



City of Mercer Island

CLIMATE ACTION PLAN



DRAFTED JANUARY 2023



Message from the City

Sustainability and stewardship are core values for the City of Mercer Island and the City has long been committed to proactively enhancing and protecting our natural environment, as well as preserving the quality of life for all residents.

One of the biggest threats to the Island—and the entire region—is our rapidly changing climate. Now, more than ever before, we need to take action to protect people, resources, and the economy from climate-related disasters. The science is clear: our community is already experiencing these changes in the form of hotter, drier summers, unprecedented heatwaves and wildfires, and more frequent and intense rainstorms and flooding in the winter.

The Mercer Island Climate Action Plan outlines a strategic, coordinated approach for reducing greenhouse gas emissions and also preparing the community for the unavoidable impacts of a warming planet.

Over the past 16 months, through surveys, workshops, and public comment, we have learned firsthand what priorities, challenges, and opportunities residents see in the fight against climate change. This input helped staff and the City Council to develop a suite of goals and targets that demonstrate our commitment to reducing greenhouse gas emissions, while preserving our natural environment.

This plan sets Mercer Island on a realistic and well-defined path to transition to clean energy sources, to electrify our transportation, to enhance stormwater and tree planting programs, to reduce waste, and to strengthen our climate resiliency.

For this plan to succeed, community engagement and widespread participation will be critical. We look forward to collaborating with you – every member of the Mercer Island community – to bring this plan to life over the next few years.

Sincerely,

Jason Kintner, Chief of Operations





Acknowledgements

The City of Mercer Island would like to thank the community for their feedback and collaboration throughout the development of the Climate Action Plan (CAP). Special thanks to those community members who participated in workshops, surveys, and engaged on Let's Talk.

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Acronyms and Key Terms

ADA Transition Plan	A plan that identifies accessibility gaps and barriers in public Right-of-Way, parks, and City buildings and defines priorities for investments.
Adaptive capacity	The potential of a system to adjust to change (including climate impacts) to moderate potential damages and cope with consequences. ¹
Carbon intensity	The amount of carbon emitted per unit of energy consumed. A higher carbon intensity produces more CO ₂ emissions than a lower carbon intensity.
Circular economy	A model that optimizes resources by keeping materials and products within a closed loop system, which minimizes resource inputs, waste and pollution outputs, and carbon emissions.
Climate Action Plan (CAP)	A comprehensive and strategic plan that outlines specific strategies and actions that an entity will take to reduce greenhouse gas emissions and adapt to climate change impacts.
Commute trip reduction (CTR) program	A Washington State Department of Transportation (WSDOT) program that promotes alternatives to driving alone under the Commute Trip Reduction Law (WAC Chapter 468-63) to shift commuter behavior to more sustainable modes and improve transportation system efficiency. The program generally applies to employers with at least 100 full-time employees at one location.
Construction and demolition (C&D) waste	A type of debris from the construction and demolition of buildings that is not included in municipal solid waste, including steel, wood products, and concrete.
Decarbonization	The reduction of the amount of carbon dioxide and other greenhouse gases emitted into the atmosphere from fossil fuel-based power sources and other infrastructure.
Electric vehicles (EVs)	Vehicles that derive all or part of their power from electricity.
Electrification	The transition from using natural gas and other energy sources to electricity (typically generated from renewable energy sources) to power buildings, industrial processes, and vehicles.
Frontline communities	Communities that experience the impacts of climate change earliest and most severely. These often include Black, Indigenous, People of Color (BIPOC) and low-income communities that face historic and current inequities. Frontline communities are also more likely to have limited resources and capacity to adapt to climate impacts.
Green stormwater infrastructure	A system for stormwater management that captures, filters, slows, and/or reduces stormwater by mimicking natural processes using vegetation and soils.
Greenhouse gas (GHG) emissions	Emissions of heat-trapping gases in the atmosphere including carbon dioxide (CO ₂), methane (CH ₄), and nitrous oxide (N ₂ O).

¹ [Capacity Building Definitions, U.S. Climate Resilience Toolkit.](#)



Heating, ventilation, and air conditioning (HVAC)	Various technologies to control the temperature, humidity, and purity of air in an enclosed space.
Internal combustion engine (ICE) vehicle	A vehicle that runs on a traditional internal combustion engine typically fueled by gasoline or diesel.
Low impact development (LID)	An approach to manage stormwater runoff that emphasizes conservation and use of on-site natural features to protect water quality.
Leadership in Energy and Environmental Design (LEED)	A certification and framework for sustainable, efficient, and low-carbon buildings.
King County-Cities Climate Collaboration (K4C)	A partnership between local King County jurisdictions that aims to share knowledge and resources to accelerate and enhance regional climate action; Mercer Island is a founding member.
Key performance indicators (KPIs)	Quantifiable metrics used to measure and track performance on goals.
Metric ton of carbon dioxide equivalent (MTCO₂e)	Greenhouse gases standardized to equal one unit of carbon dioxide (CO ₂).
Million British Thermal Units (MMBtu)	A unit of measurement used to quantify the thermal energy contained in natural gas.
National Association of City Transportation Officials (NACTO)	A coalition of the Departments of Transportation in North American cities.
Net zero emissions	The point at which the amount of greenhouse gas emissions produced does not exceed the amount removed from the atmosphere.
Puget Sound Energy (PSE)	Energy utility based in Washington that serves the Puget Sound region.
Recology	Mercer Island’s waste management company that collects and processes municipal solid waste.
Transportation demand management (TDM)	Public and private programs to manage transportation demand. TDM measures often aim to increase the use of public transportation, carpools and vanpools, nonmotorized travel modes, and flexible work schedules.



PLAN SUMMARY



Plan Summary



In alignment with neighboring King County communities, Mercer Island has set a goal to reduce community greenhouse gas (GHG) emissions by 95% by 2050 with interim targets of 50% reduction by 2030 and 75% reduction by 2040.² **This Climate Action Plan (CAP) provides a roadmap for meeting this GHG emissions reduction commitment as well as achieving other important goals for our community**, including preparing for unavoidable climate impacts and protecting our valuable natural resources, preserving what people love about living on Mercer Island, and enhancing the quality of life and prospects for all community members.

This 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 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.

² Emissions reduction targets are based on a 2007 baseline.



PLAYING OUR PART

What the community can do:



Choose nonstop flights and consider purchasing carbon offsets to offset emissions from air travel.



Upgrade to electric, energy-efficient appliances in your homes and offices.



Opt for the light rail instead of driving when commuting off Island.



Bus, walk, scooter, bike, and carpool.



Add a solar panel to your house or participate in the Green Power Program to help fund local renewable energy projects.



Go electric when you purchase your next vehicle.



Increase local tree canopy and restore natural areas.

What the City is doing and will continue to do:



Promote regional incentive programs to help residents and business owners fund building retrofits, electric vehicles, and other climate-smart purchases.



Engage and educate the community on climate change and climate action.



Promote sustainable and resilient development and ensure City buildings and infrastructure are prepared for climate friendly technologies like electric vehicles and renewable energy.



Reduce emissions from City operations.



Ensure City emergency services and other departments are prepared for current and future climate impacts.



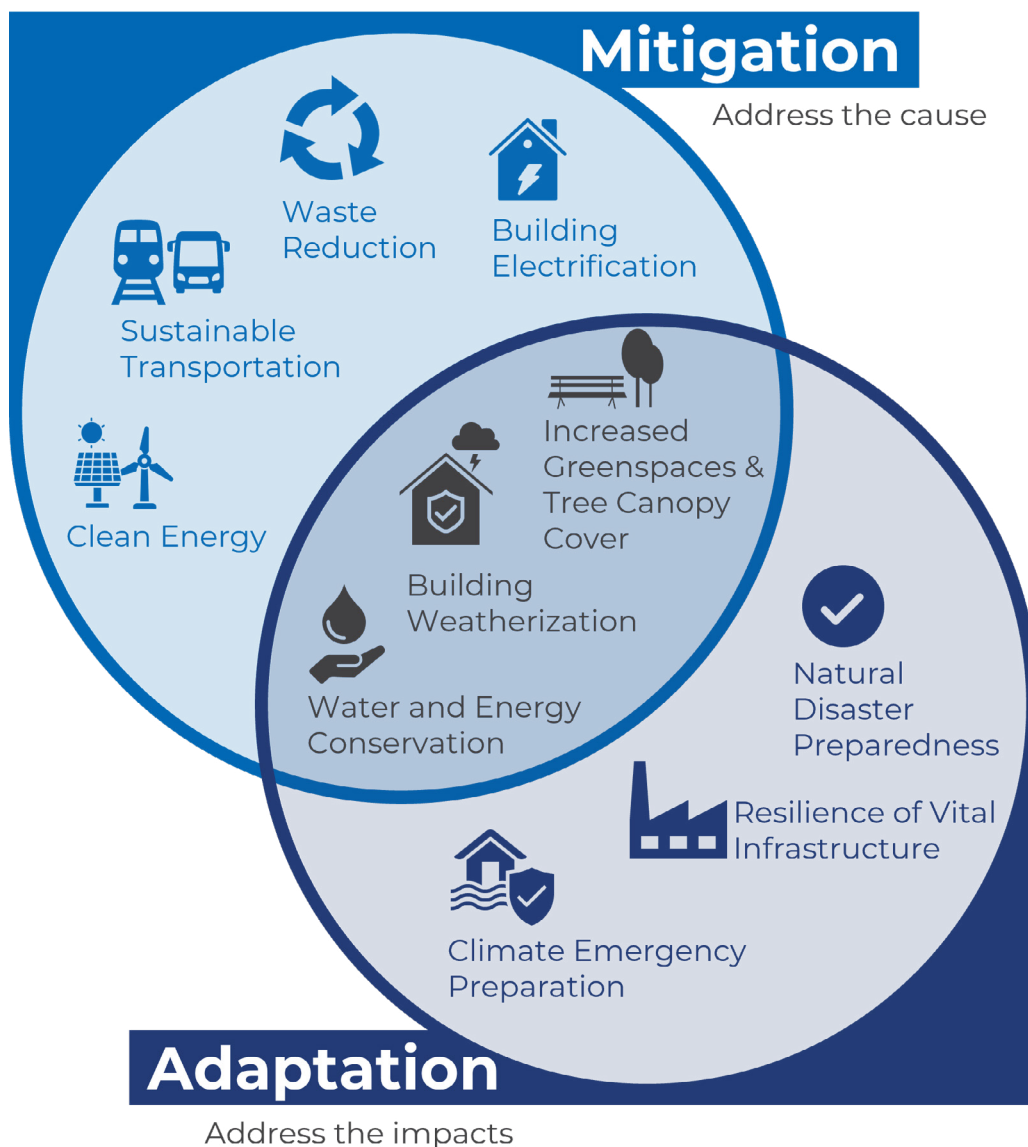
Increase local tree canopy and restore natural areas.



MITIGATION AND ADAPTATION

There are two types of climate strategies and actions in this plan, and both are important for addressing and preparing for climate change.

- **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 and wildfire smoke).





STRATEGIES & ACTIONS AT-A-GLANCE



Strategies & Actions At-A-Glance

The tables below introduce the key components of each CAP focus area—the **goal**, the sector-specific **targets** needed to achieve that goal, the overarching GHG emission reduction target, and **a few selected key actions** to support these targets. For a complete list of all actions, see the strategies and actions section starting on [page 22](#).



The overarching GHG emissions reduction targets (see [page 20](#)) reflect a 2007 baseline to align with the original work done by K4C. Sector-specific targets have been adjusted in this CAP to reflect a 2019 baseline (unless otherwise noted) as it is the most recently completed GHG emissions analysis and the year from which future emissions are forecasted.



Focus Area: Cross-Cutting & Municipal (CC)

Goal: Reduce overall community and municipal GHG emissions, integrate climate considerations into City reporting and decision-making, and encourage community members to participate in local climate action.

Targets

2030 Target

- 50% reduction in community GHG emissions (compared to a 2007 baseline).
- Carbon neutral municipal operations.

2050 Target

- 95% reduction in community GHG emissions (compared to a 2007 baseline) and net zero emissions.

Strategies

CC1: Engage and support community climate action.

CC2: Reduce climate impact of municipal operations.

CC3: Institutionalize climate considerations into City planning & decision-making.

Selected Key Actions (full list starts on page 24)

- **CC1.1:** Low carbon schools
- **CC1.2:** Climate advocacy and partnerships

- **CC2.1:** CTR participation & incentives
- **CC2.4:** Municipal fleet electrification

- **CC3.1:** GHG tracking & reporting
- **CC3.2:** Climate-informed City decision-making



Focus Area: Buildings & Energy (BE)

Goal: Reduce GHG emissions from buildings by reducing energy use, electrifying buildings, and transitioning to clean and reliable renewable energy sources.

Targets

2030 Target

- 78% reduction in building GHG emissions.
- 35% reduction in building natural gas, propane, and fuel oil consumption.
- 22% reduction in communitywide energy use.

2050 Target

- 97% reduction in building GHG emissions.
- 92% reduction in building natural gas, propane, and fuel oil consumption.
- 63% reduction in communitywide energy use.

Strategies

BE1: Transition to non-fossil building energy.

BE2: Reduce energy use in new and existing buildings.

Selected Key Actions (full list starts on page 26)

- **BE1.1:** Heat pump rebates & education
- **BE1.3:** Contractor incentive & training program
- **BE2.1:** Energy efficiency incentives and programs
- **BE2.2:** Green building campaigns





Focus Area: Transportation (TR)

Goal: Reduce GHG emissions from transportation by transitioning to electric vehicles (EVs), expanding multimodal transportation options, and improving cycling and pedestrian networks.

