



# **PLANNING COMMISSION**

## **WEDNESDAY, JANUARY 8, 2025**

### **WORK SESSION**

1. Climate Action Plan (Rappold)(60 Minutes)



**PLANNING COMMISSION MEETING  
STAFF REPORT**

<b>Meeting Date:</b> January 8, 2025		<b>Subject:</b> Climate Action Plan	
		<b>Staff Member:</b> Kerry Rappold, Natural Resources Manager	
		<b>Department:</b> Community Development	
<b>Action Required</b>		<b>Advisory Board/Commission Recommendation</b>	
<input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 <sup>st</sup> Reading Date: <input type="checkbox"/> Ordinance 2 <sup>nd</sup> Reading Date: <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Information or Direction <input type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda		<input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input type="checkbox"/> Not Applicable	
		<b>Comments:</b> N/A	
<b>Staff Recommendation:</b> Provide input on the proposed Climate Action Plan and planning process.			
<b>Recommended Language for Motion:</b> N/A			
<b>Project / Issue Relates To:</b>			
<input checked="" type="checkbox"/> Council Goals/Priorities: Develop a climate inventory and gap analysis of city practices and operations and engage the community to build awareness of climate friendly practices.	<input type="checkbox"/> Adopted Master Plan(s):	<input type="checkbox"/> Not Applicable	

**ISSUE BEFORE COUNCIL:**

The City Council goals for FY 2023-25 include developing a Wilsonville Climate Action Plan. Staff will provide an overview of the planning process for the Climate Action Plan (CAP).

**EXECUTIVE SUMMARY:**

In August, staff and the consultant (Sustainability Solutions Group - SSG) kicked off the planning process for the CAP. The CAP provides a roadmap for achieving net-zero greenhouse gas (GHG) emissions and will include the following steps in developing the Plan:

1. Context review: The review of key strategic documents to understand Wilsonville's city and climate planning, as well as state legislation and other climate plans.
2. Data input and GHG inventory: The inventory will include the energy use and emissions within Wilsonville's city boundaries, and an update and refinement of data and modeling previously completed for the Clackamas County Climate Action Plan.
3. Model calibration: The calibration will identify the activities producing GHG emissions by sector and target emission reduction measures for specific activities.
4. Business-as-Usual (BAU) and Business-as-Planned (BAP) scenarios: The BAU scenario will provide the annual energy consumption and emissions through 2050 by traffic zones and neighborhoods across the city. The BAP scenario will reflect the additional impact on energy use and emissions of key county, state, and federal policies.
5. Strategies and actions: A list of "low carbon" actions and policy options will be identified and refined for geographic rollout, equity improvement, and to optimize co-benefits for the city.
6. Draft low-carbon scenario: The selected set of "low carbon" actions will be modeled for their energy and emissions impacts between the baseline and target years. The scenario will include year-over-year energy and emissions projections associated with implementation of the emission reduction actions.
7. Final low-carbon (best fit) scenario: The final scenario will outline how the City can achieve its emission reduction targets in relation to existing policies, regulations, plans, and investments, and will provide a viable, sector-by-sector action pathway for reducing community emissions.
8. Draft and final plans: The CAP will include the following information:
  - a. Descriptions of local context, existing conditions, targets, and legislation that will affect climate action in Wilsonville.
  - b. Identify key expected impacts of climate change to local conditions in Wilsonville in future decades.
  - c. Outline the community's projected energy use and emissions in the BAU, BAP and "low carbon" scenarios, and provide a clear pathway of the modeled actions, and the timeline to achieve a net-zero future in Wilsonville.
  - d. An appendix with data, methods, and assumptions.

In addition to the Planning Commission and City Council, a staff advisory committee, comprised of members from Community Development, Public Works, Parks and Recreation, SMART, and Finance, will provide input during the planning process.

On October 13, 2024, staff provided the Planning Commission an introduction to the Climate Action Plan. At this meeting, staff will present the greenhouse gas inventory, BAU and BAP scenarios, and draft low carbon actions.

**Discussion Questions:**

1. Do you have any questions about the greenhouse gas inventory and the planning scenarios?
2. Are there specific low carbon actions you would like to see included?

**EXPECTED RESULTS:**

The completion and adoption of a Climate Action Plan which will focus on reducing the community's GHG emissions, and how these changes can also increase resilience.

**TIMELINE:**

Staff will present the draft and final plans to the Planning Commission for specific input and final adoption by Spring of 2025.

**CURRENT YEAR BUDGET IMPACTS:**

The approved FY 2024-25 Wilsonville budget includes \$70,000 in general funds as part of Project #3007 - Climate Action Plan. A supplemental budget adjustment will be needed to add unspent general funds from FY 2023-24 to the project, which include \$35,000 from Project #3007.

