



Climate and Energy Plan Committee Meeting Agenda

August 17, 2016 | 5:30-7:30 | Community Development Building
51 Winburn Wy – Siskiyou Room

Agenda

Duration	Item	Lead
5 min	Call to Order <ul style="list-style-type: none">• Approval of Minutes – July 6, 2016• Icebreaker Question	Rich
15 min	Public Forum	
10 min	Recap of Council Report/Update	Rich
20 min	Discussion of Goals/Target Ordinance	Rich
60 min	Focus Group activity on initial draft actions list	Rich/Jeff/Adam
10 min	Follow up for next meeting (Sept 7)	Adam

MINUTES FOR THE CLIMATE & ENERGY ACTION PLAN ad hoc COMMITTEE

Wednesday, July 6, 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 Cindy Bernard, Bryan Sohl, Jim Hartman, James McGinnis, Roxane Beigel-Coryell, Sarah Lasoff, Cluadia Alick, and Stuart Green were present. Staff member Adam Hanks was present. Consultants Andrea Martin and Kendra White were present via speakerphone.

2. Around the Room

Group did an around the room team building regarding something joyful they did on the 4th of July holiday.

3. Public Input

Huelz Gutchen: Stated that there are many kinds of renewable energy – solar is the most effective here. Solar created near or very near residences, businesses, and overall community is the most effective, particularly solar created on-site, because it eliminates the need for wires. Another model for solar production is corporate-owned. This is a relatively new model where the utility acquires, finances, and maintains the solar panels installed on residences or businesses. If utility and planning departments work together, with good outreach, this is the most promising market for solar. If it's done wrong though it could be undersubscribed and have too high of a cost. We need to have people pre-educated on this possibility.

Ray Molett: Stated he was happy to see at the last meeting that the group approved consumption-based reductions. He is working with SOCAN to find a way to calculate those emissions. There is a Berkeley calculator he hopes can be used by City residents.

Hannah Sohl: Stated that she sent a draft ordinance to members of the group and staff and got great feedback. She would love to be able to share the updated version of the ordinance. She gave information about Eugene and the update they have recently approved to their ordinance in order to meet goals. She stated that she is concerned that the group is considering waiting until the plan is finished to propose the ordinance. There is currently lots of excitement and momentum regarding the ordinance and she is worried that we will lose the political will, especially with the holidays. The current Council seems to be good at pushing climate actions forward and she thinks the group should do the ordinance while they can.

Ken Crocker: Stated he recently traveled in Europe and to the city of Davis, California. He found it neat seeing how other communities have embraced pedestrians, alternative energy, etc. He recently read an article about the proposal to narrow East Main Street to two lanes and wondered how much of that decision was made in consideration of climate change. Is the group

setting this plan up so that all decisions are made with climate action as the most important factor? He hopes that the group has been talking about making a cultural shift and not just a metrics tracking plan. He wanted to know how the group, he, and others can help make that cultural change.

4. Review of Goals & Targets

Group discussed the bullet points in the draft Council Communication included in the packet.

- Be more than carbon neutral by 2050.
- Goal/target should include community consumption (GHG from purchased goods and services).

Several members of the group stated that after leaving last meeting they became concerned with the decisions made. Partly they felt, “more than carbon neutral,” is too ill-defined (how much “more”?) and partly they worried these goals the plan too ‘kooky’ for Council and the community to accept. However, group members were also concerned that the goal might get too watered-down while trying to please everyone.

Group discussed the possibility of having the goal be slightly lower (carbon-neutral, not more than carbon neutral) but by an earlier deadline so that it’s still a highly aggressive target. Some group members raised concerns that, with the possibility of having the goals and targets in ordinance form, they can’t be entirely aspirational – they need to be based on what we can actually achieve.

McGinnis/Hartman m/s that the plan have a goal of 100% carbon neutral by 2050.

Discussion: McGinnis stated that after hearing the conversation it’s clear we need to have a realistic goal. Hartman stated the hard part of this, or any, goal is the cost. Based on his estimates this could cost as much as 1% of every Ashland resident’s annual income. Alick raised concerns that with this goal we are doing what is easy for the community rather than what is necessary (you shoot for the moon, not for only going part-way).

Sohl stated that Seattle’s plan is carbon neutral by 2050. With our limited growth and small city size we should be able to do better. He would prefer an end date of 2045. Beigel-Coryell stated that in her experience working on SOU’s action plan, carbon neutral is a very difficult goal and possibly not achievable, no matter the end year target. Green stated he agrees with Beigel-Coryell. Having a lower goal doesn’t mean that we can’t make achievements that go beyond the stated goal. There are other ways to be a leader than just having the most aggressive goal.

Vote: 4 Ayes, 4 Nays, Motion Fails.

Bernard/Beigel-Coryell m/s that the plan have a goal of 85% reduction by 2050, with the understanding that five-years from plan adoption the goal will be reassessed.

Discussion: Bernard stated we need to make sure the plan is realistic and understandable for the average layperson (this includes most of the Councilors). This seems to be a more affordable and attainable goal. She feels it is worse to set a higher goal and fail than to succeed fully on a more

realistic goal. Beigel-Coryell stated it will be easier to get the plan adopted if the goal is achievable. The goal can always be changed or moved higher with new technology, data or community will.

Group discussed whether the goal needs to be achievable or should be our “shot at the moon.” Alick raised concerns that the group is lowering the goal only because they are afraid of other people’s reactions. She doesn’t think that it’s the role of the committee to be afraid. Hartman stated that he hopes the goal will inspire others, which seems to require a more aggressive goal than 85%.

Beigel-Coryell stated that if the goal doesn’t contain consumption she would be okay with a higher target but including consumption means we can never reach 100%, even 85% is probably beyond our ability. Rosenthal stated he can’t support this target because it wouldn’t be inspiring to the community or others.

Vote: 3 Ayes, 5 Nays, Motion Fails.

Group discussed inclusion of consumption in the target. No other community currently has consumption in their targets because plans need to be focused on things communities can influence or control. Most of consumption is outside of a local community’s sphere of control. Hartman stated that consumption can be included and reduction achieved, but only through offsets. Some of the group had concerns about use of offsets. Group mostly agreed that consumption reduction is important but don’t know if/how it’s possible to control or set a reduction goal.

Sohl/Bernard m/s that the plan have 100% reduction in sector-based emissions by 2047, with interval goals occurring every five years, starting in 2022.

Discussion: Sohl stated that he is proposing this but is still interested in how we can engage the citizenry in consumption reduction.

Vote: 8 ayes, 0 Nays, Motion Passes.

Alick/Sohl m/s to have the plan include a goal of reducing consumption-based emissions by 50% by the same dates and interval review years as the sector-based targets.

Discussion: Sohl stated he is concerned about how to get these reductions with out fully understanding how to track them or how much is within our control. McGinnis stated it’s premature to determine reduction numbers without full understanding of the issue. It would be better to determine this goal later in the process after further study.

Alick/Sohl both agreed to withdraw the motion, so long as the topic is addressed later in the process. Group agreed further discussion is necessary. **Motion withdrawn.**

Hanks stated that Cascadia is working to get better consumption-related numbers and reminded the group that just because there is no specific goal doesn’t mean there can’t be consumption-related actions in the final plan.

- Retain the option to include the purchase of carbon offsets as a contributing solution.

Group discussed the desire to focus on local offsets. Hanks stated that most local offsets can't really qualify because you can't count the reduction twice in a single community (no "double-dipping" on reduction calculations). Group generally agreed to, "retain the option to include carbon offsets, if we can't achieve goals/targets by any other means."

- Include specific City operations goals/targets – both in overall GHG form and fossil-fuel specific.

Group all agreed to this goal.

- Base year for the plan is 2015.

Group all agreed to this goal.

- Intermediate targets in five-year increments, starting in 2020.

Group agreed that, based on previous discussion related to the overall goal, this should start in 2022. Additionally, they mostly agreed that these intermediate targets don't have to necessarily line up perfectly with the budget cycles as the City should always be pre-planning for upcoming targets.

- Plan should include action for goals/targets to be adopted by ordinance (no recommendation yet on whether the ordinance adoption should come before or after the plan approval).

Group discussed the timeline for the ordinance. Some thought the timeline should be determined based on Council's reaction to the goals and targets (i.e. if they are fully supportive of the draft goals, the ordinance can come before, if they raise concerns it probably should come along-side or after the plan). Some felt that the group needs to be very clear with what is involved in an ordinance (what are the specific details? what are the penalties for failure to achieve the ordinance? how challenging is the ordinance to update? etc.) Hanks stated that, despite the repeated statement of it being, "legally-binding" there is no way to legal bind a community to an action plan. An ordinance does mean, however, that Council has to acknowledge the ordinance with regard to how decisions are made. McGinnis stated that the next open house is in September, it might be good to have this as part of the discussion related to that open house. Group agreed to continue discussing the ordinance possibility and potential timeline at future meetings.

- Goals/targets ordinance should match the plan goals/targets (even with the fact that the goals will include consumption).

Based on the previous discussions the group agreed to continue to discuss the ordinance, and asked that the part of the statement in parenthesis should be deleted.

5. Review of Cascadia's Goals/Targets Document

Group discussed with Cascadia (via speaker phone) that there was confusion with the labeling of figure 1 as presented. They requested that it be labeled better, or have further explanation.

6. Next Meeting

The next meeting will be August 17, 2016, at 5:30 p.m. in the Siskiyou Room. Group requested that the following topics be on the agenda:

- Discussion of the next open house
- Discussion of ordinance possibility and timeline
- Discussion of how to deal with consumption-based emissions
- Discussion of how Council reacted to the goals and targets at their update

7. Adjournment

Meeting adjourned at 5:33 p.m.

Respectfully submitted,
Diana Shiplet, Executive Assistant

Memo

DATE: August 12, 2016
TO: CEAP Committee
CC:
FROM: Adam Hanks
RE: Goals/Targets Ordinance Discussion

To assist in the committee's discussion on how best to address the interest of many to have the goals and targets for the Climate and Energy Action Plan presented to Council in ordinance form, several questions have been developed for the committee to use to determine its preferred pathway forward on the matter.

Question #1

Should the committee prepare a recommendation to Council to adopt an ordinance prior to the completion and presentation of the draft Climate and Energy Action Plan in January?

If yes, the committee may want to make a formal recommendation requesting City staff review of the existing/draft ordinance and schedule its review on an upcoming committee meeting agenda as soon as feasible.

If no,

Question #2

Should the committee recommend inclusion of a high priority, immediate action in the draft plan to approve the goals/targets and other associated key commitments via ordinance.

If yes, the committee may want to make a formal recommendation requesting City staff review of the existing citizen drafted ordinance and request its review on an upcoming committee meeting agenda along with other high priority, immediate actions identified through the committee and public input processes consistent with the existing project plan.



Goals, Targets, Metrics, and Actions: Review Guide

Activity Overview

Objective

The current objective is to refine and, if needed, revise the list of potential goals, strategies, and actions in preparation for the public open house on September 25.

Activities

Work within your assigned focus area groups to review the draft goals, strategies, and actions for that focus area:

- **Buildings and Energy:** Jim H, James
- **Urban Form, Land Use, and Transportation:** Bryan, Rich, Stu
- **Consumption and Materials Management:** Roxane, Cindy
- **Health/Social Systems:** Claudia, Louise
- **Natural Systems:** Greg, Isaac, Marni

There is not enough time to review each action in detail today, so this time will be used to familiarize yourselves with the content and get a feel for initial impressions and priorities. There will be time for further conversation and discussion at the next meeting.

