

CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Policy Session Worksheet

Presentation Date: 9/4/19 **Approximate Start Time:** 2 pm **Approximate Length:** 30 min.

Presentation Title: Climate Action Planning

Department: Transportation & Development – Sustainability & Solid Waste Program

Presenters: Eben Polk, Sustainability Supervisor; Cheryl Bell, DTD Assistant Director; Sarah Allison, Sustainability Analyst

Other Invitees: Dan Johnson, *DTD Director*, Clackamas Climate Exchange Members: Karen Buehrig, *DTD*, Nancy Bush, *Disaster Management*, Matt Glazewski, *WES*, Rick Gruen, *BCS*, Jon Legarza, *BCS*, Samara Phelps, *Tourism*, Dr. Sarah Present, *H3S*, Ellen Rogalin, *PGA*, Jay Wilson, *Disaster Management*, Samantha Wolf, *BCS*

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Guidance on the breadth and level of detail in the upcoming climate action plan.

EXECUTIVE SUMMARY:

Previous Board Direction

On October 17, 2018, the Board directed staff to “develop a comprehensive and inclusive climate action plan building off the 2008 Action Plan for a Sustainable Clackamas County and supporting the 2017 climate resolution [Resolution Number 2017-85] adopted by the Board of Commissioners.” The cross-departmental Climate Exchange, led by Sustainability and Solid Waste staff, has drafted a scope of work for an RFP for this plan, while simultaneously pursuing climate actions that can proceed independently of the plan update (see Attachment A).

Early Findings

As Climate Exchange members have identified important elements for this County-wide plan to address, we have researched best practices for similar plans, and engaged with Portland State University’s Institute for Sustainable Solutions (ISS) to help identify key opportunities, understand best practices around climate action plans, and incorporate lessons learned from climate action efforts of other jurisdictions.

As we develop a draft scope of work we have worked with ISS to:

- Research and review several other climate action plans (see Attachment B)
- Interview 13 senior departmental leaders, including directors and program managers

We have learned from our research and work with ISS that climate plans often include more actions than can be undertaken effectively, and therefore don’t have sufficient resources to implement those actions. Our intent is to strike a balance between the number of potential actions we identify and where resources are focused, to maximize the plan’s effectiveness and relevance. Spreading resources too thin may undermine the value of the plan as a whole, and weaken community support.

The county’s climate action plan will need to balance multiple goals.

- The Board has already reaffirmed the 2008 goal of being carbon neutral by 2050.
- All of the *Performance Clackamas* goals are also relevant to this plan, as discussed in greater detail below.

With these goals and the goals of community members to consider, it is important for us to be strategic in developing the action plan.

Approaches to Balancing Priorities

We believe it is important to identify the plan's approach now, while we're developing the RFP, because it will have a profound impact on the proposals developed by consultants. Below, we describe three options to consider to achieve this balance. In choosing an option, it is important to note that the particular criteria for prioritizing actions can be identified with the consultant, based on research and further engagement, and does not need to be determined at this time. Additionally, the decision regarding approach will not impact the budget for this project, though it will influence how that budget is allocated.

Other Ongoing Work

Although not intended for discussion at this policy session, staff have been advancing other near-term efforts to address the county's own operational carbon footprint, which are described in Attachment A.

Future Decisions

The Board has expressed a high level of ownership and interest with the climate action plan, and staff will maintain engagement with the Board at large and Commissioners Fischer and Humberston as our key liaisons, to ensure appropriate awareness and involvement in the planning process. The final draft scope will be shared with the Board for review. Future decisions will take place during the finalization of the RFP process, during project refinement with the consultant, and at milestones during the planning process.

FINANCIAL IMPLICATIONS (current year and ongoing):

Is this item in your current budget? YES NO

What is the cost? - In advance of an RFP, Sustainability and Solid Waste has allocated \$150,000 for the development of the Climate Action Plan. Responses to the RFP may result in a different cost estimate. Funding for actions stemming from the plan will need to be determined at the time actions are implemented.

