



Climate Action Plan

For the City of Yakima, WA

Sustainable Yakima Committee

November 2023

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Executive Summary

On May 17, 2022, the Yakima City Council established the Sustainable Yakima Committee to serve as an advisory committee on issues related to sustainability, renewable energy, recycling, and climate change, and to provide advice and/or recommendations to the City Council on reducing the City's energy consumption and greenhouse gas emissions (GHG). The Committee was instructed to draft a climate action plan and implementation strategy document and present it to the City Council for its review and evaluation within one year of the committee's first meeting.

This Plan outlines key steps the City can take to reduce community-wide emissions, support healthy ecosystems that sequester carbon, and ensure that the community is prepared for, and resilient to, climate impacts. These actions will have a wide range of co-benefits for Yakima such as, cleaner air, recycling options, and cost savings from lower utility bills.

Under this plan, the City will achieve science-based targets by reducing greenhouse gas emissions. Other cities in Washington state have adopted 50% by 2030 compared to 2019. The goals, strategies and actions outlined in this plan are organized within five Sectors:

Sector 1: Environmental Justice

Ensure Yakima's diverse communities have the right to be protected from environmental pollution, and to live in and enjoy a clean and healthful environment.

Sector 2: Energy efficiency and renewable energy

Maintain Yakima's quality of life as the economy transitions away from fossil fuels.

Sector 3: Water Conservation

Protect river and aquifer resources as well as aquatic biodiversity.

Sector 4: Carbon Offsetting

Ensure Yakima contributes to State of Washington greenhouse gas emissions goals.

Sector 5: Recycling and Waste Management

Improve collection rates for recycling, reduce food waste, and divert waste from landfills.

INTRODUCTION

Plan Goals

The goals of this Plan are to:

- Develop and implement a plan that serves as a road map to a 1-year, 5-year, and 10-year Plan and leads to a sustainable future for our community.
- Harness the resources and talents within Yakima’s community to take practical actions across a wide range of sectors and activities.

In order to achieve these goals, this Plan needs to address the following climate impacts. There are six major climate issues affecting the community of Yakima.

Why the City Needs a Plan

In 2022, the City of Yakima formalized its commitment to addressing environmental and sustainable issues in Yakima. After endorsing the Energy Innovation and Carbon Dividend Act, supporting the Fossil Fuel Non-Proliferation Treaty, and committing the City to take a SAFE Cities climate change stand, the City Council established the Sustainable Yakima Committee to study matters related to sustainability in the City and provide recommendations to the City Council.

Climate change has had significant and tangible impacts on the city of Yakima and its surrounding region. Climate change is no longer a distant threat but a present reality that the community is grappling with. These impacts include:

- 1. Deadly Heat Waves:** Yakima has experienced more frequent and intense heat waves. Rising temperatures during the summer months can become unbearable and dangerous, especially for vulnerable populations such as the elderly, children, those with pre-existing health conditions, unhoused individuals, and outdoor workers. Heatwaves can lead to heat-related illnesses and, in extreme cases, fatalities.
- 2. Declining Water Availability and Drought:** Yakima is heavily reliant on water resources for agriculture, which is a critical part of the local economy. However, the region's hydrological cycle has been disrupted, leading to reduced snowpack in the nearby mountains and earlier snowmelt. This phenomenon has contributed to water scarcity and more frequent droughts, putting stress on water supplies and agricultural productivity.
- 3. Increased Wildfires and Smoke:** The wildfire season has lengthened and increased the intensity of wildfire events in Yakima and the surrounding forests. Consequently, the city has experienced periods of dense, toxic smoke-filled air, leading to hazardous air quality levels and posing health risks to residents. Wildfires also result in property damage and threaten nearby communities.
- 4. Impact on Agriculture:** Yakima is an important agricultural region, known for producing fruits such as apples, cherries, and hops. However, changing climate has affected the timing of growing seasons

and the suitability of certain crops in the region. Warmer winters have led to more pests and diseases, impacting crop yields, and posing challenges for local farmers.

5. Threats to Biodiversity: The unique ecosystem of the Yakima region, including the surrounding forests and wildlife, faces disruptions. Changes in temperature and precipitation patterns can alter habitat and affect the distribution and behavior of plant and animal species.

6. Economic Impacts: The combined effects of extreme heat, droughts, wildfires, and challenges in agriculture can result in significant economic losses for Yakima. The disruption of agricultural activities can lead to reduced revenue, job losses, and increased food prices, impacting both local residents and the broader economy.

To address these impacts and build resilience, it is crucial for Yakima to adapt to the changing climate and implement strategies to mitigate further warming. This may include implementing water conservation measures, promoting sustainable land management practices, investing in renewable energy, and creating emergency plans for extreme weather events. Additionally, engaging in regional and global efforts to reduce greenhouse gas emissions is essential to tackle the root causes of climate change and mitigate the effects in the long run.