You will be working in your group to review the goals, strategies, and actions. Please assign one person to write notes and edits for the group. Use the following table as a guide for the hour:

Time	Activity
10 min	Ashland's Unique Opportunity – Brainstorm and write any thoughts that come to mind
10 min	Goals Review – Edit the goals, if needed
15 min	Strategy and Action Refinement – individual exercise: <ul style="list-style-type: none"> ▪ Review the list on your own, note any initial reactions ▪ Choose your top 5 actions for 1) your focus area and 2) cross-cutting strategies ▪ Strikeout any actions that could be deferred from the plan
20 min	Strategy and Action Refinement – focus group discussion: <ul style="list-style-type: none"> ▪ Compile decisions and notes, discuss as a team, and note any additions, revisions, comments, or questions
5 min	1-min report-outs
15 min	Open house preparation discussion

Activity Background and Detail

Introduction

The consultant team has developed a comprehensive list of potential goals, strategies, and actions for the Ashland Climate and Energy Action Plan. This list was generated through compilation of public input, outcomes from the joint City/ad-hoc committee workshop in May, and best practices from comparable jurisdictions elsewhere. The list underwent an initial review from City staff in June/July for the following elements, and this list represents the outcomes from that review (considerations stated by City staff are in the “Comments, Notes, and Considerations” column of the Excel file):

- **Clarity:** Is the action clear? Does it clearly contribute to a climate action goal?
- **Relevance:** Is the action relevant to Ashland?
- **Redundancy:** Is the action already being done? Or does it seem redundant with another action?
- **Completeness:** Are there any actions missing that should be added? Or other existing, related plans/policies that should be noted?

The current objective is to refine and, if needed, revise the list of potential goals, strategies, and actions in preparation for the public open house in September. The open house will be an opportunity for the public to review, prioritize, and comment on these initial strategies and actions of the plan. To best utilize the limited time we have with the public, it is important that we present them with the key content and questions that you think will be most useful for creating a successful Climate and Energy Action Plan.

Ashland’s Unique Opportunity

Ashland is unique, so we want to make sure that the Climate and Energy Action Plan reflects and leverages Ashland’s unique qualities. For example, the fact that Ashland owns its electric utility could position the City to take deeper action on reducing GHG emissions in the electrical sector than other jurisdictions. Ashland also has a relatively clean energy source, which means that transportation emissions may take up a larger proportion of the city’s carbon footprint than in other cities.

To ensure that these unique qualities are leveraged through this plan, consider reflecting on the following considerations before digging into these goals, strategies, and actions:

- **What are the largest opportunities for emissions reductions in Ashland?** What sectors contribute the most emissions? For which sectors has Ashland already addressed the “low hanging fruit” or otherwise made significant progress? (For reference, see the city GHG inventory, as well as the list of accomplishments in the packet.)
- **What are the highest priorities for addressing climate change impacts in Ashland?** Which impacts have been identified as highest priority by scientists and the public? Which impacts have not been addressed to-date by the City or other entities through planning or other efforts?
- **Where does the City have the most influence?** Which “levers” are available and most effective for the city to influence climate action? Over which areas does the city have limited influence, and what can be done to address that disconnect? How does this effort connect to other City plans, programs, or efforts?

Based on your answers to the above questions, what do you think Ashland’s **overarching strategy** should be as part of the CEAP? Should one focus area, strategy, or category of action (e.g., R&D,

education/outreach, policy/regulation) be emphasized first before implementing others? Should the City focus internally before taking action directed toward the broader community? What key partnerships or frameworks need to be in place early in the process?

Keep these considerations in mind when reviewing the goals, strategies, and actions. We will have the opportunity at future meetings to have a more structured discussion of overarching strategy.

Goals Review

As a group, review the draft goals for your focus area. In reviewing the focus area-specific goals, keep in mind the following key elements of goals:

- Express an ambitious, but specific commitment.
- Always start with a verb/action.
- Present a single challenge with great impact.
- Are different from targets, which are quantified sub-components that will contribute in a major way to achievement of goal (e.g., achieve carbon neutral City facilities by 2020, or reduce community water consumption by 20% by 2025). We will address focus area-specific targets at a later date.
- Are different from actions, which delineate specific steps or actions to achieve the goal.

Are there any goals missing? Any that you think should be revised? Discuss as a group for 10 minutes and assign one person to write any edits onto the packet.

Strategy and Action Refinement

At this phase, we will not be evaluating the actions in detail—that will come at a later date after receiving public input from the open house and stakeholder interviews. Our current objective is to refine the list of strategies and actions into a shortlist that can be reviewed at the open house and by external stakeholders. If time allows, we can also begin discussing key considerations or comments for the public to keep in mind when reviewing the list.

Please take about 5 minutes to review this list on your own. Take notes on what first comes to mind when reviewing the actions—especially relevant to the reflections made earlier regarding Ashland’s unique opportunities and leverage points.

After reviewing the list, take 10 minutes to do the following:

- **Place stars next to your top five actions within your focus area** (which actions must *absolutely* be a part of the CEAP?).
- **Strikeout any actions within your focus area that you think could be deferred from the plan** (note: we will not eliminate any actions at this point, but this exercise will further assist in focusing the public’s attention at the open house).
- **Repeat these steps for the “Cross-Cutting Strategies” section of the plan, if you have time.**

Provide brief written justification for these decisions. Did the action seem unfeasible? Do we know enough to be able to implement it? Would it have a minimal impact on meeting the goals of the plan? Are there other actions that address the goal but with more co-benefits or fewer required resources?

Criteria

Below you'll find a list of potential criteria to consider when deciding which actions to prioritize and which to eliminate:

- **Effectiveness:** How likely will the action work to address the goal? What is the extent to which the action contributes to accomplishment of the goal?
- **Co-benefits:** Does the action address multiple goals, or other City objectives?

Notes

Please take notes as you go on important considerations, points, or questions that arise during discussion.

Revisions

If you think any of the strategies or actions need revising, please discuss as a team and note those revisions on the packet. Also add any essential actions that you think are missing from the list.

Presentation

After finishing the individual exercise, compile the decisions and discuss for 20 minutes as a focus area team. You do not need to all agree on which actions to prioritize or defer, but try to agree on any revisions needed to the strategies/actions. Assign someone to present a 1-minute report-out to the group.

Note: Today we have limited time to discuss outcomes from the discussion as a group. At the next ad-hoc committee meeting, we will have more time for larger group discussion of individual focus area goals, strategies, and actions.

Open House Preparation

The open house will be one of two remaining large-scale opportunities to receive meaningful input on the plan. As currently planned, the purpose of the September open house will be to:

- Allow the public to explore potential strategies to address climate change in Ashland, and provide input on considerations and priorities.
- Educate the public on Ashland's emissions forecast model, draft GHG emission reduction goal, and identified climate vulnerabilities.

Below is a summary of the proposed open house plan:

The open house will begin with a brief (15-minute) update on the CEAP process, overview the open house format and objectives, and discussion of actions Ashland is already taking to address climate change. There will be two informational stations and five focus area-specific stations. The focus area-specific will describe the focus area, overview climate action goals, and list potential strategies and actions (along with short descriptions and/or considerations for each). Attendees will be given 25 dots (five of each color) and \$1,000 in play money at the registration table. They will then walk among the various stations and vote on their highest and lowest priority actions for each focus area. With the dots, they will vote on the top three actions that should absolutely be a part of the plan, as well as two actions that could be eliminated from the plan if needed. With the fake money, they will distribute their dollars towards those actions that they would most likely want to fund, in the proportion of funding that they see fit. Each station

will also have comment cards and focus area handouts that attendees can write on to provide comments, as well as 1-2 iPads with online surveys that also allow attendees to provide comments, including ideas for new actions. Stations could also ask other questions specific to the focus area, strategy, or actions, as identified by the ad-hoc committee.

Please take a moment as a larger group to reflect on the proposed open house plan. Do you have suggestions for other activities or formats that will solicit feedback from the public or increase public attendance? Are there goals or actions specific questions you would like addressed through the open house that would not be addressed through the proposed activities?

Next Steps

After the open house, the ad-hoc committee will be tasked with deciding on the strategies and actions of the plan. This process will include confirmation of the following attributes for each action:

Ranking against Criteria

How does the action size up against predetermined evaluative criteria, such as effectiveness, economic impact, feasibility, and co-benefits? We will review ranked actions (high, medium, or low) against these criteria, and arrive at an overall “priority score” based on relative weights assigned to each criterion.

Responsible Department

Each action will be assigned to a primary responsible department and, if needed, supporting departments or organizations. City staff will identify responsible departments for the actions, and the committee will have the opportunity to review and comment on the assignments.

- **Primary:** Which City department would most likely be responsible for implementing the action?
- **Supporting:** Which other departments or organizations, if any, who would need to coordinate with the primary department to implement the action (could be oversight, admin, or supporting role)?

Implementation Timeframe

Based on the evaluation of the action against the criteria, when should implementation of the action be completed? In the end, we will aim to arrive at a mix of different timeframes per focus area.

- **Immediate actions (next 1-2 years) may be:**
 - Foundational actions that that must be completed before others can be implemented
 - “Low hanging fruit” actions that are straightforward or inexpensive to achieve
 - Timely actions that take advantage of some window of opportunity, such as a current planning effort or study that is already underway
- **Shorter-term actions (2016-2020) may be:**
 - Relatively easy and quick to implement
 - Important to get started early (e.g., to realize benefits later, high priority/ranking action)
 - Precursors for other additional longer-term actions
- **Longer-term actions (2020 and beyond) may be:**
 - More difficult or time-intensive to implement
 - Contingent upon new funding sources, preliminary research, or coordination with partner entities
 - Less important to get started early (e.g., lower priority/ranking action)

Overarching Vision

Ashland **leads** on climate action to foster a **resource-efficient, diverse, and prosperous** community with **secure** and sustainable access to clean **renewable energy, air, water, food, and green spaces** for future generations.

Overarching Goals

- Achieve community wide, sector-based net carbon neutrality by 2047.
- Achieve carbon neutrality of City operations by 2027 and fossil fuel reduction of 50% by 2022.
- Increase city preparedness to climate change impacts.

What the City is Already Doing

Buildings and Energy

- Solar installations on customer and City buildings and programs, incentives, and codes that support access and installation
- Community solar project (Solar Pioneer II)
- Streamlined permitting for solar PV installations
- Energy conservation programs, incentives and loans and subsidies
- Stable, long term hydro-power wholesale contracts
- Ashland Municipal Electric Utility ownership (e.g., current contracted energy supply is 95% carbon free; 85% hydro)
- Net metering policy for local renewable power generation and use
- Discourage the use of wooden stoves through requirement that they be removed at sale (non-certified) and an incentive program for removal (certified or non-certified).
- Retro-commissioning incentive program to provide financial and technical assistance to tune up energy systems in existing commercial and residential buildings. BPA is expanding their commercial HVAC programs now which will give the City many more tools for commercial buildings.
- Facilitate contractor and building professional training, skill growth, and awareness of energy conservation rebates.
- Participate in various BPA and Energy Trust trade ally networks (TAN) with local retailers and contractors to promote high efficiency equipment and efficiency best practices for residents and businesses.
- Conducted a pilot program for rating home energy performance with free EPS evaluations.
- Conducting a feasibility study that includes consideration of consolidating City offices into centralized campus.
- Conducted a City Facilities Energy Audit in 2013, which included use of the BPA–ESIP program consultants who specialize in wastewater treatment plants to evaluate potential load-shifting measures and upgrading inefficient pumps to Variable Frequency Drives (VFDs).
- Currently converting traffic lights, streetlights, and all government buildings to LED (approx. 40% complete in commercial areas for streetlights and 20% in residential. Have been more aggressive on arterials—all but one traffic light is LED).

Transportation and Land Use

- Multi-modal infrastructure, bike lanes and paths
- Compact urban form and land use policies. For example, Comprehensive Plan policies and City street standards highlight “connectivity” as a requirement
- Concentrating housing density and employment centers along public transit routes
- City manages four public EV charging stations downtown
- City fuel-efficient vehicles and growing EV fleet (3)
- Regional public transit system
- Recent updates in the Unified Land Use Code
- Transportation System Plan considers and includes climate actions, such as bicycle intersection safety improvements on heavily traveled bicycle corridors, increased bike lane infrastructure (e.g., bike lane downtown), expansion of on-street bicycle racks and bike shelters, and provision of off-street bicycle parking and bike sharing.
- Future climate-friendly impacts recognized and considered in Transportation System Plan
- Green land use code updates (e.g. eave extensions for passive solar, rain barrel water retention in setback areas, keeping of animals)
- Neighborhood Master planning to ensure coordination of land use and transportation in future developments.
- Have street standards and street classifications in the Transportation System plan that promote “complete streets,” a “complete streets” policy that requires transportation and rehabilitation projects to incorporate infrastructure for bicycles, pedestrians, and mass transit service.
- TOD/Pedestrian Places ordinance in the land use code.
- An over-the-counter electrical permit system for the installation of EV charging systems, and have an incentive in the City’s high efficiency new construction program for EV charging.
- Discouragement of idling: have an anti-idling ordinance; City policy on idling, signs installed that discourage idling, and have the topic as part of our safety/driving classes for employees
- ODOT has synchronized and recalibrated the timing of traffic signals on all arterials to reduce congestion and idling as feasible.
- Have bicycles for use by City employees located at primary City offices.
- Use biodiesel for diesel operated vehicles and equipment where possible.
- Utilize zoning and permitting methods to concentrate new growth in proximity of services and transit.
- Land use code encourages denser development (including housing and businesses).

