

Council Business Meeting

May 4, 2021

Agenda Item	Climate and Energy Action Plan (CEAP) Progress Update	
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SUMMARY

Ashland's Climate and Energy Action Plan (CEAP) is an ambitious framework to reduce our community's climate pollution and prepare for likely climate impacts. It includes a list of goals, strategies, and actions that the Ashland community could undertake between 2017 and 2025. The CEAP establishes climate goals for the Ashland community as a whole, as well as goals for municipal operations. It was approved by the City Council in 2017 and is incorporated into the Municipal Code as Title 9.40: Climate Recovery. This 2021 progress report contains the following information:

- Analysis of community progress toward CEAP's two top-level goals: reducing emissions and preparing for climate impacts;
- Status summary of all goals and specific actions identified in the CEAP;
- Review of key progress indicators.

Key takeaways

1. Ashland is falling behind on its goals to reduce greenhouse gas emissions. Since 2015, there has been a significant increase in natural gas connections and consumption. Achieving Ashland's mitigation goal will require continued attention to reducing transportation and greater focus on natural gas emissions.
2. More clarity is required regarding strategies and actions to prepare for likely climate impacts.
3. Equitable climate action demands a special emphasis on assisting low and medium income residents by maximizing current programs, opportunities, and resources to this end.
4. Expand the CEAP into a regional effort by engaging a broader array of stakeholders and decision makers. Coordinate regional climate planning and increase ownership of community-based actions.
5. Although municipal operations account for a small percentage of Ashland's greenhouse gas emissions, it's important for the City to lead the way with investment choices that reduce emissions and increase resilience to likely climate impacts.

POLICIES, PLANS & GOALS SUPPORTED

- 2019-21 Council Goal 2.B.A – Value Services: Emergency Preparedness, Address Climate Change
- 2015-17 Council Goal 22.1 – Develop and implement a community climate change and energy plan
- Ashland Climate and Energy Action Plan – Council adopted March 2017
- AMC 9.40 – Climate Recovery

PREVIOUS COUNCIL ACTION

- [Climate Recovery Ordinance 3145](#) - An ordinance establishing greenhouse gas and fossil fuel reduction goals and targets for community and city operations. [Minutes from the September 19, 2017 Regular Business Meeting](#).
- [Ashland Climate and Energy Action Plan](#) – Comprehensive plan to reduce community emissions and prepare for climate impacts. [Minutes for the March 7, 2017 Regular Business Meeting](#).

BACKGROUND AND ADDITIONAL INFORMATION

Ashland's climate plan contains many layers, including strategic initiatives, focus areas, goals, strategies, actions, and projects. Each layer builds upon the next to create a comprehensive climate plan.

This 2021 progress report focuses on Ashland's climate goals and also includes partial greenhouse gas emissions updates. Each climate goal is a destination our community is trying to reach, and this report contains information to help judge if we are getting closer to those goals. Ashland's climate Plan includes goals for the entire community, as well as goals specific to municipal operations. Additional implementation details for goals and actions are included as attachments.

Progress Toward Overall Climate Goals:

The CEAP contains two main goals. Each Goal is listed below, along with adopted climate targets. Each Target contains a brief evaluation of progress, problems, and plans for the future.

GOAL 1 - MITIGATION: Reduce Ashland's contribution to global carbon pollution by reducing greenhouse gas emissions associated with City, residential, commercial, and industrial activities.

Community Target: Reduce overall Ashland community greenhouse gas emissions by 8% on average every year to 2050.

Status:

- The Community is not meeting adopted emission reduction goals.
- The current progress indicator data suggest that community climate emissions have remained relatively flat overall. Transportation electrification has reduced emissions, but increased natural gas consumption has added emissions.
- The Community is generally supportive of climate action and is making progress on several fronts.

Progress/Highlights:

- The community has reduced transportation emissions, primarily due to adoption of electric vehicles and decreased car travel as a result of the pandemic.
- Dozens of community groups in Ashland and the region are actively working on climate action.
- Many Ashland homeowners are investing in their homes for increased efficiency and resilience.
- The City of Ashland Conservation Division offers [multiple programs](#) to help citizens save energy and reduce carbon emissions. These programs currently include free home energy reviews, new construction incentives, solar electric incentives, heat-pump water heaters, heating system and window upgrades, project-specific incentives for commercial customers, no-barrier public charging, and zero emission vehicle incentives.
- The City of Ashland has implemented very successful solar electric policies. In the past 20 years, nearly 3.25MW of solar have been installed within city limits. Ashland's progressive [Virtual Net Metering policy](#) allows ratepayers to install solar anywhere in the City and receive the credit on their utility bill. Nearly 325kW of solar electric power has been installed under the virtual net metering framework.
- Ashland climate staff are in the midst of delivering the "[Adapt Your Home](#)" outreach campaign, which helps residents reduce emissions and prepare for climate impacts.
- Ashland climate staff created all-new web content to engage citizens on residential climate actions and connect them with City resources.
- City Commissions remain a key area of public engagement. Commissions have begun to identify common interests and coordinate their efforts for maximum effect. Ashland hosts two City Commissions that specifically handle climate-related issues: [Conservation and Climate Outreach Commission](#) and the [Climate Policy Commission \(CPC\)](#).

Key Issues:

- Community natural gas emissions increased ten percent in 2020 compared to the 2015 baseline. (The 2015 baseline coincided with an exceptionally warm Winter with low levels of heating fuel consumption.) Ashland will not be able to meet its climate goals if fossil gas use continues to expand and increase.
- New construction and development in Ashland often (but not always) increase use of fossil energy sources, which makes achieving the City's emissions goals more difficult.
- Rental properties are difficult to make more energy efficient due to the 'split incentive' effect, which can cause rent increases without additional regulations in place.
- Building code is established at the State level and holds all jurisdictions to the same standard. City Staff have advocated for the creation of State policies that allow Cities and Counties to optionally require higher-efficiency building 'reach codes' if they are first approved by the State.
- Many CEAP actions designed to lower community emissions fall outside the legal authority of the City of Ashland.
- Consumption emissions (from the purchase of goods and services) have increased throughout Oregon, especially since the pandemic.
- Zero emission transportation is still beyond the financial reach of many Ashland residents.

Plans:

- The City's Conservation Division has plans to offer additional incentives to help the community reduce emissions: induction cooktops, small electric engines, low-Carbon new construction,
- Ashland Electric utility has been invited by the federal Rural Energy Savings Program to apply for an approximately \$10M zero interest loan for building energy retrofit programs to be re-lended to ratepayers to expand current on-bill financing. If awarded this loan, it will provide up-front financing for Ashland utility customers to complete comprehensive building energy upgrades.
- Community Solar projects are being proposed to make use of Ashland's virtual net metering policy.
- The Climate Policy Commission has begun working on an implementation update to the CEAP, as well as identifying needs and issues for Ashland's longer term energy and utility planning.
- City Staff and Commissioners are planning to update the Ashland Electric Systems 10-year Planning Study.

Future needs:

- Support Ashland Electric in the creation of expanded on-bill energy loan programs.
- Focus on the development of zero energy homes programs.
- Ensure adequate funding for incentives that reduce climate-altering emissions in Ashland.
- Ensure that City incentive programs and assistance are tailored to facilitate climate action by low and medium income residents.
- Include low-carbon language in Ashland's new development density bonus.
- Ensure that all major City of Ashland planning documents consider equity and climate impacts.
- Increase community stakeholder involvement and accountability. The updated CEAP may include commitments from community actors in addition to the Municipality.
- Engage with all Ashland Utilities to explore de-fossilization opportunities.