Targets

2030 Target

- 65% of new passenger vehicles sold and 20% of all registered vehicles are EVs.
- 1%-20% reduction in overall vehicle miles traveled (passenger + freight). *Target still under review – to be finalized for final plan.*³
- 44% reduction in average vehicle carbon intensity.
- 5% reduction in regional air travel fuel use.
- 10% reduction in aviation fuel carbon intensity.

2050 Target

- 100% of all registered passenger vehicles are EVs.
- 5%-50% reduction in overall vehicle miles traveled (passenger + freight). *Target still under review – to be finalized for final plan.*
- 96%⁴ reduction in average vehicle carbon intensity.
- 15% reduction in regional air travel fuel use.
- 95% reduction in aviation fuel carbon intensity.

Strategies

TR1: Plan for expansion of EV infrastructure and fleet electrification.

TR2: Reduce vehicle travel and decarbonize offroad equipment.

TR3: Reduce aviation emissions.

Selected Key Actions (full list starts on page 29)

- **TR1.1:** Public EV infrastructure plan
- **TR1.4:** EV charging incentives & rebates

- **TR2.1:** Update the Pedestrian and Bicycle Plan
- **TR2.3:** Town Center Parking Study implementation

- **TR3.1:** Air travel alternatives
- **TR3.3:** Regional aviation coordination



³ VMT reduction targets are still being determined based on the latest regional transportation projections and also K4C goals.

⁴ Remaining vehicle emissions in 2050 are generated from electricity emissions tied to EVs.



Focus Area: Consumption & Disposal (CD)

Goal: Reduce community waste and the GHG emissions associated with the consumption and disposal of goods and materials.

Targets

2030 Target

- 81% reduction in solid waste GHG emissions.
- 70% of all waste diverted from landfills; zero waste of edible food.
- 11% reduction in tons of landfilled waste.
- 85% diversion of construction & demolition (C&D) waste and other recyclables.
- No net increase in total community waste generation, including solid waste, recycling, and compost.

2050 Target

- 86% reduction in solid waste GHG emissions.
- 70% of all waste diverted from landfills.
- 60% reduction in landfilled waste.
- 85% diversion of construction & demolition (C&D) waste and other recyclables.
- 10% reduction in total community waste generation, including solid waste, recycling, and compost.

Strategies

CD1: Reduce waste generation & landfill disposal.

CD2: Consume sustainably.

Selected Key Actions *(full list on starts on page 31)*

- | | |
|---|---|
| <ul style="list-style-type: none"> • CD1.1: Recycling space/access requirements • CD1.2: Mandatory composting/recycling | <ul style="list-style-type: none"> • CD2.1: Community gardens • CD2.2: Local retail options |
|---|---|





Focus Area: Natural Systems (NS)

Goal: Foster climate resilient natural landscape by protecting vital habitats, ecosystems, and natural resources, and conserving water resources.

Targets

2030 Target

- Maintain current canopy and increase canopy by 5% (compared to a 2018 baseline⁵) *Target still under review – to be finalized for final plan.*
- Restored ecosystem functions (forest age & diversity, invasives removal, stream daylighting). *Target still under review – to be finalized for final plan.*

2050 Target

- Maintain current tree canopy and increase canopy by 15% (compared to a 2018 baseline). *Target still under review – to be finalized for final plan.*
- Improved ecosystem functions (forest age & diversity, invasives removal, stream daylighting). *Target still under review – to be finalized for final plan.*

Strategies

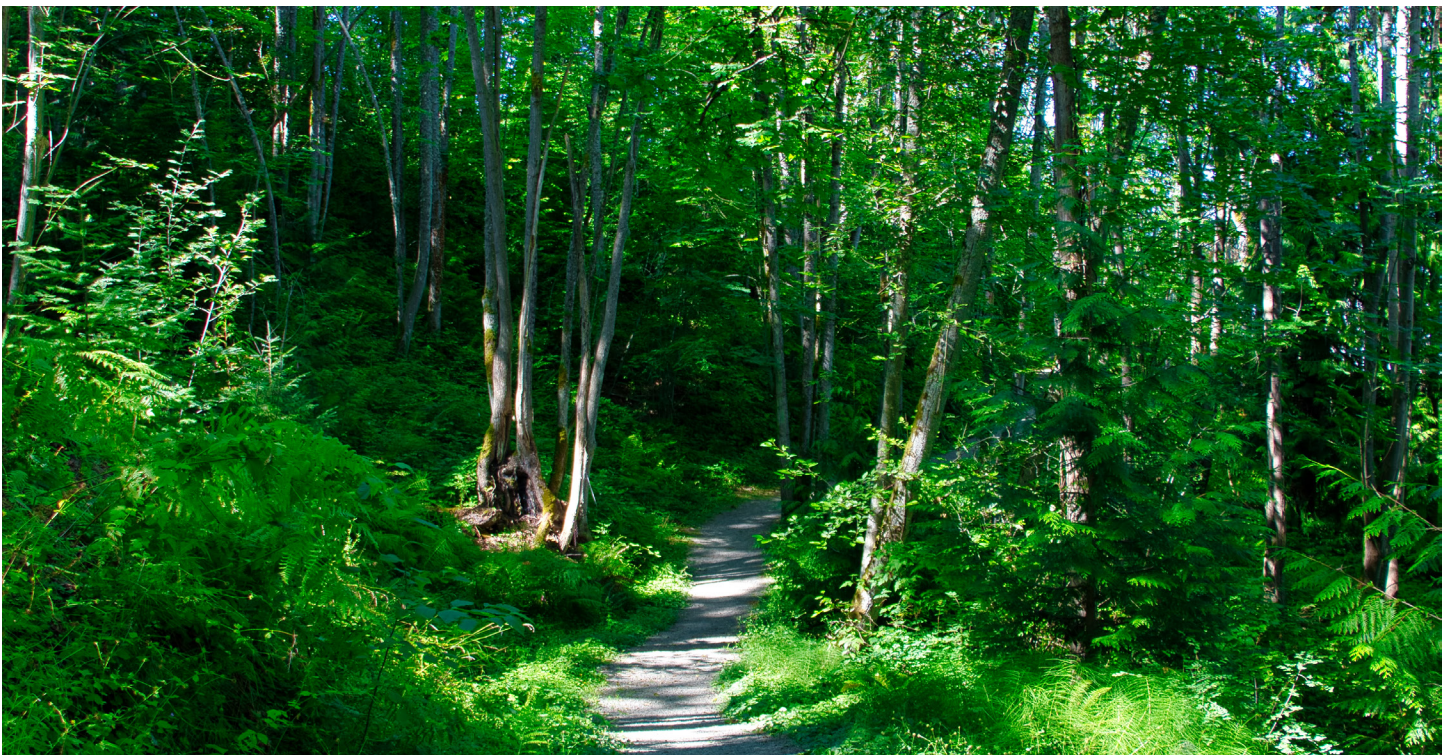
NS1: Increase urban tree canopy and green space.

NS2: Foster healthy & resilient natural systems.

Selected Key Actions *(full list starts on page 33)*

- **NS1.1:** Tree planting incentive program
- **NS1.2:** Tree planting programs

- **NS2.1:** Water-efficient landscape standards
- **NS2.3:** Green stormwater infrastructure



⁵ The most recent tree assessment was completed in 2018.



Focus Area: Community Resilience (CR)

Goal: *Ensure that all Mercer Island residents are prepared for current and future climate impacts.*

Targets

2030 Target

- 10% increase in participation in public programs devoted to climate resilience.
- 100% of residents served by emergency response programs and departments.

2050 Target

- 20% increase in participation in public programs devoted to climate resilience.

Strategies

CR1: Increase resilience of community members to climate impacts.

CR2: Prepare infrastructure & emergency services for climate change.

Selected Key Actions *(full list starts on page 35)*

- **CR1.1:** Personal preparedness for wildfire smoke
- **CR1.2:** Adaptation incentives

- **CR2.2:** Emergency management planning and response
- **CR2.3:** Electric grid resiliency





INTRODUCTION



Introduction

The City of Mercer Island acknowledges that the island is the traditional land of the first people of Seattle, the Duwamish people past and present, and honor with gratitude the land itself and the Duwamish Tribe.

Mercer Island is situated on Lake Washington, with close proximity to Seattle to the west and Bellevue to the east. The Island is home to a community of 25,000 residents and includes a Town Center to the north and a small commercial business district to the south. Visitors and residents enjoy the Island’s natural beauty, with over 475 acres of parkland and open space.

Residents are stewards of the Island and strive to maintain a sustainable community that supports both present and future generations. **This commitment to environmental stewardship is more important now than ever** given the impacts arising from a warming planet. The Puget Sound region has warmed substantially—average annual temperatures are up 1.3°F since 1900⁶—changing the seasonal weather patterns and leading to more frequent and severe winter storms and wildfires, heatwaves, and drought in the summer months. These impacts pose a serious threat to the natural environment, and also to jobs, health, and wellbeing.

Through this CAP, Mercer Island is joining communities across Puget Sound and the globe in taking action to reduce global greenhouse gas (GHG) emissions and improve resiliency to climate impacts such as extreme heat and wildfire smoke.



Climate Change & Equity

Climate change disproportionately impacts frontline communities locally, regionally, and globally, who are often the people with the least ability and resources to adapt. The Global South—regions in Latin America, Asia, Africa, and Oceania that are lower-income—is also more vulnerable to climate impacts like drought and flooding.

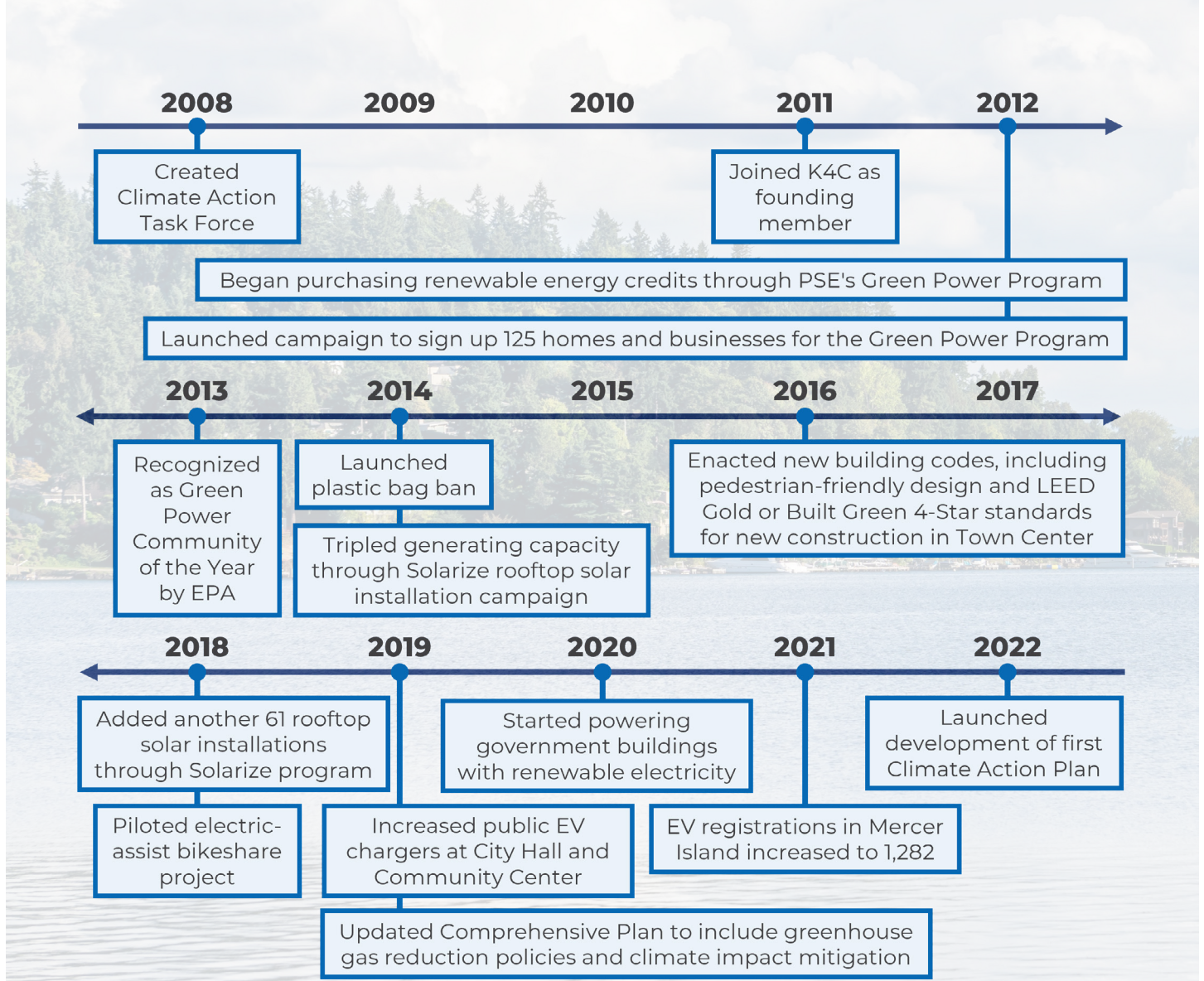
The global nature of climate impacts and emission reduction efforts means that Mercer Island’s CAP has implications beyond its borders. By committing to climate action, Mercer Island is helping to reduce local and global inequities caused and amplified by climate change.

