



## Climate and Energy Plan Committee Meeting Agenda

January 4, 2017 | 3:30 PM -5:00 PM | Community Development Building  
51 Winburn Wy – Siskiyou Room

### Agenda

Duration	Item	Lead
	<b>Call to Order</b> <ul style="list-style-type: none"><li>Icebreaker</li></ul>	Rich/Claudia
	<b>Approval of Minutes</b>	Rich
	<b>Public Input</b>	Rich
45 min	<b>Implementation Plan – Review/comment</b>	Adam
15 min	<b>Carbon Offsets – Action Proposal</b>	Adam
20 min	<b>Next Steps - Review schedule table</b> <ul style="list-style-type: none"><li>Council Study Session – Jan 17, 2017</li><li>CEAP Committee Meeting – Jan 18, 2017</li><li>Council Business Meeting – February 7, 2017</li></ul>	Rich/Adam



### CEAP Ad-Hoc Committee - Scope of Work

The ad hoc Climate Change and Energy Action Plan Committee is charged with making recommendations to the City Council regarding a climate change and energy action plan intended to identify existing and potential vulnerabilities and develop an organized and prioritized set of actions to protect people and resources from the ongoing impacts of climate change. The plan shall include targets and strategies for reduction of greenhouse gas emissions in Ashland. These targets and strategies may be short- mid- or long-term, and shall consider cost, feasibility, community acceptance and likelihood of success, with an emphasis on voluntary measures that can be undertaken by different sectors of the community. The plan shall include specific, measurable actions that citizens and local institutions can undertake immediately upon adoption of the plan.

The Committee shall review similar plans in comparable communities, consult as necessary with local subject matter experts in the areas of transportation, energy, land use and infrastructure (and other areas as the Committee deems advisable), and identify implementation steps as appropriate.

The Committee shall, in consultation with City staff and consultants, determine its own work plan and project timeline, however the activities of consultants hired by the City to work on the plan or technical reports associated with the plan shall be directed by the City and not by the ad hoc committee. The ad hoc committee shall not create and appoint subcommittees without the prior consent of the City Council. Unless otherwise directed by the City Council, the Climate Change and Energy Action Plan shall be delivered to the City Council by January 31, 2017.

The Committee shall, in the course of its work:

- Provide ample opportunity for public input and feedback; and
- Present its recommendations in writing so they can be easily shared with the public.

**MINUTES FOR THE CLIMATE & ENERGY ACTION PLAN ad hoc COMMITTEE**  
**Wednesday, December 14, 2016**  
**Siskiyou Room, 51 Winburn Way**

**1. Call to Order**

Councilor Rich Rosenthal called the meeting to order at 3:30 p.m.

Committee members Bryan Sohl, Jim Hartman, Cindy Bernard, Roxanne Beigel-Coryell, Louise Shawkat, James McGinnis, Stuart Green and Greg Jones were present. Staff member Adam Hanks was present. Committee member Marni Koopman arrived late. Committee member Claudia Alick was listening via speakerphone. Committee members Claire Pryor and Isaac Bevers were absent.

**2. Approval of Minutes**

**McGinnis/Bernard m/s to approve the minutes of November 2 and 16 as presented.**

**Discussion:** None. **Voice Vote:** All Ayes. **Motion Passes.**

**3. Public Input**

Robert Block-Brown – stated he was pleased with the number of people attending the open house. He also thought the general information there was good and presented well. He is concerned because the committee members made it clear they wanted the ordinance approved either before or with the plan approval but it is not clear that this will be done in that timeframe. He is also concerned with how the staff position will be created and where in the org chart that position will be placed. He believes it needs to have management level skills as well as a clear understanding of climate science.

Allie Rosenbluth – thanked the group for their work. She thought the open house was good and gave some recommendations for future events such as having the flyer in Spanish to targets groups we may have left out of the process. She stated that the group needs to hold people accountable for the pledges they made at the open house. She was upset that there was no expression of clear support for the ordinance at the open house and she would appreciate if the group talk about it clearly at the January study session with Council.

*Committee member Marni Koopman arrived 3:39 p.m.*

James Stephens – thanked the group for allowing the 10x20 display in the lobby outside of the open house. He had several good discussions there. He stated that one thing that came up in those discussions was the environmental impact of solar installations. He isn't worried about this as the City always thinks these things through completely. He stated that solar arrays help to shade the ground which supports a more diverse environment for plants and animals. He stated that on January 10<sup>th</sup> there will be a demonstration of an electric bus in Ashland. The company giving the demonstration will then move north to Medford, Grants Pass, Eugene, etc.

Huelz Gutchen – stated that he thinks the plan is good but there will be lots to change in it, which is okay because it's a living document. He stated that Portland is now requiring all homes being sold to have an energy audit which much be shown in the real estate listing. He thanked those

who had read his double-bundle e-mail and encouraged the rest to read it. He would like the group to create a list of definitions of terms so that everyone is on the same page.

Ray Mollett – he agrees with the rest regarding the good open house attendance. He stated that page 19 of the plan was his favorite because it lays out the vision and goals. He believes we need to consider things like offsets to meet those goals. He thinks other cities with plans will be doing the same thing. However, there needs to be a good discussion of how much money is spent here versus other locations.

#### **4. Icebreaker**

The group did a teambuilding icebreaker around the question what do you most want for Christmas?

#### **5. Open House #3 Recap/Debrief**

Rosenthal stated he was pleased with the turnout and thanked everyone for their participation and assistance. He has received positive feedback from the community. Hanks gave an overview of what information from the open house is already on the commission's webpage and what information will soon be there.

Group discussed their observations of the open house. In general they were pleased with the turnout and thought the question and answer period was useful and fostered good dialogue. They generally were frustrated that the implementation plan, even a very rough version, was not part of the open house as that's the "meat" of the plan. Group raised concerns that there will not be enough time for the committee to really review the implementation plan before everything is presented to Council.

#### **6. Draft Plan Review**

Rosenthal thanked the committee members who submitted comments and markups to Hanks. Those have already been sent to Cascadia along with some policy-level comments and suggestions from city staff.

Group expressed some of their concerns with the plan including; the 'what's possible' section needing to be clearer, lack of reference to the 8% goal throughout the plan, lack of reflection of Ashland as a tourist destination, needing better context for numbers - particularly related to graphics, needing to highlight that they are science-based targets so they can be updated as science changes. Additionally, the group would like the 8% reference to be a call-out in the plan, rather than just included in the appendix. Hanks stated he had already made this request of Cascadia.

Koopman raised a concern that none of the strategies reflect equity (the beginning statement is not enough) or co-benefits. McGinnis stated he was under the impression that equity would be a consideration of every strategy or action taken, so specifically calling it out each time wasn't necessary. Group agreed that as this was their intention it could be left as-is.

#### **7. Carbon Offsets**

Hartman gave an overview of why he believes offsets must be included in the plan in order to

achieve the 8% goal each year (see attached memo).

Sohl asked if the group had already voted to leave offsets as an option. Group agreed they thought they had (from the July 6, 2016 minutes, “Group generally agreed to, ‘retain the option to include carbon offsets, if we can’t achieve goals/targets by any other means.’”). Sohl stated he would rather not have offsets be a specific part of the plan but rather leave the option open for consideration. Alick (by speakerphone) asked if there were anything in the plan prohibiting use of offsets. Hanks stated no.

Group discussed use of offsets and whether they should be specifically called out in the plan and whether they should have limits on usage. Beigel-Coryell stated offsets should be a last-resort option, that we should focus instead on spending the money in our own community for long-term improvements rather than spend it outside our community in order to achieve only a short-term goal achievement.