Consumption and Waste

- Green waste program and pricing (e.g., yard debris curbside collection)
- Local recycling center with expanded recycling options for community and requirements
- Residential curbside recycling programs and outreach
- Plastic bag ban ordinance and polystyrene ban ordinance
- Parks Dept community gardens programs
- Ashland food bank
- Farmers markets ,co-op, and local production
- Reuse stores

- Waste reduction plan as part of building demolition process
- E-waste program with multiple drop-off locations in Ashland.
- Adopted keeping of animals code in 2013 to ensure the ability to keep food-producing animals by urban residents.
- Host website (www.ashlandsaveswater.org) that lists plants that are drought-tolerant and appropriate for the regional climate.
- Require new buildings to provide adequate space for receptacles for recycling and collection.
- Use an electronic document and records management system.
- Collect and recycle yard debris from parks operations.

Natural Systems

- Ashland Forest Resiliency project, forest fuel management and wildfire planning
- Parks, forests, pollinator gardens
- Construction of the TAP line and acquisition of Medford Water Commission water to diversify drinking water sources for the community
- One current large tree planting project is cooling Ashland and Bear Creek to meet DEQ temperature requirements for waste water effluent.
- Water Master Plan assessed water budgeting and climate modeling for impacts on watershed and water availability
- Promote drought-tolerant home landscaping at www.ashlandsaveswater.org
- Enact water usage regulations when certain shortage levels are reached
- Have a substantial water conservation program that conducts outreach and assists residents and businesses around water conservation.
- Have block rates and seasonal rates, as well as irrigation-only rates to promote water conservation. Currently updating rate design through the water master plan.
- Have an open space plan
- Upcoming facilities water audit will monitor facility and irrigation water use and identify opportunities to optimize water efficiency.

Health and Social Services

- Social Service Grant Program
- Community Development Block Grant support of the Ashland Emergency Food Bank
- Support of the Ashland Community Resource Center and Options for Homeless Residents of Ashland
- Recently received a site-specific DEQ air quality monitor for smoke air health issues.
- Emergency Operations Centers (EOCs) in the case of natural disasters
- Annual Ashland is Ready (AIR) workshop for emergency planning assistance.
- At city buildings, emphasize personal protective equipment and temperature-appropriate attire, hydration, and limited physical activity on high-risk heat and/or wildfire smoke days.

Focus Area-Specific Goals

Buildings and Energy Use

- Reduce the carbon footprint of Ashland's energy
- Increase energy and water efficiency in City and private buildings (residential and commercial) buildings (*Target: Seek zero net energy building codes*)
- Maximize resiliency of Ashland's energy sources to climate change
- Maximize protection of Ashland's building stock from future climate change impacts

Transportation and Land Use

- Reduce community and city employee vehicle miles traveled
- Improve vehicle efficiency in City operations and emission reductions
- Support local and regional sustainable growth
- Protect transportation infrastructure from climate impacts

Consumption and Waste

- Reduce solid waste disposed at landfills
- Increase waste diversion through waste prevention, recycling, and composting
- Support locally produced products and increase their availability
- Expand education and outreach
- Incentivize city procurement of local goods
- Goods exchange, up cycle

Natural Systems

- Enhance ecosystem health and resilience
- Ensure sustained access to clean air and drinking water

Health and Social Services

- Protect public health from air pollution and climate impacts
- Improve community capacity to understand, prepare for, and respond to climate change impacts

Focus Area-Specific Strategies and Actions

Cross-Cutting Strategies

CC-1 Educate and empower the public

- CC-1.1 Create and distribute on an ongoing basis effective multi-media outreach tools related to preparedness for climate change.
- CC-1.2 Implement utility level smart grid technologies that empower and inform the customer energy decision-making process.
- CC-1.3 Create an formal public outreach and education plan to inform the community about climate actions, what they accomplish, how they can be accessed/used, how the community is progressing on the targets
- CC-1.4 Communicate best practices and priorities between management and City staff.
- CC-1.5 Support capacity of neighborhood and community groups to implement climate mitigation and adaptation initiatives.

CC-2 Educate and empower City staff.

- CC-2.1 Ensure all City departments educate their staff about the Climate Action and Energy Plan and identify the expectation, role, and responsibility of each department in meeting specific community and City operations actions.

CC-3 Mainstream climate considerations

- CC-3.1 Consider climate change in all Council policy, budgetary, or legislative decisions (e.g., triple bottom line evaluation). Incorporate climate action considerations/relationship as part of the Council Communication document template.

CC-4 Ensure implementation of the Climate and Energy Action Plan

- CC-4.1 Form a City leadership advisory team to shepherd the City's climate action plan goals and actions.
- CC-4.2 Establish a full-time City position dedicated to coordination, promotion, implementation and reporting of the Climate and Energy Action Plan, including both community and City operations.
- CC-4.3 Designate an existing, reconfigured or new Advisory Commission to assist City staff and community with plan implementation, reporting, and updates.
- CC-4.4 Establish an ordinance tied to the CEAP.

CC-5 Prepare for climate impacts

- CC-5.1 Continue to update the City's emergency response plan and ensure that preparation and updates recognize and address likely for climate change impacts.

Buildings and Energy Use

BE-1 Support cleaner energy sources and improved demand management

- BE-1.1 Expand current net meter resolution to include and incorporate virtual net metering (includes ability to facilitate private/non-profit community solar).
- BE-1.2 Explore a holistic energy approach that balances energy efficiency, demand management, and renewable energy. Continue to support and expand local on-site solar power system installations
- BE-1.3 Evaluate the use of power purchase agreements (PPAs) in addition to or in lieu of upfront cash incentives for solar installations.

- BE-1.4 Complete currently underway City facilities solar assessments and include future solar installations on City facilities in CIP budgets to complement/assist in meeting annual energy master plan target or separate City solar installation goal/target.
- BE-1.5 Consider the use of available vacant land for renewable energy projects.
- BE-1.6 Consider a recognition program for neighborhoods meeting a certain percentage of electricity needs above the amount currently provided by the utility through renewable energy.
- BE-1.7 Develop an energy master plan that accomplishes the following:
- Establishes an annual target for energy efficiency savings from City programs (two million kWh saved annually).
 - Evaluates the feasibility of alternative energy solutions such as geothermal and district energy.
 - Establishes a policy for energy efficiency program funding levels that relates to annual revenue in the Electric Fund.
 - Evaluates the cost effective and the maximum operationally optimum ratio of solar power generation within the City's distribution grid.
 - Establishes a long-term goal and an annual target for installation of solar PV within the City's distribution grid.
 - Establishes a policy for renewable energy programs (incentives and acquisition) that relates to annual revenue in the Electric Fund.
 - Establishes demand management targets and accompanying infrastructure, programs and initiatives to meet target, both in combination with energy efficiency or as a stand-alone target.
 - Establishes a long-term strategy for wholesale power acquisition, including policy direction for a local renewable portfolio standard. The strategy shall include risk assessment of the power to be acquired as well as comparative financial analysis of current and forecasted pricing of the different energy sources and providers, including local generation of utility level solar power.
- BE-1.8 Evaluate cost-benefit analysis for benefits of solar energy production vs. temperature benefits associated with greater tree canopy cover.

BE-2 Encourage increased building energy efficiency

- BE-2.1 Implement utility systems that provide customers the ability to make real time usage and demand response decisions.
- BE-2.2 Encourage City staff participation in statewide conversations coordination with Oregon cities to promote and reinforce higher energy standards.
- BE-2.3 Evaluate re-starting the energy and green building challenges.
- BE-2.4 Continue to partner with the school district to support programs that promote energy efficiency.
- BE-2.5 Continue to facilitate retailer, contractor, and building professional training, skill growth, and awareness of energy conservation rebates.
- BE-2.6 Require building audits for the largest or least efficient commercial and multifamily buildings to help identify cost-effective improvements.
- BE-2.7 Introduce minimum efficiency standards for affordable housing program.

- BE-2.8 Consider passing an ordinance that requires home energy performance when a house is listed for sale.
- BE-2.9 Promote passive house construction principles, such as use of passive solar for heating and cooling in new and existing housing and commercial building stocks.
- BE-2.10 Work with property and business owners to develop and implement strategies on leasing practices and to reduce or remove barriers to energy efficiency in multi-family and commercial rent/lease properties.
- BE-2.11 Evaluate and pilot a program that would pay for actual energy savings over time instead of providing an up-front payment for projected/modeled savings.
- BE-2.12 Expand and prioritize energy conservation programs for rental housing. Support zero net energy apartments for low income renters that have better air quality and no utility bills.
- BE-2.13 Increase outreach efforts to expand participation in commercial energy and water conservation programs.
- BE-2.14 Ensure electric and water rates are designed and implemented to encourage and reward efficiency and conservation.

BE-3 Maximize efficiency of City buildings, facilities, and other energy-intensive equipment and operations.

- BE-3.1 Based on outcomes from a triple bottom line (TBL) facility assessment, develop a specific action plan to prioritize projects and integrate into biennial budget for City Facilities CIP and Maintenance planning.
- BE-3.2 Continue to monitor and adjust load-shifting measures at water treatment facility, such as running systems (aeration, residuals pumping, lighting) during off peak hours, optimizing process control, limiting pumping rates during the peak demand period.
- BE-3.3 Pursue LEED or ENERGY STAR certification for existing and new City buildings (e.g., require ENERGY STAR score of 85 or greater); adopt City policy to require all City facilities are operating at optimal performance levels. Adopt the LEED EB rating system as a tool to guide operation, management, and upgrade of existing building inventory.
- BE-3.4 Establish formal purchasing policy for Select new electronics purchases that meet Electronic Product Environmental Assessment Tool (EPEAT) standards and become an EPEAT purchasing partner, when possible.
- BE-3.5 Explore potential energy efficiency upgrades at City facilities using long-term Return on Investment (ROI) and “triple bottom-line” (TBL) criteria provided in the 2013 Facilities Energy Audit.
- BE-3.6 Prioritize climate change and GHG mitigation opportunities in the evaluation and decision making regarding the re-construction, replacement or new construction of City Hall.

BE-4 Enhance energy reliability

- BE-4.1 Include in an energy master plan the following: 1) evaluation of climate change impacts on electricity resources and future energy demands, 2) opportunities to improved reliability of the city’s grid, and 3) assessment of the capacity of power generators to keep pace with increased cooling demands.

BE-4.2 Balance diversity/resiliency of energy sources among the actual capabilities of the technologies, the City’s contractual obligations (BPA), and a cost-effective implementation timeframe.

BE-5 Adapt buildings to a changing climate

BE-5.1 Hold citywide contest to become “coolest block.”

BE-5.2 Designate publically accessible cooling centers through the city, such as libraries.

BE-5.3 Encourage new construction of public building to consider white or cool roofs to minimize urban heat island.

BE-5.4 Consider future climate conditions when designing City buildings and identify current or future opportunities to include elements such as distributed power generation and passive solar.

