



# OLYMPIA

## 2045

### Climate Action & Resilience



# Agenda

- Introductions
- Structure of the Climate Chapter
- Overview of Chapter Development Process
- Status of Sub-Elements
  - Mitigation
  - Resilience





The Climate Element Update is supported with funding from Washington's Climate Commitment Act. The CCA supports Washington's climate action efforts by putting cap-and-invest dollars to work reducing climate pollution, creating jobs, and improving public health. Information about the CCA is available at [www.climate.wa.gov](http://www.climate.wa.gov).



# HB 1181 – Climate Change Planning

ESSHB – 1181 – “Climate Change – Planning”:

- Adds new GMA Planning Goal: climate change and resiliency
- Requires a Climate Change and Resiliency Element for jurisdictions required to plan under GMA
- Adds requirements for the Land Use, Transportation, Parks, and Capital Facilities Elements
- Directs Commerce with other state agencies to provide guidance documents and funding opportunities



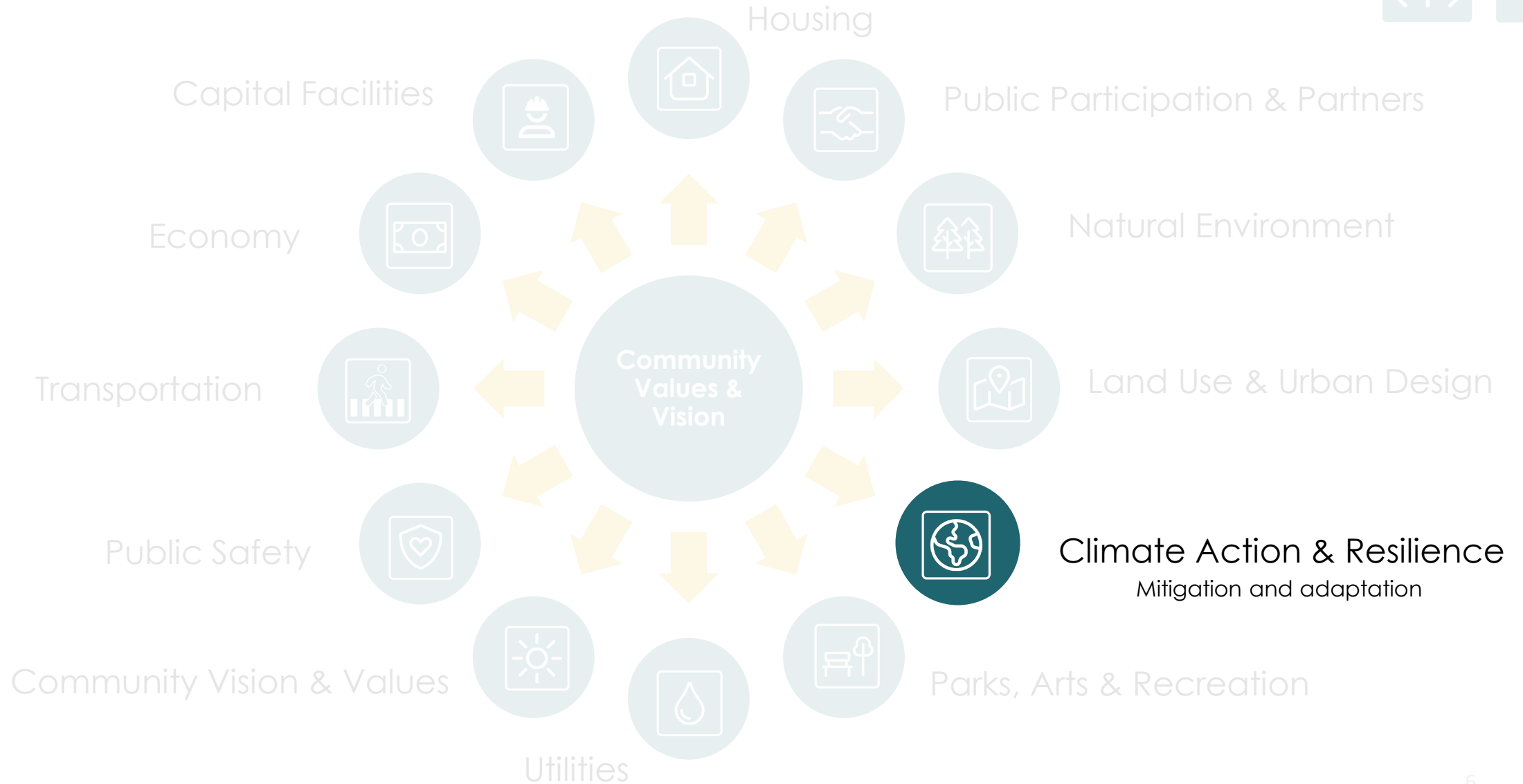
# Olympia 2045 Chapters

Equity and health are addressed  
in every chapter.



