



OLYMPIA

2045

Climate Action & Resilience



Agenda

1. Climate Change Planning in Washington
2. Olympia 2045: Climate Element
 - Mitigation sub-element
 - Resilience sub-element
3. Changes from Previous Drafts
4. Goals and Policies
5. Next Steps



HB 1181 – Climate Change Planning

ESSHB – 1181 – “Climate Change – Planning”:

- Requires a Climate Change and Resiliency Element for jurisdictions required to plan under GMA

Overarching Goals:

- Reduce greenhouse gas emissions
- Reduce vehicle miles traveled
- Improve climate preparedness, response and recovery efforts
- Maximize co-benefits and prioritize environmental justice in the development of policies/programs to achieve these goals.

Olympia 2045

Climate Element

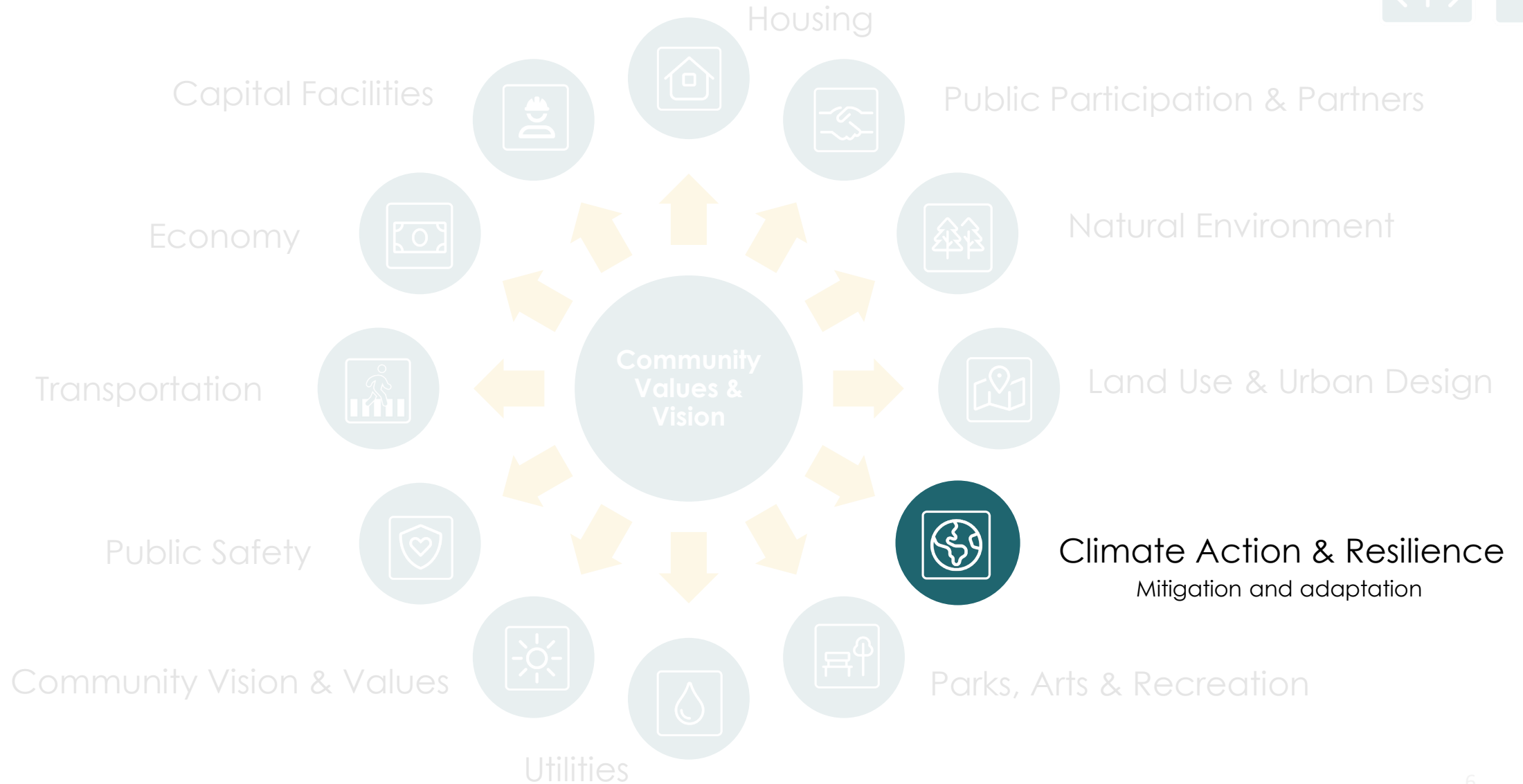
Olympia 2045 Chapters

Equity and health are addressed
in every chapter.



