

Ashland Climate and Energy Action Plan Progress Report 2019



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City of Ashland, March 2019



Photo: Les Stone

Our climate vision

Ashland’s climate vision for 2050 is to be a resilient community that has zero net greenhouse gas emissions, embraces equity, protects healthy ecosystems, and creates opportunities for future generations.

What’s in this report?

This report is a snapshot of Ashland’s Climate and Energy Action plan. It includes progress made to date and information to help revise implementation strategy.

This report contains the following sections:

- Background
- Overall climate recovery status
- Climate action implementation status
- Major accomplishments since CEAP adoption
- Summary of future objectives
- Implementation update for all CEAP actions (Appendix)

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Executive Summary

Our community has made important advances. Citizens and City staff are more engaged in climate issues than ever before. Despite the unprecedented engagement in climate issues, there is a likelihood that Ashland's collective efforts are not keeping pace with our goals. Despite the significant progress made to date, it is unlikely that Ashland has achieved 8% emission reductions called for in the CEAP. It is too soon to accurately detect changes in our GHG emission trends. It is also important to note that emission trends are impacted by regulatory and enforcement changes at the state and federal level and factor into the calculations that are relied upon to measure our local progress.

The City of Ashland is making meaningful progress on the implementation tasks identified in the Climate Plan, though additional resources would be valuable for sustaining public engagement and incentivizing action.

There are 27 "Phase 1" actions to be completed or significantly underway by 2020. Of these, 16 (59%) are either complete or on track for completion by 2020. There are 10 (37%) in progress and likely continuing past 2020. Only 1 (3.7%) Phase 1 action has not been started.

Significant accomplishments to date include projects and activities in the following areas:

- Making buildings more efficient,
- Planning for Ashland's future,
- Improving transportation,
- Protecting Ashland,
- Making ecosystems healthy.

High Impact opportunities for Ashland to continue climate action include:

- Building on the existing Climate and Energy Action Plan,
- Electrifying home heating and cooling,
- Improving low-carbon mobility options,
- Reducing consumption.

Background

How can we take action on climate change?

Unprecedented global warming has already begun and we will not be able to stop all of the effects. As a society, we need to reverse global warming to reduce the effects of drastic climate change.

There are two key things that we can do:

1. Stop making the problem worse. This means we need to stop emitting carbon dioxide and other substances that create global warming.
2. Prepare for the unavoidable changes that are coming. This means getting our people, places, economy, and environment ready for the future.

Ashland's Climate and Energy Action Plan lays out a foundation for the community to reduce its emissions and improve its resilience to future impacts of climate change on its environment, infrastructure, and people.

Why does the CEAP exist?

Ashland's Climate and Energy Action Plan (CEAP) exists to help manifest Ashland's climate vision for 2050: to be a resilient community that has zero net greenhouse gas emissions, embraces equity, protects healthy ecosystems, and creates opportunities for future generations.

The CEAP is a toolkit to help our community reduce climate altering emissions and prepare our community for climate impacts. It includes a list of strategies and actions that the Ashland community could undertake between 2017 and 2025. The CEAP also establishes climate goals for the Ashland community as a whole, as well as goals for municipal operations.

What is the CEAP trying to accomplish? (Mission)

The CEAP highlights the initial steps on a path to reduce Ashland's carbon pollution almost 95% below 2015 levels by 2050.

Our community has selected two overall goals:

1. Reduce our community's carbon pollution.
2. Prepare for local impacts of climate change.

Reduce Carbon Pollution

In climate science, the reduction of climate altering emissions is often called "mitigation". The CEAP identifies two specific carbon reduction objectives:

1. For the Ashland community: Reduce overall Ashland community greenhouse gas emissions by 8% on average every year to 2050.
2. For City of Ashland operations: Attain carbon neutrality in City operations by 2030, and reduce fossil fuel consumption by 50% by 2030 and 100% by 2050.

Adapt to a Changing Climate

Getting ready for climate change is often called "adaptation". The CEAP identifies a number of general strategies and actions to help Ashland prepare for a changing climate. Adaptation work is especially valuable because it often has direct implications for citizens and infrastructure. The

CEAP offers several starting points to begin adaptation work, but does not establish detailed overall adaptation goals. Additional work is needed to expand, clarify, and prioritize the community's adaptation needs and desired outcomes. The soon-to-be created Climate Policy Advisory Commission will play an important role in further developing our Adaptation goals.

Why 8% Reductions

The Ashland Climate and Energy Action plan sets a community-wide goal consistent with that of the city of Eugene, Oregon, which is to achieve a 7.6% annual reduction in community-wide greenhouse gas emissions. This target was developed using a global-equity, carbon budget approach that calculated reductions needed to achieve a global atmospheric carbon dioxide concentration of 350 ppm by 2100.

Link: <https://www.ashland.or.us/Files/ScienceBasedTargetsInformation.pdf>

Who created the CEAP?

The CEAP was collaboratively developed over 18 months by Ashland citizens, City government staff, local businesses, and other regional organizations. The current CEAP was adopted by the City Council in 2017. The City releases a progress report for the CEAP each year detailing climate action progress, plans, and problems encountered.

Link: <https://www.ashland.or.us/Page.asp?NavID=17630>

Is Ashland achieving its climate recovery goals?

Progress

Our community has made important advances; our citizens and City staff are more engaged in climate issues than ever before. Despite the unprecedented engagement in climate issues, there is a strong possibility that Ashland's collective efforts are not keeping pace with our goals. Despite the significant progress made to date, it is unlikely that Ashland has achieved 8% emission reductions since the CEAP was adopted.

It is too soon to accurately detect changes in our GHG emission trends. Updated GHG inventory data are not yet available and do not completely reflect events happening on the ground; local policies are too new to have had an effect; and, some of the data are uncertain. Two separate GHG inventory updates are scheduled in 2019, covering sector- and consumption-based emissions respectively. Once complete the GHG inventory updates will outline a more complete picture of Ashland's climate altering emissions, and will provide some basis for comparing against previous years.

There are still ways to gauge progress even though the most recent emissions estimates are not yet available. We can assess the degree of implementation for CEAP's 65 identified climate actions. In addition, we can infer trends from electric utility data, natural gas consumption, and electric vehicle adoption.

Our overall climate goal is based on an average annual reduction of 8%. For short term planning and progress evaluation, it is helpful to clarify the specific drawdown scenario the CEAP suggests. Both CEAP and the associated Climate Recovery Ordinance (CRO) were adopted in 2017. Inventory year 2018 will therefore be expected to be 8% below the 2015 baseline. The table below illustrates Ashland's drawdown scenario under the adopted CEAP goals.

Table 1. Ashland emissions drawdown by year

Plan Year	GHG Inventory Year	GHG Emissions mtCO2e	Change %	Key publications	Notes
-2	2015	342480	--	--	Baseline GHG Year
-1	2016	TBD	--	2011-2015 GHG Inventory	CEAP development
0	2017	TBD	0%	Climate and Energy Action Plan 2017	CEAP / Ordinance adopted
1	2018	315082	-8%	Progress Report 2019	8% below 2015
2	2019	289875	-15%	2016-2018 GHG Inventory update	15% below 2015
3	2020	266685	-22%	CEAP update	22% below 2015

The 8% GHG reduction goal was used to calculate Ashland's overall emissions target for the year 2020. To meet the adopted goals, Ashland's emissions in the year 2020 will need to be 22% lower than in 2015, or approximately 266,685 mtCO2e.

In addition to overall GHG goals, the CEAP presents goals for each of the six focus areas. Where appropriate, the 8% emissions goal was used to calculate 2020 targets for focus area goals.

City Staff is finalizing the "sector" inventory for the 2016-2018 period, which will be published in mid-2019. The sector inventory calculates emissions from within Ashland's jurisdiction, as well as from power generation and disposal of waste.

Staff have access to high quality utility data which will help to assess short term progress in the Buildings and Energy focus area. (For simplicity, and because final 2018 estimates are not available, the analyses below do not account for population change between 2015 and 2018, which is estimated to be approximately +2%.)

Natural gas trends – Ashland's use of natural gas increases and decreases according to seasonal heating needs. Not accounting for weather effects, gross natural gas use has increased 12% in Ashland compared to 2015.

Normalizing the natural gas data for heating demand helps to roughly separate the weather-related trends from the overall consumption trends. Accounting for the effects of winter heating, natural gas use has declined approximately 0.5%. Factoring in a modest population

growth, Ashland’s per capita gas use may be declining slightly. Additional analysis will be possible when the GHG inventory update is complete.

Most important to know for this progress report, Ashland will need to decrease natural gas use a much faster rate to keep pace with adopted climate goals.

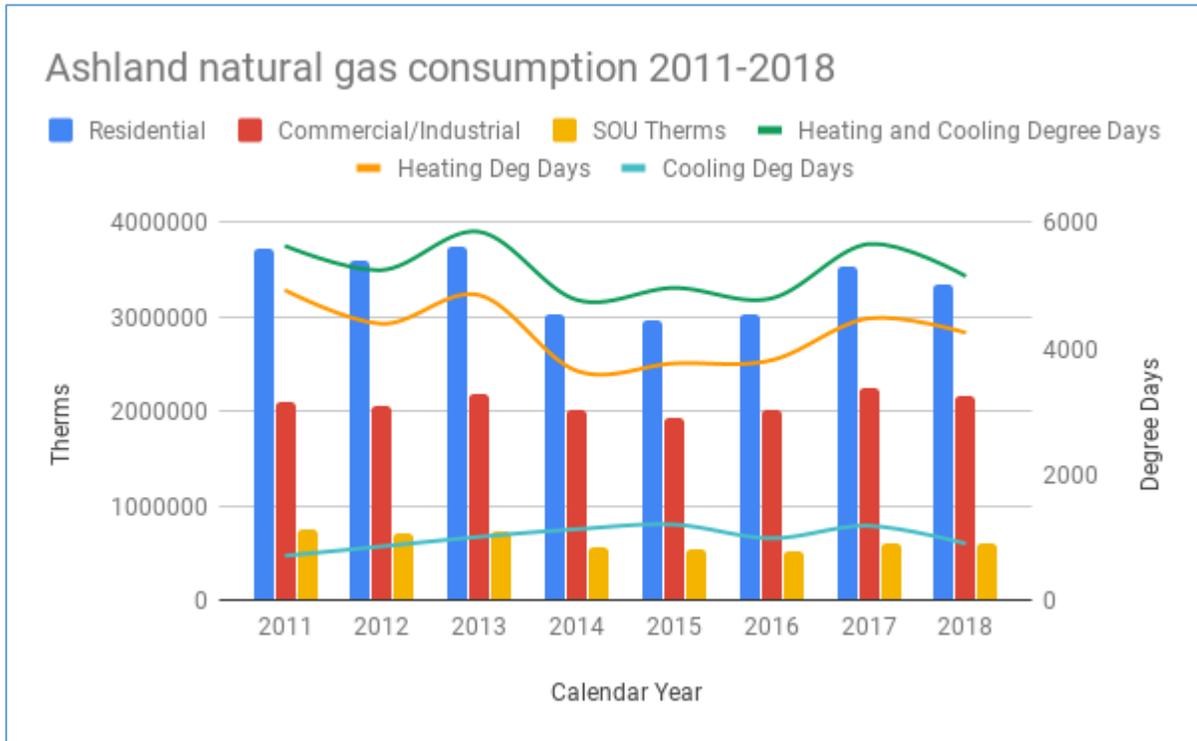


Figure 1. Ashland natural gas use by year.

Electricity trends – Moving away from fossil fuels will increase Ashland’s electricity use, while conservation efforts will create electricity savings. Taken together, Ashland’s electricity use is projected to stay relatively flat in coming years. Not accounting for weather effects, Ashland’s electricity use has increased 3.9% compared to 2015.

Normalizing the electricity data to account for seasonal heating and cooling loads, Ashland’s electricity use is nearly the same as in 2015.