6 [Climate change impacts in King County](#)



MERCER ISLAND CLIMATE ACTION TO DATE

This plan builds upon Mercer Island’s long history of environmental programs, policies, and accomplishments. In 2007, the City first committed to GHG reductions of 80% by 2050. In 2011, Mercer Island was a founding member of the King County-Cities Climate Collaboration (K4C)—a partnership between local King County jurisdictions that aims to share knowledge and resources to accelerate and enhance regional climate action. Through this partnership, Mercer Island has adopted stronger GHG reduction targets, most recently updated in April 2022. In pursuit of these targets and fostering sustainability more broadly on the Island, **the City has demonstrated local environmental leadership** through numerous programs and initiatives, some of which are highlighted below.





PLAN DEVELOPMENT PROCESS

The CAP was developed through a **multi-phase process informed by data, climate science, and community, staff, and City Council input**. The results of a comprehensive GHG analysis and forecast (described in detail in the "[Greenhouse Gas Emissions](#)" on [page 19](#)) were used to identify GHG emissions reduction targets and the key strategies and actions needed to meet these goals.





Community Engagement

Development of this plan incorporated community feedback through a range of platforms, including:

- Two community **workshops**
- **Tabling** events during Earth Day and at Summer Celebration
- A formal **public comment period** where residents were invited to review and provide feedback on the draft plan
- Two public **surveys**
- Ongoing engagement throughout the process via the online “**Let’s Talk**” platform



Themes from community engagement



Overall support for Mercer Island taking action to address climate change.



Concern over climate impacts (e.g., air quality and extreme heat) and support for enhancing community resilience.



Strong interest in advancing climate action through incentives, education, and outreach.



Desire to see climate change integrated into City planning efforts.



Consistent support for tree planting, protection of the natural environment, and access to open space.



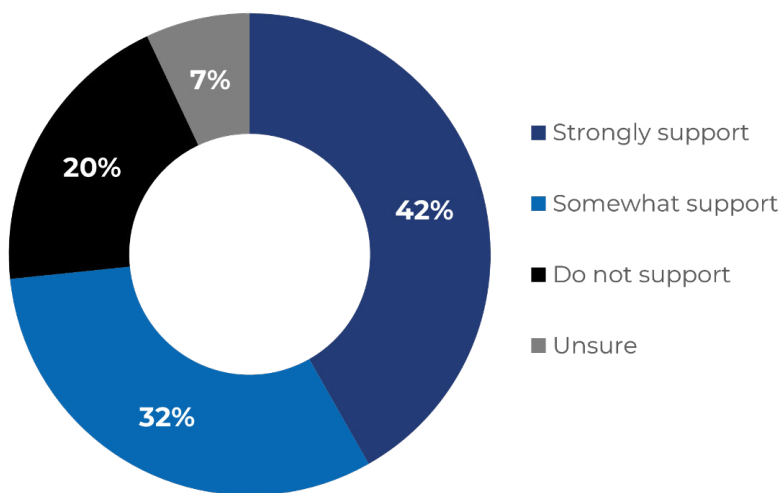
Frequent mention of residential or community solar, electrified transportation, an expanded bike lane network, strengthened green building codes, and air quality.



Random Sample Community Survey

The engagement strategy included a random sample community survey administered by mail to 2,500 randomly selected residents (10% of Mercer Island’s population)⁷ to gather feedback on proposed CAP strategies and actions. Survey results informed prioritization of potential CAP actions. Key findings from the survey are summarized below. "[Appendix D. Survey Summary](#)" provides the full detail on survey results.

- The majority of survey respondents (74%) strongly or somewhat supported all proposed climate actions.



Top 5 Most Supported Actions:

1. **CD 2.3** | Expand repair & reuse programs
2. **NS 2.1** | Water efficient landscaping standards
3. **CD 2.2** | Local retail options
4. **BE 1.6** | Solar panel expansion
5. **CR 1.2** | Adaptation incentives

Community Priorities:

- Improved resiliency to climate impacts was the top ranked solution for addressing climate change on Mercer Island.
- Worsening air quality was ranked as the most concerning climate related threat.

⁷ With 264 responses, the survey achieved an overall 95% confidence level with a +/- 6% margin of error



CLIMATE IMPACTS

Mercer Island is already facing economic, health and ecosystem impacts from climate change, and the community will continue to experience more intense and frequent **extreme heat events, wet winters, dry summers, and smoky days.**



Increased Temperatures: Heat waves across the Puget Sound are projected to intensify and King County is expected to average 20.1 extreme heat days per year in the 2050s and 40.9 in the 2080s.^{8,9}

Warmer temperatures can increase the risk of heat-related illness and death

Rising temperatures can increase vector-borne (e.g., mosquitos and ticks) and water-borne diseases

Extreme heat can disrupt and deteriorate energy, building, water, and road or rail infrastructure



Variable Precipitation: While annual precipitation trends will still be variable in the future, the precipitation intensity in Mercer Island is expected to increase by 26% by the 2050s.^{10,11}

Extreme rain can increase risk of mudslides and urban flooding, which can damage homes, businesses, and roads, especially during winter

Heavy rains can lead to more polluted runoff, which can cause increased nutrient loading to Lake Washington and more frequent algal blooms

Less summer and fall precipitation can mean prolonged exposure to wildfire smoke or poor air quality



Wildfire Smoke: The combination of warmer temperatures, less snowpack, increased drought, and historic land use is expected to increase annual fire danger days by 50% by 2050 and increase the number of wildfire smoke days in the future.¹²

Wildfire smoke degrades air quality which can harm human health and quality of life

Wildfires can disrupt energy infrastructure and grid reliability

Who is most vulnerable?

The effects of climate change are not felt equally across communities. Frontline communities have higher exposure and are more sensitive and less able to adapt to climate change. Climate change exacerbates existing social inequities and puts the heaviest burden on our most vulnerable community members, including people with low incomes, communities of color, immigrants, indigenous peoples, children, older persons, persons with disabilities or chronic medical conditions, and households that speak a language other than English.

8 [Extreme heat days under an RCP 8.5 scenario for years 2040-2069](#)

9 Extreme heat days can be measured as the change in the number of days per year with a maximum humidex value over 90°F relative to 1980-2009. Humidex is a measure of "experienced" temperature and includes measures of both temperature and humidity.

10 [Precipitation intensity under an RCP 8.5 scenario for the years 2040-2069](#)

11 Mercer Island spans 4 quadrants of the heavy precipitation tool; 26% is the median of the 4 quadrants (cells 72-61, 72-61, 73-61, 73-62), ranging from a precipitation intensity of 24-28%.

12 [Wildfire danger in the Western U.S.](#)

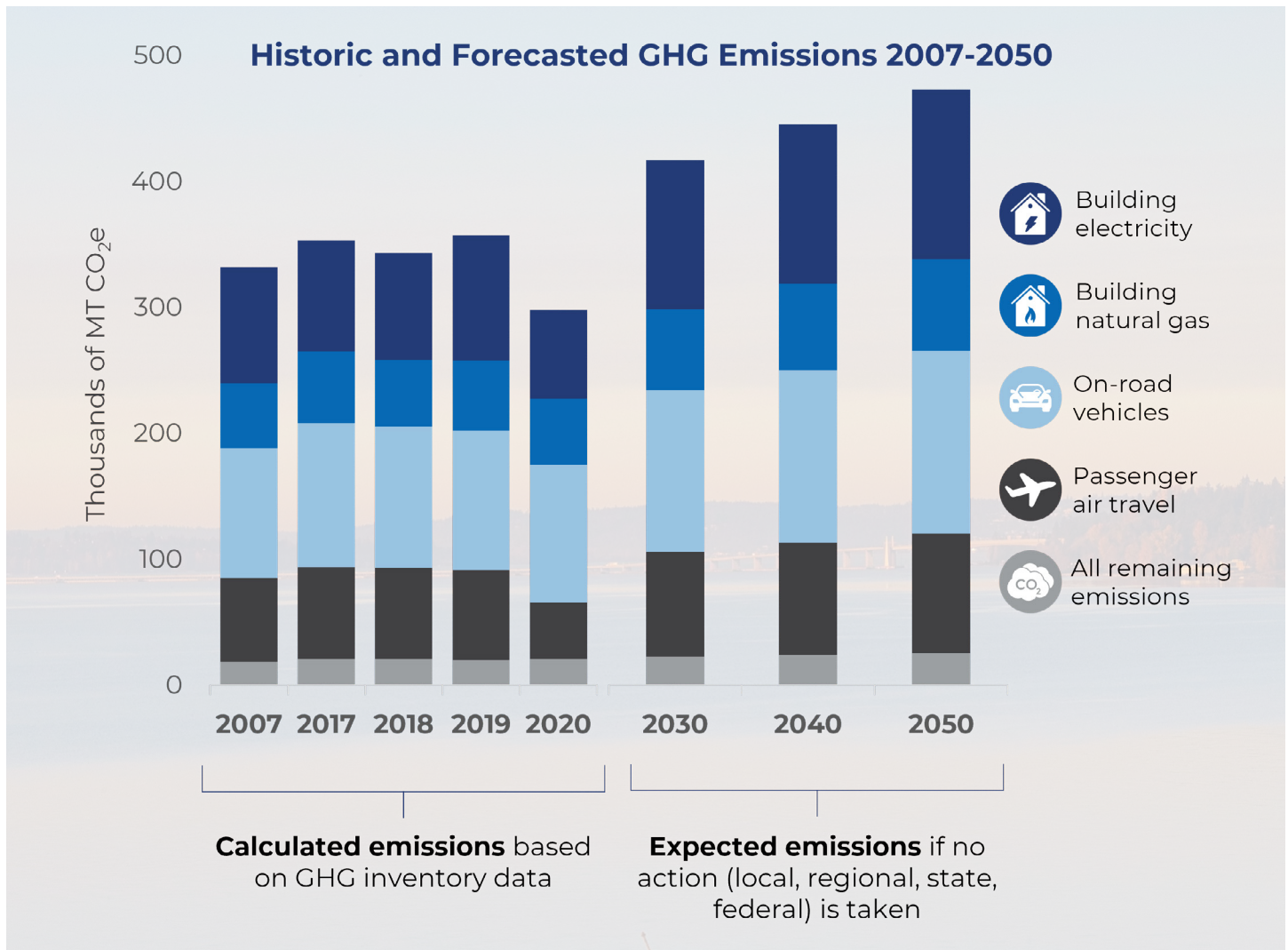


GREENHOUSE GAS EMISSIONS

Greenhouse gas emissions are generated primarily from human activities related to transportation, energy used in buildings, solid waste disposal, and other activities that require the burning of fossil fuels. These gases trap heat in the atmosphere, making the planet warmer and changing local climate patterns.



As shown in the graph below, **Mercer Island's largest sources of community emissions are consistently from on-road vehicles, building electricity, building natural gas, and passenger air travel.**¹³



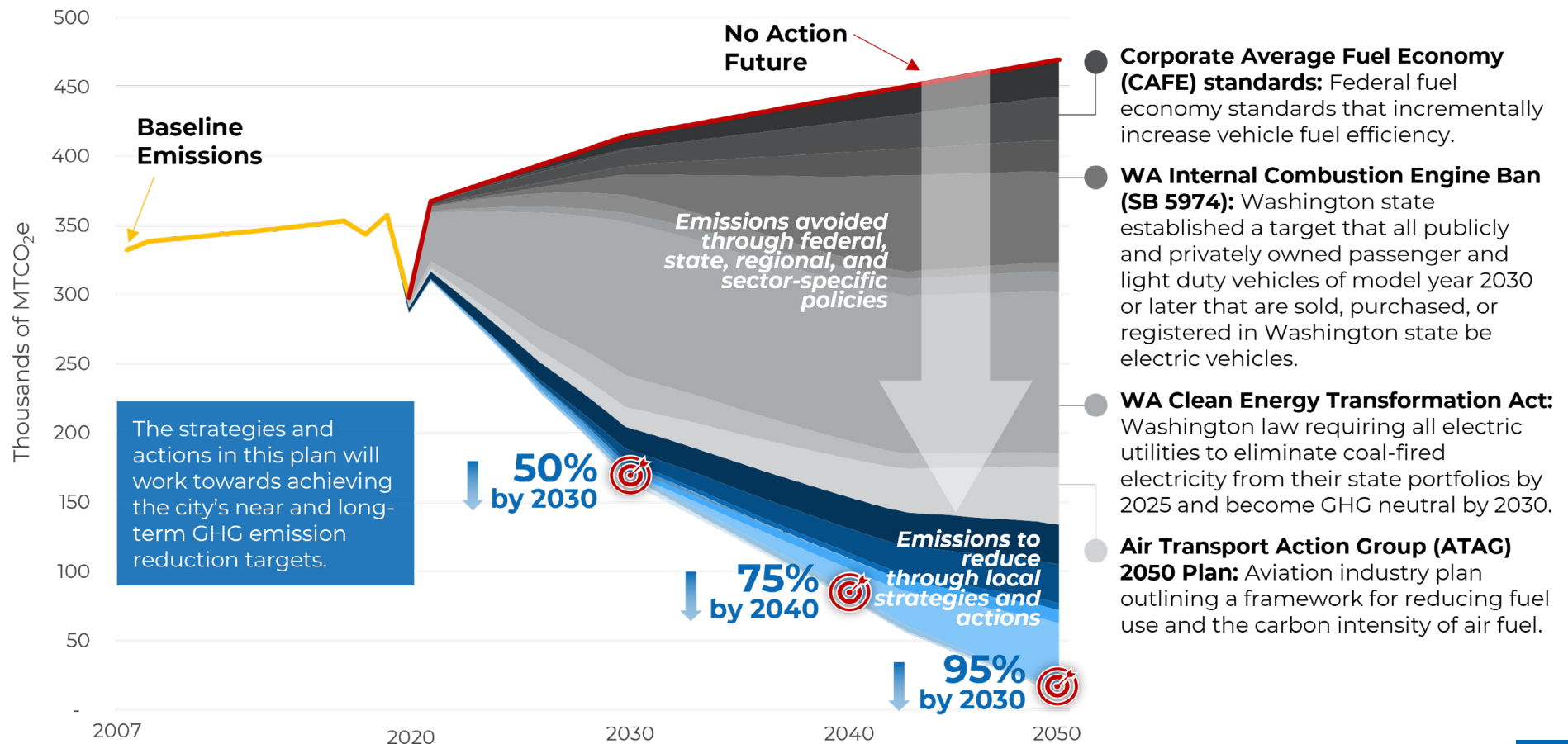
¹³ The reduction in 2020 emissions was due primarily to reduced travel during the COVID-19 pandemic.



