

CLIMATE & ENVIRONMENT COMMISSION

Letter from Chair, Carolyn Amparan

The Climate and Environment Commission has continued to focus on the implementation of the CAAP. The Commission has completed many projects which are highlighted below. Additionally, we have established new priorities for 2022 as well as plans to follow through on implementation for projects started in 2021. Below is a list of 2022 priorities and budget requests for fiscal year 2023 to support future execution and implementation of these priorities. We have three major requests for action from the City Council that relate to the budget and management of City operations. The CEC believes these actions are important for rapid progress towards achieving CAAP goals.

The priorities are as follows:

- Provide direction to the City Manager to include a report in the City Manager's proposed budget on existing and proposed projects that improve mitigation and adaptation efforts (I-2.2.2)
- Include an assessment of progress toward CAAP goals in the City Manager's annual performance review by the City Council. (I-2.2.3)
- Ask that each relevant department respond to the CEC regarding line items proposed by the CEC in the budget priorities included in this report. The responses should include information on the amounts identified in the proposed FY 2023 budget or information on reasons this item cannot be proposed at this time. (I-1.1.1)

Accomplishments:

In 2021, the CEC and city staff worked together to advance multiple initiatives in alignment with CAAP goals and actions.

- Approved a recommendation to have the city staff create a Fleet Electrification Action Plan that will include a strategy to rapidly electrify the City of Columbia vehicle fleet and phase out fossil fuel use by 2040. The city staff is actively working on the plan development. (CAAP Action T-2.1.1)

CEC ACCOMPLISHMENTS

Accomplishments (continued):

- **Recommended the use of the Triple Bottom Line method for future investment decision making.** This method gives equal consideration to the impact of investments that include equity, financial costs and economic benefits, and environmental impacts such as mitigation of GHG emissions or adaptation for climate change impacts. City staff has been refining the tool for local use and hopes to conduct a formal pilot in a real-time decision making process in 1Q 2022. We hope to present this approach to the City Council and the City Manager in 2022. (CAAP Action I-2.2.3, I-2.1.4)
- **Recommended an approach to create a policy that will reduce energy usage in municipal buildings by 20% over five years.** City staff has budgeted to increase the number of necessary building inspections to identify opportunities for energy efficiency improvements and is researching building performance standards. Staff feedback on a formal policy is pending. (CAAP H-1.3.1)
- **Reviewed a proposal developed by city staff to benchmark energy usage in all municipal buildings.** Building benchmarking is in progress and will be completed in two phases. Phase one to be complete by June 2022 and phase two by June 2023. (CAAP Action H-1.3.4)
- **Recommended monthly communication themes to promote awareness, cooperation, and support of the community in achieving CAAP goals.** City staff has implemented ongoing weekly social media communications as well as a monthly email newsletter focused on sustainability (CAAP Action I-3.3.3)
- **Provided input on using the Parks and Recreation Sales Tax funds to support community and CAAP goals.** (CAAP I-3.4.1)
- **Collaborated with city staff, to developed a recommendation to City Council to improve availability of the Department of Energy's Home Energy Score to the public to create a market for energy efficient housing.** This recommendation was approved by the City Council and is currently in progress of implementation. (CAAP Action H-1.1.4)

CEC ACCOMPLISHMENTS (CONT'D)

- Recommended state legislative priorities that will support achieving CAAP goals to city staff responsible for state legislature lobbying. (CAAP Action I-1.1.2)
- Recommended short- and long-term changes to the CATSO Long-range Transportation Plan to increase alignment with the CAAP. Presented to City Council February 2022. (CAAP Action T-1.1.1-T1.4.1)
- Provided input to the Integrated Electric Resource and Master Plan Taskforce regarding recommendations to make to the City Council. (CAAP Action E-1.2.1, E-1.3.2)
- Provided input to the Boone County Commission regarding wind farm regulations for Boone County. (CAAP Action E-1.1.4)
- Prepared a report for City Council that recommends electrification of new municipal buildings. Presented to City Council in February 2022. (CAAP Action H-1.5.1)