Transportation and Land Use

TL-1 Make streets and development more bike- and pedestrian-friendly

- TL-1.1 Implement the following actions in the Transportation System Plan: 1) installation of bicycle intersection safety improvements on heavily traveled bicycle corridors, such as by building bike lanes that are physically separated from traffic; 2) increased bike lane infrastructure (e.g., bike lane downtown); and 3) expansion of on-street bicycle racks and bike shelters, and facilitate provision of off-street bicycle parking and bike sharing.
- TL-1.2 Consider introduction of a pedestrian and bike-friendly bridge across Ashland Creek.
- TL-1.3 Implement a project reallocating a portion of the public right-of-way to a public/pedestrian space such as a plaza or parklet.
- TL-1.4 Evaluate options for reducing vehicle use downtown, such as by establishing motor vehicle-free streets.
- TL-1.5 Explore opportunities to convert to “shared streets” where appropriate to reduce pavement and provide multi-modal connectivity.
- TL-1.6 Consider providing valet bike parking at City events.
- TL-1.7 Examine pedestrian crossing times at intersections to ensure pedestrians have sufficient time to cross.
- TL-1.8 Conduct a community survey to understand barriers to carpooling biking.

TL-2 Support better public transit and ridesharing

- TL-2.1 Provide additional park-and-ride lots to promote the use of public transit and reduce downtown congestion.
- TL-2.2 Expand use of carpooling and car sharing systems and opportunities.
- TL-2.3 Work with RVTB to promote expanded and more climate-friendly transit, including reduced downtown congestion, introduction of diesel-electric hybrid buses and/or oxidation catalyst retrofits, electronic real-time bus schedule information, and off-board payment options.
- TL-2.4 Work with neighboring local governments to coordinate regional public transit opportunities including mass transit, shuttle buses, carpooling and vanpooling, bicycle, and pedestrian infrastructure.
- TL-2.5 Develop equitable development policies to support growth and development near transit hubs without displacement of disadvantaged populations.
- TL-2.6 Evaluate introduction of a City owned and operated trolley.

TL-3 Support more efficient vehicles

- TL-3.1 Include information on the City website about the value of electric vehicles and directions for receiving rebates for electric and hybrid vehicles.
- TL-3.2 Explore a city-facilitated carbon offset program whereby drivers can offset the GHG impact of driving through the purchase of renewable energy credits.
- TL-3.3 Work with contracted waste haulers to reduce emissions from trucks that haul waste, such as integration of more efficient trucks as they are replaced.
- TL-3.4 Introduce land use code changes to require EV charging infrastructure in all multi-family and commercial developments.
- TL-3.5 Encourage expansion and increased enforcement of anti-idling policy.
- TL-3.6 Support the transition of taxi, for-hire, and limousine vehicles to low-carbon fuels and technologies.

TL-4 Increase efficiency of City fleet and commuting

- TL-4.1 Improve facilities for biking at City facilities, including showers, lockers, and covered/secured bike parking.
- TL-4.2 Provide employee parking and charging stations for personal EV vehicles.
- TL-4.3 Introduce City employee carpool and vanpool parking spaces.
- TL-4.4 Participate in the new state clean fuels program implementation and develop a local plan to take advantage of opportunities.
- TL-4.5 Use the City fleet audit to set policy and targets for conversion of vehicles to higher efficiency (EV, clean diesel, etc.), vehicle sharing across departments, and out-of-town vehicle use.
- TL-4.6 Provide stronger incentives for sustainable City employee commuting such as walking, biking, public transportation, carpooling, or teleworking.
- TL-4.7 Conduct a City fleet audit to identify existing and future fleet needs.
- TL-4.8 Consider establishing a car-sharing program, such as Zipcar, at City Hall for use by City employees and residents.

TL-5 Support more climate-friendly development and land use.

- TL-5.1 Revise community development plans to more strongly favor walkable neighborhoods and infill density both in existing built environment and in new development.
- TL-5.2 Introduce a Brush Ordinance that requires property upkeep over time and fire codes to require defensible space and best practices for fire-wise construction in the city.
- TL-5.3 Explore modification of the Wildland-Urban Interface (WUI) code to include construction techniques and materials appropriate for wildfire-prone areas.
- TL-5.4 Consider regulating further construction or expansion in the WUI part of the urban growth boundary (UGB).
- TL-5.5 Evaluate climate impacts to transportation infrastructure and operations, including critical needs for emergency response, goods and services movement, and community access. Identify and prioritize strategies for enhancing resilience.
- TL-5.6 Preserve open space and restore converted grasslands and forestland on vacant developable lands in the city where it does not conflict with urban density priorities.
- TL-5.7 Explore opportunities for planting additional trees in strategic locations around city facilities to maximize energy savings and minimize urban heat island.

Consumption and Waste

CW-1 Expand community recycling, composting, and reuse

- CW-1.1 Make recycling easier for people, such as by putting pictures on bins and increasing the number of recycling and compost bins available in city public areas.
- CW-1.2 Conduct outreach and education, especially targeted at the multi-family sector, to increase recycling compliance and reduce consumption.
- CW-1.3 Provide more information for the public on when to replace high energy-use appliances.
- CW-1.4 Provide information on the City website on how to opt-out of junk mail.
- CW-1.5 Increase public awareness of reuse stores and their benefit.
- CW-1.6 Update the multi-family recycling ordinance to encourage more diversion.
- CW-1.7 Increase requirements and/or enforcement of the construction and demolition debris ordinance to require deconstruction, recycling, and/or reuse of C&D materials.
- CW-1.8 Support “collaborative consumption” community projects like tool libraries and repair cafes, such as through mini-grant programs.
- CW-1.9 Explore development of a cost-effective approach to deconstructing and recycling demolished buildings.
- CW-1.10 Study current waste generation through modeling, physical sampling, or direct measurement techniques
- CW-1.11 Examine options for expanding commercial and residential composting, including the feasibility of establishing a permitted facility in the area that can compost or anaerobically digest organic materials and food waste.

CW-2 Support sustainable and accessible local production and consumption

- CW-2.1 Expand community gardening and urban agriculture opportunities at community gardens, schools, parks, common open spaces, and on rooftops.
- CW-2.2 Work with sustainability organizations to recognize restaurants that feature local produce and products.
- CW-2.3 Work with non-profits and universities to create education, outreach, and training materials about transitioning to agricultural practices that reduce greenhouse gas emissions.
- CW-2.4 Pilot small-scale urban agriculture programs on public land to encourage locally-sourced foods.
- CW-2.5 Grow the existing plant-growing list on ashlandsavewater.org to focus on plants that can thrive under anticipated climate change impacts.
- CW-2.6 Support efforts of food-advocacy organizations, food growers, and state agencies to increase the diversity and drought resistance of food crops grown in the area.
- CW-2.7 Conduct a comprehensive community food security assessment to identify opportunities for improving food security.
- CW-2.8 Plant non-invasive food-bearing trees and shrubs on public lands.
- CW-2.9 Consider local supply chains in implementation of the economic development strategy.
- CW-2.10 Implement a “buy climate-friendly first” food purchasing policy for public institutions, including city and county governments, schools, and hospitals.

CW-3 Reduce food waste.

- CW-3.1 Donate edible leftover foods from City events to non-profits.

- CW-3.2 Provide a best practices guide to support commercial kitchens in finding efficiencies and reducing waste, and help households and businesses reduce food waste through better planning, purchasing, storage and preparation.
- CW-3.3 Facilitate the sharing of best practices among restaurants, caterers, and other commercial food preparation operations for minimizing and reusing and recycling food waste.
- CW-3.4 Seek grant funds to launch a public campaign (support by EPA's Food: Too Good to Waste program) to encourage food waste reduction by residents.
- CW-3.5 Work with the food bank to support edible food donations and gleaning (harvesting produce left over in fields and home/community gardens for donation).
- CW-3.6 Support efforts to recycle food waste for fuel/energy, including cooking oil and locally produced biodiesel and biofuels.

CW-4 Improve sustainability of City purchases and operations.

- CW-4.1 Install methane capture at landfills and wastewater treatment facilities.
- CW-4.2 Ensure that desk-side recycling stations are adequately placed at employee workstations.
- CW-4.3 Promote online citizen services (permitting, bill pay, etc.) to reduce paper use and vehicular trips to City offices.
- CW-4.4 Introduce City environmentally preferable purchasing guidelines for City procurement, including products that increase energy efficiency and reduce waste.
- CW-4.5 Consider use of low-carbon concrete and/or recycled asphalt shingles on City buildings and fiberglass paving liner to reduce pavement depth.
- CW-4.6 Explore use of 100% recycled aggregate in residential street construction and up to 50% recycled aggregate in concrete mix for sidewalks.
- CW-4.7 Conduct a feasibility study at the Wastewater Treatment Plant to determine the system ability to co-digest food waste and biosolids to generate electricity.
- CW-4.8 Determine the greenhouse gas emissions profile associated with the current solid waste collection system and provide recommendations on how to reduce carbon emissions within the system.

Natural Systems

NS-1 Manage and conserve community water resources

- NS-1.1. For all relevant building permits, evaluate and implement if feasible technologies that result in reductions.
- NS-1.2. Identify areas for conducting restoration to hold water upstream and reduce flood risk (e.g., Bear Creek).
- NS-1.3. Install water bottle filling stations at City facilities.
- NS-1.4. Promote water conservation through continued investment in water conservation programs and associated outreach and communications to residents and businesses.
- NS-1.5. Require water-efficiency technologies on irrigation systems during the permitting process.
- NS-1.6. Consider rate structures or incentives for customers to encourage water conservation. For example, restructure water rates to reduce non-essential water consumption. Strategies include increasing block rates and implementing seasonal rates.

NS-1.7. Provide incentives for practices that reduce the use of potable water for non-potable purposes and recharge ground water, such as through rainwater collection and rain gardens.

NS-1.8. Explore feasibility and benefits of installation of “smart” water meters.

NS-1.9. Explore other applications for irrigation water (TID).

NS-2 Promote ecosystem resilience

NS-2.1. Evaluate the carbon sequestration potential of Ashland’s watershed.

NS-2.2. Update and maintain natural features inventories so that the most climate-sensitive or significant natural resources can be tracked.

NS-2.3. Utilize controlled burning in spring and fall when smoke impacts on public are best managed.

NS-2.4. Include climate change projections in forest management.

NS-2.5. Promote the expansion of tree canopy in urban heat islands or areas that need air conditioning such as schools (while still allowing for solar).

NS-2.6. Hire an Urban Forester and tree maintenance staff to oversee public forest stewardship and coordinate community volunteers.

NS-2.7. Promote habitat restoration and conservation through improved public lands management/ownership and promotion of conservation easements and private open space to maintain and restore habitat.

NS-2.8. Update the City’s approved street tree guide and landscape design standards for new development for tree species appropriate for a future local climate.

NS-2.9. Assess whether and how ecosystem market approaches can enable the city to more efficiently and effectively protect and restore ecosystems.

NS-3 Conserve water use within City operations

NS-3.1. Implement efficiency recommendations from the City facilities water audit.

NS-3.2. Install rainwater collection systems for City facilities for graywater and outdoor uses. Investigate the opportunities for greywater reuse at existing and new City facilities and open spaces.

NS-3.3. Update City landscaping standards for water consumption and chemical use.

Health and Social Services

HS-1 Manage ecosystems and landscapes to minimize climate-related health impacts.

- HS-1.1 Evaluate and implement methods to remove slash without creating as much smoke, such as air curtain burners.
- HS-1.2 Develop an incentive program for conversion of fuel-burning lawn mowers, weed whackers, and blowers to electric.

HS-2 Optimize city services to minimize climate-related public health impacts.