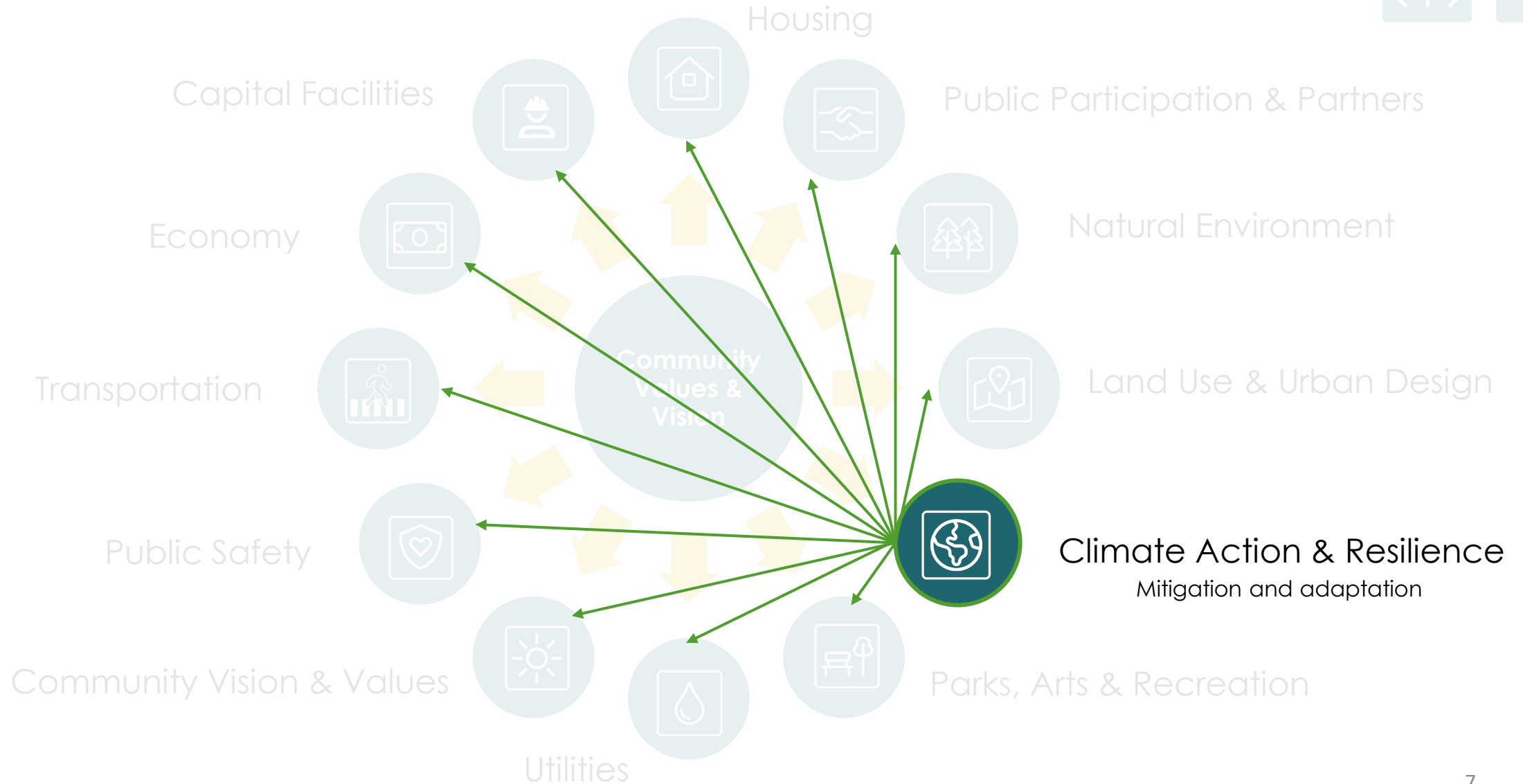
# The Climate Chapter

Equity and health are addressed  
in every chapter.

