

Whatcom 2021 Climate Action Plan

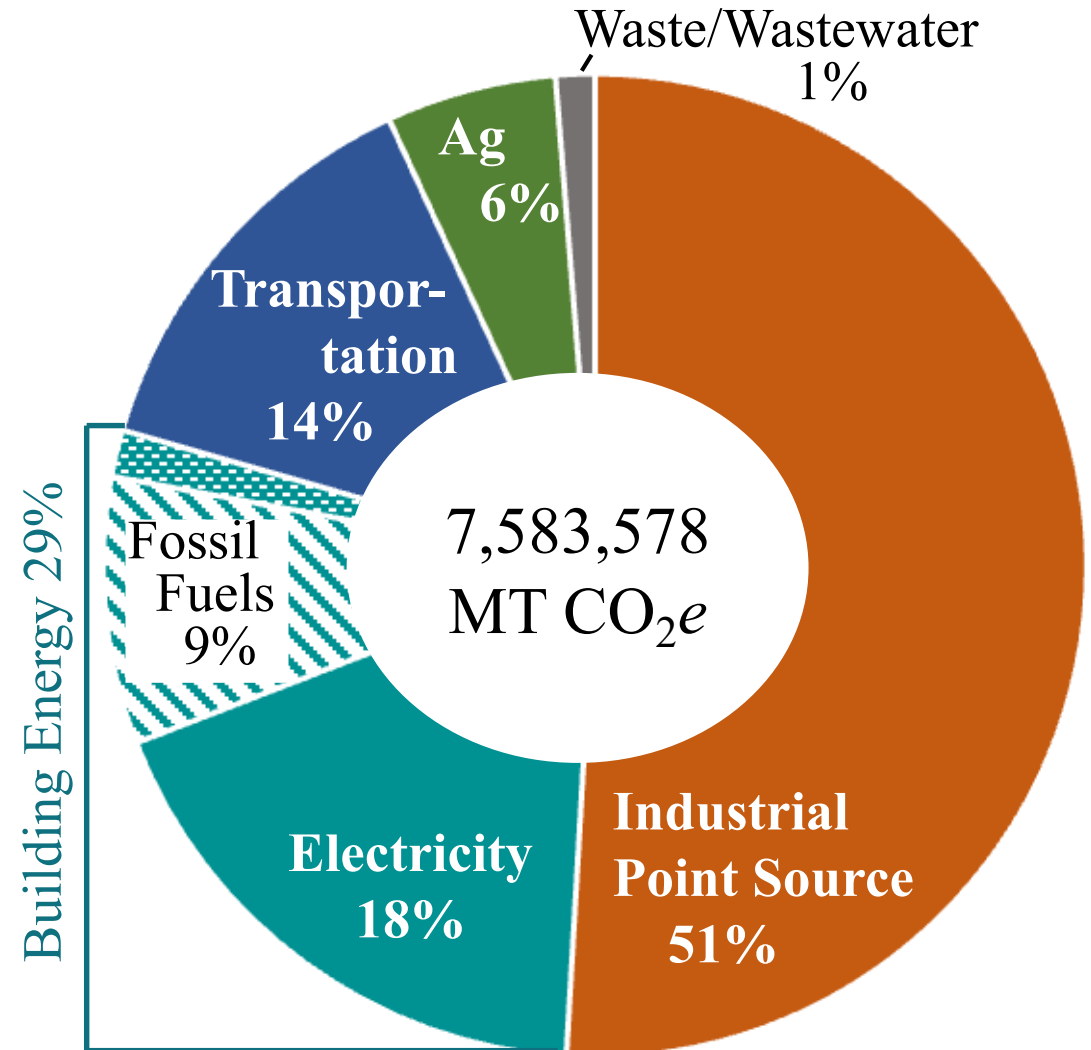
Climate Impact Advisory Committee

August 10th, 2021

Between 2000 and 2017 Whatcom GHG Emissions Have Grown Faster than the Population