**McGinnis/Beigel-Coryell m/s to ask Cascadia to draft a strategy for consideration regarding offsets for inclusion in the plan. Discussion:** Bernard stated she wants to be clear that we should not start with offsets - they should be a last resort for achieving reduction goals. Beigel-Coryell raised concerns that once they are used, there won’t be an easy way to stop using them. **Voice Vote: All Ayes. Motion Passes.**

## **8. Implementation Plan**

Hanks reviewed the upcoming work plan and timeline. Group discussed the timing of the proposed ordinance.

## **9. Geos Survey Results**

Koopman stated that the full report will be coming in a few weeks. There were over 1,000 respondents, which was far more than anticipated. She hopes the response numbers will help Council see that there is support for the plan. The results also should help the future commission to know where the City can supplement efforts already being taken in the community.

## **10. Next Meeting**

The upcoming meeting schedule is as follows:

January 4, 3:30 – 5:30 p.m.

January 23, 5:30 p.m. preview of plan at Council Study Session (please note: this date is subject to change)

## **11. Adjournment**

Meeting adjourned at 5:15 p.m.

Respectfully submitted,  
Diana Shippet, Executive Assistant

## Should You Buy Carbon Offsets?

Posted April 28, 2016 by Brian Palmer on The Natural Resources Defense Council Website

<https://www.nrdc.org/stories/should-you-buy-carbon-offsets>

### A practical and philosophical guide to neutralizing your carbon footprint.

If you want to go carbon neutral, you could do what Daniel Suelo did. In 2000, Suelo moved into the caves in Arches National Park, where he forages for food, buys nothing, and doesn't own a car. He's also sworn off heating and cooling devices.

You don't have to go quite that far, though, to live a carbon-neutral life. (Nor should you—Suelo's lifestyle raises some serious legal and environmental issues.) Start by reducing your emissions. Then, after you've done all you can to shrink your personal carbon footprint, it's time to consider buying offsets.

You've almost certainly been given the opportunity to buy carbon offsets. Some airline websites, for example, offer the option to buy them from third-party sellers to counterbalance the considerable carbon pollution associated with flying. Should you buy them? Yes, but selectively. Low-quality carbon offsets were once common, so you first have to do some legwork to ensure authenticity.

To illustrate the difference between a quality carbon offset and a scam, consider a hypothetical example: The offset seller will give your money to a landowner in the Amazon who promises to leave his trees standing to maximize carbon sequestration.

The offset seller should make several guarantees in this transaction. First, that the offsets are *real*—that there's an actual landowner who owns actual land with actual trees. This guarantee shouldn't be necessary, but unfortunately there have been cases of groups collecting money for offset projects that don't yet exist. Relatedly, the offset should be *verified* and *enforceable*—a third party should have laid eyes on the trees, and there must be a mechanism for penalizing the landowner if he doesn't follow through. The offset should also be *permanent*. If the guy who gets your money can burn his trees to the ground six months later, your money will have been wasted.

Finally, the offset must be **additional**. This is the trickiest issue with carbon offsets. What if the Amazonian landowner never had any intention of clear-cutting his land in the first place? Then your purchase would be a gift rather than an offset. The landowner would be taking advantage of the offset system to collect a windfall for doing exactly what he would have done anyway. Your transaction would have no effect on the amount of carbon in the atmosphere. A corollary to “additionality”—yes, carbon offset works use that word—is **leakage**. Let’s say your money prevented the Amazonian landowner from selling his plot to a logging company. That’s great, but what if the logging company simply bought the plot next door? That’s leakage. Your offset dollars shifted deforestation rather than preventing it.

Both individuals and corporations buy carbon offsets. Big companies have the resources to research the legitimacy of an offset themselves. Google, for example, employs people to investigate the quality of the company’s carbon offset outlays. You probably don’t have the time or money to fly to Ecuador and poke around a forested plot, to inspect a methane capture system, or to visit an urban forestry project. Fortunately, a quality assurance system has developed to verify the quality of your offsets. At the top level are standard-setting groups, such as the Climate Action Reserve, which establish rules and protocols for offset projects. Below them are retail certification programs, like Green-e Climate, which help individuals identify reliable carbon offset sellers.

The best carbon offset programs are transparent. If you have concerns, you should contact the seller to find out exactly what you’re buying. Many will allow you to direct your money to specific projects or away from others. You may, for example, prefer not to invest in a factory farm, even if the money is earmarked for methane capture. Or you may wish to look for programs that offer benefits beyond carbon reduction, such as employment in low-income areas or improvements in public health.

In addition to these practical issues, you should be aware of a larger philosophical argument about carbon offsets. While proponents view high-quality offsets as a way to support carbon-fighting projects, critics say they are merely a license to pollute. When you buy an offset, you are paying someone to cut her emissions so *you don’t have to*.

That’s why your first move should always be to reduce your own emissions. Drive fewer miles, fly less, don’t overheat or over-cool your home. But before you resign yourself to moving to a cave, know that high-quality carbon offsets are available to eliminate the last traces of your carbon footprint.

# Ashland Climate and Energy Action Plan: Implementation Plan

This implementation plan sets forth a proposed structure and schedule for implementation of the Climate and Energy Action Plan (CEAP). It contains the following sections:

- **Year 1 Implementation Summary** – A summary of key tasks to be accomplished in Year 1 of CEAP implementation, described in more detail in the following sections.
- **Oversight** – An ongoing structure for ongoing citizen oversight of the CEAP.
- **Accountability and Enforcement** – Potential policy mechanisms for ensuring that the CEAP is implemented to its full potential.
- **City Coordination** – A structure for ongoing City coordination and implementation of the CEAP.
- **Funding** – Potential funding mechanisms for financing CEAP actions.
- **Monitoring and Evaluation** – A mechanism and set of metrics for monitoring and evaluating CEAP progress and updating the plan as necessary.
- **Equity** – Guidance for ensuring that equity is considered in CEAP implementation.
- **Near-term Actions** – CEAP actions to be implemented by 2020.
- **Implementation Schedule** – Implementation detail for each priority CEAP action, including relative measures of action cost and effectiveness; accompanying co-benefits; timeframes for implementation; and responsible departments.

## Year 1 Implementation Summary

Assuming adoption by the Council in February, the focus in 2017 will be on establishing the institutional foundation for plan implementation and taking initial steps on key priority actions. Table 1 provides a schedule and key milestones for Year 1. Key activities to undertake are:

- Form and convene a **citizen advisory committee** to provide guidance and oversight of plan implementation.
- **Formalize the city's commitment** to CEAP actions and goals (e.g., ordinance or resolution).
- Designate a **CEAP Coordinator** position and constitute an internal City **Climate Action Team**.
- Designate **funding sources** and identify additional **funding needs**.
- Establish **CEAP progress indicators** and corresponding baselines and targets (including **equity indicators**).
- Determine and formalize Ashland's approach to incorporating **equity considerations** into plan implementation.
- Commence **priority near-term CEAP actions**.

Table 1. Schedule and key milestone for Year 1 CEAP implementation (*this section under development*).

Item	Q1	Q2	Q3	Q4
<b>Citizen Advisory Committee</b>				
<b>Resolution/Ordinance</b>				
<b>CEAP Coordinator</b>				
<b>Internal Climate Action Team</b>				
<b>Funding</b>				
<b>Progress Indicators</b>				
<b>Equity Considerations</b>				
<b>Priority Near-Term Actions</b>				

### Oversight

A **citizen advisory committee** is recommended to oversee implementation of the CEAP. The advisory committee will be composed of stakeholders who represent Ashland residents, have interest, experience or expertise on climate-relevant topics or related policy work, and/or represent key community or civic organizations that may play a role in implementation.