What is the funding source? - The Sustainability and Solid Waste fund, with contributions from other departments as part of their participation in the Climate Exchange.

STRATEGIC PLAN ALIGNMENT:

- **How does this item align with your Department's Strategic Business Plan goals?**

The forthcoming climate action plan will impact all County departments, including their strategic business plans. Therefore, while the issue of this policy session does align with all of DTD's Strategic Business Plan goals and the goals of many other departments, the larger alignment with Performance Clackamas is more relevant to this policy session.

- **How does this item align with the County's Performance Clackamas goals?**

<i>Performance Clackamas goals</i>	<i>Climate Action Plan Alignment</i>
Grow a vibrant economy	Climate change will impact every sector of the economy, and is already impacting many. Wildfires, reduced snowpack, increased vulnerability to pests, and increased summer temperatures have a direct impact on a variety of businesses. Policies to reduce greenhouse gas emissions will also have impacts on businesses. In

	order to grow a vibrant economy, the County must look forward to both the physical and policy impacts of climate change.
Build a strong infrastructure	Climate change makes it more important that infrastructure be energy efficient and built or retrofitted to withstand the amplified hazards and stresses of a changing climate.
Ensure safe, healthy, and secure communities	Climate change is one of the greatest threats humans have ever faced. It impacts our health in many ways, and can undermine the safety and security of our communities.
Honor, utilize, promote, and invest in our natural resources	Our natural resources are both at high risk from climate change, and provide some great opportunities for reducing greenhouse gasses. By investing in our natural resources, they can be healthier and more resilient, while also protecting our community.
Build public trust through good government	The climate plan will, by necessity, involve virtually every department in the County. It will also directly engage the community to help address this challenge. This collaboration and problem solving are key to good governance and building trust.

LEGAL/POLICY REQUIREMENTS:

There is no legal requirement for Clackamas County with respect to climate change. In the 2017 resolution on climate the Board of Commissioners resolved to “renew its commitment to policies and practices, both within county government and throughout the community, that respond to the need to combat and adapt to climate change, for the sake of the future of our residents and our economy.”

A number of other policies and plans speak to climate issues and would benefit from continued coordination. For example, the Oregon Legislature required Metro to develop a strategy to reduce greenhouse gas pollution from the transportation sector in our region, which culminated in the regional Climate Smart Strategy in 2015. Our new Regional Waste Plan incorporates goals and actions that would reduce GHG emissions from our consumption and discard of materials. Tourism is developing a sustainable tourism strategy. The County’s Public Health Modernization process explicitly includes climate-related health issues.

PUBLIC/GOVERNMENTAL PARTICIPATION:

As noted above under the Performance Clackamas section, this plan will involve extensive participation by various departments within the County, other agency partners, and the community; therefore, broad engagement will be key in developing and implementing the plan.

As work progresses from the planning phase into development and implementation, the specific details will be developed. PGA has been included in the pre-work associated with this effort, and will continue to work with staff and the consultants in developing communications strategies.

OPTIONS:

1. **Menu Approach.** A traditional approach to the question of focus is to develop a broad array or “menu” of potential climate actions. The Multnomah County/City of Portland 2015 Climate Action Plan follows this approach, with over 170 actions. Implementation of these actions is then dependent on funding and other opportunities that arise after the planning process.

– *Advantages:* Community members and partners who see their interests and priorities included in the plan may be more supportive.

– *Disadvantages:* A wide range of included actions will leave insufficient resources to research and plan for implementation. With limited County resources, actions are likely to only be partially implemented, resulting in limited success for overall goals.

2. **Narrow Approach.** A different approach was taken by the City of Tempe, Arizona, who focused in on three issues (energy and energy efficiency, transportation, and extreme heat) from the beginning of their process, and identified four actions for each of these issues, for a total of twelve actions in their plan. The City anticipates multiple plans, each with its own planning process building off of previous work.

– *Advantages:* Selected actions can be developed to an even greater depth of detail. Engagement can be focused in priority areas, building stronger awareness in the community and partners of those issues.