BACKGROUND

Yakima's Contribution to Climate Change

- **Transportation:** Like many urban areas, transportation is a significant contributor to GHG emissions in Yakima. This includes emissions from cars, trucks, and other vehicles using fossil fuels for commuting, goods movement, and transportation within the City.
- **Energy Consumption:** The use of electricity and other forms of energy from fossil fuels, such as natural gas, for residential, commercial, and industrial purposes can contribute to GHG emissions in the City.
- **Agriculture:** Yakima is a prominent agricultural region, and agricultural activities can also contribute to GHGs. Emissions can arise from the use of fossil fuels in farming operations, as well as from agricultural waste management practices.
- **Waste Management:** The handling and disposal of waste in landfills can produce methane, a potent GHG. While Yakima may have waste management practices in place, it is essential to manage organic waste to reduce methane emissions effectively.
- **Industrial Processes:** Various industrial processes can contribute to GHG emissions. These emissions might result from energy-intensive manufacturing or chemical processes.

Climate Change Impact on Yakima's Resources

Climate change has had significant impacts on the city of Yakima and its valuable natural resources. As with many regions, Yakima is experiencing changes in temperature, precipitation patterns, and extreme weather events, leading to various environmental and socioeconomic challenges. Some of the notable impacts on the city and its resources include:

- **Heatwaves:** Climate change has led to more frequent and intense heatwaves in Yakima, increasing the risk of heat-related illnesses and deaths, particularly among vulnerable populations.
- **Water Resources:** Yakima heavily relies on water resources for agricultural activities and water supply for its residents. However, climate change has led to changes in the timing and intensity of precipitation, reducing snowpack in the mountains and affecting the availability of water during the dry season. This results in water scarcity, impacting agricultural productivity and the availability of drinking water.
- **Wildfires:** Climate change has contributed to more frequent and intense wildfires in the region. These wildfires can have devastating effects on communities, ecosystems, and air quality. Smoke from wildfires can also pose health risks to residents, especially vulnerable populations.
- **Agriculture:** Yakima is an essential agricultural region known for producing fruits such as apples, cherries, and hops. However, changes in temperature and precipitation patterns can alter

growing seasons and affect crop yields. Warmer temperatures and increased risks of pests and diseases can pose significant challenges to agricultural production.

- **Forests and Biodiversity:** Yakima's forests and biodiversity are vulnerable to the impacts of climate change. Rising temperatures and changing precipitation patterns can affect the distribution and behavior of plant and animal species. These changes can lead to shifts in ecosystems, potentially threatening local biodiversity and ecological balance.
- **Infrastructure:** Extreme weather events, such as heavy rainfall and flooding, can strain the city's infrastructure, leading to damage to roads, bridges, and other public facilities.

Economic Impact: The combination of challenges in agriculture, water availability, and natural disasters can have economic implications for the city and its residents. Reduced agricultural productivity and increased firefighting and recovery costs can impact the local economy.

Yakima's Frontline Communities

The term "Frontline communities" is often used in the context of environmental and social justice movements. These communities are typically the most directly impacted by environmental issues, such as pollution, climate change, or natural disasters, as well as other social and economic challenges. They are called "frontline" because they are on the front lines of experiencing the immediate and often disproportionate impacts of these issues. Frontline communities may include low-income neighborhoods, communities of color, indigenous peoples, and other marginalized groups. These groups often face systemic inequalities, limited access to resources, and unequal representation in decision-making processes related to environmental and social issues.

The median household income for Yakima residents is 27% lower than the median for the State of Washington. Similarly, 22.8% of the city's population earns below the federal poverty level. For the City of Yakima, the most vulnerable and susceptible to the harsh effects of climate change includes those who are experiencing homelessness and are exposed to the elements for long periods of time. Yakima County as a whole saw an increase of 15% of residents classified as homeless from 2022 to 2023.

People with disabilities have largely been systematically ignored by government and sustainability planning. The City of Yakima has the most persons with disability in the county, at 13,897. People with disabilities are among the most vulnerable to climate impacts, partly because of the nature of their disabilities and the social disadvantage that often accompany this. They tend to be poorer and have fewer resources. People who use wheelchairs are among the most vulnerable to the climate crisis.

Climate change is a "threat multiplier", meaning it escalates social, political and economic tensions in fragile and conflict-affected settings. As climate change drives conflict across the world, women and girls face increased vulnerabilities to all forms of gender-based violence, including conflict-related sexual violence, human trafficking, child marriage, and other forms of violence. Yakima already has the second highest rate of domestic violence in the state. Women and girls experience the greatest impacts of climate change, which amplifies existing gender inequalities and gender-based violence, and poses unique threats to their livelihood, health, and safety.