- HS-2.1 Develop and publicize the Ready, Set, Go! Evacuation program.
- HS-2.2 Educate citizens about wildfire smoke and controlled burn smoke trade-offs along with strategies to manage smoke exposure.
- HS-2.3 Improve cooling options in schools and senior centers.
- HS-2.4 Leverage federal and state reporting and monitoring assets, such as NOAA's Hazard Mapping System, the Wildland Fire Decision Support System, Inciweb, Incident Management Situation Reports, and MODIS Large Incident Maps to prepare for impacts.
- HS-2.5 Adjust City-sponsored outdoor activity schedules to accommodate longer and hotter summer seasons. Plan for outdoor activity and event cancellations, with indoor alternative locations pre-decided.
- HS-2.6 Develop or enhance heat-warning systems for employees and the public. For example, create city-specific algorithms based on local health and climatological data to help trigger heat warnings or responses.
- HS-2.7 Increase efforts to educate homeowners about creating defensible space around their homes.
- HS-2.8 Educate public and public health professionals about health risks posed by climate change.
- HS-2.9 Coordinate with adjacent cities, counties, and states around regional smoke impacts.
- HS-2.10 Work with vulnerable neighborhoods through a community planning process that engages all stakeholders, and create site-specific adaptation strategies.
- HS-2.11 Continue to monitor emerging data on climate change-related health risks and revise adaptation plans as necessary.
- HS-2.12 Review and incorporate changes to incentives for buildings, land use and design elements to accelerate the adoption of cooling strategies for both indoor and outdoor environments, including "cool" infrastructure such as cool roofs, cool pavements, and trees.
- HS-2.13 Conduct further research into "urban heat islands" to identify and eliminate potential hot spots.
- HS-2.14 Ensure that essential services are not within the 100-year flood zone.
- HS-2.15 Develop an educational campaign to raise awareness among private property owners about strategic planting of trees for energy savings. Promote U.S. Department of Energy program, "Cool Communities".
- HS-2.16 Collaborate with non-profits to offer low cost trees to residents to strategically plant for shade.

HS-3 Optimize city operations and programs to minimize climate-related employee health impacts.

- HS-3.1 Enhance internal education and understanding of changing wildfire smoke and extreme heat risks.
- HS-3.2 Formalize and disseminate City policy regarding employee time off during extreme heat and wildfire smoke events.
- HS-3.3 Include wildfire smoke health and safety measures in the city safety and health policy, and ensure that each department's policies and procedures are consistent and adequate. For example, align city-wide guidance and widely accepted thresholds related to health criteria.

HS-4 Promote a sustainable local economy that minimizes emissions and vulnerability to climate impacts.

- HS-4.1 Work with businesses to analyze their vulnerability to climate change and help them plan for the future.
- HS-4.2 Launch efforts to seek and solicit innovative ideas for city cooling and other adaptation strategies.
- HS-4.3 Develop a climate-ready recognition program for the city's community leaders.
- HS-4.4 Engage leading employers in a dialogue on climate action, for example, by organizing and facilitating roundtables.

Focus Area	#	Strategy	#	#	Action	Impact	Scope	Category	Comments, Notes, and Considerations	Lead(s)	Other Stakeholders	Timeframe
Cross-Cutting Strategies	CC-1	Educate and empower the public.	1	CC-1.1	Create and distribute on an ongoing basis effective multi-media outreach tools related to preparedness for climate change.	Adaptation	Community	Outreach/education				
Cross-Cutting Strategies	CC-1	Educate and empower the public.	2	CC-1.2	Implement utility level smart grid technologies that empower and inform the customer energy decision making process.	Both	Community	Capital/infrastructure	As a component of a smart grid, smart meters can provide the basis for personal and interactive consumption management – including energy efficiency and demand response. Smart grid allows more efficient load and power management (identifies and reduces system losses), and creates an environment where alternative distributed resources (e.g. solar) can be easily integrated and managed for efficient distribution system operations.			
Cross-Cutting Strategies	CC-1	Educate and empower the public.	3	CC-1.3	Create an formal public outreach and education plan to inform the community about climate actions, what they accomplish, how they can be accessed/used, how the community is progressing on the targets.	Both	Community	Outreach/education	Education with objective (key) information will be the best bang for the buck. This needs to be to all elements of the community.	Administration	Energy Team	Short-term
Cross-Cutting Strategies	CC-1	Educate and empower the public.	4	CC-1.4	Communicate best practices and priorities between management and City staff.	Both	Municipal	Outreach/education				
Cross-Cutting Strategies	CC-1	Educate and empower the public.	5	CC-1.5	Support capacity of neighborhood and community groups to implement climate mitigation and adaptation initiatives.	Both	Community	Outreach/education				
Cross-Cutting Strategies	CC-2	Educate and empower City staff.	1	CC-2.1	Ensure all City departments educate their staff about the Climate Action and Energy Plan and identify the expectation, role, and responsibility of each department in meeting specific community and City operations actions.	Both	Municipal	Outreach/education				
Cross-Cutting Strategies	CC-3	Mainstream climate considerations.	1	CC-3.1	Consider climate change in all Council policy, budgetary, or legislative decisions (e.g., triple bottom line evaluation). Incorporate climate action considerations/relationship as part of the Council Communication document template.	Both	Municipal	Operations	Will want to carefully balance priorities.			
Cross-Cutting Strategies	CC-4	Ensure implementation of the Climate and Energy Action Plan.	1	CC-4.1	Form a City leadership advisory team to shepherd the City's climate action plan goals and actions.	Adaptation	Municipal	Operations				
Cross-Cutting Strategies	CC-4	Ensure implementation of the Climate and Energy Action Plan.	2	CC-4.2	Establish a full-time City position dedicated to coordination, promotion, implementation and reporting of the Climate and Energy Action Plan, including both community and City operations.	Both	Municipal	Operations				
Cross-Cutting Strategies	CC-4	Ensure implementation of the Climate and Energy Action Plan.	3	CC-4.3	Designate an existing, reconfigured or new Advisory Commission to assist City staff and community with plan implementation, reporting, and updates.	Both	Municipal	Operations				
Cross-Cutting Strategies	CC-4	Ensure implementation of the Climate and Energy Action Plan.	4	CC-4.4	Establish an ordinance tied to the CEAP.	Both	Municipal	Policy/Regulation				
Cross-Cutting Strategies	CC-5	Prepare for climate impacts.	1	CC-5.1	Continue to update the City's emergency response plan and ensure that preparation and updates recognize and address likely for climate change impacts.	Adaptation	Municipal	Planning	Ashland is relatively well positioned to manage local and regional emergencies and we have the highest functioning EOC in the county. However, there is room for improvement relating to climate and energy emergencies. We will be updating the Natural Hazards Mitigation Plan soon and this is the document that will help guide changes.			
Buildings and Energy	BE-1	Support cleaner energy sources and improved demand management	1	BE-1.1	Expand current net meter resolution to include and incorporate virtual net metering (includes ability to facilitate private/non-profit community solar).	Mitigation	Community	Capital/infrastructure				
Buildings and Energy	BE-1	Support cleaner energy sources and improved demand management	2	BE-1.2	Explore a holistic energy approach that balances energy efficiency, demand management, and renewable energy.	Mitigation	Community	Planning				
Buildings and Energy	BE-1	Support cleaner energy sources and improved demand management	3	BE-1.3	Evaluate the use of power purchase agreements (PPAs) in addition to or in lieu of upfront cash incentives for solar installations.	Mitigation	Community	R&D				
Buildings and Energy	BE-1	Support cleaner energy sources and improved demand management	4	BE-1.4	Complete currently underway City facilities solar assessments and include future solar installations on City facilities in CIP budgets.	Both	Municipal	Capital/infrastructure	Would contribute to meeting annual energy master plan target or separate City solar installation goal/target. In many areas solar systems are considered consumables; they have a lifespan. We should ensure that we're planning for replacement of what we already have in addition to future installations.			
Buildings and Energy	BE-1	Support cleaner energy sources and improved demand management	5	BE-1.5	Utilize available vacant land for renewable energy projects.	Both	Community	Capital/infrastructure	This strategy could be in direct conflict with the goal to "Reduce community vehicle miles traveled" if residentially and commercially zoned lands is consumed for renewable energy projects, thereby displacing the future growth to areas further from the urban center. Public land? Parks? balance between natural undisturbed open spaces, trees and solar?			
Buildings and Energy	BE-1	Support cleaner energy sources and improved demand management	6	BE-1.6	Consider a recognition program for neighborhoods meeting a certain percentage of electricity needs above the amount currently provided by the utility through renewable energy .	Both	Community	Outreach/education	Can/should Renewable Energy Credits (RECs) be used as part of this process?			

Buildings and Energy	BE-1	Support cleaner energy sources and improved demand management	7	BE-1.7	Develop an energy master plan.	Both	Municipal	Planning	<p>Plan would do the following:</p> <ul style="list-style-type: none"> - Establishes an annual target for energy efficiency savings from City programs (two million kWh saved annually). - Evaluates the feasibility of alternative energy solutions such as geothermal and district energy. - Establishes a policy for energy efficiency program funding levels that relates to annual revenue in the Electric Fund. - Evaluates the cost effective and the maximum operationally optimum ratio of solar power generation within the City's distribution grid. - Establishes a long-term goal and an annual target for installation of solar PV within the City's distribution grid. - Establishes a policy for renewable energy programs (incentives and acquisition) that relates to annual revenue in the Electric Fund. - Establishes demand management targets and accompanying infrastructure, programs and initiatives to meet target, both in combination with energy efficiency or as a stand-alone target. - Establishes a long-term strategy for wholesale power acquisition, including policy direction for a local renewable portfolio standard. The strategy shall include risk assessment of the power to be acquired as well as comparative financial analysis of current and forecasted pricing of the different energy sources and providers, including local generation of utility level solar power. - Establishes a policy and implementation plan for deployment of smart meters as a tool to accomplish demand management and energy efficiency targets. Policy research shall also evaluate the use of time-of-use rates as a demand management and energy efficiency tool. <p>The 2010-11 Renewable Energy Assessment evaluated non-solar renewable energy potential and found that the region has limited availability.</p>				
Buildings and Energy	BE-1	Support cleaner energy sources and improved demand management	8	BE-1.8	Evaluate cost-benefit analysis for benefits of solar energy production vs. temperature benefits associated with greater tree canopy cover.	Both	Community	R&D					
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	1	BE-2.1	Implement utility systems that provide customers the ability to make real time usage and demand response decisions.	Mitigation	Municipal	Capital/infrastructure	Also contributes to increased building energy efficiency.				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	2	BE-2.2	Encourage City staff participation in statewide conversations coordination with Oregon cities to promote and reinforce higher energy standards.	Mitigation	Municipal	Operations	<p>The building code is a state code; the City can't alter energy efficiency in the codes. The Oregon Energy Efficiency Specialty Code provides avenues for both prescriptive and performance-based energy conservation.</p> <p>We can incentivize higher code standards through density bonus opportunities in the land use code, however (action in transportation and land use).</p>				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	3	BE-2.3	Evaluate re-starting the energy and green building challenges.	Mitigation	Community	Outreach/education	Perhaps with a focus on net zero energy?				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	4	BE-2.4	Continue to partner with the school district to support programs that promote energy efficiency.	Mitigation	Community	Outreach/education					
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	5	BE-2.5	Continue to facilitate retailer, contractor, and building professional training, skill growth, and awareness of energy conservation rebates.	Mitigation	Community	Outreach/education					
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	6	BE-2.6	Require building audits for the largest or least efficient commercial and multifamily buildings to help identify cost-effective improvements.	Mitigation	Community	Policy/Regulation	Focusing on identifying the least efficient versus highest use. An inventory smaller inefficient buildings/homes may be a bigger opportunity than a single large inefficient building.				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	7	BE-2.7	Introduce minimum efficiency standards for the affordable housing program.	Mitigation	Community	Policy/Regulation	Push for net zero energy?				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	8	BE-2.8	Consider passing an ordinance that requires home energy performance when a house is listed for sale.	Mitigation	Community	Policy/Regulation	The City did a small pilot for EPS scores earlier this year.				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	9	BE-2.9	Promote passive house construction principles, such as use of passive solar for heating and cooling in new and existing housing and commercial building stocks.	Mitigation	Community	Pricing/incentive					
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	10	BE-2.10	Work with property and business owners to identify strategies that reduce or remove barriers to energy efficiency in multi-family and commercial rent/lease properties.	Mitigation	Community	R&D	What are some available vehicles for this? Incentives? Education? Leasing practices?				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	11	BE-2.11	Evaluate and pilot a program that would pay for actual energy savings over time instead of providing an up-front payment for projected/modeled savings.	Mitigation	Community	R&D	This is a good idea and one that BPA is looking at rolling out. It is currently available as a custom project. Typically, the work required to do this means that it only happens with a pretty large customer. If we do something other than the BPA programs, it comes out of City funds.				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	12	BE-2.12	Expand and prioritize energy conservation programs for rental housing. Support zero net energy apartments for low income renters that have better air quality and reduced utility bills.	Both	Community	Pricing/incentive					
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	13	BE-2.13	Encourage increased energy and water conservation in commercial energy and water conservation	Both	Community	R&D	New BPA Commercial efficiency measures coming in next IM in Oct will have expanded commercial program opportunities				
Buildings and Energy	BE-2	Encourage increased building energy efficiency.	14	BE-2.14	Ensure electric and water rates are designed and implemented to encourage and reward efficiency and conservation.	Both	Community	Pricing/incentive					
Buildings and Energy	BE-3	Maximize efficiency of City buildings, facilities, and other energy-intensive equipment and operations.	1	BE-3.1	Based on outcomes from the TBL facility assessment, develop a specific action plan to prioritize projects and integrate into biennial budget for City Facilities CIP and Maintenance planning.	Mitigation	Municipal	Capital/infrastructure	This action would include increasing the efficiency of data centers and use of virtual servers.				

