

CITY OF TAKOMA PARK  
PUBLIC WORKS DEPARTMENT



February 07, 2024

# Sustainability & Climate Action

Update to City Council

Presented by Dory Estrada

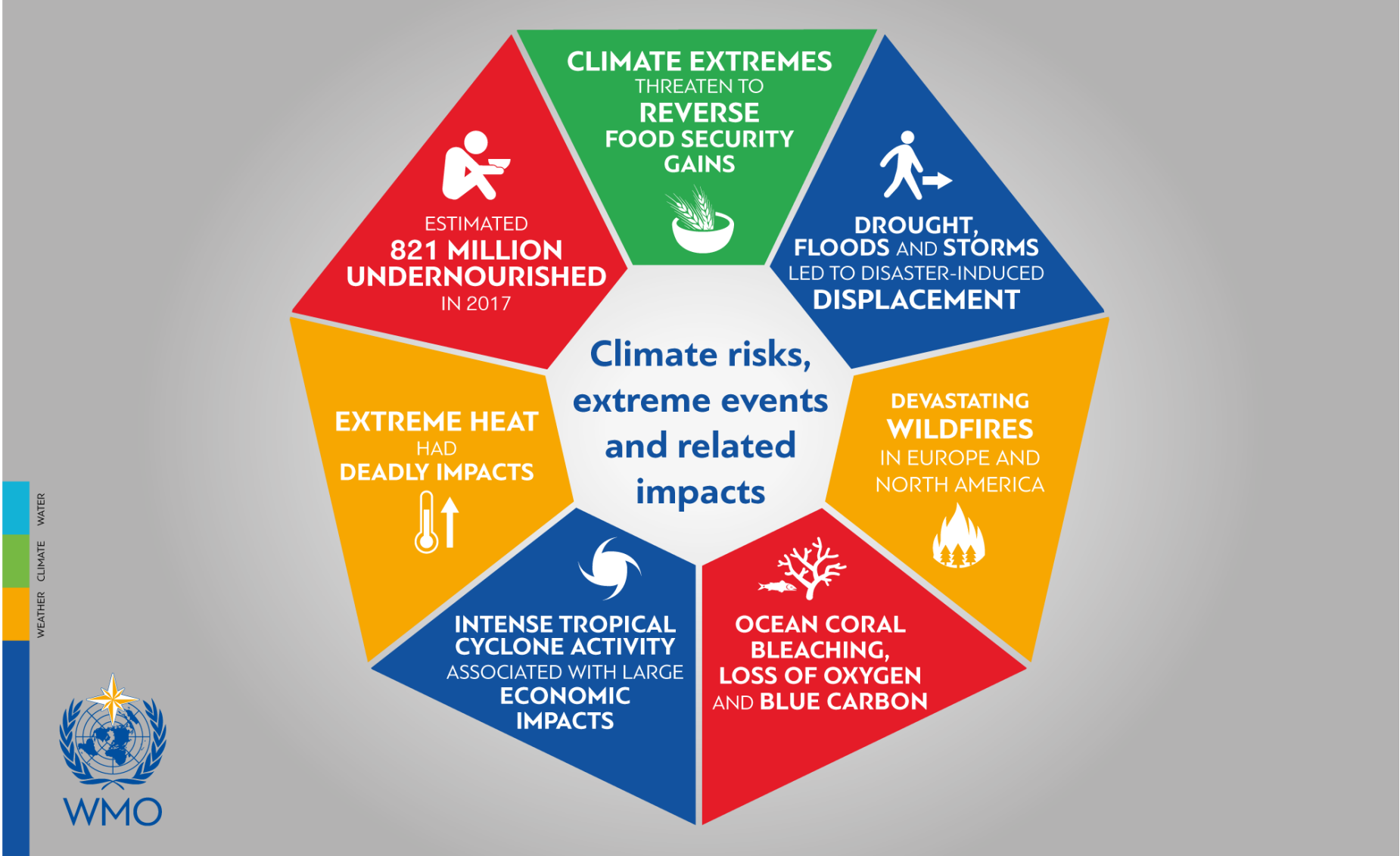




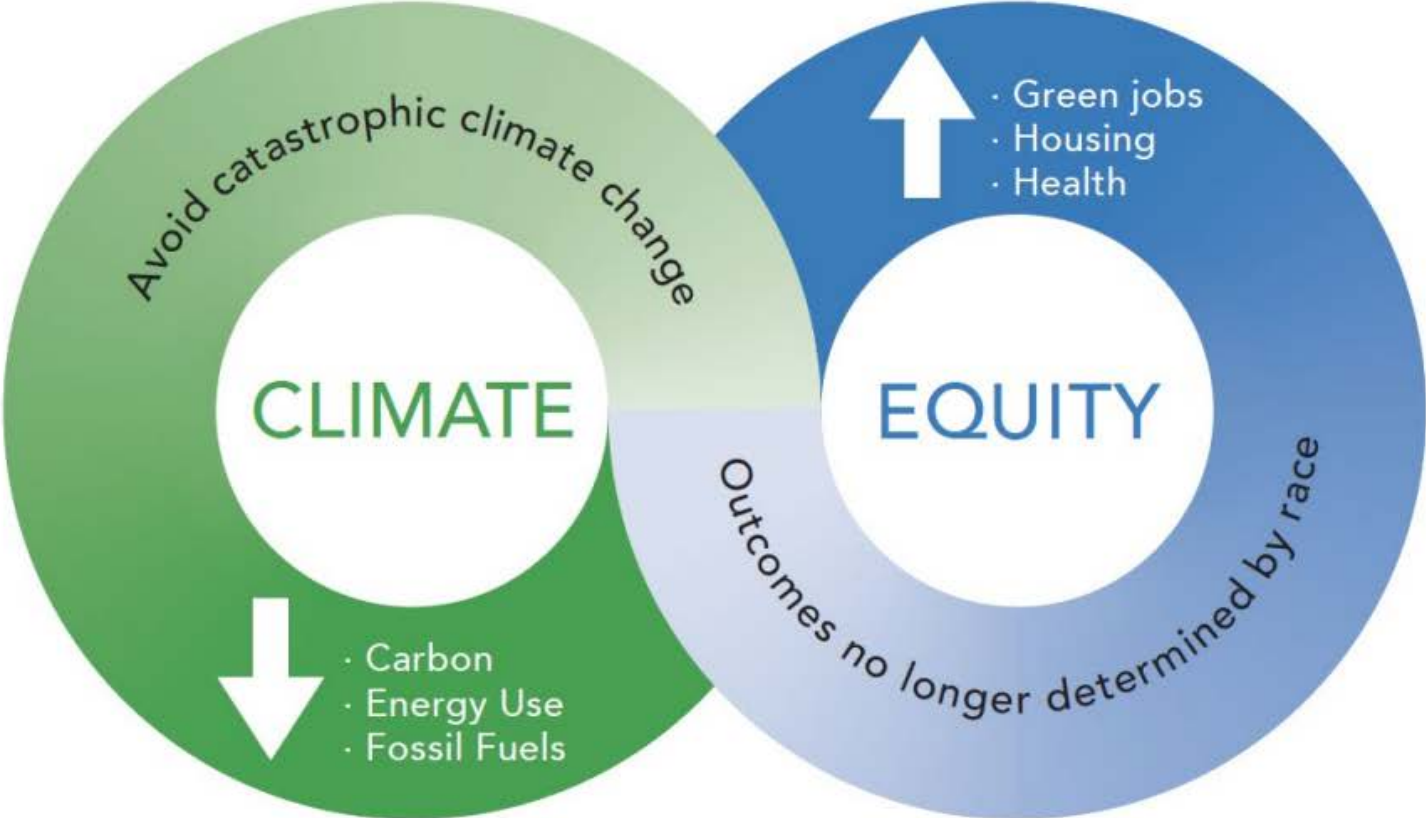
## Overview

- 1. Main Climate Goals**
- 2. GHG Emissions Profile**
- 3. Climate Emergency Response Framework Update**
- 4. New Grant/Funding Opportunities**
- 5. Partnerships**
- 6. Communications & Outreach**
- 7. Budget Implications**

# Context Setting:



### The Twin Goals of Climate and Equity



Source: American Cities Climate Challenge, *Building Performance Standards: A Framework for Equitable Policies to Address Existing Buildings*