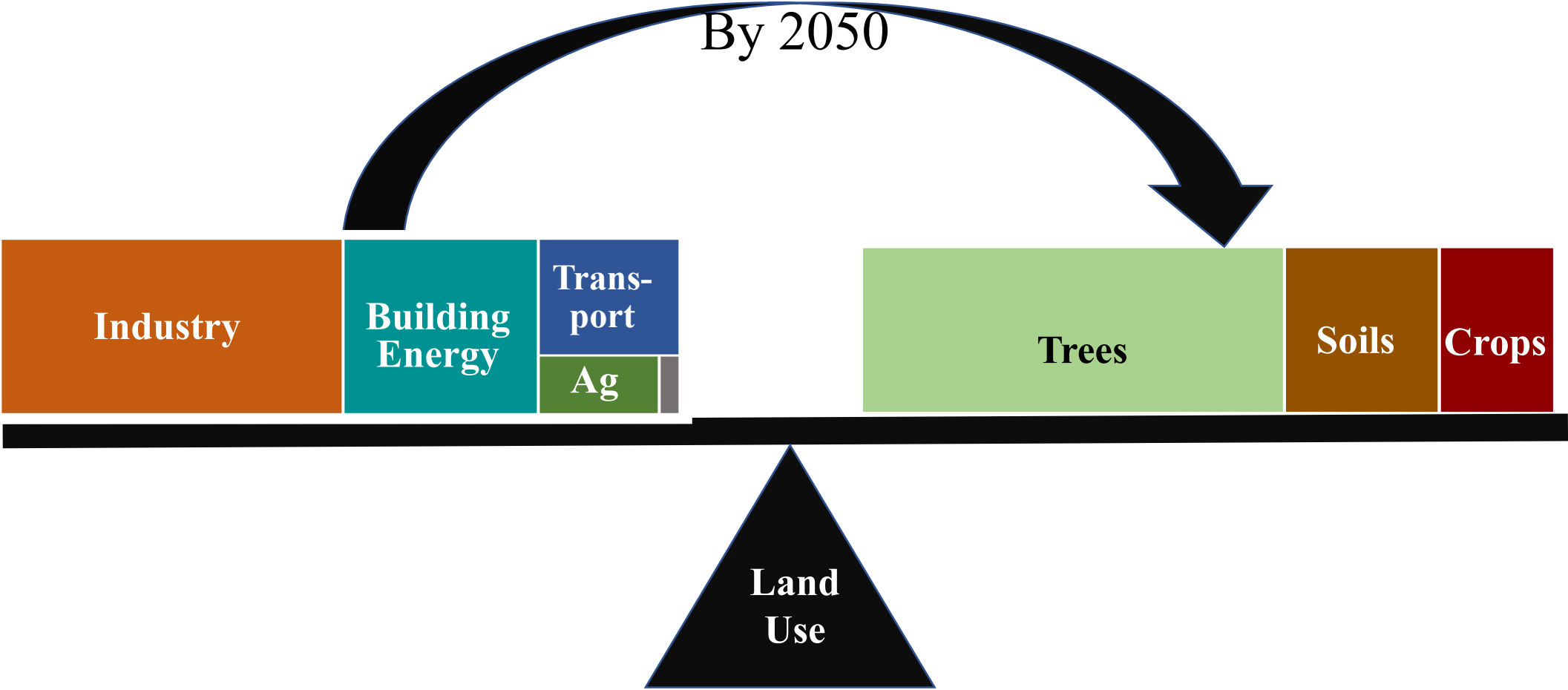
Communitywide Targets: we followed State Targets of 45% reduction below 1990 levels by 2030 & 95% reduction by 2050.

Our County emissions are almost 3 times the State-wide per capita emissions



Overall Challenge 2050 Goal

Net Zero
By 2050



Climate Action Plan Organization

1. Climate Change in Whatcom County

- Observed climate trends, GHG assessment, Targets, State Legislation and Guiding Principles.

