

III. Introduction

Purpose and Guiding Principles

Cities play a pivotal role in addressing climate change. Half the world's population lives in urban areas, and cities often serve as first responders to the extreme weather associated with climate change. According to the United Nations, cities consume more than two-thirds of the world's energy and account for more than 70 percent of global carbon emissions—which means they also play a critical role in cutting emissions.² While the City of Rockville's share of global emissions is relatively small, community leadership is a powerful force when multiplied across cities throughout the world.

Rockville's first Climate Action Plan (CAP) prioritizes strategies to reduce greenhouse gas (GHG) emissions and prepare the community to adapt to a changing climate. Building on past achievements, the plan will guide future City policies, programs, projects, plans and investments over the next five to ten years. The plan seeks to advance Rockville toward being both climate-friendly and climate-ready by implementing a variety of strategies:

- **Mitigation (climate friendly)** - mitigation strategies including conservation, renewable energy, storage, and sequestration that slow the pace and lessen the severity of climate change by reducing or offsetting greenhouse gas emissions from local government and community-wide activities; and
- **Resiliency (climate ready)** - resiliency strategies including hazard mitigation, emergency preparedness, and environmental management that protect infrastructure, buildings, services, ecosystems, public health, and quality of life from the impacts of climate change by reducing community vulnerability and increasing the capacity to recover from a disturbance and/or adapt to new conditions.

The Climate Action Plan contains a variety of actions; several are low cost or could be integrated into current programs and absorbed into existing budgets, while others require funding and staff resources to be implemented. The plan sets out foundational strategies based on best practices and local research, with strategies to target emissions and climate resilience that are within the City's influence. Actions will require focused efforts across many programs and departments. Many are also interdependent with Montgomery County, State, regional and federal activities. Rockville's Climate Action Plan intends to:

- Focus on cost-effective, fair, equitable and reasonable actions that reduce greenhouse gases quickly and foster community resilience;
- Ensure that benefits and savings are accessible to those who need it most;
- Leverage available resources, partnerships, financing, and incentives to maximize impact;
- Reflect community values and create environmental, safety, and economic benefits for a thriving Rockville;
- Demonstrate City leadership;
- Advocate for advancements at the county, state, regional, and federal level; and
- Evolve over time and be flexible to respond to new priorities and opportunities.

² United Nations Human Settlements Programme, World Cities Report 2020.
https://unhabitat.org/sites/default/files/2020/10/wcr_2020_report.pdf

During the planning process, the City emphasized coordination with the goals and strategies of other jurisdictions in the region to maximize impacts and benefits. The CAP aligns with the following plans and seeks to leverage group action to complement local programs to best serve Rockville:

- [Montgomery County Climate Action Plan](#)
- [Metropolitan Washington Council of Governments \(COG\) 2030 Climate and Energy Action Plan](#)
- [Maryland 2030 Greenhouse Gas Emissions Reduction Act Plan](#)

Rockville's Climate Commitments and Progress

Rockville's elected officials adopted several climate commitments over the last decade and agreed that the next critical step was to engage with community partners to develop and adopt a Climate Action Plan (Figure 1).