## Main Climate Goals and Priorities:

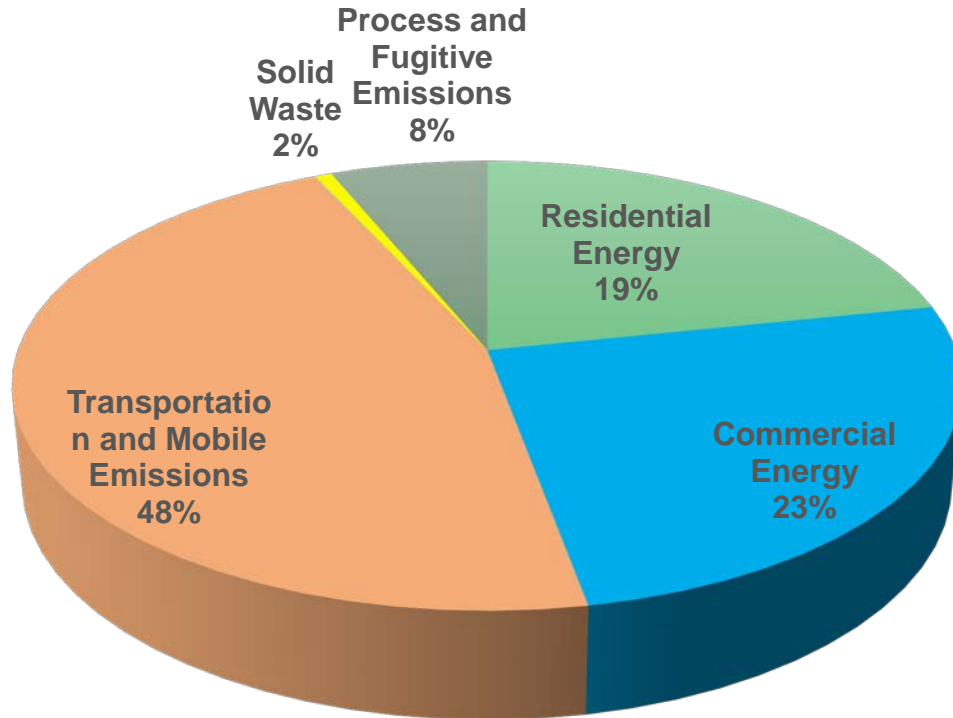
- City of Takoma Park: Net Zero by 2035
- Montgomery County: 100% reduction of GHG emissions by 2035
- Maryland State: 50% reduction by 2030 (2006 baseline)
- MWCOG regional goal: 50% reduction by 2030 and 80% by 2050 (2005 baseline)

### ***Environmentally Sustainable Community (Council Priorities) 2023-2024***

- *Climate Change Mitigation: Work towards net-zero greenhouse gas emissions goal by 2035.*
- *Climate Change Resilience: Improve our ability to adapt and be resilient to local impacts of climate change.*
- *Manage our Community's Natural Resources Sustainably: Protect, maintain, and improve the health of our urban forest, natural resources, and water quality, with an emphasis on equity.*



# Takoma Park's GHG Emissions Profile



2020 emissions data

***Building Energy Use & Transportation*** are the largest source of emissions in the City

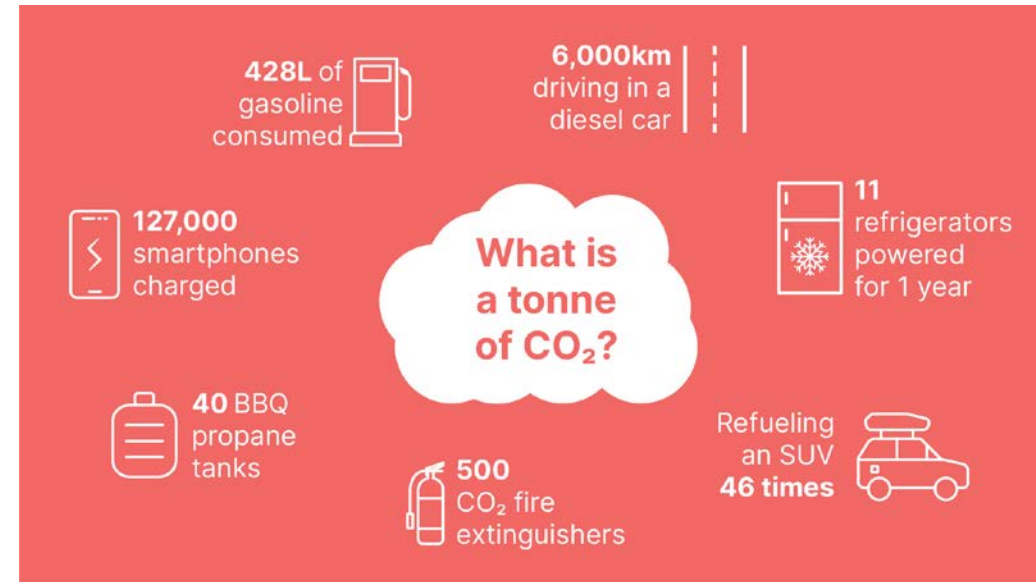
- 42% from buildings
- 48% from transportation
- 129,869 MTCO<sub>2</sub> in 2020
  - 27,485 MTCO<sub>2</sub> fossil fuel use in buildings
  - 26,419 MTCO<sub>2</sub> from electricity use
  - 62,406 MTCO<sub>2</sub> from transportation
  - 10,325 MTCO<sub>2</sub> fugitive sources
  - 1,978 MTCO<sub>2</sub> waste and water
  - (1,889) MTCO<sub>2</sub> trees & forestation



