

CLIMATE ACTION PLAN

JANUARY 2020

ADOPTED BY CITY COUNCIL



Acknowledgments

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Acronyms

Acronym	Full Name
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
KT	Kilotons, thousand metric tons
MT CO ₂ e	Metric tons of carbon dioxide equivalent
GHG	Greenhouse gas
EV	Electric vehicle
VMT	Vehicle miles traveled
CAP	Climate Action Plan



THE PLAN AT A GLANCE

The Plan at a Glance

Global greenhouse gas (GHG) emissions are changing the climate in ways that threaten the vitality, livability, and prosperity of the Everett community. The City of Everett is projected to encounter changes in temperature, rain and snowfall, sea level, and flooding frequency. The City is committed to reducing local GHG emissions to help stabilize the global climate. This community-level Climate Action Plan (CAP) is the first of its kind for the City of Everett. It provides a long-term vision and strategic roadmap for reducing GHG emissions and preparing for climate change in the City. This CAP represents the first phase of an ongoing and evolving process.



The goal of the Everett Climate Action Plan is to reduce Everett's greenhouse gas (GHG) emissions. The emissions reductions targets proposed for the City of Everett reaffirm the 2050 target set in 2014 and are consistent with targets set by cities around the Puget Sound Region.

COMMUNITY TARGET

Reduce Everett community **GHG** emissions 50% by 2030 and 80% by 2050, compared to the 2014 baseline.

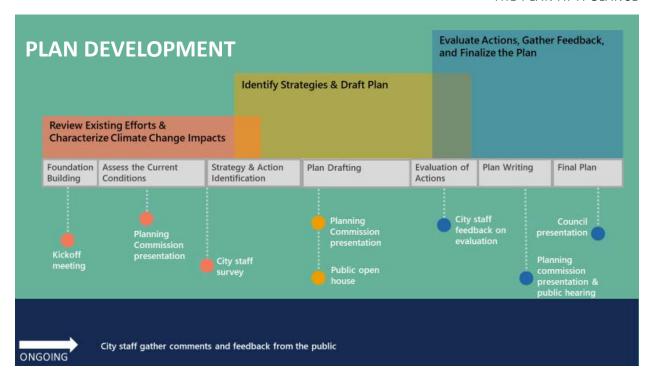


MUNICIPAL OPERATIONS TARGET

Reduce municipal **GHG emissions 50% by 2030** and achieve **carbon neutrality by 2050.**



THE PLAN AT A GLANCE



CLIMATE IMPACTS

The impacts of climate change—including heat waves, changing precipitation patterns, and sea level rise are occurring now. To reduce these potential impacts, substantial reductions in GHG emissions are needed.

Climate change has already affected and will continue to affect Everett. Climate change is expected to increase the frequency and severity of heat stress, respiratory disease, and vector-borne diseases. City disaster and relief costs will likely increase as climate-related natural disasters become more frequent and intense. Disaster response and relief costs are anticipated to increase as flooding, storms, droughts, wildfires and smoke, and other climate-related natural disasters become more common.

Climate change is anticipated to affect buildings, stormwater infrastructure, transportation infrastructure, community services, and land-use planning and development.

IMPLEMENTATION

The City of Everett will lead implementation of the Climate Action Plan. One of the priority actions set forth in this CAP includes the creation of a sustainability coordinator who can plan for and conduct implementation, reporting, and evaluation of the CAP based on an established framework. This framework will identify who will lead and partner on each action, a timeframe, key performance indicators to measure progress, funding strategies, and other key factors necessary for successful implementation. The CAP is only the beginning of an ongoing process that will require flexibility and adaptive management in the coming years.



THE PLAN AT A GLANCE

GOALS, STRATEGIES, AND ACTIONS

The CAP presents goals, strategies, and actions in these five focus areas. The table below summarizes goals and strategies; actions are presented in the Mitigation Strategies and Actions chapter beginning on page 21.



Governance (GO)

Provide overall leadership and capacity-building



Transportation (T)

Promote more biking, walking, transit, and clean, energy-efficient vehicles



Electrification (E)

Transition away from natural gas heat and deploy electric vehicle infrastructure



Green Economy (GE)

Build a sustainable local economy with green jobs for residents



Compact, Multimodal Land Use (LU)

Concentrate homes and workplaces together, with easy access to transit and amenities

Goal GO-1: Strengthen capacity to support climate action.

Strategy GO-1.1: Improve City staff knowledge of and capacity for their role in climate action.

Goal T-1: Embrace non-car travel.

Strategy T-1.1: Prioritize, incentivize, and promote transportation by biking, walking, and transit.

Strategy T-1.2: Reduce commute trips.

Goal T-2: Transition to the use of clean, energy-efficient vehicles.

Strategy T-2.1: Transition to electric vehicles (EVs).

Goal E-1: Eliminate natural gas from new and existing buildings.

Strategy E-1.1: Mandate all-electric construction.

Goal E-2: Electrify the transportation system through infrastructure development.

Strategy E-2.1: Create a robust electric vehicle (EV) charging station network.

Goal GE-1: Position Everett as a green economy hub of the future.

Strategy GE-1.1: Incentivize green infrastructure.

Strategy GE-1.2: Recruit and support green business and industry.

Goal GE-2: Prepare Everett residents for jobs in the green economy.

Strategy GE-2.1: Increase education, workforce training, and local recruitment in green jobs and fields.

Goal GE-3: Promote the local, circular economy.

Strategy GE-3.1: Incentivize local and green purchasing for city government and the community.

Strategy GE-3.2: Catalyze a sharing and reuse economy.

Strategy GE-3.3: Support local agriculture and small businesses.

Goal LU-1: Create centralized activity centers with a dense and diverse mix of services, amenities, jobs, and housing types in areas well-served by public transit.

Strategy LU-1.1: Support intentional high-density development.

Goal LU-2: Develop vibrant, healthy, and livable neighborhoods.

Strategy LU-2.1: Improve neighborhood walkability.

Strategy LU-2.2: Increase, protect, and restore green spaces and natural areas within the community.



Introduction

WHY A CLIMATE ACTION PLAN?

Global greenhouse gas (GHG) emissions are changing the climate in ways that threaten the vitality, livability, and prosperity of the Everett community. The City of Everett is projected to encounter changes in temperature, precipitation, rain and snowfall, sea level, and flooding frequency. These changes will exacerbate existing concerns and introduce new challenges to Everett's natural resources, economy, infrastructure, and quality of life.

The City of Everett is committed to reducing local GHG emissions to stabilize the global climate. This Climate Action Plan (CAP) builds on the City's past successes and strengths in other planning and implementation efforts and sets new targets—a 50% reduction in GHG emissions by 2030 and an 80% reduction by 2050—to protect the wellbeing of its residents for decades to come. As one of the fastest-growing cities in the Puget Sound region, the City of Everett will face particular challenges in attempting to curb GHG emissions. However, the cost of inaction is too high—and the benefits of climate action are too large—not to act now.

This community-level CAP is the first of its kind for the City of Everett. It provides a long-term vision and strategic roadmap for reducing GHG emissions and preparing for climate change in the community. This CAP represents the first phase of an ongoing and evolving process. It was written for the community—building on knowledge of projected local climate changes, sources of GHG emissions, and community vulnerabilities, priorities, ideas, and concerns. It focuses on foundational activities that set up Everett for future successes, along with those that achieve the greatest emissions reductions and create transformational change in a cost-effective and equitable manner. The entire community—Everett businesses, residents, and visitors—has a role in both implementing the CAP and enjoying its benefits.

VISION FOR THE FUTURE

The City of Everett is a leader in climate action and the green economy.

We partner with communities and businesses to work toward carbon neutrality; sustain healthy, resilient, and livable communities; preserve the natural environment and a robust local economy; and enhance quality of life for all residents for generations to come.

Everett's greatest impact on emissions reductions will likely be through creating and promoting a **safe**, **healthy, and sustainable community** with buildings, transit, freight movement, and cars powered by **clean**, **renewable energy** that fuels our **thriving**, **local green economy**. This green economy creates plentiful local green jobs that will employ the community and promotes low-carbon and low-waste goods. Through this plan, the City of Everett can demonstrate successful carbon reduction and help inform other communities.



PLAN OVERVIEW

Plan Organization

The goals, strategies, and actions in this CAP—which together build the strategic roadmap for reducing GHG emissions—are organized into five focus areas. The first, **Governance**, is aimed at laying the groundwork for future implementation success and ensuring government and community resources are in place to support actions in the other focus areas. The other focus areas—**Transportation**, **Electrification**, **Green Economy**, and **Compact**, **Multimodal Land Use**—represent the community sectors identified in the City's prior work to have the greatest opportunity for GHG emissions reductions.

Adapting to climate change impacts is not an explicit focus of this foundational CAP effort, as many of the City's existing plans and work already support climate adaptation. However, actions within this CAP are evaluated and prioritized based on their potential to increase community resilience to the impacts of climate change, among other key factors.



