2021 Annual Report

Columbia Climate Action & Adaptation Plan (CAAP)

city of Columbia Sustainability

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2021 ANNUAL REPORT

In 2021, the CAAP teams continue to develop and implement CAAP actions in many areas. Two of the policies advanced impact building energy and municipal vehicle fleet emissions. Activities in these areas account for over 70% of all municipal emissions.
As detailed further in this report, teams are collecting and analyzing data on existing programs; evaluating existing land management policies; and developing programs and partnerships to improve energy efficiency and health outcomes.

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REPORT AUTHORS

The Columbia Office of Sustainability (OS) is tasked with managing the implementation of the Climate Action & Adaptation Plan. OS Staff coordinate the internal CAAP teams and serve as liaison to the City Council's Climate & Environment Commission. This report was written with input from all three groups.

MEASURES: Community Emissions

Key performance indicators (KPIs) are an important component of the information needed to explain progress toward our stated goals. KPIs will be available on the CAAP Dashboard and updated annually. Highlighted in this report are the initial KPIs - starting with a community greenhouse gas (GHG) emissions inventory.

GHG inventories measure emissions from local activities, like burning fuel for transportation and buildings, and methane emissions from the landfill and treatment of wastewater. Since the baseline year of 2015, Columbia has reduced community GHG emissions by 12.4% (295,439 MTCO2e) - the equivalent of over 326 million pounds of coal not being burned.

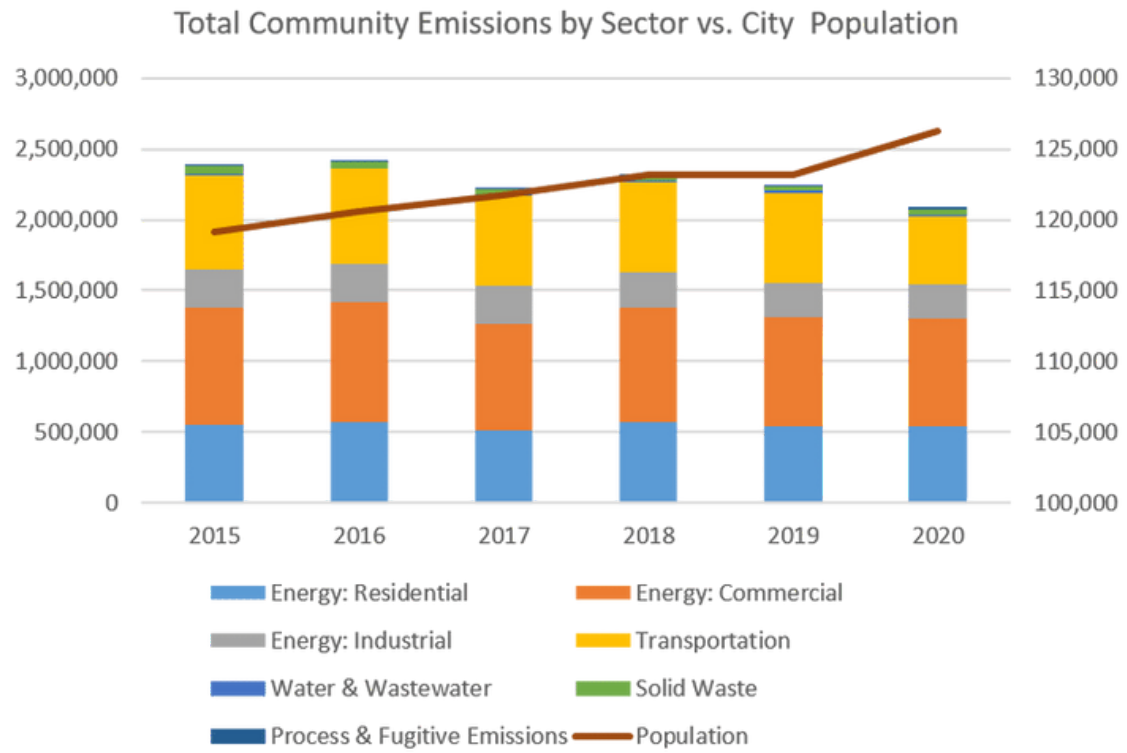
The CAAP community emissions reduction (from 2015 baseline) goals are :

- 35% by 2035
- 80 % by 2050
- 100% by 2060

- 12.4%

DECLINE IN COMMUNITY GHG EMISSIONS SINCE 2015

In 2020, the City of Columbia's transportation emissions were the lowest of all inventory years, due to the impact of COVID-19 on transportation. This accounts for most of the change between 2019 and 2020 emissions inventories. All other sectors were similar in 2019 and 2020.



