

FAQs ~ Frequently Asked Questions

Climate Action and Adaptation Plan for Columbia, Missouri

1. IN A NUTSHELL, WHAT IS THE PLAN'S PURPOSE?

The Plan's twofold purpose is to make Columbia carbon neutral by 2060 and to prepare our community for both sudden and gradual climate-fueled changes. Using Columbia's 2015 greenhouse gas (GHG) emissions survey as its baseline, the Plan aims to reduce emissions by 50% in the City's municipal operations by 2035 and 100% by 2050. The Plan also reduces emissions by 35% community-wide by 2035, 80% by 2050, and 100% by 2060. This 80x50 community-wide target—an 80% reduction in emissions by 2050—is broadly accepted by other cities across the globe and aligns with the Paris Agreement.¹

2. WHERE CAN I REVIEW A COPY OF THE PLAN?

The Plan is located at www.CoMo.gov/Sustainability/CAAP/

3. WHY DO WE NEED A CLIMATE PLAN AT ALL?

Columbia is experiencing the effects of climate change, and these effects are expected to worsen over time. Here in mid-Missouri, we already see that:

- Heatwaves are more common, more severe and more long-lasting.
- Flooding is occurring more frequently and is more catastrophic.
- Allergy seasons, which also exacerbates asthma, last longer and are more intense.
- Droughts are intensifying, fueling spikes in food prices and food scarcity.
- Severe storms, including high winds and wet microbursts, are more frequent and damaging.
- Diseases, such as Lyme Disease which more than doubled from 2004 to 2016², are spreading more easily.

We also experience harm from climate-fueled changes that don't affect us *directly* here in the Midwest. We help bear the financial costs of rebuilding communities through insurance premiums, taxes, and charitable giving. We mourn the loss of life and property and the destruction of species and habitats. In other communities in the U.S. and across the globe:

- Wildfires are growing in frequency, intensity, and range.
- Sea level rise is forcing the relocation of a growing number of coastal communities.
- Hurricanes are becoming more likely and more dangerous.
- Mass migration, both domestic and international, is intensifying, with people forced to leave homes because of drought, floods, conflicts over scarce resources, and other climate-related disasters.

Climate change and its impacts are accelerating faster than previously understood.³ We are experiencing the damaging effects noted above at the current global warming of 1°C. Global warming will reach 1.5°C sometime between 2030 and 2052 at the current rate of

¹ "Framework for Long-Term Deep Carbon Reduction Planning." Carbon Neutral Cities Alliance. 2018.

² www.cdc.gov/media/releases/2018/p0501-vs-vector-borne.html

³ Global Warming of 1.5°C - An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels.

0.2°C average global rise in temperature each decade. C40—a network of 90 of the world’s largest cities encompassing 700 million people and a quarter of the global economy—warns us:

“Exceeding the 1.5°C global warming limit, even if only temporarily, will lead us into a highly uncertain world. Such an overshoot will push a number of natural and human systems beyond their limits of adaptation and into possible futures about which we have limited scientific knowledge and no institutional or governance experience.”⁴

This Plan is our city’s roadmap. It will guide us in our work together to make Columbia carbon neutral by mid-century and to prepare for climate-fueled changes underway. And there is a silver lining. Actions taken to address climate change also result in “co-benefits,” such as generating a lower cost and more resilient energy grid, providing more healthy and locally available foods, and growing local businesses that contribute to a high quality of life. In other words, acting locally to slow and to adapt to the effects of climate change simultaneously engenders the kind of healthy, vibrant community we want to live in.

4. HOW DID THE PLAN ORIGINATE?

Columbia Mayor Brian Treece joined 407 mayors—representing 70 million Americans—by signing on with Climate Mayors in June 2017 after the President announced his plan to withdraw the U.S. from the Paris Agreement. The goal of the Agreement (the world’s first comprehensive climate accord adopted in 2015 by 195 original signatories) is to limit the increase in the global average temperature to well below 2°C above pre-industrial levels.