# How Much is a Metric Ton of CO<sub>2</sub>?



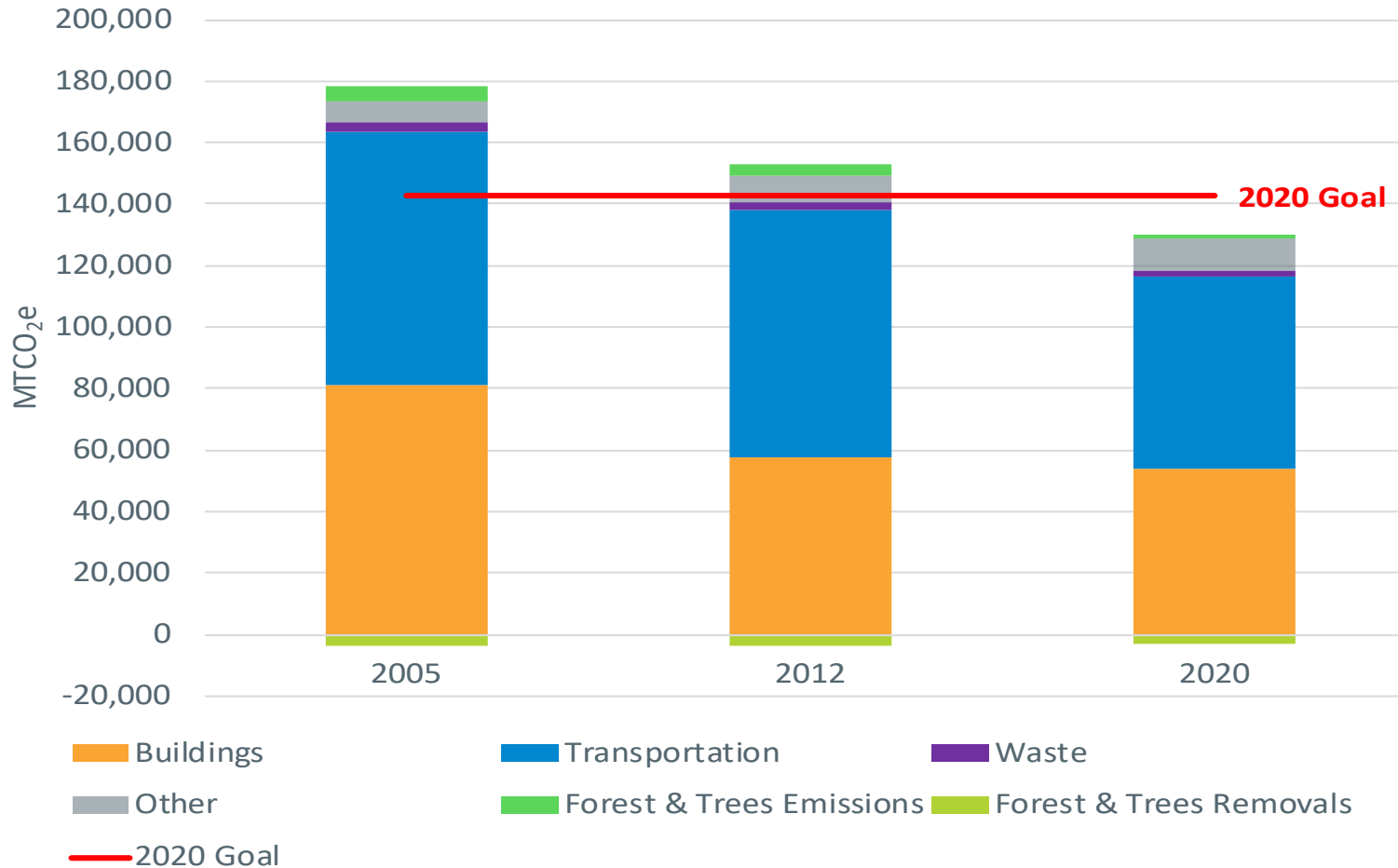
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# GREENHOUSE GAS TRENDS CHART - TAKOMA PARK