MEASURES: Municipal Emissions

Our municipal emissions inventory measures the impact of day-to-day operations of the City of Columbia as an organization. This includes building and facility energy use and waste production; and fuel use by transit, fleet and employee vehicles for commuting. The distribution of the City of Columbia's operational emissions across sectors resembles that of the Community's inventory, with 76% of municipal emissions in 2020 coming from facility energy, 22% from transportation, and 3% from waste process emissions.

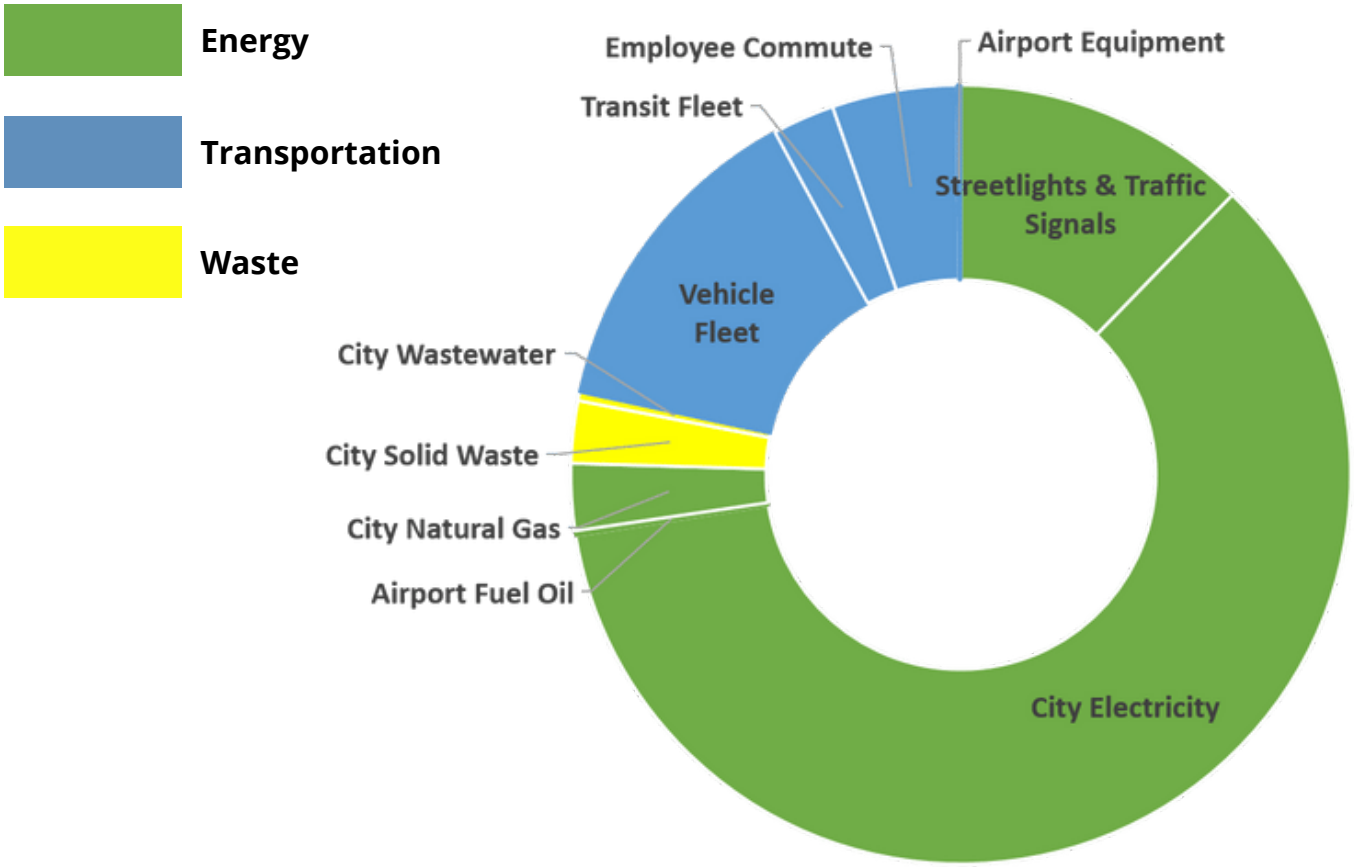
The CAAP municipal emissions reduction goals are 50% by 2035 and 100% by 2050 from 2015 levels.