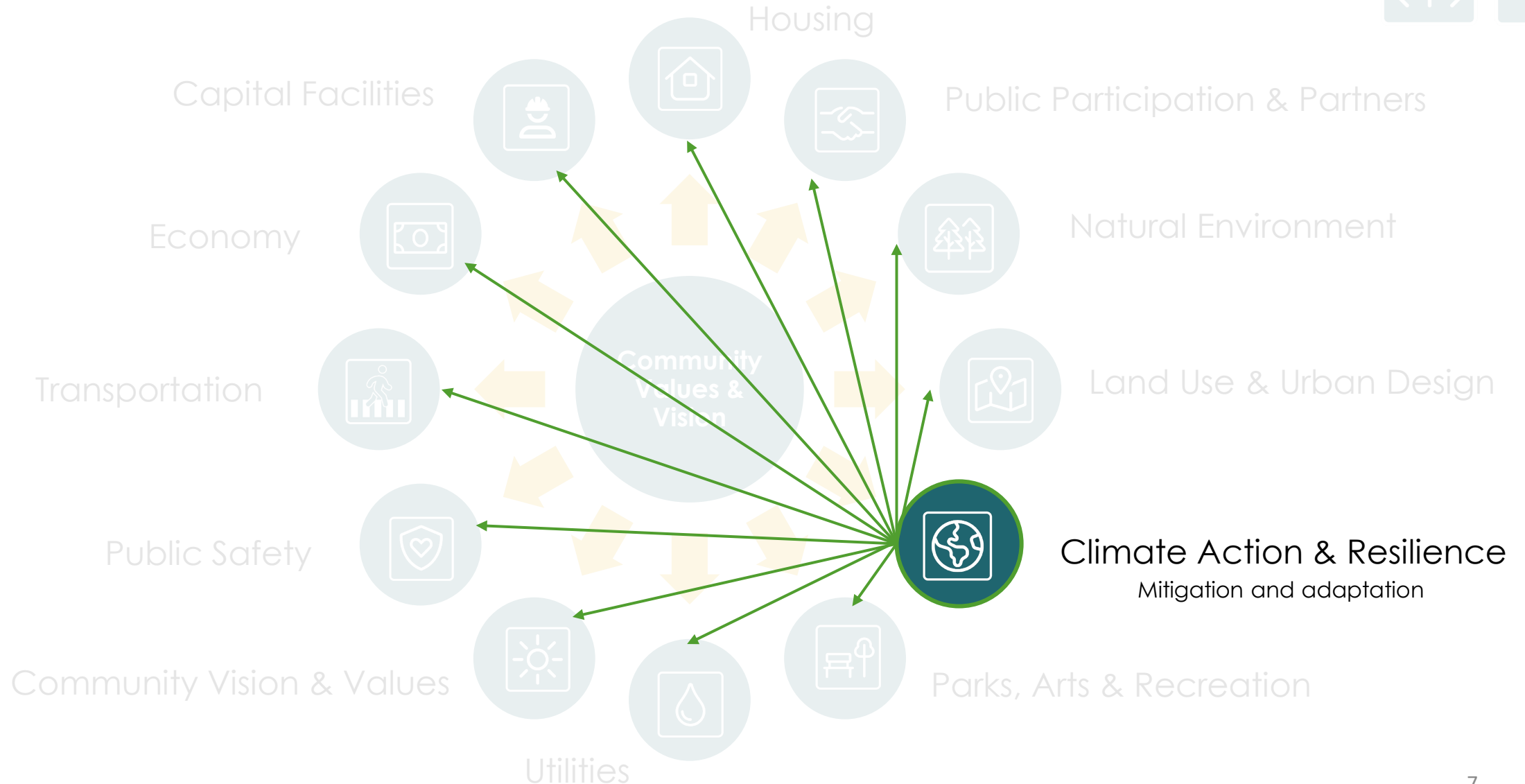
The Climate Element

Equity and health are addressed
in every chapter.



Climate Integration with All Chapters

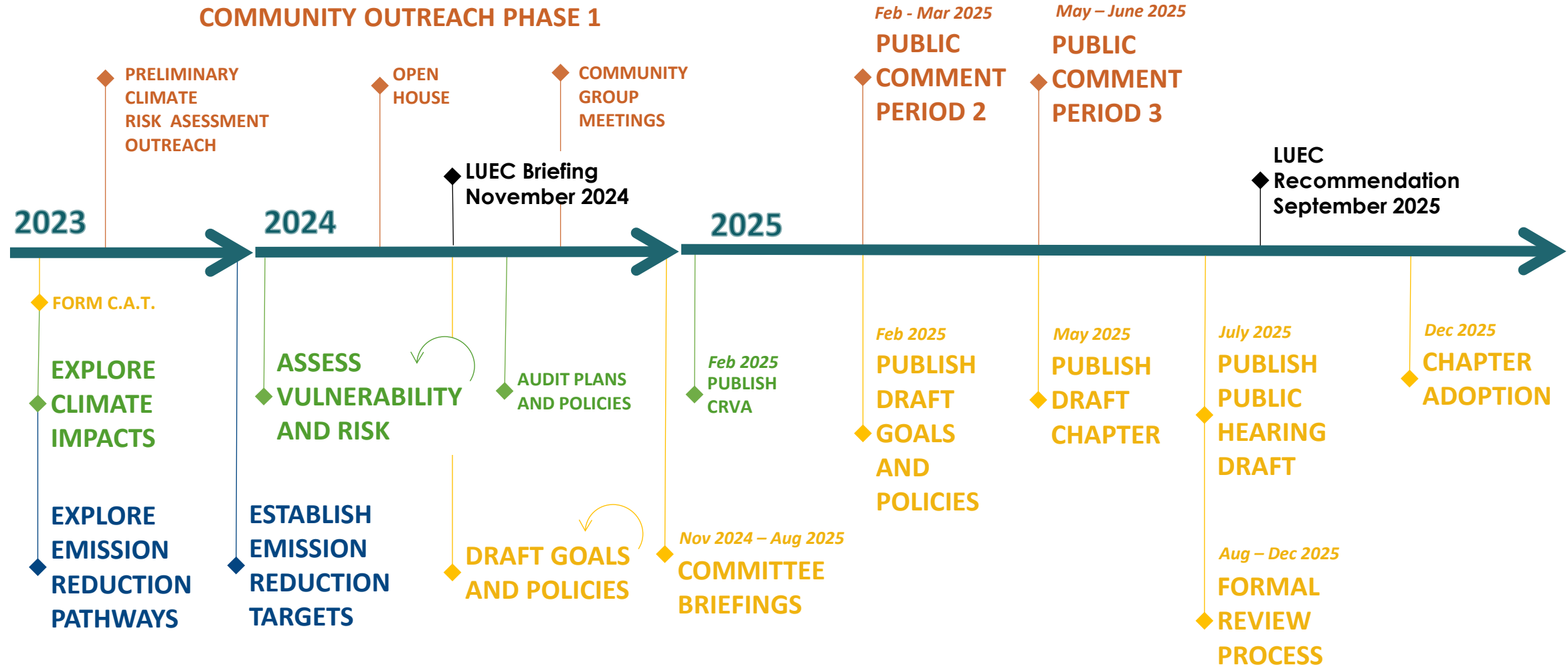
Equity and health are addressed
in every chapter