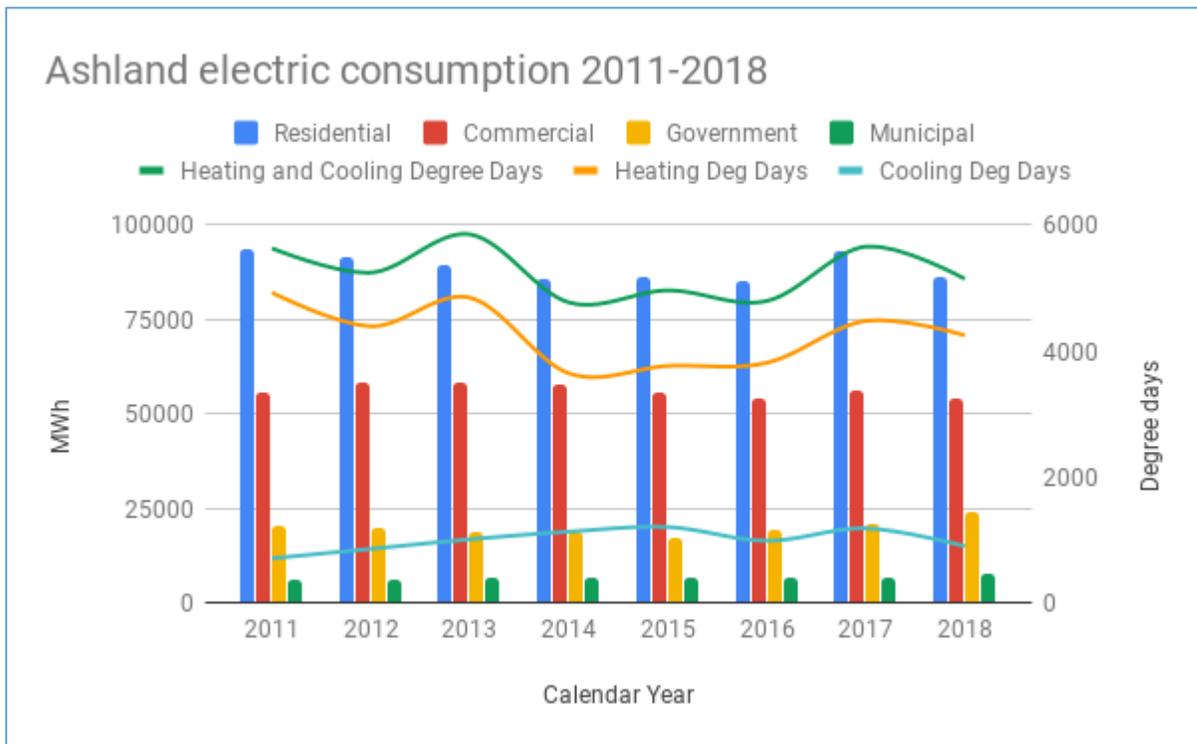


Figure 2. Ashland electricity use by year.

Transportation trends – There is much to be hopeful for in the Transportation sector, which is electrifying faster than anticipated. The transition to electric vehicles is especially pronounced in Ashland as seen by our unusually high adoption rate. The table below is based on ODEQ vehicle registration data (from June 2018) and compares the number of electric and plug-in hybrid vehicles in Ashland to available County data. Care must be taken when comparing City and County-level data, as there are significant differences in geography and demographics.

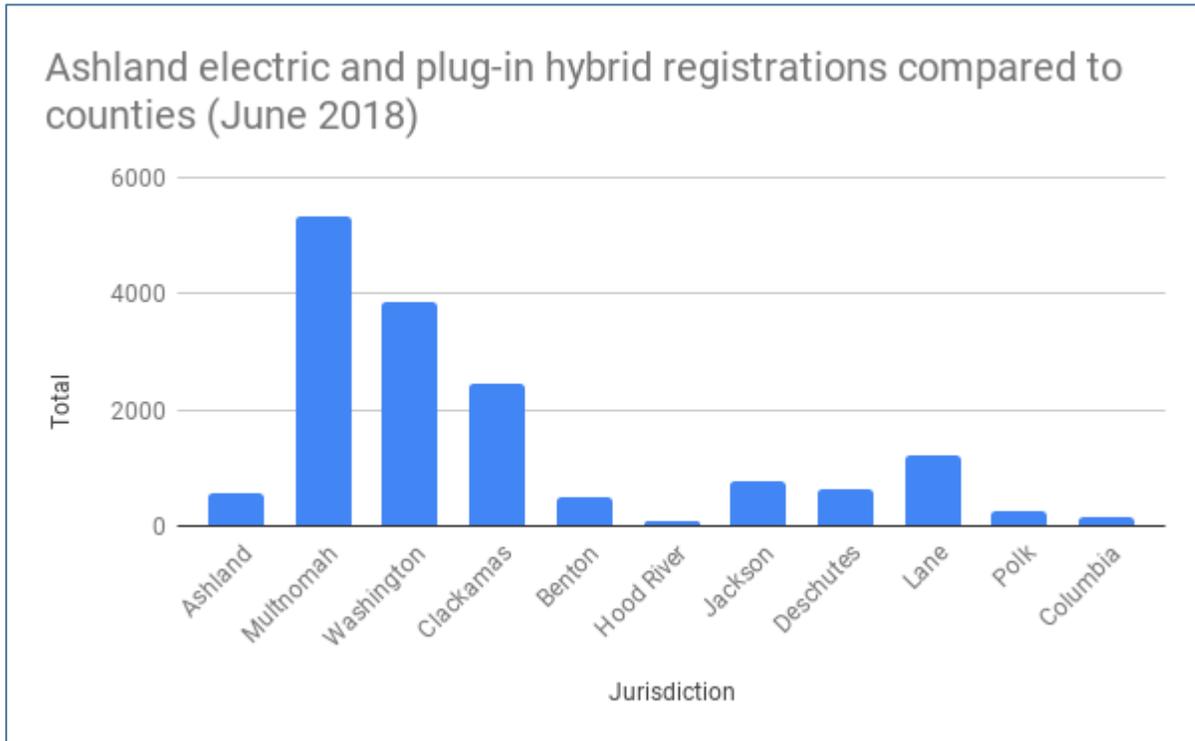


Figure 3. Ashland electric and plug-in hybrid registrations.

Source: <https://www.oregon.gov/deq/FilterDocs/CFP-electricvehicles.pdf>

Although Jackson County EV adoption is similar to other rural counties, the capita number low emission vehicles per capita in Ashland is much higher than average.

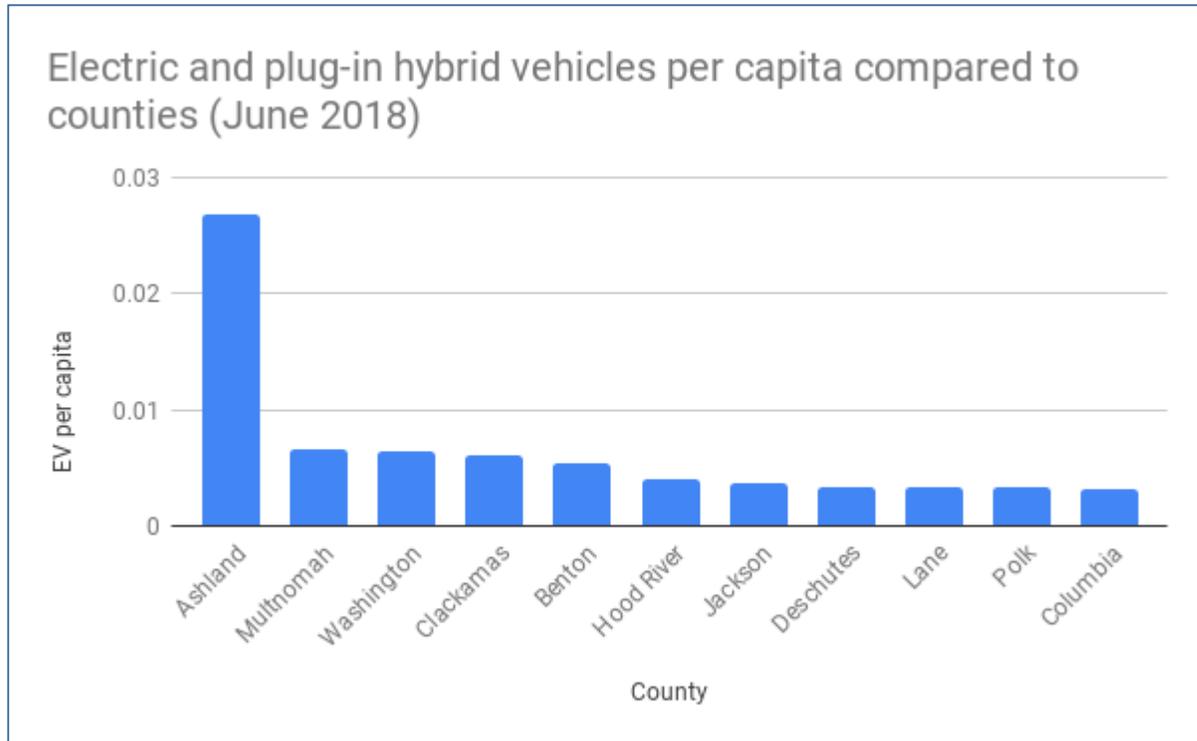


Figure 4. Electric and plug-in hybrid vehicles per capita.

Source: <https://www.oregon.gov/deq/FilterDocs/CFP-electricvehicles.pdf>

Consumption and Materials trends – Consumption emissions represent nearly half of Ashland’s estimated GHG, but there is little quantitative, Ashland-specific data available to give us a detailed understanding of local consumption. However, City of Ashland is coordinating with ODEQ to improve estimates of consumption-based emissions. The State of Oregon has emerged as a leader in the field of Consumption emissions and our City will benefit by relying on State resources. A more accurate understanding of Consumption emissions will help design local policy and educational efforts.

There has been significant activity at the grassroots level to help address Ashland’s consumption emissions. Local advocacy and volunteer groups, such as SOCAN and Pachamama-Drawdown, are mobilizing community-based climate programs. Sustained peer-to-peer educational efforts will be critical if Ashland is to reduce consumption-based emissions.

Plans

Ashland’s current City Council has reaffirmed climate action as an established priority goal ahead of the upcoming 2019-2021 budget cycle. Top-level leadership will be an essential element of successful climate action. There are numerous opportunities for climate action; Staff and CEAP supporters are preparing for a busy 2019.

City Council recently approved the creation of a new Climate Policy Advisory Commission and a refocused scope of work for the existing Conservation Commission. Both commissions will support the CEAP and will provide new opportunities for citizen-stakeholders to engage in climate action.

Ashland's "consumption-based" inventory is planned for update in 2019 and will be completed in collaboration with Oregon DEQ, who are on the leading edge of CBEI estimates. Consumption emissions include annual GHG from everything the community eats and buys.

Problems

As with any policy, full integration of CEAP goals into City operations will require time and resources. Additional resources are required for the direct implementation of CEAP, as well as for short-term, incremental costs of doing business in a climate friendly manner.

How and whether the community of Ashland meets its climate goals will depend on our values, and how we prioritize the use of resources. It is no simple task and prioritizing community actions often requires trade-offs and compromise.

Inventory protocols are constantly improving, but currently the GHG inventory protocols are more suited to assessing long-term trends. It is not an ideal tool for measuring short-term progress. Prevailing GHG methodologies still partially rely on uncertain, modeled data that has is not Ashland specific. Uncertainties and data gaps must be acknowledged when comparing GHG inventory years to gauge progress. Because of modeled data and inherent uncertainties, local climate action is not automatically reflected by the GHG Inventory. When measuring progress on climate action, it is important to evaluate specific progress indicators in addition to the overall GHG emission estimates.

Are we making progress in taking climate action? (CEAP action status)

Progress

The City of Ashland is making meaningful progress on the initial implementation tasks identified in the Climate Plan, though additional resources would be valuable, especially for sustaining public engagement and incentivizing action.

The ad-hoc CEAP Implementation Committee, formed of Ashland citizens, helped to advise on initial Climate Plan implementation over the course of 2018.

The Ashland Community is more organized than ever, as shown by the many climate-action groups currently at work in our community. Many Ashland residents are taking positive climate action by electrifying their vehicles and homes, as well as by adopting more mindful consumption practices.

There are 27 "Phase 1" actions to be completed or significantly underway by 2020. Of these, 16 (59%) are either complete or on track for completion by 2020. There are 10 (37%) are in progress and likely continuing past 2020. Only 1 (3.7%) Phase 1 action has not been started.

Table II. Status of CEAP Actions.