2. Built Environment

- Electricity & Buildings
- Industry
- Transportation
- Waste
- Land Use

3. Natural Environment

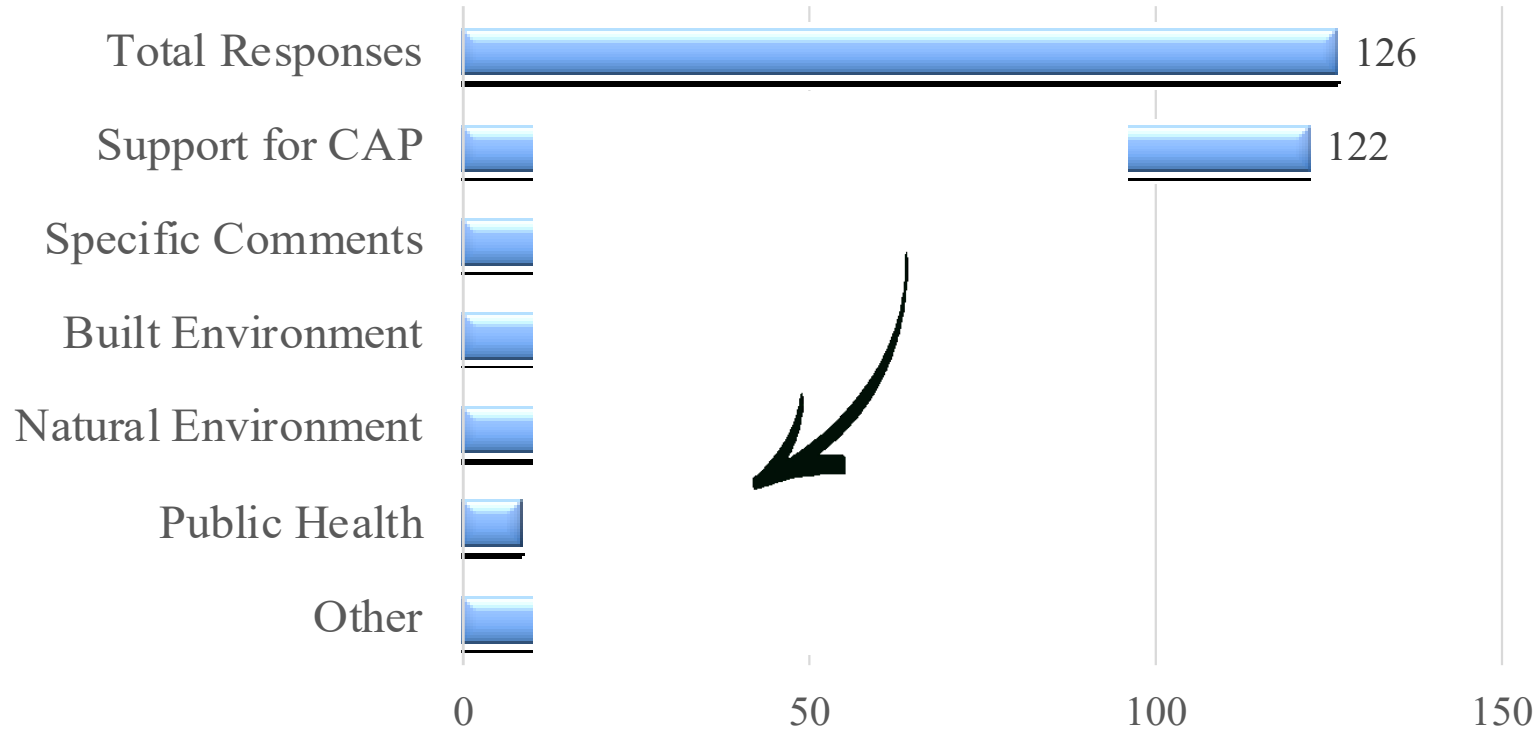
- Water Resources & Fisheries
- Agriculture
- Forestry
- Ecosystems

4. Implementation

- Office of Climate Action (coordination, information, community engagement), Role of CIAC, & Funding.