Municipal Targets: Attain carbon neutrality in City operations by 2030, and reduce fossil fuel consumption by 50 percent by 2030 and 100 percent by 2050.

Status:

- Municipal operations need improvement and investment to attain carbon neutrality by 2030.
- With sustained support from staff and elected leadership, it is possible for Municipal operations to be fossil free by 2050.

Progress/Highlights:

- Ashland Electric is participating in the Oregon Clean Fuels Program, which generates revenue to support low-carbon energy projects, including no-barrier public charging, and zero emission vehicle incentives.
- The City of Ashland has electrified nearly all passenger vehicles in the fleet. Approximately 30 percent of sport utility vehicles and 20 percent of Police vehicles utilize high-efficiency hybrid engines.
- Climate, Electric Utility, and Fleet staff collaborated to update and improve Ashland's fleet charging infrastructure.
- City Commissions have begun incorporating climate issues and coordinating with each other to increase policy impact.
- The City of Ashland Administration Department created internal policies in 2018 to cease the development of fossil fuel in new facilities and equipment whenever available and practicable.

Key Issues:

- Municipal buildings and operations require significant investment to eliminate 50 percent of fossil-based emissions by 2030.
- Absent these investments, the City may be able to satisfy this goal using a market-based program, for example carbon offsets. It is preferable to directly eliminate emissions when possible, rather than use market-based programs.
- The Municipal fleet is reliant on low-carbon vehicle fuels for medium and heavy duty vehicles, until those zero-emission versions become available.
- Currently all facilities managed by the City are counted as Municipal emissions. It should be noted that the majority of energy intensive City facilities are operated to serve the general public (public pool, water treatment plant, wastewater treatment plant, water pump stations). The Briscoe School is an outlier because it is managed by the City, but leased privately.

Plans:

- City of Ashland continues replacing vehicles with electric and fossil-free vehicles whenever practical.
- Beginning in 2021, City of Ashland Fleet plans to utilize renewable-Diesel to reduce emissions of medium- and heavy-duty vehicles.
- Ashland Electric is preparing to update the Electric System 10-year planning study, which will include a Distributed Energy Resource policy to guide the development of additional renewable energy on the electric grid.
- The City is assessing the potential for municipal facilities to host additional solar energy projects, including the potential for Utility-scale solar investments.

Future needs:

- Ensure that the City of Ashland invests in low-Carbon facility energy upgrades.
- Support transition of Ashland's fleet and equipment to low-carbon vehicles.
- Consider climate issues, including equity and inclusivity, as part of City decision making.
- Support development of climate-friendly procurement policies.

GOAL 2 - PREPARE: Prepare the city's communities, systems, and resources to be more resilient to climate change impacts.

Status:

- The community has taken significant action toward mitigating wildfire risk.
- There is significant work to be done to assess and reduce risk from other climate impacts, including smoke, drought, and access to safe indoor areas during acute smoke and heat events.

Progress/Highlights:

- Wildfire Safety Ordinance is a key part of the strategy to protect Ashland from wildfire. It was created and subsequently expanded to cover all lots in Ashland.
- Ashland Forest Resiliency Project has been active for many years to reduce wildfire risk and improve forest ecosystem health. This program may serve as a model for future long-term community collaborations.
- City of Ashland offers multiple water conservation programs which are popular among citizens. Ashland has a demonstrated ability to reduce water consumption in times of need, and conservation strategies will be critical to make the most of limited water resources.
- Collaboration with OHRA.
- Talent-Ashland-Phoenix water supply.
- Consumer-owned utilities and services provide Ashland residents with water, wastewater, broadband, and electric services. This provides a degree of local influence over utilities that many communities do not have.

Key Issues:

- Some community members lack access to safe indoor spaces during acute smoke and extreme weather events.
- Many buildings in Ashland have inadequate air filtration, some do not have air conditioning.
- Houseless and lower-income residents are most likely to be affected by climate impacts.
- Consumer-owned utilities are usually smaller and with fewer resources, making it difficult to leverage economies of scale.

Plans:

- CPC to develop additional adaptation and resilience targets as part of CEAP implementation update.
- Southern Oregon University and Southern Oregon Climate Action Now - Ashland Climate Action Project are developing a community survey, which will better inform adaptation and resiliency planning efforts.

Future needs:

- Refine and expand CEAP adaptation goals and targets.
- Increase focus on equity.
- Engage with all Ashland utilities to explore resilience-building opportunities.

CEAP Goals and Action Status:

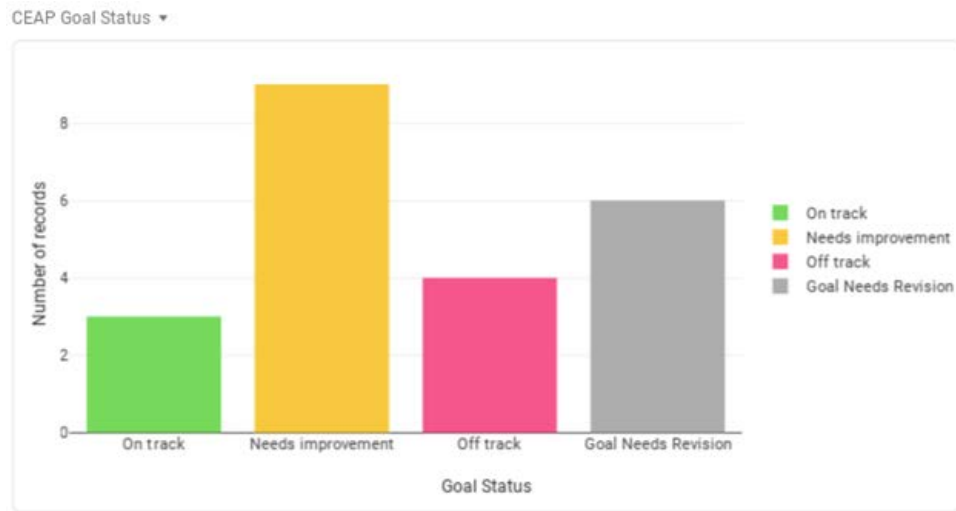


Chart 1. Status of CEAP Goals 2021

- Out of 22 adopted goals (4 overall goals, and 18 Focus Area Goals)
 - 3 goals are “on track”,
 - 9 goals “need improvement” to get back on track,
 - 4 goals are “off track”, and
 - 6 goals “need development” in order to be reported on.
- A list of all CEAP goals and their current status is included as Attachment 1: CEAP 2021 Goals.pdf.

CEAP Actions Summary:

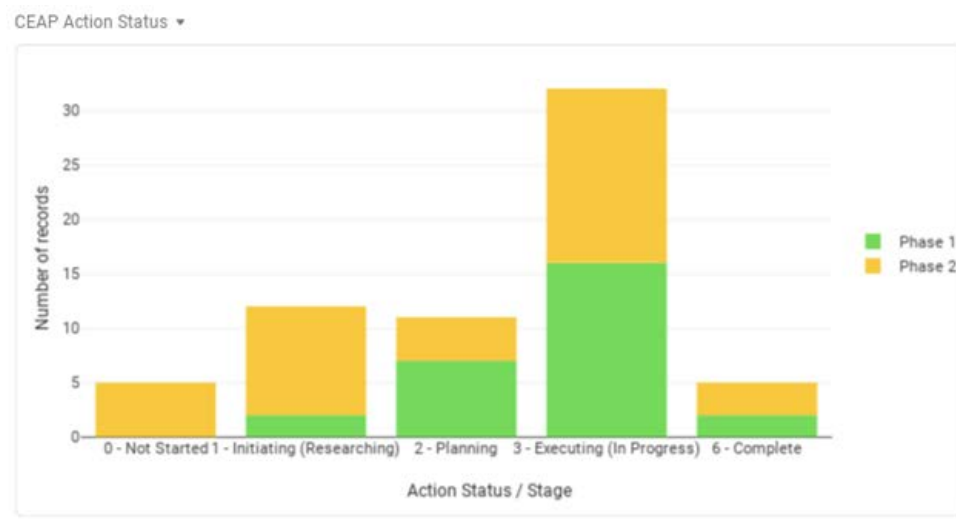


Chart 2. Status of CEAP Actions 2021.