Status	Phase 1	Phase 2	Total
Complete	1	2	3
In-progress, complete by 2020	15	9	24
In-progress, continuing past 2020	10	14	24
Not Started	1	13	14
Total	27	38	65

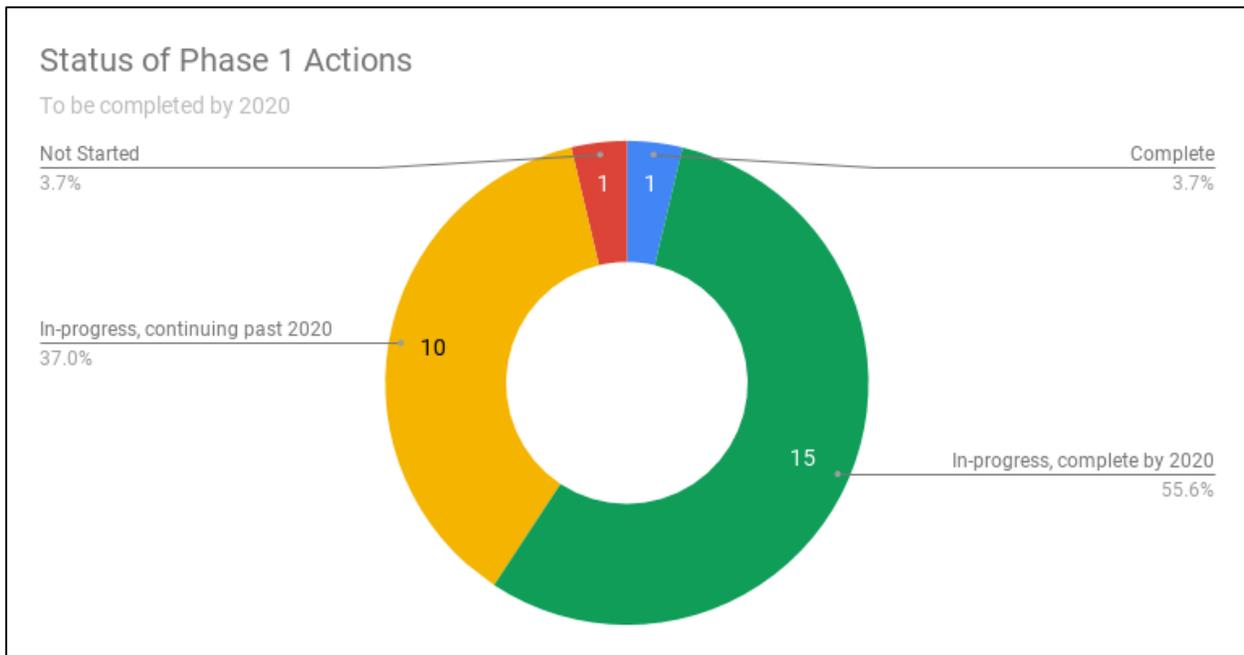


Figure 5. Status of Phase 1 Actions, March 2019.

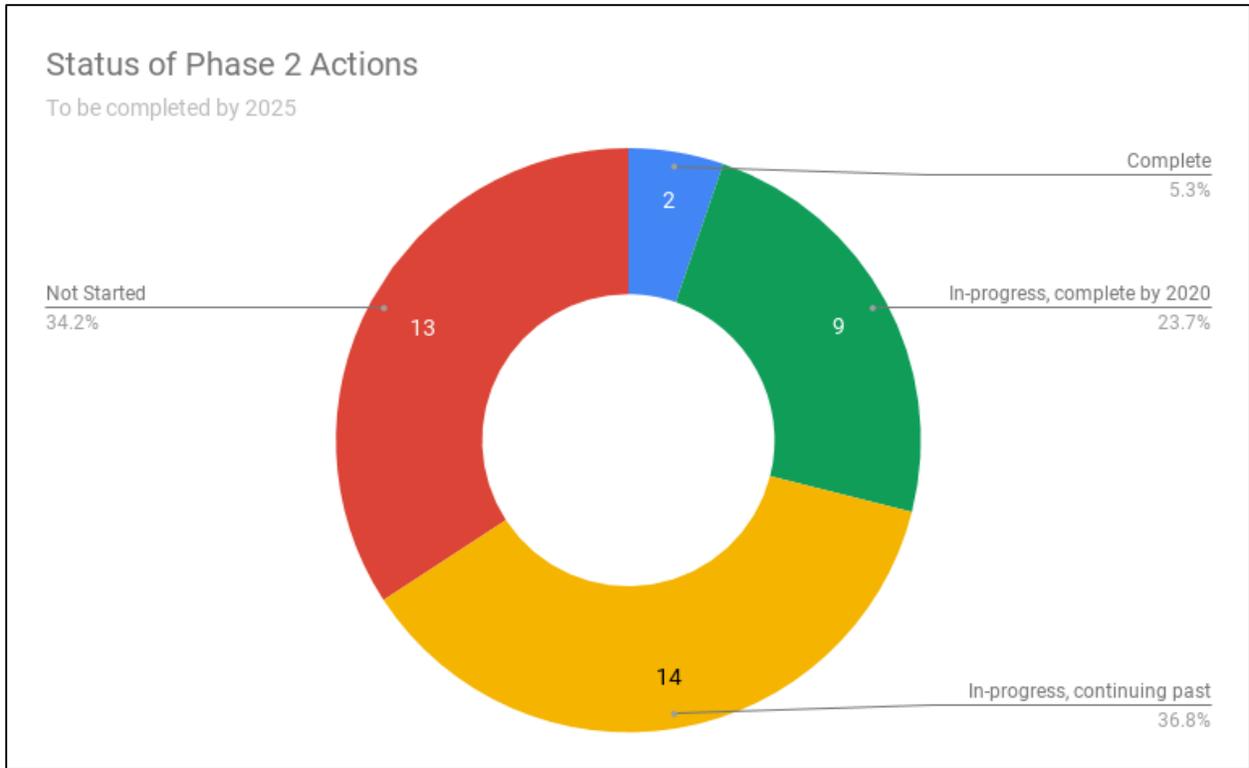


Figure 6. Status of Phase 2 Actions, March 2019.

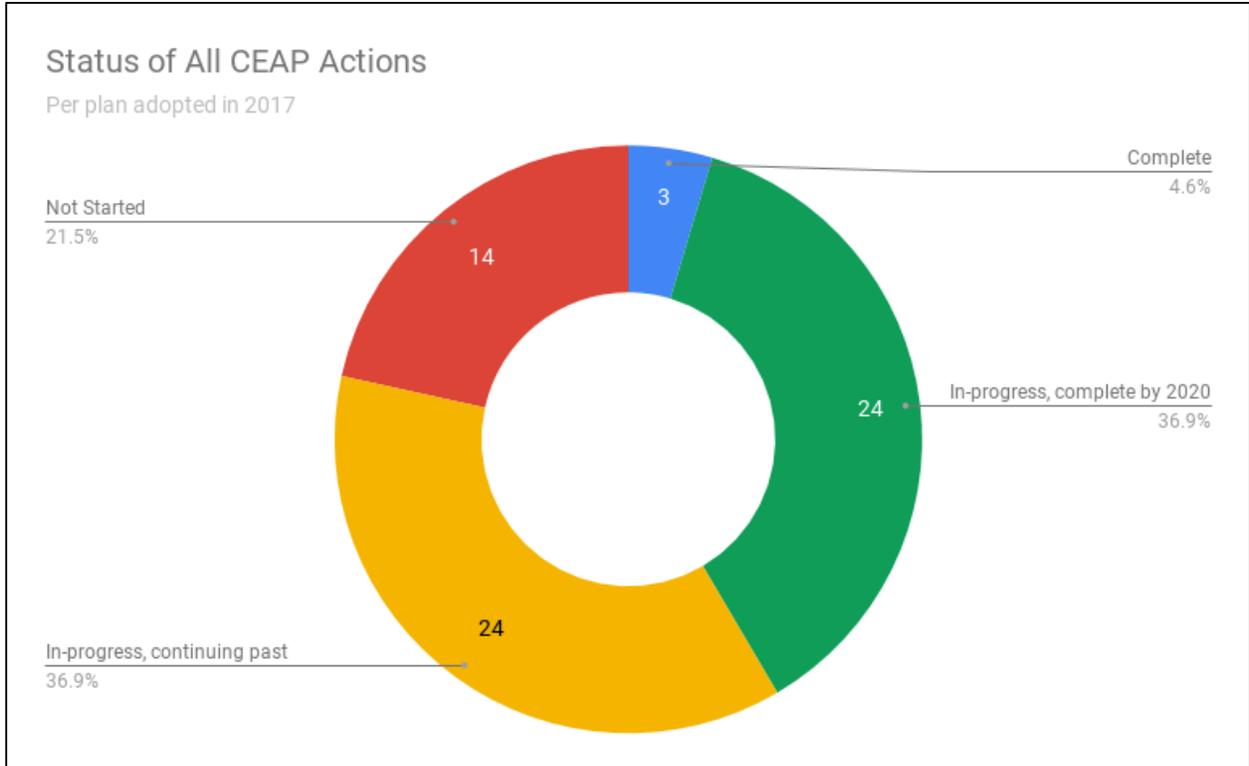


Figure 7. Status of All CEAP Actions, March 2019.

Plans

The City will continue to coordinate implementation of climate actions as outlined in the CEAP. There is an opportunity to increase engagement with community stakeholder organizations. During the planned CEAP review in late 2019, Staff and stakeholders will address the CEAP implementation framework to more effectively coordinate and leverage community climate action resources.

Problems

Because there are many community groups working, and many parties taking individual action, it is a challenge to track and account for climate actions taking place throughout our community.

Ashland Municipal Electric Utility

How Clean is Our Power?

The City of Ashland purchases approximately 99% of our electric power from BPA, with the remaining 1% coming from local hydropower at Reeder Reservoir. BPA power comes mostly from large hydroelectric dams and is some of the lowest carbon power available in the nation. Under Oregon's Renewable Portfolio Standard, large hydropower dams are not considered a renewable resource. The power we purchase from BPA is low-carbon, but it is not considered renewable.

Link: <https://www.oregon.gov/energy/energy-oregon/pages/renewable-portfolio-standard.aspx>

ODEQ is the official agency tasked with tracking, accounting, analyzing and reporting utility emissions in Oregon. Below are the ODEQ's 2019 carbon intensity values for the statewide electricity mix and utilities that have requested a utility-specific CI score.

Each utility in Oregon can apply for an official Carbon Intensity value, which are generated primarily for use with Oregon's Clean Fuels Program (CFP) and are useful for comparing utility carbon impacts. Ashland Electric began participating in the CFP in 2018.

Table III. Carbon Intensity Values for 2019.

	Direct Emissions (gCO₂e/MJ)	Indirect Emissions (gCO₂e/MJ)	Carbon Intensity (gCO₂e/MJ)
Statewide Mix	98.93	10.38	109.31
Ashland Electric Department	3.86	1.22	5.08
Blachly-Lane Electric Cooperative	3.62	1.22	4.84
Central Electric Cooperative	3.84	1.22	5.06
Central Lincoln PUD	3.86	1.22	5.08
Clatskanie PUD	15.86	1.23	17.09
Columbia River PUD	3.86	1.22	5.08
Consumers Power, Inc	3.65	1.22	4.87
Emerald PUD	26.86	1.24	28.10
Springfield Utility Board	3.86	1.22	5.08
Hermiston Energy Services	3.86	1.22	5.08
EWEB	4.08	1.22	5.30
Midstate Electric Cooperative	3.86	1.22	5.08
Lane Electric Cooperative	3.83	1.22	5.05
Tillamook PUD	3.83	1.22	5.05

Source: <https://www.oregon.gov/deq/FilterDocs/cfp-electrcalc.pdf>

ODOE maintains a helpful website that catalogs Oregon Statewide Energy Mix. Investor owned utilities source relatively high fractions of coal and natural gas whereas most consumer owned utilities (COUs) in Oregon source hydropower from BPA. The following chart generated by ODOE, compares the carbon intensity of Ashland’s Electric Utility with larger utilities in Oregon. (Note change in units.)