Roles of the advisory committee could include:

- Monitoring and tracking progress towards meeting CEAP goals.
- Providing recommendations to the Climate and Energy Coordinator regarding CEAP progress and implementation.
- Ensuring that the CEAP stays up-to-date over time, with a focus on the three-year plan update cycle
- Reviewing and making recommendations as part of the three-year greenhouse gas (GHG) inventory update process

It is expected that the advisory committee will meet at least **quarterly**.

### Accountability and Enforcement

Adoption of this Climate and Energy Action Plan will demonstrate the City of Ashland’s commitment to addressing the challenge of climate change in the Ashland community. Establishing a more formal City commitment to CEAP goals, such as through a resolution or ordinance, would be seen by many as reinforcing the importance of this plan and could help ensure implementation of CEAP actions and measurable progress toward meeting CEAP goals over time.

### City Coordination

The plan calls for a **designated City Climate and Energy Coordinator position** to be created to coordinate and shepherd implementation of the CEAP. Job responsibilities of the position include the following:

- Working with City departments to facilitate and track strategy and action implementation.
- Working with external stakeholders, including public, to encourage taking and/or contributing to actions identified in the CEAP.
- Briefing the advisory team on progress updates and relaying advisory team recommendations to relevant implementing parties.

- Leading development of annual CEAP progress reports, as well as plan updates.
- Communicating CEAP progress to internal and external stakeholders.
- Developing and implementing a system to systematically review, adjust, and update plan strategies and actions as needed.
- Maintaining a dashboard or other interactive platform for tracking and communicating progress.

The Climate and Energy Coordinator will ideally have the following qualifications:

- Familiarity with both climate mitigation and adaptation, including greenhouse gas accounting methodologies and climate change projections and anticipated impacts.
- Experience managing climate-related programs that involve both internal and external stakeholders.

It is anticipated that an internal Climate Action Team will be formed within the City to coordinate and implement CEAP actions. The following departments should be represented as part of the Climate Action Team:

- Community Development (including Building Division and Planning Division)
- Ashland Municipal Utility (Electric)
- Administration
- Parks and Recreation
- Conservation
- Public Works
- Fire

## Funding

Funding for near-term actions of the CEAP will come from a variety of sources within the City budget depending on the type of action, the responsible department, and the legal and operational limitations of the particular funding source. Additionally, some of the actions recommended in the plan are expansion of existing City programs or efforts and therefore already have funding sources. However, incremental funding increases may be needed to meet the higher level of action called for in the plan.

Current and potential funding sources include:

- City general fund
- Electric Utility revenues (energy related actions)
- Storm Water Utility revenues (flood/riparian related actions)
- Water Utility revenues (water conservation, water quality related actions)
- Bonneville Power Administration
- Federal and state grants
- Revolving loan funds

As the implementation commences in earnest, City staff and the proposed CEAP advisory committee should pay particular attention to additional funding sources. This examination should include exploration of specific grant opportunities targeted at individual plan actions, potential new local revenue streams such as from a carbon/fuel tax, and multi-jurisdiction or public/private partnerships to provide the resources needed for City and community goal achievement.

## Monitoring and Evaluation

Progress toward meeting CEAP targets and goals will be evaluated and tracked on an action-by-action basis with an overall progress report for all actions and activities provided on at least an **annual** basis. If possible, qualitative updates will be provided to the advisory team on a **quarterly** basis.

The plan will be evaluated and updated on a **three-year cycle** to ensure that plan strategies and actions reflect the latest knowledge and best practices around climate mitigation and adaptation. The plan will also be reevaluated to assess whether actions are sufficient to meet emission reduction goals and, if not, to add new or expanded actions to the plan. To facilitate the three-year update, the Ashland community and City greenhouse gas inventories will also be updated on recurring cycle, one year in advance of the plan update process. This cycle will provide City staff and the proposed commission with concrete measurement results to inform plan evaluation and updates.

At a minimum, the following indicators will be tracked and reported on at least an annual basis. Due to data availability limitations, some of these indicators will require establishment of baseline and target values for meeting CEAP goals—to be developed in Year 1 of implementation. Additionally, we expect that some methodologies for measuring some indicators, such as consumption-based greenhouse gas emissions, will evolve and improve over time.

Further development and build-out of the monitoring and evaluation indicators likely form a significant opportunity for the proposed new commission to work on as an early oversight activity.

Equity indicators will also be monitored, as available (see “Equity” section below).

### Offsets

Every time Ashland completes its greenhouse gas inventory, the City and community can evaluate the need to purchase carbon offsets to help meet emission reduction goals. Offsets provide a pathway for achieving emission reductions beyond what can be achieved internally.

Purchasing offsets means counting emission reductions achieved by another party and often in another geographic area. For example, Ashland could purchase offsets from Bonneville Environmental Foundation, which offers emissions reduction credits from regional and global renewable energy projects, forest enhancement projects, and waste methane and heat capture projects.

When an entity sells their carbon offsets, those emission reductions cannot be counted by anyone except the party that purchased the offsets, thereby minimizing the risk of double counting.

Table 2. Potential CEAP progress indicators

CEAP Goal	Primary Goal	Indicator	Target	2015 Baseline
<b>Overarching Goal 1: Reduce GHG Emissions</b>				
	Mi	Community GHG emissions (mtCO <sub>2</sub> e)	8% reduction per year	342,480
	Mi	City GHG emissions (mtCO <sub>2</sub> e)	0 by 2030	10,757
	Mi	Fossil fuel consumption (MMBTU)	50% reduction by 2030; 100% reduction by 2050	Unknown
<b>Overarching Goal 2: Prepare for Climate Impacts</b>				
	Ad	N/A (see individual focus areas)	N/A	N/A
<b>Buildings and Energy</b>				
Reduce building GHG emissions.	Mi	Building GHG emissions (mtCO <sub>2</sub> e)	8% reduction per year	82,426
Increase energy and water efficiency in City and private buildings.	Mi	Energy & water use per square foot (MMBTU/sf & CCF/sf)	TBD	Unknown
Protect Ashland’s building stock and energy supply from climate impacts.	Ad	Proportion of buildings that use heat-resistant materials, passive heating/cooling, and/or white roofs (%) Local renewable energy production (%)	TBD	Unknown
<b>Urban Form, Land Use &amp; Transportation</b>				
Reduce transportation GHG emissions.	Mi	Transportation GHG emissions (mtCO <sub>2</sub> e)	8% reduction per year	79,000
Reduce community & City employee vehicle miles traveled.	Mi	Vehicle miles traveled (miles)	TBD	Unknown
Improve vehicle efficiency and expand low-carbon transport, including within City’s fleet	Mi	Emissions per mile traveled (mtCO <sub>2</sub> e/mile) Transit ridership (passenger miles) and bicycling	TBD	Unknown
Support local and regional sustainable growth.	Mi/Ad	Average city “Walk Score”	TBD	53 <sup>i</sup>
Protect transportation infrastructure from climate impacts.	Ad	TBD	TBD	TBD
<b>Consumption &amp; Materials Management</b>				
Reduce solid waste & wastewater GHG emissions.	Mi	Solid waste & wastewater GHG emissions (mtCO <sub>2</sub> e)	8% reduction per year	6,923
Increase waste diversion through waste prevention, recycling, and composting.	Mi	Waste diverted from landfill to recycling and composting (%)	TBD	Unknown
Reduce consumption of climate-intensive food, products, and services.	Mi	Consumption-related emissions (mtCO <sub>2</sub> e)	8% reduction per year	166,731
Support locally-produced products.	Mi/Ad	Community gardens (#) Farmers markets (#)	TBD	4 gardens; 1 farmers market
<b>Natural Systems</b>				

