OLYMPIA 2045

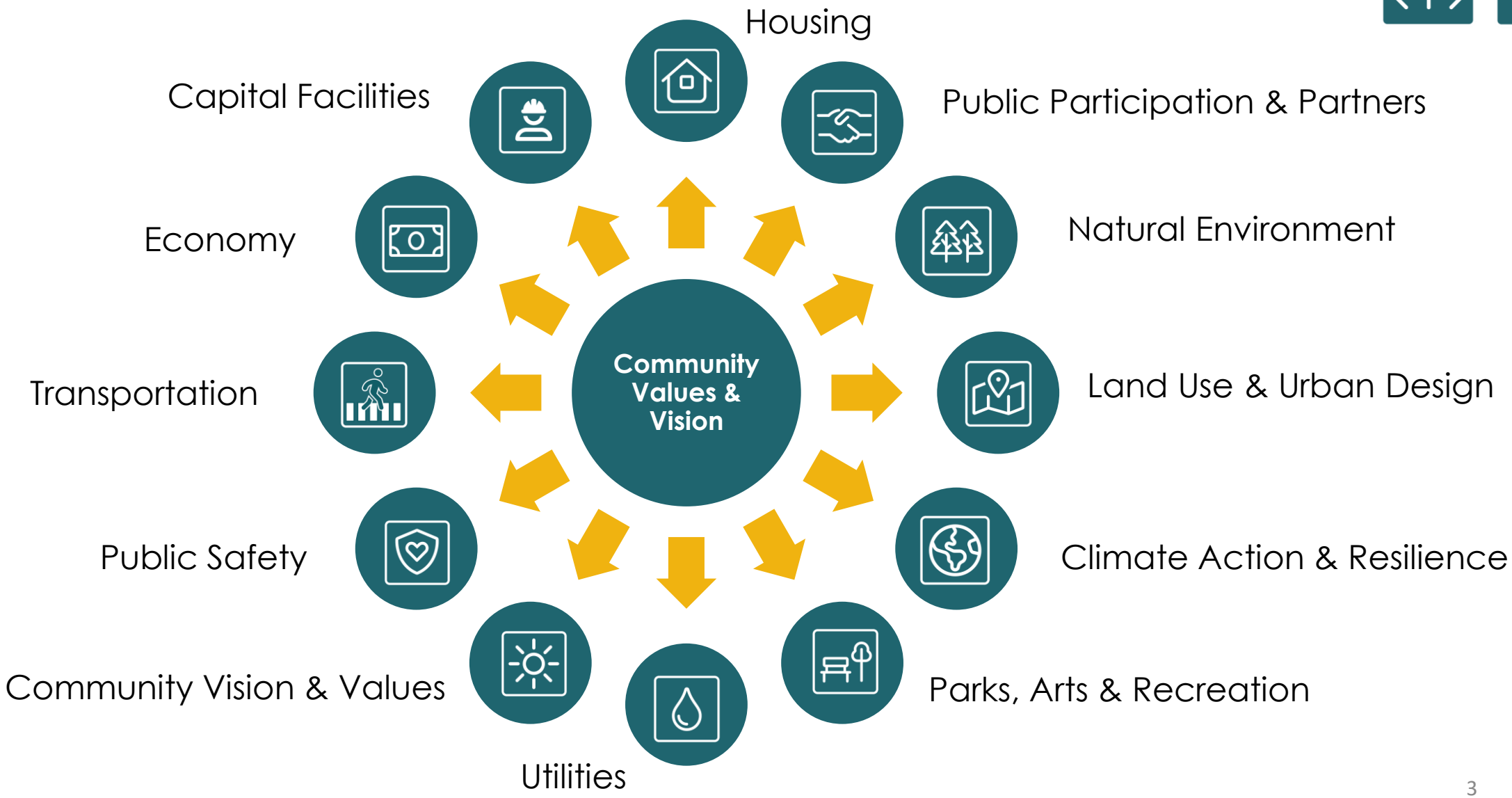
Climate Action & Resilience

Agenda

- Brief Overview of the Climate Element and process
- Review Draft Goals and Policies