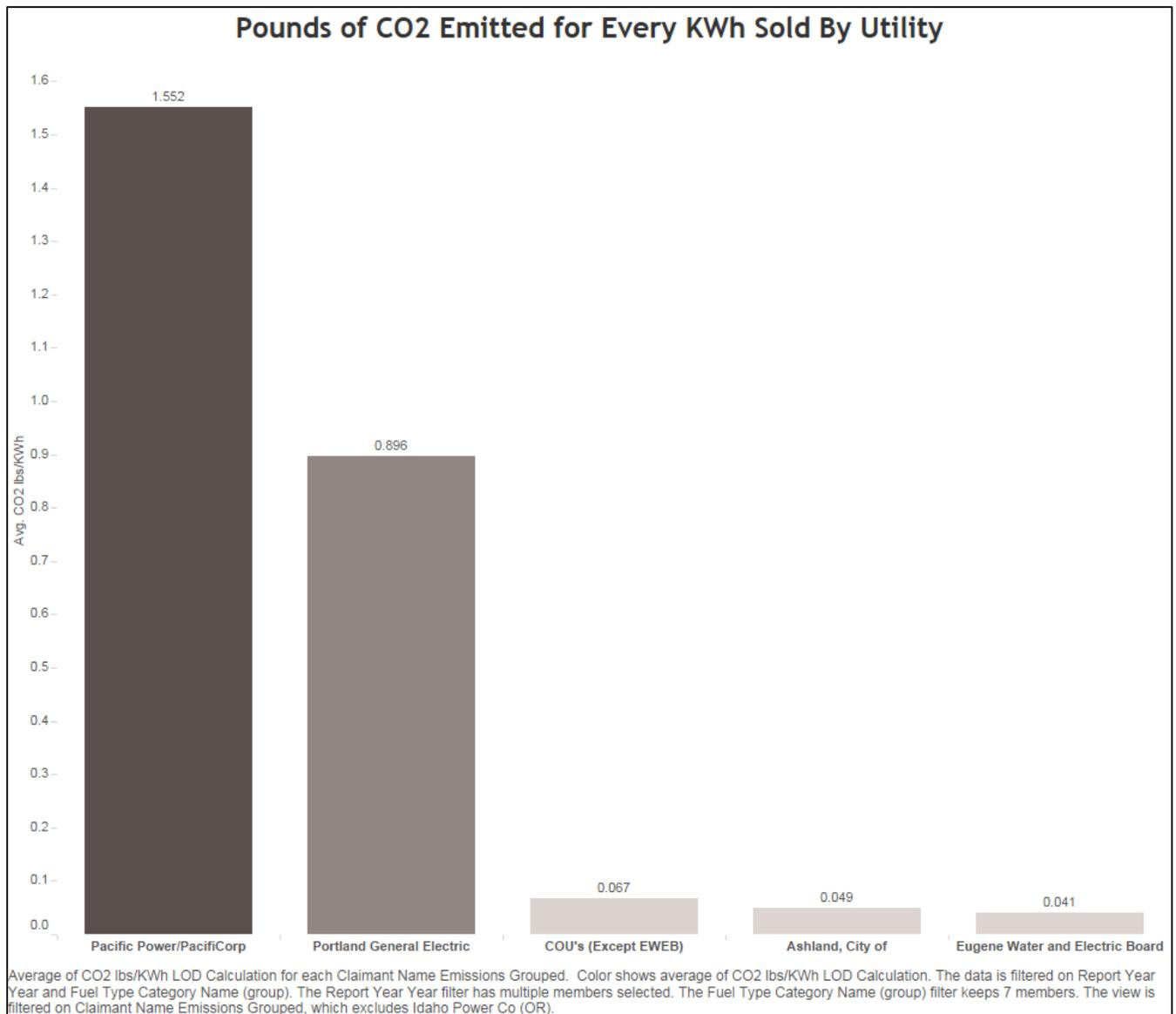


Figure 8. Average Carbon Intensity in MT/CO₂e, 2014-2016.

Source: <https://www.oregon.gov/energy/energy-oregon/Pages/Electricity-Mix-in-Oregon.aspx>

Major Accomplishments 2017-2019

Making Buildings More Efficient

Home Energy Assessment Tool

A new home energy assessment tool is available to all Ashland Electric customers. Spend a few minutes with this online tool and you will receive custom recommendations on how to save energy and money in your home. You will also get information about incentives that can reduce the cost. When adapting your home for our changing climate, energy efficiency is a good place

to start. Climate adapted homes are more than just energy efficient, they are healthier and more comfortable to live in.

Link: <http://ashland.eeaudit.com>

City of Ashland Solar program

The City of Ashland has been promoting the use of solar energy since 1981, when it passed one of the first city-wide solar rights, or access, protection ordinances in the United States. Since the year 2000, more than 2 megawatts of residential and commercial Solar have been installed.



The City offers up to \$7,500 to customers who install qualifying solar electric systems. The City now also offers a virtual net metering option, which allows customers to install solar at an off-site location, or split the generation of a system among a group of owners.

Link: <https://www.ashland.or.us/conserv>

City of Ashland Energy Efficiency Programs

City of Ashland's Conservation Division offers free, in-person home energy reviews from our Residential Energy Analyst. An energy review will identify ways to reduce your energy use or get more out of the energy you use currently. The energy review may lead to simple immediate actions to improve the efficiency and comfort of your home or it could identify more significant actions to consider. The City has a wide array of financial incentive programs available, including weatherization, heating and cooling, and zero interest loans.



Link: <https://www.ashland.or.us/conserv>

Planning for the Future

Fossil Free Municipal Facilities

The City of Ashland has committed to reductions in Greenhouse Gases through the adoption of a Climate and Energy Action Plan (CEAP) as well as a Council approved ordinance that specifies a local carbon reduction of 8 percent annually (AMC 9.40.020).



To help fulfill Ashland’s climate goals, in early 2019 the City adopted a new administrative policy to minimize use of fossil energy sources in City facilities. The new policy states that “municipal facilities currently in existence or under construction shall utilize climate neutral, low emission energy sources as much as possible and ensure that upgrades/replacements of building systems utilize higher efficiency and/or lower emission technology”. The City Administrator may grant an exception in instances where fossil-free alternatives do not meet a specific need; any such exceptions will include a written record of decision and supporting documentation.

Accessory Residential Units

The City Council adopted amendments to the accessory residential unit (ARU) standards in July 2018 creating a streamlined approval process for ARUs that are less than 500 square feet in size and located within or attached to a single-family home. The amendments exempt these small ARUs in the single-family zones from the planning application process and allow a property owner to obtain a building permit to convert existing floor area or construct an ARU attached to a home. Ashland is in the 28th year of allowing ARUs in single-family zones. Since Ashland began allowing ARUs in 1991, over 200 units have been approved at an average of seven ARUs approved a year.

Cottage Housing Ordinance

The City Council adopted a new provision allowing cottage housing in single-family zones in November 2017. The ordinance allows the number of housing units to be double the allowed density of the traditional single-family subdivision if the cottages add up to the same overall building square footage permitted with a traditional subdivision and at least 75 percent of the units are 800 square feet or smaller. Development standards allow the cottages to be oriented around a central recreational/open space area and parking congregated in one area.

Transit Triangle

The Transit Triangle (TT) overlay and land use ordinance amendments were adopted by the City Council in December 2018. The proposed amendments cover the area surrounding the bus route in the southeastern part of Ashland that circulates on Ashland St., Tolman Creek Rd., and Siskiyou Blvd. The TT overlay is intended to provide an area to construct greater numbers of moderately sized housing units, provide a better environment for local business development

and expansion, support transit service through increasing the number of residents in close proximity to the bus route, and create a walkable neighborhood by locating good and services near new housing and existing residential neighborhoods.

Improving Transportation

Greening the Municipal Fleet

In early 2019 the City strengthened its commitment by developing an administrative policy to speed transition from fossil fuel vehicles and equipment to low-carbon alternatives. New vehicles will be replaced with fossil-free or lower carbon vehicles unless no practical alternative is available.

Building EV Infrastructure

The City of Ashland recognizes that electric vehicles are a vital part of reducing GHG emissions. Ashland's residents also recognize our electric future, as our EV adoption rates are among the highest in the state. To help our community transition to electric transportation, the city maintains six public charging stations. There is currently no fee to use the public chargers, thanks to Ashland's participation in the OR Clean Fuels Program.



Link: <https://www.ashland.or.us/EV>

Supporting EV adoption

City of Ashland has created the EmpowerEV pilot program, which offers incentives to Ashland electric customers who purchase EVs. Residential electric customers can earn a cash rebate for a new or used vehicle. Commercial electric customers can earn incentives for vehicles or workplace chargers. The current EmpowerEV pilot program ends in March, 2019.



The City gave a sustainability grant to help fund the Electric Vehicles Ashland project, which is awarding grants to businesses who purchase an EV.

City of Ashland is coordinating with statewide and local non-profit partners to increase EV educational offerings in Southern Oregon in 2019.

Link: <https://www.ashland.or.us/EV>

Sharing Bikes / Rogue Bike Share

The City, ODOT, RVT, SOU, Asante have come together to sponsor the Rogue Bike Share program for a three-year period. The Bike Share provides the ability for a short term bicycle rental as needed and offers several membership tiers. Locks come with the bikes, so riders have the freedom and convenience of being able to make multiple stops before returning to any station. There are currently 40 bikes available across 10 different stations in Ashland. Bike Share utilization has increased each year. Since July 2015, nearly 1,500 members have taken nearly 5,500 trips.



Link: <https://rvcog.org/what-we-do/rogue-bike-share/>

Protecting Ashland

Nixle

City of Ashland is now using Nixle, an easy and direct way for citizens to get timely information about ongoing issues, major events, air quality advisories, evacuations, and all emergencies affecting town. Nixle supplements the Jackson County Citizen Alert System and provides Ashland specific messaging such as street closures, evacuations, and power outages.



Link: <http://ashland.or.us/nixle>

Wildfire Ordinance

Ashland's setting, history of wildfires, and increasingly long, hot, and dry summers put us at high fire risk each year. One piece of an overall strategy to better protect our community from wildfire was adopted by the City Council in 2018. The expanded and enhanced wildfire safety ordinance now applies to all lots in Ashland, updates standards for development, and restricts new plantings of known flammable trees and shrubs on any lot in the city at any time.

Link: <https://www.ashland.or.us/Page.asp?NavID=17670>

Firewise

City of Ashland provides residents with tools to create fire safe landscaping and use fire-resistant construction materials to protect lives, property and firefighters in the event of a wildfire. One of the main tools provided is a free Firewise Assessment provided by the Fire Adapted Communities Coordinator at Ashland Fire & Rescue. This comprehensive assessment includes a walk around your home and property where specific recommendations are provided for the landowner.



Link: <http://ashland.or.us/firewise>

CERT

Created in 1999 after the community experienced a severe flood on New Year's day 1997, Ashland's Community Emergency Response Team (CERT) program has trained over 850 volunteers to be better prepared to survive in a disaster making Ashland's CERT program one of the most successful in the nation. CERT has been mobilized over thirty times for activities ranging from managing emergency shelters to evacuating residents during wild fires. CERT's core competency is *"preparing our community to endure disasters."* Since 2011 CERT has orchestrated more than 20,000 hours of volunteer effort.



Link: <http://ashland.or.us/cert>

Making Ecosystems Healthy

Ashland Forest Resiliency Project

The AFR is a ten-year, multi-agency stewardship project designed to reduce the risk of severe wildfire in the watershed and to protect water quality, older forests, wildlife, people, property and quality of life. Key objectives of the project include:

- Reduce the risk of large-scale wildfire,
- Help large, old trees survive fire, insects and disease
- Restore a healthy forest ecosystem
- Uphold and protect critical watershed values



To date the project has produced measurable results: 7,600 acres of fuel management enhancing safety in the wildland-urban interface, numerous opportunities for community education, the creation of 17 permanent jobs, and 150 seasonal jobs.

Link: <https://www.ashland.or.us/afr>

Saving Water

City of Ashland provides extensive water-saving programs to help conserve our natural resources and save money. Residents can request a free, in-person evaluation of irrigation systems or indoor water use. Additional opportunities include a lawn replacement incentive, appliance rebates, graywater reuse, rainwater catchment, and landscaping resources. In the past five years the community has saved approximately 25 million gallons of water by participating in the water efficiency programs the City has to offer.



