



CITY OF ROCKVILLE



# CLIMATE ACTION PLAN

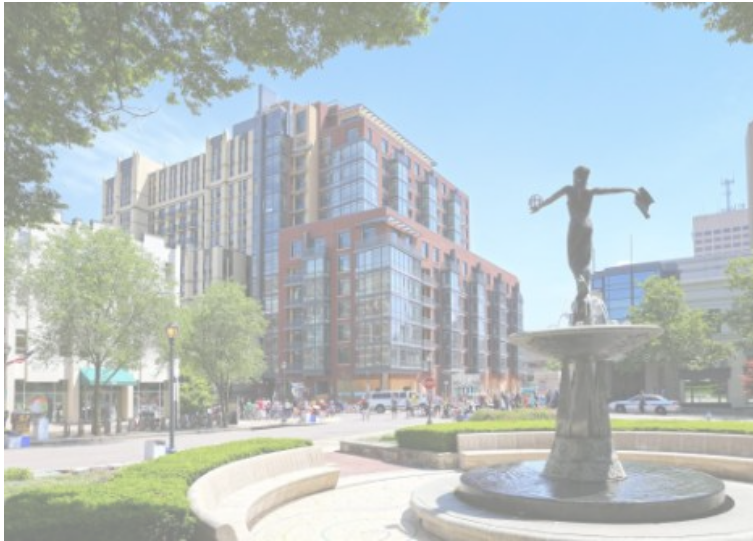
Draft Plan Presentation and Discussion

Mayor and Council

November 15, 2021

# Purpose

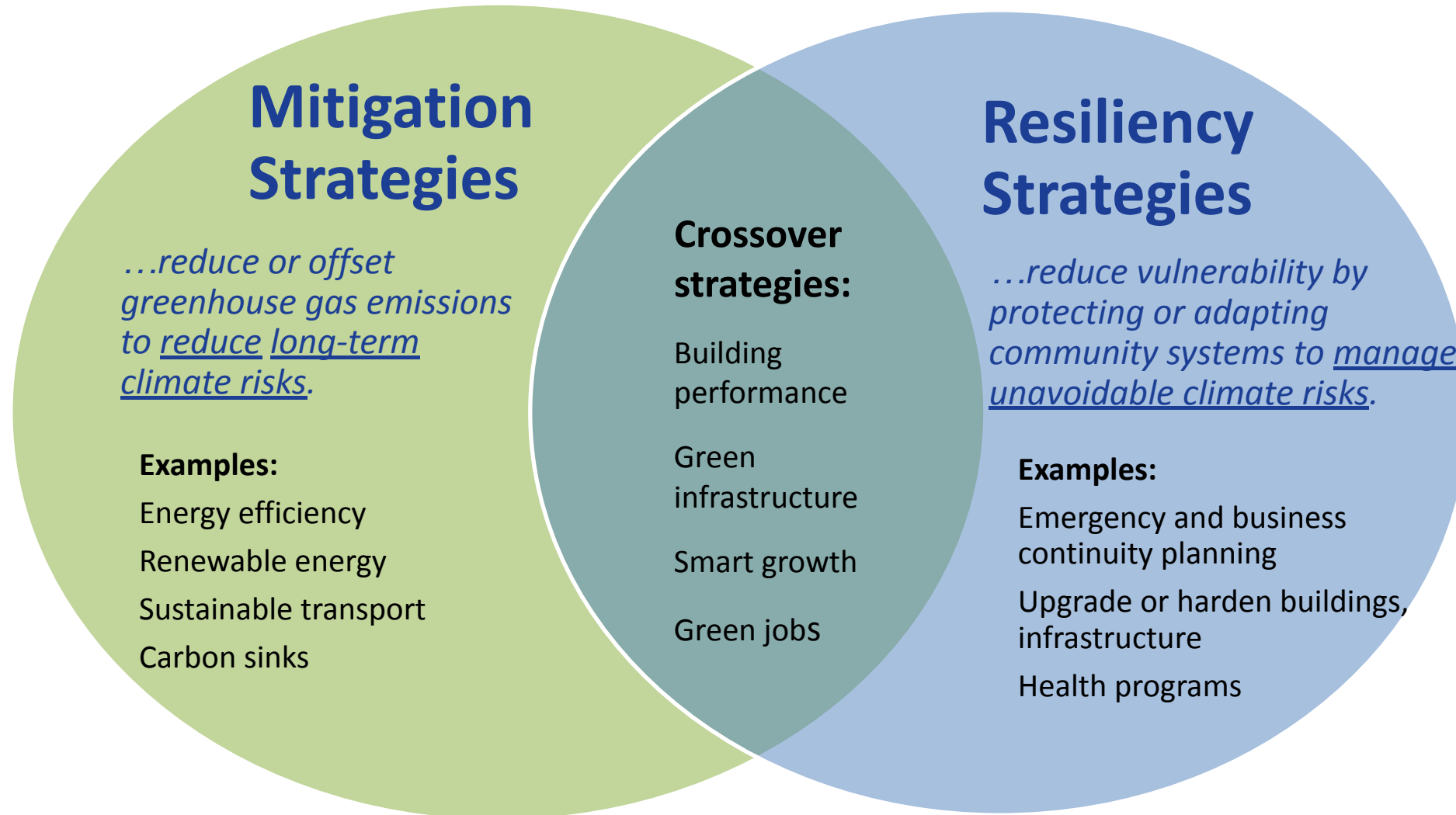
- Presentation and discussion on the draft Climate Action Plan
- Approve Climate Action Plan schedule