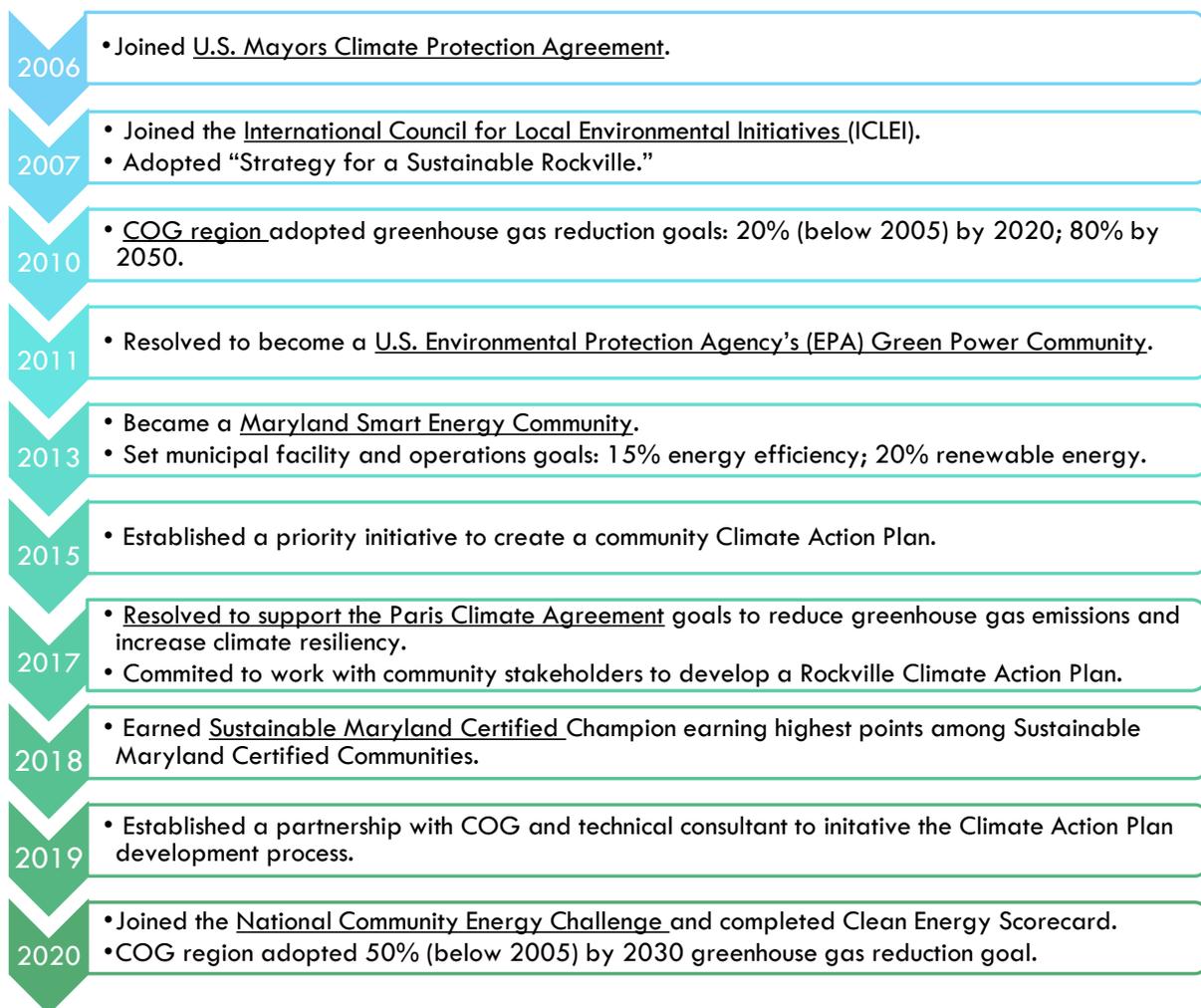


Figure 1: Rockville Climate Commitments

Since 2006, Rockville has made progress towards these commitments, including, but not limited to:

- green building and energy efficiency codes,
- extensive bicycle and pedestrian programs,
- energy benchmarking requirements for commercial buildings,
- RainScapes Rewards incentive program for environmentally friendly landscape practices,
- municipal facility energy upgrades,
- residential solar co-op program,
- robust volunteer Weed Warrior and stream clean-up programs,
- electric and hybrid fleet vehicles and electric vehicle charging stations,
- residential recycling programs for single-stream materials, yard waste, metal, and electronics, and
- annual tree and native seed giveaways.

These programs contributed to Rockville's earning:

- Sustainable Maryland Certification through the Maryland Municipal League and the University of Maryland Environmental Finance Center;
- Tree City USA certification for 32 years from the Arbor Day Foundation;
- Community Wildlife Habitat certification from the National Wildlife Federation; and
- Bike Friendly Community designation from the League of American Bicyclists.