The City of Ashland has received a 1st Place Stewardship and Conservation Award from the Oregon Water Resources Department for the 2018 Best Water Conservation Program in the Large Municipality and Water Supplier Category (Serving more than 1,000 people).

Link: <https://www.ashland.or.us/conserve>

Reducing Disposables

Ashland's Conservation commission works to educate and advocate for the wise use of resources by the city government and the people of Ashland. In 2018 the Commission helped design and pilot a disposables reduction program called "Straws on Demand", which was received favorably by participants and will inform a broader, upcoming effort to reduce disposable packaging. The Conservation Commission has also begun working on a grant with ODEQ to create and pilot a reusable take-out container program. Lastly, additional recycling infrastructure has been installed in the downtown core, so most City trashcans also provide an opportunity to recycle.

High Impact Opportunities

For Ashland to meet its goals, climate action will need to be broadly incorporated into all levels of our community, and government. However, every community has opportunities that can uniquely contribute to climate solutions. This section seeks to identify some climate action opportunities that are somewhat unique to our community, and may merit additional discussion at future climate-related Commission meetings.

Build on Existing Climate and Energy Action Plan

Thanks to Citizen participation and City Council support, Ashland has one of the most detailed climate plans for a city of its size. Though it is already quite comprehensive, there are a few areas where the CEAP needs additional clarification and development. Opportunities for improvement include:

Climate Adaptation - While the CEAP does a thorough job of addressing emission mitigation opportunities, a more cohesive and specific Adaptation strategies and actions would improve the plan. Adaptation plans are essential to inform emergency preparedness for climate-related impacts. This effort should include development of a detailed list of local and vulnerable populations, including a list of experts, advocates, and direct points of contact.

Community Action Hub and Stakeholder Expansion – There is an identified need for a collaborative, community stakeholder group that can coordinate community action and potentially take ownership of specific actions in the CEAP. The CEAP contains goals for both Municipal and community-wide action, yet all of the actions in the current CEAP are delegated to the City. The City has approved a new Climate Policy Advisory Commission to convene 2019. Conservation Commission will take on an expanded role to include climate outreach. Ashland is pursuing opportunities to develop a multi-stakeholder action plan as part of the scheduled CEAP update.

Equity Guidance – The adopted CEAP stresses the importance of building equity as part of climate action, but it does not offer a complete framework for addressing equity considerations. The ad hoc CEAP Implementation Committee recommended the Climate Policy Advisory Commission create an equity evaluation process that is inclusive, actionable, transparent, and streamlined. This “lens” will be used to inform climate action as they are designed and implemented.

Electrify Home Heating and Cooling

There is a tremendous opportunity to reduce Ashland’s GHG emissions by focusing on home electrification. Approximately 7000 homes in Ashland use natural gas for heating and each of these represent an opportunity for emissions reduction. The City of Ashland is developing programs to encourage electrification of home heating and cooling systems.

While residential energy is only 13% of Ashland’s GHG emissions, home energy upgrades have positive spillover effects on residential transportation and consumption emissions. Nearly 75% of Ashland emissions are generated by residential sources (including building energy use, transportation, and consumption emissions).

The following graphic from ODOE illustrate the average use of energy in Oregon homes.

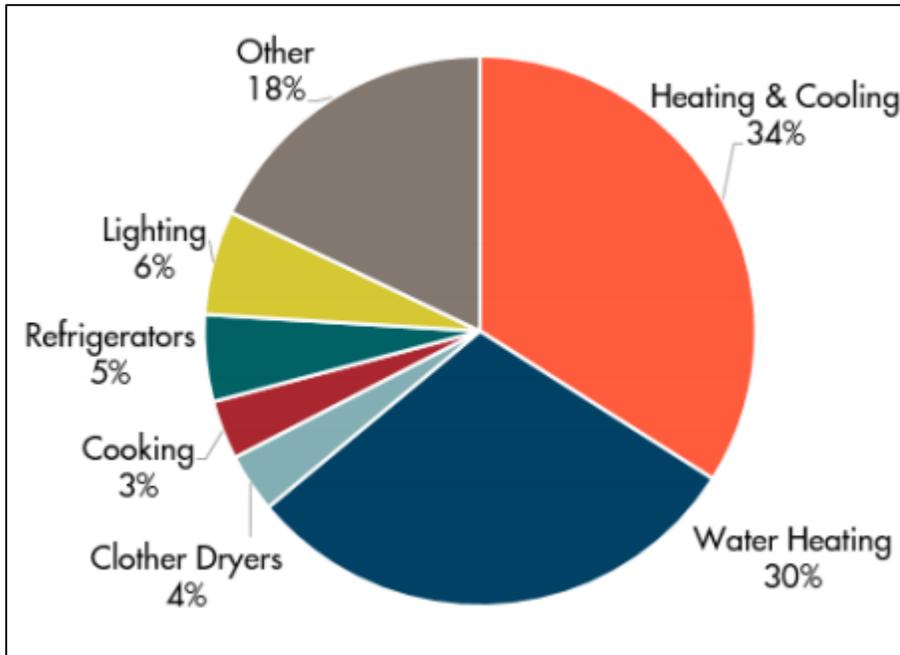


Figure 9. Average energy use in Oregon homes.

Source: <https://www.oregon.gov/energy/Data-and-Reports/Documents/2018-Biennial-Energy-Report.PDF>, Chapter 1, p. 39.

Improve Low-carbon Mobility Options

As our community works toward our climate goals, there is a significant opportunity to reshape transportation and mobility within Ashland. As a tourist-based economy, Ashland should continue to work towards improving pedestrian infrastructure and walkability. Walkable neighborhoods can improve livability and reduce GHG emissions. Ridesharing services may improve mobility for some residents and visitors and could reduce the need for private vehicle ownership; however, the net effect of ridesharing services on Ashland’s GHG emissions has not been established. The City of Ashland should encourage all forms of transportation that do not directly emit pollutants. In the near term, the City should continue to support vehicle electrification, which reduces emissions and has positive air quality effects that support public health. Vehicle electrification has the additional benefit of acting as a gateway for climate action at home.

Reduce Consumption

In Ashland, nearly half of our estimated GHG emissions come from consumption-based emissions, which include the things we eat and buy. Consumption-based emissions include all of the climate impacts associated with producing, transporting, using, and disposing of the goods and services used by our community. The City of Ashland should continue and expand support for consumption education and find ways to support the community-based efforts that

currently exist. To achieve our climate goals citizens will need to take action at the household level. The City of Ashland has little authority to regulate private consumption. The City should explore novel ways of reducing consumption that do not rely on regulatory authority.

Link: Oregon Consumption Based Emissions Inventory

<https://www.oregon.gov/deq/mm/Pages/Consumption-based-GHG.aspx>

Appendix 1: Acronyms

AFR – Ashland Forest Resiliency (Project)

BPA – Bonneville Power Administration

CEAP – Climate and Energy Action Plan

CERT – Community Emergency Response Team

CPAC – Climate Policy Advisory Commission

EV – Electric Vehicle
mtCO₂e – Metric tons of carbon dioxide equivalent

ODEQ – Oregon Department of Environmental Quality

ODOE – Oregon Department of Energy

TAP – Talent Ashland Phoenix (Pipeline)

TT – Transit Triangle

Appendix 2: CEAP Actions Status Update 2019

Action Rating Legend



Red = Not Started



Yellow = In Progress, continuing past 2020



Green = On track, complete by 2020



Blue = Complete

Phase 1 Action Status

Timeline	Action Title and Description	Status Report 2019
 In progress - continuing past 2020	BE-1-1. Develop a comprehensive plan for the Municipal Electric Utility.	<p>Progress Ashland Electric is currently following the 10 year plan that was adopted in 2014. Recognizing the need, the intention is to update that plan in the next Biennium.</p> <p>Plans Earmarked for budget request. Researching potential new policies. Building policy support structures (CEAP).</p> <p>Problems</p>
 On track - complete by 2020	BE-1-2. Promote switching to lower-carbon fuels.	<p>Progress Current efforts to support low-carbon fuels are focused on transportation electrification. The City provides helpful information about electric vehicles, including locally appropriate estimates of ownership costs.</p>

Timeline	Action Title and Description	Status Report 2019
		<p>Link: ashland.or.us/EV</p> <p>The City of Ashland provides direct support to help residents and visitors transition to lower carbon fuels, including the following City-led actions:</p> <ul style="list-style-type: none"> - Providing Public EV charging stations (currently 6 stations downtown) - Charging stations are currently free to use thanks to Ashland's participation in the Oregon's Clean Fuels Program. - The EmpowerEV pilot program offers incentives to Ashland electric customers who purchase EVs or workplace chargers (pilot program ends in March, 2019) - Coordinating with non-profit partners to increase EV educational offerings in Southern Oregon. <p>Municipal operations: The City has created administrative policies which accelerate the transition to an electric fleet and minimize use of fossil energy sources in City facilities.</p> <p>Plans The City of Ashland aims to continue and expand support for vehicle electrification in 2019, and plans create new programs to support building electrification.</p> <p>Problems The scope of this action needs to be refined.</p>
 On track - complete by 2020	BE-1-3. Facilitate and encourage solar energy production.	<p>Progress The City of Ashland has been promoting the use of solar energy since 1981, when it passed one of the first city-wide solar rights, or access, protection ordinances in the United States. Since the year 2000, more than 2 megawatts of residential and commercial Solar have been installed.</p> <p>The City offers financial incentives to customer who install solar electric systems. The City also</p>

Timeline	Action Title and Description	Status Report 2019
		<p>offers a virtual net metering option for customers who wish to install at an off-site location.</p> <p>Plans The City is researching options to develop utility-scale solar to serve community energy needs, and would like to develop a project in 2019. In addition, the City is supporting the several community solar projects that intend to build in 2019.</p> <p>The Conservation Division plans to review and refine solar incentive programs to better align with social equity considerations.</p> <p>Problems Developing utility-scale solar projects greater than 1 megawatt creates financial obstacles under our current power contract with BPA.</p>
 <p>In progress - continuing past 2020</p>	<p>BE-1-4. Enhance production of on-site solar energy from City facilities.</p>	<p>Progress The City of Ashland has installed 93 kW of solar electric on City facilities since 2000.</p> <p>Plans Public Works plans to include solar electric generation as part of the future Water Treatment Plant; the scope of that project is still being evaluated.</p> <p>With the completion of a solar assessment audit on over 20 existing City buildings and facilities, the City is researching the feasibility of developing additional solar resources as part of a wider energy services contract or other funding opportunities.</p> <p>Problems Facilities budgets do not have flexibility to develop additional solar resources at this time.</p>
	<p>BE-2-1. Increase outreach efforts to expand participation</p>	<p>Progress The online home energy audit tool, eeAudit, recently made available to residents provides an easy self-guided format to determine efficiency opportunities with City program offerings embedded</p>

Timeline	Action Title and Description	Status Report 2019
On track - complete by 2020	in energy efficiency programs and promote climate-friendly building and construction.	<p>into the audit recommendation results. Link: http://ashland.eeaudit.com</p> <p>Plans Update existing Smartbuild new construction program to further incentivize all electric new development rather than natural gas. Explore third party loan program to expand on-bill financing for homeowner energy efficiency upgrades</p> <p>Problems</p>
 On track - complete by 2020	BE-3-1. Use results from City Facilities Energy Audit to prioritize City Facilities Capital Improvement Plans (CIPs) and maintenance improvements.	<p>Progress Several LED lighting retrofit projects have been completed, along with all new lighting being designed with LED. Facilities Energy Audit is being used to assist the City’s internal Facility Use Committee in prioritizing funding within Facilities Capital and operating budgets.</p> <p>Plans Lighting controls (motion and daylight sensors), exterior lighting LED retrofits (parking lots, Hargadine Parking Structure, and several facilities HVAC projects are planned for the upcoming biennium.</p> <p>Problems Overall funding for Facilities Capital and Maintenance does not meet the needs of the facilities being managed and emergency/unplanned projects consume majority of funding.</p>
 On track - complete by 2020	CC-1-1. Create a formal public outreach and education plan to inform the community about climate actions and progress.	<p>Progress The City of Ashland worked with the ad-hoc CEAP Implementation Committee to create a draft community outreach plan for the CEAP. Elements of that plan have been incorporated into City messaging.</p> <p>Plans City Staff are seeking a designated funding stream for the Empower Ashland education plan as part of the 2019/2021 budget cycle.</p>

