August 6th, 2025

CLIMATE ELEMENT

COUNCIL- PLANNING COMMISSION JOINT MEETING

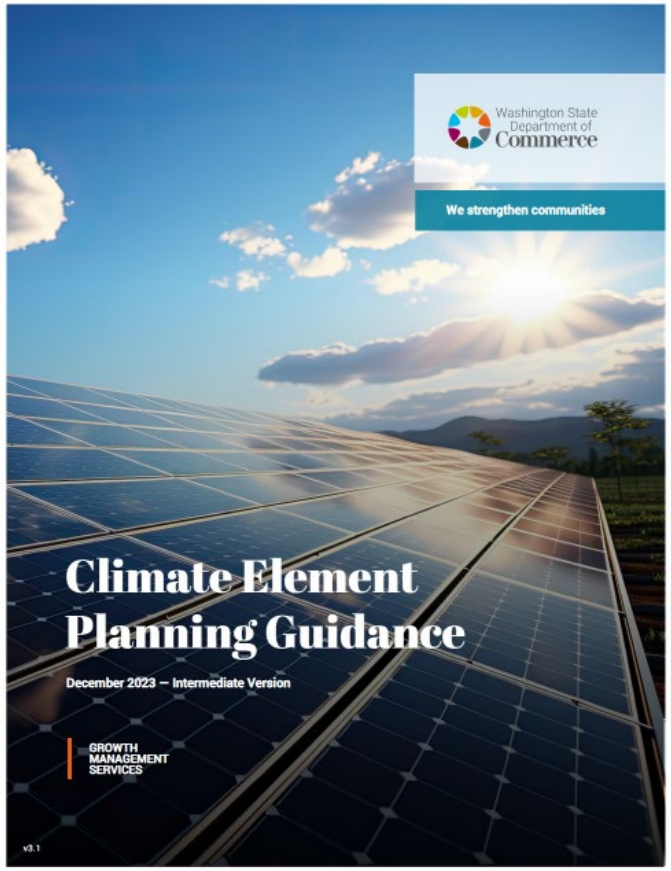
Whatcom County Public Works

8/6 Council- Planning Commission Joint Meeting

Goals:

- Introduction of Climate Element (Planning Commission- Council review draft)
- Council and Planning Commission questions & discussion
- Policy direction prior to Planning Commission work session and public hearing on new climate chapter (Chapter 12) on August 14th – 6 pm

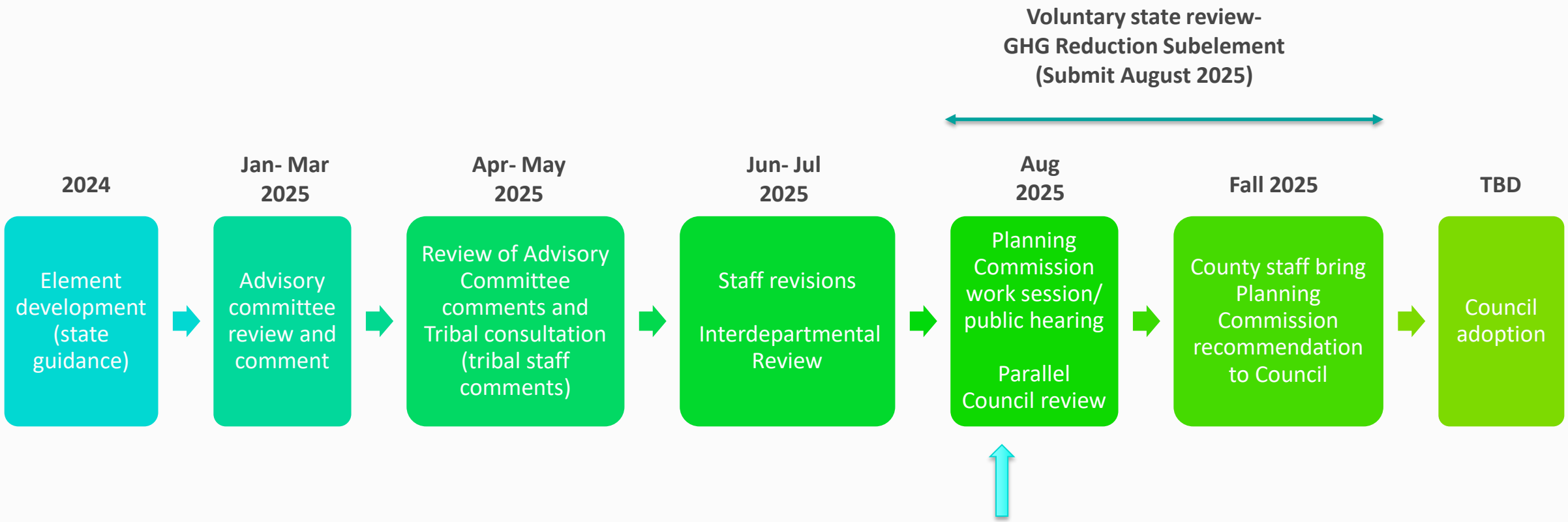
Climate Planning & Comprehensive Plan



[Department of Commerce Intermediate Guidance]

- Cities and counties planning under Growth Management Act must add a new climate element (chapter) to their Comprehensive Plan (HB 1181)
- 2025 jurisdictions are the first group subject to new state guidance issued by Washington Department of Commerce
- Climate element must have two “sub-elements” that include policies that to reduce greenhouse gas emissions reductions and increase resilience