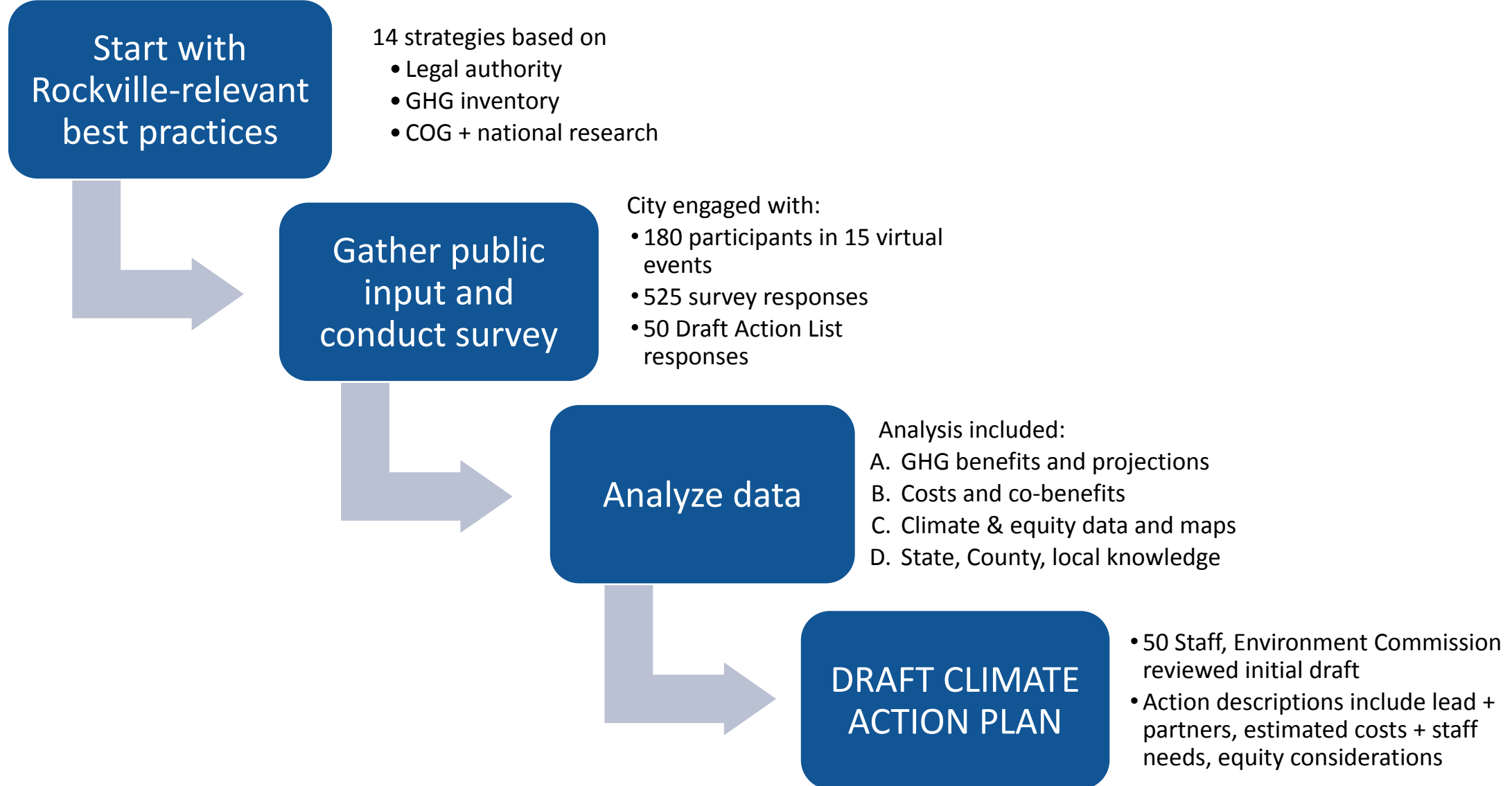
# Process/Schedule

- Mayor & Council Draft Climate Action Plan Presentation– **November 15, 2021**
- Public review of Draft Climate Action Plan– **open October 25 through December 3, 2021**
  - Visit [www.rockvillemd.gov/climate](http://www.rockvillemd.gov/climate)
  - Climate Office Hours – November 18 and 30
- Mayor & Council submit comments & questions – **December 17, 2021**
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# What is a Climate Action Plan?