Timeline	Action Title and Description	Status Report 2019
		<p>Problems</p> <p>The Empower Ashland outreach plan requires funding or significant additional staffing.</p>
 <p>On track - complete by 2020</p>	<p>CC-1-2. Support capacity of neighborhood and community groups to implement climate mitigation and adaptation initiatives.</p>	<p>Progress</p> <p>The City of Ashland has provided financial resources through the Economic, Cultural, Tourism & Sustainability Grant program a subset of which are engaged in climate-related projects.</p> <p>City Staff are supporting local organizations with resources and information on an ongoing basis.</p> <p>Plans</p> <p>Ashland City Staff and Conservation Commission plan to explore community needs and next steps.</p> <p>Problems</p> <p>The scope of this action could be refined.</p>
 <p>On track - complete by 2020</p>	<p>CC-1-3. Assess the feasibility of a City-sponsored carbon offset program.</p>	<p>Progress</p> <p>The City of Ashland offers two distinct Carbon products, both through the Bonneville Environmental Foundation. Carbon Offsets are available for purchase to offset the consumption of goods and services. Renewable Energy Certificates are available to offset use of non-renewable energy. Both products are available at:</p> <p>Link: https://ashland.or.us/conserv</p> <p>Plans</p> <p>There is an opportunity to create a voluntary electric rate for customers who wish to purchase RECs to cover all of their electricity use. The City and Utility may consider new, voluntary rate tiers and products as part of Electric Utility long-term planning.</p> <p>Problems</p> <p>Questions remain about the efficacy and best practices for use of RECs and offsets. Besides</p>

Timeline	Action Title and Description	Status Report 2019
		existing or new Carbon offset projects, other opportunities exist such as creating a Renewable Energy Development Fund, or an Energy Storage and Resiliency Fund.
 <p>On track - complete by 2020</p>	CC-2-1. Ensure all City departments educate their staff members about the Climate and Energy Action Plan.	<p>Progress City Administration is coordinating Department leads to increase awareness of the Climate Plan among staff. Staff have conducted internal stakeholder meetings and internal presentations as appropriate to discuss and advance the actions identified in the CEAP.</p> <p>Plans City Administration plans to continue reaching out to Staff to increase understanding of the climate plan.</p> <p>Problems New initiatives are difficult as most City staff do not have excess capacity.</p>
 <p>On track - complete by 2020</p>	CC-3-1. Consider climate change in all City Council policy, budgetary, or legislative decisions and as part of the Council Communication document template.	CEAP increasingly referenced in communication docs and is listed (as relevant) in the “Policies, Plans and Goals Supported” section of each Council Communication (staff report) that is presented to Council for review and action.
 <p>On track - complete by 2020</p>	CC-3-2. Incorporate CEAP goals and actions in future updates of city plans.	<p>Nov 2019 - CEAP referenced in recent draft housing element update.</p> <p>Feb 2019 – CEAP incorporated into Transit Feasibility Study</p> <p>TBD - Water Master Plan update contains section on climate change and impacts to the water system</p>

Timeline	Action Title and Description	Status Report 2019
		Plan to include this in upcoming Electric comprehensive planning.
 In progress - continuing past 2020	CC-3-3 Include consideration and perpetuation of climate action goals within the scope of every appropriate City Advisory Commission.	2015 - Creation of ad-hoc CEAP 1 - planning committee. 2017 - Creation of ad-hoc CEAP 2 - implementation committee. 2019 - Climate Policy Advisory Commission and revised Conservation Commission
 On track - complete by 2020	CC-4-1. Engage with other governments and organizations around regional, statewide, national, and international climate policy and action.	<p>Progress City of Ashland is actively engaging with agencies and organizations from around the United States, especially at the State level.</p> <p>Plans The City will continue to work with local and State stakeholders to advance climate action agendas in 2019. The City also plans to convene a new climate advisory committee in 2019. Conservation Commission will take on an expanded role to include climate outreach. Ashland is pursuing opportunities to develop a multi-party action plan as part of the scheduled CEAP update.</p> <p>Problems The scope of this action could be refined.</p>
 In progress - continuing past 2020	CM-2-1. Partner with nonprofit organizations to promote the purchase of climate-friendly food and products.	<p>Progress The City of Ashland has begun to engage with interested local community groups to help spread low-consumption educational messages.</p> <p>Plans There is an opportunity to further develop public outreach and education related to consumption emissions. The City will seek funding for the Empower Ashland outreach campaign, which includes a component on lowering consumption emissions. Staff continue to engage with local advocacy</p>

Timeline	Action Title and Description	Status Report 2019
		<p>groups and work toward formalizing the educational messaging an content.</p> <p>Problems Education will be a primary tool for the City in lowering consumption emissions. Designated funds for future climate outreach were not available in 2018, and would help to advance this action. Some citizens question the role of government in telling people what they should eat or buy.</p>
 On track - complete by 2020	CM-2-2. Expand community gardening and urban agriculture opportunities	<p>Progress Ashland Parks and Recreation already provides recreational community garden spaces for non-commercial organic gardening. The gardens offer various-sized plots that can be leased by annual subscriptions starting each January.</p> <p>Link: http://www.ashland.or.us/communitygardens</p> <p>Plans As APRC works through the master planning process for E. Main property there may be an opportunity to add additional community garden space at that location. With addition of new park properties, there may be opportunities to improve or increase the number of community gardens.</p> <p>Problems</p>
 On track - complete by 2020	NS-1-1. Manage forests to retain biodiversity, resilience, and ecosystem function and services in the face of climate change. Use best available science to	<p>Progress AFR is a ten year stewardship project designed to reduce the risk of severe wildfire in the watershed and to protect water quality, older forests, wildlife, people, property and quality of life.</p> <p>Plans AFR has received funding to start tracking carbon storage in City-managed forest lands. The project will use computer models to optimize fire suppression opportunities. Work will start in the next couple of months.</p>

Timeline	Action Title and Description	Status Report 2019
	inform fire management and planning to manage ecosystem health, community safety, and carbon storage.	<p>Link: https://ashland.or.us/afr</p> <p>Problems The scope of this action could be refined.</p>
 In progress - continuing past 2020	NS-1-3. Undertake restoration efforts to retain and restore native fish and riparian species.	<p>The City has contracted with The FreshWater Trust for riparian restoration in conjunction with temperature mitigation requirements that will be codified by a new National Pollution Discharge Elimination System (NPDES) wastewater permit. Restoration will include the removal of non-native vegetation and streamside plantings of trees and shrubs to enhance stream shade for cooler water temperatures.</p> <p>The City has also completed preliminary design to relocate the current wastewater outfall from Ashland Creek to Bear Creek. The new outfall will include appropriate fish screen protection and provide improved water quality in Ashland Creek for fish migration/spawning.</p> <p>The City is supportive of an application by Rogue River Watershed Council for a project to improve the Smith Meyer Roper Diversion on Ashland Creek.</p> <p>Ashland Parks and Rec are reviewing a suite of measures as part of the Lithia Park master plan to improve riparian areas and support native species restoration.</p>
 In progress - continuing past 2020	NS-2-2. Explore water-efficient technologies on irrigation systems and consider requiring them during the permitting process.	<p>Progress The Conservation Division is currently exploring a “Smart” irrigation controller and pressure reducing valve rebate program.</p> <p>Plans Explore including program as part of 2019-2021 budget cycle</p> <p>Problems</p>

Timeline	Action Title and Description	Status Report 2019
 <p>On track - complete by 2020</p>	<p>PHSW-2-1. Engage leading employers in a dialogue on climate action, for example, by organizing and facilitating roundtables.</p>	<p>Progress Some of this work has been designed to occur as part of the Empower Ashland outreach plan.</p> <p>Plans Discuss with Conservation Commission. Pursue additional venues and champions for this action.</p> <p>Problems Empower outreach plan is awaiting funding.</p>
 <p>In progress - continuing past 2020</p>	<p>PHSW-3-1. Work with vulnerable populations to create specific adaptation strategies to address public health risks.</p>	<p>Ashland Firewise</p> <p>The City of Ashland is also a leader in the Firewise USA program which provides residents with the knowledge and skill necessary to reduce impacts from wildfire. The Firewise USA recognition program enables communities in all parts of the United States to achieve a high level of protection against wildfire as well as sustainable ecosystem balance. Find out how today by visiting firewise.org, or by calling Ashland Fire & Rescue and asking for more information about how your neighborhood can become Firewise.</p> <p>Link: ashland.or.us/firewise</p> <p>The NIXLE platform used to communicate emergency information in Ashland is low barrier and allows most people to get timely information in the event of an emergency.</p> <p>Ashland Smokewise program information was published in multiple formats, including bilingual versions that were distributed to Spanish-speaking community organizations, such as La Clinica.</p> <p>Our City's emergency services have made an extra effort to reach out to local care facilities to make sure they are ready to respond in an emergency, and be able to move patients that require extra care.</p>

Timeline	Action Title and Description	Status Report 2019
		Link: https://www.ashland.or.us/smoke
 In progress - continuing past 2020	ULT-1-2. Work with RVTD to implement climate-friendly transit.	<p>The City of Ashland has developed with the assistance of Nelson Nygaard a transit feasibility study that details a flexible set of strategies to improve transit within the City. The study also details propulsion technologies including electrification. The City has provided a letter of support for an RVTD grant to purchase two (2) Ford Transit Hybrid vans for a demand response pilot program to be operated in the City of Ashland, reference January 15, 2019 Council meeting.</p> <p>Link: https://www.ashland.or.us/SIB/files/011519_RVTD_Grant_Letter_of_Support_CCFinal1.pdf</p> <p>Future implantation could include fixed route circulation service in the City with a “right sized” electric bus operated by RVTD. Continued use of the on demand program after the pilot period ends.</p>
 In progress - continuing past 2020	ULT-2-1. Implement bicycle- and pedestrian-friendly actions in the City's Transportation System Plan and Downtown Parking Management Plan.	<p>The City of Ashland has received a Transportation Growth and Management Grant (TGM) from the Oregon Department of Transportation (ODOT) for a Revitalize Downtown Study. The study will take into account previous work done with respect to downtown parking, circulation, loading zones, etc. and create an implementable prioritized project list with defined funding sources. The Revitalize Downtown Study will analyze the bicycle and pedestrian level of “stress” under current conditions and make project recommendations to enhance the pedestrian and bicyclist use of the system.</p> <p>The City continues to explore grant funding opportunities for sidewalk infill projects and will enhance the current curb ramp inventory through the street maintenance program.</p> <p>The City, ODOT, RVTD, SOU, Asante have come together to sponsor the Rogue Bike Share program for a three year period. Since the program began in the year 2015, annual membership and trip counts have steadily increased. There are numerous stations throughout town that provide the ability for a short term bicycle rental as needed. Locks come with the bikes, so riders have the freedom and convenience of being able to make multiple stops before returning to any</p>

Timeline	Action Title and Description	Status Report 2019
		<p>station.</p> <p>Link: https://rvcog.org/what-we-do/rogue-bike-share/</p>
 Not started	ULT-2-2. Explore opportunities to convert to shared streets where appropriate to provide multimodal connectivity.	<p>Progress Not started.</p> <p>Plans</p> <p>Problems</p>
 In progress - continuing past 2020	ULT-3-2. Revise land use codes to require EV charging infrastructure at multifamily and commercial developments.	<p>Progress Community Development and Administration Departments have had initial discussions about modifying land use code to support EV infrastructure. Concurrently, the State BCD is currently revising EV Parking Program, as well as wider updates to the uniform building code. In concert with partner organizations, such as Forth and Zero Energy Ready Oregon, the City is advocating for adoption of advancing statewide codes to include support of EV infrastructure in all buildings.</p> <p>Plans The City will continue to advocate for advancing State level building codes to support EV. As part of future land use code updates, City Staff and community stakeholders will have an opportunity to review and advocate for pragmatic EV zoning measures.</p> <p>Problems It is unclear whether the effort to adopt the State EV Parking Program would provide sufficient benefit for the parking threshold. The State is beginning a review of the EV Parking Program and may significantly alter its structure and function.</p>
	ULT-3-3. Provide information about electric and hybrid	<p>Progress City of Ashland has a dedicated web page to promote the use of Electric Vehicles. The site provides helpful information about electric vehicles, including maps of local charging</p>