Rockville's climate initiatives continue to evolve. Concurrent with CAP planning efforts, the City is coordinating with the Maryland Energy Administration to assess 6 Taft Court, a 55,350 square foot office building purchased in 2019, for solar and microgrid feasibility and to assess the municipal fleet for electrification opportunities. The City is also working with Pepco on installations of public electric vehicle charging stations along municipal rights-of-way, planning light-emitting diode (LED) streetlight retrofits, and collaborating with community partners to implement energy audits and weatherization improvements for low-to-moderate income homes. These actions contribute to energy efficiency, renewable energy, sustainability, and climate resilience while also meeting other community goals like safety, accessibility, and environmental quality.

The City can build upon the success of our programs (summarized Figure 2); however, more needs to be done to meet the City's climate goals and address equity challenges. Additional resources, investment and leadership will be needed to further advance climate initiatives to bring about the rapid and far-reaching changes needed for the plan's success and to protect future generations in Rockville.





764 solar permits issued



45% residential recycling rate



34 miles shared-use paths



12 public EV charging stations and 2,279 electric vehicles registered in Rockville.

City Fleet has 1 electric, 1 hybrid and 1 charging station.



22 energy audits and improvements for low to moderate income homes. The City completed 9 energy efficiency projects.



More than 87 million kilowatt hours of green power purchases in 2020; The City purchased wind renewable energy certificates for 100% of municipal electricity



200 buildings report energy benchmarking data. The City tracks energy use for all 150 municipal accounts.



32 years Tree City USA
28,000 street trees
300 trees distributed in annual tree giveaways



More than 70 green buildings and 55 ENERGY STAR buildings

Figure 2: Rockville Progress (as of 2020)

How the Climate Action Plan was Developed

Work on elements of the Climate Action Plan began in 2015 when the Mayor and Council first designated the plan as a priority. Initial work included developing greenhouse gas inventories and reviewing best practices, climate change impacts, and City actions to date. Adopted in August 2021, Rockville's Comprehensive Plan update involved extensive community engagement sessions between 2015 and 2021. This process provided an opportunity to integrate broad sets of goals, policies, and actions to reduce greenhouse gas emissions and increase resiliency to climate change in the comprehensive plan for the first time. The CAP provides a deeper analysis and outlines specific actions and implementation measures to achieve the goals. Figure 3 illustrates the CAP development timeline.

