitioning away from fossil fuels by electrifying buildings and expanding tree canopy cover).
- **Adaptation** actions work to address the impacts of climate change by building resilience and preparing the community and natural environment to adapt to the unavoidable impacts of climate change (e.g., providing community cooling centers and air shelters in case of extreme heat, wildfires, and wildfire smoke).