Alignment with Existing Plans & Laws

Relationship to Other City Plans

The Sustainable Yakima Committee considered other City Plans during the development of the Climate Action Plan (Plan). These plans either inform or could be informed by the Plan. Some of these documents already emphasize climate and sustainability solutions outlined in this Plan, while others will need to be updated to integrate sustainability and climate action.

Comprehensive Plan 2040

Goal 2.7

- Equity Study (2016)
- East-West Analysis
- Bicycle Master Plan (2017)
- Pedestrian Master Plan (2021)
- Continue to work with schools on Safe Route to School Plans
- Housing Action Plan (2021)
- Water Use Efficiency Goals and Objectives (2017)
- Community Health and Safety Plan (2018)

Relationship to Regional Plans & Programs

- Yakima County Comprehensive Emergency Management Plan (2019)
- Yakima County Trails Plan (2020)
- 6-Year Transportation Improvement Program 2023-2028 (2023)
- Yakima River Basin Integrated Plan

Related State Code

- 2019 Clean Energy Transformation Act (CETA)
- Revised Code of Washington 70A.45.020 - - Greenhouse Gas Emissions Reductions
- Revised Code of Washington Chapter 19.27A - - Washington State Energy Code

Cities & Organizations

This Sustainability Action Plan was developed using multiple models for guidance, including the following:

- City of Spokane - Spokane Sustainability Action Plan (2021)
- City of Bellingham - Climate Protection Action Plan (2018)
- City of Vancouver - Climate Action Framework (2022)
- Yakama Nation - Climate Action Plan for the Territories of the Yakama Nation (2019)

AREAS OF FOCUS

Sector 1: Environmental Justice

Environmental justice is a concept that addresses the fair distribution of environmental benefits and burdens, particularly in relation to the impact of environmental hazards on different communities. It emerged in the United States during the 1980s as a response to the recognition that low-income and minority communities often bear a disproportionate burden of environmental pollution and lack access to environmental benefits.

The environmental justice movement aims to rectify historical and systemic environmental injustices, promote environmental equity, and ensure that all individuals and communities have the right to a clean and healthy environment. Efforts include grassroots organizing, legal actions, policy advocacy, and collaboration between communities, environmental organizations, and policymakers. The goal is to create a more inclusive and sustainable approach to environmental protection that prioritizes the well-being of all people, regardless of their socio-economic background or cultural identity.

This plan will focus on two aspects of environmental justice: community resilience and housing.

Community Resilience

Goal: Ensure the community has equitable access to resources such as clean water and air, healthy attainable and affordable housing, nutritious food, and living wage jobs.

- ▶ **Strategy 1:** Conduct community outreach to address the concerns and needs of marginalized groups and what resolutions or assistance is needed.
 - **Actions:**
 - Review regional policies and initiatives that support equitable access to resources for all. (1-Year Plan)
 - Recommend policies and initiatives that support equitable access to resources for all. (5-Year Plan)
 - Implement policies and initiatives that support equitable access to resources for all. (5-10 Year Plan)
- ▶ **Strategy 2:** Leverage current unused and vacant properties owned by the city for potential sustainable activities.
 - **Actions:** Review current unused and vacant properties owned by the city. (1-Year Plan)
 - **Actions:** Recommend utilizing unused and vacant properties owned by the city. (5-Year Plan)
- ▶ **Strategy 3:** Educate the community on ways to keep themselves safe and their homes safe during natural disasters or significant events.
 - **Actions:** Develop workshops and educational tools. (5-Year Plan)
- ▶ **Strategy 4:** Address Food Insecurity.
 - **Actions:**
 - Promote local food campaigns/food banks. (1-Year Plan.)

- Partner with organizations that serve food-insecure populations to provide access to fresh, healthy food via a community garden space and local produce markets. (1-Year Plan)
 - Support and promote food hubs to distribute locally produced food. (1-Year Plan)
 - Support expansion of businesses that connect customers to restaurants and stores that have unsold surplus food. (5-Year Plan)
- ▶ **Strategy 5:** Develop a community garden.
- **Actions:**
 - Identify current community gardens. (1-Year Plan)
 - Support interested neighborhoods in creating community garden spaces and incentivize developers to include community garden space in new development. (5-Year Plan)
 - Support schools and youth education programs that teach students how to grow and prepare fresh produce. (5-Year Plan)

Housing

Goal: Ensure residents of Yakima are adequately housed in homes and shelters equipped to handle extreme wildfire and weather events and have access to shelters.