Governance

Provide overall leadership and capacity-building



Transportation

Promote more biking, walking, transit, and clean, energy-efficient vehicles



Electrification

Transition away from natural gas heat and deploy electric vehicle infrastructure



Green economy

Build a sustainable local economy with green jobs for residents



Compact, multimodal land use

Concentrate homes and workplaces together, with easy access to transit and amenities





Plan Development

This CAP is the product of a six-month public and stakeholder engagement process that included a community open house, City staff surveys, presentations at three Planning Commission meetings, engagement at community events, and collaboration with concurrent planning efforts. The CAP was not developed in a vacuum, but rather within an active community that is already working to improve quality of life through planning and projects. This CAP recognizes, connects to, and builds on these existing activities. Everett plans that informed this CAP include:

- ► Hazard Mitigation Plan (2018)
- ▶ Comprehensive Plan, Climate Change & Sustainability Element (2017)
- Climate Action Inventory (2018)
- ▶ Urban Carbon Reduction Strategies and Wedge Analysis (2016)
- Climate Action Plan for Municipal Operations (2011)
- ▶ Everett Transit Draft Long Range Plan (2018)
- Stormwater Management Program Plan (2019)





TARGETS

This CAP will guide the City of Everett and its community in reducing GHG emissions, preparing for climate risks, and protecting the health and wellbeing of current and future residents. This plan reaffirms the GHG reduction targets set in 2014 and is consistent with targets set by cities around the Puget Sound region.

- ▶ Everett's communitywide target: Reduce Everett community GHG emissions 50% by 2030 (50x30) and 80% by 2050 (80x50), compared to its 2014 baseline.
- ▶ Everett's municipal operations target: Reduce municipal GHG emissions 50% by 2030 (50x30) and achieve carbon neutrality by 2050.

Numerous cities in Washington and around the United States have established emissions reduction targets, as noted in the table below. These peer cities and municipalities helped inform Everett's emissions reduction goals. Everett contributes to global emissions reductions by reducing GHGs associated with its municipal, residential, commercial, and industrial activities.

Communitywide Targets Municipal Operations Targets Dozens of cities around the United States have Many cities with communitywide GHG established emissions reduction targets. Local emissions reduction targets also adopt targets community targets include the following: for their municipal operations, which often have similar or more aggressive timelines than ▶ 40% reduction by 2030 communitywide targets. Examples include: Portland, Oregon (1990 baseline) 40% reduction by 2020 (1990 baseline) 25% reduction by 2020 Tacoma King County ▶ 50% reduction by 2030 ▶ 50% reduction by 2030 King County, Redmond, Issaquah (2007) King County 53% reduction by 2030 baseline) Portland, Oregon (2006 baseline) ▶ 80% reduction by 2050 King County, Redmond, Issaquah, Shoreline ▶ 80% reduction by 2050 Nashville, Tennessee (2007 baseline) Portland, Oregon (1990 baseline) Zero net emissions by 2050 Zero net emissions by 2050 Seattle

The reduction of 50% of GHG emissions by 2030 aligns with Everett's previously established wedge analysis and is comparable to cities of similar size, population, and/or region. Generally, it is easier for cities to achieve more ambitious municipal targets compared to communitywide targets, which is why Everett's 2050 target is greater for its municipal operations. Everett reaffirms this long-term target. Pursuing this target affirms the City's commitment to advancing global goals for GHG neutrality by the second half of the century.

Columbia, Missouri



Seattle

BUILDING ON A FOUNDATION

Over the years, the City of Everett has taken actions to monitor and reduce GHG emissions while mitigating and adapting to the impacts of climate change. In 2007, for example, the City joined a network of local governments and began conducting GHG emissions inventories for municipal and community operations to inform its policies and programs. Highlights of Everett's plans, policies, and programs include the following:

- ▶ Mayors Climate Protection Agreement (2006): Mayor Stephanson signed the Climate Protection Agreement, joining with hundreds of U.S. cities in committing to meet or beat the Kyoto Protocol targets, urge federal and state governments to enact GHG reduction policies, and urge Congress to pass bipartisan legislation to reduce greenhouse gas emissions.
- ► Climate Action Plan (2011): Everett's Climate Action Plan identified programs and policies to reduce GHG emissions from municipal operations. A wide variety of measures were identified to decrease operational emissions by 40% by 2030, including HVAC and lighting retrofits, green purchasing, waste reduction, and hybrid vehicle purchasing.
- ▶ Hazard Mitigation Plan (2018): The Hazard Mitigation Plan took inventory of climate change impacts to the Everett area. The analysis identified a wide variety of impacts of climate change on property, critical infrastructure, public health, the environment, and the economy. The plan addressed mitigation measures the City could take to increase hazard resilience.
- ► "Smart Move" Ride Share Program: Provides incentives to encourage the use of public transit, carpooling, vanpooling, biking, and walking for commuting to work.
- ► Compressed Work Week: Approximately 360 full-time City employees work a compressed schedule, rather than the standard five-day week, resulting in a reduction in GHG emissions from employees commuting to and from work.
- ▶ **Department of Energy Grant:** In 2009, the City received a \$1.4 million grant for energy efficiency projects, including the Community Housing Improvement Program, HVAC replacement systems, and solar-powered trash compactors.





Climate Change and Everett

The plants and animals on our planet generally are able to adapt to a climate that changes slowly over thousands of years. However, when the climate changes rapidly—as we are seeing today—drastic consequences, such as mass extinctions, can occur. This swift change in climate is being driven by decades of burning fossil fuels and other human activities that have released dangerous levels of heat-trapping gases into the atmosphere. These greenhouse gases—carbon dioxide, methane, nitrous oxides, and others—are changing our climate in ways that threaten to destabilize global weather patterns and ecosystems.

This section presents the context of climate change in the City of Everett, including an overview of anticipated climate changes and associated impacts, and an overview of the sources of greenhouse gas emissions produced by the Everett community.

TEMPERATURE

By mid-century, under the current emissions pathway, the average year in Washington is projected to be warmer than the hottest year of the 20th century.1

- As compared to historical trends, the average year in Snohomish County during the mid-century is projected to be 4 to 5.5°F warmer.²
- Heat waves are projected to increase in intensity, while cold nights are projected to become less severe.³
- Increased likelihood of droughts and wildfires.
- Increased likelihood of heat stress and heat-related deaths. Heat events also trap air pollution and humidity, which affect daily health and generally decrease city labor productivity (refer to Human Health Impacts section on page 17 for additional details).



¹ Snover et al., 2019.

³ Mauger et al., 2015.



² NOAA, 2019.

SEA LEVEL RISE

In Washington, the latest projections available indicate increases in sea level rise across all emissions scenarios by 2100.4

- ▶ The rate at which sea level rises in Puget Sound depends on the rate of global absolute sea level rise and regional factors, such as ocean currents, wind patterns, location, and elevation.
- ▶ In areas where the land is sinking, the regional relative sea level rise will be greater than the absolute sea level rise, and in regions where the land is rising, relative sea level rise will be less than the absolute sea
- ▶ Relative sea level rise is projected to increase the Snohomish River levels between 4–14 inches by 2050.⁵ Absolute sea level rise is projected to nearly triple under both the low and high GHG emissions scenarios between 2050 and 2100.
- ▶ Sea level rise will lead to greater storm surge impacts as a higher sea level translates to higher water levels during storm events. However, it is unclear how storm surge (independent of sea level rise) will change in the future.6
- ▶ Projected relative sea level rise by 2050 is estimated at 0.5–0.9 feet under the low GHG emissions scenario and increases to approximately 1.2–2.4 feet under the high GHG emissions scenario.⁷

PRECIPITATION

Precipitation variability is projected to continue to increase, causing greater seasonal extremes.

- ▶ Washington is projected to see an increase in precipitation under all emissions scenarios (+3.7–4.6% higher on average in the 2050s as compared to 1970–1999).
- ▶ Wetter conditions are anticipated in spring, fall, and winter (+8.3–10.2% higher on average in the 2050s as compared to 1970–1999), while the summers are projected to get drier and warmer (-7 to -8.2% lower precipitation on average in the 2050s as compared to 1970–1999).8

SNOWPACK

Warmer winters have led to reductions in the snowpack that historically covered the region's mountains.9

- ▶ In 2015, record winter warmth led to record-low snowpack in much of the Northwest's mountains, as winter precipitation fell as rain instead of snow, resulting in drought and water scarcity. 10
- Less precipitation will arrive in the form of snow, reducing spring snowmelt and in-stream water flows during the summer months.
- ▶ The reliability of Everett's municipal water supply is anticipated to remain largely unaffected, meaning no water shortages are projected through the 2080s. 11

¹¹ Vano et al., 2010.



⁴ Miller et al., 2018.

⁵ Mauger et al., 2018.

⁶ Mauger, Lee, and Won, 2018.

⁷ Vano et al., 2010.

⁸ Mauger et al., 2015.

⁹ Mote, Li et al., 2018.

¹⁰ Mote, Rupp et al., 2016.

STREAMFLOW AND STREAM TEMPERATURE

While annual streamflow volumes are not projected to change significantly, 12 seasonal streamflow volume and timing are expected to shift based largely on the proportion of precipitation falling as snow and rain.

- As snowpack declines, spring runoff is expected to shift earlier in the year.
- As summer grows warmer, summer streamflow is anticipated to decline significantly across Puget Sound watersheds, including the Snohomish River.
- ▶ Daily peak river flow is projected to increase in the Snohomish River over time, with the largest changes projected for the two-year events and smallest changes for 100-year events. 13
- Stream temperatures are projected to increase between 4 to 4.5°F by the 2080s.¹⁴
- The duration of low-flow periods is expected to increase as well. 15

FLOODING

Flood risk is projected to increase in the future, due to a combination of decreased snowpack and more intense heavy rains. Area flooded is projected to increase 19-69% by the 2080s, due to combination of high river flows and sea level rise.¹⁶

- ▶ As the amount of winter precipitation falling as rain rather than snow increases, increased streamflow and flood risk is projected to occur in the Snohomish River. 17 However, some projections indicate a decrease in peak flows in the future. 18
- ▶ Transient (mixed rain and snow) basins such as the lower Snohomish River are most at risk for flooding due to the expected increase in winter precipitation falling primarily as rain instead of snow.¹⁹
- ▶ Regional models suggest that heavy rainfall events in Western Washington may intensify by 22% by the 2080s and that these increases would likely lead to increases in streamflow and increased risk of flooding. Not only is it projected that these events increase in intensity, but they are anticipated to occur more often, occurring 7 days per year by the 2080s, compared to 2 days a year historically.²⁰
- ▶ Coastal flooding can make it harder for river floodwaters to drain into Puget Sound. The area flooded during a 100-year event in the Snohomish River floodplain is expected to increase 23% by the 2080s due to the combined impact of coastal and inland flooding.²¹

²¹ Petersen et al., 2015.