Climate Element Process- August 2025



August 6th- Joint Planning Commission/ Council Meeting

August 14th- Planning Commission Work Session/ Public Hearing

Minimum State Requirements- Climate Element

GREENHOUSE GAS EMISSIONS SUB-ELEMENT

1. Reduce emissions from transportation and land use within Whatcom County
2. Reduce per capita vehicle miles travelled
3. Prioritize overburdened communities

RESILIENCE SUB-ELEMENT

1. Address hazards created or aggravated by climate change (sea level rise, landslides, flooding, drought, heat, smoke, wildfire, and changes in temperature and precipitation)
2. Identify, protect, and enhance natural areas and habitat
3. Identify, protect and enhance community resilience to climate impacts (social, economic, and built environment)

HB 1181 and Council Priorities

County Council Priorities 2022-036

Utilities
- Location and capacity of natural gas systems

Transportation Element- 6/12 and 6/26 PC
- Multimodal level of service (MMLOS) for locally owned arterials

Parks and Recreation- 7/10 PC
- Retention of open and greenspace, evaluation of tree canopy coverage

Climate Element (all new- HB 1181/ state guidance)

Environment
- Air/ water quality, water availability

Capital Facilities- 7/24 PC
- Green infrastructure- map

Land Use
- Urban and community forests, reduction in VMT, wildfire risk reduction

Whatcom County Climate Action Plan

GHG Emission Reduction Subelement- Inventory (Pathway 3)

FIGURE 1. 2022 COMMUNITYWIDE GHG EMISSIONS PROFILE BY SOURCE.

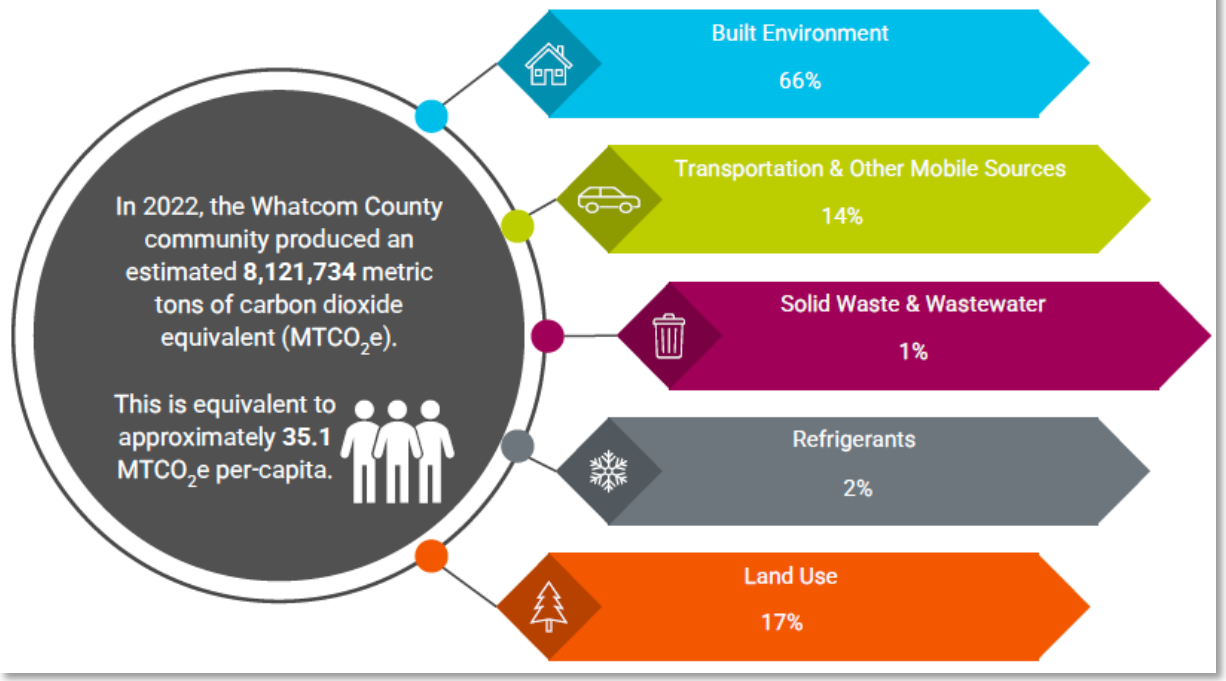
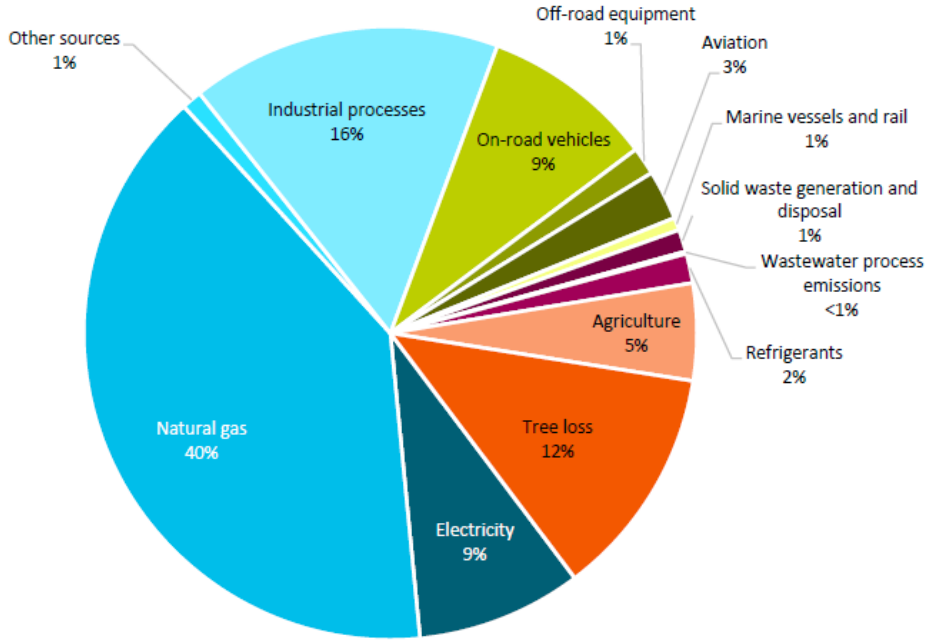