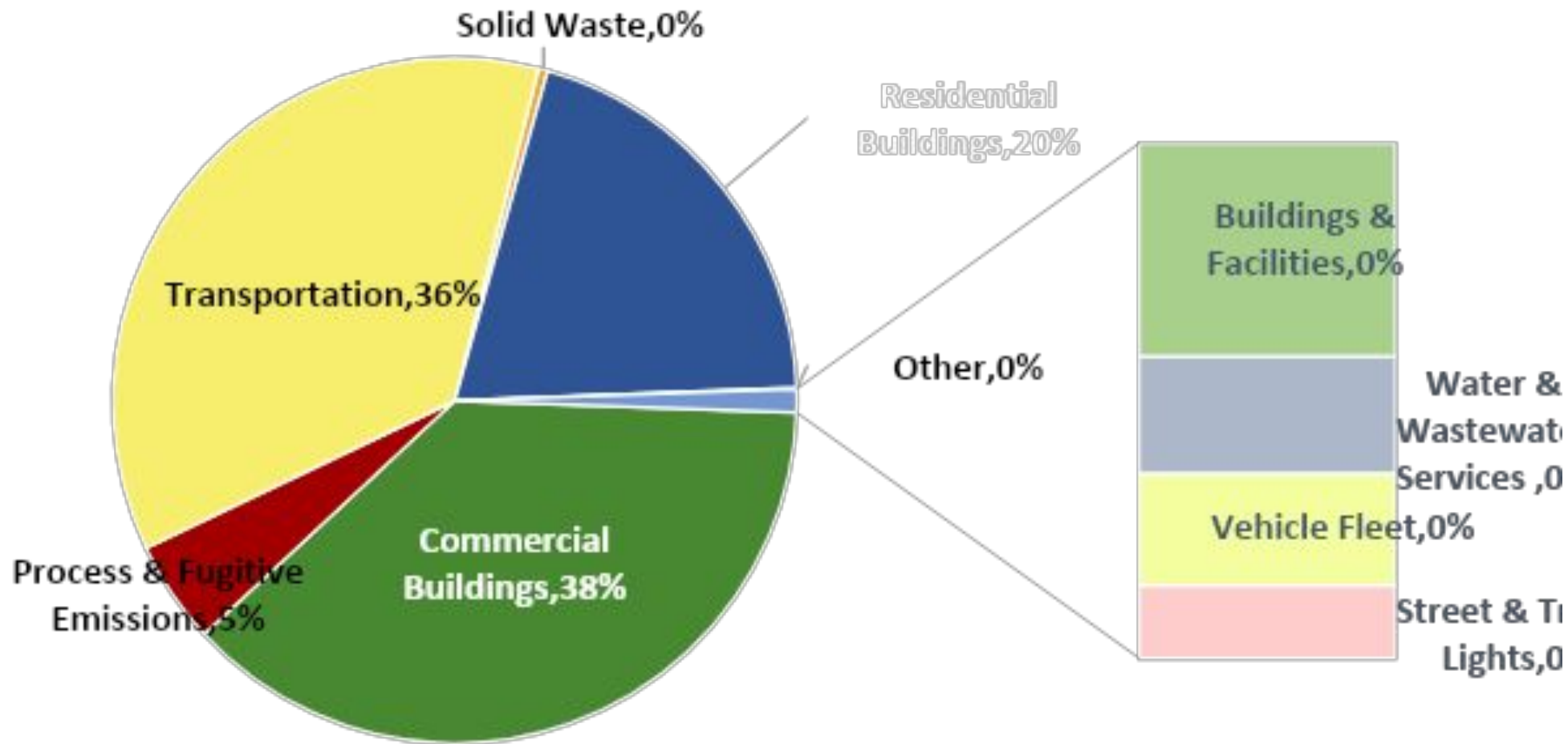
# Developing the Draft Plan



# Greenhouse Gas Emissions

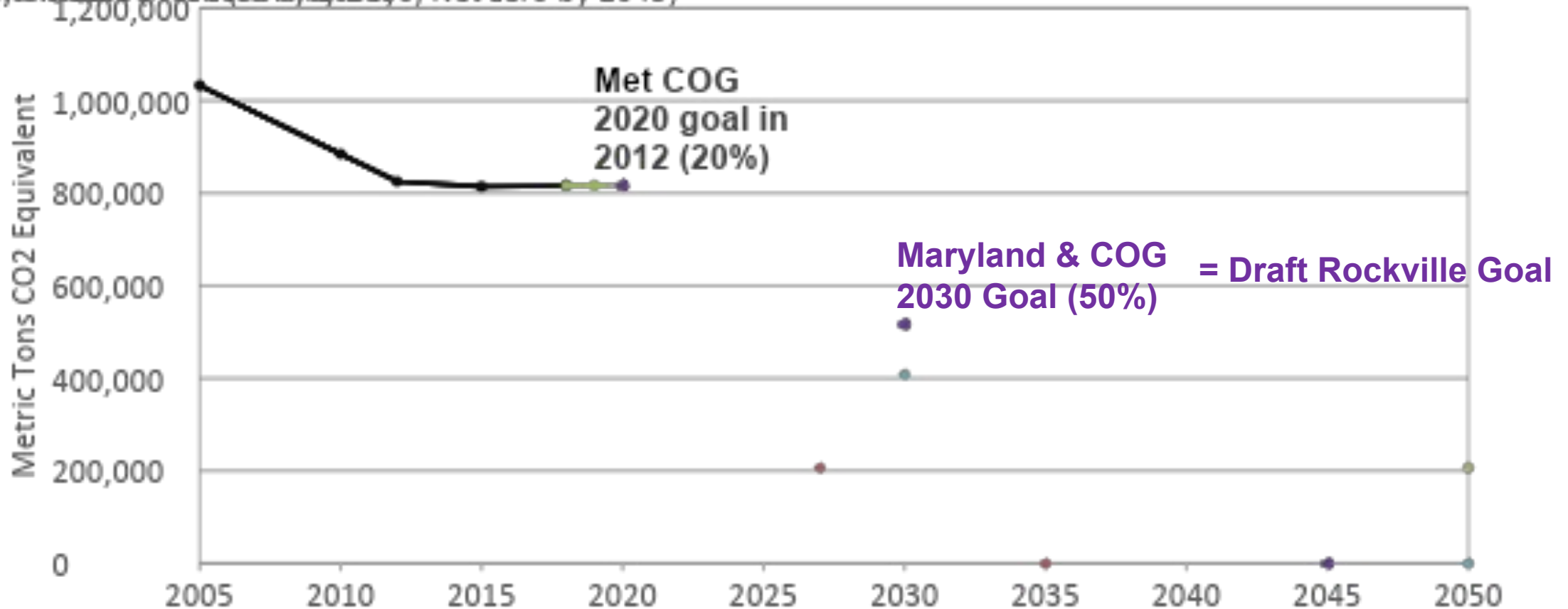
Community Total: 816,868 MTCO<sub>2</sub>e