¹² Hamlet et al., 2013.

¹³ Mauger, Lee, and Won, 2018.

¹⁴ Hamlet et al., 2013.

¹⁵ Mauger et al., 2015.

¹⁶ Mauger et al., 2014.

¹⁷ Mauger et al., 2015.

¹⁸ Mauger, Lee, and Won, 2018.

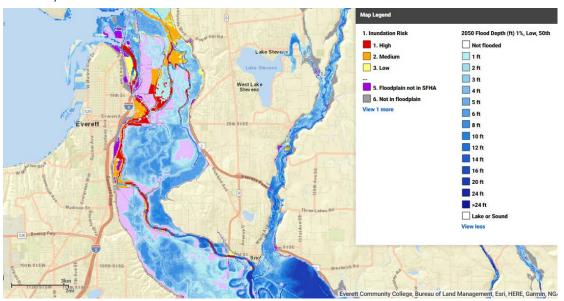
¹⁹ Mauger et al., 2015.

²⁰ Mauger et al., 2015.

The area in Everett that could flood during regular high tides by the 2050s (as a result of a 100-year flooding event) is projected to increase. Figure 1 shows that the City of Everett has varying inundation risk, or risk of water covering normally dry land:

- Dark blue indicates deeper water; these areas may be affected even when the flow is not especially high.
- Light blue indicates shallower water; these areas may only be seriously flooded during the most extreme flooding events.
- Red indicates areas of high vulnerability to inundation.
- Orange indicates areas of medium vulnerability to inundation.
- Yellow represents areas with low vulnerability to inundation.

Figure 1. Everett inundation risk and flood depth from a 100-year flooding event. Projections are for the low emissions scenario by the 2050s.22



NATIVE TREE AND PLANT HABITATS

Terrestrial ecosystems in Washington are projected to experience a continued shift in the distribution of species, changes in forest growth and health, increases in fire activity, and changes in risk from insects, diseases, and invasive species.²³

- Carbon storage is projected to decline. The Cascades region is projected to lose up to 46% of ecosystem carbon stocks (1.2 billion metric tons of carbon dioxide equivalents) by the end of the century.²⁴
- Local native plants and animals are at risk as temperatures rise. Scientists are reporting more species shifting to higher elevations or more northerly latitudes.²⁵
- Increased flow and salinity of water resources would also seriously affect the food web and spawning conditions for fish like salmon that are of economic and recreational importance to residents.

²⁵ Monleon et al., 2015.



²² Mauger, Lee, and Won, 2018.

²³ Mauger et al., 2015.

²⁴ Rogers et al., 2011.



HUMAN HEALTH IMPACTS

In Snohomish County, annual heat-related mortality is projected to increase between 64 to 200 deaths by 2025, compared to 1980-2006, for people ages 65 and older. 26

- Projected increases in the frequency and intensity of extreme heat events are expected to increase hospitalizations due to heat stress. Increased heat-stroke risks are of particular concern to vulnerable populations like the elderly, young, and those already sick as well as to people who work outdoors.
- ▶ Increasing fire risk could affect human health through smoke exposure and increased occupational hazards for emergency responders.²⁷
- ▶ Increased flooding can introduce biological and chemical agents to drinking, storm, and recreational waters and promote favorable conditions for bacterial and mold growth.²⁸
- ▶ Warming temperatures and increased precipitation can accelerate the breeding of mosquitoes, thus spreading diseases for which mosquitoes are vectors, such as West Nile virus. The Washington Department of Health's vector surveillance program has observed an earlier onset of West Nile viruscarrying mosquitoes, likely associated with higher temperatures, and an increasing number of human infections, with some resulting in fatalities.²⁹ In the last several years, the region has also seen an increase in cases of Lyme disease, associated with rising temperatures and changing tick habitat. 30
- Increased ozone levels and air pollution toxicity could potentially lead to increased rates of asthma and other pulmonary diseases.

³⁰ Beard et al., 2016.



²⁶ Jackson et al., 2010.

²⁷ Mauger et al., 2015.

²⁸ Dalton et al., 2013.

²⁹ WSDOH, 2018.

ECONOMIC IMPACTS

The costs to the state of Washington of continuing a "business-as-usual" approach to climate change are estimated at \$6.5 billion annually by 2040. These costs include both the effects of climate change on people and ecosystems as well as the costs of inefficient energy use and coal-fired electricity generation.

- ▶ These costs are estimated to rise to \$12.9 billion by 2080.³¹
- ▶ Rising seas, heavy rains, river floods, and increasing temperatures are likely to cause transportation closures, delays, or detours, especially for facilities and transportation lines located in or near coastal and low-lying areas.
- ▶ Wastewater and stormwater collection systems are likely to experience more problems with saltwater intrusion, corrosion, flooding, and inundation, along with associated increases in maintenance costs.
- ▶ Port operations and infrastructure, including access to port facilities, are likely to be altered by sea level rise and increased coastal flooding, including increased storm surge damage to port facilities and more saltwater corrosion in docks.
- ▶ Increased wildfires could interrupt or damage power generation facilities and energy transmission and distribution infrastructure.³²
- People on the front lines of climate change are expected to experience impacts first and most severely. Frontline communities include tribes, economically disadvantaged communities, and those dependent on natural resource economies.
- ▶ Washingtonians are also expected to incur costs as they engage in practices that contribute to climate change, such as consuming electricity generated by burning coal and continuing technologies and practices that waste energy (Table 1).

Table 1. Potential economic impacts in Washington State under a business-as-usual approach to climate change (\$/year). 33

Potential Costs	2020	2040	2080
Costs of Climate Change	\$2.3 billion	\$4.9 billion	\$10.7 billion
Increased energy-related costs	\$222 million	\$623 million	\$1.5 billion
Reduced salmon populations	\$531 million	\$1.4 billion	\$3.0 billion
Increased coastal and storm damage	\$72 million	\$150 million	\$352 million
Reduced food production	\$35 million	\$64 million	\$364 million
Increased wildland fire costs	\$102 million	\$208 million	\$462 million
Increased health-related costs	\$1.3 billion	\$2.2 billion	\$4.4 billion
Lost recreation opportunities	\$75 million	\$210 million	\$612 million
Additional Costs from Business-As-Usual Activities	\$1.4 billion	\$1.6 billion	\$2.2 billion
Inefficient consumption of energy	\$1.4 billion	\$1.6 billion	\$2.2 billion
Increased health costs from coal-fired emissions	\$19 million	\$23 million	\$31 million
TOTAL	\$3.8 billion	\$6.5 billion	\$12.9 billion
Average cost per household per year	\$1,250	\$1,800	\$2,750

³¹ Niemi, 2009. Note that the figure for increased energy-related costs for 2080 reflects a correction in units from the original source document.

³³ Niemi, 2009. The business-as-usual (BAU) approach assumes no efforts are completed to reduce or limit emissions. Estimated increased health costs from coal-fired emissions were limited to sulfur dioxide and nitrogen oxides in this study. Particulate matter, mercury, and other harmful pollutants were not included; thus these health costs are likely underestimated.



³² Mauger et al., 2015.

EVERETT'S CONTRIBUTION TO CLIMATE CHANGE

In 2014, Everett's GHG emissions totaled 672 kilotons of carbon dioxide equivalent (KT CO_2e , thousand metric tons) and were primarily from transportation and natural gas consumption (see Figure 2). Transportation emissions account for almost half of Everett's total GHG emissions (361 KT CO_2e) and stem mainly from passenger vehicles, but also include municipal fleet trips and public transit. Natural gas consumption is the second largest contributor to Everett's emissions (245 KT CO_2e) and comes from residential, commercial, and industrial buildings as well as electricity generation. Little of Everett's electricity comes from coal, making it the smallest source of the city's emissions (66 KT CO_2e).

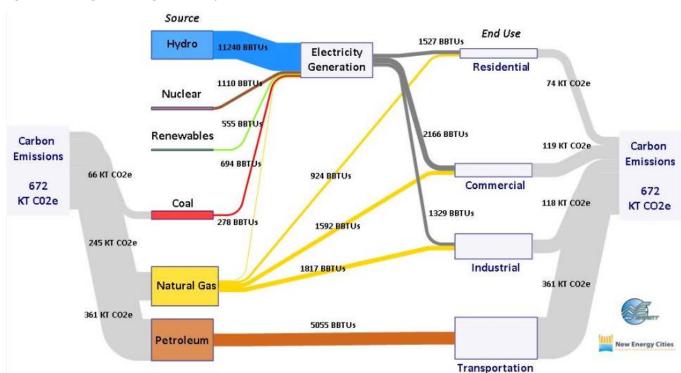


Figure 2. Everett greenhouse gas inventory, 2014.34

A forecast of Everett's GHG emissions provides insight into how emissions may change over time (see Figure 3). The forecast includes projections for population growth, as well as reductions from state measures such as the State Clean Energy Standard, federal vehicle efficiency standards, and the State Energy Code.