Carolyn Amparán



CEC Budget Priorities for FY 2023

- Provide funding and resources for the management of publicly-owned natural areas to enhance and maintain diverse native communities. (NR-1.1.1)
- Provide funding and resources for the promotion of water conservation programs and promotion of incentives for water conservation from Water and Light (W&L). (NR-2.1.3)
- Update the water rate structure for W&L customers to lower the base rate and shift the true cost of high volume water users including peak summer water plant capacity to those high volume users through the Tier 3 rate. Provide funding to conduct necessary studies to make the change to the base rate possible. Provide funding for outreach to the community and all customers regarding the rate changes.(NR-2.1.1)

CAAP Overall Implementation

I-2.2.2 Include a report in the City Manager's proposed budget on the existing and proposed projects that improve mitigation and adaptation efforts

- City Council provide direction to the City Manager to include a report in Fiscal Year 2023 budget proposal

I-2.1.3 Develop a decision matrix to be used to integrate mitigation and adaptation priorities into City planning and standards (e.g., zoning, construction standards, CIP review). City departments will utilize forecasted model data (e.g., climate, health, population, economic, etc.) during these processes, where available.

- Add .75 FTE (\$60,000) to staff to drive deployment of CAAP related programs. CEC is recommending an additional transportation infrastructure scorecard for transportation related projects
- Note Fiscal Year 2022 Budget includes \$25,000 to develop a plan

I-3.3.1 Align existing City educational and engagement programs with CAAP goals and programs. Provide additional support to education and outreach for the CAAP and its individual actions.

- Continue existing staff support for monthly community communications on CAAP and implementing sustainable living including newsletters and social media

I-3.5.1 - Use online dashboard to report on the status of the CAAP priority actions/KPIs

- Continue existing investments in updating the online CAAP performance indicators and dashboard

CEC Budget Priorities for FY 2023

Housing, Buildings and Infrastructure

H-1.1.2 - Increase energy efficiency funding options for families (low-interest financing, on-bill financing, Pay As You Save, PACE, etc.).

- Need staff to assess program management and implementation costs for an additional energy efficiency improvement financing option more supportive of low and moderate income families and plan for implementation in FY 2023.

H.1.1.3 Rental Energy Efficiency Standards

- Need 0.75 FTE staff to manage development of a final proposal and drive implementation – 0.75 FTE (\$60,000)
- Need funds to communicate to involved parties - \$1000

H.1.1.4 Energy Performance ratings for homes for sale or rental license renewal

- Need funds to communicate regarding implementation to realtors, landlords, public - \$1000

H.1.3.1 20% energy usage reduction in city buildings over 5 years

- Need investment funds for initial energy efficiency improvements - \$100,000

H.1.3.3 City buildings to meet building performance standards

- Need investment funds for initial changes and evaluations to meet standards - - \$100,000 (assuming budget for H1.3.1 is also allocated)

H.1.3.4 City buildings to be benchmarked for energy usage

- Need building assessment funds \$15,000

H.1.5.1 - Incentivize fuel switching from fossil fuel based systems to electric

- Need funds planned for increased participation in rebate programs for replacing gas based HVAC systems with electric heat pumps
- Need funds for increased communication to the community regarding incentive programs - residential and commercial and education for local HVAC dealers - \$2000



CEC Budget Priorities for FY 2023

Natural Resources

NR-2.1.1 Complete change to rate structure to encourage reduced water use

- In fiscal year 2019 the Columbia City Council added a Tier 3 water rate at \$6.02 per CCF. This action is a step in the right direction to encourage water conservation and promote a more equitable pricing structure for water services. The CEC encourages the Council to take the next step as recommended in the most recent Cost of Service study. The Cost of Service study recommended a gradual increase in Tier 3 rate from the Tier 2 rate of \$4.01 in 2018, to \$7.82 in (2019), \$8.22 (2020), \$8.64 (2021), \$9.06 (2022), and \$9.54 (2023). The CEC is asking for the Council to implement the cost of service study recommendations for the coming fiscal year.

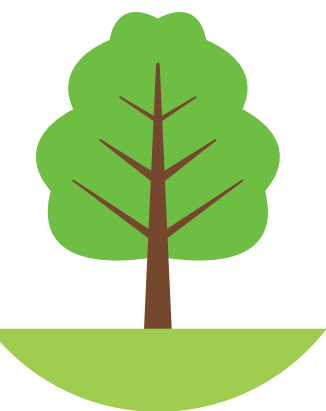
NR - 3.2.2 - Perform detailed studies to identify areas that are at high risk for flooding and are maybe a prospect for property acquisition or mitigation.