Municipal Total: 8,994 MTCO<sub>2</sub>e



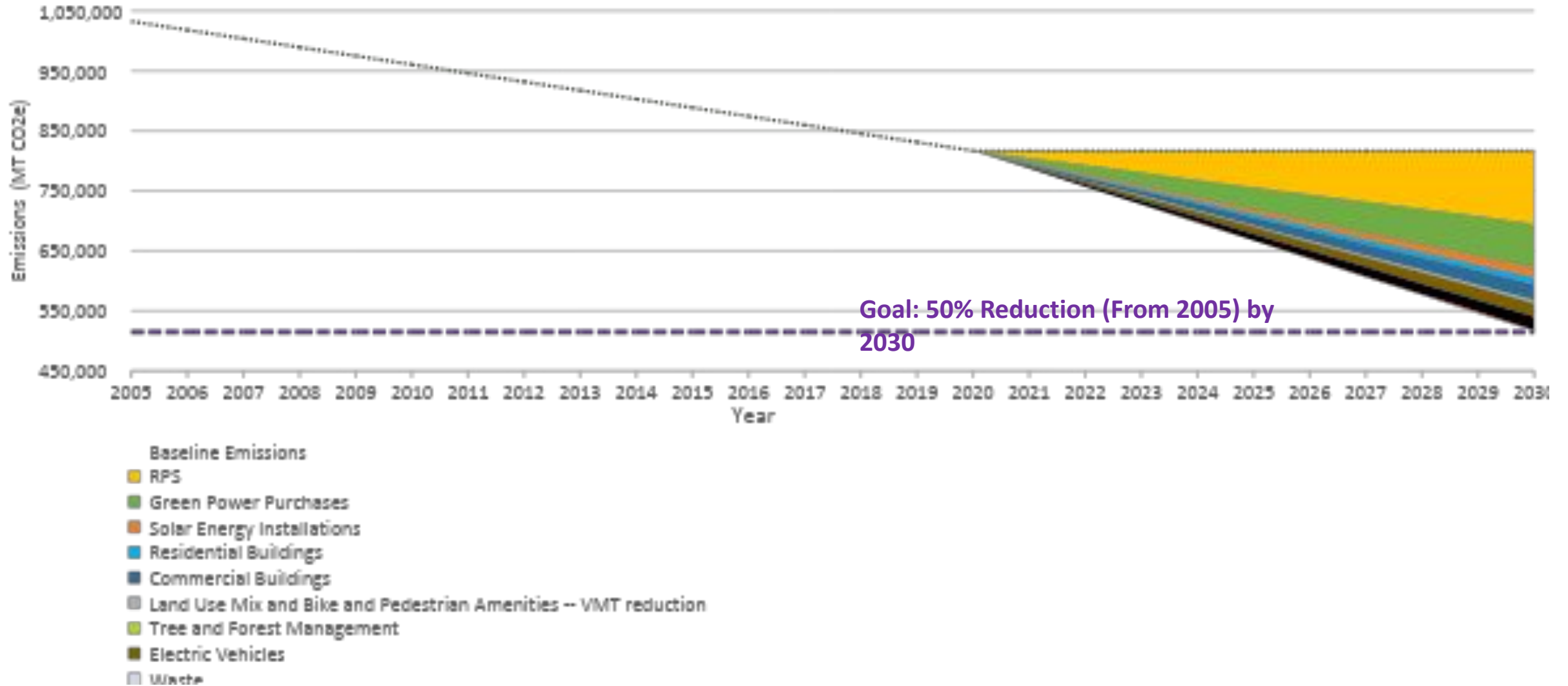
# Emissions Reduction Goals

- Rockville Historical
- COG (50% by 2030; 80% by 2050)
- COG Proposed?
- Montgomery Co. (Net zero by 2035)
- Maryland (2030 Phase 1, 50% by 2030, Net zero by 2045)
- 