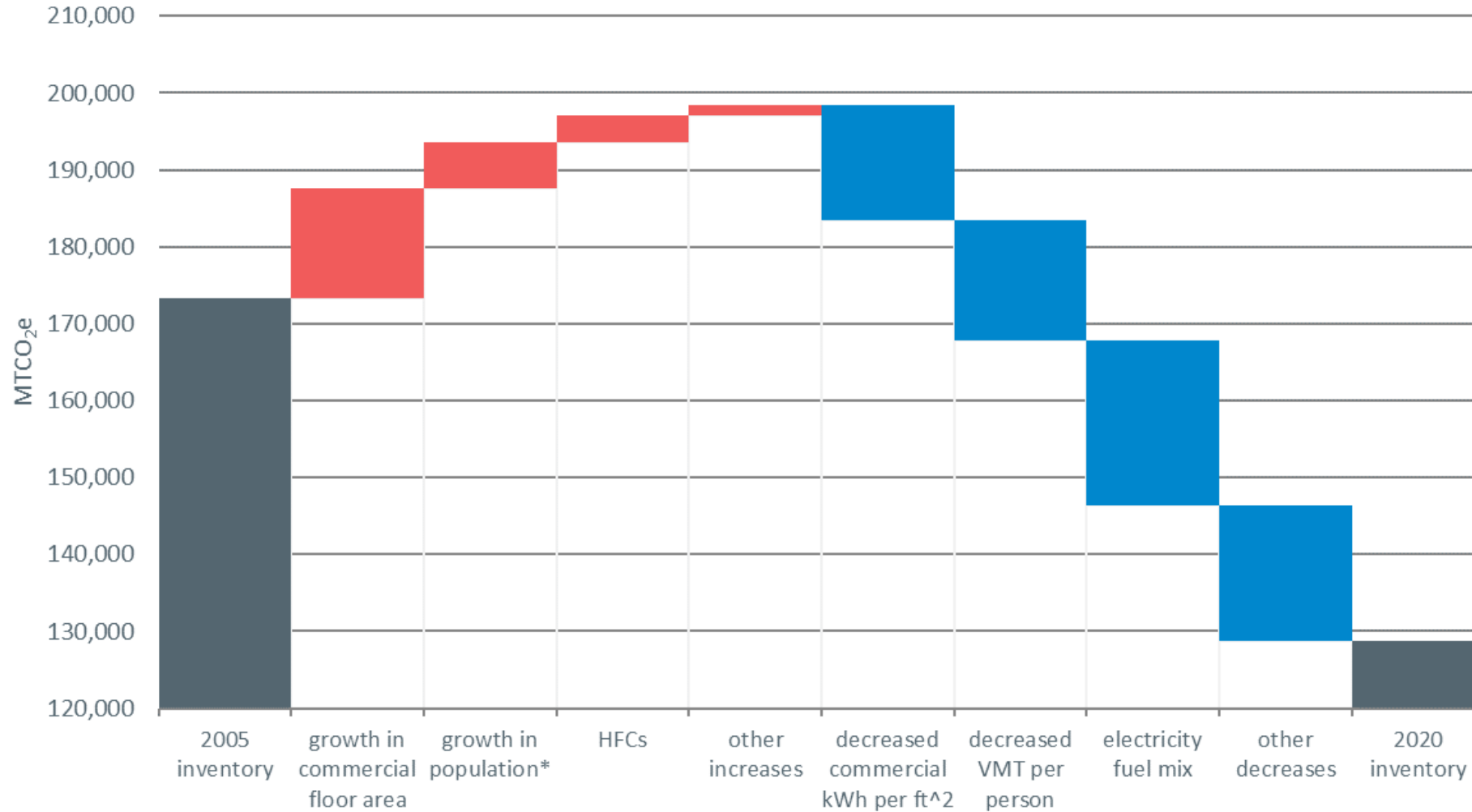
Takoma Park greenhouse gas emissions decreased by **27%** from 2005 - 2020.