Olympia 2045 Chapters

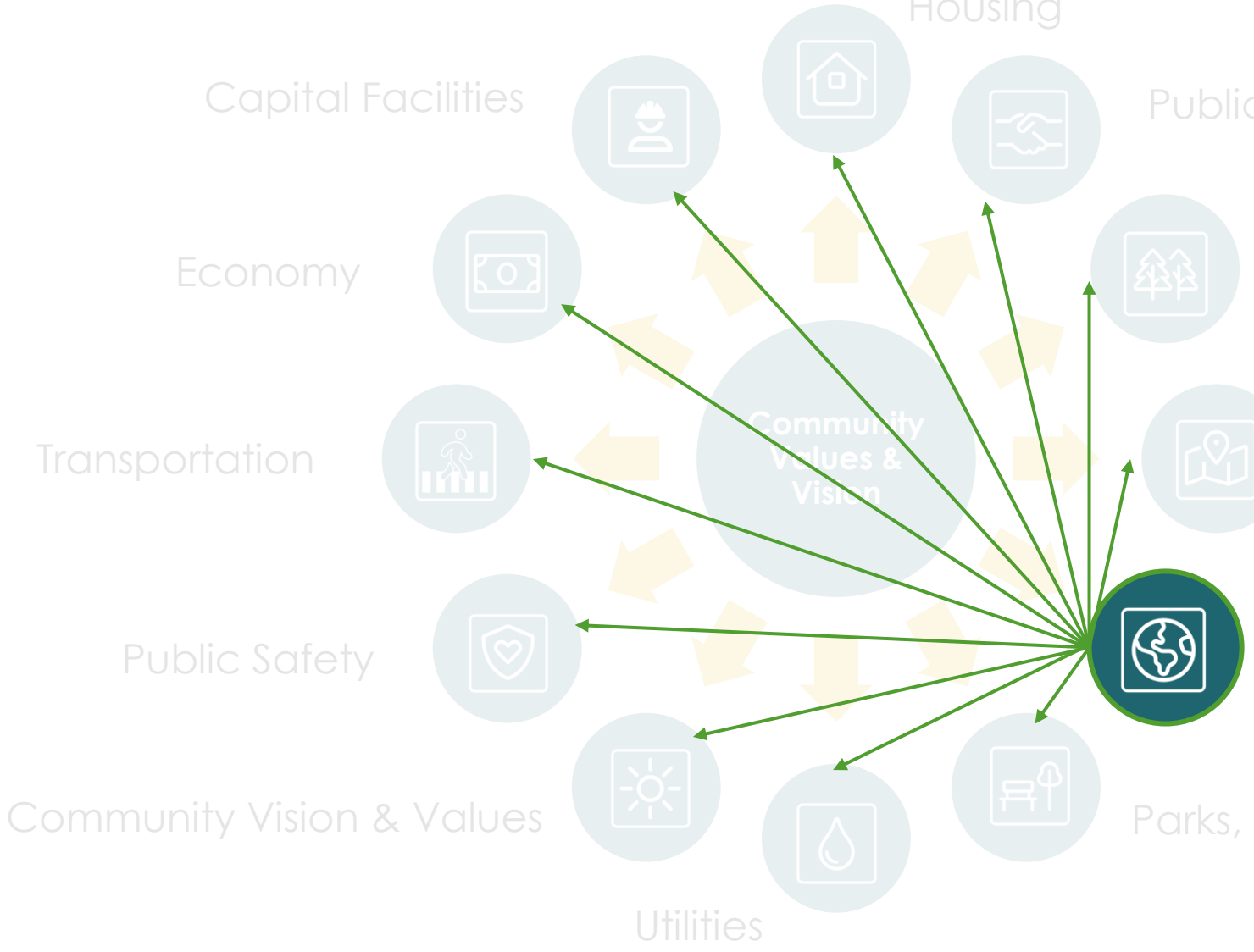
Equity and health are addressed in every chapter.