- Out of 65 adopted actions
 - 5 are “complete”
 - 32 are “executing / in progress”
 - 11 are “planning”
 - 12 are “initiating / researching”
 - 5 are “not started”
- A list of all climate actions and their current status is included as Attachment 2: CEAP 2021 Goals.pdf.

- The CEAP is a living document, and it is understood that Ashland’s climate goals and actions will evolve over time. The Climate Policy Commission is charged with updating the CEAP document and expects to offer a revised Climate implementation framework in late 2021.
- Several actions in the CEAP will need to be updated and/or revised before they can be completed. For example, “BE-1-2. Promote switching to lower-carbon fuels” is a relatively easy action to take, but does not clearly specify an endpoint. Creating more specific goals and actions is an important outcome of the CEAP update process.

Overall climate and energy trends

- The graphic below is a new visualization of the three primary types of energy use that occur in or near Ashland: use of electricity, burning of natural gas, and local transportation. This graphic includes only combustion emissions of energy used directly within Ashland City limits and does not include upstream impacts of fossil fuel combustion. Emissions from fossil sources would be considerably higher if external environmental impacts were to be factored in.

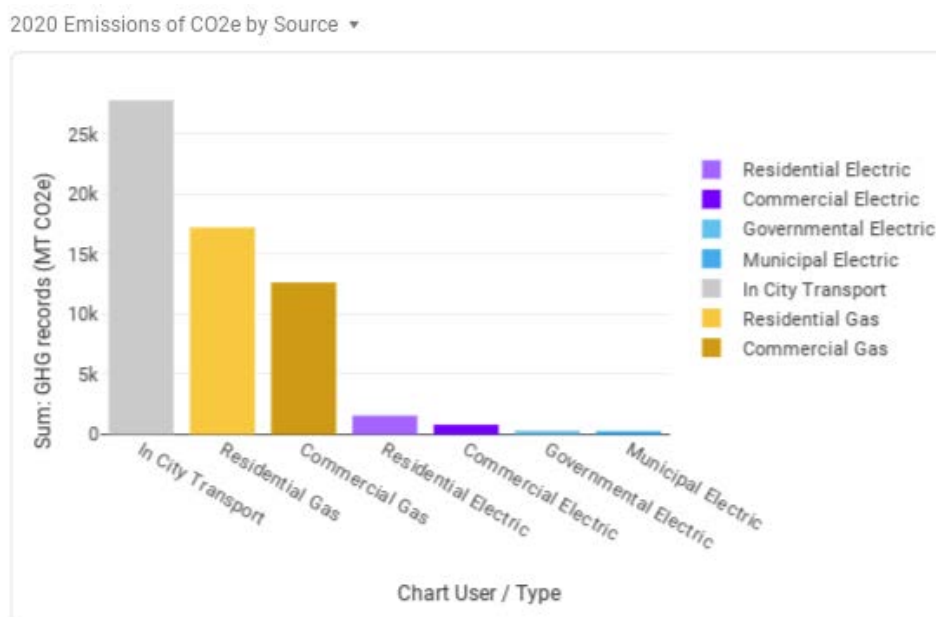


Chart 3. 2020 Emissions of Carbon Dioxide Equivalent from Ashland energy use.

Approximate MT CO2e by Energy Source from 2017-2020 ▾

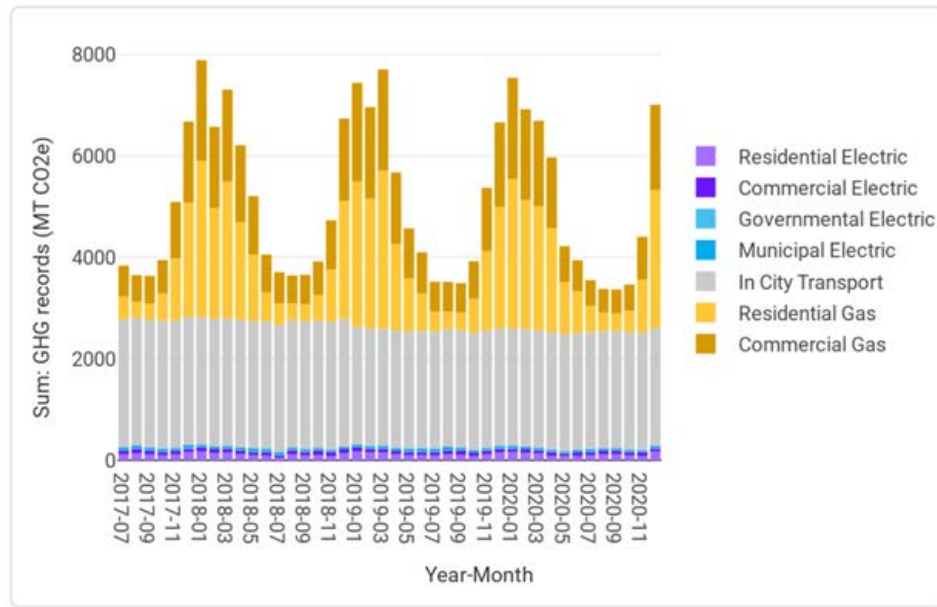


Chart 4. Approximate Metric Tons of CO2 equivalent by source 2017-2020.

- Key Points
 - Since 2017, Ashland has not made meaningful reductions in use of natural gas.
 - Ashland's vehicles are electrifying rapidly, but the distances travelled have not decreased significantly.
 - Using Ashland Electric's utility-specific carbon intensity reduces electric emissions compared to using a regional average, and reflects the power that Ashland has contracted to purchase.
- Energy emission sources in Ashland during 2020, percent of total:
 - Natural gas = 49 percent
 - Transportation = 46 percent
 - Electricity = 5 percent
- Assumptions about this data:
 - Electricity emissions are modeled using a utility-specific Carbon intensity generated for Ashland Electric by Oregon Department of Environmental Quality as part the Clean Fuels Program. (Electric Carbon Intensity for 2020 = 4.74 g CO2e/MJ). Ashland's utility specific carbon intensity is ~95 percent lower than the statewide average. Previous GHG inventories have used a Northwest-average Carbon Intensity, rather than recognize Ashland's choice to utilize BPA hydropower.
 - Natural Gas emissions are modeled using EPA emission factors and only include combustion from within Ashland city limits. Upstream emissions from natural gas are significant, though they are not included here. (Natural Gas = 0.005 MT CO2e/therm).
 - Transportation Emissions are estimated based on Oregon state and county vehicle miles travelled which are scaled to the regional road network. Transportation emissions have not been adjusted to include the effects of electric vehicles adoption, which would reduce transportation emissions by five to ten percent. Staff intends to make this adjustment in the future when higher quality vehicle registration data is available.
 - Consumption Emissions are not included in this chart as emissions generally occur outside of Ashland and available data are not Ashland specific.