Figure 3 presents the GHG emissions reductions that are possible if the City pursues bold climate strategies and actions, such as those presented in this CAP. Everett's projected emissions with no action—also known as business as usual (BAU)—are represented by the top dashed black line. Projected emissions with state and federal actions are represented by the dashed red line. The impact from state and federal policies are enough to avoid additional emissions associated with growth; however, existing laws are not enough to achieve the goal of 50% reduction by 2030. Achieving 50x30 requires bold action and planning at a local level using a carbon reduction lens.

³⁴ New Energy Cities and Stockholm Environment Institute, 2016.



By reducing transportation emissions, electrifying the natural gas system, and further transitioning to renewable energy sources, Everett can reduce its GHG emissions 50% below the 2014 baseline by 2030. These reductions represent significant progress toward the city's long-term goal of 80% by 2050 and demonstrate the powerful impact that local climate action and leadership can have.

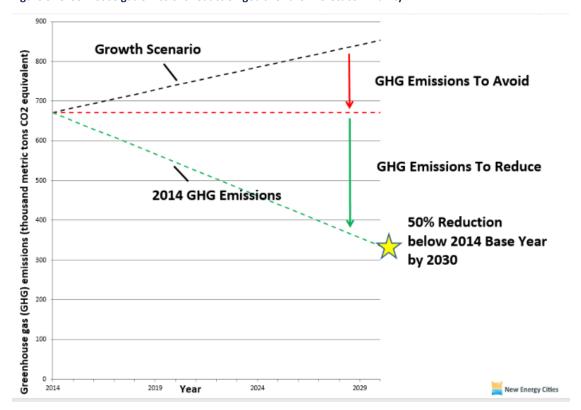


Figure 3. Greenhouse gas emissions reduction goals for the Everett community. 35

³⁵ New Energy Cities and Stockholm Environment Institute, 2016.



MITIGATION STRATEGIES AND ACTIONS

Mitigation Strategies and Actions

The five focus areas of the Everett CAP—Governance, Transportation, Electrification, Green Economy, and Compact, Multimodal Land Use—collectively focus the City of Everett's efforts on the greatest opportunities to reduce GHG emissions by 80% communitywide and reach carbon neutrality in city operations by 2050.

To reach these targets, Everett will need to transition toward compact development patterns with easy, affordable access to bike, walk, ride transit, and when needed, drive an electric or hybrid vehicle. Along the way, natural gas will need to be largely eliminated from buildings and homes, and residents may begin to reuse and repair goods such as clothing and furniture more often than they buy new. As part of this transition, Everett aims to position itself as a green economy hub of the future, with many local jobs contributing to cleaner energy, lower-carbon materials and transportation, and green manufacturing.

This chapter describes the proposed strategies and actions for attaining these targets and realizing Everett's vision for the future.





MITIGATION STRATEGIES AND ACTIONS

HOW TO READ THE STRATEGIES AND ACTIONS

Each focus area section (Governance, Transportation, Electrification, Green Economy, and Compact, Multimodal Land Use) begins with an overview of the topic and its importance and relevance to the CAP.

Goals are briefly stated, followed by a detailed table of supporting strategies and actions, as explained below.

ID	Action	City Lead	Benefits	Community/Municipal			
Strategy	number and nam	e					
Action ID	Action name/ description	The department within the City responsible for implementation	Potential benefits of action (see below)	Whether the action focuses on government operations or the community (see below)			
Yellow hi	Yellow highlighted cells indicate the highest priority actions.						



Municipal

This icon indicates that the action is focused on City government operations.



Community

This icon indicates that the action is focused on the broader Everett community.



Municipal/Community

This icon indicates that the action is focused on both government and the community.



GHG Emission Reduction **Potential**

This icon indicates that the action could have a higher GHG reduction potential because the action targets a large source of emissions or is very direct.



Public Health

This icon indicates that the action could have a higher positive impact on public health.



Equity

This icon indicates that the action could have a higher positive impact on equity within the community.



Cost/Affordability

This icon indicates that the action could be more costeffective for the City and community, and/or funding for the action is already available.



Feasibility

This icon indicates that the action could be highly feasible technically, politically, and socially under current conditions.



Resilience

This icon indicates that the action could have a higher positive impact on community resilience to climate change.



Economic Growth

This icon indicates that the action could have a higher positive impact on economic growth in the community.



Leadership

This icon indicates that the action could have a high potential for Everett to be innovative and demonstrate its leadership in climate action.





Governance (GO)

Capacity to support climate action at both the municipal and community level will be needed to implement the CAP successfully. Strategies that support foundational collaboration, capacity-building, and institutionalization of climate action include learning from others acting on climate change, staff training and resources, regular reporting, and centralized coordination of climate and sustainability activities.

Goal GO-1: Strengthen capacity to support climate action.

	-1. Strengthen capacity to support			Com/
ID	Action	City Lead	Benefits	Com/ Mun
Strategy GO	D-1.1: Improve City staff knowledge of and capa		e in climate action.	
GO-1.1.1	Create a centralized City climate/ sustainability coordinator to support CAP monitoring and implementation.	Administration	* =	M
GO-1.1.2	Create a management and reporting system for key metrics of activities related to CAP goals. This could include the use of an online dashboard to report on the progress of actions that have been initiated, implementation schedule, community and municipal GHG emissions, and equity impacts of actions implemented.	Administration	\$	М
GO-1.1.3	Educate all City staff members about the CAP.	Administration	<u>\$</u>	M
GO-1.1.4	Evaluate the differential impact of climate change on neighborhoods and communities.	Planning	Š	С
GO-1.1.5	Develop and incorporate equity metrics in the evaluation of CAP activities.	Planning	<u>\$</u>	С
CO ₂	♦	[# <u>=</u>]		A
GHG Reduction	n Public Health Equity Cost	Feasibility R	desilience Economic Growth	Leadership





Transportation (T)

Most Everett residents and commuters drive alone for work, recreation, and errands in gasoline-powered vehicles. These strategies incentivize other modes of transportation and the transition to cleaner, more energy-efficient vehicles such as electric and hybrid vehicles. Success in the transportation sector relies on compact, multimodal land use, and vice versa. Importantly, mixed used development is already promoted in transportation policy; incentives for market response are needed to push these two sets of strategies forward.

Goal T-1: Embrace non-car travel.

ID	Action	City Lead	Benefits	Com/ Mun
Strategy	T-1.1: Prioritize, incentivize, and promote transp	ortation by biking	g, walking, and transit.	
T-1.1.1	Incentivize transit use by promoting benefits such as pre-tax transit passes and rebates to employees who give up use of employer parking facilities.	Administration	co,	С
T-1.1.2	Advocate for regional congestion pricing authority, with flexibility to dedicate revenues to projects and services that would serve a variety of different transportation modes and options.	Administration		С
T-1.1.3	Accelerate the implementation of the "Complete Streets" policy by mandating all new transportation and land use projects to incorporate infrastructure for bicycles, pedestrians, and mass transit service unless a reasonable exemption is determined by the City Engineer.	Public Works		С
T-1.1.4	Partner with the school district and Safe Routes to Schools to expand educational programs and events to encourage and promote walking and biking, including a Bike to School Day, walking school bus, and sidewalk painting for safe routes.	Public Works	<u>\$</u>	С
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GHG Reduc	tion Public Health Equity Cost	Feasibility F	Resilience Economic Growth	Leadership



Everett Climate Action Plan

MITIGATION STRATEGIES AND ACTIONS

ID Strategy	Action T-1.2: Reduce commute trips.	City Lead	Benefits	Com/ Mun
T-1.2.1	Work with third-party programs and businesses to increase the availability, accessibility, and convenience of shared mobility options (e.g., bike share, scooter share, car share).	Administration	\$	С
T-1.2.2	Educate local employers on the options for and benefits of compressed work weeks, telecommuting, and other schedule adjustments that reduce commute trips. Share case studies and learnings from the City's internal implementation of these programs and from local businesses with innovative flexible work policies.	Administration	<u>\$</u>	С
T-1.2.3	Continue to promote and support carpooling, vanpooling, and telecommuting amongst City employees to reduce drive alone commute trips.	Administration	<u>\$</u>	M

Goal T-2: Transition to the use of clean, energy-efficient vehicles.

				07			
ID	Action			City Lead	Benefits		Com/ Mun
Strategy	T-2.1: Transition to	electric vehicl	es (EVs).				
T-2.1.1	Continue to invest in Transit fleet to an a		•	Everett Transit	co		М
T-2.1.2	Introduce a policy to with electric and hy replacement.			Motor Vehicles		繮	М
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GHG Redu	ction Public Health	Equity	Cost	Feasibility	Resilience	Economic Growth	Leadership





Electrification (E)

Since most of Everett's electricity comes from hydroelectric power, the greatest source of emissions from buildings and homes is from natural gas heating. Electrification strategies focus on eliminating natural gas from buildings and homes through both incentives and mandates and capitalizing on electricity from hydropower to roll out electric vehicle charging infrastructure in Everett.

Goal E-1: Eliminate natural gas from new and existing buildings.

ID	Action	City Lead	Benefits	Com/ Mun
Strategy	E-1.1: Mandate all-electric construction.			
E-1.1.1	Partner regionally and with Washington state to revise building codes to disincentivize natural gas for heating in buildings.	Administration	<u>\$</u>	С
E-1.1.2	Study the benefits and economic tradeoffs of regulations that require all-electric buildings and disincentivize natural gas for new construction and major renovations/ redevelopment. Options such as city mandates, building code updates, or ordinances should be explored as tools for transitioning new construction to all-electric for heating. Ideally, these regulations would cover both new construction and major renovations of existing buildings, including accessory dwelling units.	Planning and Building		С
E-1.1.3	Work with regional energy partnerships to develop and implement an Electrification Action Plan for all City facilities. In new and existing buildings, incorporate strategies to address electricity storage, and focus on highlighting any hurdles or solutions that would be applicable to the broader community.	Facilities		М
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GHG Redu	ction Public Health Equity Cost	_	(esilience Economic Growth	



MITIGATION STRATEGIES AND ACTIONS

Goal E-2: Electrify the transportation system through infrastructure development.