- Need funds to complete a study to identify areas and specific properties that have experienced flooding or are at a high risk for future flooding based on anticipated heavier precipitation events. Report should include information on flooding frequency and recommend actions as appropriate - \$25,000

Health, Safety and Well-being

HS 1.3.2 Update property maintenance code to manage and mitigate mold or fungus.

- The Healthy Housing CAAP team is developing a program to assist with remediating mold and mildew in housing. They will be requesting funds to support the purchase of cleaning kits and small dollar repairs (\$10,000).



CEC Budget Priorities for FY 2023

Transportation

T-1.1.2 – Revise street design standards to prioritize people walking, biking and riding transit while also accommodating vehicles

- Allocate city staff time to engage in Complete Streets policy update (campaign led by Local Motion) 0.10 – 0.20 FTE
- Allocate city staff time to lead long-range transit master plan visioning process/task force

T-1.2.1 – Improve efficiency, convenience and reliability of bus service and infrastructure (e.g., increase frequency, shorten wait times, construct bus stop shelters).

- Add additional bus shelters, seating, trash cans for current routes
- Maintain transit fare-free for fiscal year 2023
- Allocate city staff time to lead long-range transit master plan visioning process/task force

T-2.1.1 – Introduce a policy to replace municipal fleet vehicles and buses with electric and hybrid options at the time of replacement, and require emissions standards, testing and biofuel preference for any combustion vehicles remaining in the fleet.

- City staff expects to have a fleet vehicle policy available for review in January 2022. Need to allocate any funds necessary for FY2023 to support policy implementation including possible up-front price differential for electric vehicles. Additionally funds should be allocated for electric charging infrastructure for city vehicles.



CEC 2022 Priorities

Energy

CAAP Action	CEC Next Steps	Work Initiated	Status
E-1.3.2 – Codify through ordinance Columbia Water & Light’s responsibility to meet 100% renewable energy generation or purchase by 2035.	Next step is to work with the staff and the WL Advisory Board to propose a new ordinance.	Yes	CEC approved a recommendation to the IERMP task force that Columbia achieve 100% renewable energy from water and light by 2030. This is a change from 2035 to 2030. IERMP has been completed and has been presented to City Council.
E-1.2.1 – Include CAAP priorities in Columbia Water & Light’s long-range electric and water resource planning goals.	CEC will provide input to the City Council regarding implementing aspects of the recently completed IERMP. CEC needs to continue to participate in long-range planning for electric or water resources.	Yes	CAAP goals were included in the IERMP statement of work. CEC list of priorities was voted on at the September 2020 meeting and provided to W&L staff for inclusion in the IERMP.
E-1.1.7 - Determine the true value and potential of customer-owned photovoltaics		No	A study was done with the IERMP but was determined to be unsatisfactory.
E-1.1.5 - Make it easier for large multi-family, commercial and industrial customers to maximize the benefit of using their space for photovoltaics	Investigate inhibitors	No	

Climate and Environment Commission (CEC) 2022 Priorities

Housing, Buildings, and Development

CAAP Action	CEC Next Steps	Work Initiated	Status
H-1.1.2 - Increase energy efficiency funding options for families (low-interest financing, on bill financing, Pay As You Save, PACE, etc.).	<ol style="list-style-type: none"> 1. Research if city utility can also provide PACE like loans 2. Ensure that if a PACE program is enacted, that it supports low and moderate households to help them achieve energy efficient homes 	No	
H-1.1.3 – Establish a date by which all rental housing will be required to meet basic energy efficiency standards at license renewal.	<p>CEC works with stakeholders to review similar programs in other cities and propose a program and implementation timeline for Columbia. A CEC liaison participates with the Safe, Healthy and Affordable Housing Action Team from the Community Health Improvement Plan.</p> <p>Present a report for a efficiency program passed by CEC to City Council By end of February 2022</p>	Yes	Housing group will present a draft report to the CEC for review and approval in Jan-Feb. 2022.
H-1.1.4 – Develop and test an energy performance rating / labeling program for homes listed for sale or upon rental license renewal.	<ol style="list-style-type: none"> 1. Determine efficacy of the opt out vs opt in method of saving and publishing energy scores 2. CEC works with stakeholders to review similar programs in other cities and develop programs for Columbia with local data metrics for evaluation of potential impacts. 	Yes	CEC provided report to City Council supporting the Home energy score opt-out program.
H-1.3.1 - Create a policy that all City buildings shall reduce energy usage by 20% over the next five years.	Pass recommendation by CEC to city council stating that the energy reduction is completed by end of Fiscal Year 2025	Yes	Housing group needs to provide report to CEC