**COMMUNITY INVOLVEMENT PROCESS:**

Community involvement and public outreach will be a key component of the project. Staff welcomes input from the Planning Commission on public engagement activities for the CAP process. A "Let's Talk, Wilsonville!" site has been set up for the project, which included a community survey. Future activities include a public open house and a forum with local businesses scheduled for January 16, 2025.

**POTENTIAL IMPACTS OR BENEFIT TO THE COMMUNITY:**

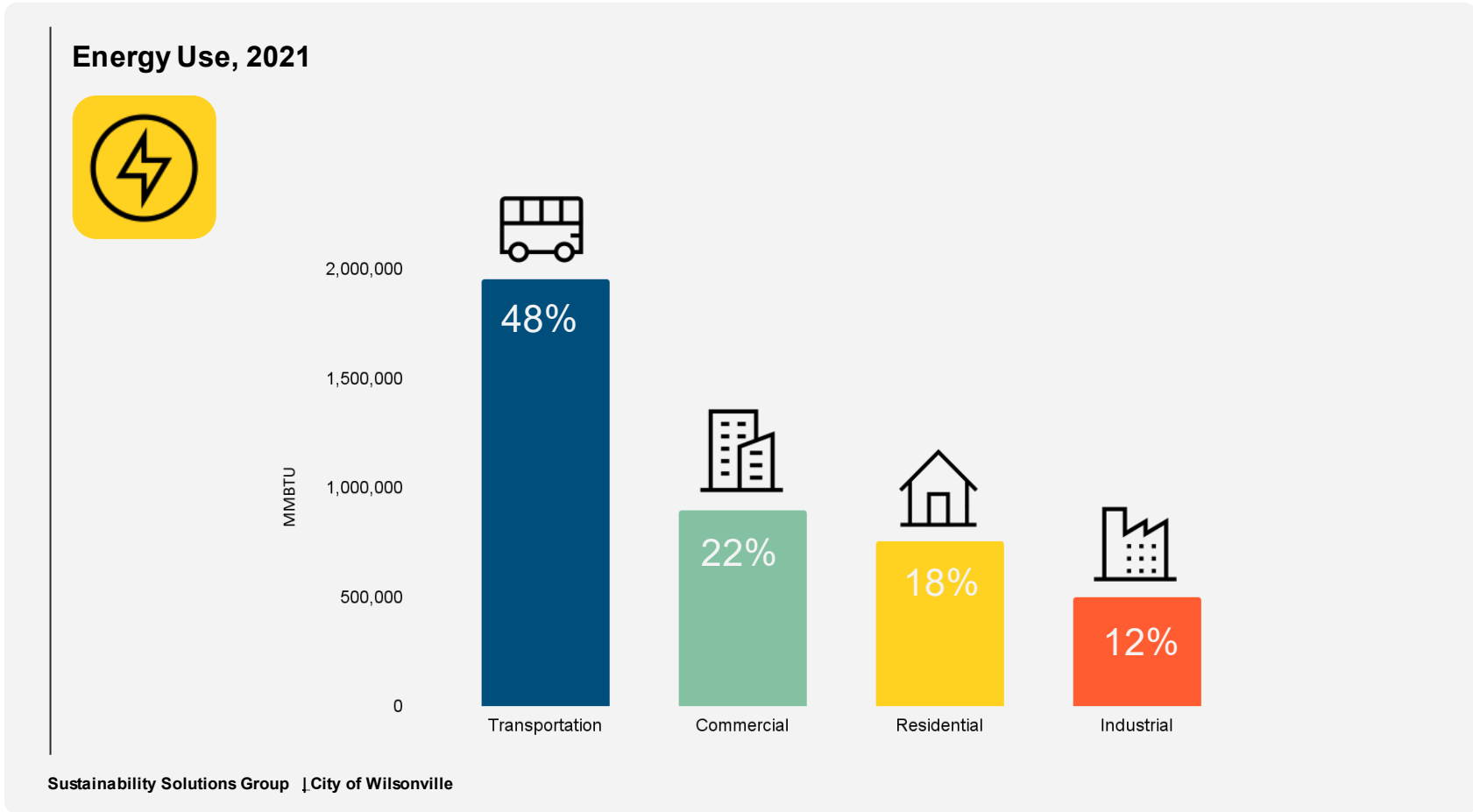
Climate change has the potential to affect the lives and livelihoods of every resident. Developing a Wilsonville Climate Action Plan will provide the opportunity to explore options for reducing greenhouse gas emissions and identifying actions that address climate change.