Climate Mayors, a peer-to-peer network, pledges to uphold our country’s original commitment to the Paris Agreement by intensifying climate action at the local level. To fulfill his pledge, Mayor Treece asked the City Council to approve a resolution to convene a Mayor’s Task Force on Climate Action and Adaptation Planning. The Task Force, coordinated through the Office of Sustainability, began working alongside city staff and consultants in February 2018 to oversee the development of a Plan for Columbia.

5. WHEN WILL THE CITY COUNCIL VOTE ON THE PLAN?

The City Council will vote on the proposed Plan during a bi-monthly, public meeting on Monday, June 17, 2019. The meeting begins at 7 PM and takes place in the Council Chamber, located in City Hall, 701 E. Broadway. Please plan to attend the meeting!

6. HOW DO I PROVIDE FEEDBACK ON THE PLAN?

A survey soliciting citizen feedback ended May 10, 2019. However, stay tuned! The Plan proposes creation of a Citizens Climate Commission to oversee its implementation. City staff will track and regularly report on the Plan, including GHG emissions and progress

⁴ Summary for Urban Policymakers, What the IPCC Special Report on Global Warming of 1.5°C Means for Cities, Dec 2018, IPCC, pg 11. <https://www.ipcc.ch/site/assets/uploads/sites/2/2018/12/SPM-for-cities.pdf>

toward implementing strategies and actions. The Plan is a living document; it will be revised regularly, and we'll need ongoing citizen input and support.

7. HOW CAN I GET A PRESENTATION ON THE PLAN FOR A LOCAL GROUP?

Submit your request to Sustainability@CoMo.gov to let us know that you'd like a speaker for a club, neighborhood association, church group or any other organization you're involved in. Members of the Mayor's Task Force and City staff are available to customize a presentation to suit your audience, time parameters, and desired content.

8. HOW WILL THE CITY MAKE SURE THIS PLAN DOESN'T HURT LOW INCOME FAMILIES AND THAT LOW INCOME FAMILIES CAN PARTICIPATE?

It is particularly unjust that those who are most vulnerable to the effects of climate change are often those who have contributed the least to its causes. When developing the Plan, Task Force members prioritized actions that benefit individuals, families, and neighborhoods more likely to suffer from climate hazards. Special care will be paid during the Plan's implementation to ensure folks most vulnerable, including low income neighborhoods, people of color, the young and the elderly, are lifted up. We will:

- Design policies and programs that serve disadvantaged neighborhoods first.
- Focus policies and programs on neighborhoods experiencing high pollution burdens, poverty, health issues, and exposure to climate hazards.
- Use an "equity checklist" when implementing actions.
- Involve, proactively and regularly, community leaders and citizens from neighborhoods most harmed by climate hazards.

Got additional ideas? Please share by completing the survey at CoMoClimateAction.com

One area of concern is the impact on rents if rental properties are required to become more energy efficient. According to the Division of Energy within the Missouri Department of Economic Development:

"Households that have received weatherization services are better able to pay utility bills and reduce debt. A home that has been weatherized can reduce average annual fuel usage per dwelling by 35 percent for the typical low income home."⁵

"Low income households spend nearly 14 percent of their total annual income on energy costs. Other households spend only 3 percent of their annual income, on average, on energy costs. Low income families often cut back on other necessities to pay their energy bills."⁶

Although rents may increase slightly after weatherization and energy efficiency improvements, landlords should be able to keep the rent increases below the levels of the utility savings and still earn a return on their investment.

⁵[https://exportmissouri.mo.gov/energy/consumers/assistance-programs/low-income-weatherization-assistance-program-\(liwap\)](https://exportmissouri.mo.gov/energy/consumers/assistance-programs/low-income-weatherization-assistance-program-(liwap)); ORNL/TM-2010/66. EIA February 2010 Short Term Energy Outlook;

⁶[https://exportmissouri.mo.gov/energy/consumers/assistance-programs/low-income-weatherization-assistance-program-\(liwap\)](https://exportmissouri.mo.gov/energy/consumers/assistance-programs/low-income-weatherization-assistance-program-(liwap))

9. WILL MY ELECTRIC BILL GO UP IF WE IMPLEMENT THIS PLAN?

Many factors influence the size of a business or household's electric bill, including the cost and amount of electricity used. Improving the energy efficiency of our households and businesses over time will lower the amount of electricity each household uses and is billed for and will help Columbia Water & Light meet our electricity demands with 100% renewable clean energy. After weatherization improvements to a residence, the households save on average \$437 annually on energy bills.¹¹

To improve the energy efficiency of your home or business and to reduce energy use, visit: ColumbiaPowerPartners.com. For tips on how to be energy efficient in a rental unit or to find an efficient rental, visit: <https://www.CoMo.gov/utilities/ucs/usage-history/>.