– *Disadvantages:* Initial prioritization will be done without benefit of engagement, limiting the array of potential actions to be considered.

3. **Strategic Implementation Approach.** A third approach uses the Clackamas County Multi-Year Long-Range Planning Work Program as a model, and serves as a hybrid between the other two approaches. In this model, a first phase would explore a comprehensive range of climate actions through research and engagement. A second phase of the planning process would evaluate those actions for those that have the highest impact for the County at this time. Those high-impact actions would be developed into a series of work plans for implementation. This option allows each work plan to use the findings from the initial phase with minor updates, rather than requiring a separate planning effort.

– *Advantages:* A broad range of actions will be identified, which will both honor the input of partners and community members, and provide a foundation for future development of additional actions. Sufficient resources will be allocated to developing actions that will be implemented, maximizing their chances of success.

– *Disadvantages:* Community members and partners whose proposed actions are not prioritized may express frustration with which actions were chosen.

RECOMMENDATION:

Staff respectfully recommends Option 3 – Strategic Implementation Approach, with broad exploration of potential actions that are prioritized into a series of targeted work plans.

ATTACHMENTS:

Attachment A. Summary of Current Clackamas County Climate Actions

Attachment B. Clackamas County Climate Action Plan Memo: Typologies and Tradeoffs

SUBMITTED BY:

Division Director/Head Approval _____

Department Director/Head Approval _____

County Administrator Approval _____

Summary of Current Clackamas County Climate Actions

September 2019

Overview

In response to the Board of County Commissioners' direction to take action addressing climate change, staff has initiated several projects. These projects address greenhouse gas production by County operations and increase staff capacity to address climate concerns. In addition to the projects listed below, several departments represented in the Climate Exchange have done recent work to analyze their assets for resilience to and contribution to climate change.

Current Climate Actions

Climate change has been studied and mitigation actions developed for decades. Because of this foundation, the County is able to take some impactful actions with little further research. Many of these actions build on work that the County and our partners have already started.

Clackamas Climate Conversations: Lunch & Learn Series

The Clackamas Climate Exchange, a cross-departmental group of staff working on climate issues, has presented a lunch & learn series in 2019 to engage County staff on climate action. Each presentation has addressed the way that climate change impacts a different department or program, and actions that staff are taking to address those issues.

County Operational Greenhouse Gas Inventory

Staff from across the County worked with an AmeriCorps member in the Sustainability and Solid Waste program to gather data for an inventory of all greenhouse gas emissions from County operations in 2017. This inventory provides key insights into areas of opportunity to reduce the County's impact on climate change, and a baseline for evaluating future progress to reduce those emissions.

Renewable Energy Purchase for County Operations

Sustainability and Solid Waste staff has worked with Facilities staff to research opportunities for the County to reduce their greenhouse gas impact by purchasing renewable energy. Staff has identified several options, and is researching the costs and benefits of each in order to present those options to the Board.

Low-Carbon Fleet Analysis

DTD staff has begun exploring opportunities to analyze County fleet and develop a scope for a clean fleet plan. This work will clarify the needs and impacts of different fleet vehicles, and the cost to transition to lower-impact vehicles at different rates.

Electric Vehicles

Social Services, with support from Sustainability and Solid Waste, is in the process of developing a grant application to add several electric vehicles (EVs) and EV charging stations to their fleet. These vehicles would serve the rural population, with a focus on senior centers and transportation of patients. This project would also create new opportunities for rural residents to charge EVs, making them a more feasible option.

High Performance Building Policy

Facilities and Sustainability and Solid Waste staff have drafted a High Performance Building Policy to set standards for new construction of County facilities or major renovations that reflect the County's climate goals. Facilities built to these standards would be more energy efficient and have lower greenhouse gas emissions, both during construction and during operation.

Attachment B

Clackamas County Climate Action Plan Memo: Typologies and Tradeoffs



Liliana Caughman, PhD Candidate
Portland State University
Institute for Sustainable Solutions
August 2019

Overview

This short paper uses a literature review of the most recent and cutting-edge research on climate change planning to address the following questions:

- What is a climate action plan (CAP)?
 - What are common CAP goals, strategies, and typologies?
- Do climate action plans work? Why or why not?