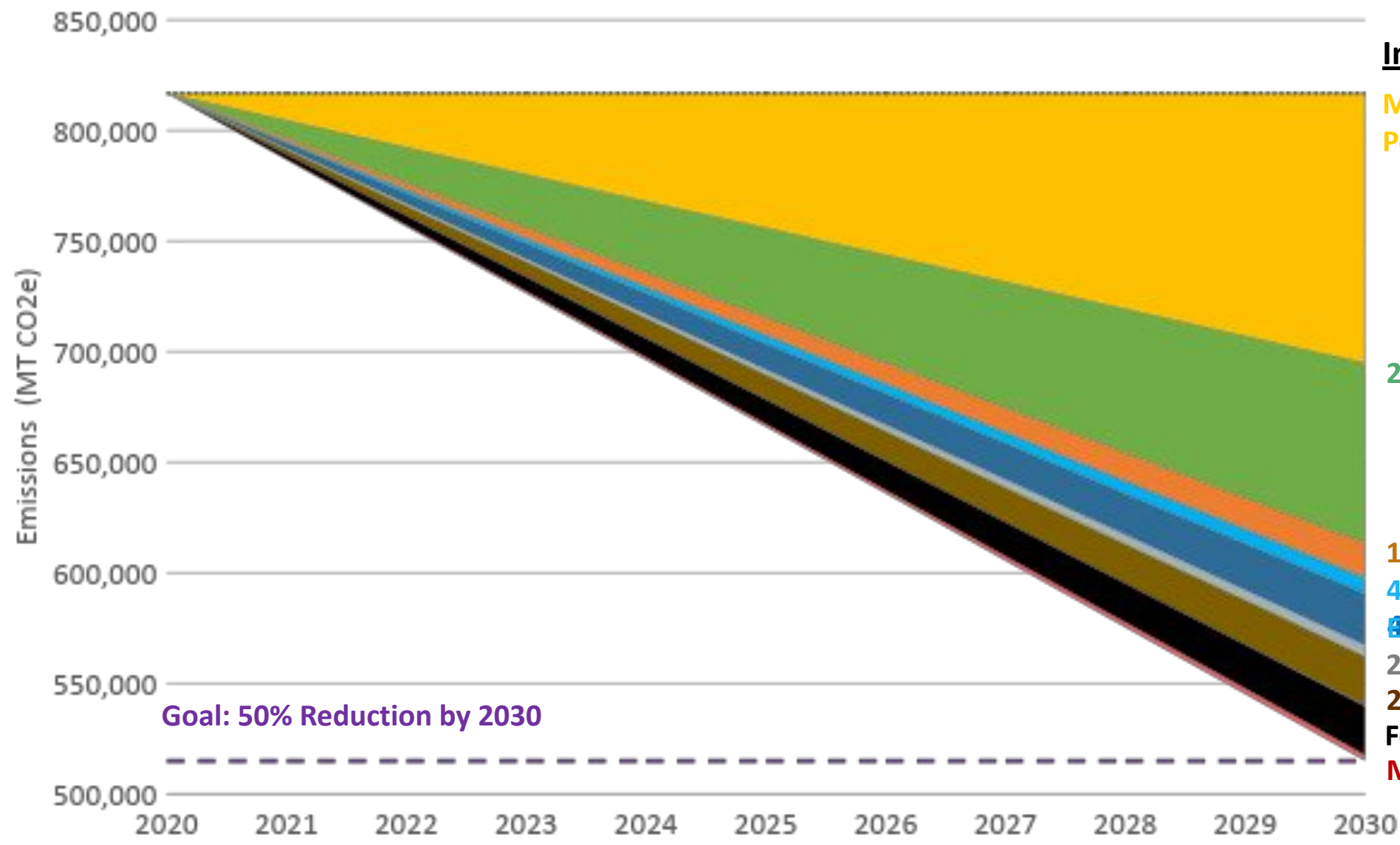
# How Can We Reduce Emissions?



Source: Cadmus Reduction Analysis Tool, 2021. Based on COG Business as Usual Projections.