Summary of Selected Community Progress Indicators: Electric Use

Ashland Monthly Electricity Use (Megawatt Hours) 2017-2020 ▾

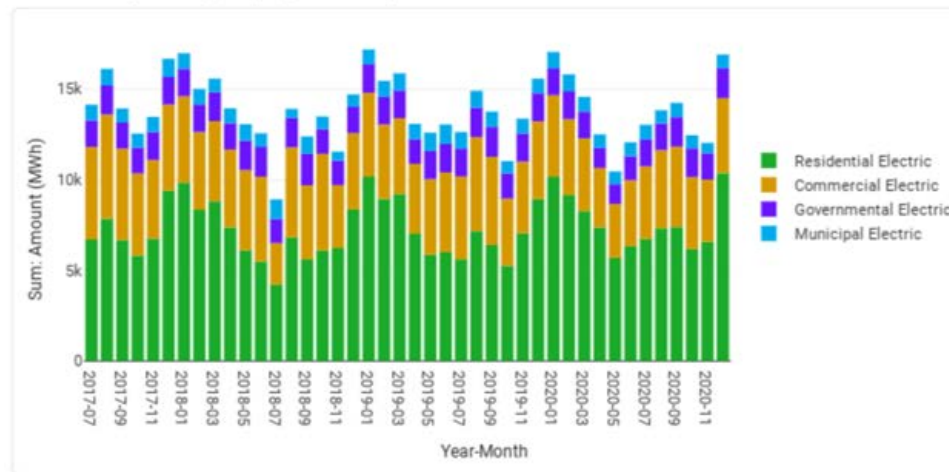


Chart 5. Ashland Monthly Electricity Use July 2017-2020.

- Community Electric Use has remained steady since the adoption of the CEAP in 2017. Potential increases in electric use by new development are being offset by gains in efficiency.
- Ashland's monthly electricity use peaks in January, with a less pronounced peak occurring in mid-Summer.
- As of early 2020, Ashland Electric serves the following type and number of meters:
 - Residential: 19,078
 - Commercial: 1,009
 - Governmental: 103
 - Municipal: 227

Ashland Annual Electricity Use (Megawatt Hours) 2010-2020 ▾

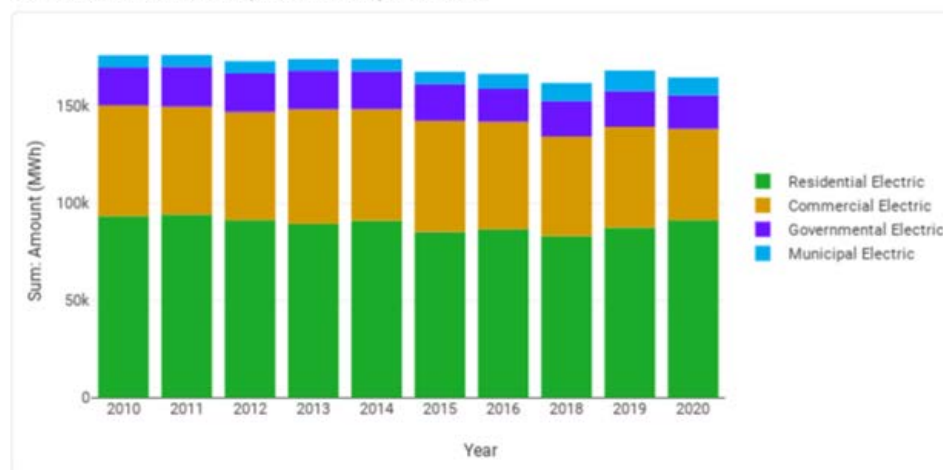


Chart 6. Ashland Annual Electricity Use (Megawatt Hours) 2010-2020.

- Ashland's electric use declined two percent in 2020, compared to the 2015 baseline.

Community Natural Gas Use

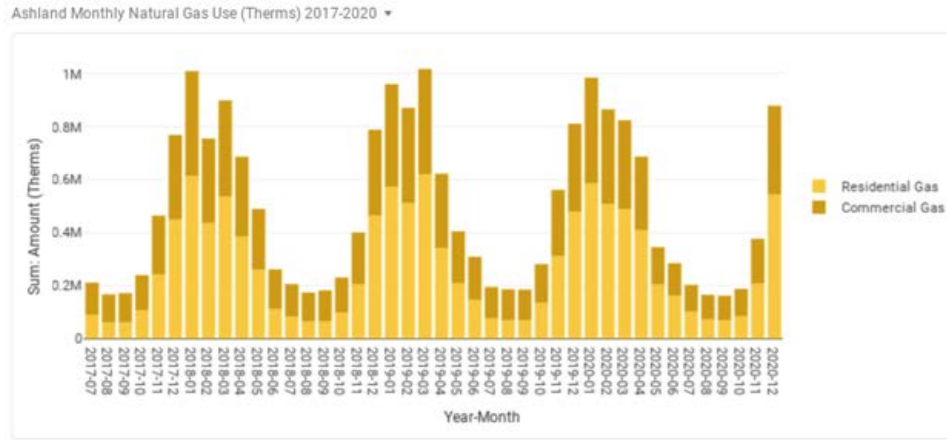


Chart 7. Ashland Monthly Natural Gas Use 2017-2020.

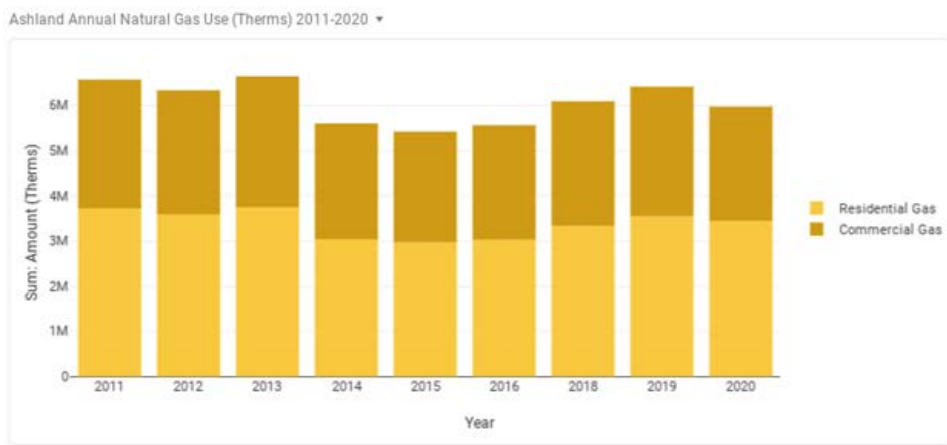


Chart 8. Ashland Annual Natural Gas Use (Therms) 2011-2020.

- Community natural gas consumption increased 10% in 2020, compared to 2015
- The average number of gas meters in Ashland increased 5% in 2020, compared to 2015
 - 2015 = 6568 residential + 807 commercial = 7375 total gas meters
 - 2020 = 6903 residential + 842 commercial = 7745 total gas meters

Municipal Electric Use

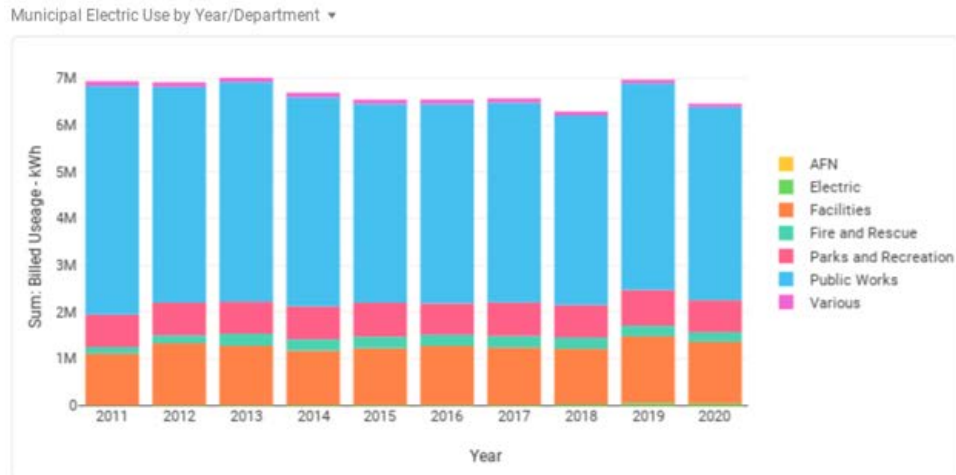


Chart 9. Municipal Electric Use by Year and Department 2011-2020.