<sup>i</sup> Source: <https://www.walkscore.com/OR/>

CEAP Goal	Primary Goal	Indicator	Target	2015 Baseline
Enhance ecosystem health and resilience.		Water quality (EPA score out of 100) Acres of forest maintained Acres of protected and restored habitat	TBD	Water quality = 60/100 <sup>ii</sup>  Over 2,000 acres of forests maintained <sup>iii</sup>
Ensure sustained access to clean air and drinking water.		Water consumption (avg MGD)	TBD	4.5 MGD <sup>iv</sup>
<b>Public Health, Safety &amp; Security</b>				
Protect public health from air pollution and climate impacts.		Air quality (EPA score out of 100) Cooling center capacity (# people) Tree canopy cover (%)	TBD	Air quality = 70/100 <sup>ii</sup>
Improve community capacity to understand, prepare for, and respond to climate change security risks.		# homes in the wildland urban interface (WUI)	TBD	1,400 homes <sup>v</sup>
<b>Cross-Cutting Strategies</b>				
Increase awareness of city climate goals and needs.		Public and staff knowledge and understanding of climate change issues and actions (e.g., # students engaged in AFR project)	TBD	(e.g., over 2,000 students <sup>vi</sup> )
Integrate climate considerations into City operations, planning, and decision-making.		Number of other City plans or activities that incorporate climate change considerations	TBD	2 (Water Master Plan Update; 2016 Ashland Forest Plan)

<sup>ii</sup> Source: <http://www.bestplaces.net/health/city/oregon/ashland>

<sup>iii</sup> Source: [http://www.ashland.or.us/Files/Fall\\_2016Flyer\\_Updated\\_9272016\\_Final%20Draft.pdf](http://www.ashland.or.us/Files/Fall_2016Flyer_Updated_9272016_Final%20Draft.pdf)

<sup>iv</sup> Source: <http://www.ashland.or.us/Page.asp?NavID=17045>

<sup>v</sup> Source: <http://www.ashland.or.us/Page.asp?NavID=13511>

<sup>vi</sup> Engaged in AFR project from 2010 to 2014 (Source: 2016 Ashland Forest Plan)

## Equity

Each action of the CEAP should be implemented in an equitable manner that addresses Ashland’s unique equity issues and concerns. The sections below provide suggestions for ensuring equitable implementation of the CEAP. It is expected that specific criteria and indicators will be determined and formalized in Year 1 of CEAP implementation.

### Equity Considerations

When planning for implementation, the City should consider equity impacts and potential benefits. For example, the City of Portland put forth the following equity considerations in implementation of their Climate Action Plan:<sup>7</sup>

Equity Considerations	
<b>Disproportionate impacts</b>	Does the proposed action generate burdens (including costs), either directly or indirectly, to communities of color or low-income populations? If yes, are there opportunities to mitigate these impacts?
<b>Shared benefits</b>	Can the benefits of the proposed action be targeted in progressive ways to reduce historical or current disparities?
<b>Accessibility</b>	Are the benefits of the proposed action broadly accessible to households and businesses throughout the community — particularly communities of color, low-income populations, and minority, women and emerging small businesses?
<b>Engagement</b>	Does the proposed action engage and empower communities of color and low-income populations in a meaningful, authentic and culturally appropriate manner?
<b>Capacity building</b>	Does the proposed action help build community capacity through funding, an expanded knowledge base or other resources?
<b>Alignment and partnership</b>	Does the proposed action align with and support existing communities of color and low-income population priorities, creating an opportunity to leverage resources and build collaborative partnerships?
<b>Relationship building</b>	Does the proposed action help foster the building of effective, long-term relationships and trust between diverse communities and local government?
<b>Economic opportunity and staff diversity</b>	Does the proposed action support communities of color and low income populations through workforce development, contracting opportunities or the increased diversity of city and county staff?
<b>Accountability</b>	Does the proposed action have appropriate accountability mechanisms to ensure that communities of color, low-income populations, or other vulnerable communities will equitably benefit and not be disproportionately harmed?

In addition, these equity considerations can be explicitly integrated into the cross-cutting strategy CC-3-1 “Consider climate change in all City Council policy, budgetary, or legislative decisions. Incorporate climate action considerations/relationship as part of the Council Communication (staff report) document template.” The inclusion of equity considerations as part of the standard formal communication template for City Council deliberation and decision making ensures that equity related impacts of City Council decisions are by default considered in the deliberation and able to be understood and commented on by the public.

<sup>7</sup> Source: <https://www.portlandoregon.gov/bps/article/583501>

## Equity Indicators

Progress toward advancing equity through implementation of the CEAP will also be assessed as part of the monitoring and evaluation process. Identification and baseline assessment of relevant indicators will be an important part of Year 1 implementation. Potential process and outcome indicators related to climate resilience implementation identified by the National Association for the Advancement of Colored People (NAACP), for example, including the following:<sup>8</sup>

Example Climate Resilience Process/Outcome Indicators	
<b>Infrastructure</b>	Solar and wind installation – community level, home, commercial/business (mapping/distribution)
<b>Economic Development and Jobs</b>	New, local jobs created Businesses temporarily or permanently closed (net new businesses) Community Workforce Agreements for redevelopment projects
<b>Food Security</b>	Households identified as food insecure
<b>Housing</b>	Property values increased or reduced
<b>Healthcare Services</b>	Health care and mental health facilities
<b>Emergency Management</b>	Emergency shelter availability, capacity, and access
<b>Planning and Decision Making</b>	Inclusive stakeholder engagement in community planning Equity-based resource allocation

<sup>8</sup> Source: [http://action.naacp.org/page/-/Climate/Equity\\_in\\_Resilience\\_Building\\_Climate\\_Adaptation\\_Indicators\\_FINAL.pdf](http://action.naacp.org/page/-/Climate/Equity_in_Resilience_Building_Climate_Adaptation_Indicators_FINAL.pdf)

Near-Term Actions

The following twenty actions were identified as near-term priority actions to be implemented by 2021. Actions were identified as near-term that meet one or more of the following criteria:

- **Easy, early wins** – relatively straightforward actions that demonstrate climate action and help the City hit the ground running on making progress toward climate goals.
- **Foundational steps** – actions that set the stage or guide direction for other actions.
- **Complex, but important initiatives** – actions that will make a big difference but may be challenging or resource-intensive to implement, so getting started as early as possible will be important.
- **Windows of opportunity** – actions align with or could synergize with other City plans, projects, or initiatives, and so should be implemented concurrently.
- **Too good to wait** – actions that will be very effective in meeting climate action goals or carry significant co-benefits, and so should be implemented immediately.

	Scope	Type	Criterion
<b>Buildings and Energy</b>			
<b>BE-1-1. Develop a comprehensive plan for the Municipal Electric Utility.</b> Initiate planning process in 2017.	C	Mi	Foundational step
<b>BE-1-2. Facilitate and encourage solar energy production.</b> Begin exploring increased local solar energy production as part of the 10-by-20 ordinance implementation.	C	Mi/Ad	Window of opportunity
<b>BE-1-3. Enhance production of on-site solar energy from City facilities.</b> Prioritize and development implementation plan and funding for recently completed City facility solar audit.	M	Mi/Ad	Window of opportunity
<b>BE-2-1. Increase outreach efforts to expand participation in energy efficiency programs and promote climate-friendly building and construction.</b> Update the land use code for conservation housing density bonus, expand participation in City’s Smartbuild program, and expand zero-interest loan program opportunities.	C	Mi	Easy, early win
<b>Urban Form, Land Use &amp; Transportation</b>			
<b>ULT-1-2. Work with the RVTD to implement climate-friendly transit.</b> Begin conversations with RVTD to begin transitioning to lower emission buses and exploring ways to expand access and ridership.	C	Mi	Too good to wait
<b>ULT-2-1. Implement bicycle-friendly Transportation System Plan (TSP) actions.</b> Begin implementing capital improvement plans as part of TSP implementation.	C	Mi	Window of opportunity
<b>ULT-2-2. Explore additional opportunities to convert to shared streets where appropriate to provide multimodal connectivity.</b> Pursue East Main St super-sharrow concept through Transportation Commission.	M	Mi	Window of opportunity
<b>ULT-3-2. Revise land use codes to require EV charging infrastructure at multifamily and commercial developments.</b> Draft revised code.	C	Mi	Complex, but important
<b>ULT-3-3. Provide information about electric and hybrid vehicles and rebates on the City’s website.</b>	C	Mi	Easy, early win
<b>ULT-4-1. Consider regulating further construction or expansion in the Wildland Urban Interface (WUI) part of the urban growth boundary (UGB).</b> Explore available policy instruments or incentives for limiting development in this area.	C	Ad	Complex, but important
<b>Consumption and Materials Management</b>			
<b>CM-2-1. Partner with nonprofit organizations to promote the purchase of climate-friendly produce and products.</b> Implement as part of Economic Development Strategy 1.3: local import substitution.	C	Mi	Easy, early win
<b>CM-2-2. Expand community gardening and urban agriculture at community gardens, schools, parks, and rooftops.</b> Offer additional trainings, programs, and gardening areas.	C	Mi/Ad	Too good to wait