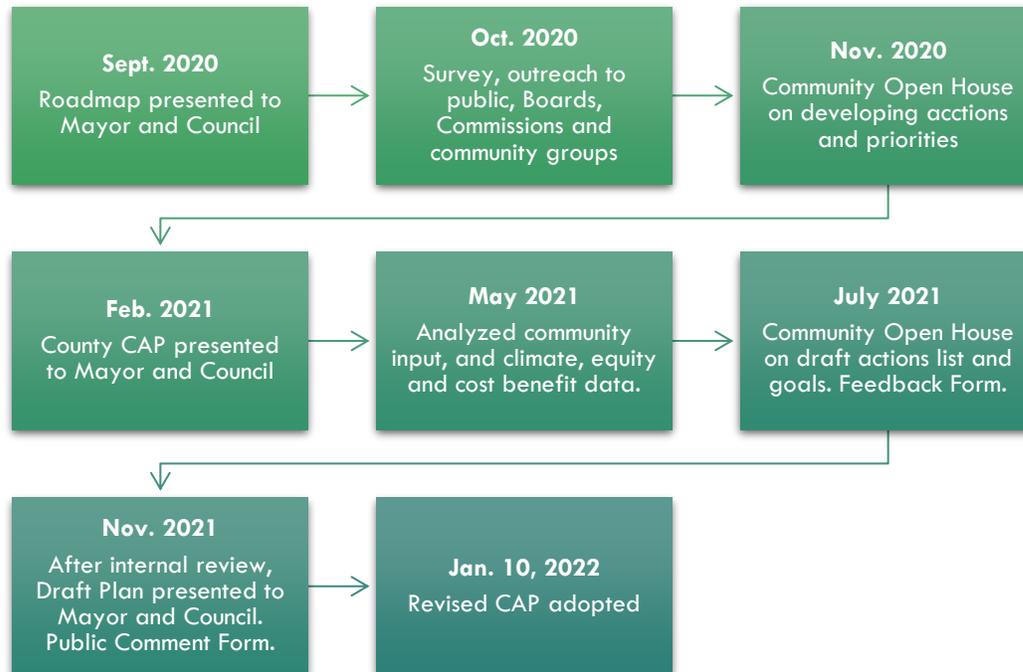


Figure 3: Climate Action Plan Development Timeline

First, the Mayor and Council reviewed the Roadmap to developing a Climate Action Plan in September 2020. Throughout the fall and winter of 2020 and 2021, staff opened an online survey and engaged with various boards, commissions, and community groups to provide a climate action process overview and seek feedback on local concerns, strategies, and barriers to action. Due to the pandemic, engagement was conducted virtually. After reviewing stakeholder input, staff worked with a technical consultant, Cadmus, to develop a reduction pathway and a cost benefit assessment. A draft actions list was developed based on climate, equity, and cost benefit data tailored to Rockville community priorities. An open house was held July 2021 to update the community on the draft plan goals, greenhouse gas reduction pathway, and draft actions list, and to invite community feedback through an online Feedback Form. With this input the draft plan was developed, underwent internal review by City departments, and was presented to the Mayor and Council on November 2021 for comment. The public was invited to comment through an online Comment Form. The comments resulted in a revised plan which Mayor and Council adopted January 10, 2022 with a Resolution to Transition the City's On-road Fleet to Cleaner and More Efficient Fuel Sources (Appendix D). Implementation will be phased-in through 2030 with changes in current policies or upon budget appropriation for actions that require additional resources.

Community Engagement

Throughout the process, the City connected with more than **200 participants** during **20 virtual events** and received **525 survey responses**, **50 feedback forms** on the draft list of actions, and **79 comments** on the draft plan (Figure 4). The City engaged with 11 commissions, committees, and community groups. Virtual office hours were held so that the public could have more in-depth conversations with staff. Rockville's Climate Change Survey was open to the public from September 2020 to February 2021. The survey was widely promoted and was translated into Chinese and Spanish. A plan update open house event was held in summer 2021 to gather feedback on proposed climate mitigation goals and the draft action list. Attendees and others following the process (including previous participants) and the public were invited to submit their comments on a Feedback Form which received **over 50 responses**. A total of **79 comments** were received on the draft plan. Mayor and Council presentations guided the plan through to adoption. Feedback highlights are summarized in the next section.