- 9.3%

DECLINE IN MUNICIPAL GHG EMISSIONS SINCE 2015

Columbia's 2020 municipal emissions were 52,117 MTCO2e - the equivalent emissions of 11,334 passenger vehicles driven for one year. This represents a 9.3% decline from our 2015 baseline emissions.

2020 Municipal GHG Emissions by Sector



MEASURES: Key Performance Indicators (KPIs)

The CAAP has 161 actions, measuring the impact of these actions may not always be possible with emissions inventory data. The table below represents KPIs of priority actions for which there are current baseline, target and trend data. Our ability to report progress toward goals has improved as we refine our data collection and reporting processes.

G = Meets or exceeds target value Y = Within 20% of target value R = 20% or more from target value

Status	Sector	Key Performance Indicator	2015 Baseline	2020 Actual	2020 Target	2035 Target	2050 Target
R	Energy	Renewable Energy (percentage of total)	7%	15%	20%	71%	100%
Y	Energy	Building Energy GHG Emissions (MTCO2e)	1.7M	1.6M	1.4M	602K	119K
G	Energy	Community/On-Site Solar Capacity (MW)	.316	3	2.7	10	10
Y	Buildings	Residential Energy Use (MMBtu/household)	79	78	71	46	27
G	Buildings	% Change in Municipal Building Energy Use from 2015 Baseline	-	-10%	-10%	-50%	-70%
G	Transportation	Municipal Fleet Emissions (MTCO2e)	15K	11.3K	13.4K	8.7K	7.4K
G	Transportation	Transportation GHG emissions (MTCO2e)	667K	477K	597K	378K	334K
R	Waste	City Recycling Rate (tons of recycling/tons of waste)	14%	7.5%	14%	15%	28%
G	Natural Resources	Per Capita Water Consumption (gallons/resident)	38.3K	36.1K	36.4K	30.7K	26.8K

Additional information on KPIs and action progress can be found on the community dashboard:
www.CoMoClimateAction.org/dashboard

CAAP Teams: 2021 Activities and 2022 Priorities

Implementing CAAP actions relies on the dedication and skill of more than 50 City employees from 37 divisions and 13 departments. This interdepartmental cooperation provides a forum where employees contribute their expertise and passion to achieve municipal and community goals. The sections below are highlights of these teams' accomplishments and continuing work.

CAAP Team: Project Management (OS Staff)

The Project Management Team, comprised of OS staff, is tasked with providing strategic direction, logistical support, and the overall vision to guide the successful implementation of the CAAP.

Some highlights from 2021 for overall CAAP management include:

- Reporting and analyzing annual GHG emissions
- Collecting and reporting performance metrics
- Supporting building energy, transportation and natural resource CAAP policy development.

This team is also charged with communication, outreach and education to support CAAP implementation. Some examples from 2021 include:

- Continuation and expansion of activities with Columbia Public Schools and the Columbia STEM Alliance.
- Monthly CAAP e-newsletter with current efforts, events, and ways to be involved.

The Project Management/OS Team's 2022 priorities are:

- Developing the OS Team's strategic plan
- Improving equitable outreach practices
- Delivering City staff and Council education on CAAP related issues
- Development of department and division CAAP related goals
- Integrating CAAP metrics into CIP/Budget items

CAAP Team: Clean Energy

Mission: Implementing the renewable energy strategies and actions of the CAAP to achieve the goal of 100% renewable energy in Columbia.