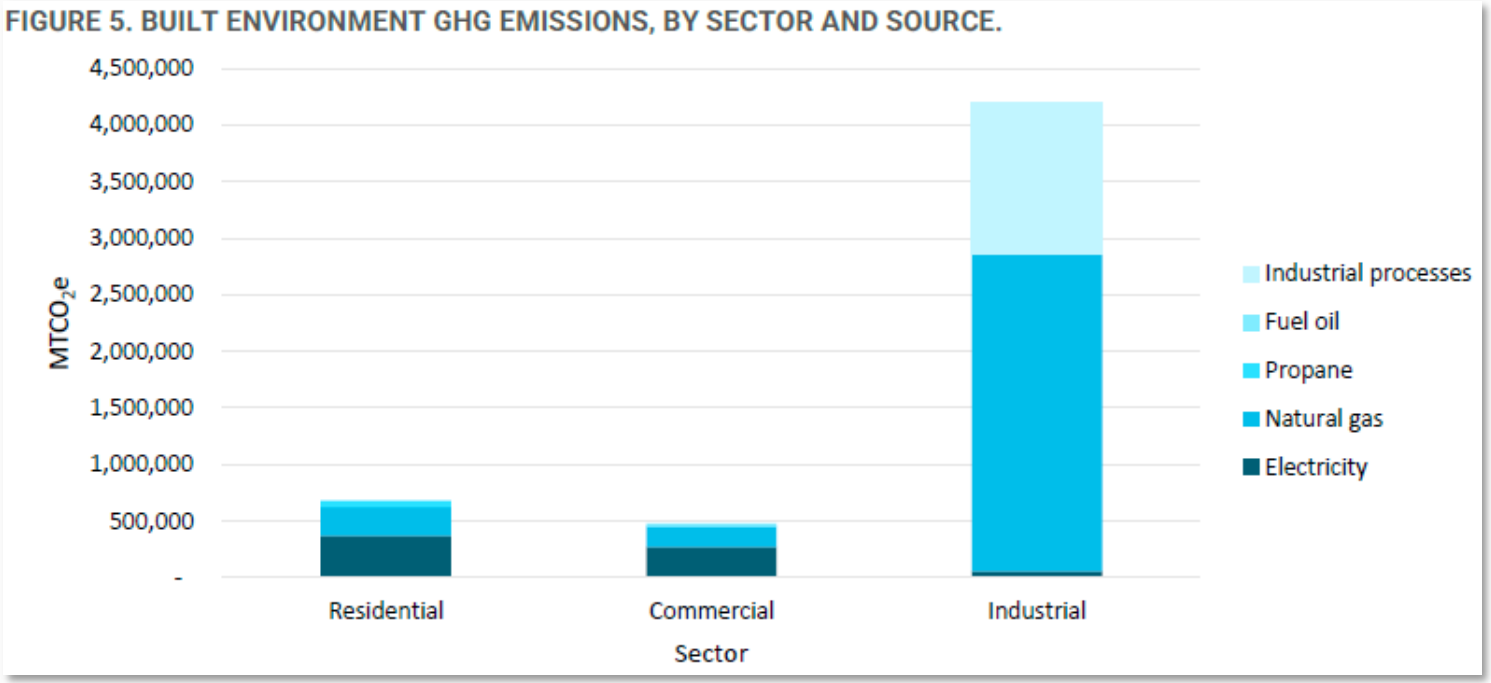
FIGURE 4. 2022 COMMUNITYWIDE EMISSIONS PROFILE ($MTCO_2E$).



[2022 Whatcom County Greenhouse Gas Inventory](), p. 5 and p.11

GHG Emission Reduction Subelement- 2022 Inventory

FIGURE 5. BUILT ENVIRONMENT GHG EMISSIONS, BY SECTOR AND SOURCE.