- ▶ **Strategy 1:** Promote adequate housing to support economic development.
- **Action:**
 - Incentivize housing developments based on affordability and proximity to active transportation corridors. (10-Year Plan)
- ▶ **Strategy 2:** Assist residents to feel comfortable and safe in their homes for future effects of climate change.
- **Action:** Provide extreme weather shelters. (1-Year Plan)
 - **Action:** Promote and utilize State and Federal programs for weatherization. (1-Year Plan)
- ▶ **Strategy 3:** Review single-family zoning to encourage higher-density housing.
- **Action:** During the next Growth Management Act (GMA) Comprehensive Plan Update, adjust land use designation to promote higher density housing opportunity. (5-Year Plan)
- ▶ **Strategy 4:** Support resilience in the event of extreme weather events such as backup energy supplies, water, and shelters.
- **Action:** Review current Emergency Management Plans. (1-Year Plan)
 - **Action:** Recommend additional measures. (5-Year Plan)
- ▶ **Strategy 5:** Promote building codes to encourage green building practices.
- **Action:** Review current housing codes. (5-Year Plan)

Sector 2: Energy Efficiency and Renewable Energy

Energy efficiency and renewable energy are two key components of sustainable and responsible energy practices. Both play crucial roles in addressing environmental concerns, reducing reliance on fossil fuels, and mitigating the impacts of climate change.

The interconnection of energy efficiency and renewable energy is common. Combining energy efficiency measures with the use of renewable energy enhances the overall sustainability of energy systems. For example, an energy-efficient building with solar panels can significantly reduce its environmental impact. Energy efficiency measures can help reduce the overall demand for energy, making it easier to meet the remaining energy needs with renewable sources. Both energy efficiency and renewable energy technologies contribute to job creation and economic growth in the clean energy sector.

Energy efficiency and renewable energy are integral components of a sustainable and environmentally friendly energy future. Combining these approaches can contribute to a more resilient and low-carbon energy system while fostering economic growth and addressing climate change.

This plan will focus on two aspects of energy efficiency and renewable energy: reduction of greenhouse gas emissions and buildings and clean energy.

Reduction of greenhouse gas emissions

Goal: Reduce GHG emissions from motorized transportation, including through electrification of all modes.

- ▶ **Strategy 1:** Yakima residents will be able to travel safely and reliably to their destinations, and the City will be able to adequately, affordably, and sustainably construct and maintain roads and streets.
 - **Actions:**
 - Review current plans. (1-Year)
 - Pursue federal and state funding for efficiency improvements. (1-10 Year Plans)
 - Expand lighting and other safety features on pedestrian pathways. (1-10 Year Plans)
 - Identify areas of the city where pedestrian facilities could be prioritized. (1-10 Year Plans)
 - Improve sidewalks, curb ramps, and street crossings near transit stops. (1-10 Year Plans)
 - Dedicate increased local funding to the local Safe Routes to School program. (1-10 Year Plans)
- ▶ **Strategy 2:** Encourage land use policies that support navigable, livable, sustainable communities for all.
 - **Actions:**
 - Review current plans. (1-Year Plan)
 - Include infrastructure to support bike parking, charging for electric bikes and scooters, and shared mobility programs. (5-10 Year Plans)
 - Encourage active transportation and multi-modal uses across the city's parks, and open spaces that explicitly serve and connect under-developed areas, overburdened communities, and transit-dependent communities. (5-10 Year Plans)
- ▶ **Strategy 3:** Promote and encourage the use of EVs and low-carbon fuels in transportation.
 - **Actions:**
 - Pursue federal and state funding for efficiency improvements. (1-5 Year Plans)

- Offer non-financial incentives to encourage EV adaptation and expand EV infrastructure, such as resident-select EV charging locations and streamlined permitting for developers. (5-Year Plan)
 - Promote education and advocacy to increase awareness and adoption of low-carbon and alternative fuels. (5-Year Plan)
- ▶ **Strategy 4:** Promote and encourage public transportation and alternative modes of single-occupancy travel.
 - **Actions:**
 - Pursue federal and state funding for efficiency improvements. (1-10 Year Plans)
 - Active transportation development to encourage opportunities for biking, walking, and wheelchairs. (1-5 Year Plan)
 - Work with the school district to promote school bus ridership and explore options for increasing services. (1-5 Year Plans)
 - Encourage active transportation through participation in Safe Routes to School program. (1-Year Plan)
 - Incentive the use of public transportation by providing free rides to city workers. (5-Year Plan)
 - Work with schools to educate students on how to use public transportation. (5-Year Plan)
 - Work with third-party programs and businesses to increase the availability, accessibility, and convenience of shared mobility options (e.g., bike and scooter share programs) (5-Year Plans)
- ▶ **Strategy 5:** Review current fleet management practices.
 - **Actions:**
 - Ensure that new transit developments have features for safety, accessibility, and comfort. Identify and secure adequate permanent funding for fossil fuel alternatives for sustainable transportation. (5-10 Year Plans)

Buildings and Clean Energy

Goal: Reduce emissions from all municipal, commercial, industrial, and residential buildings.