Timeline	Action Title and Description	Status Report 2019
 Complete	vehicles and rebates on the City's website.	<p>infrastructure, current rebates and incentives available, an EV calculator to generate custom estimates of savings and ownership costs.</p> <p>Link: ashland.or.us/EV</p> <p>Plans City of Ashland will continue to support community-wide vehicle electrification.</p> <p>Problems</p>
 On track - complete by 2020	ULT-4-1. Regulate new development in the Wildfire Lands Overlay part of the urban growth boundary.	<p>Ashland's setting, history of wildfires, and increasingly long, hot, and dry summers put us at high fire risk each year. One piece of an overall strategy to better protect our community from wildfire was adopted by the City Council in 2018. The expanded and enhanced wildfire safety ordinance now applies to all lots in Ashland, updates standards for development, and restricts new plantings of known flammable trees and shrubs on any lot in the city at any time.</p> <p>Link: Ord - https://www.ashland.or.us/Page.asp?NavID=17670 Link: Map - http://www.ashland.or.us/Page.asp?NavID=17603</p> <p>In addition, the City is reviewing ways to influence development of lands bordering the city, especially within the Urban Growth Boundary.</p>

Phase 2 Action Status

Timeline	Action Title and Description	Status Report 2019
 <p data-bbox="121 456 285 561">In progress - continuing past 2020</p>	<p data-bbox="317 321 669 505">BE-2-2. Require building energy scores to identify and incentivize cost-effective energy efficiency improvements.</p>	<p data-bbox="690 321 806 350">Progress</p> <p data-bbox="690 358 1896 542">City Staff have conducted an initial review of other localities' use of required building performance scores. The State of Oregon's home energy scoring program is expanding support for cities who wish to establish similar programs and City. City staff are working with State officials and advocacy groups to identify best practices and potential program structure.</p> <p data-bbox="690 591 1587 620">Link: https://www.oregon.gov/energy/save-energy/Pages/HEPS.aspx</p> <p data-bbox="690 669 1890 894">As a precursor to requiring building energy scores, the City has launched a voluntary home energy efficiency tool called EEAudit. Ashland ratepayers can use this tool to get customized ideas on saving energy and money in their home. This tool provides a meaningful course of action for motivated citizens, and helps to build a more complete picture of Ashland's building inventory.</p> <p data-bbox="690 943 1131 972">Link: http://ashland.eeaudit.com/</p> <p data-bbox="690 1021 764 1050">Plans</p> <p data-bbox="690 1058 1808 1127">The City will continue to refine local building inventory data and engage with Staff and community stakeholders to determine program feasibility.</p> <p data-bbox="690 1175 816 1205">Problems</p> <p data-bbox="690 1213 1833 1320">Ashland may be able to require home energy scores to increase building efficiency. Significant questions remain to be answered such as clarifying funding sources, program goals, enforcement strategies, and disclosure requirements.</p>

 <p>In progress - continuing past 2020</p>	<p>BE-2-3. Identify and adopt strategies to reduce energy efficiency barriers in rent/lease properties.</p>	<p>Progress City Staff have completed an initial review of other localities' efforts in this area. Boulder, CO has built a successful rental efficiency policy in conjunction with require building performance scores (see above BE-2-2.)</p> <p>Plans Additional research and stakeholder engagement are required before draft policies can be developed.</p> <p>Problems</p>
 <p>In progress - continuing past 2020</p>	<p>BE-2-4. Establish minimum energy efficiency standards for the affordable housing program.</p>	<p>Progress City staff are researching potential models for implementing home energy performance scores in Ashland. Potential models could be applied to affordable housing or community-wide housing inventory.</p> <p>Plans Phase II action item identified for next two budget bienniums. Discuss with Climate Policy Advisory Commission.</p> <p>Problems The scope of this action could be refined.</p>

 Complete	BE-4-1. Expand the current net meter resolution to include and incorporate virtual net metering.	Progress In December 2017 "Virtual Net Metering" was added to Ashland's Electric Utility Renewable Resource Purchase Policy to facilitate the distribution of electricity generated from a customer-generator. A handful of VNM systems were installed in 2018. Plans Virtual net metering provides a framework for cooperatively owned systems, or for customers to place their own generation off-site. Several different community groups are evaluating the feasibility of using VNM as part of a community solar project. Problems
 Not Started	BE-4-2. Implement utility-level smart grid technologies to facilitate efficiency and distributed energy solutions.	Progress Not Started Plans Pending upcoming Utility Review (See action BE-1-1) Problems The scope of this action could be refined.
 Not Started	BE-5-1. Encourage heat-tolerant building approaches such as cool roofs and passive cooling.	Progress Not started. Plans Phase II action item identified for next two budget bienniums. Explore incorporating into conservation and efficiency programs. Problems The scoped of this action could be refined.

 <p>In progress - continuing past 2020</p>	<p>CM-1-1. Implement an education campaign for waste and consumption reduction strategies.</p>	<p>Progress</p> <p>Recology continues to refine community messaging about waste prevention and recycling with respect to new knowledge about global markets. Through offering services like community workshops, a new business recognition program, and public education using popular channels like social media and television news broadcasting, Recology continues to encourage and foster a world without waste.</p> <p>The City of Ashland has drafted a climate outreach and education campaign for the CEAP, called Empower Ashland, which includes an element on reducing personal consumption emissions.</p> <p>Ashland's Conservation Commission piloted a "Straws on Demand" to educate restaurant goers and support zero waste alternatives.</p> <p>Plans</p> <p>Recology anticipates updating signage at the Ashland Recycle Center, and will also improve educational collateral in order to transmit a clearer message about proper recycling to the public.</p> <p>The City plans to implement the climate outreach and education plan in 2019.</p> <p>Ashland's Conservation Commission is preparing expand its climate outreach activities to engage more of the community with the CEAP.</p> <p>City Staff and Conservation Commission are working together to implement a pilot program for reusable carry-out containers. Comprehensive "zero disposables" education programs are being researched.</p> <p>Problems</p>
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 Not Started	CM-1-2. Support “collaborative consumption” community projects.	<p>Progress Not Started.</p> <p>Plans Discuss with Climate Policy Advisory Commission.</p> <p>Problems The scope of this action could be refined.</p>
 On track - complete by 2020	CM-1-3. Determine and implement effective ways to reduce and track consumption based emissions.	<p>Progress City of Ashland conducted a comprehensive GHG inventory in 2015, which included both "sector based" and "consumption based" emissions. Sector emissions are commonly reported, but at the time Ashland was one of the first communities to estimate Consumption emissions.</p> <p>Plans The City of Ashland is collaborating with Oregon DEQ to develop a revised Consumption Based Emissions Inventory based on current best practices. The new inventory will be more representative of the local economy and will be a more useful for policy development.</p> <p>There are significant outreach and education opportunities to help citizens. The City plans to increase outreach and education efforts as a primary tool for reducing consumption based emissions.</p> <p>Problems The City has few options to significantly or directly regulate consumption based emissions.</p> <p>Additional research and community engagement could identify the most effective ways to reduce consumption emissions. This information could be used to refine outreach and education efforts.</p>

 <p>On track - complete by 2020</p>	<p>CM-3-1. Improve recycling programs to make them easier to use and implement new education and outreach to increase recycling in all sectors; expand public space recycling.</p>	<p>Progress The City and Recology have partnered to support continued recycling in the wake of the global recycling crisis. Recology continues to refine community messaging about waste prevention and recycling with respect to new knowledge about global markets. Through offering services like community workshops, a new business recognition program, and public education using popular channels like social media and television news broadcasting, Recology continues to encourage and foster a world without waste.</p> <p>Plans On the horizon, Recology anticipates updating signage at the Ashland Recycle Center, and will also improve educational collateral in order to transmit a clearer message about proper recycling to the public.</p> <p>Ashland Parks and Recreation and Conservation Commission maintain recycling infrastructure throughout Lithia park and the Downtown core.</p> <p>Problems</p>
 <p>Not Started</p>	<p>CM-3-2. Update the multi-family recycling ordinance to encourage more diversion.</p>	<p>Not Started.</p>
 <p>Not Started</p>	<p>CM-3-3. Strengthen the Demolition Debris and Diversion ordinance to enhance enforcement and increase diversion and reuse.</p>	<p>Progress Not started</p> <p>Plans Community Development Dept. is seeking consulting services to update the local demolition/relocation of structures code (AMC 15.04.210-220) which contains the demolition and debris diversion requirements. City/Recology staff will provide technical support to update demolition debris diversion standards as part of this process.</p> <p>Problems</p>

 In progress - continuing past 2020	CM-4-1. Support edible food donation.	Progress City has provided written support for annual DEQ grant for ACCESS Fresh Alliance program that coordinates the collection and re-distribution of near end of shelf-life food locally. Plans Discuss with Conservation Commission. Problems The scope of this action could be refined.
 In progress - continuing past 2020	CM-4-2. Provide a kitchen best practices guide to help households and businesses reduce food waste and consumption.	Progress DEQ is conducting food waste reduction/sustainable best practices for the restaurant industry around the region. City staff will coordinate with DEQ to develop and provide ongoing educational materials to local businesses. Plans City and Recology will be developing educational materials for home use. Discuss with Conservation Commission Problems
 Not Started	CM-4-3. Evaluate opportunities for recycling of commercial food waste.	Progress Not Started. Plans Discuss with Conservation Commission Problems Current program limited to “pre-consumer” food waste from commercial customers only. No facility exists currently in the region to collect and process post-consumer food waste at scale.

 Not Started	CM-5-1. Introduce environmentally preferable purchasing (EPP) guidelines for City procurement.	Not Started.
 Not Started	CM-5-2. Assess the feasibility of co-digesting food waste and biosolids to generate electricity at the wastewater treatment facility.	Progress Not started. Plans No action taken, but under a 5 year evaluation forecast. Problems
 In progress - continuing past 2020	NS-1-2. Use green infrastructure such as bioswales, permeable pavement, other pervious surfaces to reduce flood risk and minimize sediment entry into creeks from trails and roads.	Progress Ashland's conservation programs promote groundwater infiltration, water catchment, and beneficial reuse. See also NS-2-3. Current green infrastructure requirements are contained within City Street Standards document and Site Design and Use Standards for new development (Multi-family and Commercial). Plans Phase II action item identified for next two budget bienniums. Discuss with Climate Policy Advisory Commission. Problems The scope of this action could be refined.