- Municipal Electric use decreased 1.4 percent in 2020 compared to 2015.

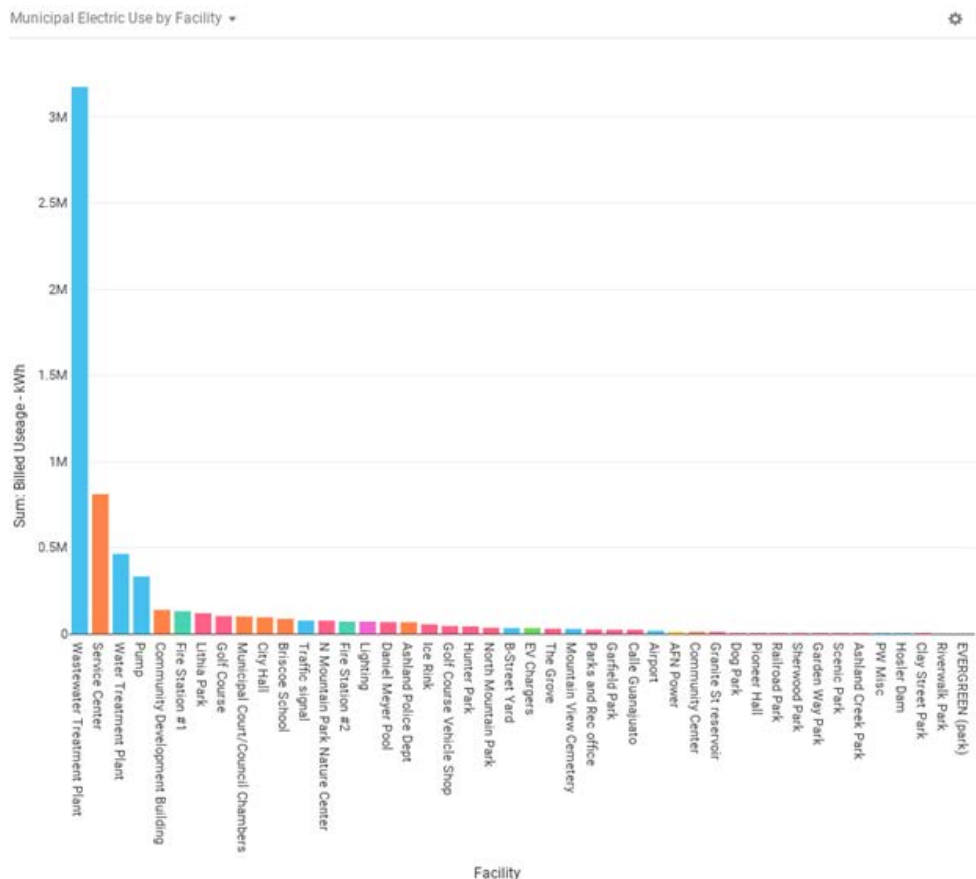


Chart 10. Municipal Facility Electric Use by Facility 2020.

- Ashland's Wastewater Treatment Plant is the largest user of electricity among municipal facilities.
- Emissions and energy use from wastewater treatment plants are considered a community emission source, but are counted here as a municipal source because the City pays for the energy.

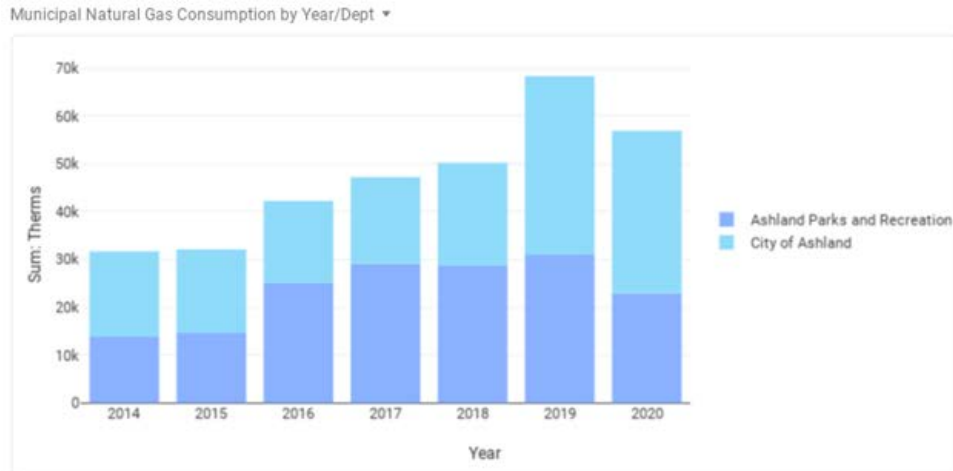


Chart 11. Municipal Natural Gas by Year and Customer.

- Municipal natural gas use increased 77 percent in 2020 compared to 2015.
- This increase is due primarily to increased heating of Daniel Meyer pool and acquisition of Briscoe School.

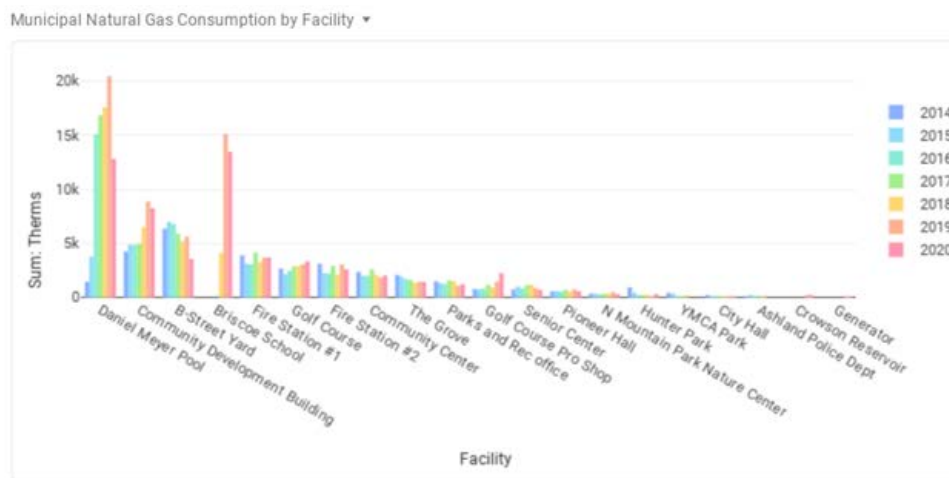


Chart 12. Municipal Natural Gas Use by Facility 2014-2020.

- Daniel Meyer Pool used 339 percent more natural gas in 2020 than in 2015.
- Briscoe School was not a municipal account in 2015, but is currently owned by the City of Ashland.
- Increased use of heating and cooling equipment due to smoke has also increased natural gas consumption at some facilities.