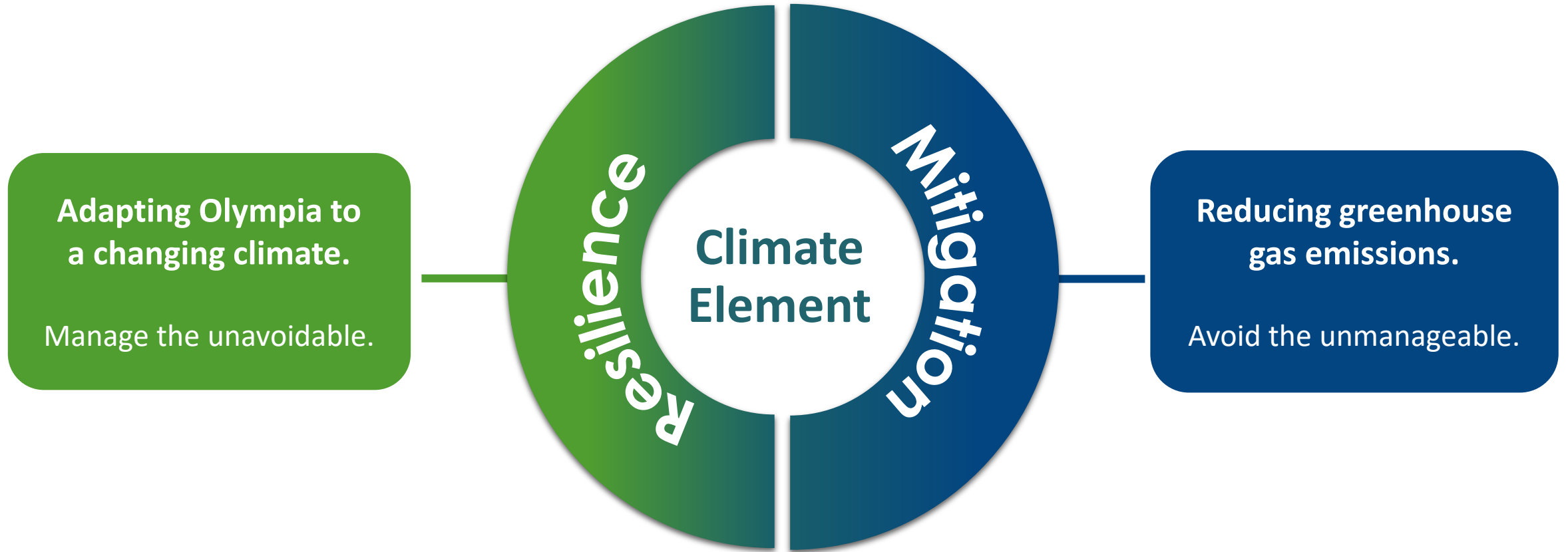


# Climate Integration with All Chapters

Equity and health are addressed  
in every chapter



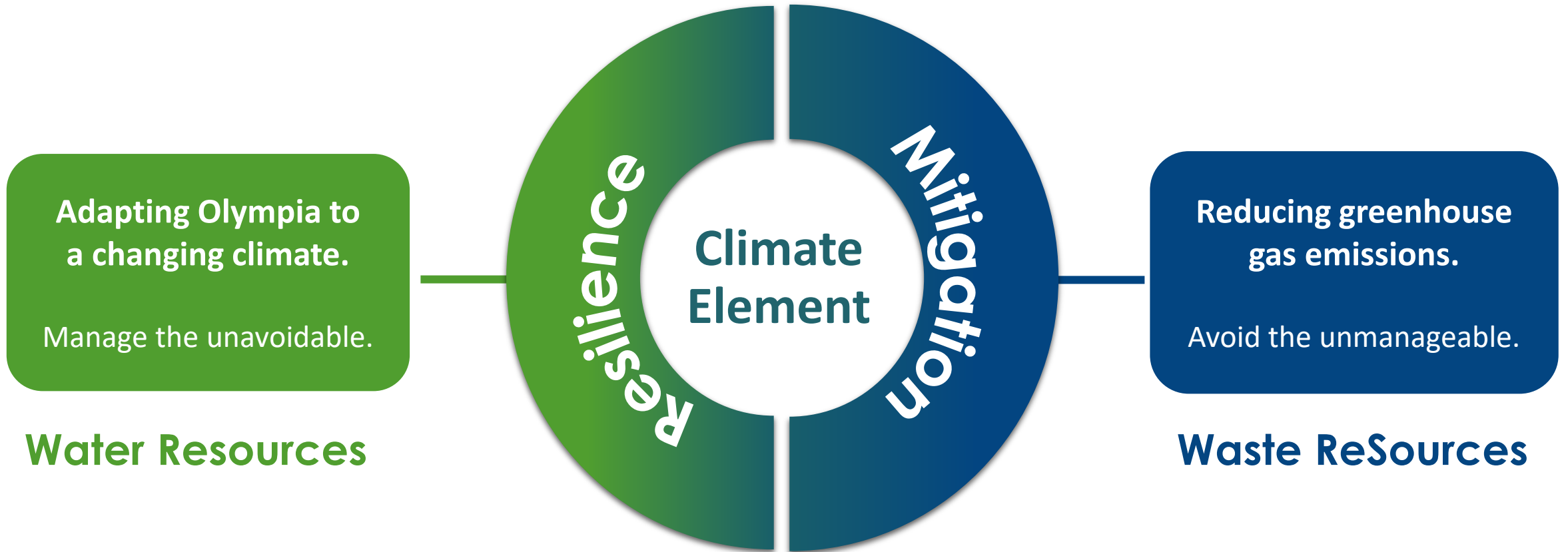
# The 2 Parts to the Climate Element





# The 2 Parts to the Climate Element:

## Public Utilities

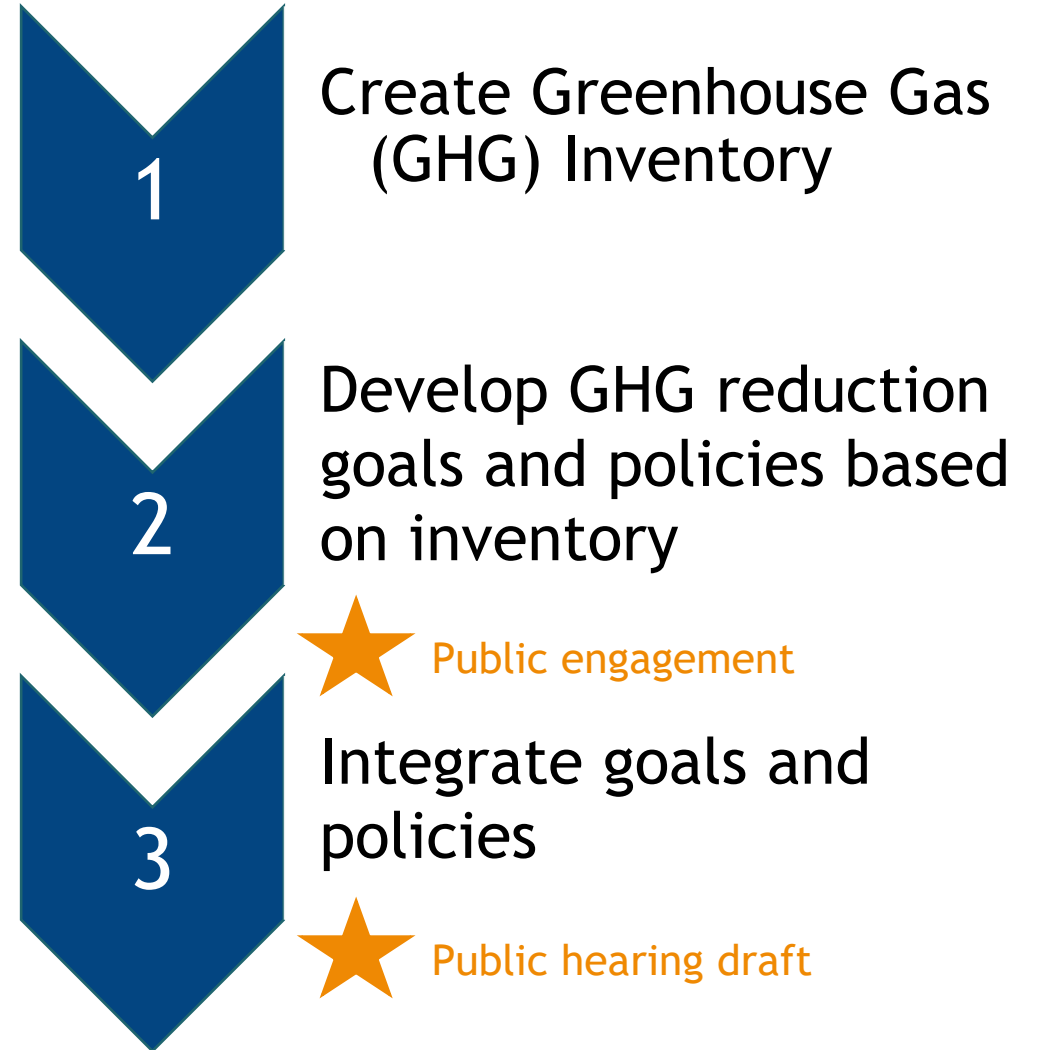