Buildings and Energy	BE-3	Maximize efficiency of City buildings, facilities, and other energy-intensive equipment and operations.	2	BE-3.2	Continue to monitor and adjust load-shifting measures at the wastewater treatment facility, such as running systems (aeration, residuals pumping, lighting) during off peak hours, optimizing process control, and limiting pumping rates during the peak demand period.	Mitigation	Municipal	Operations	This was originally done in parallel with the Facilities Energy Audit with the use of the BPA –ESIP program consultants who specialize in wastewater treatment plants.			
Buildings and Energy	BE-3	Maximize efficiency of City buildings, facilities, and other energy-intensive equipment and operations.	3	BE-3.3	Pursue LEED or ENERGY STAR certification for existing and new City buildings and adopt a City policy to require that City facilities operate at optimal performance levels, including adopting the LEED EB rating system as a tool to guide operation, management, and upgrade of existing building inventory.	Mitigation	Municipal	Policy/Regulation	For example, require ENERGY STAR score of 85 or greater. Would require LEED certified inspectors.			
Buildings and Energy	BE-3	Maximize efficiency of City buildings, facilities, and other energy-intensive equipment and operations.	4	BE-3.4	Establish a formal purchasing policy that requires evaluation of products using the Electronic Product Environmental Assessment Tool (EPEAT).	Mitigation	Municipal	Policy/Regulation	The Electronic Product Environmental Assessment Tool (EPEAT) is a method for purchasers (governments, institutions, consumers, etc.) to evaluate the effect of a product on the environment.			
Buildings and Energy	BE-3	Maximize efficiency of City buildings, facilities, and other energy-intensive equipment and operations.	5	BE-3.5	Explore potential energy efficiency upgrades at City facilities using long-term Return on Investment (ROI) and "triple bottom-line" (TBL) criteria provided in the 2013 Facilities Energy Audit.	Mitigation	Municipal	R&D	The 2013 Facilities Energy Audit compares building performance on a per-square-foot basis to buildings serving a similar function within City operations and in peer communities. This action would include increasing the efficiency of data centers and use of virtual servers.			
Buildings and Energy	BE-3	Maximize efficiency of City buildings, facilities, and other energy-intensive equipment and operations.	6	BE-3.6	Prioritize climate change and GHG mitigation opportunities in the evaluation and decision making regarding the re-construction, replacement or new construction of City Hall. include in an energy master plan the following: 1) evaluation of climate change impacts on electricity resources and future energy demands, 2) opportunities to improved reliability of the city's grid, and 3) assessment of the capacity of power generators to keep pace with increased cooling demands.	Both	Municipal	Planning				
Buildings and Energy	BE-4	Enhance energy reliability.	1	BE-4.1		Adaptation	Municipal	Planning	Given that Ashland contracts with BPA for its energy, assessing the capacity of power generators may not be that useful.			
Buildings and Energy	BE-4	Enhance energy reliability.	2	BE-4.2	Explore ways to balance diversity and resiliency of energy sources with the technology capabilities, the City's contractual obligations with BPA, and a cost-effective implementation timeframe.	Adaptation	Municipal	R&D	Current timeline: • BPA take or pay obligations through September 30, 2028 • Market predictions of higher efficiency and lower cost solar technology (2021-2026) • Market predictions of commercially viable/grid capable storage technologies (e.g. battery) (2024-2026) • Market predictions of commercially viable/grid capable storage technologies (e.g. battery) (2024-2026)			
Buildings and Energy	BE-5	Adapt buildings to a changing climate.	1	BE-5.1	Hold a citywide contest to become "coolest block."	Adaptation	Community	Outreach/education	For example, the prize could be home sealing or white roofs.			
Buildings and Energy	BE-5	Adapt buildings to a changing climate.	2	BE-5.2	Designate publically accessible cooling centers through the city, such as libraries.	Adaptation	Community	Planning				
Buildings and Energy	BE-5	Adapt buildings to a changing climate.	3	BE-5.3	Encourage new construction of public building to consider white or cool roofs to minimize urban heat island.	Adaptation	Municipal	Pricing/incentive	We can promote, not require. The Oregon Structural Specialty Code contains the prescriptive requirements for roof assemblies.			
Buildings and Energy	BE-5	Adapt buildings to a changing climate.	4	BE-5.4	Consider future climate conditions when designing City buildings, and identify current or future opportunities to incorporate elements that build resilience.	Both	Municipal	Operations	Elements could include distributed power generation and passive solar. Distributed generation (also known as distributed energy) refers to power generation at the point of consumption. Generating power on-site, rather than centrally, eliminates the cost, complexity, interdependencies, and inefficiencies associated with transmission and distribution.			
Transportation and Land Use	TL-1	Make streets and development more bike- and pedestrian-friendly.	1	TL-1.1	Implement the following actions in the Transportation System Plan: 1) Installation of bicycle intersection safety improvements on heavily traveled bicycle corridors, such as by building bike lanes that are physically separated from traffic; 2) increased bike lane infrastructure (e.g., bike lane downtown); and 3) expansion of on-street bicycle racks and bike shelters, and facilitate provision of off-street bicycle parking and bike sharing.	Mitigation	Community	Capital/infrastructure	The TSP (Transportation System Plan) and Downtown Parking and Circulation committee work will be going to Council this fall. Note that making these capital improvements may not actually increase bicycle use.			
Transportation and Land Use	TL-1	Make streets and development more bike- and pedestrian-friendly.	2	TL-1.2	Consider introduction of a pedestrian and bike-friendly bridge across Ashland Creek.	Mitigation	Community	Capital/infrastructure				
Transportation and Land Use	TL-1	Make streets and development more bike- and pedestrian-friendly.	3	TL-1.3	Implement a project reallocating a portion of the public right-of-way to a public/pedestrian space such as a plaza or parklet.	Mitigation	Community	Capital/infrastructure	What would the objective/result be? Seems like it needs co-benefit.			
Transportation and Land Use	TL-1	Make streets and development more bike- and pedestrian-friendly.	4	TL-1.4	Evaluate options for reducing vehicle use downtown, such as by establishing vehicle-free streets.	Mitigation	Community	Capital/infrastructure	A contentious issue; would need to determine whether it is a placemaking action or truly does reduce VMT (depends on where and how parking would be provided).			
Transportation and Land Use	TL-1	Make streets and development more bike- and pedestrian-friendly.	5	TL-1.5	Explore opportunities to convert to shared streets where appropriate to reduce pavement and provide multi-modal connectivity.	Mitigation	Community	Capital/infrastructure	"Shared streets" typically refer to spaces where slow motorized traffic and car parking are still permitted on the street, but pedestrians have the priority.			
Transportation and Land Use	TL-1	Make streets and development more bike- and pedestrian-friendly.	6	TL-1.6	Consider providing valet bike parking at City public events.	Mitigation	Community	Operations				
Transportation and Land Use	TL-1	Make streets and development more bike- and pedestrian-friendly.	7	TL-1.7	Examine pedestrian crossing times at intersections to ensure pedestrians have sufficient time to cross.	Mitigation	Community	Operations	This may have a negative impact on vehicle idling at intersections.			
Transportation and Land Use	TL-1	Make streets and development more bike- and pedestrian-friendly.	8	TL-1.8	Conduct a community survey to understand barriers to biking.	Mitigation	Community	R&D				

Transportation and Land Use	TL-2	Support better public transit and ridesharing.	1	TL-2.1	Provide additional park-and-ride lots to promote the use of public transit and reduce downtown	Mitigation	Community	Capital/Infrastructure	This idea has been discussed with decent research.				
Transportation and Land Use	TL-2	Support better public transit and ridesharing.	2	TL-2.2	Expand use of carpooling and car sharing systems and opportunities.	Mitigation	Community	Outreach/education	What viable avenues for this? Incentives? Providing vehicles? Education? Right now categorizing this as education.				
Transportation and Land Use	TL-2	Support better public transit and ridesharing.	3	TL-2.3	Work with RVRTD to promote expanded and more climate-friendly transit, including reduced downtown congestion, introduction of diesel-electric hybrid buses and/or oxidation catalyst retrofits, electronic real-time bus schedule information, and off-board payment options.	Mitigation	Community	Planning	Note that the City would not provide the infrastructure, RVRTD would.				
Transportation and Land Use	TL-2	Support better public transit and ridesharing.	4	TL-2.4	Work with neighboring local governments to coordinate regional public transit opportunities including mass transit, shuttle buses, carpooling and vanpooling, bicycle, and pedestrian infrastructure.	Mitigation	Community	Planning	Related to this, it was suggested to develop a Transportation Demand Management (TDM) policy to be used in evaluation of development proposals which addresses parking requirements.				
Transportation and Land Use	TL-2	Support better public transit and ridesharing.	5	TL-2.5	Develop equitable development policies to support growth and development near transit hubs without displacement of disadvantaged populations.	Mitigation	Community	Policy/Regulation	The City has a TOD/Pedestrian Places ordinance that went into the land use code 3-4 years ago.				
Transportation and Land Use	TL-2	Support better public transit and ridesharing.	6	TL-2.6	Evaluate introduction of a City owned and operated trolley.	Mitigation	Community	R&D	For reference: http://www.lindenavenue.com/db/article/31.html				
Transportation and Land Use	TL-3	Support more efficient vehicles.	1	TL-3.1	Include information on the City website about the value of electric vehicles and directions for receiving rebates for electric and hybrid vehicles.	Mitigation	Community	Outreach/education					
Transportation and Land Use	TL-3	Support more efficient vehicles.	2	TL-3.2	Explore a city-facilitated carbon offset program whereby drivers can offset the GHG impact of driving through the purchase of renewable energy credits.	Mitigation	Community	Outreach/education	The electric utility may have RECs available for sale.				
Transportation and Land Use	TL-3	Support more efficient vehicles.	3	TL-3.3	Work with contracted waste haulers to reduce emissions from trucks that haul waste, such as integration of more efficient trucks as they are replaced.	Mitigation	Community	Partnership/coordination	Discussed but not included in the franchise agreement, but has been working with Recology to improve this. This would be a good one to keep in, but recognize that it would happen over a long timeframe as truck life cycles permit.				
Transportation and Land Use	TL-3	Support more efficient vehicles.	4	TL-3.4	Introduce land use code changes to require EV charging infrastructure in all multi-family and commercial developments.	Mitigation	Community	Policy/Regulation					
Transportation and Land Use	TL-3	Support more efficient vehicles.	5	TL-3.5	Encourage expansion and increased enforcement of anti-idling policy.	Mitigation	Community	Policy/Regulation					
Transportation and Land Use	TL-3	Support more efficient vehicles.	6	TL-3.6	Support the transition of taxi, for-hire, and limousine vehicles to low-carbon fuels and technologies.	Mitigation	Community		Through what vehicle? Incentives? A recognition program? Should also consider autonomous vehicles as taxis, such as Uber.				
Transportation and Land Use	TL-4	Increase efficiency of City fleet and commuting.	1	TL-4.1	Improve facilities for biking at City facilities, including showers, lockers, and covered/secured bike parking.	Mitigation	Municipal	Capital/Infrastructure					
Transportation and Land Use	TL-4	Increase efficiency of City fleet and commuting.	2	TL-4.2	Provide employee parking and charging stations for personal EV vehicles.	Mitigation	Municipal	Capital/Infrastructure					
Transportation and Land Use	TL-4	Increase efficiency of City fleet and commuting.	3	TL-4.3	Introduce City employee carpool and vanpool parking spaces.	Mitigation	Municipal	Capital/Infrastructure	We currently have none in the downtown. The downtown parking and circulation plan will be going to Council this fall and does not contain any content for EV charging/parking or carpool spaces.				
Transportation and Land Use	TL-4	Increase efficiency of City fleet and commuting.	4	TL-4.4	Participate in the new state clean fuels program implementation and develop a local plan to take advantage of opportunities.	Mitigation	Municipal	Planning					
Transportation and Land Use	TL-4	Increase efficiency of City fleet and commuting.	5	TL-4.5	Use the City fleet audit to set policy and targets for conversion of vehicles to higher efficiency (EV, clean diesel, etc), vehicle sharing across departments, and out-of-town vehicle use.	Mitigation	Municipal	Planning	Would follow the fleet audit action.				
Transportation and Land Use	TL-4	Increase efficiency of City fleet and commuting.	6	TL-4.6	Provide stronger incentives for sustainable City employee commuting such as walking, biking, public transportation, carpooling, or teleworking.	Mitigation	Municipal	Pricing/incentive					
Transportation and Land Use	TL-4	Increase efficiency of City fleet and commuting.	7	TL-4.7	Conduct a City fleet audit to identify existing and future fleet needs.	Mitigation	Municipal	R&D	Needs, policies, and targets would be based on vehicle classification, use needs, and total life cycle costing. Audit would also identify and set policy for vehicle sharing across departments and out-of-town vehicle use.				
Transportation and Land Use	TL-4	Increase efficiency of City fleet and commuting.	8	TL-4.8	Consider establishing a car-sharing program, such as Zipcar, at City Hall for use by City employees and residents.	Mitigation	Municipal	R&D					
Transportation and Land Use	TL-5	Support more climate-friendly development and land use.	1	TL-5.1	Revise community development plans to more strongly favor walkable neighborhoods and infill density both in existing built environment and in new developments.	Mitigation	Community	Planning					
Transportation and Land Use	TL-5	Support more climate-friendly development and land use.	2	TL-5.2	Introduce a Brush Ordinance that requires property upkeep over time and fire codes to require defensible space and best practices for fire-wise construction in the city.	Adaptation	Community	Policy/Regulation					
Transportation and Land Use	TL-5	Support more climate-friendly development and land use.	3	TL-5.3	Explore modification of the Wildland-Urban Interface (WUI) code to include construction techniques and materials appropriate for wildfire-prone areas.	Adaptation	Community	Policy/Regulation					
Transportation and Land Use	TL-5	Support more climate-friendly development and land use.	4	TL-5.4	Consider regulating future construction or expansion in the WUI part of the urban growth boundary.	Adaptation	Community	Policy/Regulation					
Transportation and Land Use	TL-5	Support more climate-friendly development and land use.	5	TL-5.5	Evaluate climate impacts to transportation infrastructure and operations, including critical needs for emergency response, goods and services movement, and community access. Identify and prioritize strategies for enhancing resilience.	Adaptation	Community	R&D					