5. Appendices: Technical reviewers for each area; suggested demonstration projects.

July 30-day Public Review Results

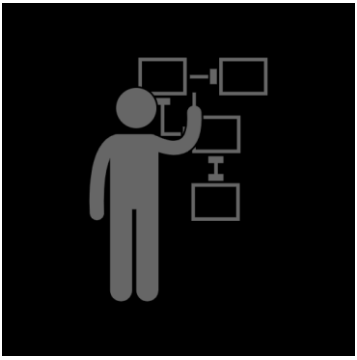


- 87 form letter response
- 4 organizations
 - North Cascade Audubon
 - RE Sources
 - Whatcom Million Trees
 - PSE
- 60 responses offered changes or suggestions

[Other category: coordinate with Tribes, public communication, organization of plan, wildfire concerns, etc.]

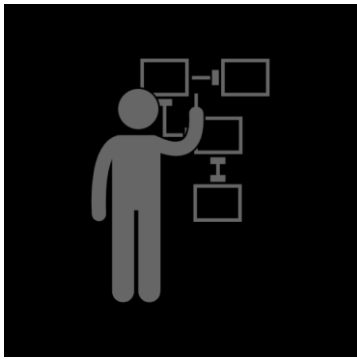
Discussion Today:

- What did you like or not like about the Plan?
- Do you have questions or suggestions?