ID	Action			City Lead	Benefits		Com/ Mun
E-2.1.1	Create an Electric Verente an Electric Verente an Electric Verente Action Plan that: • Addresses ways to chargers • Identifies locations areas • Considers installing integrated into strees • Considers smart care. • Addresses barriers homes and rental promotes and rental promotes are party EV charging start program and constructions.	ehicle (EV) Cheincrease publications for chargers able technologies to charging foperties atial to partners ation provide	arging Station lic access to in commercial rastructure gy or garage-free	Planning and Public Works			С
E-2.1.2	Adopt an EV chargin amendment that wo requirements for ne renovations.	uld increase	the charging	Planning	co	<u>\$</u>	С
GHG Reduc	ction Public Health	Equity	<u>s</u> Cost	Feasibility	Resilience	Economic Growth	Leadership





Green Economy (GE)

A green economy in Everett means local, living-wage green jobs, many in cutting-edge sectors; widespread sustainable business practices; and a robust local, circular economy. Everett's robust industrial and manufacturing sectors stand to benefit from the transition to a green economy, provided the education, workforce training, and business assistance are in place to facilitate the transition. By using resources more efficiently and promoting reuse and repair over buying new, crucial reductions in the emissions associated with new construction and consumption of goods and services can be achieved. These green economy strategies complement and rely upon the other strategies in the CAP, especially the green building policies in the land use focus area.

Goal GE-1: Position Everett as a green economy hub of the future.

ID	Action	City Lead	Benefits	Com/ Mun
Strategy	GE-1.1: Incentivize green infrastructure.			
GE-1.1.1	Develop municipal standards for green building design, construction, and capital projects, working with a multidisciplinary team. King County's sustainable infrastructure scorecard is a potential evaluation model for internal standards.	Planning and Building	<u>\$</u>	М
GE-1.1.2	Encourage the use of green roofs, green walls, cool roofs, cool pavement, and additional landscaping tolerant to a range of climate conditions, especially in areas where urban heat island effects will be greatest.	Planning		С
GE-1.1.3	Conduct a feasibility study on using treated greywater and rainwater harvesting for non-potable water needs at city facilities.	Public Works		М
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Everett Climate Action Plan

MITIGATION STRATEGIES AND ACTIONS

ID	Action	City Lead	Benefits	Com/ Mun
GE-1.1.4	Adopt new stormwater development regulations (codes and standards) specified in the Permit and the new Ecology Stormwater Management Manual, including vesting requirements and new Low Impact Development (LID) Best Management Practices (BMPs). Implement new plan review, inspection, and escalating enforcement processes and procedures necessary to implement the program in accordance with Permit conditions.	Public Works		С
Strategy (GE-1.2: Recruit and support green business	and industry.		
GE-1.2.1	Work with partners in higher education and elsewhere to inventory and evaluate green economy innovations to determine which are aligned with the city's vision, goals, and capacity. These may include research centers for clean energy, water, manufacturing, and technology, as well as other endeavors.	Administration	§ ✓ ▲	С
GE-1.2.2	With community stakeholders and partners, conduct a study and host a community conversation to identify threats to current industries, opportunities for new green businesses and industries, and areas that need support.	Administration		С
GE-1.2.3	Focus some business development efforts on businesses that have fewer impacts on natural resources.	Economic Development	<u>\$</u>	С
GE-1.2.4	Encourage local recycling businesses in appropriate locations with appropriate standards.	Economic Development	<u>\$</u>	С
GHG Reduct	ion Public Health Equity Cost	₩ Feasibility Res	illience Economic Growth	Leadership



MITIGATION STRATEGIES AND ACTIONS

ID	Action	City Lead	Benefits	Com/ Mun
GE-1.2.5	Work with regional partners to support business and non-governmental organizational efforts to participate in the green economy. This may include: • Roundtables focused on green economy strategies • Business continuity planning and exercises, especially transitions to greener practices and industries • A "green economy guide" and other education campaigns focused on the opportunities a circular economy provides • Recognition program for green economy innovation	Economic Development	\$	С

Goal GE-2: Prepare Everett residents for jobs in the green economy.

ID	Action	City Lead	Benefits	Com/ Mun
	GE-2.1: Increase education, workforce train limate impacts.	ning, and local recruitme	nt in green jobs and fields t	hat
GE-2.1.1	Explore the potential of small green commercial hubs—or clusters of sustainable local business—in neighborhoods that will promote the local green economy and compact, walkable communities.	Economic Development		С
GE-2.1.2	Explore ways to establish a local hiring preference for green jobs and jobs that reduce climate risks in Everett.	TBD		M∕ _c
GE-2.1.3	Work with local and regional partners to develop and promote internship and apprenticeship programs in the green economy.	Administration		M/c
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MITIGATION STRATEGIES AND ACTIONS

Goal GE-3: Promote the local, circular economy.

ID	Action	City Lead	Benefits	Com/ Mun
Strategy GE-3.1: Incentivize local and green purchasing for city government and the community.				
GE-3.1.1	Promote local purchasing for businesses and residents to support local vendors, services, and stores and to reduce GHG emissions from commerce-related transportation and food production and distribution.	Administration	\$	С
GE-3.1.2	Develop a city-wide environmentally preferable purchasing policy (EPP). Consider life-cycle costing as one of the decision-making tools in the process.	Purchasing	\$	М
GE-3.1.3	Replace all non-Energy Star office equipment and appliances at the end of their life cycle with Energy Star-rated models. Require energy and water efficiency as a primary consideration for all future purchasing decisions.	Purchasing		М
GE-3.1.4	Develop and disseminate tools for writing green specifications, RFPs, and bids.	Purchasing		M
Strategy (Strategy GE-3.2: Catalyze a sharing and reuse economy.			
GE-3.2.1	Work with regional partners to promote eco-industrial development in the area, in which a waste stream from one firm becomes the raw material for another, thus minimizing the use of raw materials.	Economic Development		С
GE-3.2.2	Continue to support neighborhood events such as garage sales that extend the useful life of items, and clean-ups that result in recycling of appliances, metals, yard waste, etc.	Community Development	\$	С
GE-3.2.3	Support "collaborative consumption" community projects like tool libraries and repair cafes through mini-grant programs.	Community Development	[<u>*</u> =	С
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GHG Reduct	ion Public Health Equity Cost	Feasibility Res	ilience Economic Growth	Leadership



Everett Climate Action Plan

MITIGATION STRATEGIES AND ACTIONS

ID	Action	City Lead	Benefits	Com/ Mun
GE-3.2.4	Work with local and regional partners to conduct a public education and outreach campaign around local options for toollending libraries, car share, swap events, service websites, and exchange websites like Snohomish County's Reusable Materials Exchange (2good2toss.com) and Facebook's Buy Nothing groups.	TBD	<u>*=</u>	С
Strategy	GE-3.3: Support local agriculture and small	businesses.		
GE-3.3.1	Expand and encourage community gardens, urban agriculture, community supported agriculture (CSA), and farmers markets that sell locally produced food.	TBD		С
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Compact, Multimodal Land Use (LU)

Mixed use development is already promoted in Everett's land use policy; incentives for market response are needed to support continued compact, multimodal development. Success in the land use sector also relies on multimodal transportation including public transit, and vice versa. These strategies locate businesses, services, governmental offices, and schools that generate many trips near the permanent transit network and prioritize vibrant, healthy, and livable neighborhoods for current and future residents.

Goal LU-1: Create centralized activity centers with a dense and diverse mix of services, amenities, jobs, and housing types in areas well-served by public transit.

ID	Action	City Lead	Benefits	Com/ Mun
Strategy	LU-1.1: Support intentional high-density developn	nent.		
LU-1.1.1	Incentivize infill and mixed-use development (e.g., through alternative code compliance, fee waivers, density bonuses, investment prioritization, development impact fees, tax benefits).	Planning	co	С
LU-1.1.2	Evaluate the effectiveness of zoning codes for and identify incentives to encourage Accessory Dwelling Units (i.e., mother-in-law units).	Planning	\$	С
LU-1.1.3	Adopt a Transit Communities Policy and create a Transit Communities Development Authority to implement transit-oriented development (TOD), including actions to: • Reduce cost and prolonged project review processes in Transit Communities • Use zoning and permitting methods to concentrate new growth in proximity to services and transit • Implement capital improvements in priority Transit Community corridors	Planning		С
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GHG Reduct	ion Public Health Equity Cost	Feasibility	Resilience Economic Growth	Leadership



MITIGATION STRATEGIES AND ACTIONS

Goal LU-2: Develop vibrant, healthy, and livable neighborhoods.