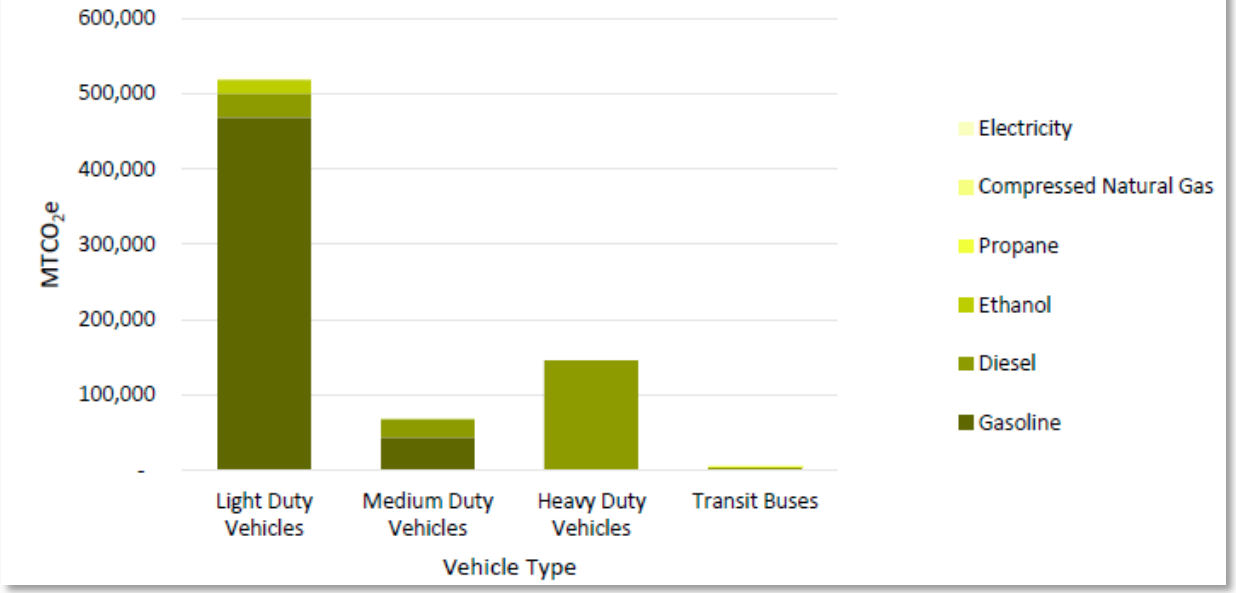


[2022 Whatcom County Greenhouse Gas Inventory, p.13 and p.14]

GHG Emissions Sector	Total Emissions ($MTCO_2e$)
Built Environment	
Electricity	709,148
Residential	373,306
Commercial	273,483
Industrial	62,359
Natural Gas	3,231,190
Residential	249,994
Commercial	176,752
Industrial	2,804,444
Propane	66,582
Residential	55,494
Commercial	11,088
Fuel Oil	19,787
Residential	2,997
Commercial	16,790
Industrial Processes	1,330,442

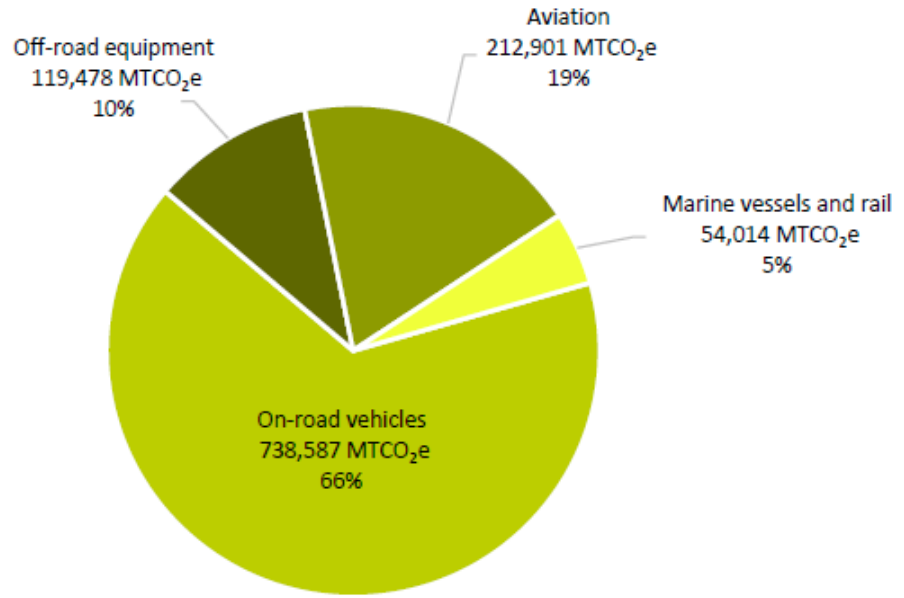
GHG Emission Reduction Subelement- 2022 Inventory

FIGURE 7. ON-ROAD TRANSPORTATION EMISSIONS, BY VEHICLE AND FUEL TYPE.



[2022 Whatcom County Greenhouse Gas Inventory, p.15]

FIGURE 6. TRANSPORTATION EMISSIONS, BY SOURCE.



Key State and Federal Policies for Emissions Reduction

- **Washington State Energy Code (SB 5854)-** requires residential and nonresidential construction permitted under the 2031 state energy code to achieve a 70% reduction in annual net energy consumption (compared to a 2006 baseline).

- **Washington Clean Buildings Act (HB 1257)-** Requires all new and existing commercial buildings over 50,000 square feet to reduce their energy use intensity by 15%, compared to the 2009–2018 average (compliance dates between 2026 and 2028 for buildings from 50,000 to 220,000 square feet).

- **Federal Vehicle Regulations (CAFE)-** Passenger cars and light trucks require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, increasing fuel efficiency 8% annually for model years 2024–2025 and 10% annually for model year 2026.

- **WA Clean Fuel Standard (HB 1091)-** The Clean Fuel Standard requires a 20% reduction in the carbon intensity of transportation fuels by 2038, compared to a 2017 baseline level.

2022 Whatcom County Greenhouse Gas Inventory, p. 46

Key State and Federal Policies for Emissions Reduction

- **WA Clean Cars Program (SB 5974)-** Establishes a statewide target that, "all publicly owned and privately owned passenger and light duty vehicles of model year 2030 or later that are sold, purchased, or registered in Washington state be electric vehicles."

- **WA Hydrofluorocarbon Policies (HB 1112 & HB 1050)-** new equipment be manufactured without hydrofluorocarbons or using refrigerants with a lower global warming potential (GWP) in a phased approach through 2024

- **WA Clean Energy Transformation Act (CETA)-** CETA applies to all electric utilities serving retail customers in Washington and sets specific milestones: By 2025, utilities must eliminate coal-fired electricity from their state portfolios; by 2030, utilities must be greenhouse gas neutral, with flexibility to use limited amounts of electricity from natural gas if it is offset by other actions; by 2045, utilities must supply Washington customers with electricity that is 100% renewable or non-emitting, with no provision for offsets.