The costs for clean renewable energy have dropped significantly. Some utilities are acquiring renewable energy for electricity at prices equal to or lower than fossil fuel generated electricity. Several factors, including energy supply in the Midwest, technology improvements, and subsidies all impact the costs Columbia Water & Light will pay for new contracts. While no one can predict whether rates will need to go up, remain the same or possibly even go down as we work to achieve the Plan's goals, the trend is for renewable energy prices to cost less than fossil fuel alternatives by 2020.⁷ Columbia Water & Light and the City Council understand the need to minimize any rate increases, and efforts will be made to achieve the Plan's goals without significant rate increases.

10. WHY WASN'T PERSONAL CONSUMPTION INCLUDED IN THE PLAN?

The Plan's focus is on collective action, mapping the policies and strategies that we as citizens and City staff can and must do together to transform to carbon neutrality the systems that keep our community humming—transportation, energy, housing, natural resources, health services, and waste management. Greenhouse gas emissions from these sectors are also more measurable; unfortunately, personal consumption is not trackable or measurable at the community level.

Nevertheless, reducing our own personal consumption will be key to making Columbia carbon neutral by 2060. Reducing our individual carbon footprint is not enough to mitigate climate change, but it can and will make a difference. Says Richard Heede, co-founder of the Climate Accountability Institute:

"We can't solve the problem by ourselves, but it would be a morally better choice to attempt to do something and derive satisfaction by it, rather than saying, "My carbon savings don't matter." Because they do matter! They matter symbolically. They matter financially. They matter morally. They matter to your neighbors."⁸

A good place to start for ideas to reduce your own consumption is "78 Actions an Individual Can Take to Slow Climate Change."⁹

⁷ www.businessinsider.com/renewable-energy-will-be-cheaper-than-fossil-fuels-by-2020-2018-1

⁸ <https://www.vox.com/the-goods/2018/10/12/17967738/climate-change-consumer-choices-green-renewable-energy>

⁹ <http://slowingclimatechange.blogspot.com/2018/05/78-actions-individual-can-take-to-slow.html>

11. WHY WEREN'T THE ACTIONS I PROPOSED INCLUDED IN THE DRAFT PLAN?

The Task Force received many suggestions for actions to include in the plan. During a lengthy process, each action was evaluated by teams of City staff and Task Force members on five criteria: Effectiveness in reducing GHG emissions or helping the community adapt to climate change impacts; Anticipated costs; Equity; Technical feasibility (including the skills within the City to implement the action); and Co-benefits to accomplishing other quality of life goals in Columbia.

The actions that were included in the proposed Plan were ranked, based on all five criteria, to accomplish the goals that have the most immediate impact. Additionally, some of the proposed actions are necessary first steps to pave the way for other actions in the future. Additional actions will be considered and added to the Plan over time.

12. HOW CAN I HELP ACHIEVE THE GOALS IN THE PLAN?

You can support the Plan in a variety of ways, including:

- Contact the Mayor and your City Council Member with your message of support. (Contact information is located at CoMo.gov/council).
- Write a letter to the editor or an opinion editorial for a local paper.
- Request a presentation about the Plan for a community organization you're part of.
- Share information about the Plan with your social and professional networks.
- Chat about the Plan informally with your family, friends, neighbors and coworkers .
- Make choices to reduce your own carbon emissions (see #10 above for ideas).

It is important to start now to make changes in our own lives. We must not wait for the effects of climate change to worsen. We've been dumping GHG emissions into our atmosphere since the start of the Industrial Revolution; it will take time to draw down emissions to a safe level.