The Climate Chapter

Equity and health are addressed in every chapter.

Climate Integration with All Chapters



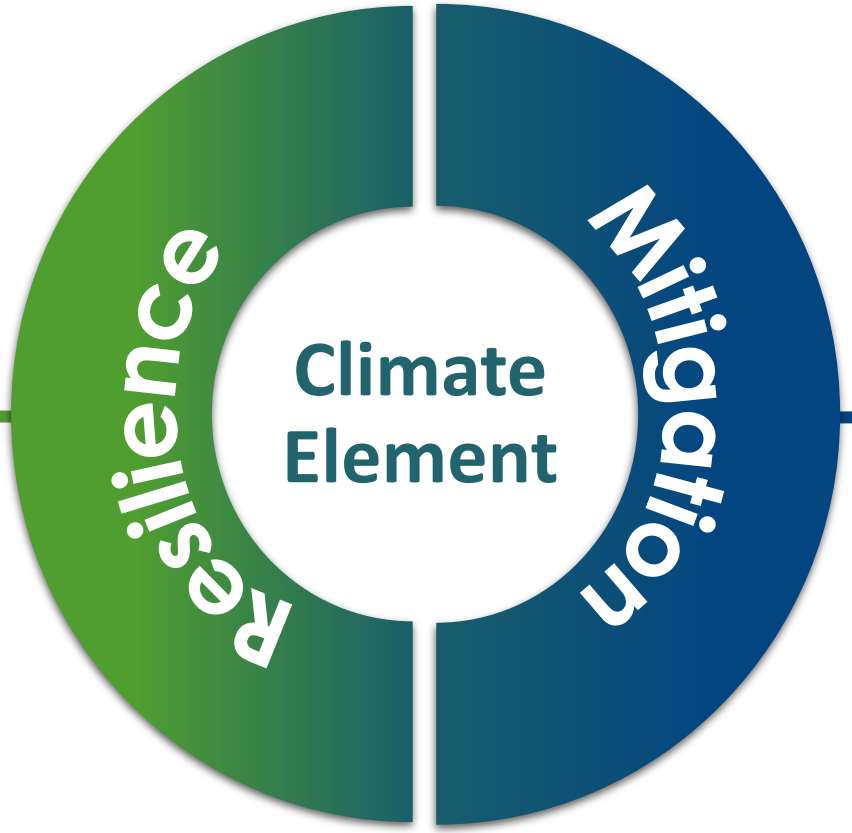
Climate Action & Resilience

Mitigation and adaptation

The 2 Parts to the Climate Element

Adapting Olympia to a changing climate.