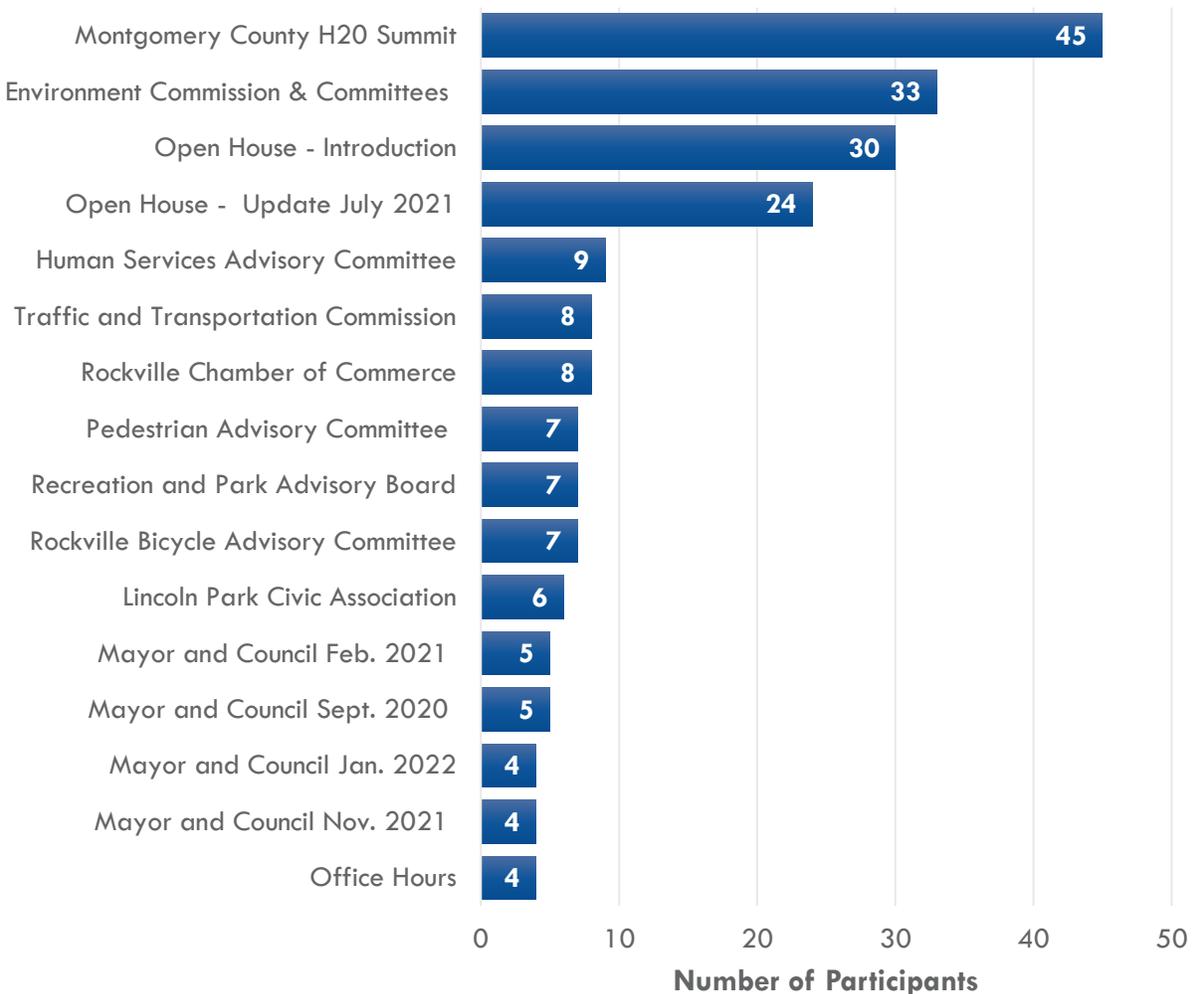


Figure 4: Climate Action Planning Meeting Participation

Public Feedback Summary

Rockville Climate Change Survey Highlights

Rockville’s Climate Change Survey involved 525 respondents providing feedback on multiple choice questions and submitting more than 700 comments (Figure 6). Survey highlights include:

- About 89 percent rated global warming as very or extremely important to them personally.
- Respondents revealed concerns for a variety of climate change risks for Rockville; 82 to 87 percent were concerned/very concerned with impacts on air quality, infrastructure, natural areas, vulnerable people, heat waves, stronger storms, increased pests, and urban drainage.
- Respondents wanted Rockville to prioritize actions that reduce GHGs fastest, further equity and benefit historically disadvantaged groups, and provide co-benefits such as job creation, health, and environmental quality. They placed less priority on actions that have lower costs, although Rockville is still taking cost into consideration.
- Respondents indicated the individual climate actions they were most interested in pursuing: recycling/reducing waste, planting trees/protecting forests, reducing food waste/composting, taking more non-auto trips, building energy retrofits, gardening, and purchasing green electricity.
- Barriers to participation that should be factored into the CAP include being a renter, living in multi-family homes, lack of information, cost, or level of difficulty in pursuing the action.
- More that 76 percent indicated moderate or strong support for the City to implement all the following actions in the CAP (Figure 5):