- ▶ **Strategy 1:** Encourage efficient, renewable energy buildings that meet WA Clean Building Act targets.
 - **Actions:**
 - Provide education and technical support to building owners. (1-5 Year Plans)
 - Pursue federal and state funding for efficiency improvements. (1-10 Year Plans)
 - In cooperation with environmental groups and solar installers, developing a marketing program to Yakima residents and businesses to encourage installation of solar systems on or at their property. (1-5 Year Plans)
- ▶ **Strategy 2:** Increase education on energy-saving strategies.
 - **Actions:**
 - Provide education and technical support to building owners. (1-5 Year Plans)
 - Provide education in schools. (1-5 Year Plans)
- ▶ **Strategy 3:** Retrofit existing buildings to be more energy efficient.

- **Actions:**
 - Pursue federal and state funding for efficiency improvements. (1-10 Year Plans)
 - Provide education and technical support to building owners. (1-5 Year Plans)
 - Partner with organizations that can assess current energy usage, and recommend efficiency improvements. (1-5 Year Plans)

Sector 3: Water Conservation

Water conservation involves the careful management and responsible use of water resources to reduce waste, ensure sustainability, and address water scarcity issues. It is a critical practice given the increasing global demand for water, coupled with the impact of climate change on water availability.

Water conservation is essential for ensuring sustainable water supplies for current and future generations. It requires a multi-faceted approach involving individuals, communities, businesses, and policymakers working together to manage and use water resources wisely.

Goal: Conserve community water resources and increase water efficiency savings through education, outreach, retrofitting, and rebates that ensure overburdened communities see the benefits of water conservation.

▶ **Strategy 1:** Educate and engage the community in water resources stewardship.

- **Actions**
 - Promote and fund City programs encouraging water conservation (5-10 Year Plan)

▶ **Strategy 2:** Ensure a sustainable water supply.

- **Actions:**
 - Review current plans/policies. (1-Year Plan)
 - Create clear processes and policies for assessing and approving land use and development that will impact future aquifer pumping volumes. (1-10 Year Plans)
 - Continue to work with and support Yakima River Basin Integrated Plan. (1-10 Year Plans)

▶ **Strategy 3:** Encourage reduction of irrigation use.

- **Actions:**
 - Educate homeowners/landscapers on efficient irrigation practices. (1-5 Year Plans)
 - Rainwater capture incentives (5-10 Year Plans)
 - Drought-tolerant landscaping incentives (Heritage Garden) (5-10 Plans)
 - Increase resilience by reducing stressors such as non-native noxious species. (5-10 Year Plans)

Sector 4: Carbon Offsetting

Carbon offsetting is a practice that involves compensating for the greenhouse gas emissions generated

in one location by investing in projects that reduce or remove an equivalent amount of emissions elsewhere. The goal is to achieve a balance between emissions produced and emissions removed or reduced, ultimately helping to mitigate climate change.

Carbon offsetting is often seen as a temporary solution to address emissions that are challenging to eliminate completely, especially in the short term. It is crucial, however, for entities to prioritize reducing their own emissions through sustainable practices and technologies before relying on offsetting as a sole strategy. Carbon offsetting should complement broader efforts toward achieving a low-carbon and sustainable future.

Goal: Yakima will implement policies to improve air quality.

- ▶ **Strategy 1:** Increase tree canopy and climate-adapted plant landscapes.
 - **Actions:**
 - Plant trees throughout the city to help reduce air pollution and reduce urban heat. (1-10 Year Plans)
 - Develop educational programs to promote tree plantings with residents. Tie it to Earth Day, or Arbor Day. (5-Year Plan)
- ▶ **Strategy 2:** Utilize City properties to increase canopy for carbon sequestration.
 - Review the current Parks & Recreation plan. (1-Year Plan)
 - Review inventory of City owned, unused and/or vacant properties. (1-Year Plan)

Sector 5: Recycling and Waste Management

Recycling and waste management are critical components of sustainable resource management aimed at minimizing the environmental impact of human activities. Recycling conserves resources, reduces energy consumption, decreases landfill waste, and minimizes pollution. It also helps lower greenhouse gas emissions associated with the extraction and manufacturing of virgin materials. Effective waste management requires a comprehensive and integrated approach that prioritizes waste reduction, encourages recycling and reuse, and ensures safe and environmentally sound disposal practices. Sustainable waste management practices contribute to resource conservation, pollution prevention, and a healthier environment.

Effective recycling and waste management require collaboration among individuals, businesses, communities, and governments. By adopting sustainable practices, reducing waste generation, and promoting responsible resource management, societies can contribute to a more environmentally friendly and resilient future.

Goal: Establish additional drop-off recycling collection location accessible to the entire community and increase the number of public recycling bins throughout the city. Develop clear, positive, and targeted communication campaigns to limit waste.

- ▶ **Strategy 1:** Conduct a waste audit. (5 Year Plan)
- ▶ **Strategy 2:** Increase Recycling education in schools.