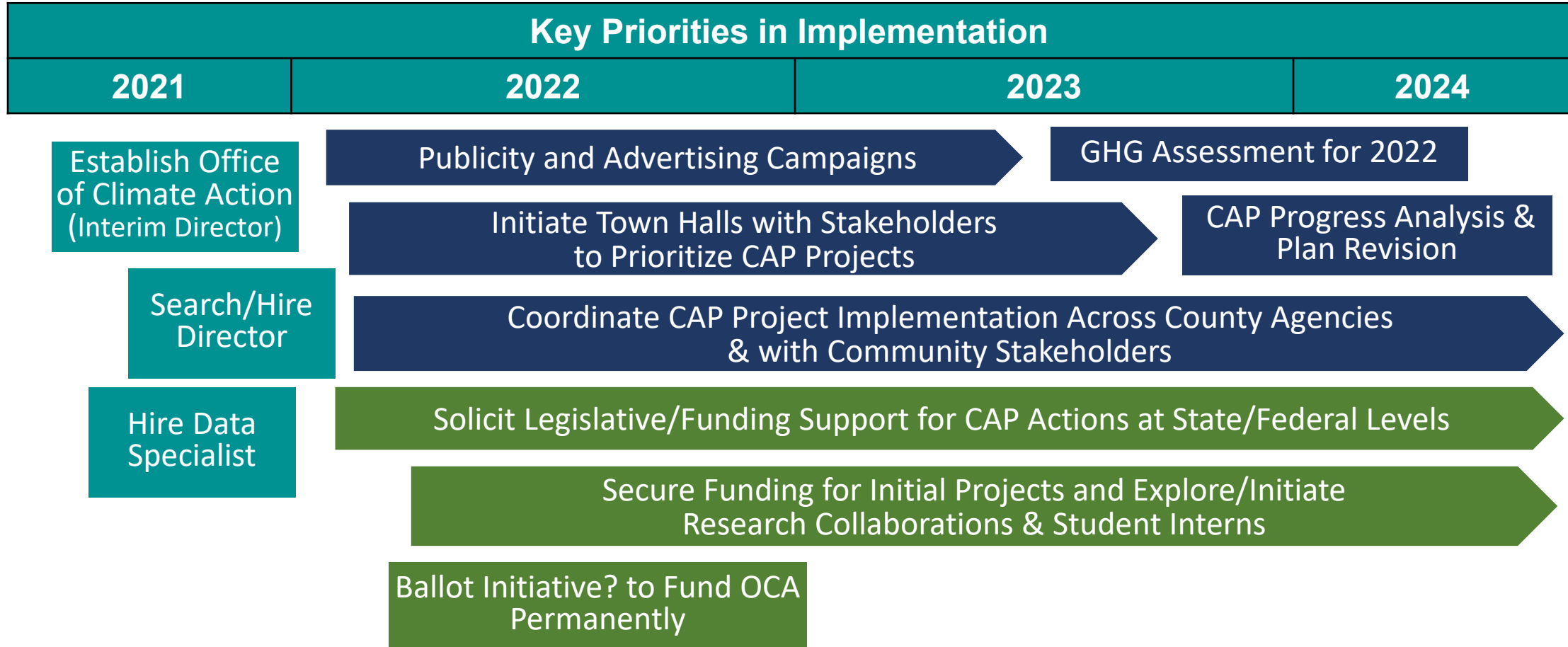
County Implementation

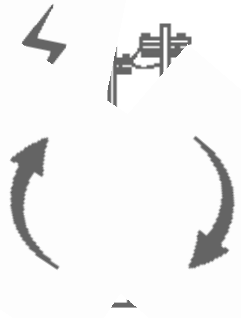
- Establish an Office of Climate Action & Senior Climate Advisor to the Executive and Council.
- Appoint an interim head from within current county staff while pursuing funding to hire a permanent head of the office.
- Hire a data analyst/information specialist to begin compiling relevant climate data and making them available to staff and the community.



County Implementation

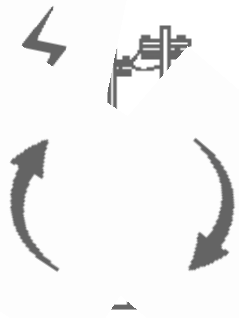
Key Priorities in Implementation





Electricity & Buildings

- Commit to net zero carbon emissions for government buildings & create resilience hubs for emergencies & community benefits.
- Accelerate deployment of distributed energy resources & broadband while ensuring equity & to promote energy resilience.
- Develop an equity-based financing plan to expand energy efficiency upgrades and electrification of space and water heaters.
- Promote leadership at the state and county levels through support of climate legislation and demonstration projects that promote climate resilience.



Electricity & Buildings

Key Priorities for Electricity and Buildings

2021

2022

2023

Codes,
Regulations

Net-zero C Emissions in County Buildings

Electrification & Efficiency Codes for New Buildings

Establish Resilience Hubs for County Services

Incentives,
Finance Tools

Accelerate DERs & Microgrids Communitywide:
Implement C-PACER → PACE and Support NGO's

Program
Implementation,
Collaboration,
Advocacy

Collaborate with Port & PUD-1 on Fiber & Public Power Expansions

Establish Climate Resilience Leadership at State & County Levels



Industry Point-Source Emissions

- Facilitate a solutions-focused collaboration with *bp*'s Cherry Point and energy experts in academia, state and federal governments to discuss ways to reduce emissions 45% by 2030.
- Promote the research, development, & collaboration needed to build a hydrogen electrolysis facility to create green hydrogen.

2019 Washington Clean Energy Jobs

11x more clean energy jobs in Washington than fossil fuel jobs

10% of Washington clean energy workers are veterans, nearly double the national average

8.3K rural Washington residents work in clean energy

7 OUT OF 10 clean energy employees in Washington work at companies with fewer than 20 employees

45% of Washington's clean energy workforce is located outside of the Seattle metro area

5 OUT OF 10 counties by clean energy jobs per capita have populations fewer than 100,000 – including Jefferson County which has 23 clean energy jobs for every 1,000 employable residents



Industry Point-Source Emissions

Key Priorities for Industry Point Source Emissions

2021

2022

2023

Codes,
Regulations

Cherry Point Amendment

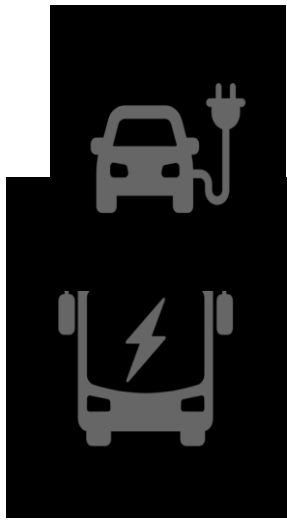
Evaluate additional code updates that would promote sustainable infrastructure to attract new clean/green industries