Climate and Environment Commission (CEC) 2022 Priorities

Housing, Buildings, and Development

CAAP Action	CEC Next Steps	Work Initiated	Status
H-1.3.3 – Introduce a policy that requires all new and existing municipal buildings to meet and maintain energy and resource efficiency standards (ENERGY STAR, LEED, Home Energy Score or other).	Per October 2021 meeting this will be done by October 2022. CEC will provide input to CAAP team proposal.	Yes	City CAAP teams are working on this.
H-1.3.4 - Introduce a policy that requires all municipal buildings to be benchmarked with the current Energy Score rating, the energy use intensity (kBtu/sqft) and the energy reduction goal. These benchmarks and goals shall also be posted on the City's website.	Upon completion of this benchmarking policy and the benchmarking implementation, the city should focus on helping Commercial properties under H 1.2.1 and shift priority focus of city buildings to H 1.3.5 - net zero energy use in municipal buildings 2. Staff is requested to provide updates on this progress quarterly to the CEC	Yes	The City adopted the formal policy proposed by CAAP staff team and reviewed by CEC for benchmarking standards. Benchmarking of buildings is in progress.
1.4.1 - Require that the City adopts the International Building Energy Conservation Codes for municipal, commercial and residential buildings as written.	CEC supports the city adopting the 2021 Energy Conservation Building Codes changes by the end of Calendar year 2022. CEC assigns liaison to the BCCC team.	Yes	Need to assign a CEC liaison.

Climate and Environment Commission (CEC) 2022 Priorities

Housing, Buildings, and Development

CAAP Action	CEC Next Steps	Work Initiated	Status
1.5.1 - Incentivize switching space and water heating from fossil fuel-based to electric heat pumps.	<ol style="list-style-type: none">1. Oct 2021 CEC passed a motion in support of new city construction adopting non-fossil fuel sources for water, space heating and cooking. It shall be presented to Council by February 20222. CEC should pursue a conversation with community partners to voluntarily adopt same standards with their new construction3. Review Incentives of other utility rebate programs and incentive levels by EOY 2022	Yes	Utility staff is working on #3 CEC report to be presented to the City Council in February 2022.

Health

CAAP Action	CEC Next Steps	Work Initiated	Status
HS 1.3.2 Update property maintenance code to manage and mitigate mold or fungus.	Support CAAP staff team with input	Yes	CAAP Staff team in progress.

Climate and Environment Commission (CEC) 2022 Priorities

Implementation

CAAP Action	CEC Next Steps	Work Initiated	Status
I-1.1.1 - Use recommendations in the annual report to identify budgetary priorities that support implementation of the CAAP.	Include budget priorities in the Annual Report to be delivered Feb. 2022. For FY2023 work more closely with staff to drive inclusion of CAAP budget priorities in City Manager's FY2023 budget plan.	Yes	Budget priorities were included in the 2021 annual report with minimal impact on the budget.
I-3.3.1 Align existing City educational and engagement programs with CAAP goals and programs. Provide additional support to education and outreach for the CAAP and its individual actions.	Continue community outreach through social media with selected monthly topics related to climate and sustainability. Investigate communication platforms for marginalized and underserved communities.	Yes	Monthly focus topics revised for 2022. Through working with OS these are now in sync with monthly newsletter from OS. Additionally, all Thursday social media posts from OS focus on selected monthly theme. Communication team members also propose information for use in Thursday posts.
I-3.4.1 - Develop specific funding options for CAAP priorities	Propose funding options for CAAP priorities - including alternative financing / funding opportunities. Identify FY 2023 budget priorities.	No	
I-3.5.1 - Use online dashboard to report on the status of the CAAP priority actions/KPIs (eg. Progress of actions that have been initiated, implementation schedule of other actions not yet started, community and municipal GHG emissions, equity impacts of actions implemented).	Propose changes to online dashboard to make it more up-to-date and relevant. Support continued funding for maintenance of KPIs and dashboard.	Yes	In process - dashboard deployed with staff updates