Emission Reductions have decreased by 27% since 2005



# Sources of Increases and Decreases in Takoma Park, 2005-2020:



## Emission Increase:

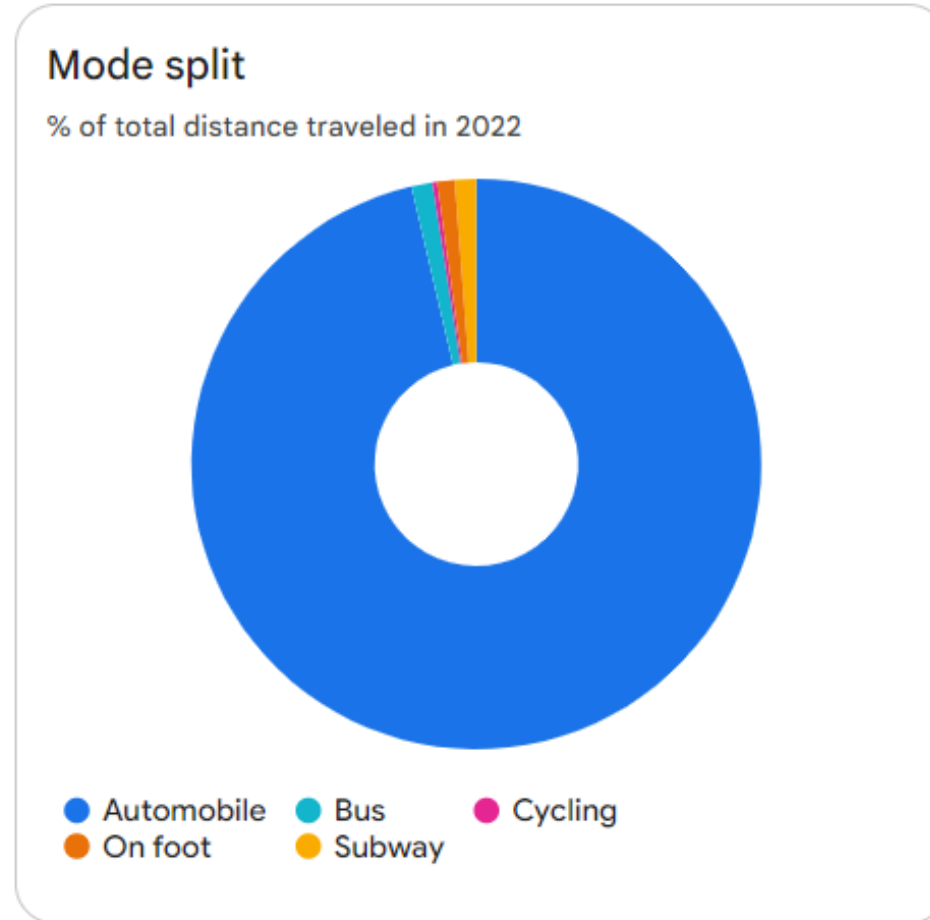
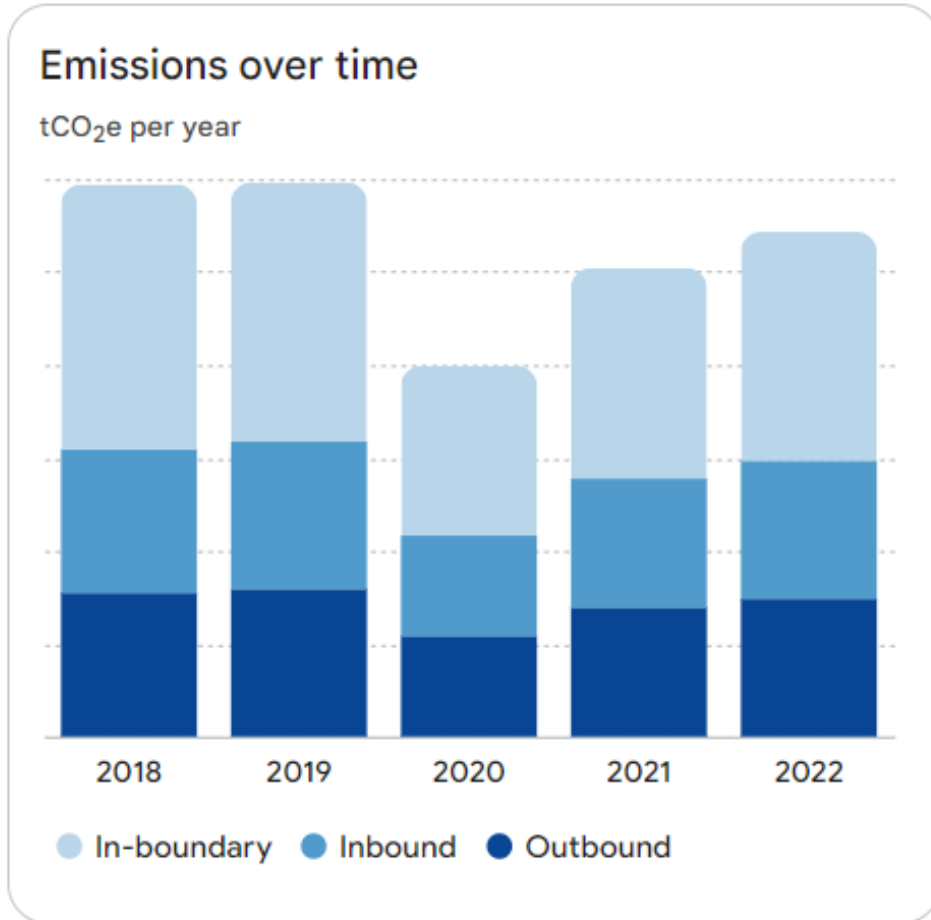
- Growth in commercial space
- Increase in population
- Increase in hydrofluorocarbons