- **WA Climate Commitment Act (E2SSB 5126)-** The Climate Commitment Act (known as Cap and Invest) places an economy-wide cap on carbon to meet state GHG reduction targets. Every polluting facility covered under the program purchases for every ton of greenhouse gas emitted.

2022 Whatcom County Greenhouse Gas Inventory, p. 47

GHG Emission Reduction Subelement- Projections Report

Table 5. Local action assumptions under Alternative 1 (some local action).

Strategy	2030	2040	2050
Electrify new residential buildings (% fossil fuel use converted to elect.)	25%	50%	100%
Electrify new commercial buildings (% fossil fuel use converted to elect.)	5%	50%	75%
Electrify new industrial buildings (% fossil fuel use converted to elect.)	5%	25%	50%
Reduce energy use in existing residential buildings (% reduction in energy use)	3%	30%	50%
Reduce energy use in existing commercial buildings (% reduction in energy use)	3%	25%	50%
Reduce energy use in existing industrial buildings (% reduction in energy use)	3%	10%	30%
Electrify existing residential buildings (% fossil fuel use converted to elect.)	3%	30%	80%
Electrify existing commercial buildings (% fossil fuel use converted to elect.)	3%	20%	60%
Electrify existing industrial buildings (% fossil fuel use converted to elect.)	3%	15%	40%
Increase local solar (total new MW)	5	50	100
Reduce industrial emissions (% reduction in emissions) *	3%	5%	10%
Reduce passenger vehicle travel (% reduction in per-capita VMT) *	5%	10%	15%
Electrify passenger vehicles (% new vehicles sold that are EV) *	25%	25%	25%
Electrify freight/service vehicles (% new vehicles sold that are EV) *	5%	50%	100%
Electrify transit vehicles (% new vehicles sold that are EV) *	20%	25%	50%
Decarbonize offroad equipment (% reduction in emissions) *	5%	35%	50%
Decarbonize aviation fuels (% reduction in fuel carbon intensity) *	0%	0%	0%
Reduce air travel & increase efficiency (% reduction in aviation fuel use)	0%	0%	0%
Divert C&D materials (% of C&D waste diverted)	25%	75%	75%
Divert other recyclable and compostable materials (% reduction in landfilled waste)	40%	75%	90%
Improve soil management (% reduction in emissions from soil management)	5%	20%	30%
Reduce tree loss (% reduction in tree loss)	5%	30%	30%
Protect land carbon sinks (% of current sinks protected)**	50%	80%	80%

Table 6. Local action assumptions under Alternative 2 (local action to meet target).

Strategy	2030	2040	2050
Electrify new residential buildings (% fossil fuel use converted to elect.)	25%	50%	100%
Electrify new commercial buildings (% fossil fuel use converted to elect.)	5%	50%	75%
Electrify new industrial buildings (% fossil fuel use converted to elect.)			
Reduce energy use in existing residential buildings (% reduction in energy use)	3%	30%	50%
Reduce energy use in existing commercial buildings (% reduction in energy use)	3%	25%	50%
Reduce energy use in existing industrial buildings (% reduction in energy use)		25%	50%
Electrify existing residential buildings (% fossil fuel use converted to elect.)	3%	30%	80%
Electrify existing commercial buildings (% fossil fuel use converted to elect.)	3%	20%	60%
Electrify existing industrial buildings (% fossil fuel use converted to elect.)		30%	90%
Increase local solar (total new MW)			
Reduce industrial emissions (% reduction in emissions) *	3%	20%	70%
Reduce passenger vehicle travel (% reduction in per-capita VMT) *	5%	10%	10%
Electrify passenger vehicles (% new vehicles sold that are EV) *			
Electrify freight/service vehicles (% new vehicles sold that are EV) *		50%	100%
Electrify transit vehicles (% new vehicles sold that are EV) *			50%
Decarbonize offroad equipment (% reduction in emissions) *			50%
Decarbonize aviation fuels (% reduction in fuel carbon intensity) *			
Reduce air travel & increase efficiency (% reduction in aviation fuel use)			
Divert C&D materials (% of C&D waste diverted)			75%
Divert other recyclable and compostable materials (% reduction in landfilled waste)		75%	90%
Improve soil management (% reduction in emissions from soil management)			30%
Reduce tree loss (% reduction in tree loss)	5%	50%	90%
Protect land carbon sinks (% of current sinks protected)**		80%	80%

Scenario 1- Whatcom County GHG emissions will decrease 29% to 56% by 2050 compared to 2022 levels.

Scenario 2- Assumed 100% federal/state policy implementation, we estimate that Whatcom County GHG emissions will decrease 55% to 80% by 2050 compared to 2022 levels.

Whatcom County Greenhouse Gas Projections Report, Scenario 1 and 2, pg. 12 and 14

Resilience Subelement- Overburdened Communities (Pathway 2)

Table 3. Climate sensitivities for select populations.

This table crosswalks the specific hazards that each sensitive population may be sensitive to. Note: members of each population group may face differential risks depending on individual risk profiles.