# Emissions Reduction Pathway



**Impactful Actions**

Maryland 50% Renewable Portfolio Standard

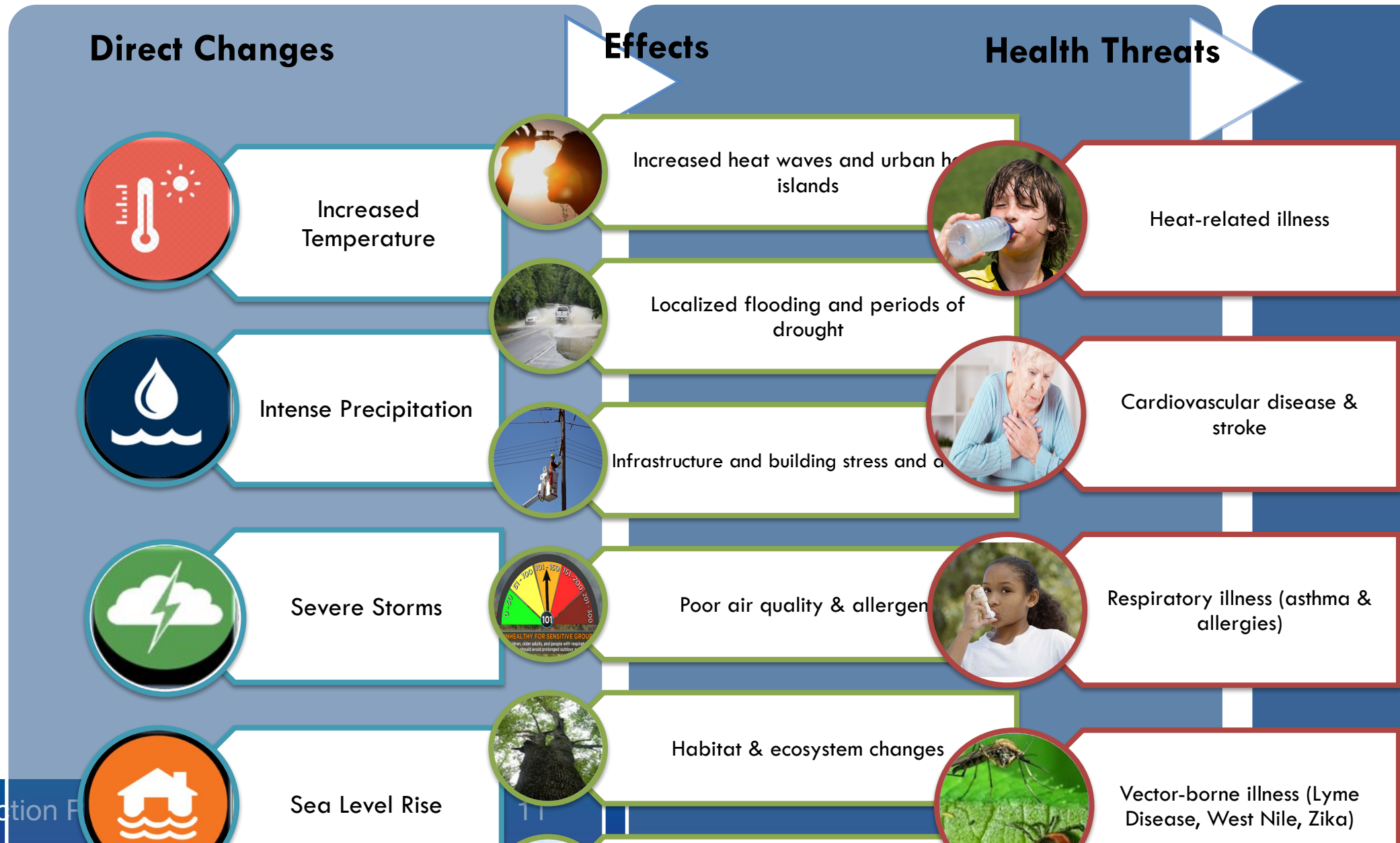
27% Green Power Purchase

- 1800 Solar Installations
- 4000 Residential Energy Efficiency
- 400 Commercial Energy Efficiency
- 2000 Households Near TOD
- 2000 Electric Vehicles
- Federal HFC/ NG Rules
- Municipal Operations

# Emissions Reduction Pathway

	Quantity of Strategy Implementation by 2030	Status	% Contribution to 50% Goal by 2030
Maryland	Maryland <b>renewable energy portfolio standard (RPS)</b> increasing to 50%	Adopted	41%
Montgomery County	<b>Green power purchases</b> increasing to 27% of residents and businesses	Proposed County action may assist	27%
	400 <b>commercial building electric and natural gas upgrades</b>	Proposed County action may assist	8%
Federal	Federal standards <b>reduce HFC emissions</b> by 75%	Rule finalized	7%
Rockville	2,000 additional <b>electric passenger vehicle</b> swaps	Voluntary	7%
	1,800 additional <b>solar energy installations</b>	Voluntary	5%
	4,000 <b>residential building electric and natural gas upgrades</b>	Voluntary	2.4%
	Land use mix + bike/pedestrian amenities lead to 2,000 households located near transit and <b>reduced vehicle miles traveled</b>	Adopted in Comprehensive Plan	1.7%
	<b>Municipal</b> facility efficiency, fleet conversions, streetlights, solar	Proposed	0.8%
	3,000 <b>trees</b> planted	Ongoing action	0.1%
	Municipal <b>compost drop-off program</b>	Proposed	0.02%
<b>Total</b>			<b>100%</b>