Developing the Climate Element

COMMUNITY
INPUT

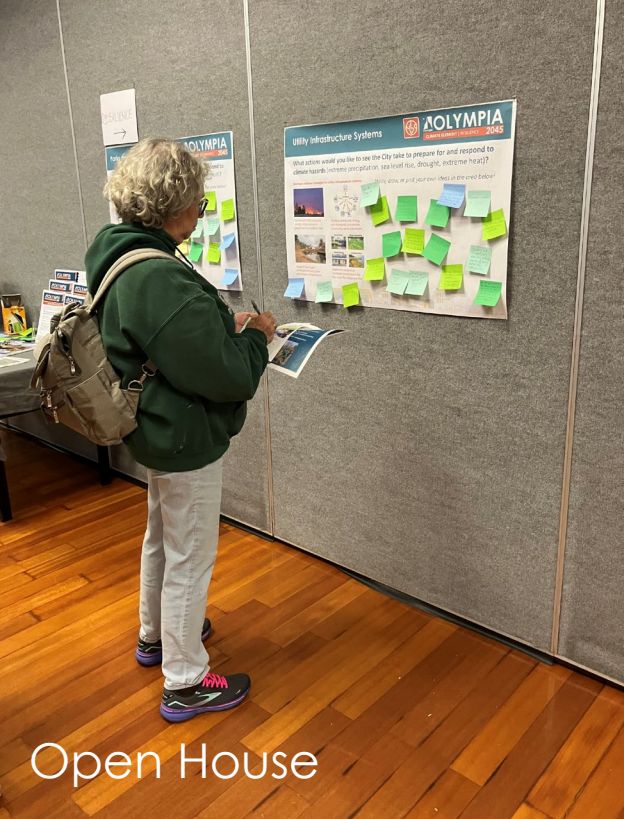
CITY OF OLYMPIA
STAFF



CLIMATE
ELEMENT

MITIGATION
SUBELEMENT

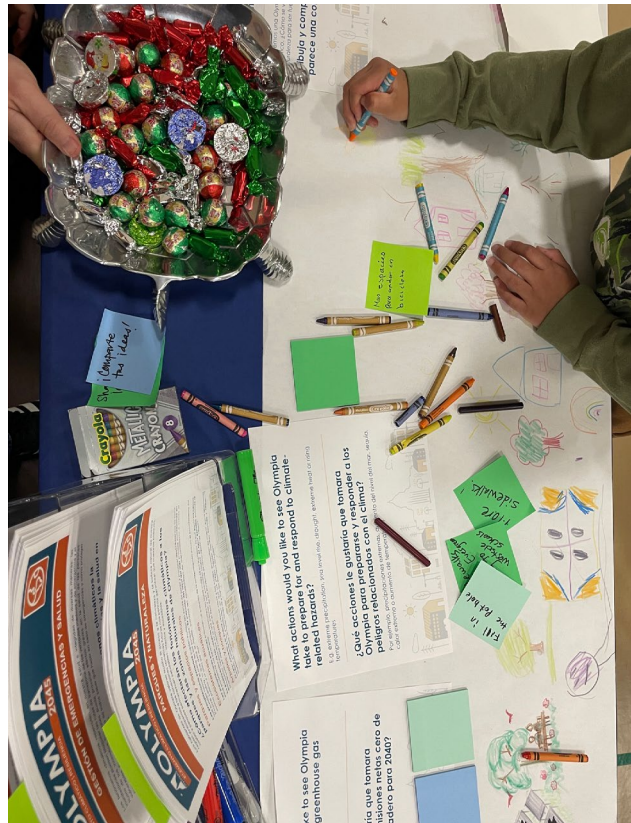
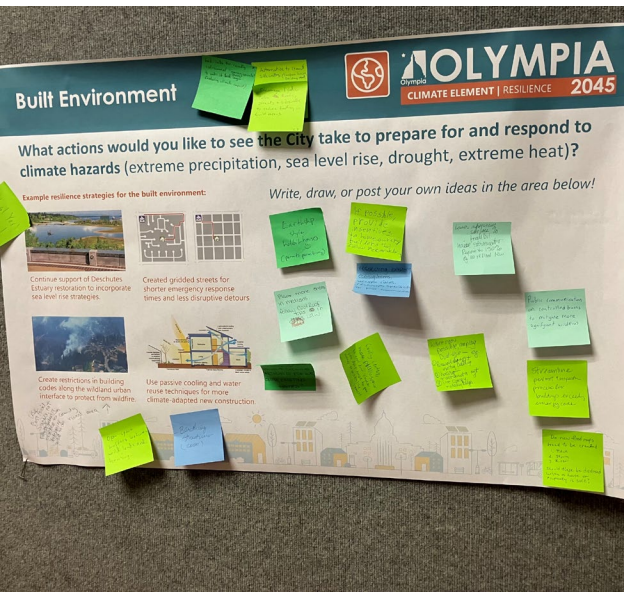
RESILIENCE
SUBELEMENT