2021 Progress: Water and Light received the final Integrated Electric Resource and Master Plan (IERMP) report from Siemens. The report describes the challenges facing the utility and evaluates planning scenarios for future generation, demand growth, energy efficiency, transmission and distribution, and metering infrastructure.

2022 Priorities: the Clean Energy Team will develop communications materials to describe the state of Columbia's energy and transmission system, clarify components of the IERMP, and explain important clean energy concepts. A 2022 cost of service study will be undertaken to analyze the current relationship between the cost of providing the service to the rates being paid across rate classifications. This information will be vital as Water & Light staff, the Climate and Environment Commission, the Water & Light Advisory Board and City Council consider long-range planning and investment.

CAAP Team: Resource Stewardship

Mission: Reducing landfill waste and encouraging water conservation.

2021 Progress: The Resource Stewardship team has fully implemented the Pay-As-You-Throw program. A request for proposal (RFP) has been created to evaluate Columbia's recycling and waste diversion programs. The RFP is currently being reviewed.

2022 Priorities:

- Annual waste generation and customer tendencies will be monitored to understand the impacts of the Pay-As-You-Throw program.
- The Solid Waste website will be updated to better advertise the Leadership in Energy and Environmental Design (LEED) based disposal services.
- As staffing allows, Resource Stewardship plans to conduct audits of materials collected for recycling to identify areas of contamination. This will guide education and outreach efforts in residential areas.

CAAP Team: Good Stewards

The Good Stewards' mission is to identify and champion opportunities for improvement in the built and natural environments owned by the City of Columbia. This team is made up of two groups, **Good Stewards-Buildings and Good Stewards-Natural Resources.**

Good Stewards-Buildings (GSB) is responsible for identifying and championing opportunities for improvement in the built environments owned by the City of Columbia.

2021 Progress: The GSB Team drafted and guided the municipal building energy benchmarking through to approval. This policy was signed by the City Manager in October 2021. The GSB Team is working to meet the June 2022 publication deadline for the first group of buildings' energy and water use. Members of the GSB team also worked to identify funding and develop a proposal to audit more municipal buildings for inclusion in the program. By June 2023, all covered municipal buildings' energy and water use will be published.

2022 Priorities: Members of the GSB team will be managing the collection and entry of building energy information in Portfolio Manager, a widely used energy benchmarking program. The GSB team will also be researching potential internal policy and process changes to ensure municipal building energy efficiency and emissions reductions goals are met.

Good Stewards-Natural Resources focuses on the natural areas that the City of Columbia manages, including parks and right-of ways.

2021 Progress: Good Stewards-Natural Resources completed the inventory and review of city-owned lands and land management practices to inform the development of a conservation management strategy.

2022 Priorities: Good Stewards-Natural Resources will continue to develop citywide sustainable land management guidelines for city-owned lands and explore pathways for their implementation.

CAAP Team: Clean Transportation

The Clean Transportation CAAP Team focuses on improving the efficiency of the municipal fleet, opportunities for electric vehicle infrastructure, access to active transportation and reducing vehicle idling.

2021 Progress:

- In 2021, automatic vehicle locators (AVLs) were installed in 417 municipal highway use vehicles. Data from AVLs allows us to analyze fuel consumption, vehicle miles traveled (VMT), and idling time by vehicle type and departmental use. This informs decisions about the fleet while working to reduce GHG emissions.
- In 2021, the CEC called for a Fleet Electrification Plan (FEP) to be drafted by the end of the year. This plan is now in the final stages of review and approval.
- In November, the Electrification Coalition (EC) reviewed the municipal fleet for cost effective and readily available replacement opportunities. 152 light-duty vehicles were identified for electrification at their replacement time.
- GoCOMO focused on improving sustainability goals by operating four electric buses and replacing aging diesel stock with low or no emissions vehicles. All fixed bus routes and paratransit vans operated with no fares, meeting increased ridership and community resource access goals.

