

# **Climate Action Plan**

**Research Update for the City of Tualatin** 





- Definitions
- Context
- Plan Composition
- Plan Development
- Considerations

## Definitions



## **GHG Inventory**

A study that quantifies greenhouse gas emissions generated within a specific boundary, i.e. the City of Tualatin and analyzes the source

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## **Climate Action Plan**

A plan that discusses climate change and outlines specific actions an agency will undertake to reduce emissions and climate change impacts



## **Other Types of Plans**

Sustainability Plans & Energy Plans



## **Existing Climate Action Plans:**

 Ashland, Bend, Eugene, Beaverton, Corvallis, Milwaukie, Lake Oswego, Portland/Multnomah County and Hood River County

## **Climate Action Plans in Progress:**

Tigard, Gresham, Lincoln County/Newport, Salem and Clackamas County

## Sustainability Plan/Sustainability Action Plans or Energy Action Plans:

 Forest Grove, Washington County, Hillsboro, West Linn, Wilsonville, **Tigard and Talent** 





## **Clackamas County-**

Climate Action Plan development is in progress.

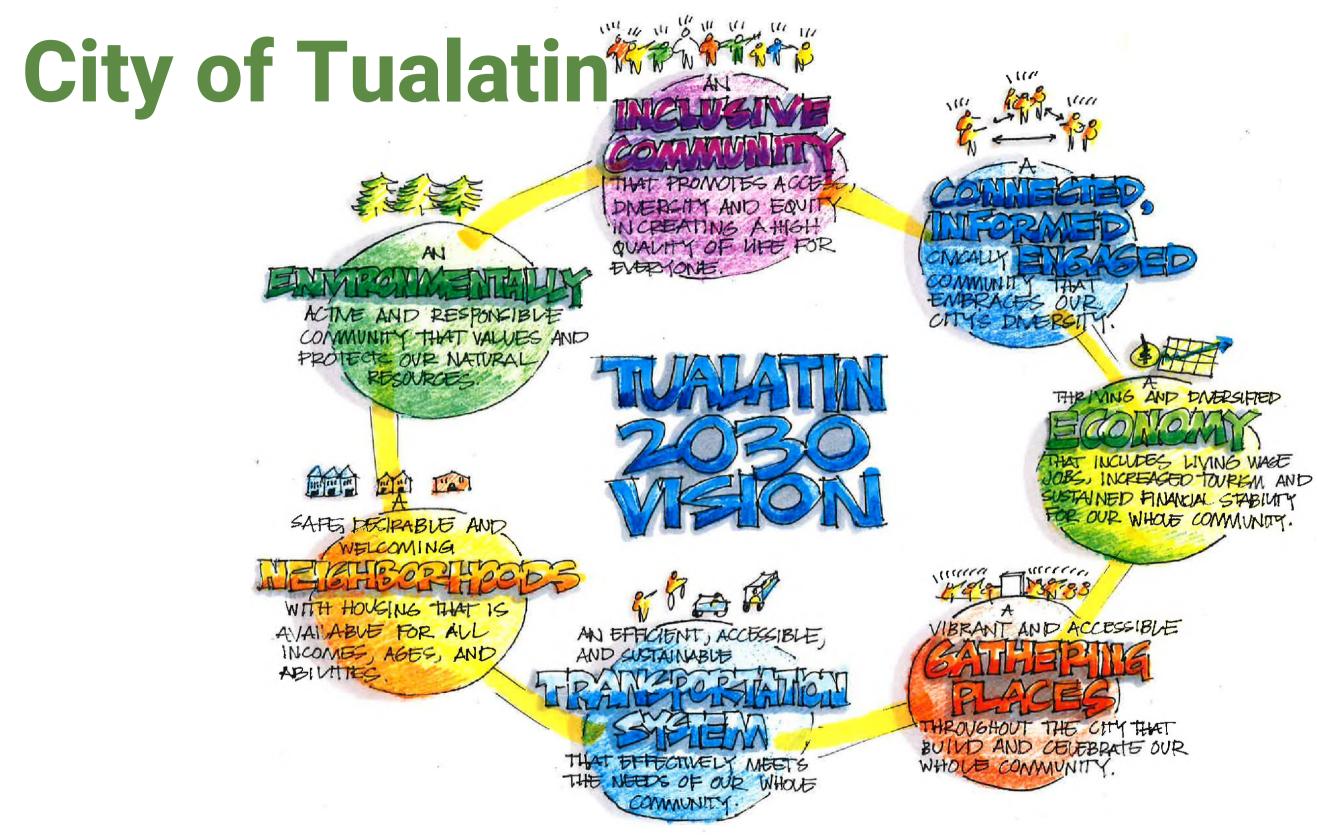
## Washington County-

Convenes the Partners for a Sustainable Washington County Community, a coalition

of 15 cities and organizations in Washington County, including Tualatin.