	Scope	Type	Criterion
<b>Natural Systems</b>			
<b>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.</b> Continue efforts as part of the Ashland Forest Resiliency Project, and implement actions in the 2016 Ashland Forest Plan.	C	Ad	Too good to wait
<b>NS-1-3. Undertake restoration efforts to retain and restore native fish and riparian species.</b> Identify and create new restoration sites, and continue maintaining existing sites.	C	Ad	Easy, early win
<b>NS-2-2. Explore water-efficient technologies on irrigation systems and consider requiring them during permitting.</b>	C	Mi/Ad	Complex, but important
<b>Public Health, Safety, and Security</b>			
<b>PHSS-2-1. Engage leading employers in a dialogue on climate action.</b> Convene ongoing, organized meetings in partnership with the Chamber of Commerce.	C	Mi/Ad	Foundational step
<b>PHSS-3-1. Identify and work with vulnerable neighborhoods to create site-specific adaptation strategies that address public health.</b>	C	Ad	Foundational step
<b>Cross-Cutting Strategies</b>			
<b>CC-1-2. Create a formal public outreach and education plan to inform the community about climate actions.</b>	C	Mi/Ad	Foundational step
<b>CC-2-1. Ensure all City departments educate their staff members about the Climate and Energy Action Plan.</b> City CEAP Coordinator can engage with each department.	M	Mi/Ad	Foundational step
<b>CC-4-1. Engage with other governments and organizations around climate policy and action.</b> Join a formal organization such as ICLEI to explore best practices and establish relationships with peer communities.	M	Mi/Ad	Foundational step

### Mid-Term Actions

The following forty actions were identified as mid-term priority actions to be implemented by 2025. Priority actions that were not identified as near-term were assigned as mid-term.

	Scope	Type
<b>Buildings and Energy</b>		
Strategy BE-2. Encourage increased building energy efficiency.		
BE-2-2. Require building energy audits to identify and incentivize cost-effective energy efficiency improvements.	C	Mi/Ad
BE-2-3. Identify and adopt strategies to reduce energy efficiency barriers in rent/lease properties.	C	Mi/Ad
BE-2-4. Establish minimum energy efficiency standards for the affordable housing program.	C	Mi/Ad
Strategy BE-3. Maximize efficiency of City facilities, equipment & operations.		
BE-3-1. Use results from City Facilities Energy Audit to prioritize City Facilities Capital Improvement Plans (CIPs) and maintenance improvements.	M	Mi
Strategy BE-4. Improve demand management.		
BE-4-1. Expand the current net meter resolution to include and incorporate virtual net metering.	C	Mi
BE-4-2. Implement utility-level smart grid technologies to facilitate efficiency and distributed energy solutions.	C	Mi
Strategy BE-5. Prepare and adapt buildings for a changing climate.		
BE-5-1. Encourage heat-tolerant building approaches such as cool roofs and passive cooling.	C	Ad
<b>Urban Form, Land Use &amp; Transportation</b>		
Strategy ULT-1. Support better public transit and ridesharing.		
ULT-1-1. Coordinate with neighboring local governments to promote use of transit, carpooling, and car-sharing.	C	Mi
ULT-1-3. Establish policies to support development near transit hubs without displacing disadvantaged populations.	C	Mi
ULT-1-4. Evaluate feasibility of locally-owned and operated transit.	M	Mi
Strategy ULT-3. Support more-efficient vehicles.		
ULT-3-1. Implement a local fuel-related tax.	C	Mi
Strategy ULT-4. Support more climate-ready development and land use.		
ULT-4-2. Further revise community development plans to favor walkable neighborhoods and infill density.	C	Mi
ULT-4-3. Modify the WUI code to include construction techniques appropriate for wildfire-prone areas.	C	Ad
Strategy ULT-5. Increase the efficiency of City fleet vehicles and employee commuting.		
ULT-5-1. Provide carpool and vanpool parking, charging stations, and preferred parking for EVs for City employees.	M	Mi
ULT-5-2. Conduct a city fleet audit and use it to set policy and targets.	M	Mi
ULT-5-3. Develop policy to require the purchase of verified carbon offsets to offset City staff travel.	M	Mi
<b>Consumption and Materials Management</b>		
Strategy CM-1. Reduce consumption of carbon-intensive goods and services.		
CM-1-1. Implement an education campaign for waste and consumption reduction strategies.	C	Mi
CM-1-2. Support “collaborative consumption” community projects.	C	Mi
Strategy CM-3. Expand community recycling and composting.		
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.	C	Mi
CM-3-2. Strengthen the Demolition Debris and Diversion ordinance to enhance enforcement and increase diversion and reuse.	C	Mi
Strategy CM-4. Reduce food waste.		
CM-4-1. Support edible food donation.	C	Mi/Ad
CM-4-2. Provide a kitchen best practices guide to help households and businesses reduce food waste and consumption.	C	Mi/Ad
CM-4-3. Facilitate recycling of commercial food waste.	C	Mi/Ad
Strategy CM-5. Improve sustainability of City operations and purchases.		