Climate Action Plans - Mitigating GHG Emissions





Traditionally, climate action plans (CAPs) are written to understand greenhouse gas emissions in a certain geographical location and to identify and implement strategies to reduce those emissions.

A typical climate action plan created by city or county governments in the US and abroad tends to have the following components:

- An inventory of all greenhouse gas emissions by major type of source, such as buildings, transportation, electrical generation, etc.
- An emission reduction goal, usually expressed as a percentage reduction compared to a baseline year. For example, Fort Collins has a goal of reducing its emissions so that by 2020 they are 20 percent below 2005 emissions, and, by 2030, 80 percent lower than 2005 emissions.
- A prediction of how emissions will increase under a “business as usual” scenario compared to the emission reduction goal to determine how much emissions need to be cut (see chart).
- A suite of strategies to achieve the needed reductions.



An analysis of 20 US climate action plans showed the following strategy areas were present in 50% or more of plans reviewed:

Climate Action Plan Category		% of plans
Local government emissions		
 Transportation	Employee commutes (carpooling, alternative mode incentives, telecommuting, etc.)	55%
	City fleet fuel efficiency (new vehicle fuel efficiency, hybrids, etc.)	70%
	City fleet low carbon fuel (biofuels, electric vehicles, etc.)	50%
 Solid Waste and Recycling	Procurement and purchasing (recycled content, purchasing products with minimal packaging)	65%
 Energy efficiency	Existing buildings (weatherization, programmable thermostats, furnace retrofits, etc.)	80%
	New buildings (green building standards, etc.)	70%
	Streetlights and amenities (LED streetlights, traffic lights, etc.)	60%
 Renewable energy	Renewable energy generation (wind turbines or solar panels on city hall, parking meters, etc.)	65%
	Require municipality to buy power from green sources	65%

Community emissions



Transportation

Reduce carbon content of fuels, including for transit (biofuel standards, electric vehicles, etc.) 65%

Increase fuel efficiency (idling policies, taxi fleet improvement incentives, etc.) 55%

Bicycle infrastructure (lanes, boulevards, etc.) 75%

Pedestrian infrastructure (sidewalks, crosswalks, etc.) 50%

Transit service (increased hours, extend number of lines) 80%

Alternative transportation (discounted transit passes, free bike helmet programs) 55%

Travel demand management policies (flex work hours, telecommuting, rideshare programs) 60%



Reduce vehicle miles of traveled



Solid waste and recycling

Increase recycling (residential, e-waste, etc.) 65%



Energy efficiency

Existing residential buildings (weatherization, incentives, real-time utility bills, etc.) 70%

New residential buildings (greening residential code, etc.) 65%

Existing commercial and industrial buildings 55%

New commercial and industrial buildings (green building practices) 55%

Encourage buying power from green sources 50%



Renewable energy

Encourage using renewable energy (programs supporting solar hot water heaters, etc.) 60%



Forestry

Investments in reforestation and tree planting 75%



Land use planning

Compact development (increase densities, remove lot size minimums, etc.) 70%

Zoning ordinances to reduce auto use (transit-oriented development ordinances, parking maximums, etc.) 55%



Education

General (climate change, carbon footprint, raising awareness, etc.) 70%

Energy efficiency (weatherization, behavior change, etc) 55%

Waste reduction and recycling 60%



Adaptation

The plan enumerates specific anticipated local impacts (heat, flooding, drought, natural disasters, and vector-borne disease) and identifies adaptive actions. 25%

Note: The table also lists the percentage of plans with adaptation actions, even though it is less than 50%. Adaptation is rapidly increasing in plans.

Climate Adaptation Plans

Recently, as climate change concerns have shifted from a future issue to mitigate to a current crisis with immediate impacts, CAPs have also changed.