Incentives,
Finance Tools

Start tracking federal and state funding opportunities to support climate resilience strategies

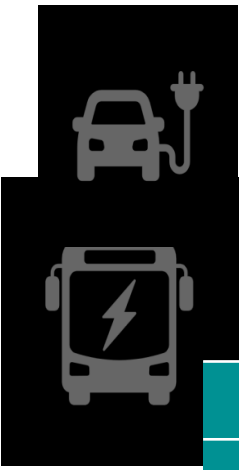
Program Implementation,
Collaboration,
Advocacy

Identify Person to lead discussions with refineries & bring together interested parties into these discussions



Transportation

- Accelerate adoption of EVs through pooled EV purchases, charging stations at all government buildings and parks, & building codes that promote EV charging at businesses and homes.
- Implement the regional trails plan for commuting and recreation and provide safe active transportation routes for schools.
- Explore and encourage electrification of buses throughout the county.



Transportation

Key Priorities for Transportation

2021

2022

2023

Codes, Regulations

Require or incentivize businesses to provide charging stations

Incentives,
Finance Tools

Offer pooled purchasing of EVs to reduce cost for county residents

Program
Implementation,
Collaboration,
Advocacy

Implement regional trails plan for commuting and recreation

Create safe, active transportation routes to schools

Explore electrification of school bus fleets

Evaluate County vehicle fleet for efficiency

Prioritize climate in transportation improvement program



Waste

- Collect the necessary data through expanded audits to evaluate the success of existing programs & the benefit of new programs.
- Eliminate single use plastic containers & utensils.
- Expand the Food Recovery Program to add a food kitchen to reduce food waste.



Waste

Key Priorities for Waste		
2021	2022	2023
Codes, Regulations		Eliminate Single Use Plastic (containers, utensils)
		Request more Detailed Data Through Waste Audits
Incentives, Finance Tools		Fund & Expand the Food Recovery Program to Add a Food Kitchen
		Install Water Refill Stations at County Parks
Program Implementation, Collaboration, Advocacy		Collect the Necessary Data to Evaluate the Success of the Existing Solid Waste Program & the Benefit of New Programs



Land Use

- Create a climate-resilient regulatory framework for new County development.
- Use regulations to enhance active & public transportation systems & infrastructure.
- Require a climate-focused risk assessment for all County infrastructure.
- Protect ecological zones that create climate resilience such as riparian areas, floodplains, shorelines, wetlands & migrations corridors.



Land Use

Key Priorities for Land Use

2021

2022

2023

Codes/
Regulations

Update codes/regs using climate resilience criteria

Avoid critical areas & design infrastructure based on climate scenarios

Revise zoning codes and compensate landowners to preserve lands

Incentives,
Finance
Tools

Increase Impact Fees to incentivize climate resilience

Expand Transportation Benefit Districts

Expand municipal owned broadband

Climate resilience into Comprehensive Plan

Program
Implementation,
Collaboration,
Advocacy

Climate vulnerability & GHG assessments for new large developments

Increase multi-modal transportation throughout county

Prioritize NR programs that enhance ecosystem health



Water Resources and Fisheries

- Resolve uncertainty in current & future water supply under climate change.
- Restore and protect watersheds that enhance streamflow and reduce water temperature to ensure year-round salmon migration & survival.
- Incentivize efficiency upgrades to water consumption systems and new augmentation approaches.
- Rebuild connectivity of our fragmented hydrologic system to increase natural water storage on the landscape & reduce flood damage.
- Enhance estuarine, marine shoreline and coastal wetland habitats for fish and shellfish.