	Scope	Type
CM-5-1. Introduce City environmentally preferable purchasing (EPP) guidelines for City procurement.	M	Mi
CM-5-2. Assess the feasibility of co-digesting food waste and biosolids to generate electricity at the wastewater treatment facility.	M	Mi
<b>Natural Systems</b>		
<b>Strategy NS-1. Promote ecosystem resilience.</b>		
NS-1-2. Expand use of green infrastructure such as bioswales, permeable pavement, other pervious surfaces to reduce flood risk and minimize sediment entry into creeks from trails and roads.	C	Ad
NS-1-4. Map and protect areas that provide ecosystem services.	C	Ad
<b>Strategy NS-2. Manage and conserve community water resources.</b>		
NS-2-1. Evaluate the value and potential for incentives for practices that reduce use of potable water for nonpotable purposes and recharge ground water.	C	Mi/Ad
NS-2-3. Expand water conservation outreach and incentive programs for residents and businesses.	C	Mi/Ad
<b>Strategy NS-3. Conserve water use within City operations.</b>		
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.	M	Mi/Ad
NS-3-2. Implement efficiency recommendations from the City facilities water audit.	M	Mi/Ad
<b>Public Health, Safety, and Security</b>		
<b>Strategy PHSS-1. Manage ecosystems and landscapes to minimize climate-related health impacts.</b>		
PHSS-1-1. Promote the expansion of tree canopy in urban heat islands or areas that need air conditioning such as schools.	C	Ad
<b>Strategy PHSS-2. Promote a sustainable local economy that minimizes emissions and vulnerability.</b>		
PHSS-2-2. Support organizations, such as SOU, in evaluating risks to local food sources under climate change.	C	Ad
<b>Strategy PHSS-3. Optimize City services to minimize public health impacts.</b>		
PHSS-3-2. Identify and minimize potential urban heat impacts, such as by designating cooling centers through the city, improving cooling systems in schools and senior centers, and incentivizing cooling strategies such as cool roofs/pavements and expanded tree canopy.	C	Ad
PHSS-3-3. Develop or enhance heat-warning systems for employees and the public.	C	Ad
<b>Strategy PHSS-4. Optimize City services to minimize public safety impacts.</b>		
PHSS-4-1. Update the City’s emergency response plan and ensure that preparation and updates recognize and address likely climate change impacts.	C	Ad
PHSS-4-1. Identify and address essential City services that are within the 100-year flood zone.	C	Ad
<b>Cross-Cutting Strategies</b>		
<b>Strategy CC-1. Educate and empower the public.</b>		
CC-1-1. Support capacity of neighborhood and community groups to implement climate mitigation and adaptation initiatives.	C	Mi/Ad
<b>Strategy CC-3. Mainstream and integrate climate considerations.</b>		
CC-3-1. Consider climate change in all City Council policy, budgetary, or legislative. Incorporate climate action considerations/relationship as part of the Council Communication document template.	M	Mi/Ad
CC-3-2. Consider CEAP goals in future updates of city plans.	M	Mi/Ad

### Implementation Schedule

The table starting on the following page details when, why, and by whom timeframes by which all priority actions in the CEAP will be implemented. The list includes additional information on each action, including co-benefits and relative, qualitative estimates of implementation costs and effectiveness in meeting CEAP goals. The CEAP also includes additional actions that were not listed as “priority”—these actions will be implemented on an opportunistic and as-needed basis.

**Timeframes:**

Timeframes for CEAP priority actions are designated by budget biennials and represent dates by which actions must be commenced (not completed per se, as some actions will be ongoing). All actions are slated for near- or mid-term commencement; it is expected that longer-term actions will be identified during the three-year plan update process:

- Near-term: 2017-2021
- Mid-term: 2021-2025

**Departments:**

Actions are labeled by the primary department responsible for implementation. It is expected that many of these primary departments will need to work with other supporting departments and/or external stakeholders to fully and successfully implement the action:

- Community Development (including Building Division and Planning Division)
- Ashland Municipal Utility (Electric)
- Administration
- Parks and Recreation
- Conservation Division
- Public Works
- Police / Fire

**Co-benefits:**



Benefits low-income or disadvantaged communities



Benefits local habitats, recreation, or natural aesthetic



Benefits households, local economy, City operations budget, or jobs



Benefits public health (e.g., by enhancing local air quality)

**Relative rankings:**

- \$ Lower relative implementation cost
- \$\$ Moderate relative implementation cost
- \$\$\$ Higher relative implementation cost

- ⚡ Effective in meeting CEAP goals
- ⚡⚡ More effective in meeting CEAP goals
- ⚡⚡⚡ Most effective in meeting CEAP goals

Table 3. CEAP Action Implementation Schedule

	Scope	Type	Cost	Effectiveness	Co-benefits	Timeframe for Implementation	Responsible Department
<b>Buildings and Energy</b>							
<b>Strategy BE-1. Support cleaner energy sources.</b>							
BE-1-1. Develop a comprehensive plan for the Municipal Electric Utility.	C	Mi	\$	⚡⚡⚡		Near-term	Electric / Conservation
BE-1-2. Facilitate and encourage solar energy production.	C	Mi/Ad	\$ \$	⚡⚡		Near-term	Electric / Conservation
BE-1-3. Enhance production of on-site solar energy from City facilities.	C	Mi/Ad	\$ \$	⚡		Near-term	Public Works
<b>Strategy BE-2. Encourage increased building energy efficiency.</b>							
BE-2-1. Increase outreach efforts to expand participation in energy efficiency programs and promote climate-friendly building and construction.	C	Mi	\$ \$	⚡⚡	⚖️	Near-term	Conservation
BE-2-2. Require building energy audits to identify and incentivize cost-effective energy efficiency improvements.	C	Mi/Ad	\$ \$	⚡⚡		Mid-term	Community Development
BE-2-3. Identify and adopt strategies to reduce energy efficiency barriers in rent/lease properties.	C	Mi/Ad	\$	⚡⚡⚡	⚖️	Mid-term	Conservation
BE-2-4. Establish minimum energy efficiency standards for the affordable housing program.	C	Mi/Ad	\$	⚡	⚖️	Mid-term	Community Development
<b>Strategy BE-3. Maximize efficiency of City facilities, equipment &amp; operations.</b>							
BE-3-1. Use results from City Facilities Energy Audit to prioritize City Facilities Capital Improvement Plans (CIPs) and maintenance improvements.	M	Mi	\$	⚡		Mid-term	Public Works
<b>Strategy BE-4. Improve demand management.</b>							
BE-4-1. Expand the current net meter resolution to include and incorporate virtual net metering.	C	Mi	\$ \$	⚡⚡		Mid-term	Electric
BE-4-2. Implement utility-level smart grid technologies to facilitate efficiency and distributed energy solutions.	C	Mi	\$ \$ \$	⚡⚡⚡	💰	Mid-term	Electric
<b>Strategy BE-5. Prepare and adapt buildings for a changing climate.</b>							
BE-5-1. Encourage heat-tolerant building approaches such as cool roofs and passive cooling.	C	Ad	\$	⚡⚡	💰	Mid-term	Community Development
<b>Urban Form, Land Use &amp; Transportation</b>							
<b>Strategy ULT-1. Support better public transit and ridesharing.</b>							
ULT-1-1. Coordinate with neighboring local governments to promote use of transit, carpooling, and car-sharing.	C	Mi	\$	⚡⚡		Mid-term	Public Works

	Scope	Type	Cost	Effectiveness	Co-benefits	Timeframe for Implementation	Responsible Department
ULT-1-2. Work with the RVTD to implement climate-friendly transit.			\$	⚡⚡		Near-term	Public Works
ULT-1-3. Establish policies to support development near transit hubs without displacing disadvantaged populations.			\$	⚡⚡		Mid-term	Community Development
ULT-1-4. Evaluate feasibility of locally-owned and operated transit.			\$\$\$	⚡⚡		Mid-term	Public Works
<b>Strategy ULT-2. Make Ashland more bike- and pedestrian-friendly.</b>							
ULT-2-1. Implement bicycle-friendly Transportation System Plan actions.			\$	⚡⚡⚡		Near-term	Public Works
ULT-2-2. Explore opportunities to convert to shared streets where appropriate to provide multimodal connectivity.			\$\$	⚡⚡⚡		Near-term	Public Works
<b>Strategy ULT-3. Support more-efficient vehicles.</b>							
ULT-3-1. Implement a local fuel-related tax.			\$	⚡⚡⚡		Mid-term	?
ULT-3-2. Revise land use codes to require EV charging infrastructure at multifamily and commercial developments.			\$	⚡⚡⚡		Near-term	Community Development
ULT-3-3. Provide information about electric and hybrid vehicles and rebates on the City’s website.			\$	⚡⚡		Near-term	Conservation
<b>Strategy ULT-4. Support more climate-ready development and land use.</b>							
ULT-4-1. Consider regulating further construction or expansion in the Wildland Urban Interface (WUI) part of the urban growth boundary (UGB).			\$	⚡⚡⚡		Near-term	Community Development/Fire
ULT-4-2. Further revise community development plans to favor walkable neighborhoods and infill density.			\$	⚡⚡⚡		Mid-term	Community Development
ULT-4-3. Modify the WUI code to include construction techniques appropriate for wildfire-prone areas.			\$	⚡⚡		Mid-term	Community Development
<b>Strategy ULT-5. Increase the efficiency of City fleet vehicles and employee commuting.</b>							
ULT-5-1. Provide carpool and vanpool parking, charging stations, and preferred parking for EVs for City employees.			\$\$	⚡		Mid-term	Public Works
ULT-5-2. Conduct a city fleet audit and use it to set policy and targets.			\$	⚡		Mid-term	Public Works
ULT-5-3. Develop policy to require the purchase of verified carbon offsets to offset City staff travel.			\$	⚡		Mid-term	Administration
<b>Consumption and Materials Management</b>							
Strategy CM-1. Reduce consumption of carbon-intensive goods and services.							