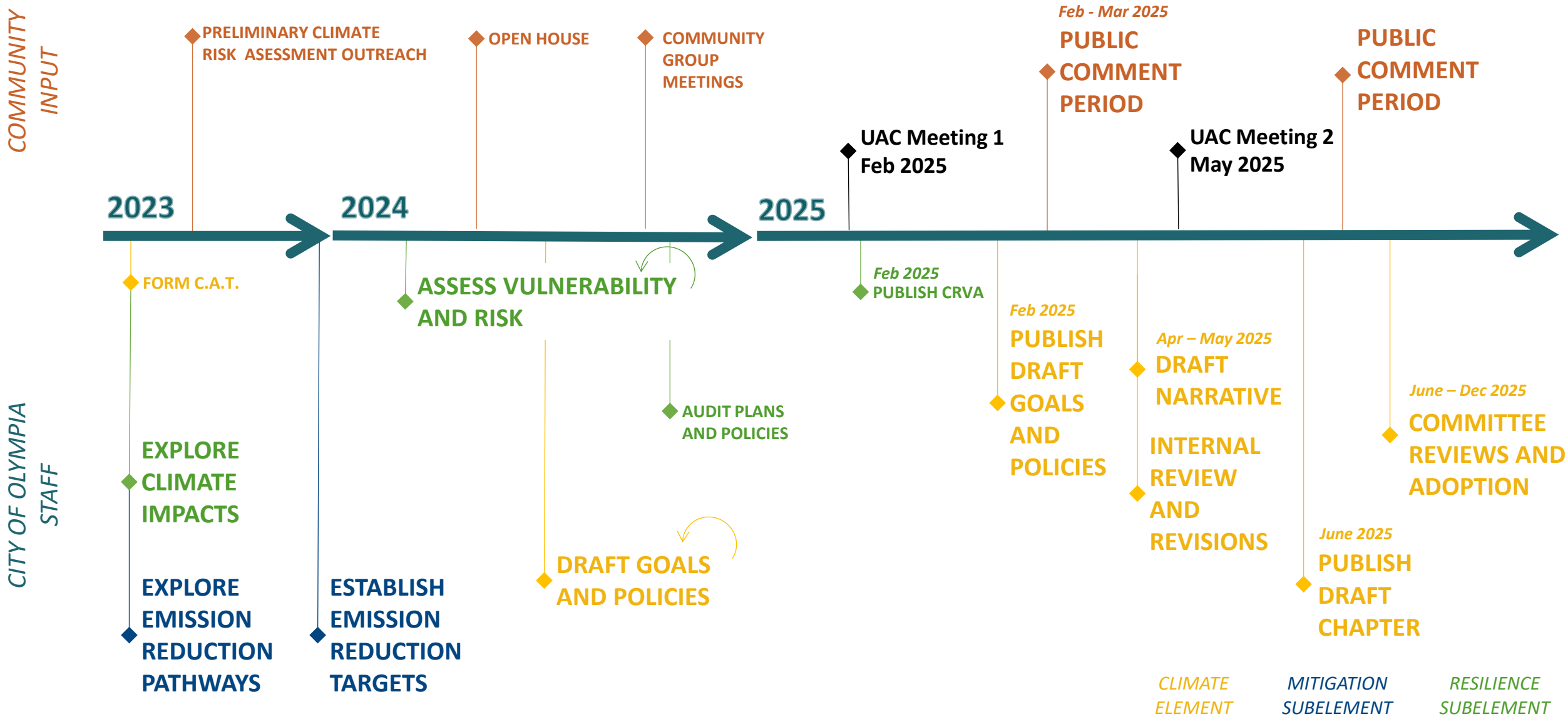
Manage the unavoidable.



Reducing greenhouse gas emissions.

Avoid the unmanageable.

Developing the Climate Element



Mitigation

Actions to reduce emissions that cause climate change.

Olympia's Emission Reduction Targets

The City of Olympia has committed to:

- Reduce greenhouse gas emissions 59% below 2015 levels by 2030
- Achieve net-zero emissions by 2040

Net-Zero:

- Reducing emissions to the greatest extent feasible
- Offsetting remaining emissions