# Mitigation

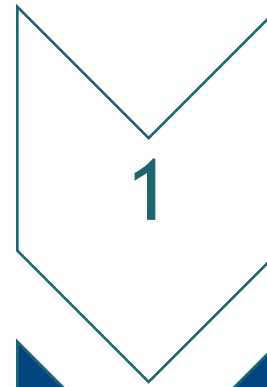
Actions to reduce emissions that cause climate change.

# Emissions Reduction Goal and Policy Development

This process was outlined by Washington Department of Commerce Climate Element Guidance.



# We are here!



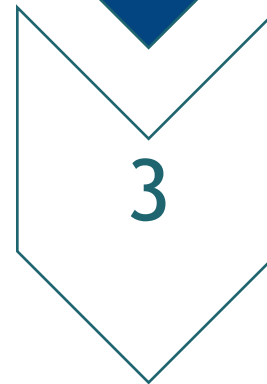
Create GHG Inventory



Develop GHG reduction goals and policies based on inventory



Public engagement



Integrate goals and policies



Public hearing draft



# 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

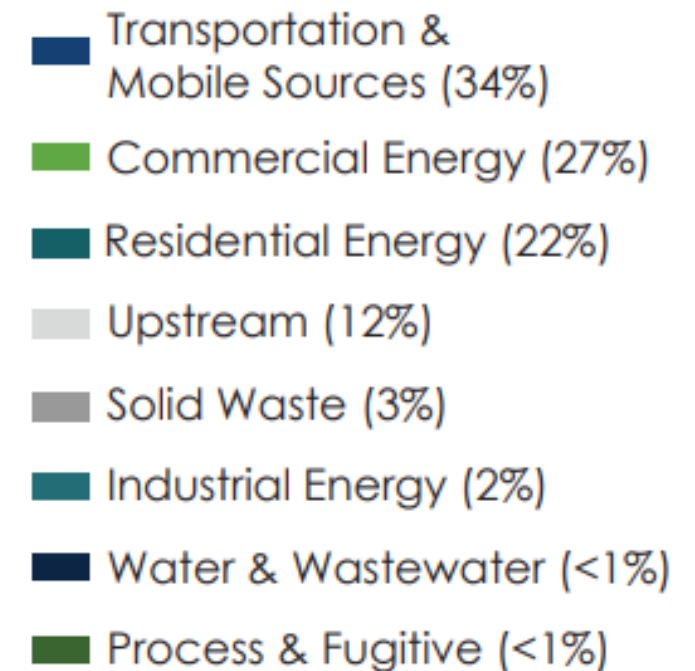
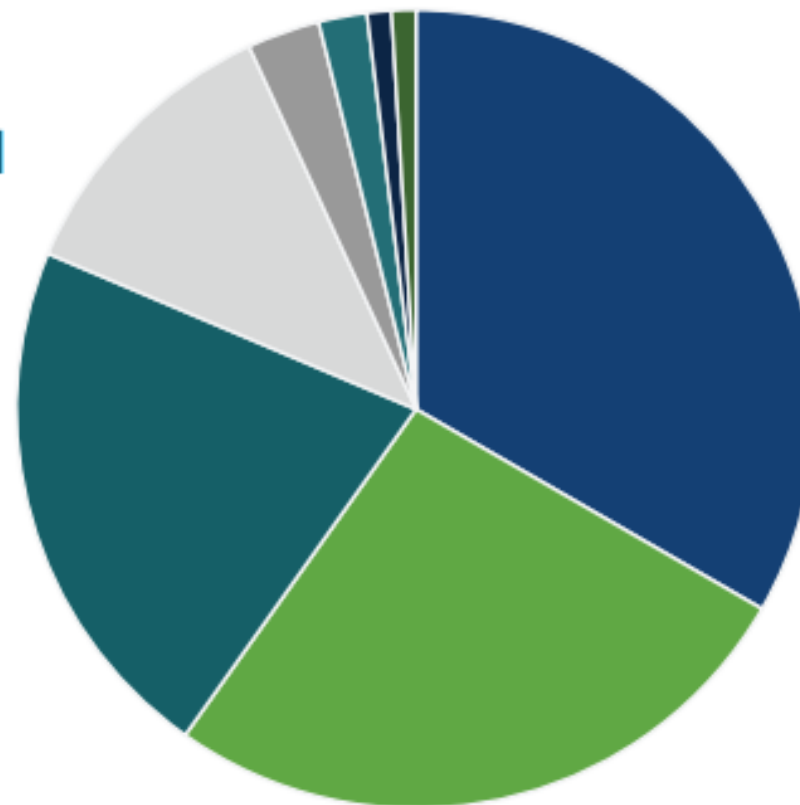
# Greenhouse Gas Emissions Sources