Open House



Community Events

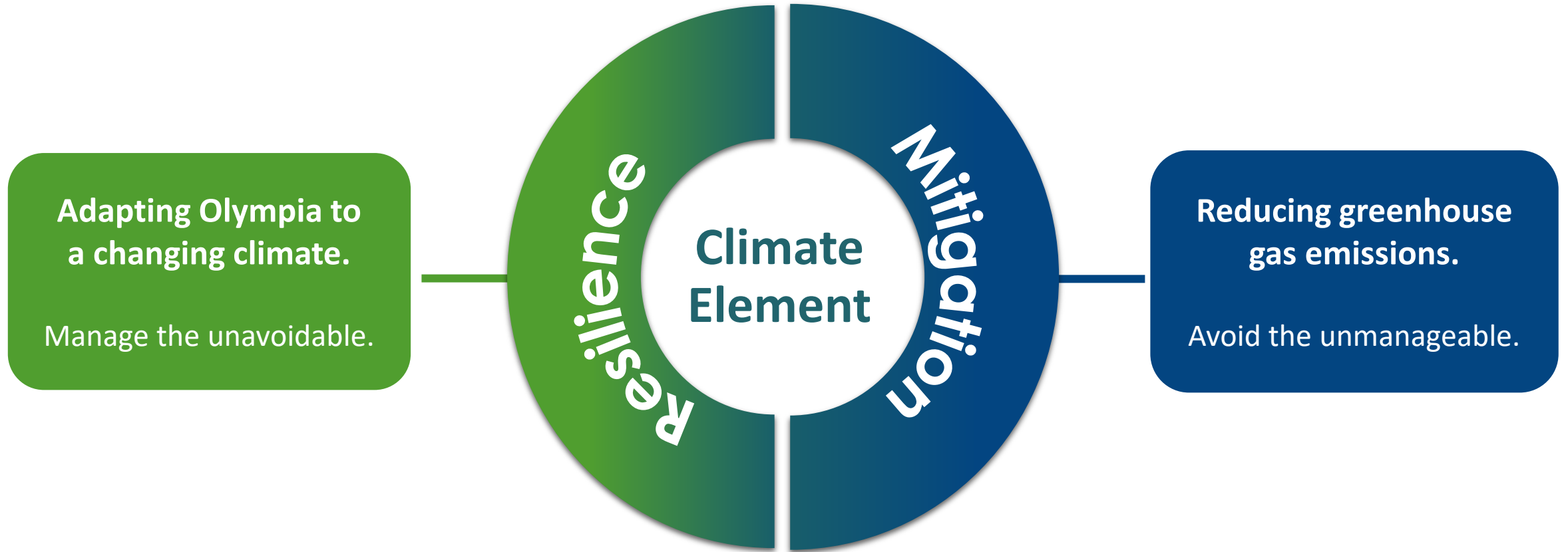


Community Engagement and Feedback

- Open houses
- Q&A sessions
- In-person tabling at community events
- Targeted community group conversations
- Engage Olympia surveys
- Direct email
- City advisory committees

We have received 500+ comments to date throughout the development process.