Transportation and Land Use	TL-5	Support more climate-friendly development and land use.	6	TL-5.6	Preserve open space and restore converted grasslands and forestland on vacant developable lands in the city where it does not conflict with urban density priorities.	Both	Community	Operations	Would apply outside UGB or on vacant developable lands within the City? Could be in conflict with urban development priorities and action to install solar energy production on vacant lands. Actions that potentially identify land inside the Urban Growth Boundary (UGB) that is currently designated for housing or job creation to uses that don't provide housing and/or projected job densities (e.g., farming, open space and forest land) would require modification of the City's Comprehensive Plan. The City is required by the Oregon Statewide Planning Program to have adequate land inventory to provide for at least the next 20 years of population and job growth. Options would need to be developed (e.g., increasing density inside the current UGB, enlarging the UGB) to address lands removed from those inventories.				
Transportation and Land Use	TL-5	Support more climate-friendly development and land use.	7	TL-5.7	Explore opportunities for planting additional trees in strategic locations around city facilities to maximize energy savings and minimize urban heat island. Make recycling easier for people, such as by putting pictures on bins and increasing the number of recycling and compost bins available in city public areas.	Both	Community	R&D	One current large tree planting project is cooling Ashland and Bear Creek to meet DEQ temperature requirements for waste water effluent.				
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	1	CW-1.1	Conduct outreach and education, especially targeted at the multi-family sector, to increase recycling compliance and reduce consumption.	Mitigation	Community	Capital/infrastructure	Part of Council approved plan from Recycle Center Committee work in 2014-15				
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	2	CW-1.2	Provide more information for the public on when to replace high energy-use appliances.	Mitigation	Community	Outreach/education	Tactics could include: - Emphasizing that reducing consumption should be first priority, followed by reuse, upcycling, repair, and choosing sustainable goods built to last. - Demonstrating how consumption habits contribute to carbon footprints, to encourage people to rethink the ideas of growth and economy. - Educating about local food growing, preparation, preservation skills, especially at schools.				
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	3	CW-1.3	Provide information on the City website on how to opt-out of junk mail.	Mitigation	Community	Outreach/education					
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	4	CW-1.4	Increase public awareness of reuse stores and their benefit.	Mitigation	Community	Outreach/education					
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	5	CW-1.5	Update the multi-family recycling ordinance to encourage more diversion.	Mitigation	Community	Policy/Regulation	Part of Council approved plan from Recycle Center Committee work in 2014-15				
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	6	CW-1.6	Increase requirements and/or enforcement of the construction and demolition debris ordinance to require deconstruction, recycling, and/or reuse of C&D materials.	Mitigation	Community	Policy/Regulation					
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	7	CW-1.7	Support "collaborative consumption" community projects like tool libraries and repair cafes, such as through mini-grant programs.	Mitigation	Community	Pricing/incentive					
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	8	CW-1.8	Explore development of a cost-effective approach to deconstructing and recycling demolished buildings.	Mitigation	Community	R&D					
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	9	CW-1.9	Study current waste generation through modeling, physical sampling, or direct measurement.	Mitigation	Community	R&D					
Consumption and Waste	CW-1	Expand community recycling, composting, and reuse.	10	CW-1.10	Examine options for expanding commercial and residential composting, including the feasibility of establishing a permitted facility in the area that can compost or anaerobically digest organic materials and food waste.	Mitigation	Community	R&D	Part of Council approved plan from Recycle Center Committee work in 2014-15				
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	1	CW-2.1	Expand community gardening and urban agriculture opportunities at community gardens, schools, parks, common open spaces, and on rooftops.	Mitigation	Community	Outreach/education					
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	2	CW-2.2	Work with sustainability organizations to recognize restaurants that feature local produce and products.	Mitigation	Community	Partnership/coordination					
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	3	CW-2.3	Work with non-profits and universities to create education, outreach, and training materials about transitioning to agricultural practices that reduce greenhouse gas emissions.	Mitigation	Community	Partnership/coordination					
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	4	CW-2.4	Pilot small-scale urban agriculture programs on public land to encourage locally-sourced foods.	Mitigation	Community	R&D					
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	5	CW-2.5	Grow the existing plant-growing list on ashlandsavewater.org to focus on plants that can thrive under anticipated climate change impacts.	Adaptation	Community	Outreach/education					
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	6	CW-2.6	Support efforts of food-advocacy organizations, food growers, and state agencies to increase the diversity and drought resistance of food crops grown in the area.	Adaptation	Community	Partnership/coordination					
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	7	CW-2.7	Conduct a comprehensive community food security assessment to identify opportunities for improving food security.	Adaptation	Community	R&D					
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	8	CW-2.8	Plant non-invasive food-bearing trees and shrubs on public lands.	Both	Community	Capital/infrastructure	Could be an issue with deer.				
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	9	CW-2.9	Consider local supply chains in implementation of the economic development strategy.	Both	Community	Operations	connects with existing phase II actoin in approved Econ Dev Strategy plan				
Consumption and Waste	CW-2	Support sustainable and accessible local production and consumption.	10	CW-2.10	Implement a "buy climate-friendly first" food purchasing policy for public institutions, including city and county governments, schools, and hospitals.	Both	Community	Policy/Regulation	Could conflict with ORS 279.				
Consumption and Waste	CW-3	Reduce food waste.	1	CW-3.1	Donate edible leftover foods from City public events to non-profits.	Both	Community	Operations					

Consumption and Waste	CW-3	Reduce food waste.	2	CW-3.2	Provide a best practices guide to support commercial kitchens in finding efficiencies and reducing waste, and help households and businesses reduce food waste through better planning, purchasing, storage and preparation.	Both	Community	Outreach/education					
Consumption and Waste	CW-3	Reduce food waste.	3	CW-3.3	Facilitate the sharing of best practices among restaurants, caterers, and other commercial food preparation operations for minimizing and reusing and recycling food waste.	Both	Community	Outreach/education					
Consumption and Waste	CW-3	Reduce food waste.	4	CW-3.4	Seek grant funds to launch a public campaign to encourage food waste reduction by residents, such as EPA's Food: Too Good to Waste program.	Both	Community	Outreach/education					
Consumption and Waste	CW-3	Reduce food waste.	5	CW-3.5	Work with the food bank to support edible food donations and gleaning.	Both	Community	Partnership/coordination	Gleaning is harvesting produce left over in fields and home/community gardens for donation.				
Consumption and Waste	CW-3	Reduce food waste.	6	CW-3.6	Support efforts to recycle food waste for fuel/energy, including cooking oil and locally produced biodiesel and biofuels.	Both	Community		Efforts by whom? How to support?				
Consumption and Waste	CW-4	Improve sustainability of City purchases and procurement.	1	CW-4.1	Install methane capture at landfills and wastewater treatment facilities.	Mitigation	Municipal	Capital/infrastructure	There are no landfills within the City. Ashland WWTP design does not allow for methane capture				
Consumption and Waste	CW-4	Improve sustainability of City purchases and procurement.	2	CW-4.2	Ensure that desk-side recycling stations are adequately placed at City employee workstations.	Mitigation	Municipal	Operations					
Consumption and Waste	CW-4	Improve sustainability of City purchases and procurement.	3	CW-4.3	Promote online citizen services (permitting, bill pay, etc.) to reduce paper use and vehicular trips to City offices.	Mitigation	Municipal	Outreach/education					
Consumption and Waste	CW-4	Improve sustainability of City purchases and procurement.	4	CW-4.4	Introduce City environmentally preferable purchasing (EPP) guidelines for City procurement, including products that increase energy efficiency and reduce waste.	Mitigation	Municipal	Policy/Regulation	Include in this creating a standardized EPP language for vendor contracts, including green specifications, owner's project requirements, and contractor materials, and include in RFP language.				
Consumption and Waste	CW-4	Improve sustainability of City purchases and procurement.	5	CW-4.5	Consider use of low-carbon concrete and/or recycled asphalt shingles on City buildings and fiberglass paving liner to reduce pavement depth.	Mitigation	Municipal	R&D					
Consumption and Waste	CW-4	Improve sustainability of City purchases and procurement.	6	CW-4.6	Explore use of 100% recycled aggregate in residential street construction and up to 50% recycled aggregate in concrete mix for sidewalks.	Mitigation	Municipal	R&D					
Consumption and Waste	CW-4	Improve sustainability of City purchases and procurement.	7	CW-4.7	Conduct a feasibility study at the wastewater treatment facility to determine the system ability to co-digest food waste and biosolids to generate biogas.	Mitigation	Municipal	R&D	at a minimum, anaerobic digestion could convert sludge to quality soil and eliminate sludge transport and dumping at Dry Creek Landfill (cost savings to the City and reduced GHG for waste and fuel/transport)				
Consumption and Waste	CW-4	Improve sustainability of City purchases and procurement.	8	CW-4.8	Determine the greenhouse gas emissions profile associated with the current solid waste collection system and provide recommendations on how to reduce carbon emissions within the system.	Mitigation	Municipal	R&D					
Natural Systems	NS-1	Manage and conserve community water resources.	1	NS-1.1	For all relevant building permits, evaluate and implement if feasible technologies that result in wastewater flow reductions.	Mitigation	Community	Policy/Regulation	(e.g., composting toilets, greywater reuse, on-site biological wastewater treatment systems). Dependent on State building code				
Natural Systems	NS-1	Manage and conserve community water resources.	2	NS-1.2	Inventory areas for riparian restoration to non-water upstream and reduce flood risk (e.g., Bear River).	Adaptation	Community	Planning					
Natural Systems	NS-1	Manage and conserve community water resources.	1	NS-1.1	Install water bottle filling stations at City facilities.	Both	Municipal	Capital/infrastructure					
Natural Systems	NS-1	Manage and conserve community water resources.	1	NS-1.1	Promote water conservation through continued investment in water conservation programs and associated outreach and communications to residents and businesses.	Both	Community	Outreach/education					
Natural Systems	NS-1	Manage and conserve community water resources.	1	NS-1.1	Require water-efficiency technologies on irrigation systems during the permitting process.	Both	Community	Policy/Regulation	Need to evaluate the legality of mandating versus offering incentives.				
Natural Systems	NS-1	Manage and conserve community water resources.	2	NS-1.2	Consider rate structures or incentives for customers to encourage water conservation. For example, restructure water rates to reduce non-essential water consumption.	Both	Community	Pricing/incentive	Strategies include increasing block rates and implementing additional seasonal rates.				
Natural Systems	NS-1	Manage and conserve community water resources.	3	NS-1.3	Provide incentives for practices that reduce the use of potable water for non-potable purposes and recharge ground water, such as through rainwater collection and rain gardens.	Both	Community	Pricing/incentive	The City already has quite a bit on this.				
Natural Systems	NS-1	Manage and conserve community water resources.	4	NS-1.4	Explore feasibility and benefits of installation of "smart" water meters.	Both	Community	R&D					
Natural Systems	NS-1	Manage and conserve community water resources.	5	NS-1.5	Explore other applications for irrigation water (TID).	Both	Community	R&D	A big issue that warrants careful consideration.				
Natural Systems	NS-2	Promote ecosystem resilience.	1	NS-2.1	Evaluate the carbon sequestration potential of Ashland's watershed.	Mitigation	Community	R&D					
Natural Systems	NS-2	Promote ecosystem resilience.	2	NS-2.2	Update and maintain natural features inventories so that the most climate-sensitive or significant natural resources can be tracked.	Adaptation	Municipal	Operations	For example, stormwater resources, riparian buffers, opportunities for food production, solar resources, soil classifications, publicly-owned land. Proactively sample and monitor trees for the presence of invasive species.				
Natural Systems	NS-2	Promote ecosystem resilience.	3	NS-2.3	Utilize controlled burning in spring and fall when smoke impacts on public are best managed.	Adaptation	Community	Operations					
Natural Systems	NS-2	Promote ecosystem resilience.	4	NS-2.4	Include climate change projections in City forest management.	Adaptation	Municipal	Planning	(e.g., changes in vegetation types, forest fire driver shift from fuels to climate).				