- **Actions:**
 - Work with schools to create educational campaigns for students and families (5-Year Plan)
- ▶ **Strategy 3:** Develop and implement strategies to reduce food waste and increase access to healthy, affordable food for all city residents.
 - **Actions**
 - Maximize composting of inedible food, yard waste, and other organic waste. (5-10 Year Plans)
 - Support & promote Food Hubs to address food scarcity and prevent food waste. (1-Year Plan)
- ▶ **Strategy 4:** Educational campaign to reduce food waste.
 - **Actions:**
 - Work with schools to create educational campaigns for students and families. (1-5 Year Plans)
- ▶ **Strategy 5:** Set recycling goals.
 - **Actions:**
 - Promote, support, and incentivize a circular economy (a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials) (5-10 Year Plans)
 - Improve recycling infrastructure to recycle more items. (5-10 Year Plan).

KEY TERMS

TERM	DEFINITION
Adaptation	Actions in response to an event and its effects, that lessen harm or exploit beneficial opportunities. It includes reducing the vulnerability of people, places, and ecosystems to the impacts of climate changes.
Biodigester	A technology in which organic waste material is decomposed by microbial action and typically produces biogas, which can then be used as a renewable fuel or converted to renewable electricity to offset fossil fuel use.
Carbon Dioxide Equivalent (CO₂e)	A measurement that describes how much global warming potential a given type and amount of greenhouse gas may cause using the functionally equivalent amount or concentration of carbon dioxide as the reference.
Climate	The average pattern for weather over a period of months, years, decades, or longer in a specific place.
Climate Change	Any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period of time (decades or longer). Climate change may result from natural factors and processes and from human activities that change the atmosphere's composition and land surface.
Climate Change Adaptation	Actions to adjust to actual or expected climate and its effects, which seek to lower the risks posed by the consequences of climate changes.
Climate Change Mitigation	Actions to limit the magnitude or rate of climatic changes and their related effects by reducing greenhouse gas emissions.
Climate Resilient Community	A community that takes proactive steps to prepare for (i.e., reduce the vulnerabilities and risk associated with) climate change impacts.
Emission intensity	The discharge rate of a given pollutant relative to the intensity of a specific activity.
Energy Audit	An assessment and analysis of energy flows for energy conservation in a building.
Energy Efficiency	Energy efficiency refers to using less energy to perform the same tasks or achieve the same level of output. It involves optimizing the use of energy resources to minimize waste and increase overall productivity.
Equity Action	Specific programs, policies, or initiatives that make climate actions more accessible and/or less harmful to underserved communities and increase benefits to traditionally underserved populations.
Equity Outcome	A resulting effect that supports equality through increasing benefits or mitigating harmful impacts to traditionally underserved populations or by making

	programs more accessible to underserved populations.
Exposure	The nature and degree to which a system is subjected to significant climate variations.
Fossil Fuel	Fuel formed from the remains of living organisms through natural processes that occur in the earth.
Greenhouse Gas (GHG)	Gas that traps heat in the atmosphere by absorbing infrared radiation.
GHG Emissions Inventory	A study that quantifies the greenhouse gas emissions that are generated within a specific boundary. The boundary can be geographic, such as the City of Yakima.
Renewable Energy	Renewable energy comes from sources that are naturally replenished on a human timescale. These sources include sunlight (solar energy), wind, rain, tides, waves, geothermal heat, and biomass. Unlike fossil fuels, these sources do not deplete over time.
Resilience	The ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structure and functions.
Sensitivity	The degree to which a built, natural, or human system is directly or indirectly affected by changes in conditions.
Stressor	A chemical or biological agent, environmental condition, external stimulus, or an event that causes stress to an organism.
Vulnerability	The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. It is a function of the sensitivity of a particular system to climate changes, its exposure to those changes, and its capacity to adapt to those changes.

Committee Members

Jeff Scott	Chair
Ray Paolella	Vice-Chair
Dan Schapiro	Secretary
Jennifer Hickenbottom	
Marcelino Osorio	
Jeremy Leavitt (resigned Nov 2023)	
Ajit Gill	Student representative