 <p>On track - complete by 2020</p>	<p>NS-1-4. Map and protect areas that provide ecosystem services.</p>	<p>Analyzing and protecting the integrity of the watershed is a primary function of AFR. AFR recently re-inventoried all City-managed forest lands for fuel loading, wildlife, and riparian habitat.</p> <p>The recently passed wildfire ordinance draws a new map of Ashland, which acknowledges the risk of wildfire across our entire community.</p> <p>AFR is currently looking at new models for incorporating forest carbon storage calculations into the data set.</p> <p>Link: https://www.ashland.or.us/Page.asp?NavID=17670</p>
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 <p>On track - complete by 2020</p>	<p>NS-2-1. Evaluate the value and potential for incentives for practices that reduce use of potable water for non-potable purposes and recharge ground water.</p>	<p>Irrigation Evaluations & Indoor Evaluations</p> <ul style="list-style-type: none"> o Every year water conservation staff offer free irrigation system evaluations and indoor water use evaluations for all Ashland customers. Evaluations are offered during the summer months and consist of an assessment of the design, operation/management of sprinkler systems. Assistance with programming sprinkler controllers and developing watering schedules is also provided. <ul style="list-style-type: none"> • Lawn Replacement Program: <ul style="list-style-type: none"> o Provides customers with a rebate for removing lawn and replacing with low water use and climate appropriate plants as well as more efficient irrigation systems. • Graywater Reuse & Rainwater Catchment <ul style="list-style-type: none"> • The City has developed information about graywater and rainwater catchment systems. A water use evaluation guide is now offered to help customers determine how much graywater they produce using plumbing fixtures such as showers and washing machines. The City has offered four workshops in the past two years on Graywater Reuse and Rainwater Catchment. We plan to continue to offer workshops in the future. More information can be found at www.ashland.or.us/graywater • Right Water Right Use <ul style="list-style-type: none"> o The City will continue to replace potable water irrigation with TID irrigation where feasible. The City has proposed to pipe a two-mile portion of the TID canal, which will reduce evaporation and seepage losses as well as improve water quality. • Water-Wise Landscaping Website <ul style="list-style-type: none"> o Website designed to inspire the creation of landscapes that incorporate lower water use plants. It serves as a virtual demonstration garden that showcases examples from local residents' landscapes and provides useful information on how to care for these planting. • Watering Hotline <ul style="list-style-type: none"> o During the months of May through October, we provide weekly watering data to assist customers in programming their irrigation system controllers. We gather local Evapotranspiration (ET) data from a weather station located at the Wastewater Treatment Plant to develop a suggested watering schedule for the week. o Developed a water use calculator for customers to evaluate their own water use. • Handouts / Resources
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		<ul style="list-style-type: none">o Created a sampling watering guide for every two weeks throughout the summer months.o Water Saving guide for the outdoorso How to read your water meter<ul style="list-style-type: none">• Landscaping and Irrigation Plan Review:o The City's Water Conservation Specialist reviews and provides comments on landscape and irrigation plans submitted to the Planning Division when applicable. Direction for meeting water efficiency standards is provided through the plan review process and also directly to landscape designers.
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 <p>On track - complete by 2020</p>	<p>NS-2-3. Expand water conservation outreach and incentive programs for residents and businesses.</p>	<p>The City provides technical assistance to residential and multi-family residential customers in a variety of ways to encourage and assist with implementing water conservation measures. In the last five years, we have expanded our program to include providing technical assistance to commercial and institutional customers. Currently all customer categories are eligible for our free evaluations, rebates and/or giveaways. Programs include, Indoor water evaluations, Irrigation system evaluations, appliance rebates and giveaways such as showerheads and aerators. We continue to work with trade allies to encourage production and installation of water efficient fixtures and products in accordance with Oregon's plumbing code regulations and the Oregon Landscape Contractors Board. This technical assistance is advertised in multiple ways and includes the following services:</p> <ul style="list-style-type: none"> • Irrigation Evaluations & Indoor Evaluations <ul style="list-style-type: none"> o Every year water conservation staff offer free irrigation system evaluations and indoor water use evaluations for all Ashland customers. Evaluations are offered during the summer months and consist of an assessment of the design, operation/management of sprinkler systems. Assistance with programming sprinkler controllers and developing watering schedules is also provided. o Indoor Water Evaluation - evaluate water use on indoor plumbing fixtures, look for leaks and giveaway showerheads, aerators and toilet leak tablets. • Giveaways <ul style="list-style-type: none"> o Regularly giveaway low-flow aerators for bathroom and kitchen sinks, low-flow shower heads and soil moisture meters. • Rebates <ul style="list-style-type: none"> o Toilets: We offer rebates for replacing older toilets with more efficient WaterSense labeled toilets o Washing Machines: We offer rebates for replacing older washing machines with more efficient Energy Star washers. o Lawn Replacement Program: Provides customers with a rebate for removing lawn and replacing with low water use and climate appropriate plants as well as more efficient irrigation systems.
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		<ul style="list-style-type: none"> • Public Outreach: <ul style="list-style-type: none"> o Water Wise Landscaping Website o Watering Hotline o Water Conservation Webpage o Handouts on watering schedules, tips for using water indoors and outdoors, how to read your meter handout, graywater, rainwater catchment, drought, how to water trees and much more. o Articles are written for the City Source newsletter that are delivered with utility bills monthly o Participate in community events such as staffing a booth at Science Works on Earth Day or the Salmon Festival at North Mountain Park. • Potential Future Programs <ul style="list-style-type: none"> o Exploring a “Smart” irrigation controller and pressure reducing valve rebate program.
 Not Started	NS-3-1. Evaluate the potential for installation of rainwater collection systems at City facilities for graywater uses, and investigate opportunities for graywater reuse at existing and new City facilities and properties.	This action will be completed after a future facilities water audit.
 Not Started	NS-3-2. Implement efficiency recommendations from the City facilities water audit.	This action will be completed after a future facilities water audit.

 Not Started	PHSW-1-1. Promote the expansion of tree canopy in urban heat islands or areas that need air conditioning such as schools.	Progress Not started. Plans Phase II action item identified for next two budget bienniums. Problems
 In progress - continuing past 2020	PHSW-2-2. Support organizations, such as SOU, in evaluating risks to local food sources under climate change.	Progress City staff have supported several organizations working broadly to identify vulnerabilities and develop climate response strategies. New opportunities and partnerships are emerging that are focused on food and local climate action. Plans Discuss with Conservation Commission. Problems
 In progress - continuing past 2020	PHSW-3-2. Identify and minimize potential urban heat impacts.	Progress Communication protocols are in place to help the community to avoid potential threats and where to go for refuge. Plans Identify opportunities and champions to address urban heat effects. Discuss with Climate Policy Advisory Commission. Identify desired outcomes and actions related to this action. Problems The scope of this action could be refined.

<p>Complete</p>	<p>PHSW-3-3. Develop or enhance heat-warning systems for employees and the public.</p>	<p>Progress Ashland Fire and Rescue adopted NIXLE 2018. , smoke/air quality advisories.</p> <p>Weather related warnings come from National Weather Service advisories and are rebroadcast to the public, and includes alerts for excessive heat, smoke/air quality, floods, and similar events.</p> <p>Link: ashland.or.us/nixle</p> <p>Plans Ashland will continue to explore additional ways to improve and supplement community communication systems.</p> <p>Problems</p>
<p> On track - complete by 2020</p>	<p>PHSW-4-1. Update the City's emergency response plan and ensure that preparation and updates recognize and address likely climate change impacts.</p>	<p>Ashland Fire and Rescue is in process of updating Ashland's emergency response plans, including updated wildfire evacuation and emergency operations protocols.</p> <p>City of Ashland, SOU, and the Ashland School District have all made improvements to their facilities to improve air filtration and reduce the public health risk of smoke. Some facilities are open to the public during hazardous smoke levels.</p> <p>The current Emergency Operations Center is not optimally placed. The City is reviewing options for relocating emergency operations to a more resilient and protected site.</p> <p>Ashland School District has plans to upgrade facilities' heating and cooling systems for additional smoke resiliency.</p> <p>The Smokewise Ashland program is being expanded to include additional information relevant to our economy and local businesses.</p> <p>Link: www.smokewiseAshland.org</p>

 <p>In progress - continuing past 2020</p>	<p>PHSW-4-2. Identify and address populations and essential City services that are within the 100-year flood zone.</p>	<p>Progress Public Works has made essential service improvements to pump stations for resiliency and fire flow requirements. The new water treatment plant will be designed to current standards and provide resiliency for the treatment and delivery of potable water.</p> <p>Public Works, Police and Fire have worked together to define essential lifeline routes in support of public safety during emergency events.</p> <p>The City has an Emergency Action Plan (EAP) in place for flooding events associated with Ashland Creek and Hosler Dam. Trainings occur each year for the EAP and the document is updated regularly and approved by the Federal Energy Regulatory Commission (FERC).</p> <p>Plans Discuss with Conservation Commission.</p> <p>Problems The scope of this action could be refined.</p>
 <p>On track - complete by 2020</p>	<p>ULT-1-1. Coordinate with neighboring local governments to promote use of transit, carpooling, and car-sharing.</p>	<p>Progress The City is currently working with RVTD to improve the marketing and outreach of the subsidy token program for seniors and school age kids within Ashland.</p> <p>Plans If RVTD is successful with the grant application for the demand response pilot van program the City will coordinate with RVTD for marketing and outreach of the program to citizens.</p> <p>RVTD has a carpool program in place called drive less connect, Link: https://www.rvtd.org/Page.asp?NavID=51</p> <p>Problems</p>

 <p>In progress - continuing past 2020</p>	<p>ULT-1-3. Establish policies to support development near transit hubs without displacing disadvantaged populations.</p>	<p>The Transit Triangle (TT) overlay and land use ordinance amendments were adopted by the City Council in December 2018.</p> <p>The proposed amendments cover the area surrounding the bus route in the southeastern part of Ashland that circulates on Ashland St., Tolman Creek Rd., and Siskiyou Blvd. The TT overlay is intended to provide an area to construct greater numbers of moderately sized housing units, provide a better environment for local business development and expansion, support transit service through increasing the number of residents in close proximity to the bus route, and create a walkable neighborhood by locating good and services near new housing and existing residential neighborhoods.</p>
 <p>On track - complete by 2020</p>	<p>ULT-1-4. Evaluate the feasibility of expanded local transit options</p>	<p>See ULT 1-2 above.</p>
 <p>In progress - continuing past 2020</p>	<p>ULT-3-1. Implement a local fuel-related tax.</p>	<p>Progress City staff have researched the feasibility of implementing a local fuel tax. Fuel taxes would could provide incomplete data on local fuel sales. Tax would need voter approval. Tax revenue needs to be spent on State-approved uses, which largely focus on road improvements.</p> <p>Plans Discuss options with future advisory commission.</p> <p>Problems The scope of this action could be refined.</p>

 <p>In progress - continuing past 2020</p>	<p>ULT-4-2. Further revise community development plans to favor walkable neighborhoods and infill density.</p>	<p>See ULT-1-3 for Transit Triangle Overlay</p> <p>Accessory Residential Unit (ARU) The City Council adopted amendments to the accessory residential unit (ARU) standards in July 2018 creating a streamlined approval process for ARUs that are less than 500 square feet in size and located within or attached to a single-family home. The amendments exempt these small ARUs in the single-family zones from the planning application process and allow a property owner to obtain a building permit to convert existing floor area or construct an ARU attached to a home.</p> <p>Ashland is in the 28th year of allowing ARUs in single-family zones. Since Ashland began allowing ARUs in 1991, over 200 units have been approved at an average of seven ARUs approved a year. ARU building permit applications in Ashland increased to 11 in 2017 and 18 in 2018. Many communities in Oregon did not allow ARUs until Oregon Senate Bill 1051 was signed into law by Governor Brown in August 2017 and required cities with populations greater than 2,500 to allow at least one accessory dwelling unit for each detached single-family dwelling in single-family zones.</p> <p>Cottage Housing The City Council adopted a new provision allowing cottage housing in single-family zones in November 2017. The ordinance allows the number of housing units to be double the allowed density of the traditional single-family subdivision if the cottages add up to the same overall building square footage permitted with a traditional subdivision and at least 75 percent of the units are 800 square feet or smaller. Development standards allow the cottages to be oriented around a central recreational/open space area and parking congregated in one area.</p>
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 <p>In progress - continuing past 2020</p>	<p>ULT-4-3. Modify the WUI code to include construction techniques appropriate for wildfire-prone areas.</p>	<p>See also ULT-4-1 above.</p> <p>In September 2018, the City expanded the Wildfire Lands Overlay to cover the entire City, and adopted updated standards for new construction, additions to existing buildings, roofing of structures, and landscaping in proximity of buildings. The new wildfire fuels management landscaping requirements increase wildfire safety through restricting new planting of flammable species identified on a newly adopted Prohibited Flammable Plant List.</p>
 <p>Not Started</p>	<p>ULT-5-1. Provide carpool and vanpool parking, charging stations, and parking for EVs for City employees.</p>	<p>Progress There's an identified need for employee workplace charging policies and infrastructure.</p> <p>Plans Until policies are in place, public EV chargers may be used with any vehicle without fees to the user.</p> <p>Problems The scope of this action could be revised.</p>
 <p>On track - complete by 2020</p>	<p>ULT-5-2. Conduct a city fleet audit and use it to set policy and targets.</p>	<p>Progress Drafted Admin Policy to prefer non-fossil vehicles, unless by exception. Worked with Fleet Mgr. to develop strategies for low-carbon fleet.</p> <p>Plans The City will continue to choose low-carbon alternatives wherever practical. Passenger vehicles will be relatively easy to replace, while.</p> <p>Problems There are few low-carbon options available for heavy duty vehicles.</p>

 Not Started	ULT-5-3. Develop policy to require the purchase of verified carbon offsets to offset City staff travel.	Progress Not Started Plans Discuss with future Climate Policy Advisory Commission. Problems The scope of this action could be refined.
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