The 2 Parts to the Climate Element



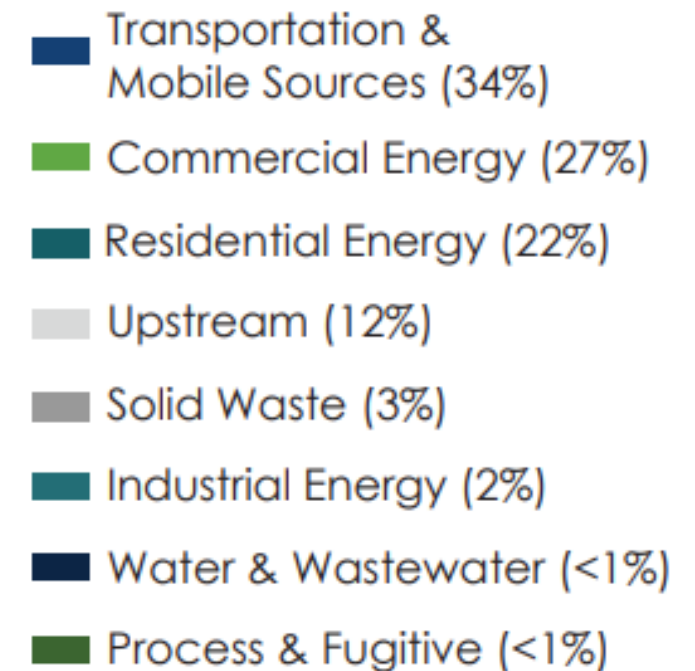
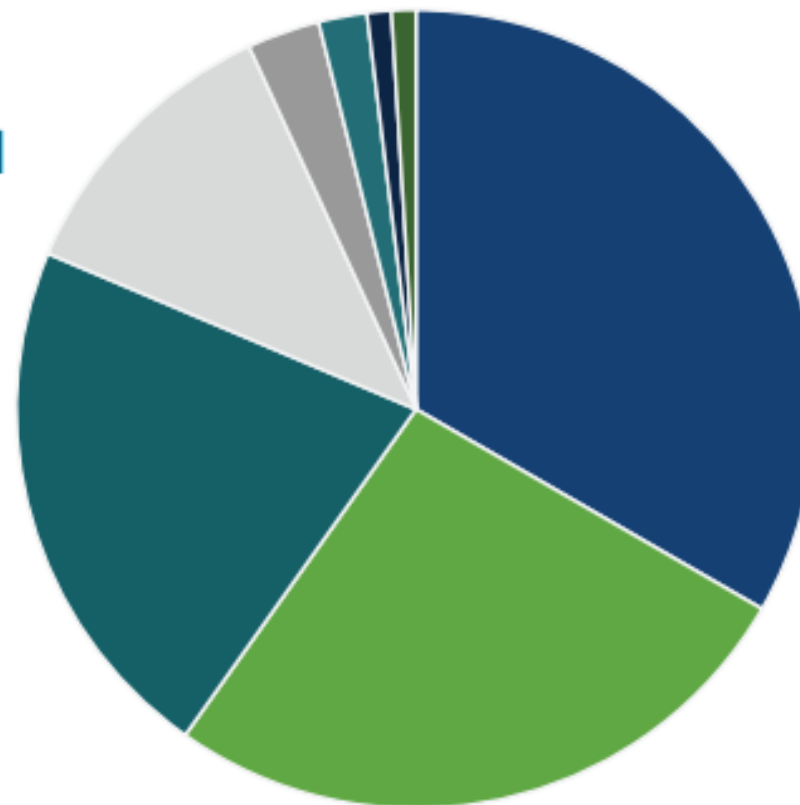
Greenhouse Gas Emissions Sources

EMISSIONS AT A GLANCE

1 TRANSPORTATION
34%

2 COMMERCIAL
ENERGY
27%

3 RESIDENTIAL
ENERGY
22%



2021 Community-Wide GHG Emissions

Main Strategies for Emission Reductions

Reduce Vehicle
Miles Traveled
(VMT)

Promote
Building Energy
Efficiency

Support Electric
Vehicle
(EV) Adoption

Reduce Solid
Waste
Generation

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

Extreme Heat and Wildfire Smoke impacts to public health, emergency preparedness and response, grid-supplied energy, and local businesses.

Sept 2020 Wildfire Smoke Event

Picture Credits: Ted S. Warren /AP

Climate Risks

Sea level rise and impacts to downtown infrastructure (sewer systems, streets, emergency preparedness and response, local businesses).

Dec 2022 Downtown Flooding Event



Climate Risks

Hotter, drier summers impact forests, aquatic ecosystems, and pollinators. Extreme rainfall and sea level rise impact aquatic and marine ecosystems.

Goals and Policies

Climate Element

Summary: Goals and Policies

| Goal or Policy? | | Changes? | Count |
|--------------------------------|--------|---------------------------------|-------|
| Existing | Goal | No change in existing language. | 53 |
| | Policy | No change in existing language. | 95 |
| | Goal | Modified | 3 |
| | Policy | Modified | 31 |
| New | Goal | - | 18 |
| | Policy | - | 109 |
| Total DRAFT Goals and Policies | | | 309 |

Climate

An overarching climate strategy guides programs and policies pursued by the City. We will make measurable progress towards our goals.

Goals and policies will:

- Reduce Greenhouse Gas (GHG)
- Support Climate Resilience
- Promote Environment Justice
- Strengthen Institutional Capacity for Climate Action

Natural Environment and Parks, Arts & Recreation

Future climate conditions will threaten the natural composition, function, and relationships within our freshwater, marine, and forest environments.

Goals and policies will:

- Strengthen the Environment's Ability to Withstand Future Climate Conditions
- Ensure Parks are Resilient to Climate Impacts and Advance Climate Action
- Cultivate a Connection to Nature
- Foster Community Connection and Belonging

Land Use and Urban Design

Land use and urban design decisions will create denser, more walkable neighborhoods, support energy efficiency, and reduce exposure to climate hazards.

Goals and policies will:

- Plan for Density and Future Climate Conditions
- Adapt the Built Environment to Reduce GHG Emissions and Protect Public Health
- Promote Local Energy Infrastructure

Housing and Public Safety

All Olympians must have access to affordable and safe housing. Our emergency preparedness and response can protect the health of those most vulnerable to climate-exacerbated events.