## Metro-

Metro Policy Advisory Committee (MPAC) and Joint Policy Advisory Committee on Transportation (JPACT) finalized a recommendation to the Metro Council on the Climate Smart Strategy and supporting actions in 2014.



#### CITY OF TUALATIN



# **Plan Composition**

## **Types of Plans**

## Community

Community-based plans focus on community infrastructure or development to reduce communitybased emissions, often incorporating partners within the community and requires public involvement.

### Example:

• Support distributed solar energy development. (Corvallis)

## Internal

Operational, internal, or municipal based plans focus explicitly on actions that can be taken regarding city operations to either mitigate effects of or adapt to climate change.

Example:

• Enhance production of on-site solar energy from City facilities. (Ashland)

## **Common Components**



### **GHG Inventory**

If a GHG inventory is conducted, emissions will fall within 3 scopes. If a GHG inventory is not conducted, there are still known actions a city can take in order to reduce emissions.





## Equity

Consideration of how the plan is developed and who is involved as well as who will benefit or be harmed by the implementation of the plan.

## **Co-Benefits**

Non-Emission reduction-based benefits which the community or city has deemed a priority.

## **Types of Strategies and Actions**



Strategies aim to reduce greenhouse gas emissions by targeting the source of production.

Example:

Work with Clackamas County, TriMet and Metro to develop micro-transit from park-and-ride or light rail station to local destinations. (Milwaukie)





Strategies focus on long-term actions to adapt to climate change impacts.

### Example:

Manage forests to retain biodiversity, resilience, ecosystem function and services. Use best available science to inform fire management and planning. (Ashland)

## **Sequestration**

Strategies focus on developing/increasing "sinks" that capture or store gases, such as forests and soil.

Example:

Increase tree canopy to 40% by 2040. (Milwaukie)



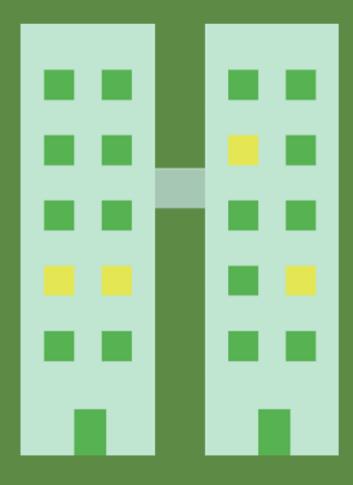
## **Targeted Areas for Strategies and Actions**

## **Buildings and Energy**

This section focuses on the efficient use of energy by city-owned buildings and community use of energy in new development as well as opportunities to retrofit existing buildings.

Example Actions:

- Develop a community solar project hosted at a city facility. (Beaverton)
- Engage NW Natural to develop strategy for becoming "net zero" from natural gas by 2040. (Milwaukie)
- Target an Energy Use Intensity of 22 (Net Zero) for all new City facility/redevelopment projects. Partner with Energy Trust of
- Oregon, Path to Net Zero program on new construction. (Lake Oswego)
- Reduce the total energy use of all buildings built before 2010 by 25%.
  (Portland)



## **Urban Form & Land Use**

It often considers housing, increasing density and opportunities for policy changes. The compact layout or density of a city impacts transportation emissions.

**Example Actions:** 

- Develop code to encourage passive house design. (Beaverton)
- Implement variable system development charges to encourage ADU development. (Milwaukie)

## **Transportation**

- **Example** Actions
  - Support school bus fleet electrification and the installation of fast charging equipment. (Beaverton)

  - Promote sidewalk credit purchases outside of pedestrian corridors. (Milwaukie)
  - employees. (Lake Oswego)

Land use and transportation planning are intimately connected. Strategies and actions in these sections aim to create more options for better and more efficient transportation and consider opportunities for investment in public transit.

- Set targets for EV adoption by 2035. Publish status
  - annually on the City's website by 2021. (Eugene)
- Continue to provide Universal Transit passes to City

### **Consumption & Waste Management**

This section eals with consumer choices and waste and materials management. It explores strategies to reduce environmental impact of the lifecycle of goods from manufacturing, packaging, distribution, product use and associated energy demands as well as disposal.