ID	Action	City Lead	Benefits	Com/ Mun
Strategy I	.U-2.1: Improve neighborhood walkability.			
LU-2.1.1	Require new development to provide pedestrian connections between retail, living, and working places; transit connections and facilities; traffic calming and other safety-related improvements; sidewalks and trails; and pedestrian and bicycle amenities, as feasible or appropriate.	Planning, Public Works	\$ = •	С
LU-2.1.2	Continue to implement the Bicycle Master Plan.	Public Works	\$	С
LU-2.1.3	Create a sidewalk, curb ramp, and crosswalk inventory to determine high-need areas. Seek additional funding to build sidewalks, crosswalks, and other walking infrastructure in high-need areas and fill connectivity gaps.	Planning, Public Works		С
Strategy I	.U-2.2: Increase, protect, and restore green spaces	s and natural are	eas within the community.	
LU-2.2.1	Support increasing the City's tree canopy through continued implementation of the City of Everett Tree Policy. Continue planting trees on publicly owned lands through on-going efforts such as the Green Everett Partnership in conjunction with Forterra.	Parks	\$ = •	С
LU-2.2.2	Continue to plan and develop a system of parks, open spaces, and trails throughout Everett.	Parks		С
LU-2.2.3	Create more usable green space in Everett's activity centers and work to incorporate a higher volume of smaller parks and urban public spaces.	Parks, Planning, Cultural Arts		С
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IMPLEMENTATION AND EVALUATION

Implementation and Evaluation

This CAP lays the groundwork for a transformation that will dramatically reduce Everett's contribution to climate change. The CAP focuses first on the foundational **Governance** actions that must take place to ensure implementation of the plan is both possible and successful. The CAP then focuses on the four high-impact sectors for reducing GHG emissions in the City of Everett and those with the most promising opportunities and benefits: **Transportation**, **Electrification**, **Green Economy**, and **Compact**, **Multimodal Land Use**. Although this CAP builds on many of the actions the City and community are already taking, continuing progress on these goals will require Everett's government and community to work together and commit dedicated time and resources.

The City of Everett will lead implementation of the CAP. One of the priority actions set forth in this CAP includes the creation of a sustainability coordinator who can plan for and conduct the implementation, reporting, and evaluation of the CAP based on an established framework (see Appendix C. Implementation & Evaluation Frameworks). This framework will identify who will lead and partner on each action, a timeframe, key performance indicators to measure progress, funding strategies, and other key factors necessary for successful implementation. The CAP is only the beginning of an ongoing process that will require flexibility and adaptive management over the years.





IMPLEMENTATION AND EVALUATION

WHAT YOU CAN DO

Addressing climate change is going to take more than the actions the City of Everett itself can control. Individuals and community groups all have an important role to play in reaching the City's climate action goals. When taken together, small changes can make a huge impact! Through collective, committed, and caring actions from all, Everett can achieve its emissions reduction targets and become a healthy, resilient, and carbon-neutral community for both present and future generations.

Electrif	ication
	Install energy-saving appliances and fixtures, such as Energy Star Appliances and LED Lightbulbs.
	Reduce natural gas use. Install electric heat pumps for space and water heating, electric dryers, electric stoves, etc. to transition to cleaner electricity.
	Install low-flow showerheads and aerated faucets to reduce the amount of hot water you use.
	Replace gas-powered yard equipment with electric alternatives.
	Visit <u>www.snopud.com/business/rebatesincentives.ashx?p=2051</u> to enroll in Snohomish PUD's lightbulb rebate program and check out their other rebates and incentives.
Transpo	ortation
	Avoid driving alone where possible. Ride transit, carpool, walk, and/or bike.
	Use a bike or scooter for shorter-distance commutes and other trips, rather than a car.
	When you decide to make your next vehicle purchase, consider buying or leasing an all-electric vehicle.
	Consider nonstop flights when travelling, and purchase carbon credits when you do fly.
Green I	Economy
	Reduce your meat and dairy consumption—even one day less a week makes a difference!
	Eat more low-carbon foods like unprocessed foods, seasonal fruits and vegetables, and grains.
	Avoid unnecessary food waste: plan meals, right-size your grocery and restaurant purchases, and bring reusable containers when you shop or eat out.
	Bring your reusable water bottle or mug when you leave the house.
	Avoid single-use plastic food wraps, utensils, or bags. Try using reusable storage containers, jars, beeswax, shower caps, or plates to cover your bowls, and use metal straws and utensils when going out.
Get Inf	ormed and Involved
	Participate in local community groups working to reduce greenhouse gas pollution and make the community more resilient to climate impacts.

□ Volunteer at local events including trash cleanups, tree plantings, and outreach events.



Appendix A. Public Feedback

As detailed in the Plan Development section, the process to develop Everett's Climate Action Plan included three Planning Commission meetings with public hearings and one public open house. Members of the public suggested the ideas presented below during these opportunities for public input. The list has been lightly edited for grammar and clarity.

GOVERNANCE

- Public education—effect on children's future
- ► Resident environmental commissions
- Resident advisory board—adopt one for Everett around climate change
- ▶ Integrate climate change into Food Policy Council
- City climate adaptation policies
- Adopt a Climate Action Plan

TRANSPORTATION

- ► More rapid transit and light rail
- Zero emissions City vehicles
- ► Roundabouts and emission-free zones
- Increase bike safety
- ▶ Bicycle Master Plan
- ► Sidewalk Plan—incremental progress
- Gondolas over highways
- ► Encourage/reward public transit for large employers
- Transition quickly to electric buses
- ▶ Put in electric car charging stations, coordinating with County and State funding sources
- ▶ Monitor air quality esp. around Paine Field and industrial (Snohomish River & waterfront) areas
- ► Encourage public transit and anti-idling behaviors
- ▶ Read about ways to increase gas/energy efficiency
- Use of biking, walking, bicycling maps
- ▶ Inflating tires for better mileage
- ▶ Encourage carpooling with neighbors and attending neighborhood meetings
- ▶ Make it easier to get to Boeing Field by bus or bike
- ► Change roads to be more pedestrian friendly
 - o Focus on major obstacles
 - o Continuity of bike/pedestrian routes
 - Locate large employers in Everett
 - o Common Network so people can learn from each other's programs
- Mobility without planning and obstacles



APPENDIX A. PUBLIC FEEDBACK

- Improve vehicle efficiency
- ▶ Electric vehicle infrastructure
- ▶ Legalize electric golf carts on city streets

ENERGY

- Non-hydro powered renewable energy—rooftop solar and/or localized wind generation
- ▶ Biogas generator for grass/yard clippings
- Renewable energy ordinance
- Gas furnace buy-outs/incentives
- ▶ Low income subsidies for solar
- Alternatives to rooftop solar
- ▶ SnoPud to continue with loans for insulating and reducing heat loss
- Incentivize solar energy
- Decrease/ban natural gas usage
- Energy efficient buildings
- Incentivize switching from natural gas to electricity
- ▶ LED lighting

GREEN ECONOMY

- ▶ Increase biodegradable products
- ► Cross-laminated timber and other carbon neutral materials
- Increase green economic opportunities

LAND USE

- Encourage new housing near transportation
- ▶ Encourage high-density development
- Building codes

NATURAL AREAS

- ▶ Break up "concrete deserts" trees on Madison, Evergreen Way, Broadway
- Parks, trees, open spaces to play
- Encourage fewer lawns, which use too much water and fertilizers
- Support tree maintenance
- Maintain and increase green space
- ▶ Plant more shrubs to provide bird habitat, food for bees, flowering and fruiting beauty, and utility
- Avoid pesticides
- ▶ Decrease grass landscaping and replace with native plants
- Tree canopy



APPENDIX A. PUBLIC FEEDBACK

GENERAL SUSTAINABILITY TOPICS

- ▶ Decrease water consumption
- Stormwater runoff
- ▶ Work with utilities on rain barrels, water conservation ideas, and wise plantings in ecological plant communities of similar water needs
- ► Work with Master Gardeners, Great Plant Picks, and similar groups to provide public education workshops
- ▶ Make recycling requirements consistent and clear
- ► Encourage better nutrition (less red meat, more fresh veggies & fruits, using the farmers markets and local farms, growing your own, starting with healthy, organic soil)
- ▶ Share excess produce with local food banks and neighbors.
- ▶ Refrigerant substitutes and safe removal
- Read Drawdown
- ▶ Research the impact of sea level rise on sewer systems
- ▶ Provide smoke shelters for relief from wildfire smoke
- Green roofs
- Prepare for the impacts of climate change
- ► Ban/reuse Styrofoam
- ▶ Ban disposable water bottles
- ► Implement Dark Sky protocols
- ▶ Only use sprinkler systems at night
- ▶ More recycling bins in public spaces
- Public health