Rather than focusing only on mitigating GHG emissions, these plans either incorporate or entirely focus on adapting to the impacts of climate change in a particular geographic location. These plans are often referred to as climate adaptation plans or resilience plans and focus on the impacts of extreme environmental events (storms, floods, heat waves, etc.) on infrastructure, policy, economy, and community livelihood.

A new paradigm?

Climate action planning has been occurring for a long time now; since the 1990s in the US. However, global emissions have continued to rise, and local emissions trends remain inconsistent. This has made many scholars and practitioners question the efficacy and impact of such plans.

Fortunately, research has shown that CAPs do make a local impact, but *why* and *how* this impact occurs is still debated. Some of the leading theories regarding the usefulness of Climate Action Plans focus on the following:

- The vision of the plan can act as a uniting force for planning and development work
- Plans help open up dialogue on climate change issues in the community
- Setting up steps that could be taken to reduce municipal and community emissions can reduce a sense of nihilism and potential spur innovation
- CAPs can increase interdepartmental coordination and best-practice sharing

Therefore, research suggests that the precise actions within the plan are generally less important than the process of making the plan and communicating the plan itself. As more of these lessons-learned are evaluated and disseminated, the types of climate action plans developed is changing, and “next-generation” plans, focused more on visioning, coordination, community engagement, and knowledge-sharing are likely coming soon.

Equity and a “Just Transition”

Finally, CAPs have begun to have a major focus on diversity, equity, and inclusion. This is occurring for a variety of reasons including:

- The idea that lack of participation and inclusion of communities of color and low-income communities is hindering progress toward GHG emissions goals
- Growing sensibilities regarding institutional racism, unconscious bias, etc. and desire to mitigate these problems
- Desire to get more people involved in climate action to enhance a variety of perspectives and hopefully inform knowledge sharing and innovative strategies.

Relatedly, there is emerging interest in ensuring a “just transition” to the new green economy. This means thinking holistically about the community, personal, and economic impacts that climate policy can have on communities, especially the working class and communities of color. For example:

- Do anti-coal policies have measures in place to secure re-training and job placement for ex-coal mine workers?
- Do new public transportation routes take into consideration where the historically black community needs to travel to get to and from church?
- Is the placement of new EV charging stations delivered equitably throughout the county and are their opportunities for economic development concurrent with the process?

Overall, including equity or a *Just Transition* framework into climate action plans requires local governments to think critically about who benefits and who suffers from climate policies, what the values and needs of the community are related to climate policies, and to offer suggestions regarding how to mitigate those impacts within the CAP plans.

Example County Plans

County	Plan Contents	Link
San Diego, CA, 2017	210 pages <ul style="list-style-type: none"> • Intro • GHG emissions inventory • GHG reduction strategies • Climate Resilience • Implementation and monitoring • Public outreach and engagement 	https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/cap/publicreview/documents/CAPfilespublicreview/Draft%20Climate%20Action%20Plan%20(LOW%20RESOLUTION).pdf
Humboldt, CA, 2012 (updating and writing plan collaboratively with public)	68 pages <ul style="list-style-type: none"> • Intro • GHG emissions inventory • GHG reduction target • GHG reduction strategies • Implementation • Monitor and report progress Agriculture and forest resources (land use - rural lands) on page 23	https://humboldt.gov/DocumentCenter/View/1347/Draft-Climate-Action-Plan-PDF?bidId=
King, WA, 2015 (updating with focus on community priorities)	151 pages <ul style="list-style-type: none"> • Intro • Outreach and engagement • Reducing GHG emissions <ul style="list-style-type: none"> ○ GHG emissions targets ○ Cost effectiveness assessment ○ Transportation and land use ○ Buildings and facilities energy ○ Green building ○ Consumption and materials management ○ Forests and agriculture (pg. 87) • Preparing for climate change impacts 	https://www.kingcounty.gov/services/environment/climate/actions-strategies/climate-strategies/strategic-climate-action-plan.aspx
Summit, UT, 2015	54 pages <ul style="list-style-type: none"> • Intro • Emissions trends and forecast • Framework for climate action • Playbook for implementation 	https://www.summitcounty.org/DocumentCenter/View/3273/Summit-County-CAP-Final?bidId=