Emissions Reduction Targets

As a founding member of K4C, Mercer Island has been actively working to reduce GHG emissions for more than 15 years. **The graph below details a pathway for meeting the shared K4C targets** to achieve 50%, 75%, and 95% emissions reductions from a 2007 baseline by 2030, 2040, and 2050, respectively.

As the graph shows, state and federal climate policies, as well as market solutions, will contribute significantly to meeting GHG reduction goals. The remaining emissions will need to be reduced through local strategies and actions, such as those detailed in this plan.





STRATEGIES & ACTIONS



Strategies & Actions

The strategies and actions in this CAP represent 54 high impact actions to chart a path for the community to meet emissions reduction targets and prepare for the impacts from climate change. The King County Climate Action Plan Toolkit and other sources informed this final list of strategies and actions.


Strategies and actions were first assessed based on costs to the City, impact (GHG emissions reduction or increased resilience), and feasibility of implementing the action. Feedback from the community, City Council, and staff informed and helped prioritize the final strategies and actions (see [“Appendix B. Multi-Criteria Analysis”](#) for more details on this action prioritization process). The [“Implementation Plan”](#) on page 38 provides details on the City’s plan for implementing CAP actions.

Strategies and actions are organized into six major focus areas, each with a specific goal and set of targets, strategies, and actions. Each piece works together to achieve the City’s collective GHG emissions reduction and climate resiliency goals.




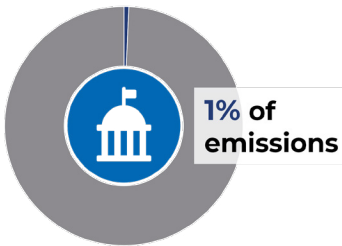
Icons

The following icons indicate actions that advance equity, are strongly supported by the community, or have been selected as early actions.

 **Equity:** Action has the potential to enhance equity or reduce historic or current disparities among underserved communities.

 **Community support:** Action is strongly supported by the community.

 **Early action:** High priority action for early implementation, based on action’s relative impact and feasibility.



CROSS-CUTTING & MUNICIPAL

City operations account for **1% of total emissions**, with most emissions coming from employee commutes and the municipal vehicle fleet. The City is committed to reducing these emissions and leading by example.



Focus Area Goal: Reduce overall community and municipal GHG emissions, integrate climate considerations into City reporting and decision-making, and encourage community members to participate in local climate action.

Strategy	KPI/Metric	2030 Target	2050 Target
Engage and support community climate action.	Reduction in community GHG emissions (MTCO ₂ e)	50% below 2007 baseline levels	95% below 2007 baseline levels and net zero emissions.
Reduce climate impacts of municipal operations.	Reduction in municipal GHG emissions (MTCO ₂ e)	100% (Carbon neutral)	100% (Carbon neutral)
Institutionalize climate considerations into City planning & decision-making.			

Reducing GHG Emissions Through Green Power

While the City’s municipal operations account for only about 1% of the community’s overall GHG emissions, the City is taking important steps to reduce its energy-related emissions. Between 2017 and 2020, the City has reduced municipal GHG emissions by around 36%, thanks to a 20-year agreement with the Puget Sound Energy (PSE) Green Direct program to fund construction of a central Washington windfarm and purchase the 100% renewable electricity to power all municipal buildings and facilities.

Island residents are also advancing local green energy by participating in the voluntary PSE Green Power program, which allows residents to invest in local renewable energy projects through an added fee on their monthly energy bills. Participation in the Green Power program on the Island has more than tripled over the past decade.







Strategy #1: Engage and support community climate action.

Action ID	Short name	Action description	Icons
CC1.1	Low carbon schools	Support local schools in integrating climate and sustainability education into curriculum and adopting low carbon solutions in their building operations. This may include working with the schools on energy efficiency and electrification, waste reduction and recycling, and sustainable purchasing.	
CC1.2	Climate advocacy and partnerships	Advocate for legislation that supports local climate mitigation and adaptation efforts. Continue to partner with neighboring cities and other regional groups to advance regional initiatives to reduce greenhouse gas emissions and increase adaptive capacity.	
CC1.3	Climate outreach/ education	<p>Develop a climate outreach and education campaign or program to support ongoing community engagement in climate actions. Initiatives may include:</p> <ul style="list-style-type: none"> • Climate challenges, competitions, and climate pledges aimed at inspiring friendly competition among residents and businesses. • Educational campaigns focused on addressing common misinformation related to home energy use and other everyday activities (e.g., the benefits of using cold v. hot water for laundry). • Resource sharing campaigns, such as "renewable energy" or "energy efficiency" home tours in which neighbors learn from each other on how to implement renewable energy or energy efficient upgrades in their homes. 	


Strategy #2: Reduce climate impact of municipal operations.

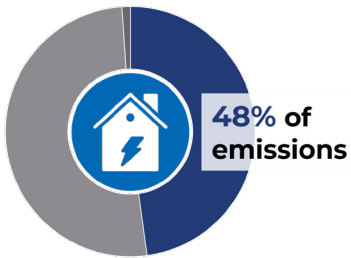
Action ID	Short name	Action description	Icons
CC2.1	CTR participation & incentives	Encourage Mercer Island employers to offer work from home and flexible work schedules for employees.	
CC2.2	Alternative commuting incentives	Reduce the drive alone rate for City employees through incentives and by improving commute options by site location. Preserve flexible scheduling and remote work options for staff.	
CC2.3	City green building guidelines	Develop green building guidelines to inform future municipal building designs.	
CC2.4	Municipal fleet electrification	Electrify the municipal vehicle fleet.	



Action ID	Short name	Action description	Icons
CC2.5	Municipal energy retrofits	Complete energy efficiency retrofits on existing municipal equipment and buildings.	
CC2.6	Environmentally Preferable Purchasing Policy	Develop and implement a municipal Environmental Preferable Purchasing Policy that prioritizes products with the lowest environmental impact. The policy will guide purchasing decisions within each department, including vehicle and fuel purchases, and construction materials.	
CC2.7	Municipal renewable energy storage	Expand solar installation and build renewable energy storage systems on City property.	

Strategy #3: Institutionalize climate considerations into City planning & decision-making.

Action ID	Short name	Action description	Icons
CC3.1	GHG tracking & reporting	Continue to maintain a publicly available online dashboard that tracks and reports on CAP and GHG reduction progress on an annual basis. Report to City Council and the community on progress annually.	
CC3.2	Climate-informed City decision-making	Apply a climate lens to City decision-making around major activities, capital projects, and initiatives.	



BUILDINGS & ENERGY

Mercer Island’s buildings and energy account for **48% of total emissions**, making this sector the community’s **second largest emissions source**. Emissions from electricity account for 28% of total emissions, followed by emissions from natural gas (16%), refrigerants (4%), and propane and fuel oil (1%).



Focus Area Goal: Reduce GHG emissions from buildings by reducing energy use, electrifying buildings, and transitioning to clean and reliable renewable energy sources.

Strategy	KPI/Metric	2030 Target	2050 Target
Transition to non-fossil building energy.	Reduction in building GHG emissions (MTCO ₂ e)	78% reduction compared to 2019	97% reduction compared to 2019
	Reduction in building natural gas, propane, & fuel oil consumption (MMBtu)	35% reduction compared to 2019	92% reduction compared to 2019
Reduce energy use in new and existing buildings.	Reduction in communitywide energy use (MMBtu)	22% reduction compared to 2019	63% reduction compared to 2019

Strategy #1: Transition to non-fossil building energy.

Action ID	Short name	Action description	Icons
BE1.1	Heat pump rebates & education	Partner with PSE and other regional partners to expand regional electric heat pump pilot programs and campaigns to replace natural gas-powered furnaces and increase energy efficiency in existing commercial and residential properties.	
BE1.2	Expand solar energy storage & grid resiliency	Accelerate improvements to the energy grid and storage to facilitate the transition to renewable energy sources. Improvements may include subsidy and grant programs to reduce the cost of battery storage in existing buildings and electric vehicle charging/storage system installations.	
BE1.3	Contractor incentive & training program	Work with regional jurisdictions and agencies to expand upstream and midstream incentives for building electrification retrofits to local distributors and contractors. Create or promote a contractor training and/or certification program focused on efficient, electric heat pump installation.	
BE1.4	Building code updates	Implement new building codes as required by the Washington State Building Code Council to transition from natural gas to electricity in new construction.	

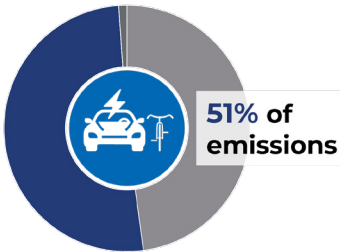


Action ID	Short name	Action description	Icons
BE1.5	Furnace and water heater replacement “burn out” program	Research the development of a “burn-out” program to incentivize the replacement of fossil fuel furnaces or water heaters with available high efficiency electric alternatives. Consider future policies to require high efficiency electric replacements at time of upgrade.	
BE1.6	Solar panel expansion	Partner with PSE and other regional partners to promote state and federal renewable energy incentives to fund onsite residential and commercial solar power projects.	
BE1.7	Green Power Program	Host education programs and conduct outreach events to encourage businesses and residents to enroll in Puget Sound Energy's (PSE) Green Power Program.	
BE1.8	Electric panel upgrades	Promote electric panel upgrades upon sale and/or rental turnover for residential and commercial properties to facilitate an easier transition to clean electricity buildings and vehicles.	

Strategy #2: Reduce energy use in new and existing buildings.

Action ID	Short name	Action description	Icons
BE2.1	Energy efficiency incentives and programs	Partner with PSE and other local jurisdictions and organizations to provide and promote energy efficiency incentives and rebate programs for residents and businesses. Partner to offer free home energy audits and upgrade programs for income-eligible residents.	
BE2.2	Green building campaigns	Develop a program to promote green building for residential and commercial properties, including education opportunities.	
BE2.3	Promote Washington Clean Buildings Act	Build awareness of the Washington Clean Buildings Act that requires all new and existing commercial buildings over 50,000 s.f. to reduce their Energy Use Intensity ¹⁴ 15% compared to the 2009-2018 average. Connect commercial building owners with state resources to learn more about the requirements of the Act.	
BE2.4	Point-of-sale green building requirements	Consider local or regional policies related to point-of-sale disclosures. Policy considerations may include disclosure of energy use, energy retrofits, or other considerations at point of sale.	

¹⁴ Energy use intensity refers to the energy consumed per square foot of building space.



TRANSPORTATION

Transportation is Mercer Island’s largest GHG emissions source, accounting for **51% of total communitywide emissions.** Most of these emissions come from on-road vehicles and aviation, which account for 28% and 20% of total emissions, respectively. The remaining transportation emissions come from off-road vehicles/equipment (including recreational boats), which account for 3% of total emissions.



Focus Area Goal: Reduce GHG emissions from transportation by transitioning to EVs, expanding multimodal transportation options, and improving cycling and pedestrian networks.

Strategy	KPI/Metric	2030 Target	2050 Target
Plan for expansion of EV infrastructure and fleet electrification.	Proportion of vehicles that are EVs	65% of new passenger vehicles 20% of all registered Vehicles	100% of all vehicles
	Reduction in average vehicle carbon intensity (MTCO ₂ e/mile)	44% reduction compared to 2019	96% ¹⁵ reduction compared to 2019
	Reduction in on-road transportation emissions (MTCO ₂ e)	45% reduction compared to 2019	96% reduction compared to 2019
Reduce vehicle travel and decarbonize offroad equipment	Reduction in overall vehicle miles traveled (passenger + freight)	1%-20% reduction compared to 2019 ¹⁶ <i>Target still under review – to be finalized for final plan</i>	5%-50% reduction compared to 2019 <i>Target still under review – to be finalized for final plan</i>
Reduce air travel emissions.	<ul style="list-style-type: none"> Reduction in regional aviation fuel use Reduction in aviation fuel carbon intensity 	<ul style="list-style-type: none"> 5% reduction in regional aviation fuel use compared to 2019 10% reduction in aviation fuel carbon intensity compared to 2019 	<ul style="list-style-type: none"> 15% reduction in regional aviation fuel use compared to 2019 95% reduction in aviation fuel carbon intensity compared to 2019

15 Remaining vehicle emissions in 2050 are generated from electricity emissions tied to EVs.



16 VMT reduction targets are still being determined based on the latest regional transportation projections and also K4C goals.




Strategy #1: Plan for expansion of EV infrastructure and fleet electrification.

