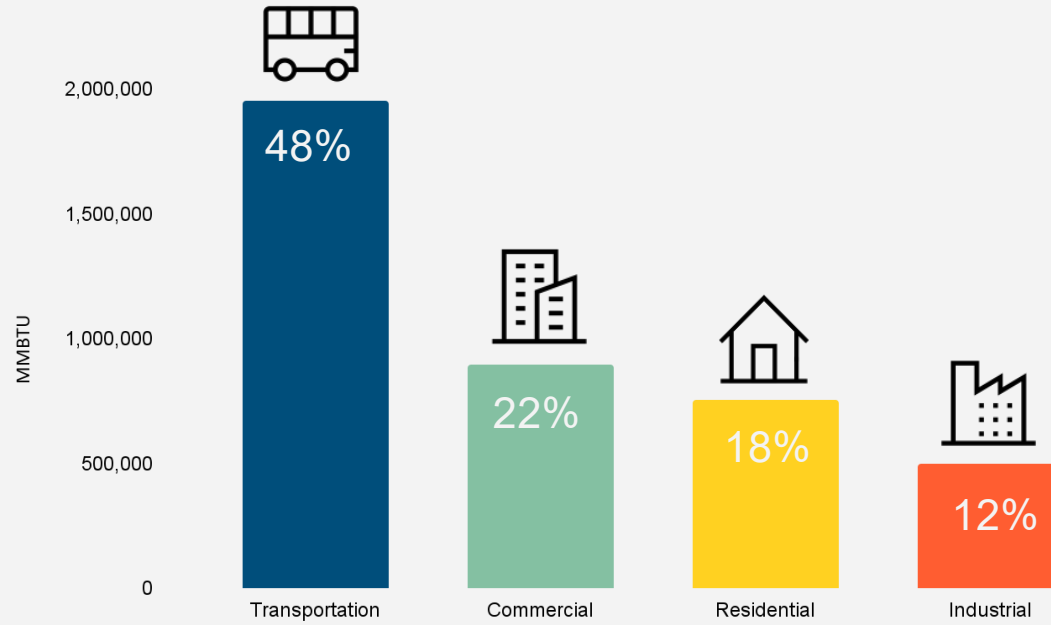


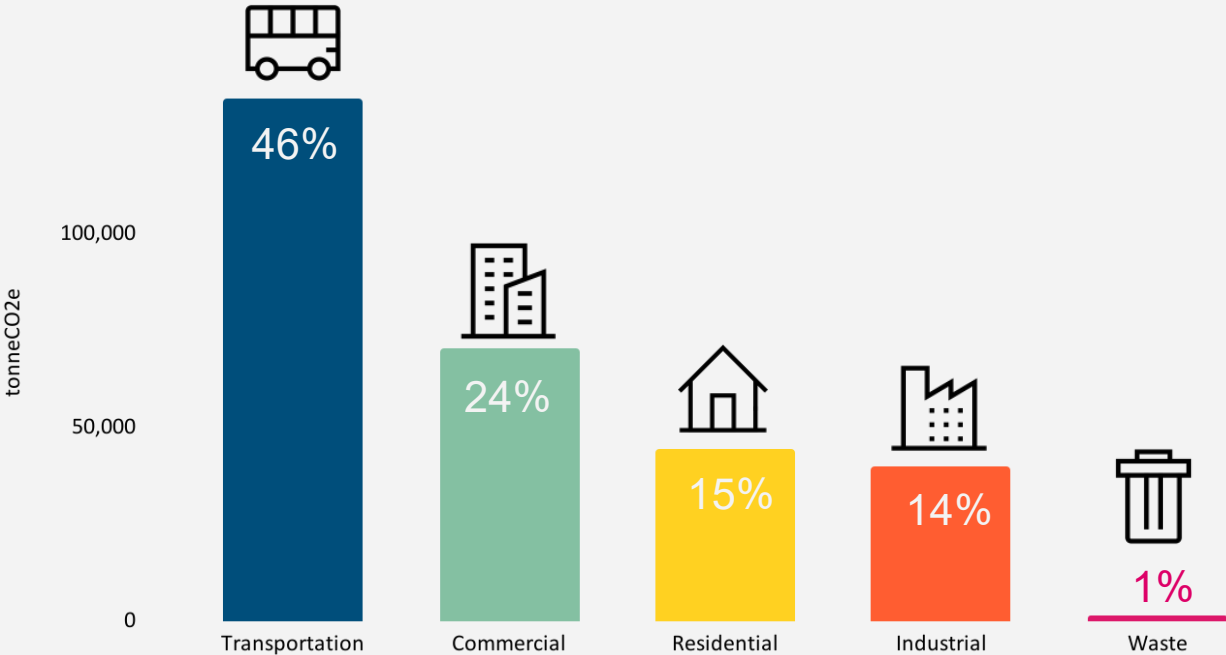
GHG Inventory (City of Wilsonville - 2021 Energy Use)

Energy Use, 2021



GHG Inventory (City of Wilsonville - 2021 Emissions)

Greenhouse Gas Emissions, 2021



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

Assumptions by Scenario				
Category	BAU Assumptions	BAP Assumption	LCS Assumption	Source(s)
Climate				
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
Demographics				
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
Energy				
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
Buildings				
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 ⅓ 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
Transportation				
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
Land Use				
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 Low Carbon Actions

**Draft Actions
for Wilsonville**

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



**Retrofit buildings
to achieve 50%
thermal savings &
10% plug load
savings**



**25% of new
buildings are net -
zero by 2030, and
50% by 2040**



**90% of existing
buildings have air
source heat
pumps by 2040**



**100% of new
buildings include
solar PV* by
2035**



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



Draft Low Carbon Actions

Draft Actions for Wilsonville

**100% of new
light-duty
vehicles electric
by 2035**



**100% of new
heavy-duty
vehicles electric
by 2040**



**Mode shift to:
8% carpool,
14% walk, 12%
bike, 16% transit
by 2040**



**100% of RNG
potential captured
at wastewater
treatment facility
by 2040**



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



**20% reduction in
industrial energy
use**



**Or access to
renewable energy*