Municipal Natural Gas Consumption by Facility 2020 ▾

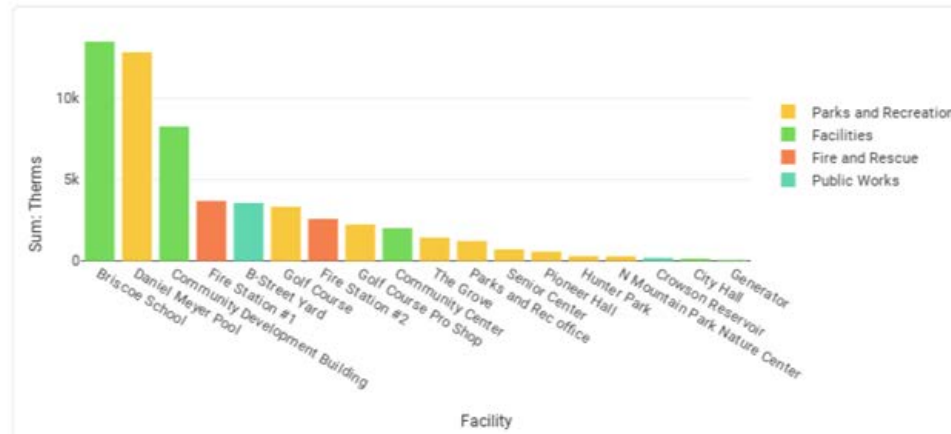


Chart 13. Municipal Natural Gas Use by Facility 2020.

- Briscoe School accounted for 24 percent of municipal natural gas use in 2020.
- Daniel Meyer Pool accounted for 23 percent of municipal natural gas use in 2020.

Transportation

Vehicle Miles Travelled ▾

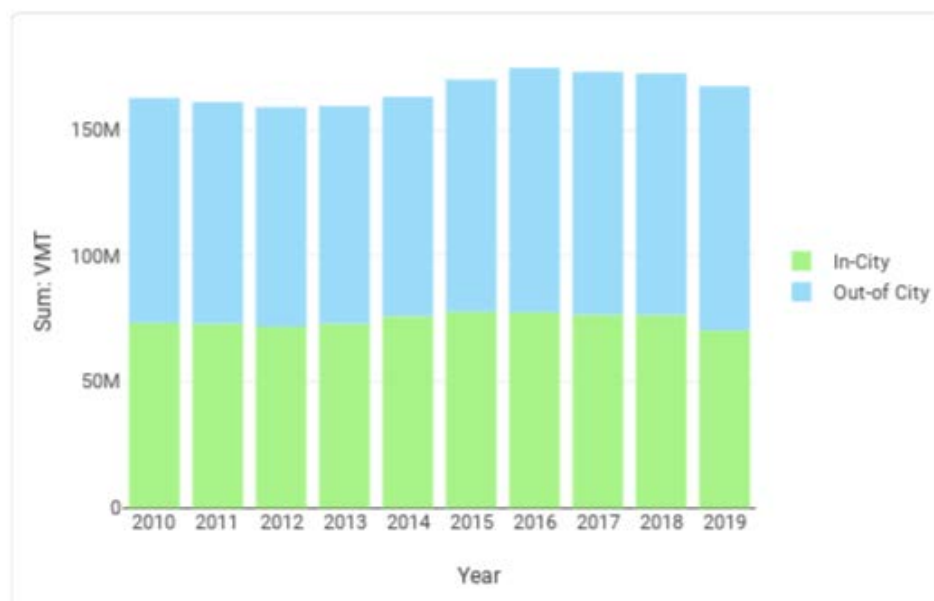


Chart 14. Estimated Vehicle Miles Travelled in and near Ashland.

- Estimated Vehicle Miles Travelled (VMT) declined (-1.6 percent) in 2019 compared to 2015.
- City of Ashland's 'Adapt Your Home' campaign features a [series of web pages](#) to help citizens understand and reduce transportation emissions.
- Electric vehicle registrations in Ashland increased (28.3 percent) between 2017 and 2019. At last reporting 773 electric vehicles were registered in Ashland.
- The number of electric vehicles registered in Ashland increased approximately 10 percent during 2020, with just under 400 electric vehicles.

Municipal Transportation

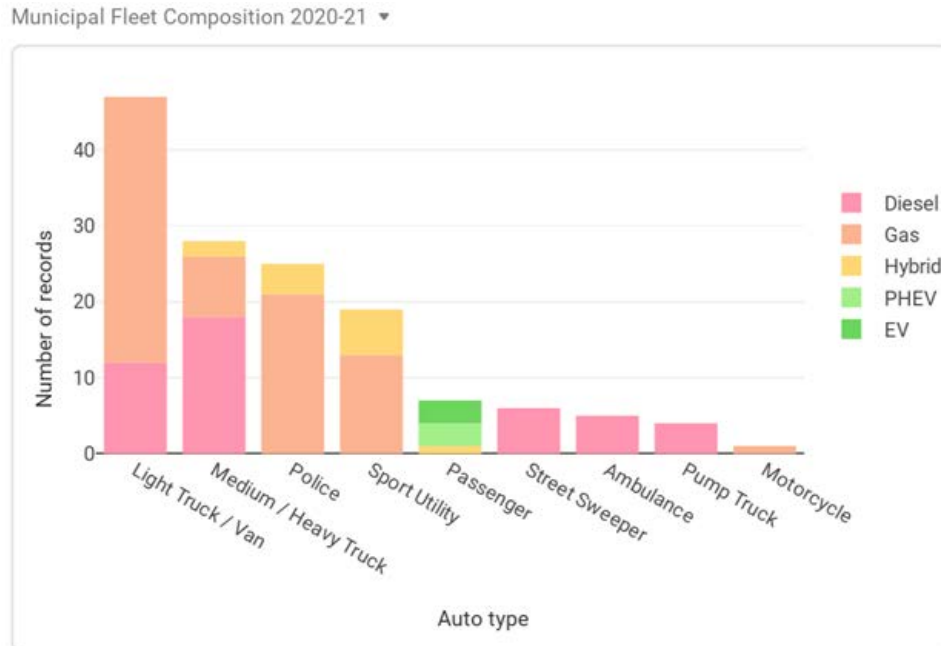


Chart 15. Municipal Fleet Composition 2020-21.

- The City of Ashland Fleet has electrified nearly all passenger vehicles.
- There will be significant opportunities to electrify light trucks, vans, and motorcycles within the next several years.
- The City fleet plans to purchase R99 renewable Diesel beginning in 2021. R99 supply is still somewhat limited in Southern Oregon, but is increasing in availability.

Consumption

- City of Ashland's 'Adapt Your Home' campaign features a [series of web pages](#) to help citizens understand and reduce consumption emissions.
- Consumption is increasing across Oregon.
- Many consumption emissions are created through personal lifestyle choices, which may be addressed through outreach and engagement.
- The City of Ashland does not have the legal authority to regulate many sources of Consumption emissions.
- Consumption emissions are difficult to calculate. The Oregon Department of Environmental Quality has the most current and accurate data on consumption emissions.
- Consumption of goods and services accounted for approximately half of Ashland's climate-altering emissions, as reported by the 2015 greenhouse gas inventory.
- Some consumption emissions (primarily fuel use) are included in the analysis above, but emissions from the manufacture and transportation of goods and services are not included in the datasets used for this report.
- For additional information about Consumption emissions, reference the
 - [Oregon Greenhouse Gas Emissions](#)
 - [Consumption-based Greenhouse Gas Emissions Inventory for Oregon](#)

FISCAL IMPACTS

There are no direct fiscal impacts as a result of this progress report, though City Council is encouraged to incorporate climate considerations into all official business.

The global cost of inaction is generally understood to be several orders of magnitude more expensive than taking preventative measures now. For example, a [2021 report](#) from Swiss Re, a global leader in re-insurance and financial risk management, concludes that without additional action the world economy is likely to shrink 10-18 percent in the next 30 years at a cost of up to \$23 Trillion US Dollars. The same report concluded that modest investments in the near term can substantially reduce long term costs.