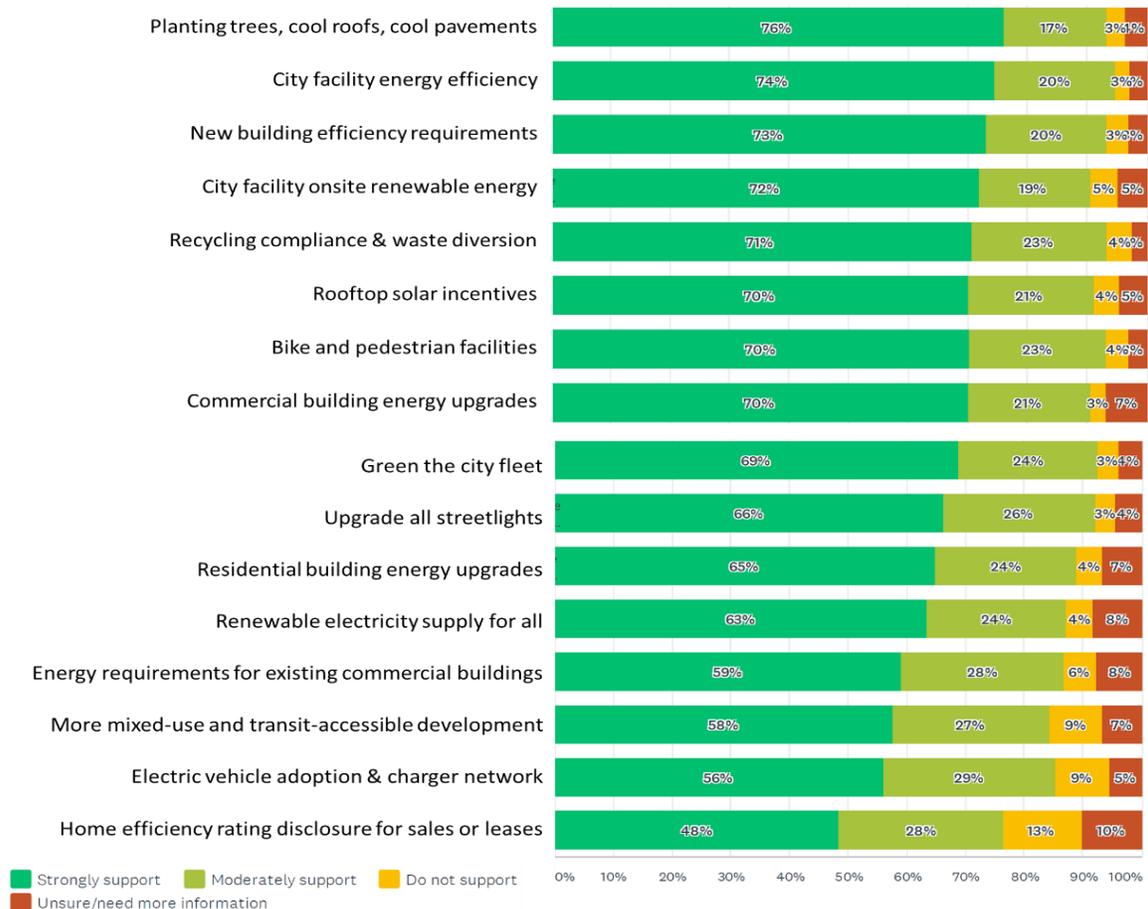


Figure 5: Rockville Climate Survey Response Ratings for Actions the City Should Implement



Figure 6: Rockville's Climate Change Survey – Community Comments

Public Feedback on Draft Climate Actions List

Public survey input and the consultant analysis fed into the development of goals and a draft list of climate actions presented at a virtual open house on July 22, 2021. The public was again invited to comment on the measures in a feedback form and 50 respondents evaluated the suite of actions within each CAP category according to the following ratings:

- **Actions About Right for Rockville:** For all seven categories, a majority, 57 percent or more of respondents, rated the actions as “about right for Rockville.” Actions within Resiliency (69%) and Public Engagement and Oversight (67%) accrued the highest approval.
- **Actions Not Ambitious Enough for Rockville/Actions Missing:** About 20 to 30 percent of respondents indicated that the sets of draft actions were not ambitious enough for Rockville or that some major actions were missing. Land Management Actions (33%) and Sustainable Transportation Actions (35%) had the most respondents wanting to see actions go further with stronger provisions for protecting open space and mature trees, creating safe pedestrian areas, separated biking opportunities, and accelerating electric vehicles. Action descriptions in Section VI were designed to provide leadership with opportunities to pursue basic or enhanced levels of service in these areas.
- **Actions are Too Ambitious or Unfeasible for Rockville:** A few respondents, 2 to 4 percent, indicated the sets of draft actions were too ambitious or unfeasible for Rockville. Land Management, Transportation, Renewable Energy, and Energy Efficiency all received 4 percent of respondents rating actions in this category. Many survey respondents noted that many of these measures involved areas outside of local control and relied on several levels of systematic change. For example, respondents indicated that electric vehicle GHG emissions reductions would only occur when investments were made in a cleaner, robust, and reliable electric grid.