Action ID	Short name	Action description	Icons
TR1.1	Public EV infrastructure plan	Develop and implement an EV Charging Infrastructure Plan, in collaboration with PSE, that guides expansion of EV charging capacity throughout the city. The plan will include analysis and recommendations on the facilities and infrastructure required for the City and the Mercer Island School District to meet 2030 and 2050 fleet electrification goals. The plan will also include a readiness and capacity study to evaluate increasing EV charging at commercial and residential properties citywide. The Plan will identify an implementation strategy including partnerships, funding, and future policy recommendations.	
TR1.2	Electric school buses	Engage the Mercer Island School District on the development of the EV Infrastructure Plan to ensure site readiness for bus and fleet electrification.	
TR1.3	State EV resource advocacy	Advocate for State resources to fund EV infrastructure planning.	
TR1.4	EV charging incentives & rebates	Explore and develop incentives in partnership with the State and other partners to expand EV charging capacity at commercial and residential properties.	
TR1.5	EV education & outreach	Develop education and outreach programs and materials to educate residents on the benefits of EVs, available EV incentives and rebates to purchase vehicles, EV charger locations, and other information to facilitate EV adoption.	


Strategy #2: Reduce vehicle travel and decarbonize offroad equipment.

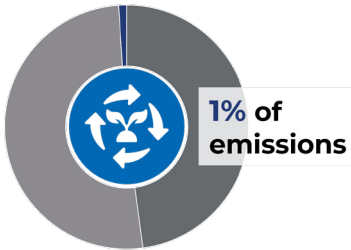
Action ID	Short name	Action description	Icons
TR2.1	Update the Pedestrian and Bicycle Plan	Update the Pedestrian and Bicycle Plan, as identified in the Transportation Improvement Plan for completion in the 2026-2027 biennium. Updates to the Plan will incorporate the results of the ADA Transition Plan, evaluate the use of urban street design guidelines such as NACTO, and identify/evaluate projects to provide a preliminary scope of work, and timeline for future improvements.	
TR2.2	Last-mile light rail connection	Support programs that provide multi-modal last-mile connections to the light rail station, such as through walking, biking, transit, and electric vehicle. Programs could include reintroduction of bike/scooter share programs.	



Action ID	Short name	Action description	Icons
TR2.3	Town Center Parking Study implementation	Encourage the use of alternative transportation by expanding time limited parking in Town Center and implementing other recommendations identified in the Town Center Parking Study.	
TR2.4	Electric lawn & construction equipment	Encourage the use of electric gardening equipment (e.g., lawn mowers, leaf blowers) through educational campaigns, rebates, and incentives.	

Strategy #3: Reduce aviation emissions.

Action ID	Short name	Action description	Icons
TR3.1	Air travel alternatives	Provide education materials around alternatives to air travel for conferences and business travel.	
TR3.2	State and federal aviation industry advocacy	Advocate for state and federal legislation aimed at decarbonizing the aviation sector.	
TR3.3	Regional aviation coordination	Support regional and industrial efforts to reduce regional aviation emissions by promoting the use of sustainable aviation fuel and adoption of aviation fuel efficiency measures.	



CONSUMPTION & DISPOSAL

Solid waste disposal and wastewater treatment account for **1% of community wide GHG emissions**. Consuming products also creates “upstream” emissions from the energy and fuel used to produce and distribute goods and materials.

The City can reduce these emissions by promoting consumption and increasing waste diversion. In addition to reducing emissions, waste prevention and diversion can also reduce pollution and litter. Sustainable consumption, in turn, supports Mercer Island businesses by promoting local goods.



Focus Area Goal: Reduce community waste and the GHG emissions associated with the consumption and disposal of goods and materials.

Strategy	KPI/Metric	2030 Target	2050 Target
Reduce waste generation & landfill disposal.	Diversion of waste from landfills	70% diversion rate Zero waste of edible food	70% diversion rate Zero waste of edible food
	Reduction in landfill waste (tons)	11% reduction compared to 2019	60% reduction compared to 2019
	Reduction in solid waste GHG emissions (MTCO ₂ e)	81% reduction compared to 2019	86% reduction compared to 2019
	Diversion of C&D waste from landfills	85% of C&D waste diverted	85% of C&D waste diverted
Consume sustainably.	Reduction in community waste generated, including solid waste, recycling, and compost	No net increase in waste generation compared to 2019 levels	Reduce overall waste generation by 10% compared to 2019 levels

Strategy #1: Reduce waste generation & landfill disposal.

Action ID	Short name	Action description	Icons
CD1.1	Recycling space/access requirements	Evaluate new construction requirements and consider policy requirements to ensure adequate space for recycling and compost collection.	
CD1.2	Mandatory composting/recycling	Phase in new state mandates for residential and commercial recycling and composting, and enforce sorting by an identified year, especially for multi-family buildings and commercial properties where contamination is high.	



Strategy #2: Consume sustainably.

Action ID	Short name	Action description	Icons
CD2.1	Community gardens	Encourage the development of community gardens at churches, community facilities, multi-family properties, and in other areas.	
CD2.2	Local retail options	Collaborate with the Chamber of Commerce to promote local retail shopping, including programs, marketing, and other seasonal campaigns. Explore potential collaboration with City's Thrift Shop.	
CD2.3	Expand repair/reuse programs	Support community reuse programs (e.g., tool libraries, Buy Nothing groups, repair cafés) to promote a circular economy.	
CD2.4	Low carbon building materials	Partner with contractors and architects to promote carbon-sequestering and low carbon building materials in new construction and renovations. Support State requirements for disclosing and/or limiting embodied carbon emissions of buildings or policies focused on reducing the use of specific materials.	



NATURAL SYSTEMS

Natural systems (e.g., trees, soil) store and capture carbon from the atmosphere and provide important climate resiliency services. For example, natural cooling from tree shade reduces extreme heat stress and decreases energy demand for air conditioning. Conserving valuable water resources also helps ensure that Mercer Island is resilient against future droughts and can maintain a healthy water supply in the years ahead.



Focus area goal: Foster climate resilient natural landscapes by protecting vital habitats, ecosystems, and natural resources, and conserving water resources.

Strategy	KPI/Metric	2030 Target	2050 Target
Increase urban tree canopy and green space.	Increase in tree canopy acreage (% of city coverage) ¹⁷	Maintain current canopy and increase canopy by 5% compared to 2018 ¹⁸ <i>Target still under review – to be finalized for final plan</i>	Maintain current canopy and increase canopy by 15% – <i>Target still under review – to be finalized for final plan</i>
Foster healthy & resilient natural systems.	Change in ecosystem function (forest age & diversity, invasives removal, stream daylighting)	Restored ecosystem function (acres?) <i>Target still under review – to be finalized for final plan</i>	Improved ecosystem function (acres?) <i>Target still under review – to be finalized for final plan</i>

Strategy #1: Increase urban tree canopy and green space.

Action ID	Short name	Action description	Icons
NS1.1	Tree planting incentive program	Develop programs to support and encourage residents and large property owners to plant the right tree in the right place and sustain existing trees with reduced cost or free trees. Offer tree-awareness campaigns and classes to educate the community and develop tree planting demonstration programs.	
NS1.2	Tree planting programs	Enhance City-led street tree planting in the right-of-way and assess long-term stewardship needs; and promote street frontage plantings by businesses.	

17 Target applies only to land acreage that could support tree canopy.

18 The most recent tree canopy assessment was completed in 2018.



Strategy #2: Foster healthy & resilient natural systems.

Action ID	Short name	Action description	Icons
NS2.1	Water-efficient landscape standards	Utilize educational campaigns to encourage drought-resistant and/or native landscaping and design. Work with landscape companies to educate and incentivize drip irrigation and smart management and technology. Develop demonstration programs.	
NS2.2	Water conservation incentives	Partner with regional water conservation groups, such as the Saving Water Partnership, to develop and advertise incentives and installation programs to retrofit inefficient water fixtures.	
NS2.3	Green stormwater infrastructure	Promote green stormwater infrastructure and low impact development (LID) through education and demonstration programs.	
NS2.4	Greywater reuse education	Develop campaigns to educate residents and businesses on the financial and environmental benefits of reusing rainwater and greywater.	



COMMUNITY RESILIENCE

Increasing community resilience—the community’s ability to adapt and respond to unavoidable climate impacts—is a necessary part of effective climate action.



Focus area goal: Ensure that all Mercer Island residents are prepared for current and future climate impacts.

Strategy	KPI/Metric	2030 Target	2050 Target
Increase resilience of community members to climate impacts.	Participation in public programs devoted to climate resilience	10% increase	20% increase
Prepare infrastructure & emergency services for climate change.	Number of residents served by emergency response programs and departments	100% of residents	



Strategy #1: Increase resilience of community members to climate impacts.

Action ID	Short name	Action description	Icons
CR1.1	Personal preparedness for wildfire smoke	Partner with Puget Sound Clean Air Agency and other regional organizations to educate the community on how to plan for and address periods of low air quality due to wildfire smoke. Opportunities include HVAC filter upgrades, DIY filter fans, use of masks, pet care, and other planning and safety tips.	
CR1.2	Adaptation incentives	Support and advocate for State and Federal rebate and incentive programs to encourage the installation of low-emissions space-cooling devices on residential and commercial properties (e.g., cool roofs, green roofs, cool pavement, ceiling fans, air filters).	
CR1.3	Urban flood management	Assess areas most at risk for flooding and ensure emergency systems are prepared to address flooding emergencies.	

Strategy #2: Prepare infrastructure & emergency services for climate change.

Action ID	Short name	Action description	Icons
CR2.1	Hazard Mitigation Plan update	Partner with King County on the next update to the Countywide Hazard Mitigation Plan (timeline estimated in 2025) to ensure climate impacts are included in plan update.	



Action ID	Short name	Action description	Icons
CR2.2	Emergency management planning and response	Review and update City’s emergency management plans to ensure readiness to respond to climate emergencies, such as providing community cooling centers and air shelters in case of extreme heat and wildfires. Ensure communication materials are developed and ready for quick deployment during climate emergencies.	
CR2.3	Electric grid resiliency	Encourage the State to implement requirements to improve the resiliency of the electric network, including the undergrounding of power lines.	



IMPLEMENTATION PLAN



Implementation Plan

The City will need to collaborate with local, regional, and State organizations, the community, and local businesses to implement CAP actions. This section addresses key implementation considerations and provides a framework for CAP implementation.

[Appendix A. Implementation Matrix](#) details the implementation plan for each individual action.

OVERSIGHT, ACCOUNTABILITY & FUNDING

Some key components of successful implementation are clear roles and responsibilities and annual progress reports. Upon adoption of this plan, the City will do the following:

- Prepare an **annual report** for City Council and the community on implementation, challenges and overall progress on meeting GHG reduction goals.
- Develop **budget and work plan recommendations** for City Council consideration each biennium to support CAP recommended actions.
- Pursue **grants and partnership** opportunities to support implementation of CAP actions.
- Identify CAP related **advocacy items** for inclusion in the City's annual legislative priorities.

MONITORING, EVALUATION, & REPORTING

Monitoring, evaluating, and reporting on CAP programs and policies is important to understanding the City's progress and will include:

- **Conducting a communitywide GHG inventory** every two years, ideally aligned with partner cities in King County's Eastside.
- **Updating the Climate Action Plan** approximately every 10 years, incorporating lessons learned from CAP implementation, updated climate science, and new or revised targets, strategies, and actions.
- **Regularly updating the City's CAP webpage** so that community members can stay informed, get involved with implementation, and track progress toward goals and targets.



COMMUNITY INVOLVEMENT

Community support and participation are key to achieving community-wide emission reduction and climate resilience goals. Community members can support CAP implementation in a variety of ways, including:

- **Participating** in new and ongoing climate initiatives.
- **Promoting** public education and engagement campaigns by staying informed and sharing opportunities with friends, family, and neighbors.
- **Volunteering** to help with implementation of CAP actions.
- **Advocating** for additional funding by engaging with local, regional, State and Federal representatives.

The City will continue to engage with the community throughout implementation of the CAP. In 2023 and 2024, the City work plan includes expanding the [heat pump rebate and installation program](#), continuing the Mercer Island [Climate Challenge](#), and seeking funding for public EV charger planning and installation.

[Appendix A. Implementation Matrix](#) below details the implementation plan for each individual action.



Appendix A. Implementation Matrix

The Implementation Matrix below outlines the key factors that the City will consider in implementing each action in the CAP. The Matrix is organized as follows:

Timeline for implementation	The expected timeline to start implementing the action. See <i>Timeline Key</i> below for additional details.
Cost range	The estimated annual cost to the City for implementing an action. See <i>Cost Key</i> below for additional details.
Lead department(s)	The City department(s) that will ultimately be responsible for overseeing the implementation of an action.
Outside partner(s)	Known local and regional partner(s) who will support implementation.
Implementation considerations	The general factors that the City considered in determining the timeframe for implementing actions and will consider in implementing an action moving forward.

IMPLEMENTATION PLAN KEYS

Timeline

Ongoing (O)	Action is already underway and/or is part of existing City programs.
Near term (NT)	City will begin implementing action within the next 1-3 years.
Mid-term (MT)	City will begin implementing action within the next 4-6 years.
Long term (LT)	City will begin implementing action within the next 7-10 years, or more.