	Scope	Type	Cost	Effectiveness	Co-benefits	Timeframe for Implementation	Responsible Department
CM-1-1. Implement an education campaign for waste and consumption reduction strategies.			\$	⚡⚡		Mid-term	Administration
CM-1-2. Support “collaborative consumption” community projects.			\$	⚡⚡		Mid-term	Administration
Strategy CM-2. Support sustainable and accessible local production and consumption.							
CM-2-1. Partner with nonprofit organizations to promote the purchase of climate-friendly produce and products.			\$	⚡⚡		Near-term	Administration
CM-2-2. Expand community gardening and urban agriculture opportunities at community gardens, schools, parks, and rooftops.			\$ \$	⚡⚡		Near-term	Administration/Parks
Strategy CM-3. Expand community recycling and composting.							
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.			\$ \$	⚡		Mid-term	Conservation
CM-3-2. Strengthen the Demolition Debris and Diversion ordinance to enhance enforcement and increase diversion and reuse.			\$ \$	⚡⚡		Mid-term	Conservation
Strategy CM-4. Reduce food waste.							
CM-4-1. Support edible food donation.			\$	⚡		Mid-term	Conservation
CM-4-2. Provide a kitchen best practices guide to help households and businesses reduce food waste and consumption.			\$	⚡⚡		Mid-term	Conservation
CM-4-3. Facilitate recycling of commercial food waste.			\$ \$	⚡⚡		Mid-term	Conservation
Strategy CM-5. Improve sustainability of City operations and purchases.							
CM-5-1. Introduce City environmentally preferable purchasing (EPP) guidelines for City procurement.			\$	⚡		Mid-term	Administrative Services
CM-5-2. Assess the feasibility of co-digesting food waste and biosolids to generate electricity at the wastewater treatment facility.			\$ \$ \$	⚡⚡		Mid-term	Public Works
Natural Systems							
Strategy NS-1. Promote ecosystem resilience.							
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.			\$	⚡⚡⚡		Near-term	Fire

	Scope	Type	Cost	Effectiveness	Co-benefits	Timeframe for Implementation	Responsible Department
NS-1-2. Expand use of green infrastructure such as bioswales, permeable pavement, other pervious surfaces to reduce flood risk and minimize sediment entry into creeks from trails and roads.	C	Ad	\$	⚡⚡	🌲	Mid-term	Community Dev
NS-1-3. Undertake restoration efforts to retain and restore native fish and riparian species.	C	Ad	\$\$	⚡⚡	🌲	Near-term	Parks & Recreation
NS-1-4. Map and protect areas that provide ecosystem services.	C	Ad	\$\$	⚡⚡	🌲	Mid-term	Parks & Recreation
<b>Strategy NS-2. Manage and conserve community water resources.</b>							
NS-2-1. Evaluate the value and potential for incentives for practices that reduce use of potable water for nonpotable purposes and recharge ground water.	C	Mi/Ad	\$\$	⚡⚡⚡	🌲	Mid-term	Conservation
NS-2-2. Explore water-efficient technologies on irrigation systems and consider requiring them during the permitting process.	C	Mi/Ad	\$\$	⚡⚡⚡		Near-term	Conservation
NS-2-3. Expand water conservation outreach and incentive programs for residents and businesses.	C	Mi/Ad	\$\$	⚡	💰	Mid-term	Conservation
<b>Strategy NS-3. Conserve water use within City operations.</b>							
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.	M	Mi/Ad	\$\$	⚡		Mid-term	Public Works
NS-3-2. Implement efficiency recommendations from the City facilities water audit.	M	Mi/Ad	\$\$	⚡		Mid-term	Public Works
<b>Public Health, Safety, and Security</b>							
<b>Strategy PHSS-1. Manage ecosystems and landscapes to minimize climate-related health impacts.</b>							
PHSS-1-1. Promote the expansion of tree canopy in urban heat islands or areas that need air conditioning such as schools.	C	Ad	\$	⚡⚡	🌲	Mid-term	Parks & Recreation/Comm Dev
<b>Strategy PHSS-2. Promote a sustainable local economy that minimizes emissions and vulnerability.</b>							
PHSS-2-1. Engage leading employers in a dialogue on climate action, for example, by organizing and facilitating roundtables.	C	Mi/Ad	\$	⚡⚡	💰	Near-term	Conservation
PHSS-2-2. Support organizations, such as SOU, in evaluating risks to local food sources under climate change.	C	Ad	\$	⚡	💰	Mid-term	Administration
<b>Strategy PHSS-3. Optimize City services to minimize public health impacts.</b>							

	Scope	Type	Cost	Effectiveness	Co-benefits	Timeframe for Implementation	Responsible Department
PHSS-3-1. Work with vulnerable neighborhoods to create site-specific adaptation strategies to address public health risks.	C	Ad	\$	⚡⚡	⚖️	Near-term	Administration/Fire
PHSS-3-2. Identify and minimize potential urban heat impacts, such as by designating cooling centers through the city, improving cooling systems in schools and senior centers, and incentivizing cooling strategies such as cool roofs/pavements and expanded tree canopy.	C	Ad	\$\$	⚡	⚖️ 🚑	Mid-term	Parks & Recreation/Fire
PHSS-3-3. Develop or enhance heat-warning systems for employees and the public.	C	Ad	\$	⚡	🚑	Mid-term	Fire
Strategy PHSS-4. Optimize City services to minimize public safety impacts.							
PHSS-4-1. Update the City’s emergency response plan and ensure that preparation and updates recognize and address likely climate change impacts.	C	Ad	\$	⚡⚡⚡		Mid-term	Fire
PHSS-4-1. Identify and address essential City services that are within the 100-year flood zone.	C	Ad	\$\$	⚡⚡		Mid-term	Public Works
Cross-Cutting Strategies							
Strategy CC-1. Educate and empower the public.							
CC-1-1. Support capacity of neighborhood and community groups to implement climate mitigation and adaptation initiatives.	C	Mi/Ad	\$	⚡⚡	⚖️	Mid-term	Administration
CC-1-2. Create a formal public outreach and education plan to inform the community about climate actions and progress.	C	Mi/Ad	\$	⚡⚡		Near-term	Administration
Strategy CC-2. Educate and empower City staff.							
CC-2-1. Ensure all City departments educate their staff members about the Climate and Energy Action Plan.	M	Mi/Ad	\$	⚡		Near-term	Administration
Strategy CC-3. Mainstream and integrate climate considerations.							
CC-3-1. Consider climate change in all City Council policy, budgetary, or legislative. Incorporate climate action considerations/relationship as part of the Council Communication document template.	M	Mi/Ad	\$	⚡⚡⚡		Mid-term	Administration
CC-3-2. Consider CEAP goals in future updates of city plans.	M	Mi/Ad	\$	⚡⚡⚡		Mid-term	Administration
Strategy CC-4. Engage with other governments and organizations around regional, statewide, national, and international climate policy and action.							
CC-4-1. Engage with other governments and organizations around regional, statewide, national, and international climate policy and action.	M	Mi/Ad	\$	⚡		Near-term	Administration

## **BEFORE THE CITY COUNCIL OF ASHLAND, OREGON**

AN ORDINANCE CONCERNING THE CURRENT AND FUTURE PROTECTION OF THE HEALTH, SAFETY, AND WELFARE OF RESIDENTS AND ECOSYSTEMS OF THE CITY OF ASHLAND, OREGON,

A. Climate change is caused by anthropogenic activities, primarily from the consumption of fossil fuels that emit greenhouse gases, primarily carbon dioxide (CO<sub>2</sub>) and methane, the primary component of natural gas.