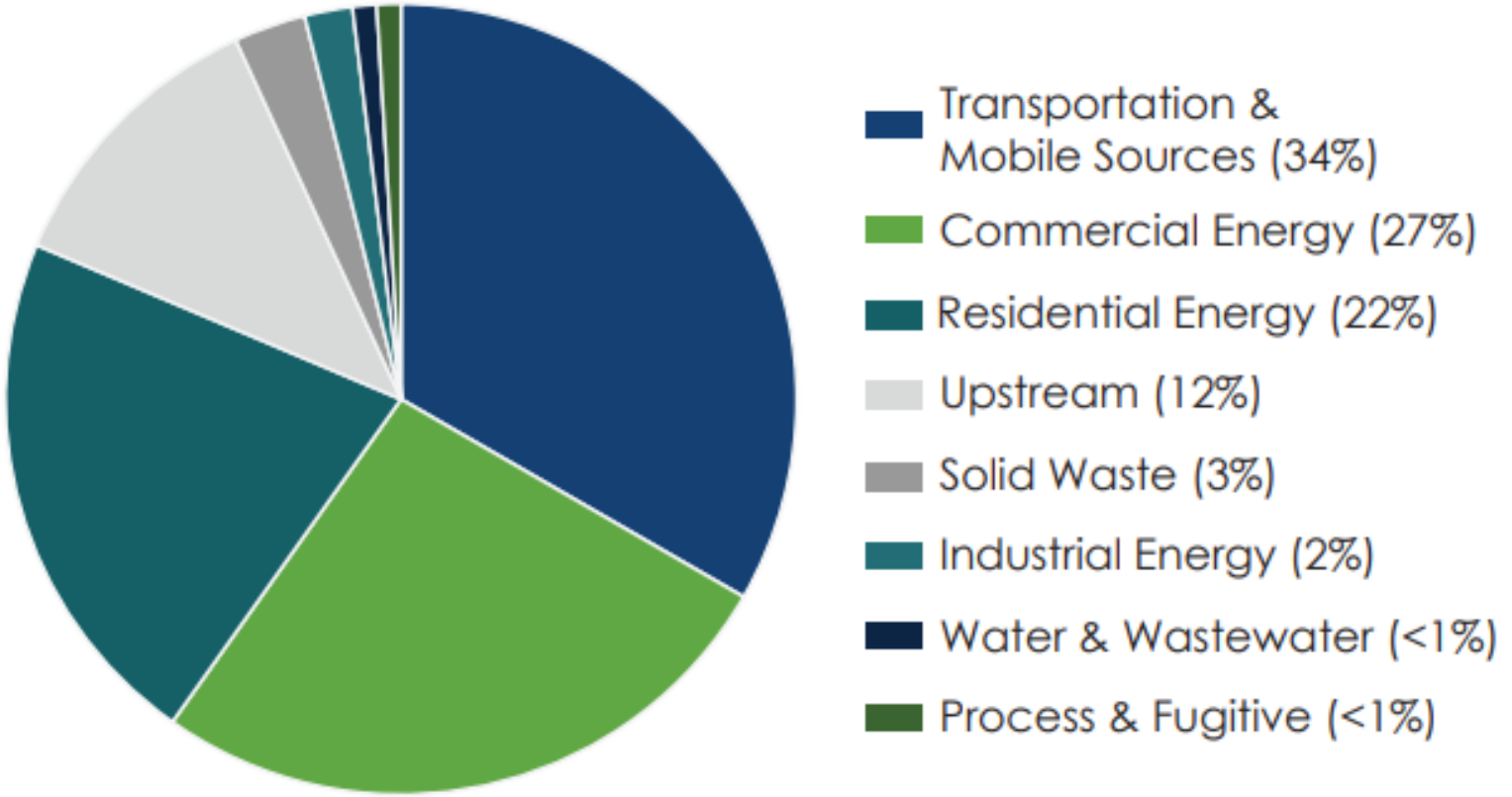
Greenhouse Gas Emissions Sources

EMISSIONS AT A GLANCE

1 **TRANSPORTATION** 34%

2 **COMMERCIAL ENERGY** 27%

3 **RESIDENTIAL ENERGY** 22%



2021 Community-Wide GHG Emissions

Mitigation Goals and Policies Objectives

Reduce Vehicle Miles Traveled (VMT)

Promote Building Energy Efficiency

Support Electric Vehicle (EV) Adoption

Reduce Solid Waste Generation

Resilience

Actions to adapt, prepare for, and recover from climate-related hazards.

Future Climate Conditions in Olympia

SUMMER CONDITIONS

More Hot Days

↑ 24 days
2050

90°F Max Humidex Days
(Baseline: 14 days)

Drought

↑ 30%
2050

Precipitation Drought
(Baseline: 25%)

Wildfire

↑ 3%
2050

Wildfire Likelihood
(Baseline: 0%)

WINTER CONDITIONS

Extreme Rainfall

↑ 13%
2050

Percent Change in Magnitude of 25-Year Storm

Sea Level Rise

↑ 11-13 in
2050

Most-Likely Scenario

Climate Risks and Vulnerability: Utility Systems

- Overwhelmed stormwater and sewer systems and increased street flooding from heavy rainfall and sea level rise
- Extreme precipitation and increased runoff pollutes nearby waterbodies and ecosystems
- Increased wildfire risk and extreme heat episodes threaten energy provision with preventative shutoffs
- Increased drought conditions require additional monitoring of drinking water systems

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→ These results directly contribute to the new and modified goals and policies included within the chapter.