Minimal funding is currently allocated for CEAP implementation, therefore City staff have sought funding through grants, State energy programs, and Federal loan opportunities. A larger investment is needed to realize Ashland's current adopted climate goals.

Climate investments should be considered a form of preparedness. Taking strategic climate action will impact citizens by making our community more resilient when inevitable natural hazards occur. Climate action is also a form of consumer protection for citizens and mitigates the financial, health, and environmental risks associated with fossil fuels.

STAFF RECOMMENDATION

1. Continue support for programs that reduce transportation emissions and bring additional focus on natural gas emissions.
2. Ensure City of Ashland programs and policies support equitable climate action by emphasizing assistance to low and medium income residents.
3. Expand the CEAP into a regional effort by engaging a broader array of stakeholders and decision makers. Coordinate regional climate planning and increase ownership of community-based actions.
4. Ensure the City of Ashland models climate leadership by making investment choices that reduce emissions and increase resilience to likely climate impacts. Include climate considerations as part of all formal business.
5. Ensure staff have resources sufficient to initiate strategic climate action.

ACTIONS, OPTIONS & POTENTIAL MOTIONS

N/A

REFERENCES & ATTACHMENTS

Attachment 1: CEAP 2020 Goals

Attachment 2: CEAP 2020 Actions

[City of Ashland Climate website](#)

[City of Ashland Climate and Energy programs and incentives](#)

[Climate Policy Commission](#)

[Conservation and Climate Outreach Commission](#)

[Oregon Greenhouse Gas Reporting Home](#)

[Ashland Electric System 10-year Planning Study](#)

PR2021 - Goal Rpt

#	Goal ID	Goal Status	Boundary	Action Type
Focus Area: Buildings and Energy				
1	BE Goal 1. Reduce GHG emissions associated with Ashland's building energy use.	Needs improvement	Community	Mitigation
2	BE Goal 2. Increase energy and water efficiency in City and Private buildings.	Needs improvement	Community	Mitigation
3	BE Goal 3. Protect Ashland's building stock and energy supply from climate impacts.	Goal Needs Revision	Community	Adaptation
Focus Area: Consumption and Materials Management				
4	CM Goal 1. Reduce solid waste and wastewater greenhouse gas emissions.	Off track	Community	Mitigation
5	CM Goal 2. Increase waste diversion through waste prevention, recycling, and composting.	Off track	Community	Mitigation
6	CM Goal 3. Reduce consumption of climate intensive food, products, and services.	Needs improvement	Community	Mitigation
7	CM Goal 4. Support locally-produced products.	Goal Needs Revision	Community	Adaptation
Focus Area: Cross-cutting				
8	CC Goal 1. Increase awareness of city climate goals and needs.	Needs improvement	Community	Adaptation
9	CC Goal 2. Integrate climate change considerations into day-to-day City operations, planning, and decision making.	Needs improvement	Municipal ...	Adaptation
Focus Area: Natural Systems				
10	NS Goal 1. Enhance ecosystem health and resilience.	Goal Needs Revision	Community	Adaptation
11	NS Goal 2. Ensure sustained access to clean air and drinking water.	Goal Needs Revision	Community	Adaptation

#	Goal ID	Goal Status	Boundary	Action Type
Focus Area: Overall Climate Goals				
12	Overall Goal 1A: Reduce Community GHG Emissions.	Off track	Community	Mitigation
13	Overall Goal 1B. Reduce City GHG Emissions.	Off track	Municipal ...	Mitigation
14	Overall Goal 1C. Reduce City Fossil Fuel Consumption.	Needs improvement	Municipal ...	Mitigation
15	Overall Goal 2. Prepare Ashland to be more resilient to climate change.	Goal Needs Revision	Community	Adaptation
Focus Area: Public Health and Safety				
16	PHSW Goal 1. Protect public health from air pollution and climate impacts.	On track	Community	Adaptation
17	PHSW Goal 2. Improve community capacity to understand, prepare for, and respond to climate change security risks.	On track	Community	Adaptation
Focus Area: Urban Form Land Use and Transportation				
18	ULT Goal 1. Reduce transportation GHG emissions.	Needs improvement	Community	Mitigation
19	ULT Goal 2. Reduce community & City employee vehicle miles travelled.	Needs improvement	Community	Mitigation
20	ULT Goal 3. Improve vehicle efficiency and expand low-carbon transport, including within the City's fleet.	On track	Municipal ...	Mitigation
21	ULT Goal 4. Support local and regional sustainable growth.	Goal Needs Revision	Community	Adaptation
22	ULT Goal 5. Protect transportation infrastructure from climate impacts.	Needs improvement	Municipal ...	Adaptation

PR2021 Annual Action Report

#	ID	Action Status / Stage	Boundary	Action Type	Phase
Focus Area: Buildings and Energy					
1	BE-1-1. Develop a comprehensive plan for the Municipal Electric Utility.	3 - Executing (In Prog...	Community	Mitigation	Phase 1
2	BE-1-2. Promote switching to lower-carbon fuels.	3 - Executing (In Prog...	Community	Mitigation	Phase 1
3	BE-2-1. Increase outreach efforts to expand participation in energy efficiency programs and promote climate-friendly building and construction.	3 - Executing (In Prog...	Community	Mitigation	Phase 1
4	BE-2-2. Require building energy scores to identify and incentivize cost-effective energy efficiency improvements.	3 - Executing (In Prog...	Community	Mitigation	Phase 2
5	BE-2-3. Identify and adopt strategies to reduce energy efficiency barriers in rent/lease properties.	1 - Initiating (Researc...	Community	Mitigation	Phase 2
6	BE-2-4. Establish minimum energy efficiency standards for the affordable housing program.	1 - Initiating (Researc...	Community	Mitigation	Phase 2
7	BE-3-1. Use results from City Facilities Energy Audit to prioritize City Facilities Capital Improvement Plans (CIPs) and maintenance improvements.	2 - Planning	Municipal ...	Mitigation	Phase 1
8	BE-1-3. Facilitate and encourage solar energy production.	3 - Executing (In Prog...	Community	Adaptation	Phase 1
9	BE-1-4. Enhance production of on-site solar energy from City facilities.	3 - Executing (In Prog...	Municipal ...	Adaptation	Phase 1
10	BE-4-1. Expand the current net meter resolution to include and incorporate virtual net metering.	6 - Complete	Municipal ...	Adaptation	Phase 2
11	BE-4-2. Implement utility-level smart grid technologies to facilitate efficiency and distributed energy solutions.	2 - Planning	Municipal ...	Adaptation	Phase 2
12	BE-5-1. Encourage heat-tolerant building approaches such as cool roofs and passive cooling.	3 - Executing (In Prog...	Community	Adaptation	Phase 2