B. Mean global temperature is increasing as a result of increased concentrations of greenhouse gases in the atmosphere.

C. The decade from 2000 to 2010 was the warmest on record; 2015 and 2014 are the two the hottest years on record; and the twelve consecutive months of May 2015 through April 2016 have each set a record for global average surface temperatures for their respective months.

D. CO<sub>2</sub> levels in the atmosphere surpassed 400 parts per million (ppm) for the first time in 800,000 years in the year 2013 and now are at the brink of permanently remaining above 400 ppm in the absence of a global effort to reduce emissions.

E. Scientists predict that by 2100 average global temperatures will be 2 to 11.5 degrees Fahrenheit higher than they are now, depending on the rate of emissions.

F. As climate change continues, the Pacific Northwest will experience a considerable amount of variation in temperature and precipitation. This is expected to have a significant impact on the local environment, economy, and community while affecting all sectors including water and other natural resources, agriculture, and recreation/tourism.

G. Emissions of greenhouse gases are already impacting global ecosystems causing ocean acidification, ocean warming, and warming of the Earth's surface. Continuation of these trends lead to rising seas, more frequent and severe weather events, heavy rainfall and flooding, heat waves and drought, intense and destructive wildfires, disrupted ecosystems and agriculture, more disease, famine, disrupted economic sectors and job markets, conflict and human loss of life, increased social and economic inequity resulting in a an added burden on those least able to adapt.

H. The health, welfare, and economic future of the citizens of Ashland are threatened by these climatic changes.

I. Meaningful action is needed at all levels of government to mitigate climate change, effectuate climate recovery, and leave a healthier environment and atmosphere for future generations. The City of Ashland ("The City") is ready to do its part, and will engage its residents, visitors, businesses and organizations to do the same.

K. This ordinance is based on the widely-accepted science of climate change. Specifically, this ordinance is a direct effort to contribute to climate stabilization and to respond to the present and future adverse impacts climate change poses to our health and safety, our environment, and our local and global economies.

L. State and Federal goals and mandates – **More to come here**

M. With the passage of this ordinance, Ashland commits itself to actively and significantly reducing all GHG emissions emanating from within city limits. The GHG reduction targets prescribed in this ordinance are designed to be consistent with science-based goals, primarily the goal of returning global atmospheric CO2 concentrations to below 350 ppm by the year 2100.

N. The City will be guided and directed by a Climate and Energy Action Plan, which will be created and developed by the City with input from Ashland residents. Progress in meeting the prescribed reductions will be monitored and reported on by the City, and course corrections to the plan can and should be made, as needed over time.

O. Failure to complete the Climate and Energy Action Plan and take meaningful action could permanently affect the safety, health, welfare, and economic future of the City and its residents. Delayed action could also result in increased City costs and community impacts.

**SECTION 1: The City of Ashland Municipal Code (AMC) Chapter 9 is amended by adding new Sections to read as follows:**

**9.40 CLIMATE RECOVERY**

**9.40.010 Definitions** - The following words and phrases whenever used in this chapter shall be construed as defined in this section.

- A. “Carbon Neutral” means zero net emissions of greenhouse gases (GHG)
- B. “City Operations” means
- C. “GHG Baseline” means the carbon emissions calculations for 2015 as found in the 2016 Greenhouse Gas Inventory document
- D. More to come**

**9.40.20 – Climate Recovery Goals - Community**

- A. By the year 2100, total community greenhouse gas emissions shall be reduced to an amount that is no more than the city of Ashland’s average share of a global atmospheric greenhouse gas level of 350 ppm, which is estimated in 2016 to require an annual average emission reduction of 8%.
- B. The per capita fossil fuel use in the City shall be reduced by at least 50% by 2030 and 100% 2050.

#### **9.40.030 – Climate Recovery Goals – City Operations**

- A. Using actions contained in the Climate and Energy Action Plan, City operations, facilities and services shall reach carbon neutrality by 2030.
- B. The City shall reduce its fossil fuel consumption by at least 50% by 2030 and 100% by 2050.

#### **9.40.040 – Climate and Energy Action Plan**

- A. The Climate and Energy Action Plan shall contain the following:
  - 1. Plan for City Operations (CEAP-CO), which shall contain specific and measurable GHG reduction targets and milestones to guide and direct City operations in achieving the required carbon mitigation and fossil fuel reduction targets.
  - 2. Plan for the Community (CEAP-C), which shall contain specific and measurable GHG reduction targets and milestones to guide and direct the community in achieving the required carbon mitigation and fossil fuel reduction targets.
  - 3. Each plan shall contain the following:
    - a. Strategies, actions, timelines and progress indicators to meet GHG reduction targets
    - b. Measurements to evaluate progress and achievement of actions
    - c. Minimum reporting content and schedule for City Council for CEAP and GHG Inventory
    - d. Identified process for plan amendments, including comprehensive review on a three year cycle.
    - e. Identified role of the Climate and Energy Action Plan Commission in advisory and recommendation capacity for CEAP implementation and updates

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE CREATING THE CLIMATE AND ENERGY ACTION COMMISSION

**2.27– Climate and Energy Action Plan Advisory Commission**

**2.27.005 – Purpose**

Upon adoption of this ordinance, the Mayor shall establish a permanent Citizen Commission to provide oversight and recommendations regarding the implementation of the Climate and Energy Action Plan, as well as recommending updates and modifications to the Climate and Energy Action Plan (CEAP) document.

**2.27.010 – Establishment – Membership**

The Commission shall reflect and represent a wide range of community interests and perspectives, including environmental, energy efficiency, renewable energy, academic and business, low income, equity, and health, communities of color and elderly. The Commission shall consist of nine (9) voting members, including at least two (2) of whom shall be 25-years-old or younger at the time of appointment. Eight (8) of the members shall reside within the City, and one (1) may be an at large member living within the Ashland urban growth boundary. One (1) Mayor or City Councilor and one (1) City staff person shall serve on the Commission as non-voting, *ex-officio* members. The primary staff liaison shall be appointed by the City Administrator and shall serve as Secretary of the Commission. Voting members shall be appointed by the Mayor with confirmation by the City Council

**2.27.020 - Powers and Duties**

- A. Monitor and advise on the Implementation of the Climate and Energy Action Plan for the Community and City Operations
- B. Recommend modifications to benchmarks, targets or implementing actions contained in the CEAP as needed to incorporate the best available science and practices to achieve CEAP related goals and targets.
- C. Monitor progress toward achieving the reductions of GHG emissions prescribed by this ordinance
- D. Work to ensure that the CEAP considers public input and long-term social, economic and environmental impacts
- E. Recommend changes in city ordinances, rules and processes that facilitate and/or incentivize residents and businesses to reduce their GHG emissions
- F. Work to ensure the plans are socially equitable for all community members including low-income, young people, persons of color, elderly and those living with disabilities.
- G. Work to ensure the CEAP protects Ashland’s quality of life by identifying, benefiting, and preserving long-term natural resources, services, amenities, institutions, industries, and community characteristics valued by Ashland residents.