Cost

\$	Action implementation will not incur additional cost beyond current staffing, programs, etc. or will require minimal new cost (<\$10k)
\$\$	Action implementation is expected to cost \$10K-\$25K
\$\$\$	Action implementation is expected to cost \$25-\$50K
\$\$\$\$	Action implementation is expected to cost \$50-100K
\$\$\$\$\$	Action implementation is expected to cost \$100K or more

Lead Department

CM	City Manager	PD	Police Department
CPD	Community Planning & Development	PR	Parks & Recreation
FD	Fire Department	PW	Public Works
HR	Human Resources	SP	Sustainability Program
MI-Emerg	Emergency Preparedness	YFS	Youth & Family Services

Partners

CC	Chamber of Commerce	NIM	Neighbors in Motion
ECP	Eastside Climate Partnership	PSCAA	Puget Sound Clean Air Agency
EKCCC	East King County Chambers Coalition	PSE	Puget Sound Energy
EPA	Environmental Protection Agency	PSRC	Puget Sound Regional Council
K4C	King County-Cities Climate Collaboration	RCC	Regional Code Collaboration
KCLS	King County Library System	SPU	Seattle Public Utilities
KCM	King County Metro	ST	Sound Transit
KCOEM	King County Office of Emergency Management	Sust-MI	Sustainable-Mercer Island
MI-CAN	MI Climate Action Now	WSDOE	Washington State Department of Ecology
MISD	Mercer Island School District	WSDOT	Washington State Department of Transportation



Icons



Action may require a code change to implement



Indicates a near term action that may require substantial time to implement and thus should start right away.



Early win—an action that can be implemented early and quickly.

MATRIX

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC1.1	Low carbon schools	Support local schools in integrating climate and sustainability education into curriculum and adopting low carbon solutions in their building operations. This may include working with the schools on energy efficiency and electrification, waste reduction and recycling, and sustainable purchasing.	○	\$\$	SP, CM, CPD	King County, MISD, KCLS, CC, EnviroStars	<ul style="list-style-type: none"> City currently coordinates with MISD on a number of long-term planning needs; action will build upon this work.
CC1.2	Climate advocacy and partnerships	Advocate for legislation that supports local climate mitigation and adaptation efforts. Continue to partner with neighboring cities and other regional groups to advance regional initiatives to reduce greenhouse gas emissions and increase adaptive capacity.	○	\$\$	SP, CM	K4C, CC, EKCCC	<ul style="list-style-type: none"> Annual legislative agenda process is well established.



Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC1.3	Climate outreach/ education	<p>Develop a climate outreach and education campaign or program to support ongoing community engagement in climate actions. Initiatives may include:</p> <ul style="list-style-type: none"> • Climate challenges, competitions, and climate pledges aimed at inspiring friendly competition among residents and businesses. • Educational campaigns focused on addressing common misinformation related to home energy use and other everyday activities (e.g., the benefits of using cold v. hot water for laundry). • Resource sharing campaigns, such as "renewable energy" or "energy efficiency" home tours in which neighbors learn from each other on how to implement renewable energy or energy efficient upgrades in their homes. 	O	\$\$\$	SP	Sust-MI, MI-CAN, MISD, EnviroStars, CC, ECP	★ Early win —action will build upon and expand existing work and outreach, including the ongoing MI Climate Challenge.




Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC2.1	CTR participation & incentives	Encourage Mercer Island employers to offer work from home and flexible work schedules for employees.	NT	\$\$	SP, CPD	KCM, ST	<ul style="list-style-type: none"> The City does not currently participate in a formal CTR program, although the City utilizes flexible work schedules to reduce employee travel. State regulations only require businesses with over 100 full-time employees in one location to participate, meaning only a few large employers in MI may qualify.
CC2.2	Alternative commuting incentives	Reduce the drive alone rate for City employees through incentives and by improving commute options by site location. Preserve flexible scheduling and remote work options for staff.	O	\$\$	SP, HR	KCM, ST	<ul style="list-style-type: none"> Remote work surged during the pandemic and the City now offers many options for alternative or flex schedules. Additional gains for nearby City buildings may come with the opening of light rail and for more distant buildings if last-mile connections established. Continue to offer hybrid options for public meetings to reduce car travel.



Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC2.3	City green building policy	Develop green building guidelines to inform future municipal building designs.	NT	\$\$\$	SP, CPD, Finance, CM	RCC, K4C	<ul style="list-style-type: none"> If this type of policy work is pursued, the City should adopt existing guidelines that have proved effective.
CC2.4	Municipal fleet electrification	Electrify the municipal vehicle fleet.	O	\$\$\$\$\$	PW, SP	PSCAA, Dept of Commerce	<ul style="list-style-type: none"> EV pilots have been successful and are ready to scale up as technology and equipment becomes available. Additional charging equipment and capacity upgrades (including backup power supply) will be needed to support more City EV's. Staff should continue testing effectiveness of EV and participate in pilot studies before decisions are made. Also requires Long-Term Facility Plan to be completed in addition to citywide EV Plan.




Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC2.5	Municipal energy retrofits	Complete energy efficiency retrofits on existing municipal equipment and buildings.	NT 	\$\$\$\$\$	Facilities, SP	PSE	<ul style="list-style-type: none"> Well underway; most parking lots and streetlight efficiency projects have been completed. Further retrofits (e.g., remaining LED lighting, HVAC upgrades) at most City facilities will require significant additional investment to meet current energy code. City will need to include this assessment of additional retrofits as part of the Long-Range Facilities Plan. Remaining retrofits could potentially be funded through rebates/ grants.





Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC2.6	Environmentally Preferable Purchasing Policy	Develop and implement a municipal Environmental Preferable Purchasing Policy that prioritizes products with the lowest environmental impact. The policy will guide purchasing decisions within each department, including vehicle and fuel purchases, and construction materials.	LT	\$\$	Finance, SP, CM	CC	<ul style="list-style-type: none"> • Must be factored into City operational budgets before implementing. • West Coast Climate & Materials Mgmt. Forum: Climate Friendly Purchasing Toolkit could serve as a starting point and a good resource to support implementation. • Consider integrating with a “Buy Local” initiative for City operations.
CC2.7	Municipal renewable energy storage	Expand solar installation and build renewable energy storage systems on City property.	MT/LT	\$\$\$\$	SP, Finance	Dept of Commerce, PSE, MISD	<ul style="list-style-type: none"> • Continue to apply for cost-sharing grants. • Explore potential for additional school roofs to go solar.
CC3.1	GHG tracking & reporting	Continue to maintain a publicly available online dashboard that tracks and reports on CAP and GHG reduction progress on an annual basis. Report to City Council and the community on progress annually.	O	\$\$\$	SP	PSE, Recology, PSRC	<ul style="list-style-type: none"> ★ Early win—data exists on website and will be enhanced as an outcome of CAP. • Will include GHG inventory and other Key Performance Indicators (KPI's).





Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC3.2	Climate-informed City decision-making	Apply a climate lens to City decision-making around major activities, capital projects, and initiatives.	NT	\$\$	SP, CM, Finance	0	<ul style="list-style-type: none"> The strategies and actions adopted in the final CAP will serve as a guidepost for City actions. Invest in climate training for staff, boards and commissions, and City Council to continue to grow knowledge and understanding of the subject.
BE1.1	Heat pump rebates & education	Partner with PSE and other regional partners to expand regional electric heat pump pilot programs and campaigns to replace natural gas-powered furnaces and increase energy efficiency in existing commercial and residential properties.	O	\$\$\$\$	SP	ECP, K4C, Sust-MI, MI-CAN	<ul style="list-style-type: none"> Explore opportunities to expand current work on pilot program using WSU CEEP Energy Efficiency Grant with other Eastside Cities.
BE1.2	Expand solar energy storage & grid resiliency	Accelerate improvements to the energy grid and storage to facilitate the transition to renewable energy sources. Improvements may include subsidy and grant programs to reduce the cost of battery storage in existing buildings and electric vehicle charging/storage system installations.	NT 	\$\$\$	SP	PSE	<ul style="list-style-type: none"> Work would initially be mostly grant applications. May also involve lobbying activity.





Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
BE1.3	Contractor incentive & training program	Work with regional jurisdictions and agencies to expand upstream and midstream incentives for building electrification retrofits to local distributors and contractors. Create or promote a contractor training and/or certification program focused on efficient, electric heat pump installation.	O	\$\$	SP	RCC, K4C	<ul style="list-style-type: none"> Primarily lobbying effort to increase incentives. Contractor training would be best attempted as regional effort.
BE1.4	Building code updates 	Implement new building codes as required by the Washington State Building Code Council to transition from natural gas to electricity in new construction.	MT	\$\$\$	CPD, SP	RCC	<ul style="list-style-type: none"> WA Building Code Council requires all-electric (i.e., heat pump) space and water heating by July 2023 for new commercial & multi-family buildings, as well as new single-family homes.
BE1.5	Furnace and water heater replacement “burn out” program 	Research development of a “burn-out” program to incentivize the replacement of fossil fuel furnaces or water heaters with available high efficiency electric alternatives. Consider future policies to require high efficiency electric replacements at time of upgrade.	NT	\$\$	SP, CPD	RCC, K4C	<ul style="list-style-type: none"> Best attempted as a regional or statewide effort. City will need to seek grant funding for the program. Policy development could impact staffing needs in CPD, particularly related to electrical inspections. City will need to carefully evaluate policy implementation and costs before pursuing.




Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
BE1.6	Solar panel expansion 	Partner with PSE and other regional partners to promote state and federal renewable energy incentives to fund onsite residential and commercial solar power projects.	MT	\$\$	SP	PSE, K4C	<ul style="list-style-type: none"> Evaluate update to City land use code allowing more than 20% roof coverage for non-residential buildings outside Town Center. Continue to apply for Department of Commerce solar grants.
BE1.7	Green Power Program	Host education programs and conduct outreach events to encourage businesses and residents to enroll in Puget Sound Energy's (PSE) Green Power Program.	NT	\$\$	SP	PSE, CC, EKCCC	<ul style="list-style-type: none"> ★ Early win—continue work that has already led to high participation. Program participation is also included as part of the MI Climate Challenge.
BE1.8	Electric panel upgrades 	Promote electric panel upgrades upon sale and/or rental turnover for residential and commercial properties to facilitate an easier transition to clean electricity buildings and vehicles.	MT	\$\$	CPD, SP	RCC	<ul style="list-style-type: none"> An educational campaign would be fairly straightforward; but if mandated, this would be a major undertaking with significant staff impacts. Best suited as a regional or Statewide partnership.



Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
BE2.1	Energy efficiency incentives and programs	Partner with PSE and other local jurisdictions and organizations to provide and promote energy efficiency incentives and rebate programs for residents and businesses. Partner to offer free home energy audits and upgrade programs for income-eligible residents.	NT	\$\$\$\$\$	SP	PSE	<ul style="list-style-type: none"> Contingent on State grant funding; encourage PSE to restart Home Energy Assessments.
BE2.2	Green building campaigns 	Develop a program to promote green building for residential and commercial properties including education opportunities.	MT	\$\$	SP, CPD	RCC, K4C, Master Builders, CC, EKCCC	<ul style="list-style-type: none"> Focus on campaigns and education encouraging residential and commercial property owners to consider alternatives when they rebuild or remodel.
BE2.3	Promote Washington Clean Buildings Act	Build awareness of the Washington Clean Buildings Act that requires all new and existing commercial buildings over 50,000 s.f. to reduce their Energy Use Intensity 15% compared to the 2009-2018 average. Connect commercial building owners with state resources to learn more about the requirements of the Act.	LT 	\$\$	SP, CPD	PSE, CC	<ul style="list-style-type: none"> SP and CPD may be able to underscore the outreach work that Department of Commerce and PSE have already done. March 2022 expansion of Clean Buildings Act means City facilities (all of which are <50,000 sq ft) will need to begin reporting by June 2027.



Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
BE2.4	Point-of-sale green building requirements 	Consider local or regional policies related to point-of-sale disclosures. Policy considerations may include disclosure of energy use, energy retrofits, or other considerations at point of sale.	MT	\$\$\$	SP, CPD	tbd	
TR1.1	Public EV Infrastructure Plan	<p>Develop and implement an EV Charging Infrastructure Plan, in collaboration with PSE, that guides expansion of EV charging capacity throughout the city. The plan will include analysis and recommendations on the facilities and infrastructure required for the City and the Mercer Island School District to meet 2030 and 2050 fleet electrification goals. The plan will also include a readiness and capacity study to evaluate increasing EV charging at commercial and residential properties citywide.</p> <p>The Plan will identify an implementation strategy including partnerships, funding, and future policy recommendations.</p>	NT	\$\$\$\$\$	SP	K4C	<ul style="list-style-type: none"> • Consider adding chargers to ROW parking or streetlights. • May occur as a joint K4C initiative.





Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
TR1.2	Electric school buses	Engage the Mercer Island School District on the development of the EV Infrastructure Plan to ensure site readiness for bus and fleet electrification.	NT	\$\$	SP	MISD, PSCAA, EPA	<ul style="list-style-type: none"> • Significant cost that would need grant support; new federal grants coming 2023 (EPA). • MISD fast chargers would offer alternatives for City EV's.
TR1.3	State EV resource advocacy	Advocate for State resources to fund EV infrastructure planning.	NT	\$\$	SP, CM	K4C	<ul style="list-style-type: none"> • Primarily a lobbying effort and part of K4C platform.
TR1.4	EV charging incentives & rebates	Explore and develop incentives in partnership with the State and other partners to expand EV charging capacity at commercial and residential properties.	NT	\$\$\$	SP	K4C	<ul style="list-style-type: none"> • Primarily a lobbying effort.
TR1.5	EV education & outreach	Develop education and outreach programs and materials to educate residents on the benefits of EVs, available EV incentives and rebates to purchase vehicles, EV charger locations, and other information to facilitate EV adoption.	O	\$\$	SP	Sust-MI	<ul style="list-style-type: none"> • Action builds on outreach underway, but City website needs a dedicated page for this information.




Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
TR2.1	Update the Pedestrian and Bicycle Plan	Update the Pedestrian and Bicycle Plan, as identified in the Transportation Improvement Plan for completion in the 2026-2027 biennium. Updates to the Plan will incorporate the results of the ADA Transition Plan, evaluate the use of urban street design guidelines such as NACTO, and identify/evaluate projects to provide a preliminary scope of work, and timeline for future improvements.	MT	\$\$\$\$\$	PW, SP	MISD, NIM, ST, WSDOT, KCM	<ul style="list-style-type: none"> Scheduled for 2026-2027 Biennium in the current Transportation Improvement Plan (TIP); could potentially be moved up with sufficient funding.
TR2.2	Last-mile light rail connection	Support programs that provide multi-modal last-mile connections to the light rail station, such as through walking, biking, transit, and electric vehicle. Programs could include reintroduction of bike/scooter share programs.	NT	\$\$\$\$\$	SP, PW	Bikeshare companies, KCM, ST	<ul style="list-style-type: none"> Coordinate potential bike/ped projects with TIP, and with recent parking study. Continue to explore bike/scooter-share pilots.
TR2.3	Town Center Parking Study implementation	Encourage the use of alternative transportation by expanding time limited parking in Town Center and implementing other recommendations identified in the Town Center Parking Study.	NT	\$\$	PD, PW, CPD, SP	0	<ul style="list-style-type: none"> Builds on recent parking study; final recommendations are pending.
TR2.4	Electric lawn & construction equipment	Encourage the use of electric gardening equipment (e.g., lawn mowers, leaf blowers) through educational campaigns, rebates, and incentives.	MT	\$\$\$	SP	PSCAA	




Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
TR3.1	Air travel alternatives	Provide education materials around alternatives to air travel for conferences and business travel.	LT	\$\$	SP	K4C	<ul style="list-style-type: none"> High GHG reduction action but requires regional, State, and Federal collaboration to determine approach.
TR3.2	State and federal aviation industry advocacy	Advocate for state and federal legislation aimed at decarbonizing the aviation sector.	MT	\$	SP, CM	Port of Seattle; EKCCC K4C	<ul style="list-style-type: none"> Primarily lobbying effort.
TR3.3	Regional aviation coordination	Support regional and industrial efforts to reduce regional aviation emissions by promoting the use of sustainable aviation fuel and adoption of aviation fuel efficiency measures.	NT 	\$	SP, CM	K4C; Port of Seattle	<ul style="list-style-type: none"> Primarily requires regional collaboration.
CD1.1	Recycling space/access requirements 	Evaluate new construction requirements and consider policy requirements to ensure adequate space for recycling and compost collection.	MT	\$\$	SP, CPD	RCC,	




Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CD1.2	Mandatory composting/recycling 	Phase in new state mandates for residential and commercial recycling and composting, and enforce sorting by an identified year, especially for multi-family buildings and commercial properties where contamination is high.	MT	\$\$	SP, CPD	RCC, Recology, CC	<ul style="list-style-type: none"> • Ensure that all City facilities also compost food waste. • Facilitate Recology outreach to multi-family and commercial properties. • Partner with Chamber of Commerce to highlight businesses that already compost. • Reinforce King County's existing Construction & Demolition debris recycling rules through outreach. • Older multi-family facilities have been reluctant to add composting due to loading dock space.
CD2.1	Community gardens	Encourage the development of community gardens at churches, community facilities, multi-family properties, and in other areas.	NT	\$\$	PR, SP	Pea Patch Users	<ul style="list-style-type: none"> ★ Early Win—Action builds on enhanced promotion, recruitment, and expansion underway for existing plots at Community Center.
CD2.2	Local retail options	Collaborate with the Chamber of Commerce to promote local retail shopping, including programs, marketing, and other seasonal campaigns.	O/NT	\$\$	CPD	CC	<ul style="list-style-type: none"> • Eligible for renewed Economic Development grant from Port of Seattle.



Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CD2.3	Expand repair/reuse programs	Support community reuse programs (e.g., tool libraries, Buy Nothing groups, repair cafés) to promote a circular economy. Explore potential collaboration with City's Thrift Shop.	MT	\$	SP	King County, Sust-MI, KCLS	
CD2.4	Low carbon building materials 	Partner with contractors and architects to promote carbon-sequestering and low carbon building materials in new construction and renovations. Support State requirements for disclosing and/or limiting embodied carbon emissions of buildings or policies focused on reducing the use of specific materials.	O	\$\$	SP, CPD	RCC; K4C	<ul style="list-style-type: none"> • Best as a regional/state initiative. • Evaluate building code amendment to allow mass timber construction.
NS1.1	Tree planting incentive program	Develop programs to support and encourage residents and large property owners to plant the right tree in the right place, and sustain existing trees with reduced cost or free trees. Offer tree-awareness campaigns and classes to educate the community, and develop tree planting demonstration programs.	O	\$\$\$	CPD, PR, SP	0	<ul style="list-style-type: none"> • Tree giveaways must also consider suitable care and watering over the first 5 years. • May need to add incentive. • Most of the available planting space is on private land.
NS1.2	Tree planting programs	Enhance City-led street tree planting in the right-of-way and assess long-term stewardship needs; and promote street frontage plantings by businesses.	NT	\$\$	PW, CPD	0	<ul style="list-style-type: none"> • City has strong tree retention regulations in place. • Focus on encouraging planting (and care) of street trees.




Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
NS2.1	Water-efficient landscape standards 	Utilize educational campaigns to encourage drought-resistant and/or native landscaping and design. Work with landscape companies to educate and incentivize drip irrigation and smart management and technology. Develop demonstration programs.	MT	\$\$	SP, CPD	SPU	<ul style="list-style-type: none"> Action builds on Green Building education program. Continue 2x/year rain barrel discounted sales. City could resume historic program providing free audits and subsidized design assistance but would need new resources to support. Evaluate requirements for drip irrigation for new tree plantings.
NS2.2	Water conservation incentives	Partner with regional water conservation groups, such as the Saving Water Partnership, to develop and advertise incentives and installation programs to retrofit inefficient water fixtures.	O	\$\$\$	SP, PW	Saving Water Partnership	<ul style="list-style-type: none"> Continue to promote conservation campaigns. Renew focus at regional level.
NS2.3	Green stormwater infrastructure	Promote green stormwater infrastructure and low impact development through education and demonstration programs.	LT	\$\$\$\$\$	SP, PW	KC; WADOE	<ul style="list-style-type: none"> All new development must comply with State stormwater regulations and include low impact development (LID) where feasible. Ensure that future storm intensity is considered in design phase (see UW Climate Impacts Group's tool).



Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
NS2.4	Greywater reuse education	Develop campaigns to educate residents and businesses on the financial and environmental benefits of reusing rainwater and greywater.	MT	\$\$	PW, SP	SPU, KC	<ul style="list-style-type: none"> • Current Water System Plan contemplates future exploration of greywater reuse opportunities. • City should borrow from regional educational materials.
CRI.1	Personal preparedness for wildfire smoke	Partner with Puget Sound Clean Air Agency and other regional organizations to educate the community on how to plan for and address periods of low air quality due to wildfire smoke. Opportunities include HVAC filter upgrades, DIY filter fans, use of masks, pet care, and other planning and safety tips.	MT	\$\$	SP, MIPD-Emerg	PSCAA	<ul style="list-style-type: none"> • Simple and low-cost.
CRI.2	Adaptation incentives	Support and advocate for State and Federal rebate and incentive programs to encourage the installation of low-emissions space-cooling devices on residential and commercial properties (e.g., cool roofs, green roofs, cool pavement, ceiling fans, air filters).	NT	\$\$\$\$\$	SP, CPD	Dept Commerce	<ul style="list-style-type: none"> • Highly contingent on funding.



Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CR1.3	Urban flood management	Assess areas most at risk for flooding and ensure emergency systems are prepared to address flooding emergencies.	NT 	\$\$\$\$	PW, SP, CPD	KCOEM, SPU, WSDOE, K4C	<ul style="list-style-type: none"> • Mercer Island is not in a designated flood zone, but does see some localized urban flooding. • There is less stormwater flooding now than 20 years ago due to better conveyance systems, but rainstorms are expected to intensify. • City already has significant restrictions around wetlands and watercourses, which include large buffers that restrict development. • Action could be included in next (2023 or 2024) Stormwater Plan Update.
CR2.1	Hazard Mitigation Plan update	Partner with King County on the next update to the Countywide Hazard Mitigation Plan (timeline estimated in 2025) to ensure climate impacts are included in plan update.	NT	\$\$\$	SP, MIPD-Emerg, CM, YFS, FD	KCOEM	<ul style="list-style-type: none"> • Engage early in next Hazard Mitigation Plan (2025) update. • State grants available.



Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CR2.2	Emergency management planning and response	Review and update City's emergency management plans to ensure readiness to respond to climate emergencies, such as providing community cooling centers and air shelters in case of extreme heat and wildfires. Ensure communication materials are developed and ready for quick deployment during climate emergencies.	O	\$\$\$	MIPD-Emerg, FD	KCOEM, PSCAA	<ul style="list-style-type: none"> • Work already in place or plans underway to partner with other entities. • If additional community emergency shelters are housed in City facilities, significant HVAC upgrades would increase costs dramatically.
CR2.3	Electric grid resiliency	Encourage the State to implement requirements to improve the resiliency of the electric network, including the undergrounding of power lines.	NT	\$\$\$\$\$	CM	PSE, KC, K4C	<ul style="list-style-type: none"> • Would have to be a regional or statewide solution; low cost if based mostly on advocacy/lobbying. • Very high cost to underground powerlines, but other resiliency measures might be cheaper.



Appendix B. Multi-Criteria Analysis

This memorandum describes the evaluation steps, criteria, and results for a **multi-criteria analysis (MCA)** conducted on **54 Climate Action Plan (CAP) actions**. The MCA assigns qualitative numerical scores to each evaluated action and criterion to arrive at an overall priority score for each action.

Process





The MCA includes the following steps:

1. Identified and defined each criterion and assigned weights for scoring.
2. Developed qualitative score matrix to allow for a consistent action scoring process.
3. Assigned score for each action based on the criteria definitions, resources and analyses from peer city case studies, knowledge of City context, community feedback, and experience from Cascadia Consulting Group's work with other clients. Each criterion is evaluated on a 1 to 5 scale; the scoring is explained in more detail below.



CRITERIA

The CAP project team used the following criteria and weights to evaluate the 55 actions. Each criterion was evaluated on a 1 to 5 scale.

	Criterion	Weight	Definition	Scoring
	Cost	20%	Estimated overall cost to the City to implement action	1 = Lower cost ¹⁹ 5 = Higher cost
	Impact	40%	Estimated GHG emission reduction or climate resilience potential	1 = Lower impact 5 = Higher impact
	Implementation	20%	Estimated feasibility/practicality of implementation based on regulatory and technological constraints, amount of time required to implement, and efficiency in integrating into existing City planning efforts	1 = Very difficult to implement (technology limitations, long time horizon to implement, etc.) 5 = Very easy to implement (few barriers/challenges to implementation)
	Community Support	20%	Community support for action (based on the % of respondents who indicated somewhat or strong support for the action in the random sample community survey and additional feedback provided to the City through other comment channels)	<u>Baseline scoring:</u> ²⁰ 1 = <50% support on survey 2 = 50%-65% support on survey 3 = 65%-80% support on survey 4 = 80-95% support on survey 5 = 95%+ support on survey

¹⁹ Unlike the scoring for the other criteria, a low score for cost indicates a greater benefit, whereas a high score indicates weaker benefits.

²⁰ One additional point was added if the action was identified as a community priority in other forms of engagement.



RESULTS

The following table presents the results of the MCA, organized by focus area and action ID. Blue shading indicates the top highest-scoring actions that resulted in a priority score of 3.5 or above.

The actions that received the **highest priority scores** were heat pump rebates & education (BE1.1), water-efficient landscape standards (NS2.1), contractor heat pump incentive & training program (BE1.3), and personal preparedness for wildfire smoke (CR1.1). The actions that received the **lowest priority scores** were municipal renewable energy storage (CC2.7), municipal energy retrofits (CC2.5), and municipal fleet electrification (CC2.4).

Results from the MCA were informed the CAP implementation plan, including the estimated cost range for each action as well as the timeframe for which it will be implemented.