Priority Climate Hazards								
Sensitive Populations		**Drought**	**Flooding & SLR**	**Heat**	**Landslides**	**Wildfire**	**Smoke**	**Ocean warming & acidification**
Social and Economic Characteristics	Indigenous people	✓	✓	✓		✓	✓	✓
	Communities of Color		✓	✓		✓	✓	
	Youth			✓			✓	
	Older adults		✓	✓	✓	✓	✓	
	Low-income households		✓	✓	✓	✓	✓	
	Outdoor & natural resource workers	✓	✓	✓	✓	✓	✓	✓
Populations with Health Considerations and Access Needs	People with disabilities		✓		✓	✓		
	People with Limited English Proficiency		✓	✓	✓	✓	✓	
	People with chronic health conditions	✓		✓		✓	✓	
	People who are pregnant			✓			✓	

[Whatcom County Climate Hazard and Impact Assessment, p.13]

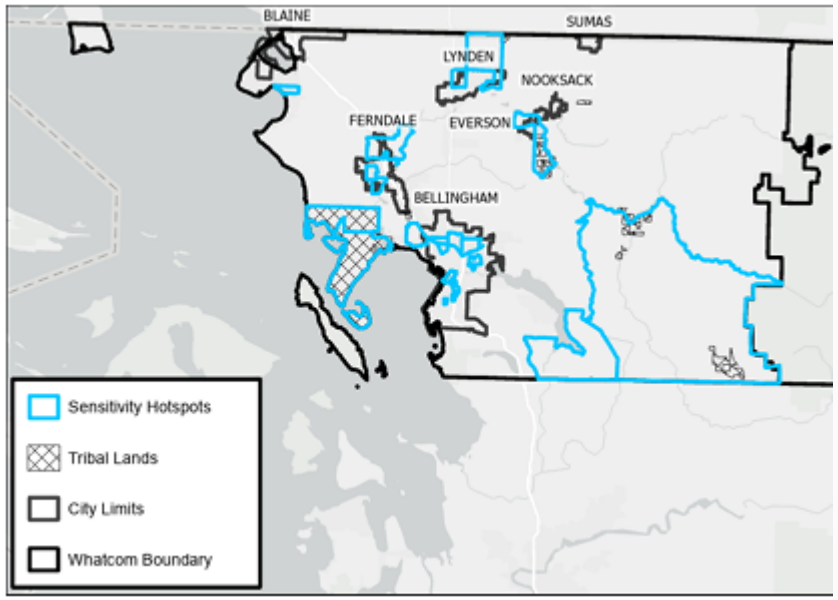
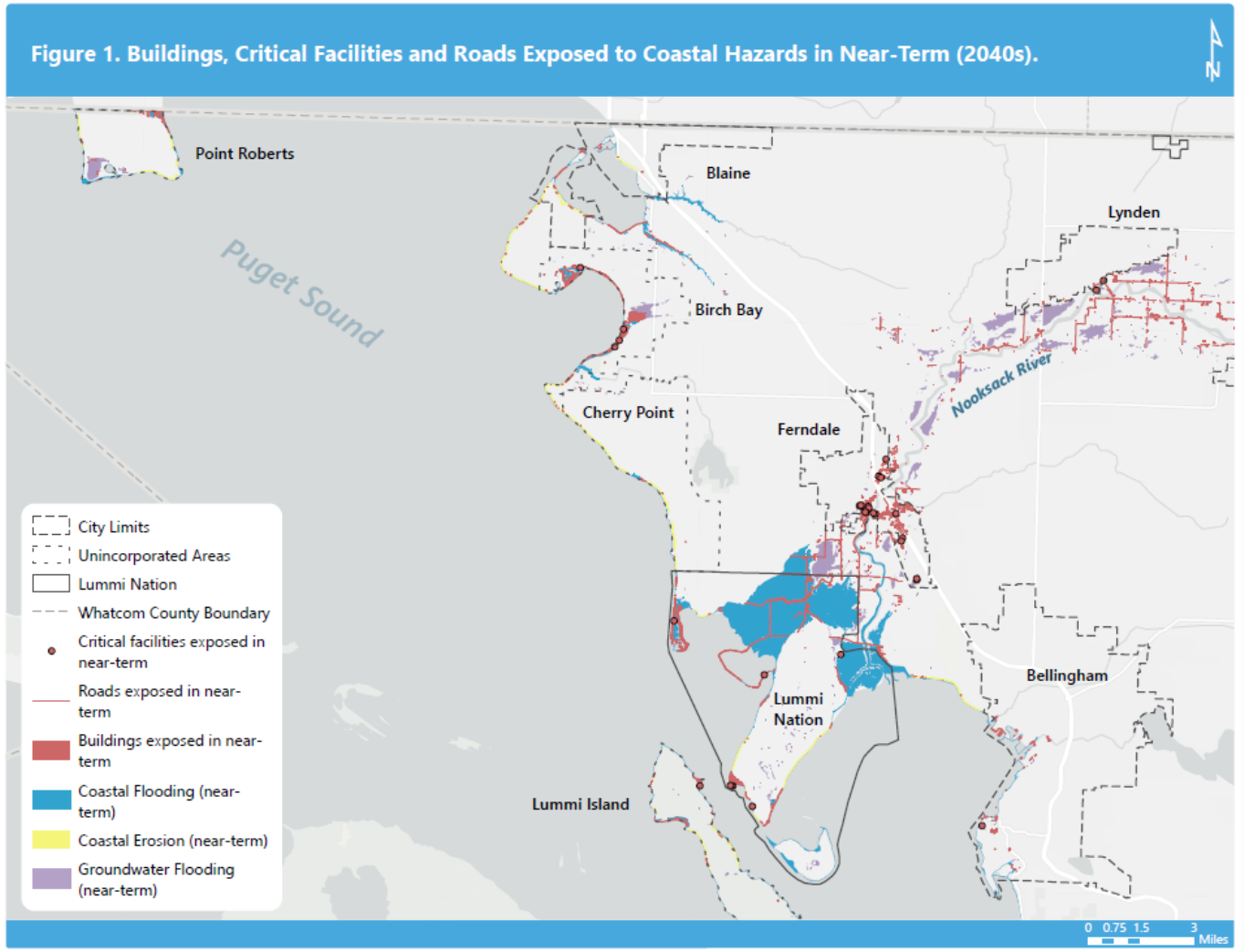