Goals and policies will:

- Address Housing and Climate Challenges Together
- Provide Stability and Services during Climate Emergencies
- Protect Public Health through Preparedness and Response

Transportation

Reducing vehicle miles traveled and emissions from vehicles are critical to meeting our net-zero goal. How we develop our transportation network will help us achieve this goal.

Goals and policies will:

- Make it Easier to Walk, Ride, Roll and Take Transit
- Support Electric Vehicle Adoption
- Prepare our Streets for Extreme Weather

Public Utilities and Capital Facilities

We must ensure our critical services – electricity, wastewater treatment, and drinking water systems– can withstand more extreme weather events. Our solid waste management can support Olympians in “living lighter”.

Goals and policies will:

- Support the Transition to a Zero-Waste City
- Reduce Flooding from Extreme Rainfall and Sea Level Rise
- Monitor and Protect Water Resources
- Secure the Energy Grid
- Make Climate-Smart Investments in Public Infrastructure

Economy

Olympia is preparing our local workforce and businesses to take climate action.

Goals and policies will:

- Develop a Climate-Smart Economy and Workforce
- Support Businesses in Preparing for Climate Impacts

Changes from Land Use & Environment Committee Draft:

- Added one policy about advocating for state-wide emissions reduction policies
- Added narrative language about wildfire prevention and response in Parks and Public Safety chapter
- Added narrative about accessing parks and improving overall transit system
- Added narrative language about reducing stormwater runoff and pollution from to local ecosystems

Summary of Community Feedback

Climate Element

What we have heard:

Be Action-Oriented.

Use stronger language to meet the scale, scope, and urgency of climate change. Provide transparent monitoring and evaluation across actions.

Develop in Urban Areas.

Significant support for infill development, walkable neighborhoods and safe, secure transportation system.

Focus on Affordability.

Advance climate solutions that are accessible and affordable to all Olympians, while considering unintended consequences. Provide support to those most vulnerable.

Ensure Grid Reliability.

Add in flexibility and streamline permitting processes to increase grid capacity needs and maintain reliability.

Advance Environmental Protection.

Ensure shorelines, marine ecosystems, open space and biodiversity can withstand compounding climate and environmental risks. Maintain existing and expand tree canopy.

Prioritize Highest Risks.

Prioritize climate actions based on highest risks and largest impact.

How we have addressed concerns:

Be Action-Oriented.

- Added language recognizing urgency and need to act at a local scale
- Strengthened language towards implementation, rather than study

Develop in Urban Areas.

- Included policies ensuring access to green space (trees, green stormwater infrastructure) in urban spaces and low-carbon transportation options (e.g. EVs and public transit)

Focus on Affordability.

- Added language providing support, incentives, and flexibility for built environment retrofits
- Focused on groups most vulnerable

Ensure Grid Reliability.

- Added policies focusing specifically on grid reliability and capacity

Advance Environmental Protection.

- Cross-listed existing policies focused on urban forestry, remediation, no net loss of ecosystem function, and shoreline protection
- Added language for critical areas, biodiversity, and phased sea level rise adaptation

Prioritize Highest Risks.

- Added policy language focusing on highest risk hazards in public safety
- Clarified that weatherization goals and policies have resilience benefits
- Emphasize planning documents that provide prioritization

Next Steps

- City Council Acceptance
- Integrate climate goals and policies across chapters
- City Council adoption of full Comprehensive Plan

Stay Informed

Subscribe to the Climate or Planning Newsletter:
www.olympiawa.gov/news

Visit our Webpage:
www.olympiawa.gov/Climate2045

Become a Party of Record by emailing:
olympia2045@ci.olympia.wa.us

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Climate Risk and Vulnerability: High Risks

SUMMER CONDITIONS



**Extreme
Heat &**



**Wildfire
Smoke**

Emergency Prep &
Response

Public Health

Grid-Supplied Energy

Local Businesses

Streets (*heat, only*)



**Extreme
Heat,**



**Rising
Temps &
Drought**

Ecosystems
(forests, aquatic, pollinators)

WINTER CONDITIONS

**Sea Level
Rise &
Extreme
Rainfall**



Downtown Infrastructure
(sewer system, streets, businesses)