Table: Summary of the Sectors, Components, and Plans

Sector	Component	1-Year Plan	5-Year Plan	10-Year Plan
Environmental Justice	Community Resilience			
	Strategy 1 Conduct community outreach to address the concerns and needs of marginalized groups and what resolutions or assistance is needed.	Review regional policies and initiatives that support equitable access to resources for all.	Recommend policies and initiatives that support equitable access to resources for all.	Implement policies and initiatives that support equitable access to resources for all.
	Strategy 2 Leverage current unused and vacant properties owned by the city for potential sustainable activities.	Review current unused and vacant properties owned by the city.	Recommend utilizing unused and vacant properties owned by the city.	
	Strategy 3 Educate the community on ways to keep themselves safe and their homes safe during natural disasters or significant events.		Develop workshops and educational tools.	
	Strategy 4 Address Food Insecurity.	<ul style="list-style-type: none"> Promote local food campaigns/food banks. Partner with organizations that serve food-insecure populations to provide access to fresh, healthy food via a community garden space and local produce markets. Support and promote food hubs to distribute locally produced food. 	Support expansion of businesses that connect customers to restaurants and stores that have unsold surplus food.	
	Strategy 5 Develop a community garden.	Identify current community gardens.	<ul style="list-style-type: none"> Support interested neighborhoods in creating community garden spaces and incentivize developers to include community garden space in new development. Support schools and youth education programs that teach students how to grow and prepare fresh produce. 	
	Housing			
	Strategy 1 Promote adequate housing to support economic development.			Incentivize housing developments based on affordability and proximity to active transportation corridors.
	Strategy 2 Assist residents to feel comfortable and safe in their homes for future effects of climate change.	<ul style="list-style-type: none"> Provide extreme weather shelters. Promote and utilize State and Federal programs for weatherization. 		
	Strategy 3 Review single-family zoning to encourage higher-density housing.		During the next Growth Management Act (GMA) Comprehensive Plan Update, adjust land use designation to promote higher density housing opportunity.	
	Strategy 4 Support resilience in the event of extreme weather events such as backup energy supplies, water, and shelters.	Review current Emergency Management Plans.	Recommend additional measures.	
	Strategy 5		Review current housing codes.	

	Promote building codes to encourage green building practices.			
Energy Efficiency and Renewable Energy	Reduction of Green House Gas Emissions			
	Strategy 1 Yakima residents will be able to travel safely and reliably to their destinations, and the City will be able to adequately, affordably, and sustainably construct and maintain roads and streets.	<ul style="list-style-type: none"> • Review current plans. • Pursue federal and state funding for efficiency improvements. • Expand lighting and other safety features on pedestrian pathways. • Identify areas of the city where pedestrian facilities could be prioritized. • Improve sidewalks, curb ramps, and street crossings near transit stops. • Dedicate increased local funding to the local Safe Routes to School program. 	<ul style="list-style-type: none"> • Pursue federal and state funding for efficiency improvements. • Expand lighting and other safety features on pedestrian pathways. • Identify areas of the city where pedestrian facilities could be prioritized. • Improve sidewalks, curb ramps, and street crossings near transit stops. • Dedicate increased local funding to the local Safe Routes to School program. 	<ul style="list-style-type: none"> • Pursue federal and state funding for efficiency improvements. • Expand lighting and other safety features on pedestrian pathways. • Identify areas of the city where pedestrian facilities could be prioritized. • Improve sidewalks, curb ramps, and street crossings near transit stops. • Dedicate increased local funding to the local Safe Routes to School program.
	Strategy 2 Encourage land use policies that support navigable, livable, sustainable communities for all.	Review current plans.	<ul style="list-style-type: none"> • Include infrastructure to support bike parking, charging for electric bikes and scooters, and shared mobility programs. • Encourage active transportation and multi-modal uses across the city's parks, and open spaces that explicitly serve and connect under-developed areas, overburdened communities, and transit-dependent communities. 	<ul style="list-style-type: none"> • Include infrastructure to support bike parking, charging for electric bikes and scooters, and shared mobility programs. • Encourage active transportation and multi-modal uses across the city's parks, and open spaces that explicitly serve and connect under-developed areas, overburdened communities, and transit-dependent communities.
	Strategy 3 Promote and encourage the use of EVs and low-carbon fuels in transportation.	Pursue federal and state funding for efficiency improvements.	<ul style="list-style-type: none"> • Pursue federal and state funding for efficiency improvements. • Offer non-financial incentives to encourage EV adaptation and expand EV infrastructure, such as resident-select EV charging locations and streamlined permitting for developers. • Promote education and advocacy to increase awareness and adoption of low-carbon and alternative fuels. 	
	Strategy 4 Promote and encourage public transportation and alternative modes of single-occupancy travel.	<ul style="list-style-type: none"> • Pursue federal and state funding for efficiency improvements. • Active transportation development to encourage opportunities for biking, walking, and wheelchairs. • Work with the school district to promote school bus ridership and explore options for increasing services. • Encourage active transportation through participation in Safe Routes to School program. 	<ul style="list-style-type: none"> • Pursue federal and state funding for efficiency improvements. • Active transportation development to encourage opportunities for biking, walking, and wheelchairs. • Work with the school district to promote school bus ridership and explore options for increasing services. • Incentive the use of public transportation by providing free rides to city workers. 	Pursue federal and state funding for efficiency improvements.