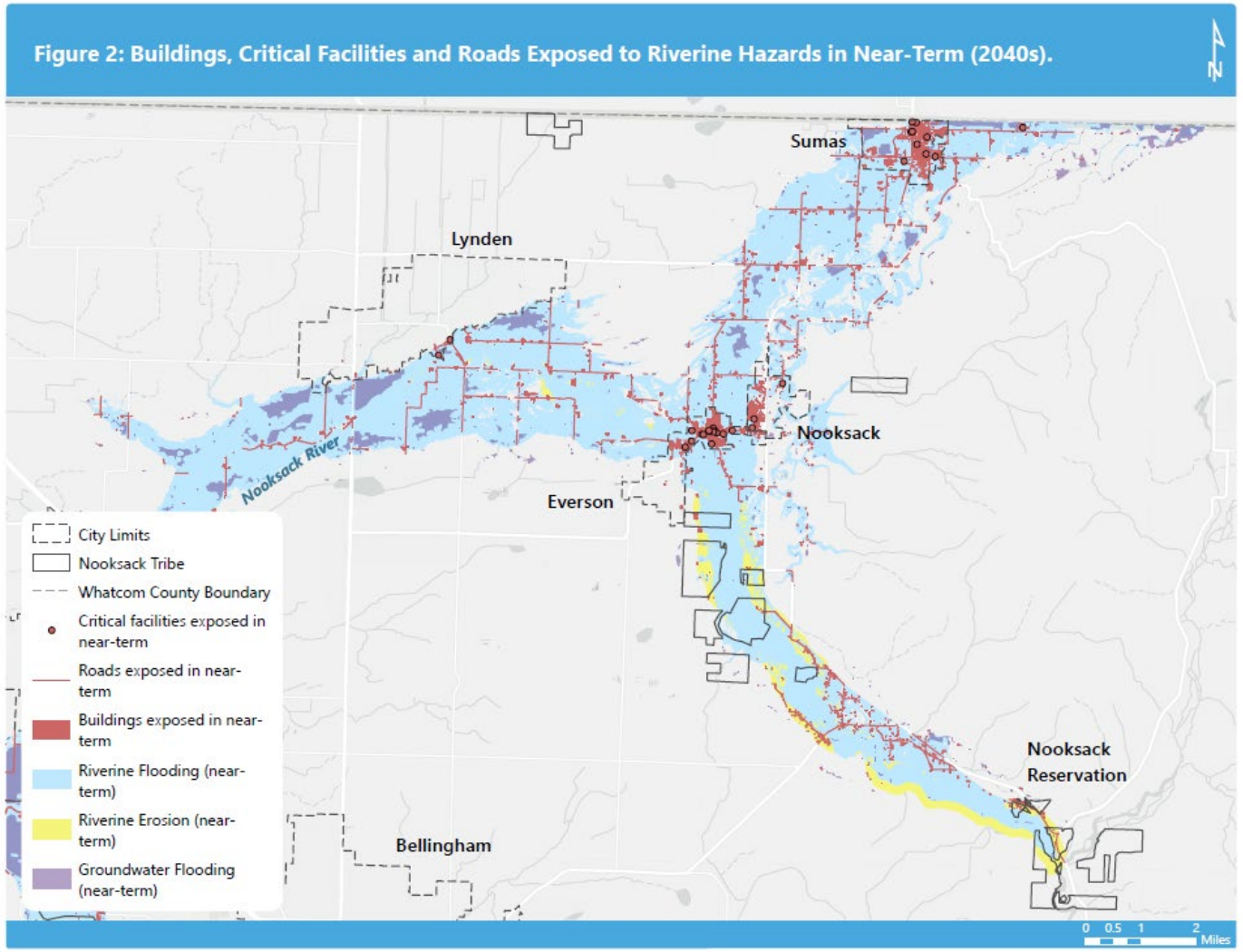
Figure 23. Hotspots of sensitive populations in Whatcom County. Block groups shown in blue meet both of the following criteria: (1) the block groups fall within the top 10th percentile for any population group identified in Section 2, and (2) the block groups are within the top 50th percentile for the proportion of residents living below the poverty line.