2022 Priorities:

- In 2022, AVL data will be used to measure VMT as well as quantity and type of fuel consumed in order to calculate GHG emissions. AVL will likely be installed on the remaining 288 highway-use vehicles in the fleet. The AVL Policy will be added to the Chapter 19 Administrative Rules.
- The FEP will begin implementation in 2022 starting with more in-depth analysis of our fleet by the EC with recommendations for the replacement and procurement of electric vehicles and chargers. Citywide clean transportation efforts include developing strategies to decrease barriers and increase local ownership of electric vehicles.
- In 2022, GoCOMO will replace two diesel buses with lower emissions compressed natural gas (CNG) buses. Performance data will continue to be collected on all buses in service to ensure the electric buses are meeting expected efficiency goals.
- GoCOMO will continue free ridership in 2022, and plans to add more shelters along the existing routes.

CAAP Team: Healthy Housing

The mission of the Healthy Housing CAAP Team is to identify policies and programs that increase safe, healthy, and affordable housing in Columbia; with an emphasis on rental housing improvements for energy efficiency and indoor environmental quality.

2021 Progress:

- A report was submitted to City Council to make Home Energy Scores more accessible on the Green Building Registry. By shifting to an "opt out" process, 4,000 existing Home Energy Scores will become more widely accessible to the public. This information will be valuable to homeowners, renters, and the real estate market.
- Staff continued to explore ways to achieve CAAP goal HS-1.3.2 "Update property maintenance code to manage and mitigate mold or fungus." Staff in the City's Office of Neighborhood Services participated in a healthy housing training offered by Children's Mercy Hospital in Kansas City. This has led to further discussion on codes related to healthy housing that can become part of the City's rental inspection program. Staff are exploring a collaboration with the medical community, housing inspectors, and other partners to improve indoor air quality.

2022 Priorities:

- Continue to support the use of Home Energy Scores and raise awareness among consumers about selecting an energy efficient home.
- Efforts related to manage and mitigate mold or fungus:
    - Expand staff training in Neighborhood Services related to conducting inspections to identify issues related to healthy housing.
    - Conduct a pilot to address housing issues for families of children who have health issues that may be exacerbated by mold, mildew, air quality and other factors where they live.
    - Explore the National Healthy Housing Standard as a code to be used while inspecting rental properties

Success: Utility Energy Efficiency Programs

The City of Columbia Utilities facilitates commercial, industrial, and residential energy and water conservation programs to save energy and improve resource efficiency in the Columbia community. Utility demand side management programming in fiscal year 2021 saved an estimated 3,499,972 kilowatt hours of first year energy savings. This equates to an estimated 2,368 Metric Tons of CO2e avoided, which is similar to the amount of emissions generated from 285 homes in one year.

Success: Parking Garage LED Lighting Renovations

The City of Columbia Public Works Department upgraded more than 300 lighting fixtures to run more efficient LED lighting across multiple locations in the Fifth & Walnut, Short Street, and Tenth & Cherry parking garages. This was completed in September 2021. These updates are estimated to reduce our annual kWh usage by more than 215,000 kWh and lead to an estimated annual cost savings of more than $21,000 and approximately 145 annual metric tons of CO2e avoided.*

**Approximate emissions avoided were calculated using 2020 MISO SRMW emissions factors.*

Success: Educational Outreach Program

Over the last few years, the Office of Sustainability has partnered with The Columbia STEM Alliance and Columbia Public Schools to create a series of educational programs. The series emphasizes the connection between City services and programs; protection of resources, the environment, and the community; and personal choices. This programming helps community members see the vital role and positive impact in their everyday lives. Topics include: Litter Prevention, Our Local Waterways, City Recycling, Drinking Water and Energy Conservation, Our Local City Government.

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 Amparan

- 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

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

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.

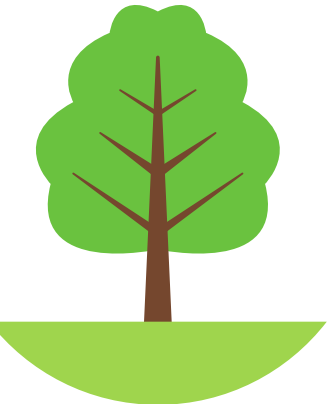
NR - 3.2.2 - Perform detailed studies to identify areas that are at high risk for flooding and are maybe a prospect for property acquisition or mitigation.