			<ul style="list-style-type: none"> • Work with schools to educate students on how to use public transportation. • Work with third-party programs and businesses to increase the availability, accessibility, and convenience of shared mobility options (e.g., bike and scooter share programs) 	
	Strategy 5 Review current fleet management practices.		Ensure that new transit developments have features for safety, accessibility, and comfort. Identify and secure adequate permanent funding for fossil fuel alternatives for sustainable transportation.	Ensure that new transit developments have features for safety, accessibility, and comfort. Identify and secure adequate permanent funding for fossil fuel alternatives for sustainable transportation.
	Buildings and Clean Energy			
	Strategy 1 Encourage efficient, renewable energy buildings that meet WA Clean Building Act targets.	<ul style="list-style-type: none"> • Provide education and technical support to building owners. • Pursue federal and state funding for efficiency improvements. • In cooperation with environmental groups and solar installers, developing a marketing program to Yakima residents and businesses to encourage installation of solar systems on or at their property. 	<ul style="list-style-type: none"> • Provide education and technical support to building owners. • Pursue federal and state funding for efficiency improvements. • In cooperation with environmental groups and solar installers, developing a marketing program to Yakima residents and businesses to encourage installation of solar systems on or at their property. 	Pursue federal and state funding for efficiency improvements.
	Strategy 2 Increase education on energy-saving strategies.	<ul style="list-style-type: none"> • Provide education and technical support to building owners. • Provide education in schools. 	<ul style="list-style-type: none"> • Provide education and technical support to building owners. • Provide education in schools. 	
	Strategy 3 Retrofit existing buildings to be more energy efficient.	<ul style="list-style-type: none"> • Pursue federal and state funding for efficiency improvements. • Provide education and technical support to building owners. • Partner with organizations that can assess current energy usage and recommend efficiency improvements. 	<ul style="list-style-type: none"> • Pursue federal and state funding for efficiency improvements. • Provide education and technical support to building owners. • Partner with organizations that can assess current energy usage and recommend efficiency improvements. 	Pursue federal and state funding for efficiency improvements.
	Water Conservation			
Water Conservation	Strategy 1 Educate and engage the community in water resources stewardship.		Promote and fund City programs encouraging water conservation	Promote and fund City programs encouraging water conservation
	Strategy 2 Ensure a sustainable water supply.	<ul style="list-style-type: none"> • Review current plans/policies. • Create clear processes and policies for assessing and approving land use and development that will impact future aquifer pumping volumes. • Continue to work with and support Yakima River Basin Integrated Plan. 	<ul style="list-style-type: none"> • Create clear processes and policies for assessing and approving land use and development that will impact future aquifer pumping volumes. • Continue to work with and support Yakima River Basin Integrated Plan. 	<ul style="list-style-type: none"> • Create clear processes and policies for assessing and approving land use and development that will impact future aquifer pumping volumes. • Continue to work with and support Yakima River Basin Integrated Plan.
	Strategy 3 Encourage reduction of irrigation use.	Educate homeowners/landscapers on efficient irrigation practices.	<ul style="list-style-type: none"> • Educate homeowners/landscapers on efficient irrigation practices. 	<ul style="list-style-type: none"> • Rainwater capture incentives

			<ul style="list-style-type: none"> • Rainwater capture incentives • Drought-tolerant landscaping incentives (Heritage Garden) • Increase resilience by reducing stressors such as non-native noxious species. 	<ul style="list-style-type: none"> • Drought-tolerant landscaping incentives (Heritage Garden) • Increase resilience by reducing stressors such as non-native noxious species.
Carbon Offsetting	Carbon Offsetting			
	Strategy 1 Increase tree canopy and climate-adapted plant landscapes.	Plant trees throughout the city to help reduce air pollution and reduce urban heat.	<ul style="list-style-type: none"> • Plant trees throughout the city to help reduce air pollution and reduce urban heat. • Develop educational programs to promote tree plantings with residents. Tie it to Earth Day, or Arbor Day 	Plant trees throughout the city to help reduce air pollution and reduce urban heat.
	Strategy 2 Utilize City properties to increase canopy for carbon sequestration.	<ul style="list-style-type: none"> • Review the current Parks & Recreation plan. • Review inventory of City owned, unused and/or vacant properties. 		
Recycling and Waste Management	Recycling and Waste Management			
	Strategy 1 Conduct a waste audit.		Conduct a waste audit.	
	Strategy 2 Increase Recycling education in schools.		Work with schools to create educational campaigns for students and families	
	Strategy 3 Develop and implement strategies to reduce food waste and increase access to healthy, affordable food for all city residents.	Support & promote Food Hubs to address food scarcity and prevent food waste.	Maximize composting of inedible food, yard waste, and other organic waste.	Maximize composting of inedible food, yard waste, and other organic waste.
	Strategy 4 Educational campaign to reduce food waste.	Work with schools to create educational campaigns for students and families.	Work with schools to create educational campaigns for students and families.	
	Strategy 5 Set recycling goals.		<ul style="list-style-type: none"> • Promote, support, and incentivize a circular economy (a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials) • Improve recycling infrastructure to recycle more items. 	<ul style="list-style-type: none"> • Promote, support, and incentivize a circular economy (a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials) • Improve recycling infrastructure to recycle more items.