Emergency Prep & Response

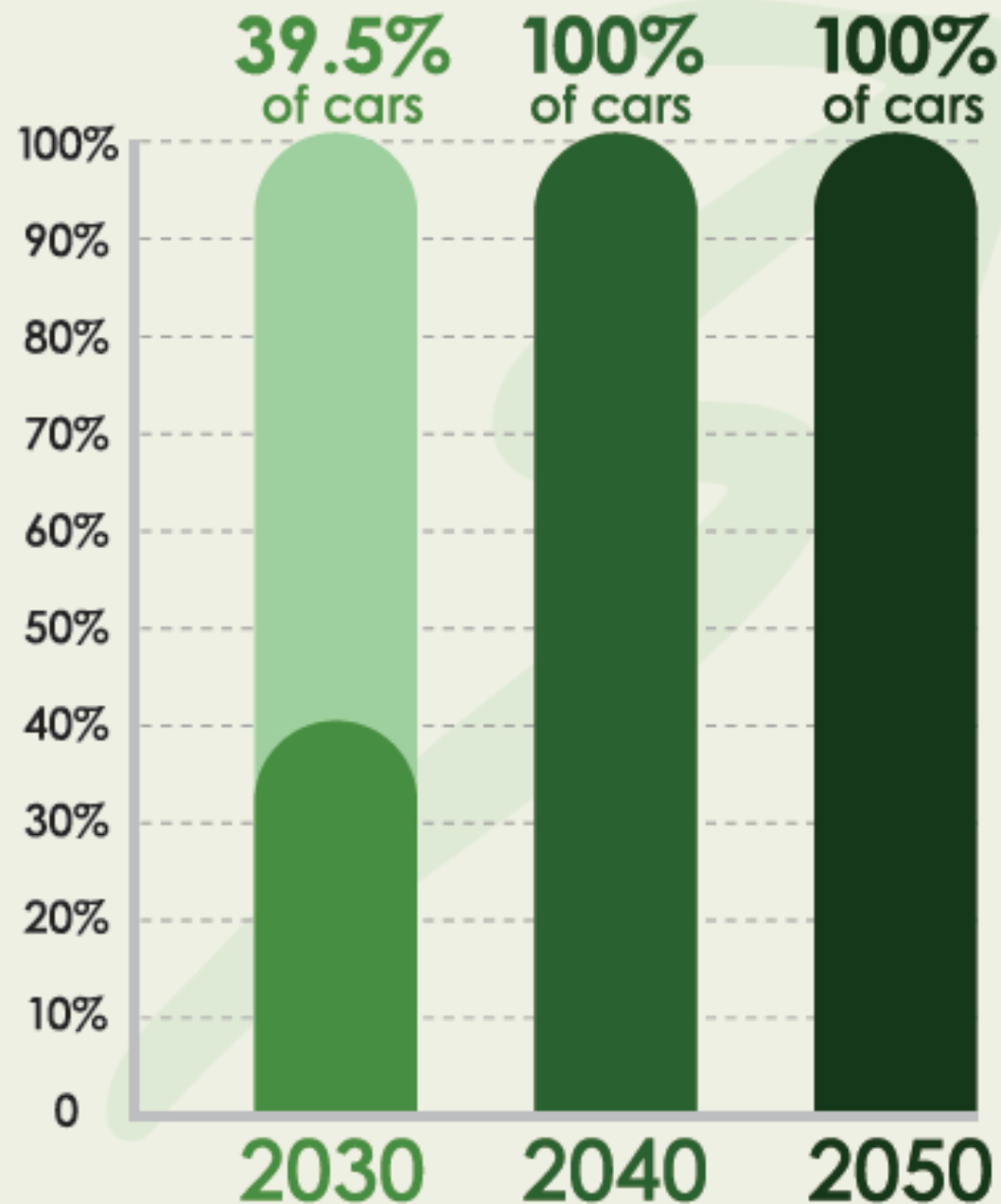
Ecosystems (marine, aquatic)

Increase Electric Vehicle Adoption



By 2030, 39.5% of gasoline-powered light-duty vehicles will be replaced with electric vehicles.

By 2040, all gasoline-powered light-duty vehicles will be replaced with electric vehicles.