This initial feedback indicated the action list is moving in the right direction and that if additional resources were available, some members of the public support more ambitious actions but also wanted to see measured results. A few examples of the range of the public comments on CAP actions are in Figure 7.

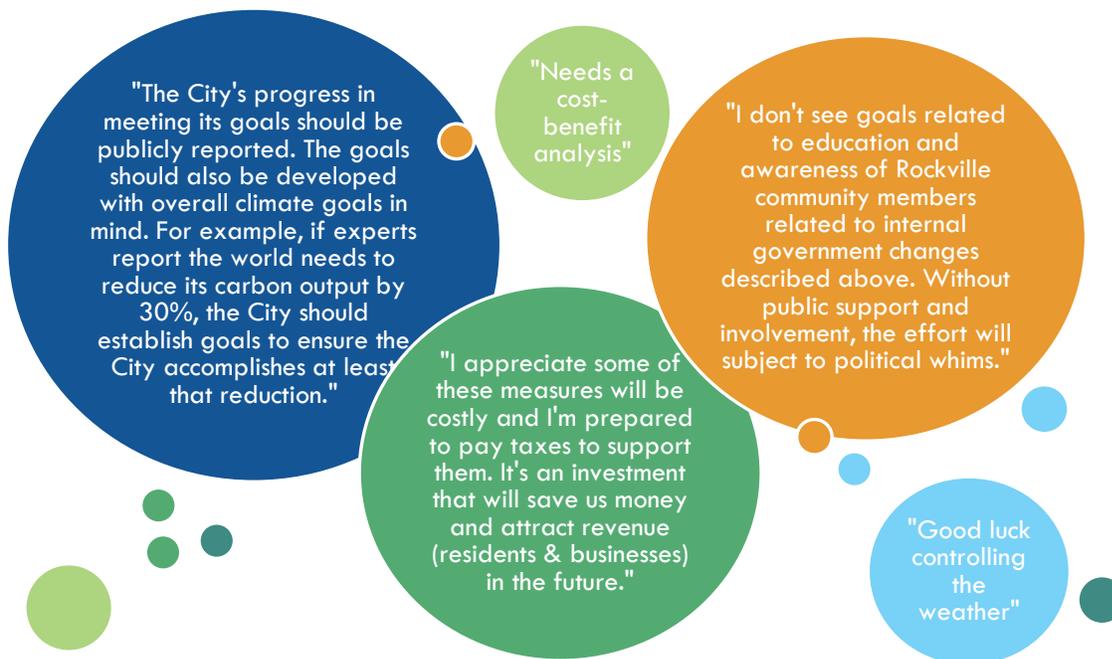


Figure 7: Public Feedback on Rockville's climate actions

Feedback on the Draft Climate Action Plan

After undergoing extensive internal review involving all major City departments, the Draft Climate Action Plan was released for public comment from October to early December 2021. Mayor and Council received a presentation on the draft plan November 15, 2021 and were invited to provide additional comments. Public comments on the Draft Climate Action Plan were submitted through community forum, online Comment Form, staff climate change office hours, and sent electronically by the Rockville Environment Commission and the Rockville Human Rights Commission.

In total, the City received 35 comments from Mayor and Council and 44 comments from the public. Overall, both sets of comments were supportive of the plan and provided helpful suggestions to strengthen actions and to clarify measures, the analysis, and the process for implementation. Some comments suggested new actions that require additional changes to county, state, or federal policies, and research and analysis to determine the City's authority and capacity for implementation. These actions were included in a new *Appendix C, Climate Actions for Future Monitoring*.

Several comments supported a wide range of topics and policies contained in the draft CAP, including equity for socially vulnerable communities, solar and green power, land use and transportation management and advocacy, streamlining permitting, flood resiliency and emergency management, tree protection, and greening the city fleet. Comments resulted in several revisions throughout the document which served to strengthen and clarify the draft Climate Action Plan.