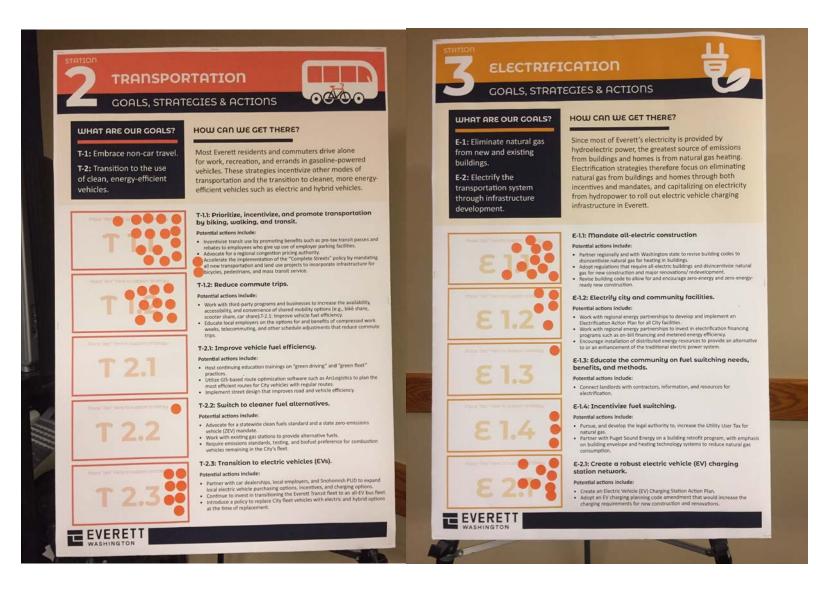


Appendix B. Public Open House Boards

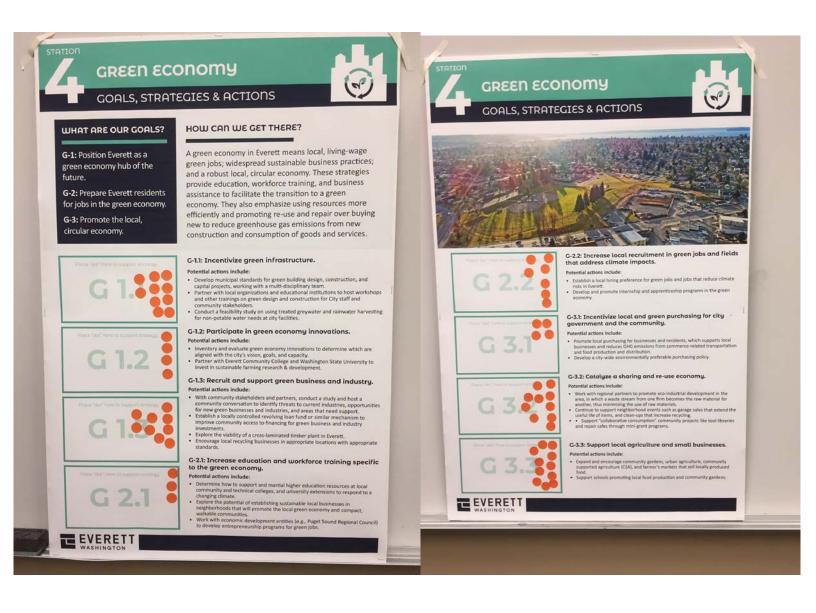
A public open house was held to solicit public feedback on the draft vision, targets, goals, and strategies in Everett's Climate Action Plan. The public open house took place the evening of October 15th, 2019. Participants were given the opportunity to suggest ideas and provide feedback on the proposed vision and targets using post-it notes. They were also asked to perform a dot voting exercise for the strategies within each focus area, where participants placed dots on their preferred strategies and actions. The outcomes of these exercises are presented below.



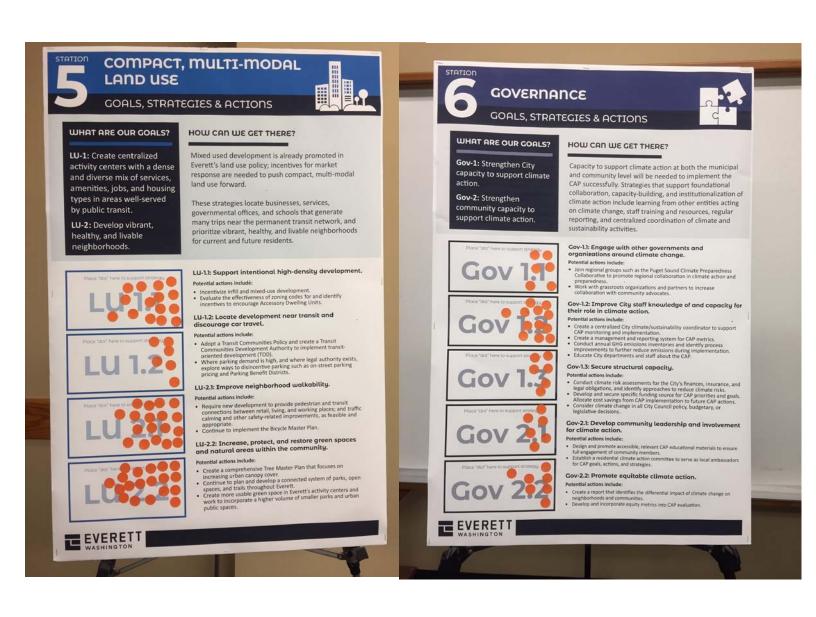














APPENDIX C. IMPLEMENTATION & EVALUATION FRAMEWORKS

Appendix C. Implementation & Evaluation Frameworks

As discussed in the Implementation and Evaluation section, these matrices provide the framework for Everett's Climate Action Plan implementation and evaluation strategy. Before diving into the full implementation of the Climate Action Plan, the City of Everett staff will have to complete some of the foundational actions listed in the Governance focus area to increase City capacity for climate action work. Once those actions are taken, the matrices listed below will help the City staff member responsible for implementation to track progress, develop a timeline, identify funding opportunities, and create accountability.

IMPLEMENTATION MATRIX

#	Action	Lever	Timeframe	Lead Entity	Potential Partners	Cost	Potential Funding Strategies	Metrics	Unintended Consequences	Key Next Steps
Strategy	: Strategy	within the CAP								
Action ID	Action name	Identified mechanism for affecting change (e.g., policy, capital improvement project, monetary instrument, information/ education, partnership/ collaboration, or	Timeline for implementation (e.g., short- term, long- term)	City department, community organization, or partnership responsible for implementation of action	Identification of partners that can support implementation elements	Cost of implementing action	How the action will be funded	Metrics for evaluating implementation of the action	Possible unintended consequences to consider during action implementation	Progress update on the status of ongoing implementation

EVALUATION MATRIX

Key Performance Indicator	Tracked?	Baseline	Current Value	2030 Target	2050 Target	Trend			
Goal: Goal within the CAP against which the KPI will assess progress.									
Metric being tracked (unit of the metric)	Whether the metric is currently tracked for an alternative program/project	Baseline value to which the goal is being compared (year of data)	Value of the metric within the current reporting year	Target value of the metric in 2030	Target value of the metric in 2050	Current observed trend in KPI (e.g., Needs Work, On Track, Exceeding Goal)			



Appendix D. Multi-Criteria Analysis

This Climate Action Plan includes a qualitative assessment of the potential benefits associated with each action presented. To create this assessment, each action was qualitatively ranked high, medium, or low based on how well the action aligns with an established set of criteria. The full outcomes of these rankings are provided below.

Overall Scores: A score of 5 is the highest possible score, indicating very high alignment with the criterion. A score of 1 is the lowest possible score, indicating very low		Score Out of 5	mbact %08	Equity %05	Cost/ Affordability	Feasibility %11	Co-Benefits
alignment ID	with the criterion. Action		30/0	2070	17/0	17/0	17/0
T-1.1.1	Incentivize transit use by promoting benefits such as pre-tax transit passes and rebates to employees who give up use of employer parking facilities.	2.6	3.8	1.0	3.0	3.0	1.4
T-1.1.2	Advocate for regional congestion pricing authority, with flexibility to dedicate revenues to projects and services that would serve a variety of different transportation modes and options.	2.6	3.8	1.0	3.5	1.6	2.6
T-1.1.3	Accelerate the implementation of the "Complete Streets" policy by mandating all new transportation and land use projects to incorporate infrastructure for bicycles, pedestrians, and mass transit service unless a reasonable exemption is determined by the City Engineer.	3.4	3.8	2.3	3.5	4.4	3.0
T-1.1.4	Partner with the school district and Safe Routes to Schools to expand educational programs and events to encourage and promote walking and biking, including a Bike to School Day, walking school bus, and sidewalk painting for safe routes.	2.6	1.0	2.3	4.5	5.0	1.8
T-1.2.1	Work with third-party programs and businesses to increase the availability, accessibility, and convenience of shared mobility options (e.g., bike share, scooter share, car share).	3.1	3.0	1.7	5.0	3.8	2.6



Overall Sco	ores:	ω			lity	ty	its
A score of 5 is the highest possible score, indicating very high alignment with the criterion. A score of 1 is the lowest possible score, indicating very low		Score Out of 5	Impact	Equity	Cost/ Affordabil	Feasibility	Co-Benefits
	with the criterion.	Š	30%	20%	17%	17%	17%
T-1.2.2	Educate local employers on the options for and benefits of compressed work weeks, telecommuting, and other schedule adjustments that reduce commute trips. Share case studies and learnings from the City's internal implementation of these programs and from local businesses with innovative flexible work policies.	2.7	2.6	1.0	4.5	4.4	1.4
T-1.2.3	Continue to promote and support carpooling, vanpooling, and telecommuting amongst City employees to reduce drive alone commute trips.	2.3	1.0	1.0	4.5	5.0	1.0
T-2.1.1	Continue to invest in transitioning the Everett Transit fleet to an all-EV bus fleet.	3.1	3.8	2.3	2.5	4.4	2.2
T-2.1.2	Introduce a policy to replace City fleet vehicles with electric and hybrid options at the time of replacement.	2.1	1.0	1.0	3.5	4.4	1.4
E-1.1.1	Partner regionally and with Washington state to revise building codes to disincentivize natural gas for heating in buildings.	2.8	3.0	1.0	4.5	4.4	1.4
E-1.1.2	Study the benefits and economic tradeoffs of regulations that require all-electric buildings and disincentivize natural gas for new construction and major renovations/ redevelopment. Options such as city mandates, building code updates, or ordinances should be explored as tools for transitioning new construction to all-electric for heating. Ideally, these regulations would cover both new construction and major renovations of existing buildings, including accessory dwelling units.	2.8	4.2	1.0	4.0	2.4	1.8