Resilience Subelement- Figure 1



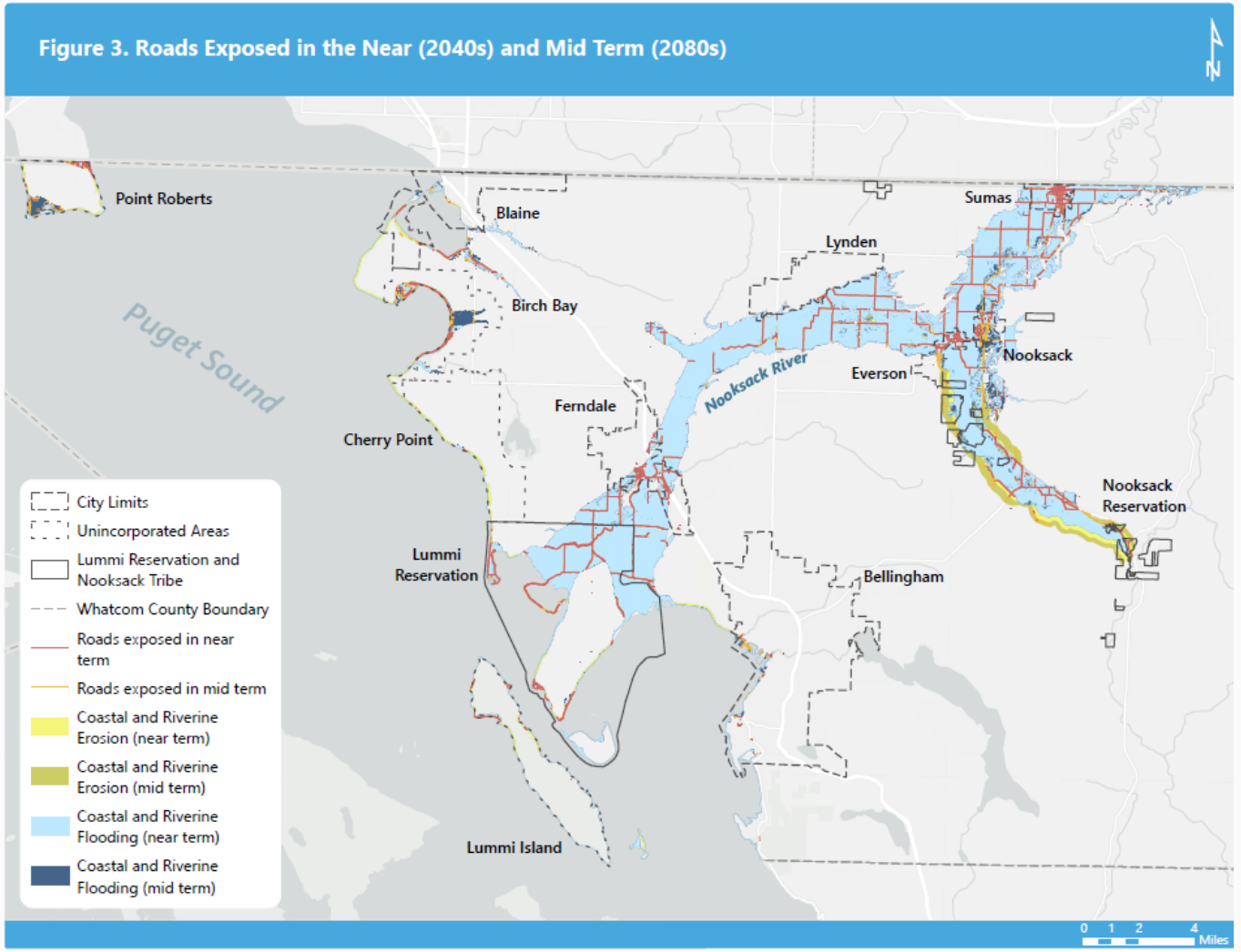
See: Whatcom County Climate Element- Draft, p. 31

Resilience Subelement- Figure 2



See: Whatcom County Climate Element (Draft), p.32

Resilience Subelement- Figure 3



See: Whatcom County Climate Element (Draft), p.33

Comment review process- see: Comments and Revisions

- Comments reviewed for **GMA compliance** and consistency with **Commerce climate planning intermediate guidance**
- Determination of consistency with other **technical documents**
- Alignment with **Council guidance** (Council resolution)
- Review for **consistency with other Comprehensive Plan chapters (ongoing as amended)**

Greenhouse Gas Subelement- Checklist (in memo)

- ❑ Goals and policies to reduce emissions and per capita vehicle miles traveled – **in GHG subelement- Transportation**
  - ❑ Set incremental targets that lead to state net zero target by 2050 set forth– **see: Countywide Planning Policy- Climate**
- ❑ Identified actions that will result in reductions in overall GHG emissions generated by transportation within the jurisdiction – in **GHG subelement- Transportation**
- ❑ Identified actions that will result in reductions in overall GHG emissions generated by land use within the jurisdiction – **see: EIS- UGA change proposals, Land Use Element**
- ❑ Identified actions that the jurisdiction will take during the planning cycle that will result in reductions in per capita vehicle miles traveled (VMT) within the jurisdiction – **see: Transportation Element, Draft EIS- Transportation Chapter**
- ❑ Prioritize GHG and VMT reductions that benefit overburdened communities in order to maximize the co-benefits of reduced air pollution and environmental justice – **in GHG subelement- Transportation**

Resilience Subelement- Checklist (in memo)

- ❑ Goals and policies that identify, protect, and enhance natural areas to foster resilience to climate impacts, as well as areas of vital habitat for safe passage and species migration. – **in Resilience subelement- Ecosystems**
- ❑ Goals and policies that identify, protect, and enhance community resilience to climate change impacts, including social, economic, and built environment factors that support adaptation to climate impacts consistent with environmental justice. – **in Resilience subelement- all sectors**
- ❑ Goals and policies that address natural hazards created or aggravated by climate change, including sea level rise, landslides, flooding, drought, heat, smoke, wildfire and other effects of changes to temperature and precipitation patterns. – **in Resilience subelement- all sectors**
- ❑ Prioritize actions that benefit overburdened communities that will disproportionately suffer from compounding environmental impacts and will be most impacted by natural hazards due to climate change. – **in Resilience subelement- all sectors**

State Rulemaking & Voluntary Approval (concurrent)

- **Final Rulemaking HB 1181-** Commerce is updating the Washington Administrative Code to provide final guidance on climate element- public hearing for Climate WAC was on 8/6

- **Final Guidance- Climate Element-** Commerce will issue final guidance by the end of 2025 (County subject to intermediate guidance)

- **Voluntary Greenhouse Gas Reduction Sub-Element Approval-** if submit sub-element for approval, Commerce will defend the decision before state's Growth Management Hearing Board. County will submit the climate chapter for review in August

Discussion & Questions