### Example Actions:

- Increase business participation in food donation and food scraps collection program. (Beaverton)
- Explore technologies that reclaim water, harvest grey water, rain water and energy waste at City facilities.
   Rainwater harvest demonstration, FY 20-22 Water
   Conservation Program. (Lake Oswego)
- Prepare for state rule change that all multifamily tenants have opportunity to recycle by 2025. (Eugene)

### **Natural Resources**

This category addresses green spaces, water, sometimes food, and natural systems that support soil, air, water, plants, and animals. Usually this section talks about watersheds and water sources, forested areas and other green spaces. This section also most often covers sequestration methods and opportunities.

Example Actions:

- Enhance street tree strategy- increase water retention,
  - mitigate heat effect. (Beaverton)
- With Tree Board, develop tree planting program focused on low income neighborhoods. (Milwaukie)
- Retrofit city facilities with green infrastructure. (Corvallis)

## **Climate Resilience/Preparedness**

Strategies and actions in this section aim to improve the community's overall ability to bounce back from climate related events (acute or ongoing) as well as to be prepared for and minimize negative impacts of climate related emergencies.

### Example Actions:

- Utilize relevant vulnerable populations maps, develop an outreach plan to engage vulnerable populations to be two-weeks-ready with emergency supplies by 2023. (Eugene)
- Partner with organizations to host community sustainability education events in public spaces. (Lake Oswego)

## **Public Health**

### Example Actions:

- Develop wildfire smoke rescue centers. (Beaverton)
- Develop public flood/fire risk zone maps and implement signage on streets. (Milwaukie)
- (Corvallis)

Acute events and increased and prolonged heat, dramatic weather events and other ongoing factors have health implications. Actions in this section prepare for both the mitigation as well as adaptation/response to such events in order to promote a healthy and resilient community.

- In case of outages, ensure backup generator operability;
  - investigate transition to non-fossil fuel alternatives.

# **Components Matrix**

			Plan	Туре	Target Areas						Strategy Type			
					Buildings		Consumption	Public	Urban Form	Resilience/	Natural			
City	Year	Pop.	Community	Operational	& Energy	Transportation	& Waste	Health	& Land Use	Preparedness	Resources	Mitigation	Adaptation	Sequestration
<u>Ashland</u>	2017	20,912	V	V	V	V	V	$\checkmark$	V	V	$\checkmark$	V	V	V
<u>Beaverton</u>	2019	98,951	V	Separate	<b>√</b>	V	V	V	V	٧		V	V	
Bend	2020	97,519	V	Separate	V	V	V	$\checkmark$				$\checkmark$	V	
<u>Corvallis</u>	2016	57,213	V	V	<b>√</b>	V	V	V	V	٧	V	V	٧	
<u>Eugene</u>	2016/20	171,245	V	Separate	V	$\checkmark$	V		V			V	V	V
Lake Oswego	2020	38,705	V	V	V	V	V	V		٧	V	V	V	
<u>Milwaukie</u>	2018	20,955	V	V	V	V	V	V	v	V		V	V	V
<u>Portland</u>	2015/20	812,855	V	V	<b>√</b>	V	V	V	V	٧	V	V	V	V

# **Plan Development**

City	Cost \$	% Engagement	GHG Inventory \$	Timeframe	
Ashland	130 K	~40%	37К	18 months	
Bend	150K	-	-	18 Months	
Beaverton	90K	NA	9К	3 years	
Corvallis*	200K	-	-	18 months	
Lake Oswego	110K	-	NA	3 years	
Milwaukie	150K	~40%	_	18 months	
Salem	52k-160k estimate	-	_	Ongoing	
Clackamas	200K	~40%	25K	Ongoing	

## Considerations

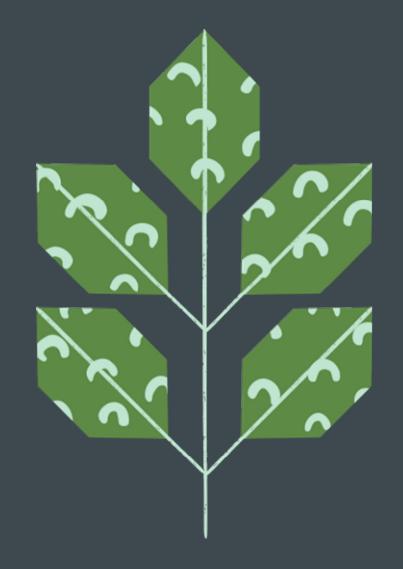
OPTION A Community Plan GHG Inventory Operational Plan OPTION B Community Plan GHG Inventory Operational Plan

## OPTION C Community Plan GHG Inventory Operational Plan

## Considerations

## WHICH TARGET AREAS ARE MOST IMPORTANT?

**Buildings & Energy Urban Form & Land Use Transportation Consumption & Waste Natural Resources Resilience/Preparedness Public Health** Other?



## **Questions and Discussion**