Overall Scores: A score of 5 is the highest possible score, indicating very high alignment with the criterion. A score of 1 is the lowest possible score, indicating very low		Score Out of 5	Impact	Equity	Cost/ Affordability	Feasibility	Co-Benefits
	with the criterion.	Š	30%	20%	17%	17%	17%
E-1.1.3	Work with regional energy partnerships to develop and implement an Electrification Action Plan for all City facilities. In new and existing buildings, incorporate strategies to address electricity storage, and focus on highlighting any hurdles or solutions that would be applicable to the broader community.	1.8	1.0	1.0	3.0	2.8	1.8
E-2.1.1	Create an Electric Vehicle (EV) Charging Station Action Plan.	3.3	5.0	1.7	3.5	2.8	2.2
E-2.1.2	Adopt an EV charging planning code amendment that would increase the charging requirements for new construction and renovations.	3.0	3.8	1.0	4.5	4.2	1.4
GE-1.1.1	Develop municipal standards for green building design, construction, and capital projects, working with a multi-disciplinary team. King County's sustainable infrastructure scorecard is a potential evaluation model for internal standards.	2.5	1.0	1.0	4.5	4.2	3.4
GE-1.1.2	Encourage the use of green roofs, green walls, cool roofs, cool pavement, and additional landscaping tolerant to a range of climate conditions, especially in areas where urban heat island effects will be greatest.	3.4	1.8	4.3	5.0	3.6	3.4
GE-1.1.3	Conduct a feasibility study on using treated greywater and rainwater harvesting for non-potable water needs at city facilities.	2.4	1.0	1.0	4.0	4.4	3.0



Overall Sco	res: 5 is the highest possible score, indicating	Score Out of 5	Impact	Equity	Cost/ Affordability	Feasibility	Co-Benefits
	very high alignment with the criterion. A score of 1 is the lowest possible score, indicating very low alignment with the criterion.		_	ш	Affo	Fe	Co
			30%	20%	17%	17%	17%
GE-1.1.4	Adopt new stormwater development regulations (codes and standards) specified in the Permit and the new Ecology Stormwater Management Manual, including vesting requirements and new Low Impact Development (LID) Best Management Practices (BMPs). Implement new plan review, inspection, and escalating enforcement processes and procedures necessary to implement the program in accordance with Permit conditions.	2.6	1.0	2.3	4.0	3.8	3.0
GE-1.2.1	Work with partners in higher education and elsewhere to inventory and evaluate green economy innovations to determine which are aligned with the city's vision, goals, and capacity. These may include research centers for clean energy, water, manufacturing, and technology, as well as other endeavors.	3.1	3.0	1.6	3.5	3.8	4.2
GE-1.2.2	With community stakeholders and partners, conduct a study and host a community conversation to identify threats to current industries, opportunities for new green businesses and industries, and areas that need support.	2.9	1.0	3.6	3.5	5.0	3.0
GE-1.2.3	Focus some business development efforts on businesses that have fewer impacts on natural resources.	2.4	1.0	1.0	5.0	4.4	2.2
GE-1.2.4	Encourage local recycling businesses in appropriate locations with appropriate standards.	2.7	1.8	1.0	5.0	5.0	1.8
GE-1.2.5	Work with regional partners to support business and non-governmental organizational efforts to participate in the green economy.	2.6	1.8	1.7	3.5	3.6	3.0



very high a	res: 5 is the highest possible score, indicating lignment with the criterion. A score of 1 is possible score, indicating very low	Score Out of 5	Impact	Equity	Cost/ Affordability	Feasibility	Co-Benefits
alignment	with the criterion.	Š	30%	20%	17%	17%	17%
GE-2.1.1	Explore the potential of small green commercial hubs—or clusters of sustainable local business—in neighborhoods that will promote the local green economy and compact, walkable communities.	2.7	1.8	1.7	3.5	4.4	3.0
GE-2.1.2	Establish a local hiring preference for green jobs and jobs that reduce climate risks in Everett.	2.9	1.0	1.7	4.5	5.0	4.2
GE-2.1.3	Work with local and regional partners to develop and promote internship and apprenticeship programs in the green economy.	2.7	1.8	1.7	3.5	4.2	3.0
GE-3.1.1	Promote local purchasing for businesses and residents to support local vendors, services, and stores and to reduce GHG emissions from commerce-related transportation and food production and distribution.	3.3	3.0	1.6	5.0	5.0	2.2
GE-3.1.2	Develop a city-wide environmentally preferable purchasing policy (EPP). Consider life-cycle costing as one of the decision-making tools in the EPP process.	1.9	1.8	1.0	3.5	2.4	1.0
GE-3.1.3	Replace all non-Energy Star office equipment and appliances at the end of their life cycle with Energy Star rated models. Require energy and water efficiency as a primary consideration for all future purchasing decisions.	2.1	1.8	1.0	3.0	4.4	1.0
GE-3.1.4	Develop and disseminate tools for writing green specifications, RFPs, and bids.	2.3	2.2	1.0	3.5	3.6	1.4



very high a	res: 5 is the highest possible score, indicating lignment with the criterion. A score of 1 is possible score, indicating very low	Score Out of 5	Impact	Equity	Cost/ Affordability	Feasibility	Co-Benefits
alignment	with the criterion.	S	30%	20%	17%	17%	17%
GE-3.2.1	Work with regional partners to promote eco-industrial development in the area, in which a waste stream from one firm becomes the raw material for another, thus minimizing the use of raw materials.	2.3	1.8	1.0	3.0	3.6	3.0
GE-3.2.2	Continue to support neighborhood events such as garage sales that extend the useful life of items, and clean-ups that result in recycling of appliances, metals, yard waste, etc.	2.8	1.8	1.7	5.0	5.0	1.4
GE-3.2.3	Support "collaborative consumption" community projects like tool libraries and repair cafes through mini-grant programs.	2.4	1.0	1.7	3.5	5.0	1.8
GE-3.2.4	Work with local and regional partners to conduct a public education and outreach campaign around local options for toollending libraries, car share, swap events, service websites, and exchange websites like Snohomish County's Reusable Materials Exchange (2good2toss.com) and Facebook's Buy Nothing groups.	2.5	1.8	1.7	3.5	5.0	1.4
GE-3.3.1	Expand and encourage community gardens, urban agriculture, community supported agriculture (CSA), and farmer's markets that sell locally produced food.	2.7	1.0	2.3	4.0	5.0	2.6
LU-1.1.1	Incentivize infill and mixed-use development (e.g., through alternative code compliance, fee waivers, density bonuses, investment prioritization, development impact fees, tax benefits).	3.1	3.8	1.7	4.0	3.8	2.2
LU-1.1.2	Evaluate the effectiveness of zoning codes for and identify incentives to encourage Accessory Dwelling Units (i.e., mother-in-law units).	2.6	1.0	1.6	5.0	5.0	1.8



Overall Sco	res:	Score Out of 5	#:	,	ility	ity	fits
very high a	A score of 5 is the highest possible score, indicating very high alignment with the criterion. A score of 1 is the lowest possible score, indicating very low		Impact	Equity	Cost/ Affordabilit _s	Feasibility	Co-Benefits
	with the criterion.	Sc	30%	20%	17%	17%	17%
LU-1.1.3	Adopt a Transit Communities Policy and create a Transit Communities Development Authority to implement transit-oriented development (TOD).	3.9	5.0	3.1	3.5	4.4	2.6
LU-2.1.1	Require new development to provide pedestrian connections between retail, living, and working places; transit connections and facilities; traffic calming and other safety-related improvements; sidewalks and trails; and pedestrian and bicycle amenities, as feasible or appropriate.	3.2	2.2	3.0	4.5	4.4	3.0
LU-2.1.2	Continue to implement the Bicycle Master Plan.	2.9	2.2	1.7	4.5	3.8	3.0
LU-2.1.3	Create a sidewalk, curb ramp, and crosswalk inventory to determine highneed areas. Seek additional funding to build sidewalks, crosswalks, and other walking infrastructure in high-need areas and fill connectivity gaps.	2.6	1.0	3.7	3.5	4.4	1.4
LU-2.2.1	Support increasing the City's tree canopy through continued implementation of the City of Everett Tree Policy. Continue planting trees on publicly owned lands through on-going efforts such as the Green Everett Partnership in conjunction with Forterra.	3.3	2.2	3.0	5.0	4.8	2.6
LU-2.2.2	Continue to plan and develop a system of parks, open spaces, and trails throughout Everett.	3.3	2.2	3.0	4.5	5.0	3.0
LU-2.2.3	Create more usable green space in Everett's activity centers and work to incorporate a higher volume of smaller parks and urban public spaces.	2.9	1.0	4.4	3.5	3.8	3.0



Everett Climate Action Plan

Overall Scores: A score of 5 is the highest possible score, indicating very high alignment with the criterion. A score of 1 is the lowest possible score, indicating very low		Score Out of 5	Impact	Equity	Cost/ Affordability	Feasibility	Co-Benefits
alignment	with the criterion. Create a centralized City	2.0	30 %	1.0	17% 3.0	4.0	1.8
GO-1:1:1	climate/sustainability coordinator to support CAP monitoring and implementation.	2.0	1.0	1.0	3.0	4.0	1.0
GO-1.1.2	Create a management and reporting system for key metrics of activities related to CAP goals. This could include the use of an online dashboard to report on the progress of actions that have been initiated, implementation schedule, community and municipal GHG emissions, and equity impacts of actions implemented.	2.1	1.0	1.0	4.5	3.6	1.4
GO-1.1.3	Educate all City staff members about the CAP.	2.3	1.0	1.0	4.5	4.8	1.4
GO-1.1.4	Evaluate the differential impact of climate change on neighborhoods and communities.	2.6	1.0	3.0	4.5	3.6	1.8
GO-1.1.5	Develop and incorporate equity metrics in the evaluation of CAP activities.	2.8	1.0	3.0	5.0	4.4	1.8



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