Focus Area	Action ID	Action Short Name	Cost	Impact	Implementation	Community Support	Priority Score
Cross-Cutting & Municipal	CC1.1	Low carbon schools	2	1	3.75	5	2.95
Cross-Cutting & Municipal	CC1.2	Climate advocacy and partnerships	2	2	4.75	2	2.95
Cross-Cutting & Municipal	CC1.3	Climate outreach/education	3	2	4.75	4	3.15
Cross-Cutting & Municipal	CC2.1	CTR participation & incentives	2	2	4.5	2	2.9
Cross-Cutting & Municipal	CC2.2	Alternative commuting incentives	2	1	4	3	2.6
Cross-Cutting & Municipal	CC2.3	City green building guidelines	3	1	4.5	4	2.7
Cross-Cutting & Municipal	CC2.4	Municipal fleet electrification	5	2	3.5	4	2.5
Cross-Cutting & Municipal	CC2.5	Municipal energy retrofits	5	1	3	5	2.2
Cross-Cutting & Municipal	CC2.6	Environmentally Preferable Purchasing Policy	2	1	4.5	3	2.7
Cross-Cutting & Municipal	CC2.7	Municipal renewable energy storage	4	1	2.5	3	1.9
Cross-Cutting & Municipal	CC3.1	GHG tracking & reporting	3	1	5	4	2.8
Cross-Cutting & Municipal	CC3.2	Climate-informed City decision-making	2	2	4.75	3	3.15
Buildings & Energy	BE1.1	Heat pump rebates & education	4	5	4.25	5	4.25



Focus Area	Action ID	Action Short Name	Cost	Impact	Implementation	Community Support	Priority Score
Buildings & Energy	BE1.2	Expand solar energy storage & grid resiliency	3	3	2.75	4	3.15
Buildings & Energy	BE1.3	Contractor heat pump incentive & training program	2	4	2.5	4	3.7
Buildings & Energy	BE1.4	Building code updates	3	3	4.5	2	3.1
Buildings & Energy	BE1.5	Furnace and water heater replacement "burn out" program	2	5	1.75	2	3.55
Buildings & Energy	BE1.6	Solar panel expansion	2	3	3.5	4	3.5
Buildings & Energy	BE1.7	Green Power Program	2	3	4.25	4	3.65
Buildings & Energy	BE1.8	Electric panel upgrades	2	2	3.25	2	2.65
Buildings & Energy	BE2.1	Energy efficiency incentives and programs	5	4	4	5	3.6
Buildings & Energy	BE2.2	Green building campaigns	2	2	4.5	4	3.3
Buildings & Energy	BE2.3	Promote Washington Clean Buildings Act	2	3	4	2	3.2
Buildings & Energy	BE2.4	Point-of-sale green building requirements	3	3	2.5	2	2.7
Transportation	TR1.1	Public EV Infrastructure Plan	5	4	2.75	4	3.15
Transportation	TR1.2	Electric school buses	2	2	2.75	3	2.75
Transportation	TR1.3	State EV resource advocacy	2	2	4.5	3	3.1
Transportation	TR1.4	EV charging incentives & rebates	3	4	4.25	3	3.65
Transportation	TR1.5	EV education & outreach	2	3	4.25	4	3.65
Transportation	TR2.1	Update the Pedestrian and Bicycle Plan	5	3	4.25	4	3.05
Transportation	TR2.2	Last-mile light rail connection	5	4	3.5	4	3.3
Transportation	TR2.3	Town Center Parking Study implementation	2	2	4.75	2	2.95
Transportation	TR2.4	Electric lawn & construction equipment	3	2	4	4	3
Transportation	TR3.1	Air travel alternatives	2	2	4	2	2.8



Focus Area	Action ID	Action Short Name	Cost	Impact	Implementation	Community Support	Priority Score
Transportation	TR3.2	State and federal aviation industry advocacy	1	3	1.75	3	3.15
Transportation	TR3.3	Regional aviation coordination	1	4	1.75	3	3.55
Consumption & Disposal	CD1.1	Recycling space/access requirements	2	1	3.75	4	2.75
Consumption & Disposal	CD1.2	Mandatory composting/recycling	2	2	2.5	4	2.9
Consumption & Disposal	CD2.1	Community gardens	2	1	3.75	4	2.75
Consumption & Disposal	CD2.2	Local retail options	3	1	4.5	4	2.9
Consumption & Disposal	CD2.3	Expand repair/reuse programs	1	1	4.5	4	3.1
Consumption & Disposal	CD2.4	Low carbon building materials	2	1	3	4	2.6
Natural Systems	NS1.1	Tree planting incentive program	3	2	4.75	5	3.35
Natural Systems	NS1.2	Tree planting programs	2	2	4.5	3	3.1
Natural Systems	NS2.1	Water-efficient landscape standards	2	3	5	5	4
Natural Systems	NS2.2	Water conservation incentives	3	2	4.5	4	3.1
Natural Systems	NS2.3	Green stormwater infrastructure	5	2	4.25	4	2.65
Natural Systems	NS2.4	Greywater reuse education	2	2	4	5	3.4
Community Resilience	CR1.1	Personal preparedness for wildfire smoke	2	3	4.5	4	3.7
Community Resilience	CR1.2	Adaptation incentives	5	4	3.25	4	3.25
Community Resilience	CR1.3	Urban flood management	4	3	5	3	3.2
Community Resilience	CR2.1	Hazard Mitigation Plan update	3	2	5	3	2.95
Community Resilience	CR2.2	Emergency management planning and response	3	4	3.75	2	3.35
Community Resilience	CR2.3	Electric grid resiliency	5	4	2.25	3	2.85



Appendix C. Crosswalk Table Summarizing MCA score and Implementation Factors

The table below summarizes actions by recommended timeline for implementation and includes the MCA score. For a detailed description of the implementation plan for each action see "[Appendix A. Implementation Matrix](#)".

KEYS

Timeline

Ongoing (O)	Action is already underway and/or is part of existing City programs.
Near term (NT)	City will begin implementing action within the next 1-3 years.
Mid-term (MT)	City will begin implementing action within the next 4-6 years.
Long term (LT)	City will begin implementing action within the next 7-10 years, or more.

Icons



Action may require a code change to implement














Indicates a near term action that may require substantial time to implement and thus should start right away.





MATRIX

Action ID	Action Short Name	Timeline	MCA Score
CC1.1	Low carbon schools	O	2.95
CC1.2	Climate advocacy and partnerships	O	2.95
CC1.3	Climate outreach/ education	O	3.15
CC2.2	Alternative commuting incentives	O	2.6
CC2.4	Municipal fleet electrification	O	2.5
CC3.1	GHG tracking & reporting	O	2.8
BE1.1	Heat pump rebates & education	O	4.25
BE1.3	Contractor incentive & training program	O	3.7
TR1.5	EV education & outreach	O	3.65



Action ID	Action Short Name	Timeline	MCA Score
CD2.4	Low carbon building materials 	O	2.6
NS1.1	Tree planting incentive program	O	3.35
NS2.2	Water conservation incentives	O	3.1
CR2.2	Emergency management planning and response	O	3.35
CD2.2	Local retail options	O/NT	2.9
CC2.1	CTR participation & incentives	NT	2.9
CC2.3	City green building policy	NT	2.7
CC2.5	Municipal energy retrofits	NT 	2.2
CC3.2	Climate-informed City decision-making	NT	3.15
BE1.2	Expand solar energy storage & grid resiliency	NT 	3.15
BE1.5	Furnace and water heater replacement “burn out” program 	NT	3.55
BE1.7	Green Power Program	NT	3.65
BE2.1	Energy efficiency incentives and programs	NT	3.6
TR1.1	Public EV Infrastructure Plan	NT	3.15
TR1.2	Electric school buses	NT	2.75
TR1.3	State EV resource advocacy	NT	3.1
TR1.4	EV charging incentives & rebates	NT	3.65
TR2.2	Last-mile light rail connection	NT	3.3
TR2.3	Town Center Parking Study implementation	NT	2.95
TR3.3	Regional aviation coordination	NT 	3.55
CD2.1	Community gardens	NT	2.75
NS1.2	Tree planting programs	NT	3.1
CR1.2	Adaptation incentives	NT	3.25
CR1.3	Urban flood management	NT 	3.2
CR2.1	Hazard Mitigation Plan update	NT	2.95
CR2.3	Electric grid resiliency	NT	2.85
BE1.4	Building code updates 	MT	3.1
BE1.6	Solar panel expansion 	MT	3.5
BE1.8	Electric panel upgrades 	MT	2.65
BE2.2	Green building campaigns 	MT	3.3
BE2.4	Point-of-sale green building requirements 	MT	2.7
TR2.1	Update the Pedestrian and Bicycle Plan	MT	3.05



Action ID	Action Short Name	Timeline	MCA Score
TR2.4	Electric lawn & construction equipment	MT	3
TR3.2	State and federal aviation industry advocacy	MT	3.15
CD1.1	Recycling space/access requirements 	MT	2.75
CD1.2	Mandatory composting/recycling 	MT	2.9
CD2.3	Expand repair/reuse programs	MT	3.1
NS2.1	Water-efficient landscape standards 	MT	4
NS2.4	Greywater reuse education	MT	3.4
CR1.1	Personal preparedness for wildfire smoke	MT	3.7
CC2.7	Municipal renewable energy storage	MT/LT	1.9
CC2.6	Environmentally Preferable Purchasing Policy	LT	2.7
BE2.3	Promote Washington Clean Buildings Act	LT 	3.2
TR3.1	Air travel alternatives	LT	2.8
NS2.3	Green stormwater infrastructure	LT	2.65



Appendix D. Survey Summary

CLIMATE ACTION PLAN (CAP) COMMUNITY SURVEY SUMMARY

Survey Summary

This section provides a general summary of results from a survey administered to Mercer Island residents to gather feedback to inform the development of the city's Climate Action Plan (CAP). The full survey report is available on the Mercer Island Let's Talk page.

The survey focused on understanding **community priorities and concerns** related to climate change as well **as level of support for the proposed climate strategies/actions** in the CAP.

Findings are presented from two survey response groups, those that were included in a random sample (RS) survey sample group and those from the general public (GP). Survey questions were the same for both groups. See "[Methodology](#)" below for more details on the difference between these two survey groups.

SURVEY FORMAT:

Part 1 of the survey asked three questions to gauge the community's priorities as they relate to climate action, including climate related threats, climate related solutions, and types of climate action. Part 2 of the survey asked participants to provide feedback on their level of support for draft CAP strategies in the following four categories:

- Infrastructure-related climate strategies
- Resource conservation/sustainable development strategies
- Strategies related to electric vehicle adoption
- Other strategies under consideration

To reduce the length of the survey, individual CAP actions were consolidated into higher level strategies.



KEY FINDINGS

Across climate strategy categories, **the majority of survey respondents** (74% of random sample and 76% of general public respondents) **strongly or somewhat supported proposed strategies** (see Figure 1).

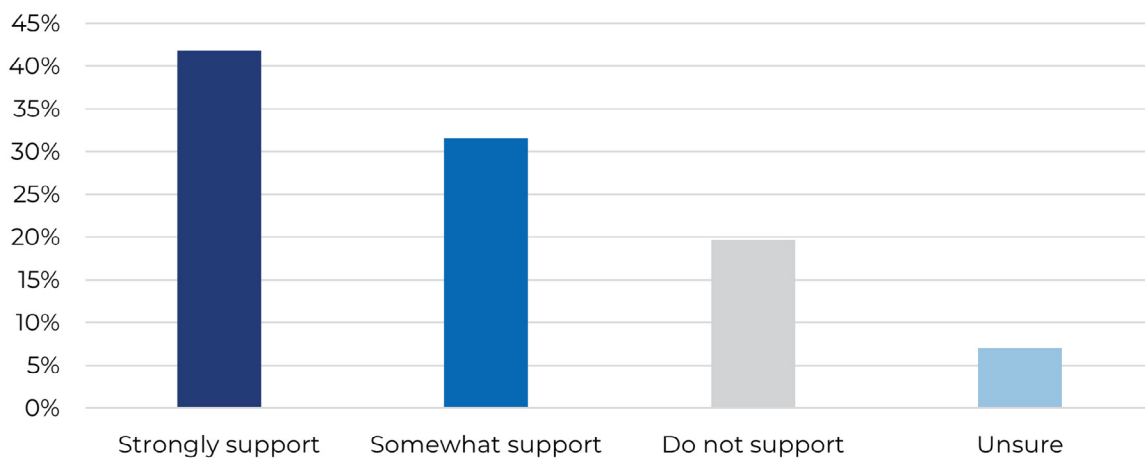


Figure 1. Average support level for all climate strategies across categories from the random sample survey. Both survey groups also expressed similar levels of support across all strategies.

Random sample (RS) Survey Trends

- By type of climate action: Over 50% of RS survey respondents **strongly supported “financial or other incentives”** as an important type of climate action. In contrast, only 15% indicated strong support for local advocacy.
- By category: On average, RS respondents **most supported** climate strategies in the **resource conservation and sustainable development** category, with an average of 58% of respondents indicating that they strongly support the proposed strategies. The next most supported category was Electric Vehicle (EV) strategies with 48% strong support, followed by infrastructure strategies with 41% strong support. On average, RS respondents **least supported** climate strategies in the **“other” category**, with an average of 36% of respondents indicating that they strongly support the proposed strategies.
- By solution: The majority of random sample survey respondents (32%) rated improved resiliency to climate change impacts as the most important climate-related solution, followed by renewable energy sources.



- By strategy:
 - › High support:
 - When asked about level of support for specific climate strategies, “**increasing recycling, compost, and reuse of goods and materials**” received the **highest level of support**, with 94% of RS survey respondents indicating strong or some support.
 - Other strategies that received high levels of support include “promote water efficient landscaping and irrigation,” “support/promote local retail,” and “expand tree planting.”
 - › Low support:
 - The strategy “**advocate for a state carbon tax**” received the **lowest level of support** across strategies, with only 40% of RS survey respondents indicating strong or some support.
 - Other strategies that received lower levels of support include “promote air travel alternatives,” “require all-electric new construction for single-family homes,” and “allow higher density housing near light rail.”

METHODOLOGY

The survey was mailed to a random sample of 2,500 households within the boundaries of the City of Mercer Island on September 25, 2022. The random sample of addresses was unique to this survey and not the same address list used in the Parks, Recreation, and Open Space (PROS) Plan surveys from early 2020–21. Reminder postcards were mailed to the same 2,500 households on October 3, 2022.

An online version of the survey was also available and posted to the City’s Let’s Talk engagement website. Respondents had the option to select the mailed or online survey. Each respondent from the random sample was given a unique ID number that they entered in order to submit an online survey or paper survey. Responses that matched these unique ID numbers were considered part of the random sample survey. All other responses were included in the general public survey. Only one survey response was allowed per household.

Information about the survey was provided on the City’s website home page and on the *Let’s Talk* Climate Action Plan webpage. It was also promoted via multiple social media postings, E-newsletters, and in the local newspaper. The survey closed on 11/8/2022.

Overall, the RS survey had a 10% response rate with 264 responses received (176 submitted via mail and 88 online). Receiving 264 responses allowed the City to achieve a 95% level of confidence with a +/-6% margin of error. The GP survey had 123 responses. In total, 387 survey responses were recorded.