# Climate Resilience Challenges

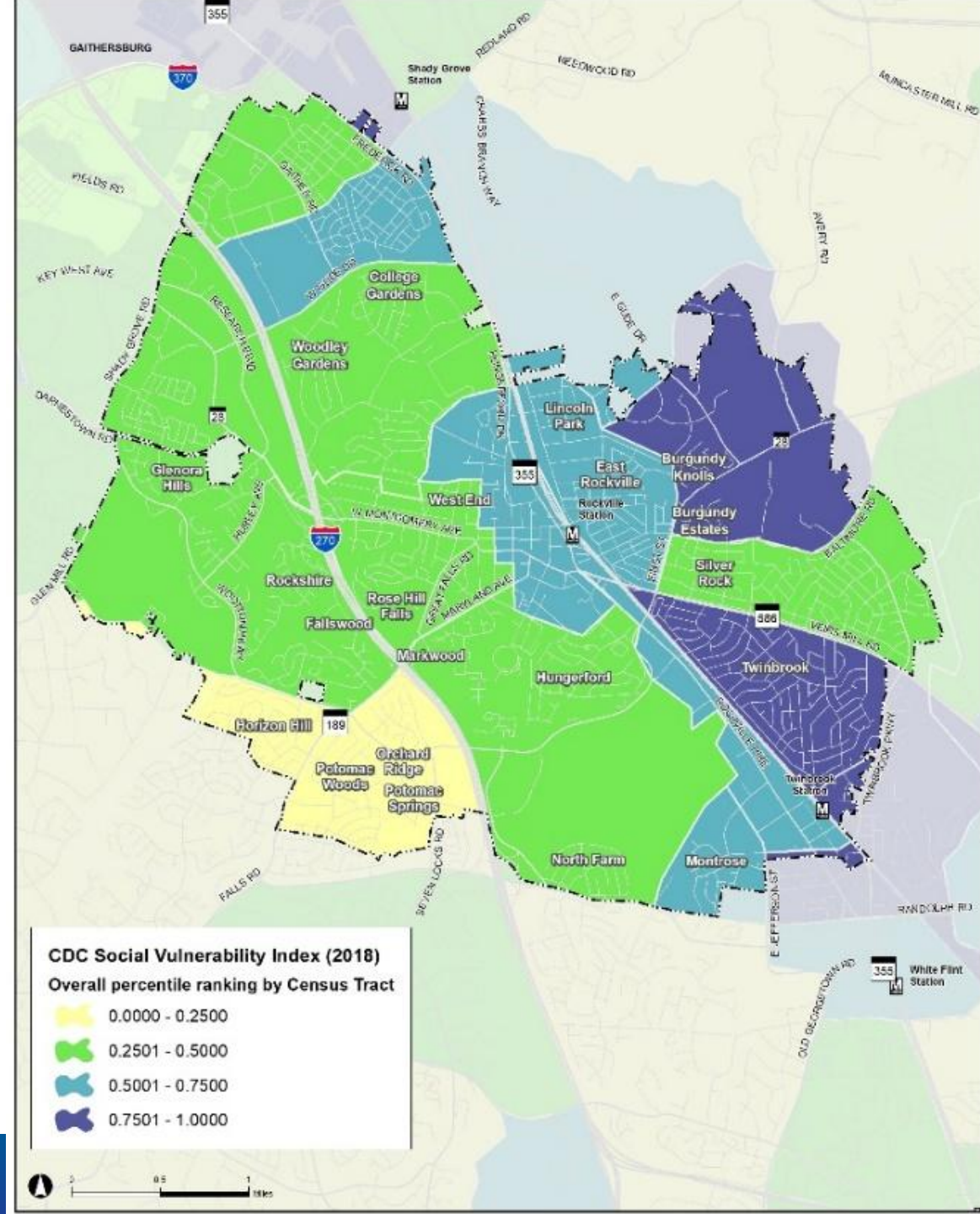




# Rockville Social Vulnerability

## CDC Social Vulnerability Index:

- Socioeconomic Status
  - Poverty, unemployed, no HS diploma
- Household composition
  - Elderly, youth, disability, single-parent
- Minority status and language
- Housing quality and transportation access



# Climate Resilience Goal

*Improve the capacity of our community, homes, businesses, and natural environment to prevent, withstand, respond to, and recover from climate change impacts such as rising temperatures, more frequent and intense heat waves, heavy rainfall and severe storms.*

# 7 Categories, 42 Actions



## Energy Efficiency (9 actions)

Increase energy conservation and efficiency and reduce fossil fuel use in all existing and new buildings and infrastructure.



## Renewable Energy (5 actions)

Increase the generation, use and access to affordable, reliable and clean energy systems.



## Transportation (9 actions)

Expand safe, efficient, affordable, and equitable multi-model transportation options that utilize clean and efficient energy sources.



## Land Management (3 actions)

Maximize the economic and social benefits of land while maintaining or enhancing natural systems and ecological health to ensure resiliency.



## Materials and Waste (3 actions)

Manage solid waste by reducing, reusing, recycling, composting, and sustainable purchasing.



## Resiliency (9 actions)

Improve the capacity of our community, homes, businesses, and natural environment to prevent, withstand, respond to, and recover from climate change impacts such as rising temperatures, more frequent and intense heat waves, heavy rainfall and severe storms.



## Public Education and Oversight (4 actions)

Conduct inclusive and equitable public engagement and involvement and establish systems for monitoring and accountability to encourage participation and support plan success.

# Action List – Energy Efficiency

Action ID	Energy Efficiency Actions	Lead
C-01	Advocate for Montgomery County to adopt a Building Energy Performance Standard (BEPS) for existing commercial and multifamily buildings	Montgomery County & PW
<b>C-02</b>	<b>Expand low and moderate income (LMI) home repair and weatherization program to increase energy efficiency, resiliency and renewable opportunities</b>	<b>Rockville - HCD</b>
<b>C-03</b>	<b>Adopt net zero building codes for new construction</b>	<b>Rockville - PDS</b>
C-04	Opt into Montgomery County's point of sale energy disclosure (Chapter 40, Real Property, Section 40-13B)	Rockville- PW
C-05	Expand home energy efficiency outreach program to increase participation in utility energy audits and rebates	Rockville- PW
C-06	Coordinate with Montgomery County on electrification incentives for existing building systems	Montgomery County & PW
<b>M-01</b>	<b>Complete energy assessments of city facilities and develop a strategic plan to reduce facility energy consumption</b>	<b>Rockville- R&amp;P/PW</b>
<b>M-02</b>	<b>Convert City-owned streetlights to energy efficient LED (light-emitting diode) (CIP TA22)</b>	<b>Rockville- PW</b>
M-03	Advocate for a Pepco-owned streetlight LED conversion agreement that serves the public interest	Pepco & PW



# Action List – Renewable Energy

Action ID	Renewable Energy Actions	Lead
C-07	Advocate to increase the Maryland Renewable Portfolio Standard by 2030	Maryland & PW
C-08	Coordinate with Montgomery County on development of the Community Choice Energy Program to aggregate green power purchasing	Maryland & Montgomery County & PW
C-09	Promote private solar and geothermal installations (solar co-op, streamlined permitting, including expanding access for low-to-moderate income residents)	Rockville- PDS, PW, HCD
<b>M-04</b>	<b>Identify feasible opportunities for solar photovoltaic installations on city property</b>	<b>Rockville- R&amp;P/PW</b>
M-05	Purchase green power renewable energy certificates (RECs) for municipal electricity	Rockville (partner with County aggregate procurement)