	Agriculture, livestock, and land use management practices featured throughout the plan	
Dane, WI, 2013	20 pages <ul style="list-style-type: none"> • About Climate Change Action Council • Dane County's rapidly changing climate • Major climate risks and adaptation opportunities • Strategies to increase resilience • Climate change mitigation projects and strategy 	https://danedocs.countyofdane.com/webdocs/pdf/press/9 - _30_Climate_Change_and_Emergency_Preparedness.pdf
Clallam, WA, 2009	24 pages <ul style="list-style-type: none"> • Summary • Action Plan <ul style="list-style-type: none"> ○ Staffing ○ Buildings ○ Fleet ○ Commute ○ Pilot projects ○ Green practices <p>Clallam is a leader for CAPs in rural NW communities</p>	http://www.clallam.net/environment/assets/applets/g2009-035.pdf
Benton, OR, 2018	7 pages <ul style="list-style-type: none"> • Overview • Immediate next steps • Staff oriented actions • Departmental oriented actions • Cross-departmental / countywide actions 	https://www.co.benton.or.us/sites/default/files/fileattachments/board_of_commissioners_office/page/5742/bccap.pdf

References

Araos, M., Berrang-Ford, L., Ford, J. D., Austin, S. E., Biesbroek, R., & Lesnikowski, A. (2016). Climate change adaptation planning in large cities: A systematic global assessment. *Environmental Science & Policy*, 66, 375-382.

Bassett, E., & Shandas, V. (2010). Innovation and climate action planning: Perspectives from municipal plans. *Journal of the American planning association*, 76(4), 435-450.

Biagini, B., Bierbaum, R., Stults, M., Dobardzic, S., & McNeeley, S. M. (2014). A typology of adaptation actions: A global look at climate adaptation actions financed through the Global Environment Facility. *Global Environmental Change*, 25, 97-108.

Climate Reality Project. (2019). How Counties are taking climate action. www.climaterealityproject.org.

Healy, N., & Barry, J. (2017). Politicizing energy justice and energy system transitions: Fossil fuel divestment and a "just transition". *Energy Policy*, 108, 451-459.

Heffron, R. J., & McCauley, D. (2018). What is the 'just transition'? *Geoforum*, 88, 74-77.

Meschkat, E. (2018). Racial Equity Tool: Cleveland Climate Action Plan. *Sustainability: The Journal of Record*, 11(6), 280-283.

Millard-Ball, A. (2013). The limits to planning: Causal impacts of city climate action plans. *Journal of Planning Education and Research*, 33(1), 5-19.

Millard-Ball, A. (2012). Do city climate plans reduce emissions?. *Journal of Urban Economics*, 71(3), 289-311.

Newell, P., & Mulvaney, D. (2013). The political economy of the 'just transition'. *The Geographical Journal*, 179(2), 132-140.

Reckien, D., Salvia, M., Pietrapertosa, F., Simoes, S. G., Olazabal, M., Hurtado, S. D. G., ... & Fokaides, P. A. (2019). Dedicated versus mainstreaming approaches in local climate plans in Europe. *Renewable and Sustainable Energy Reviews*, 112, 948-959.

Reckien, D., Salvia, M., Heidrich, O., Church, J. M., Pietrapertosa, F., De Gregorio-Hurtado, S., ... & Orru, H. (2018). How are cities planning to respond to climate change? Assessment of local climate plans from 885 cities in the EU-28. *Journal of cleaner production*, 191, 207-219.

Stone, B., Vargo, J., & Habeeb, D. (2012). Managing climate change in cities: will climate action plans work?. *Landscape and Urban Planning*, 107(3), 263-271.

Tang, Z., Brody, S. D., Quinn, C., Chang, L., & Wei, T. (2010). Moving from agenda to action: evaluating local climate change action plans. *Journal of environmental planning and management*, 53(1), 41-62.