Draft Goals and Policies

Summary: Utilities Main Themes

1. Supporting the Transition to a Zero-Waste City

2. Monitoring and Protecting Water Resources

3. Reducing Flooding from Extreme Rainfall and Sea Level Rise

4. Securing the Energy Grid

Summary: Public Utilities Draft Goals and Policies

Goal or Policy?		Changes?	Count
Existing	Goal	No change in existing language.	10
	Policy	No change in existing language.	12
	Goal	Modified	0
	Policy	Modified	8
New	Goal	-	3
	Policy	-	17
		Total DRAFT Goals and Policies	**50**

Supporting the Transition to a Zero-Waste City

Draft Mitigation Goals – Public Utilities

GOAL (Existing): Reliable utility service is provided at the lowest reasonable cost, consistent with the City's aims of environmental stewardship, social equity, economic development and the protection of public health.

POLICY (Existing - Modified): Ensure that utility fees, such as rates and general facility charges, are structured to reasonably reflect the actual cost of providing services to each customer rate-service class. Fees must also encourage customers to conserve water, reduce their demand on our wastewater treatment system, **reduce waste generation, and maximize waste diversion** to the greatest extent feasible.

Draft Mitigation Goals – Public Utilities

GOAL (Existing): Solid waste is managed as a resource to provide environmental, economic, and social benefits.

POLICY (Existing - Modified): Maintain and update the Waste ReSources Management Plan, Engineering Design and Development Standards, and Olympia Municipal Code to ensure sanitary conditions are realized, solid waste collection operations are safe and efficient, **waste prevention and diversion are optimized, and programs and services support a circular system where all waste is diverted from landfills**.

Draft Mitigation Goals – Public Utilities

GOAL (New): Solid waste disposed of in landfills is 75% lower than 2021 levels by 2040.

POLICY (Existing): Reduce waste associated with city operations and encourage recycling through the City's purchasing, recycling and disposal policies.

POLICY (Existing): Follow the solid waste management hierarchy established in federal and state legislation, which sets waste reduction as the highest priority management option, followed by reuse, recycling/composting and responsible disposal.

POLICY (Existing): Expand the City's recycling, composting, and waste reduction programs, to the greatest extent feasible, to ensure all community members have access to waste reduction, reuse, composting, and recycling programs and services. Prioritize programs and services that maximize community-wide waste reduction and diversion of material from disposal into remanufacture and reuse.

Draft Mitigation Goals – Public Utilities

GOAL (New): Olympia reduces waste associated with construction, renovation, and demolition of buildings and infrastructure.

POLICY (New): Develop and implement a comprehensive strategy to minimize waste associated with building demolition.

POLICY (New): Collaborate with local businesses and public agencies to develop local facilities and programs to enable reuse and recycling of construction and demolition debris.

POLICY (New): Develop incentives and technical assistance programs to encourage reuse and recycling of construction and demolition debris.

Monitoring and Protecting Water Resources

Draft Resilience Goals – Public Utilities

GOAL (Existing): Use Olympia's water resources efficiently to meet the needs of the community, reduce demand on facilities, and protect the natural environment.

POLICY (New): Support conservation programs and resources that provide incentives to urban farmers to implement best management practices that address impacts of climate change and invest in solutions to adapt to future climate conditions.

Draft Resilience Goals – Public Utilities

GOAL (Existing): Adequate supplies of clean drinking water are available for current and future generations and instream flows and aquifer capacity are protected.

POLICY (New): Maintain and implement a comprehensive drought resilience strategy that factors in projected climate impacts and sets action levels for different drought stages.

POLICY (New): Assess and document the risk wildfire poses to drinking water utility systems.