#	ID	Action Status / Stage	Boundary	Action Type	Phase
Focus Area: Consumption and Materials Management					
13	CM-1-1. Implement an education campaign for waste and consumption reduction strategies.	3 - Executing (In Prog...	Community	Mitigation	Phase 2
14	CM-5-2. Assess the feasibility of co-digesting food waste and biosolids to generate electricity at the wastewater treatment facility.	1 - Initiating (Researc...	Municipal ...	Mitigation	Phase 2
15	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.	3 - Executing (In Prog...	Community	Mitigation	Phase 2
16	CM-3-2. Update the multi-family recycling ordinance to encourage more diversion.	1 - Initiating (Researc...	Community	Mitigation	Phase 2
17	CM-3-3. Strengthen the Demolition Debris and Diversion ordinance to enhance enforcement and increase diversion and reuse.	1 - Initiating (Researc...	Community	Mitigation	Phase 2
18	CM-4-1. Support edible food donation.	3 - Executing (In Prog...	Community	Mitigation	Phase 2
19	CM-4-2. Provide a kitchen best practices guide to help households and businesses reduce food waste and consumption.	3 - Executing (In Prog...	Community	Mitigation	Phase 2
20	CM-4-3. Evaluate opportunities for recycling of commercial food waste.	1 - Initiating (Researc...	Community	Mitigation	Phase 2
21	CM-1-2. Support “collaborative consumption” community projects.	3 - Executing (In Prog...	Community	Mitigation	Phase 2
22	CM-1-3. Determine and implement effective ways to reduce and track consumption based emissions.	1 - Initiating (Researc...	Community	Mitigation	Phase 2
23	CM-2-1. Partner with nonprofit organizations to promote the purchase of climate-friendly food and products.	1 - Initiating (Researc...	Community	Mitigation	Phase 1
24	CM-5-1. Introduce environmentally preferable purchasing (EPP) guidelines for City procurement.	1 - Initiating (Researc...	Municipal ...	Mitigation	Phase 2
25	CM-2-2. Expand community gardening and urban agriculture opportunities.	2 - Planning	Community	Adaptation	Phase 1

#	ID	Action Status / Stage	Boundary	Action Type	Phase
Focus Area: Cross-cutting					
26	CC-1-1. Create a formal public outreach and education plan to inform the community about climate actions and progress.	3 - Executing (In Prog...	Community	Adaptation	Phase 1
27	CC-1-2. Support capacity of neighborhood and community groups to implement climate mitigation and adaptation initiatives.	3 - Executing (In Prog...	Community	Adaptation	Phase 1
28	CC-1-3. Assess the feasibility of a City-sponsored carbon offset program.	1 - Initiating (Researc...	Community	Adaptation	Phase 1
29	CC-4-1. Engage with other governments and organizations around regional, statewide, national, and international climate policy and action.	3 - Executing (In Prog...	Municipal ...	Adaptation	Phase 1
30	CC-2-1. Ensure all City departments educate their staff members about the Climate and Energy Action Plan.	3 - Executing (In Prog...	Municipal ...	Adaptation	Phase 1
31	CC-3-1. Consider climate change in all City Council policy, budgetary, or legislative decisions and as part of the Council Communication document template.	2 - Planning	Municipal ...	Adaptation	Phase 1
32	CC-3-2. Incorporate CEAP goals and actions in future updates of city plans.	3 - Executing (In Prog...	Municipal ...	Adaptation	Phase 1
33	CC-3-3. Include consideration and perpetuation of climate action goals within the scope of every appropriate City Advisory Commission.	2 - Planning	Municipal ...	Adaptation	Phase 1
Focus Area: Natural Systems					
34	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 inform fire management and planning to manage ecosystem health, community safety, and carbon storage.	3 - Executing (In Prog...	Community	Adaptation	Phase 1
35	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.	3 - Executing (In Prog...	Community	Adaptation	Phase 2

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36	NS-1-3. Undertake restoration efforts to retain and restore native fish and riparian species.	3 - Executing (In Prog...	Community	Adaptation	Phase 1
37	NS-1-4. Map and protect areas that provide ecosystem services.	3 - Executing (In Prog...	Community	Adaptation	Phase 2
38	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.	3 - Executing (In Prog...	Community	Adaptation	Phase 2
39	NS-2-2. Explore water-efficient technologies on irrigation systems and consider requiring them during the permitting process.	3 - Executing (In Prog...	Community	Adaptation	Phase 1
40	NS-2-3. Expand water conservation outreach and incentive programs for residents and businesses.	3 - Executing (In Prog...	Community	Adaptation	Phase 2
41	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.	0 - Not Started	Municipal ...	Adaptation	Phase 2
42	NS-3-2. Implement efficiency recommendations from the City facilities water audit.	0 - Not Started	Municipal ...	Adaptation	Phase 2
Focus Area: Public Health and Safety					
43	PHSW-1-1. Promote the expansion of tree canopy in urban heat islands or areas that need air conditioning such as schools.	0 - Not Started	Community	Adaptation	Phase 2
44	PHSW-3-2. Identify and minimize potential urban heat impacts.	2 - Planning	Community	Adaptation	Phase 2
45	PHSW-4-1. Update the City's emergency response plan and ensure that preparation and updates recognize and address likely climate change impacts.	3 - Executing (In Prog...	Community	Adaptation	Phase 2
46	PHSW-2-1. Engage leading employers in a dialogue on climate action, for example, by organizing and facilitating roundtables.	2 - Planning	Community	Adaptation	Phase 1

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47	PHSW-2-2. Support organizations, such as SOU, in evaluating risks to local food sources under climate change.	0 - Not Started	Community	Adaptation	Phase 2
48	PHSW-3-1. Work with vulnerable populations to create specific adaptation strategies to address public health risks.	3 - Executing (In Prog...	Community	Adaptation	Phase 1
49	PHSW-3-3. Develop or enhance heat-warning systems for employees and the public.	6 - Complete	Community	Adaptation	Phase 2
50	PHSW-4-2. Identify and address populations and essential City services that are within the 100-year flood zone.	0 - Not Started	Community	Adaptation	Phase 2
Focus Area: Urban Form Land Use and Transportation					
51	ULT-1-4. Evaluate the feasibility of expanded local transit options.	3 - Executing (In Prog...	Community	Adaptation	Phase 2
52	ULT-2-1. Implement bicycle- and pedestrian-friendly actions in the City's Transportation System Plan and Downtown Parking Management Plan.	3 - Executing (In Prog...	Community	Mitigation	Phase 1
53	ULT-3-1. Implement a local fuel-related tax.	2 - Planning	Community	Mitigation	Phase 2
54	ULT-3-3. Provide information about electric and hybrid vehicles and rebates on the City's website.	6 - Complete	Community	Mitigation	Phase 1
55	ULT-2-2. Explore opportunities to convert to shared streets where appropriate to provide multimodal connectivity.	2 - Planning	Community	Mitigation	Phase 1
56	ULT-5-1. Provide carpool and vanpool parking, charging stations, and parking for EVs for City employees.	3 - Executing (In Prog...	Municipal ...	Mitigation	Phase 2
57	ULT-1-1. Coordinate with neighboring local governments to promote use of transit, carpooling, and car-sharing.	3 - Executing (In Prog...	Community	Mitigation	Phase 2
58	ULT-1-2. Work with RVTB to implement climate-friendly transit.	3 - Executing (In Prog...	Community	Mitigation	Phase 1
59	ULT-3-2. Revise land use codes to require EV charging infrastructure at multifamily and commercial developments.	2 - Planning	Community	Mitigation	Phase 1

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60	ULT-5-2. Conduct a city fleet audit and use it to set policy and targets.	3 - Executing (In Prog...	Municipal ...	Mitigation	Phase 2
61	ULT-1-3. Establish policies to support development near transit hubs without displacing disadvantaged populations.	1 - Initiating (Researc...	Community	Adaptation	Phase 2
62	ULT-4-2. Further revise community development plans to favor walkable neighborhoods and infill density.	2 - Planning	Community	Adaptation	Phase 2
63	ULT-4-3. Modify the WUI code to include construction techniques appropriate for wildfire-prone areas.	6 - Complete	Community	Adaptation	Phase 2
64	ULT-5-3. Develop policy to require the purchase of verified carbon offsets to offset City staff travel.	1 - Initiating (Researc...	Municipal ...	Adaptation	Phase 2
65	ULT-4-1. Regulate new development in the Wildfire Lands Overlay part of the urban growth boundary.	6 - Complete	Community	Adaptation	Phase 1