Water Resources and Fisheries

Key Priorities in Water Resources and Fisheries

	2021	2022	2023
Codes/Regulations		Designate coastal and riverine floodplains according to climate projections and update code to ensure climate resilient development (riverine & coastal)	
		Revise shoreline codes/regs that create healthy, climate-resilient ecosystems, including implementation of the Shoreline Restoration Plan	
Incentives, Finance Tools		Incentivize efficiency upgrades to water consumption systems & coordinate water conservation efforts	
		Begin development of a managed retreat plan to move people and infrastructure out of climate impact zones	
Program Implementation, Collaboration, Advocacy		Restore connectivity of our fragmented hydrologic system to increase water storage & reduce flood damage through conservation acquisitions with watershed partners	
		Incorporate climate projections when determining future water supply and watershed planning efforts	
		Increase storage capacity of floodwaters & promote climate resilient floodplain management	



Agriculture

- Adopt farm management practices that maximize soil carbon storage and increase water and nutrient availability.
- Ensure a minimum of 100,000 acres of farmland is available for agriculture including rezoning the Rural Study Areas to agricultural zoning
- Reduce agriculture emissions & increase renewable energy, while providing farmers with new income opportunities.
- Promote use of climate research including drought- and heat-resistant crops.



Agriculture

Key Priorities in Agriculture		
2021	2022	2023
Codes/Regulations	Revise codes to increase renewable energy projects	
	Rezone Rural Study Areas to Agricultural Zoning	
Incentives, Finance Tools	Expand CEP including significant increase to program staffing & funding	
	Initiate a carbon credit marketplace to incentivize carbon storage	
Program Implementation, Collaboration, Advocacy	Irrigation modernization & efficiency technologies	
	Promote regenerative farming & agroforestry to increase soil carbon storage & soil moisture	
	Initiate demonstrations to generate data to support greater flexibility in state water law	



Forestry

- Protect, enhance, & monitor carbon storage and sequestration in forest ecosystems through implementation of a carbon credit program and other mechanisms.
- Increase forest health, survival & climate resilience using forest management practices that reduce wildfire risk, increase soil moisture, stream flows, & preserve wildlife habitat.
- Promote climate resilient planning & programs to maintain our forest economy for recreation and wood products.
- Reduce development pressure on rural forestry & other forested lands through voluntary conservation easements & review/ updating of zoning codes.



Forestry

Key Priorities in Forestry

2021

2022

2023

Codes/Regulations

Require Locally-Sourced Lumber for County Buildings

Rezone Rural Forestry Zone to Commercial Forestry Zoning

Incentives, Finance
Tools

Promote locally-sourced lumber in private developments

Demonstrate Climate Resilient Forest Management Practices

Expand CEP including significant increase to program staffing & funding

Initiate a Carbon Credit Marketplace

Program
Implementation,
Collaboration,
Advocacy

Develop Database/Forest Inventory Plots to Monitor
Forest Health, Survival & Carbon Potential

Incorporate Climate Change Risk in
Comprehensive Plan



Ecosystems

- Develop & implement zoning regulations that protect wildlife climate migration corridors.
- Revise land use & development codes based on current & projected climate impacts to reduce damage & enhance resilience, including designation of climate impact zones.
- Provide technical, logistical, and financial support for community efforts to restore & enhance ecosystems.
- Implement long-term monitoring to assess the impact of climate on ecosystem health.



Ecosystems

Key Priorities in Ecosystems		
2021	2022	2023
Codes/Regulations	Require climate vulnerability assessment including evaluation of ecosystem function in future projected climate scenario in development permits	
Incentives, Finance Tools	Designate and protect wildlife migration corridors and core habitats from land use changes	
Program Implementation, Collaboration, Advocacy	Expand CEP including significant increase to program staffing & funding	
	Increase funding & community awareness of ecosystem restoration needs	
	Initiate a Carbon Credit Marketplace	
	Monitor ecosystem health for representative ecosystems in the County	
		Incorporate Climate Change Risk in Comprehensive Plan