Climate and Environment Commission (CEC) 2022 Priorities

Implementation

CAAP Action	CEC Next Steps	Work Initiated	Status
I-2.1.1 Hold biannual meetings with all division heads to highlight progress, plans and challenges related to projects with climate impacts.	Sustainability manager planning to hold meetings in 2022. CEC will participate as appropriate.	Yes	Working on scheduling
I-2.1.3 Develop a decision matrix to be used to integrate mitigation and adaptation priorities into City planning and standards (e.g., zoning, construction standards, CIP review). City departments will utilize forecasted model data (e.g., climate, health, population, economic, etc.) during these processes, where available	Pursue implementation of Triple Bottom Line and climate impact statements. CEC is recommending a Transportation infrastructure scorecard for transportation related projects	Yes	Council allocated \$25,000 for FY 2022 to support implementation. CEC recommended Triple Bottom Line (TBL) approach in 2021. Staff has conducted pilots using TBL assessment tool. Staff owns next steps.
I-2.2.2 Include a report in the City Manager's proposed budget on the existing and proposed projects that improve mitigation and adaptation efforts	City Council considers direction to city manager	Yes	Fiscal Year 2022 budget input from CEC included a summary of line items and projects in the City Manager's proposed budget that had either mitigation or adaptation impacts.
I-2.2.3 Assessment of progress toward CAAP goals shall be included in the City Manager's annual performance review by the City Council.	City Council to implement. CEC to provide a recommendation via report to City Council to implement as needed.	No	

Climate and Environment Commission (CEC) 2022 Priorities

Transportation

CAAP Action	CEC Next Steps	Work Initiated	Status
T-1.1.2 – Revise street design standards to prioritize people walking, biking and riding transit while also accommodating vehicles	Street standards updated to meet CAAP Action goal. Working in partnership with Local Motion.	Yes	Transportation working group is researching successful models in other municipalities
T-2.1.1 - Introduce a policy to replace City fleet vehicles and buses with electric and hybrid options at the time of replacement, and require emissions standards, testing and biofuel preference for any combustion vehicles remaining in the fleet.	Develop programs for replacing municipal fleet with electric and hybrid options, increasing electric vehicle charging infrastructure, and incentives for the purchase of electric vehicles. Policy needs to be finalized by the staff and implemented.	Yes	CEC submitted draft to city staff. CAAP staff working team expects this to be through the levels of review and before the City Manager in December 2021.
T-1.2.1 – Improve efficiency, convenience and reliability of bus service and infrastructure	Recommend city staff time to lead long-range transit master plan visioning process/task force, similar to process as what was done for the airport	Yes	The transportation team met with transit manager to understand current routes and challenges

Climate and Environment Commission (CEC) 2022 Priorities

Natural Resources

CAAP Action	CEC Next Steps	Work Initiated	Status
NR-1.1.1 - Manage publicly-owned natural areas to enhance and maintain diverse native communities.	To increase awareness about the lack of equity among marginalized communities to become more climate resilient and educate ourselves, other CEC members and the public at large to find potential solutions: Natural Resources (NR) team to prepare a slide show presentation and/or display to distribute and/or attend city events to educate the public about equity and the climate resilience problem. NR team may visit with local communities to hear their concerns	Yes	City staff is working on 1.1.1. Natural resources team has started working on outreach plans.
NR - 1.1.2 - Establish and effectively manage native-habitat corridors along trails and utility easement areas to restore and maintain landscape connectivit	See above	Yes	
NR - 2.1.1 - Complete change to rate structure to encourage reduced water use.	Housing team will take lead on this and prepare an updated report for CEC consideration.	Yes	CEC input submitted via email on 2/1/2021 to City Council regarding Tier 3 water rates.
NR - 3.2.2 - Perform detailed studies to identify areas that are at high risk for flooding and are maybe a prospect for property acquisition or mitigation.	Housing team will start discussions with the Natural Resources team.	No	

In closing the CEC wants to acknowledge and appreciate the support of the City Council, the City staff and the community. Together we can make the necessary changes to maintain a livable climate for all.

Carolyn Amparan

Chair

Climate and Environment Commission