13. HOW WILL THE CITY AFFORD TO TAKE THESE ACTIONS?

Funding will come from a variety of sources. The City historically has been able to obtain grants for sustainability projects, such as acquiring electric buses. City staff will track savings from Climate Action and Adaptation Plan projects so that these savings can be re-invested in actions that further the Plan's goals. As decisions are made on new expenditures, higher priority will be placed on funding those actions that result in low or no emissions. City staff is also participating in a pilot project with Urban Sustainability Directors Network to look at financing options to implement actions proposed in the Plan.

14. I DON'T THINK THE GOALS ARE AGGRESSIVE ENOUGH GIVEN THE SCOPE OF THE CLIMATE CRISIS. WHAT WILL COLUMBIA DO TO QUICKLY REDUCE GREENHOUSE GAS EMISSIONS?

Yes, the situation is dire. We already are experiencing the damaging effects of climate change at the current global warming of 1°C. Warming will reach 1.5°C sometime between 2030 and 2052 at the current rate of 0.2°C average global rise in temperature each decade.

Using a computer model to predict the effectiveness of proposed actions on emissions reductions, the Plan will enable Columbia not only to meet the proposed 35% GHG reduction goal by 2035 but to exceed it. The model analysis shows that Columbia can achieve a 56% reduction in community-wide emissions from 2015 levels by 2035, and an 83% reduction by 2050. Reducing emissions by 56% by 2035 would put Columbia in line with the latest recommendations by the Intergovernmental Panel on Climate Change (IPCC) to keep the average global warming temperature under 1.5 °C.⁸

15. WHY SHOULD WE IMPLEMENT THIS PLAN WHEN OTHER CITIES OR COUNTRIES MAY NOT BE ACTING AS AGGRESSIVELY?

Communities like ours that can act, must act. The Natural Resource Defense Council makes our challenge clear:

“...failing to do enough or by doing it too slowly—would mean substantially more lives lost and ruined. It would mean more extinct species and more superstorms. It would mean fewer fish in the sea due to ocean acidification and fewer ecosystems capable of supporting biodiversity. It would mean more strain on economies and more people thrust into poverty. So it turns out that every half a degree of warming—or even a tenth of a degree—matters quite a bit.”¹⁰

The world’s cities are responsible for 70 percent of GHG emissions.⁹ In Columbia, our GHG emissions in 2015 were 20.5 metric tons per person, well above that same year’s national average of 15.98 metric tons. Coupled with the fact that the U.S. has the highest carbon footprint per person and is the second largest overall contributor of GHG emissions in the world, we as residents of both Columbia and the U.S. are doubly responsible for generating more than our fair share of GHG emissions.

When we take action, we are not alone. Other countries such as the European Union and China are rapidly converting from fossil fuels to clean renewable energy. For example “Germany, one of the world’s biggest consumers of coal, will shut down all 84 of its coal-fired power plants over the next 19 years.”¹⁰

When we take action, we not only take responsibility for our community’s role in addressing climate change, we inspire others. C40, the climate action network of the world’s largest cities, states that “lessons learned in some cities and urban areas can serve as inspiration and resources for solutions in other urban areas.”¹¹ We must be that kind of community, lighting the way for others to follow.

¹⁰ The IPCC Climate Change Report: Why It Matters to Everyone on the Planet, November 21, 2018, Courtney Lindwall, Natural Resource Defense Council
<https://www.nrdc.org/stories/ipcc-climate-change-report-why-it-matters-everyone-planet>

¹¹ Summary for Urban Policymakers, What the IPCC Special Report on Global Warming of 1.5°C Means for Cities, December 2018, IPCC.

¹⁰ www.latimes.com/world/europe/la-fg-germany-coal-power-20190126-story.html?outputType=amp&fbclid=IwAR3dsCDA4H7xNYG63MV6WIWtLa49ZUGGkR_KfsIOypOYRyJSXZykNaBTn8g

¹¹ ORNL/TM-2010/66, EIA February 2010 Short Term Energy Outlook