- 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).



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.

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	

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.).	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.	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. Present a report for a efficiency program passed by CEC to City Council By end of February 2022	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.	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

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 taff 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.	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 2022 2. CEC should pursue a conversation with community partners to voluntarily adopt same standards with their new construction 3. 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.

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

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	

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

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	

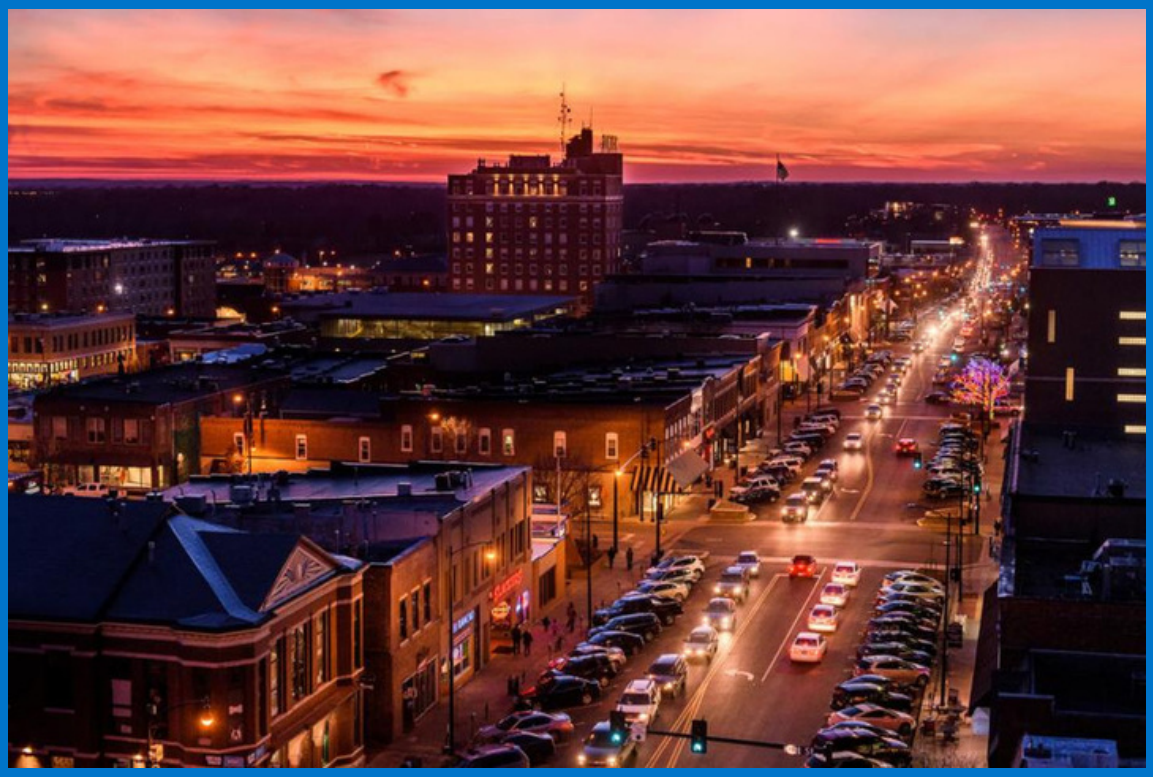
In closing the CEC wants to acknowledge and appreciate the support of the City Council, the City staff and the community. Together we can make the necessary changes to maintain a livable climate for all.

Carolyn Amparan
Chair
Climate and Environment Commission

BE PART OF THE SOLUTION

There are multiple ways you can be involved in local climate action. You can:

- Volunteer to serve on a board or commission
- Become a Climate Ambassador
- Participate in incentive programs for home energy efficiency
- Check out the CAAP Dashboard for more ideas at www.CoMoClimateAction.org



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Sustainability

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