**ALTERNATIVES:**

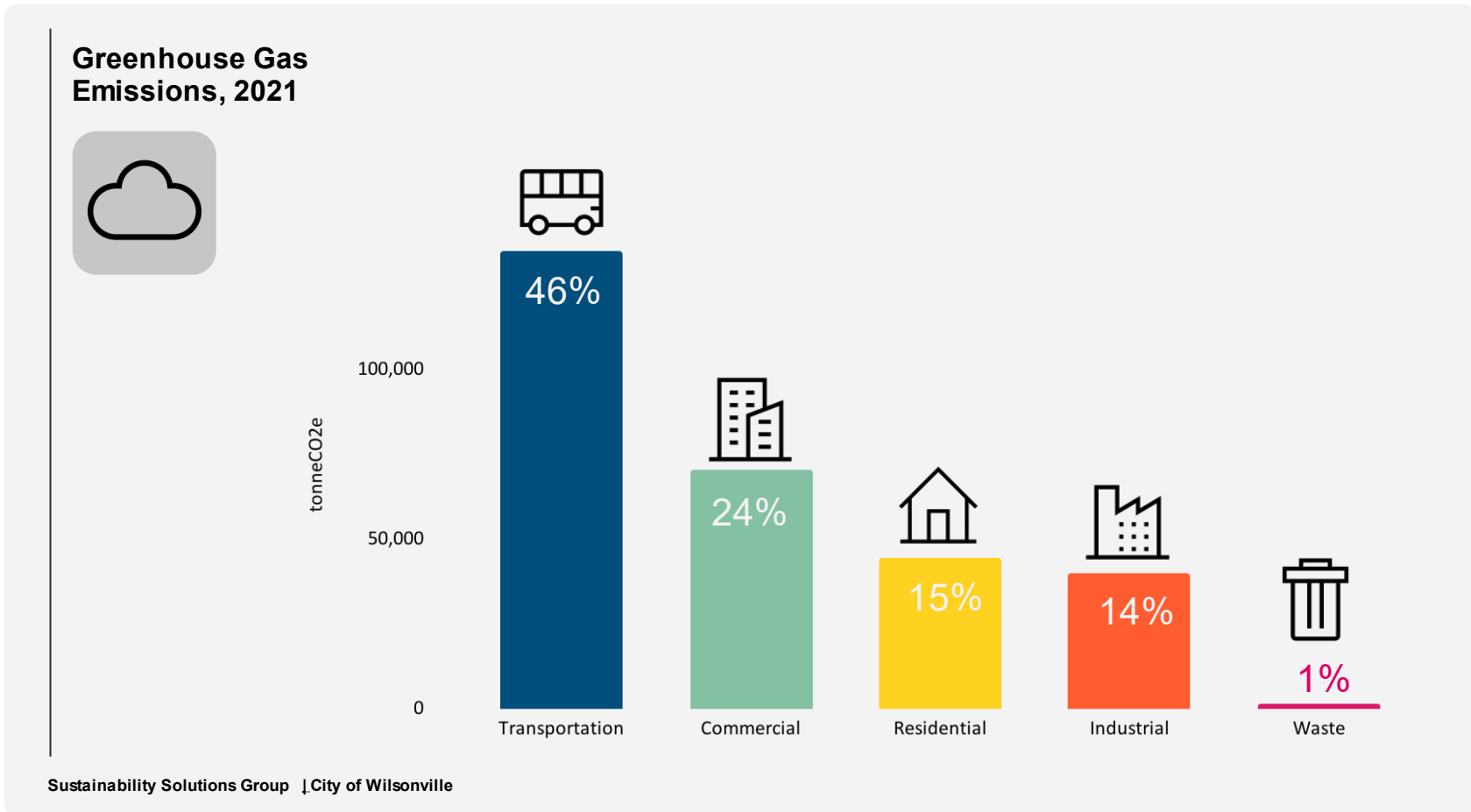
N/A

**ATTACHMENTS:**

1. GHG Inventory, BAU and BAP scenario assumptions, and draft low carbon actions



# GHG Inventory (City of Wilsonville - 2021 Emissions)



# Business-as-Usual, Business-as-Planned, and Low-Carbon Scenario Assumptions

Assumptions by Scenario				
Category	BAU Assumptions	BAP Assumption	LCS Assumption	Source(s)
<b>Climate</b>				
Changes in Climate	- Decrease in Heating Degree Days from 6,200 to 5,600 by 2050 - Increase in Cooling Degree Days from 200 to 350 by 2050	Same as BAU	Same as BAU	Climate Explorer, National Environmental Modeling and Analysis Center
<b>Demographics</b>				
Population Growth	- Increase by 14% between 2019 and 2039 - 3,373 new residents and 1,752 new households	Same as BAU	Same as BAU	Equitable Housing Strategic Plan (2020)
Employment Growth	- Increase from 20,091 jobs in 2015 to 27,207 jobs in 2040	Same as BAU	Same as BAU	Oregon Department of Transportation
<b>Energy</b>				
Grid Emissions Factor	- Existing emissions factor - PG&E's 2018 power mix: 2018 Power Mix. -- Renewable - 39% -- Nuclear - 34% -- Natural gas and other fuels - 15% -- Large hydro - 13%	Reduction in emissions from electricity grid  80% reduction by 2030, 90% reduction by 2035 and 100% reduction by 2040 relative to baseline	Same as BAP	Oregon's Clean Energy Bill (2021)
Renewable Energy Procurement	- Wilsonville continues to purchase renewable energy for community to meet EPA's Green Power Communities program's requirements that 10% of the community's electricity to come from green sources-	Same as BAU	TBD.	City of Wilsonville
<b>Buildings</b>				
New Building Performance	Existing building standards.	Improvements to residential and commercial building codes every 5 years  Begins with 8.5% energy efficiency gains in 2024 over 2019, with an additional 5.7% gain in 2028, with new code gains at ⅔ of previous gain	TBD.	State of Oregon
Existing Building Performance	Existing building performance.	1.5% of existing stock is weatherized each year, resulting in a 15% improvement per building	TBD.	Oregon's Healthy Homes Repair Fund
<b>Transportation</b>				
Electrify Light-Duty Vehicles	- Existing vehicle population - Proportion of vehicles in Oregon, 2022 -- Electric Vehicles - 1.2% -- Plug-in Hybrid Electric - 0.6% -- Hybrid Electric - 3.7% -- Other - 94.5%	By 2035, all new passenger cars, SUVs, and light-duty pickup trucks must either be battery electric or plug-in hybrid electric vehicles	TBD.	Oregon's Clean Car Standards; Alternative Fuels Data Centre