Natural Systems	NS-2	Promote ecosystem resilience.	5	NS-2.5	Promote the expansion of tree canopy in urban heat islands or areas that need air conditioning such as schools (while still allowing for solar).	Both	Community	Operations					
Natural Systems	NS-2	Promote ecosystem resilience.	6	NS-2.6	Hire an Urban Forester and tree maintenance staff to oversee public forest stewardship and coordinate community volunteers.	Both	Municipal	Operations	This has come up several times over the years. We have a City forester (on contract) and a Forest Division Fire Chief who is responsible for all of our watershed work. The urban forester work has been partially done by a staff arborist in the Parks Dept, but we have never had a true urban forester. Consider first developing an urban forest master plan before hiring staff.				
Natural Systems	NS-2	Promote ecosystem resilience.	7	NS-2.7	Promote habitat restoration and conservation through improved public lands management/ownership and promotion of conservation easements and private open space to	Both	Community	Planning					
Natural Systems	NS-2	Promote ecosystem resilience.	8	NS-2.8	Update the City's approved street tree guide and landscape design standards for new development for tree species appropriate for a future local climate.	Both	Municipal	Policy/Regulation					
Natural Systems	NS-2	Promote ecosystem resilience.	9	NS-2.9	Assess whether and how ecosystem market approaches can enable the city to more efficiently and effectively protect and restore ecosystems.	Both	Community	R&D					
Natural Systems	NS-3	Conserve water use within City operations.	1	NS-3.1	Implement efficiency recommendations from the City facilities water audit.	Both	Municipal	Capital/infrastructure	Facilities water audit scheduled for Fall 2016				
Natural Systems	NS-3	Conserve water use within City operations.	1	NS-3.1	Install rainwater collection systems for City facilities for graywater and outdoor uses. Investigate the opportunities for greywater reuse at existing and new City facilities and open spaces.	Both	Municipal	Capital/infrastructure					
Natural Systems	NS-3	Conserve water use within City operations.	1	NS-3.1	Update City landscaping standards for water consumption and chemical use.	Both	Municipal	Policy/Regulation	Have already done, to some extent?				
Health and Social Services	HS-1	Manage ecosystems and landscapes to minimize climate-related health impacts.	1	HS-1.1	Evaluate and implement methods to remove slash without creating as much smoke, such as air curtain burners.	Adaptation	Municipal	Operations					
Health and Social Services	HS-1	Manage ecosystems and landscapes to minimize climate-related health impacts.	2	HS-1.2	Develop an incentive program for conversion of fuel-burning lawn mowers, weed whackers, and blowers to electric.	Both	Community	Pricing/incentive	Conservation Commission has recently discussed this. Regulate or prohibit fossil fuel based weed eaters and leaf blowers for both air quality and noise impacts. Cash for clunkers concept – could include lawn mowers also.				
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	1	HS-2.1	Develop and publicize the Ready, Set, Go! Evacuation program.	Mitigation	Community	Outreach/education					
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	2	HS-2.2	Educate citizens about wildfire smoke and controlled burn smoke trade-offs along with strategies to manage smoke exposure.	Mitigation	Community	Outreach/education					
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	3	HS-2.3	Improve cooling options in schools and senior centers.	Adaptation	Community	Capital/infrastructure	(e.g. A/C, cooling towers, fans blowing air into buildings during cool mornings). Would be role of the school district– how can the City engage the school district around this issue?				
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	4	HS-2.4	Leverage federal and state reporting and monitoring assets, such as NOAA's Hazard Mapping System, the Wildland Fire Decision Support System, Inciweb, Incident Management Situation Reports, and MODIS Large Incident Maps to prepare for impacts.	Adaptation	Community	Operations					
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	5	HS-2.5	Adjust City-sponsored outdoor activity schedules to accommodate longer and hotter summer seasons. Plan for outdoor activity and event cancellations, with indoor alternative locations pre-decided.	Adaptation	Municipal	Operations					
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	6	HS-2.6	Develop or enhance heat-warning systems for employees and the public. For example, create city-specific algorithms based on local health and climatological data to help trigger heat warnings or responses.	Adaptation	Community	Outreach/education					
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	7	HS-2.7	Increase efforts to educate homeowners about creating defensible space around their homes.	Adaptation	Community	Outreach/education	The City is doing this through the expansion of the WHZ expansion, but it is currently stalled. This also reinforces the importance of our efforts in the watershed. The City has a firewise communities program that is very strong. Fire Dept is pushing now for an expansion of our wildfire hazards zone to prohibit certain vegetation and construction types (wood shingles).				
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	8	HS-2.8	Educate public and public health professionals about health risks posed by climate change.	Adaptation	Community	Outreach/education	City's role or others?				
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	9	HS-2.9	Coordinate with adjacent cities, counties, and states around regional smoke impacts.	Adaptation	Community	Partnership/coordination	The city just got an Ashland site-specific DEQ air quality monitor for smoke air health issues.				
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	10	HS-2.10	Work with vulnerable neighborhoods through a community planning process that engages all stakeholders, and create site-specific adaptation strategies.	Adaptation	Community	Partnership/coordination					
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	11	HS-2.11	Continue to monitor emerging data on climate change-related health risks and revise adaptation plans as necessary.	Adaptation	Municipal	Planning					
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	12	HS-2.12	review and incorporate changes to incentives for buildings, land use and design elements to accelerate the adoption of cooling strategies for both indoor and outdoor environments, including "cool" infrastructure such as cool roofs, cool pavements, and trees	Adaptation	Community	Pricing/incentive	Also in "Buildings and Energy" section.				

Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	13	HS-2.13	Conduct further research into "urban heat islands" to identify and eliminate potential hot spots.	Adaptation	Community	R&D				
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	14	HS-2.14	Ensure that essential services are not within the 100-year flood zone.	Adaptation	Municipal	R&D	Already done?			
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	15	HS-2.15	Develop an educational campaign to raise awareness among private property owners about strategic planting of trees for energy savings. Promote U.S. Department of Energy program, "Cool Communities".	Both	Community	Outreach/education				
Health and Social Services	HS-2	Optimize city services to minimize climate-related public health impacts.	16	HS-2.16	Collaborate with non-profits to offer low cost trees to residents to strategically plant for shade.	Both	Community	Pricing/incentive				
Health and Social Services	HS-3	Optimize city operations and programs to minimize climate-related employee health impacts.	1	HS-3.1	Enhance internal education and understanding of changing wildfire smoke and extreme heat risks.	Adaptation	Municipal	Outreach/education				
Health and Social Services	HS-3	Optimize city operations and programs to minimize climate-related employee health impacts.	2	HS-3.2	Formalize and disseminate City policy regarding employee time off during extreme heat and wildfire smoke events.	Adaptation	Municipal	Policy/Regulation				
Health and Social Services	HS-3	Optimize city operations and programs to minimize climate-related employee health impacts.	3	HS-3.3	Include wildfire smoke health and safety measures in the city safety and health policy, and ensure that each department's policies and procedures are consistent and adequate. For example, align city-wide guidance and widely accepted thresholds related to health criteria.	Adaptation	Municipal	Policy/Regulation				
Health and Social Services	HS-4	Promote a sustainable local economy that minimizes emissions and vulnerability to climate impacts.	1	HS-4.1	Work with businesses to analyze their vulnerability to climate change and help them plan for the future.	Adaptation	Community	Partnership/coordination	Work with the Chamber of Commerce?			
Health and Social Services	HS-4	Promote a sustainable local economy that minimizes emissions and vulnerability to climate impacts.	2	HS-4.2	Launch efforts to seek and solicit innovative ideas for city cooling and other adaptation strategies.	Adaptation	Community	R&D				
Health and Social Services	HS-4	Promote a sustainable local economy that minimizes emissions and vulnerability to climate impacts.	3	HS-4.3	Develop a climate-ready recognition program for the city's community leaders.	Both	Community	Outreach/education				
Health and Social Services	HS-4	Promote a sustainable local economy that minimizes emissions and vulnerability to climate impacts.	4	HS-4.4	Engage leading employers in a dialogue on climate action, for example, by organizing and facilitating roundtables.	Both	Community	Partnership/coordination				

Committee Meeting Schedule	Date	Time	Objectives/Outputs
CAEP Committee Meeting	September 7, 2016	3:30 PM	Continued initial action review/prioritize, Open House prep, Outreach updates
Public Open House #2	September 25, 2016	5:30 PM	Input on actions and options review
City Staff/CEAP Committee Workshop #3	September 26, 2016	9:00-12:00	Time not final - Action list criteria/evaluation
CAEP Committee Meeting	October 5, 2016	3:30 PM	Review of Open House #2 input; review action/evaluation document
CAEP Committee Meeting	October 19, 2016	5:30 PM	Final review of actions,
CAEP Committee Meeting	November 2, 2016	5:30 PM	Discuss implementation oversight, measurement/reporting
Public Open House #3	December 7, 2016	5:30 PM	Review draft plan
Updated Draft Plan - Email to committee for individual review	December 16, 2016		
CAEP Committee Meeting	January 4, 2017	3:30 PM	Final review
City Council meeting	January 17, 2017	7:00 PM	Presentation/potential adoption of draft plan