# Action List – Transportation

Action ID	Transportation Actions	Lead
C-10	Work with WMATA, MDOT, and Montgomery County to maximize transit accessibility and ridership and enhance mobility options	Rockville-PW
<b>C-11</b>	<b>Develop a Rockville Community Electric Vehicle (EV) Readiness Plan</b>	<b>Rockville-PW</b>
C-12	Require new developments and redevelopments to be electric vehicle-ready	Rockville-PDS
C-13	Promote a regional electric vehicle purchasing cooperative (EVPC)	MWCOG/ County & PW
C-14	Expand active transportation and shared micro-mobility network by implementing improvements in Bicycle Master Plan and Vision Zero Plan	Rockville-PW
C-15	Adopt and implement a Pedestrian Master Plan	Rockville-PW
<b>M-06</b>	<b>Convert the City fleet to cleaner and more efficient fuel sources</b>	<b>Rockville-PW</b>
<b>M-07</b>	<b>Establish a new Capital Improvement Plan (CIP) to expand electric vehicle charging infrastructure on City property to serve employees, fleet and the community</b>	<b>Rockville- PW</b>
M-08	Update city teleworking and transit benefit policies to encourage City employees to reduce vehicle miles traveled (VMT)	Rockville-HR



# Action List – Land Management

Action ID	Land Management Actions	Lead
C-16	Implement the Comprehensive Plan to steer the most-dense development/redevelopment to mixed-use, transit-served locations to reduce vehicle miles traveled (VMT) and conserve/restore environmental areas	Rockville- PDS/PW
C-17	<b>Expand education and incentives to support tree planting and maintenance, environmentally friendly landscape conversations, and management of non-native invasive plants on private property</b>	Rockville- PW
M-09	<b>Develop a Green Space Management Plan for public lands to assess and restore trees, forests, meadows, stream valleys and wetlands</b>	Rockville- R&P

# Action List –Materials and Waste

Action ID	Materials and Waste Actions	Lead
C-18	Develop a food waste composting program for residents	Rockville-PW
C-19	Expand recycling and waste reduction outreach program to increase recycling compliance and waste diversion	Rockville-PW
M-10	Develop a City sustainable procurement policy	Rockville- Procurement

# Action List – Resiliency

Action ID	Transportation Actions	Lead
C-20	<b>Incorporate climate resilient building and infrastructure design features in new buildings and retrofits</b>	<b>Rockville-PDS/PW</b>
C-21	Partner with Federal Emergency Management Agency to update the Flood Insurance Rate Maps used to implement the National Flood Insurance Program	Rockville-PW
<b>C-22</b>	<b>Work with Montgomery County and state agencies to provide cooling centers, resiliency hubs and other services to strengthen community resiliency</b>	<b>Rockville- R&amp;P/HCD</b>
C-23	Work with Montgomery County and community partners to measure and map urban heat islands to mitigate exposure to extreme heat	MWCOG/County/PW
C-24	Increase tree planting, green, cool and photovoltaic roofs, and cool pavements on public and private property	Rockville-PDS/PW
<b>M-11</b>	<b>Continue assessing the vulnerability of Rockville’s critical infrastructure, facilities, and services, and prioritize areas for improved climate resiliency</b>	<b>Rockville-Police/PW/R&amp;P</b>
M-12	Advocate for state and federal authorities to update stormwater infrastructure design, operations and maintenance standards to accommodate new rainfall/storm event projections and help reduce projected flooding issues	Rockville-PW
<b>M-13</b>	<b>Assess Rockville’s risk of flooding and develop a Flood Mitigation Plan to reduce or mitigate flooding impacts</b>	<b>Rockville-PW</b>
M-14	Develop and implement Heat Illness Prevention Plans for various City services and operations	Rockville-HR

# Action List – Public Engagement & Oversight

Action ID	Public Engagement Oversight Actions	Lead
C-25	<b>Work with community partners to conduct an inclusive public engagement campaign to reduce emissions and adapt to the impacts from climate change</b>	<b>Rockville-PW</b>
C-26	Develop metrics and performance indicators for climate actions to establish a data-driven assessment and reporting process	Rockville-PW
M-15	Incorporate climate mitigation and resiliency considerations into the city's budget process	Rockville-Finance
M-16	Develop an interdepartmental climate action team to implement and track plan progress	Rockville-All

# Questions/Discussion

- 1. Do you concur with the following goals for Rockville?**
  - Greenhouse Gas Emissions Goal: 50% below 2005 levels by 2030
  - Climate Resilience Goal: Improve the capacity of our community, homes, businesses, and natural environment to prevent, withstand, respond to, and recover from climate change impacts.
- 2. Is the Actions List appropriate? Would you add, remove or change any actions?**
- 3. Do you agree with the highlighted Priority Actions for needed funding?**
- 4. What is your feedback on the schedule?**



# Next Steps Process/Schedule

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# Thank you

Rockville Mayor and Council  
City Manager's Office

Boards and Commissions and all participants in public engagement

## Rockville Departments

- Public Works Environmental, Transportation, Fleets, Engineering
- Recreation and Parks
- Housing and Community Development
- Planning and Development Services
- Public Information Office
- Human Resources
- Procurement
- Police

CADMIUS



Rockville Environment  
Commission