Reducing Flooding from Extreme Rainfall and Sea Level Rise

Draft Resilience Goals – Public Utilities

GOAL (Existing): The frequency and severity of flooding are managed and hazards are eliminated, except during major storm events.

POLICY (Existing - Modified): Prioritize City upgrades and retrofits to improve stormwater systems in areas that are vulnerable to overland flooding **and sea level rise**.

POLICY (New): Support knowledge sharing with private stormwater system owners about ways to upgrade or retrofit systems for increased precipitation intensity expected under future climate conditions.

POLICY (New): Prioritize solutions that reduce flooding from sea level rise to the transportation system, especially for transportation corridors used in emergency management.

Climate Risk – Sewer Systems & Extreme Precipitation; Sewer Systems & Sea Level Rise

Draft Resilience Goals – Public Utilities

POLICY (New - WWMP): Reduce the volume of sewer overflows annually.

POLICY (New - WWMP): Adapt wastewater infrastructure to accommodate forecast precipitation trends.

POLICY (New): Evaluate and assess approaches to appropriately size stormwater facilities for increased precipitation intensity expected under future climate conditions.

Climate Risk – Sewer Systems & Extreme Precipitation; Sewer Systems & Sea Level Rise; Streets & Sea Level Rise

Draft Resilience Goals – Public Utilities

GOAL (New): The stormwater and wastewater systems are resilient to the impacts of sea level rise and increased precipitation intensity

POLICY (New): Continue to implement sea level rise adaptation measures to infrastructure systems and operations, such as flood gates and pumps on stormwater outfalls.

POLICY (New): Continue to partner with the Sea Level Rise Collaborative to implement the Olympia Sea Level Rise Response Plan.

POLICY (New): Establish new partnerships to design, plan, and adapt Olympia's infrastructure systems to prepare for sea level rise.

POLICY (New - WWMP): Continue to implement flow reduction programs through partnership with LOTT Clean Water Alliance and Cities of Lacey and Tumwater for single family, multi family, and industry and commercial customers who receive LOTT services.

Climate Risk – Sewer Systems & Extreme Precipitation; Sewer Systems & Sea Level Rise

Draft Resilience Goals – Public Utilities

GOAL (Existing): Utility and land use plans are coordinated so that utility services can be provided and maintained for proposed future land uses.

POLICY (Existing - Modified): Make necessary improvements to utility facilities that do not currently meet minimum standards. Prioritize capital improvements to existing systems based on age, condition, risk of failure, and capacity to support infill development **and increase climate adaptation**, while also balancing the fair distribution of services and benefits to the entire community.

Draft Resilience Goals – Public Utilities

GOAL (Existing): The Utility considers the interrelationship and complexity of its three missions to manage flooding, improve water quality and protect and enhance aquatic habitat in its decisions and involves other City departments in this effort.

POLICY (Existing - Modified): Implement a Capital Improvement Program that maintains and improves the municipal separate storm sewer system in a manner that enhances and protects the City's natural environment, mitigates flooding problems, improves water quality, **adapts to future climate conditions**, promotes a reliable and safe transportation network and provides the community a safe and healthy place for living, working and recreating.

Securing the Energy Grid

Draft Resilience Goals – Public Utilities

GOAL (Existing): Cooperation and coordination exists among jurisdictions and private utility providers.

POLICY (New): Collaborate with PSE to ensure continuity of operations and service provision during climate-exacerbated emergencies, including extreme heat and wildfire events.

Policy (New): Support the transition of utility energy fuel mixes to renewable sources.

Climate Risk – Grid-supplied energy & Extreme Heat; Grid-supplied energy & Wildfire

Next Steps

- Draft Climate Element Narrative
  - Publish Draft Narrative and revised goals and policies for public review and comment (June)
- Formal Review Process
  - Social Justice and Equity Commission Briefing
  - Planning Commission Briefing and Public Hearing
  - City Council Review and Acceptance
- Integrate Climate Goals and Policies across chapters

Comments? Questions?

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