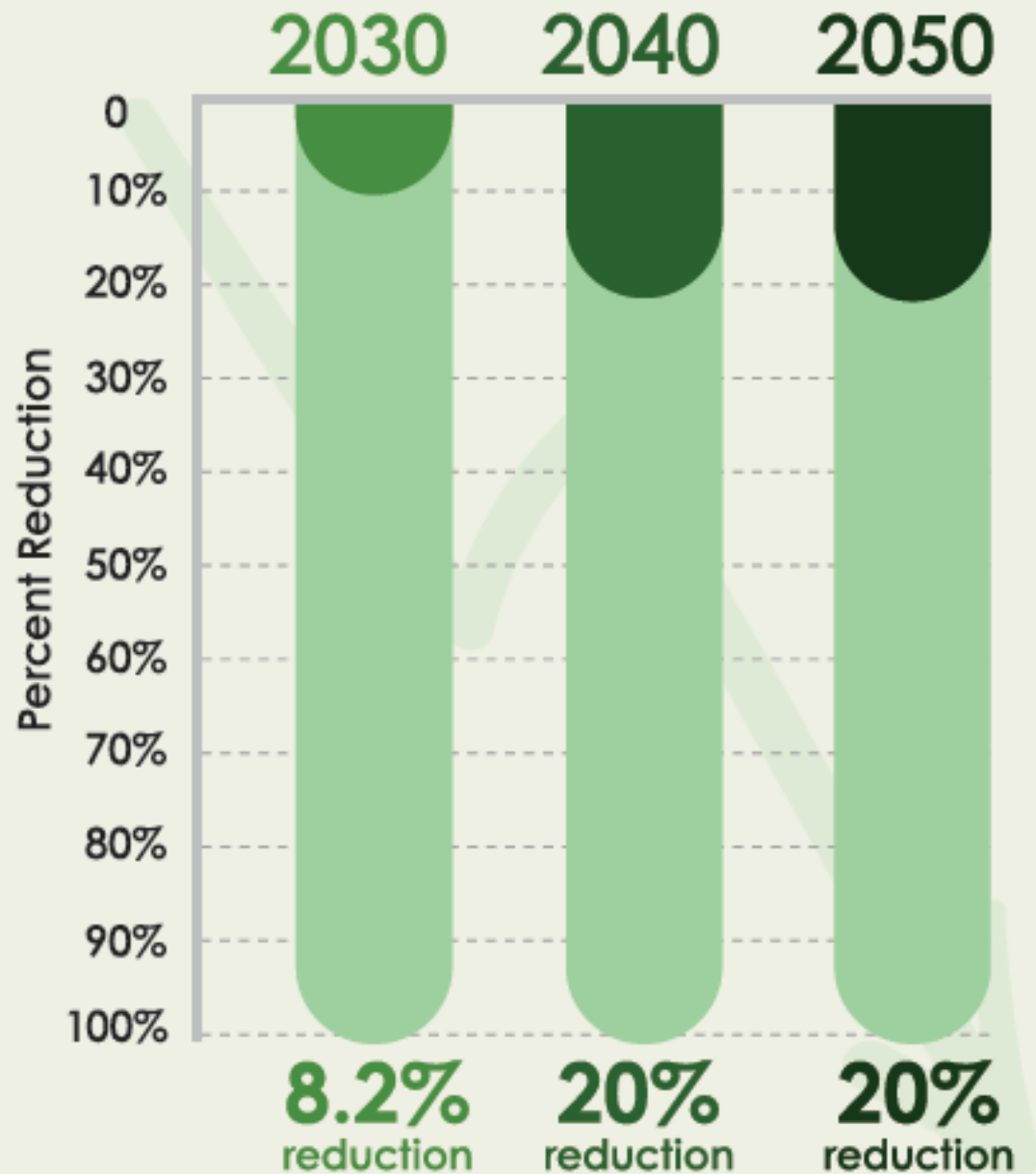


Reduce Vehicle Miles Traveled

By 2030, vehicle miles traveled are reduced by 8.2%.*

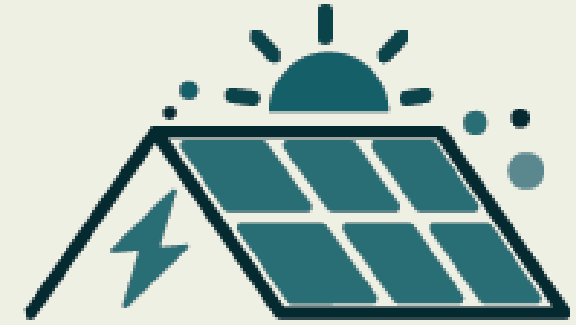
By 2040, vehicle miles traveled are reduced 20%.*

*These values are relative to the business-as-usual scenario, where Olympia does not take additional action to reduce vehicle miles traveled.

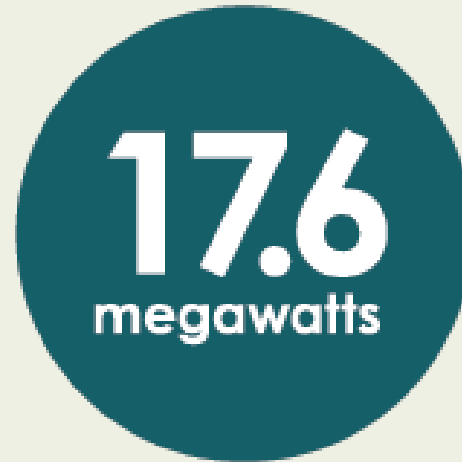


Increase Rooftop Solar

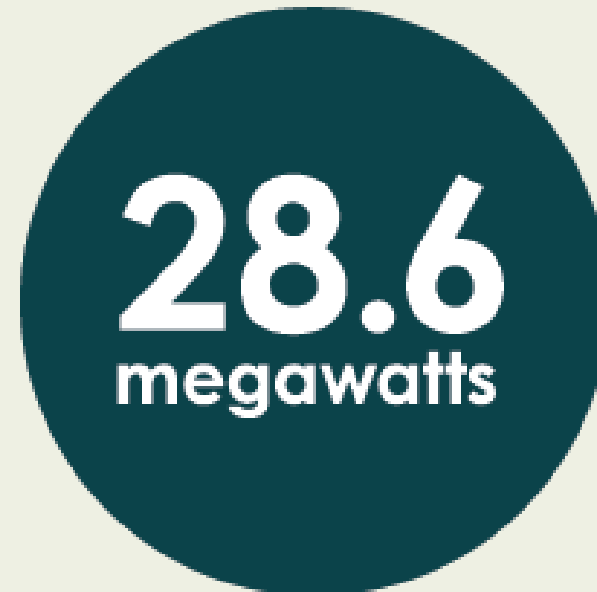
Each year, an additional 1.1 MW (megawatts) of rooftop solar is installed for residential and commercial buildings, with 6.6 MW installed by 2030 and 17.6 MW installed by 2040.



2030



2040



2050

Measured in megawatts (MW) of power.

Increase Efficiency of All Buildings



37.5%

2030

By 2030, 37.5% of existing buildings receive energy efficiency and electrification upgrades.

100%

2040

By 2040, 100% of existing buildings receive energy efficiency and electrification upgrades.

100%

2050

New buildings will become more energy efficient through compliance with Washington State building codes.

Reduce Amount of Solid Waste Generated

Between 2024 and 2050, solid waste generated in Olympia is reduced by 773.5 tons each year.

By 2030, Olympia generates 33,260 tons of solid waste.

By 2040, Olympia generates 28,619 tons of solid waste.