## EMISSIONS AT A GLANCE

**1** TRANSPORTATION  
34%

**2** COMMERCIAL  
ENERGY  
27%

**3** RESIDENTIAL  
ENERGY  
22%



# Main Themes of Mitigation Goals and Policies

Reduce Vehicle  
Miles Travelled  
(VMT)

Promote  
Building Energy  
Efficiency

Support Electric  
Vehicle  
(EV) Adoption

Reduce Solid  
Waste  
Generation

# Main Themes of Mitigation Goals and Policies

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Reduce Solid  
Waste  
Generation



# Waste ReSources – Draft Mitigation Goals

**GU2** 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.

**PU2.2** 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 and reduce their demand on our wastewater treatment system, reduce waste generation, and maximize waste diversion to the greatest extent feasible.

# Waste ReSources – Draft Mitigation Goals

**NEW GOAL:** Solid waste disposed of in landfills is 75% lower than 2021 levels by 2040.

**PU12.2** 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.

# Waste ReSources – Draft Mitigation Goals

**NEW GOAL:** Reduce waste associated with construction, renovation, and demolition of buildings and infrastructure.

**Example Policy:** Develop and implement a comprehensive strategy to minimize waste associated with building demolition.

# Summary: Utilities – Draft Goals and Policies

Goal or Policy?		Changes?	Count
Existing	Goal	No change in existing language.	2
	Policy	No change in existing language.	1
	Goal	Modified	0
	Policy	Modified	5
New	Goal	-	2
	Policy	-	3
Total DRAFT Goals and Policies			13



# Resilience

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

# Climate Resilience Goal and Policy Development

This process was outlined by Washington Department of Commerce Climate Element Guidance.



We are here!



Explore Climate Impacts



Audit plans and policies



Assess vulnerability and risk



Select, adapt, and create  
resiliency policies



Public engagement



Integrate goals and policies



Public hearing draft



Parks



Drinking Water



Farmer's Market



Community Events

# Building Resilience Across Sectors

- Emergency management, preparedness, and response
- Public health and wellbeing
- Economic and community development
- Water Resources and Utilities
- Transportation
- Ecosystems, Agriculture, and Parks
- Housing and Energy



# 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 Infrastructure Systems

- Overwhelmed stormwater and sewer systems from heavy rainfall and sea level rise
  - Solutions mitigate transportation disruptions, property damage, pollution
- 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



# Water Resources – Draft Resilience Goals

**NEW GOAL:** The stormwater and wastewater systems are resilient to the impacts of sea level rise.

**Example Policy:** Continue to implement sea level rise adaptation measures to infrastructure systems and operations, such as installing flood gates and pumps on stormwater outfalls.

# Water Resources – Draft Resilience Goals

**GU8** The wastewater collection system is designed and operated as to minimize long term costs, provide sufficient capacity for projected demand, promote equity, and protect the natural environment.

**PU8.8** Separate combined wastewater/stormwater pipes in conjunction with stormwater and road improvements or residential repairs, when economically feasible



# Water Resources – Draft Resilience Goals

**GU5 Adequate supplies of clean drinking water are available for current and future generations and instream flows and aquifer capacity are protected.**

**Example Policy:** Assess and document the risk wildfire poses to drinking water utility systems.

# Summary: Draft Utility - Resilience Goals and Policies

Goal or Policy?		Changes?	Count
Existing	Goal	No change in existing language.	10
	Policy	No change in existing language.	30
	Goal	Modified	0
	Policy	Modified	5
New	Goal	-	1
	Policy	-	11
Total DRAFT Goals and Policies			57

# Questions?