Electrify Medium & Heavy-Duty Vehicles	Existing vehicle population.	- An increasing percentage of new medium- and heavy-duty vehicles must be ZEVs beginning in 2025 - Ranges from 7% in 2025 to 75% in 2035, depending on the vehicle class	TBD.	Oregon's Clean Truck Rules
Fuel Standards	Existing fuel standards.	The average carbon intensity of gasoline and diesel decreases by 20% by 2030, and by 37% by 2035 relative to 2016	Same as BAP	Oregon's Clean Fuels Program
Replace transit buses	Existing transit buses.	Replace all buses with alternative fuelled vehicles (electric, compressed natural gas) by 2028 - 5 CNG Buses - 5 Electric Buses	TBD.	SMART Climate Action Plan
Mode shift	Current mode share will be extracted from the Oregon Metro four-step trip based travel behavior model once the Wilsonville model is calibrated.	Use the walking, cycling, and transit mode shares from the Oregon Metro four-step trip based travel behavior model. Data was provided for 2015, 2027 and 2040	Metro has identified performance targets for non-driving mode share percentages, which is to triple the walking, biking, and transit mode shares by 2040 compared to 2015.	Replica, from Wilsonville Performance Update 2023; Transportation Master Plan, SMART Climate Action Plan, SMART Safe Routes
<b>Land Use</b>				
Building Growth	- Demand for 2,476 new homes between 2019 and 2039, including 990 multi-family, 1,238 single family detached, and 248 single family attached	Same as BAU.	TBD.	Equitable Housing Strategic Plan (2020)
Tree Canopy	- Existing tree canopy coverage: 30% - 25,954 street trees	Increase tree canopy by 6% to 36% by 2046 by planting 27,000 new trees	TBD.	Urban Forest Management Plan

**Draft Actions  
for Wilsonville**

**30% of new housing developed in Town Center**



**50% thermal savings & 10% plug load savings in all existing buildings**



**25% of new buildings are zero energy ready by 2030, and 50% by 2040**



**100% of new light-duty fleet vehicles electric by 2030**



**Mode shift to:  
30% carpool,  
6% walk or bike,  
7% transit**



**20% reduction in industrial energy use through energy efficiency improvements**





Draft Low Carbon Actions

**Draft Actions  
for Wilsonville**

**100% of new  
buildings include  
solar PV by 2050**



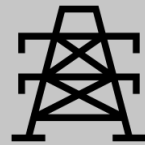
**30% of customers  
procure carbon -free  
electricity by 2030**



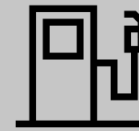
**50% of organic  
waste diverted  
from landfill by  
2030**



**100% renewable  
electricity  
generation by  
2040**



**90% of emissions  
from natural gas  
& liquid fuels  
reduced by 2050**



**100% of RNG  
potential captured  
at wastewater  
treatment facility  
by 2035**