## Emissions Decrease:

- Cleaner electricity grid
- Reduced miles traveled (pandemic)
- Decreased commercial electricity intensity

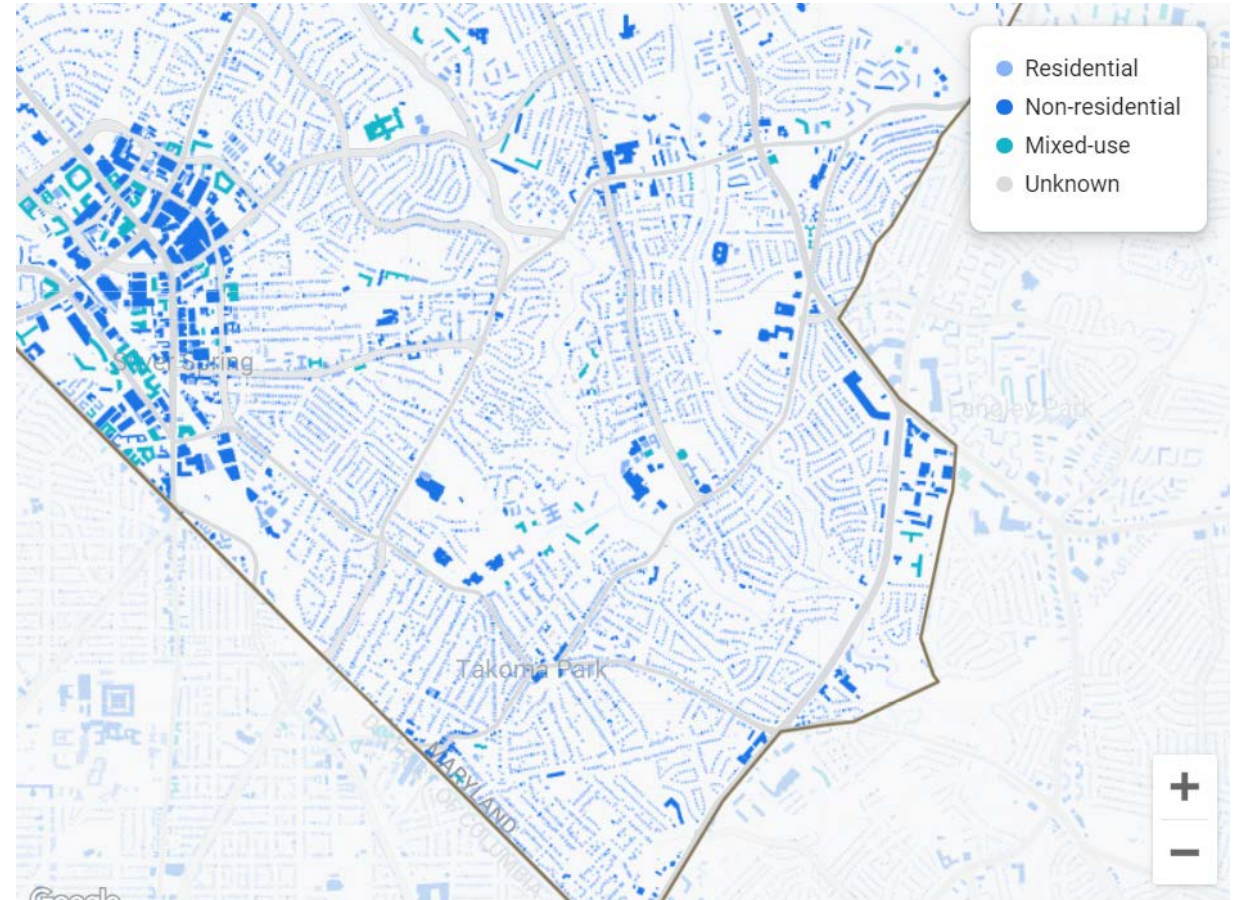
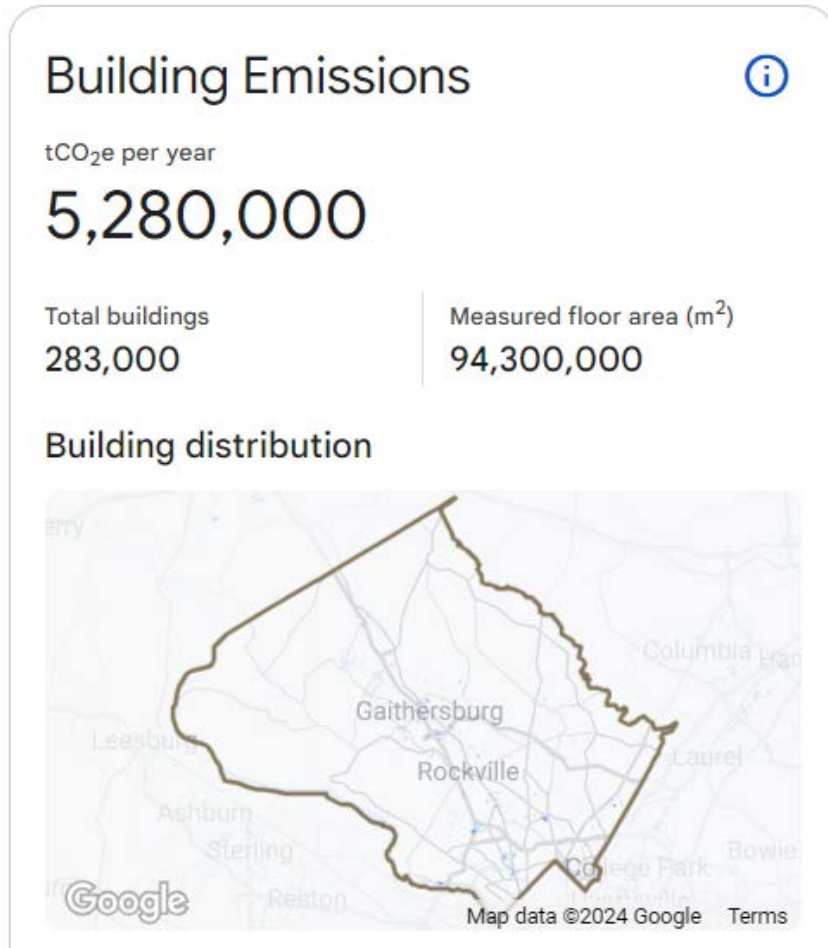
# New Transportation & Building Emissions Data for Montgomery County- 2022

## Transportation Emissions



Yearly emissions from transportation were up 8% in 2022 from 2021 levels. The estimated in-boundary emissions were 1,230,000 tCO<sub>2</sub>e per year.

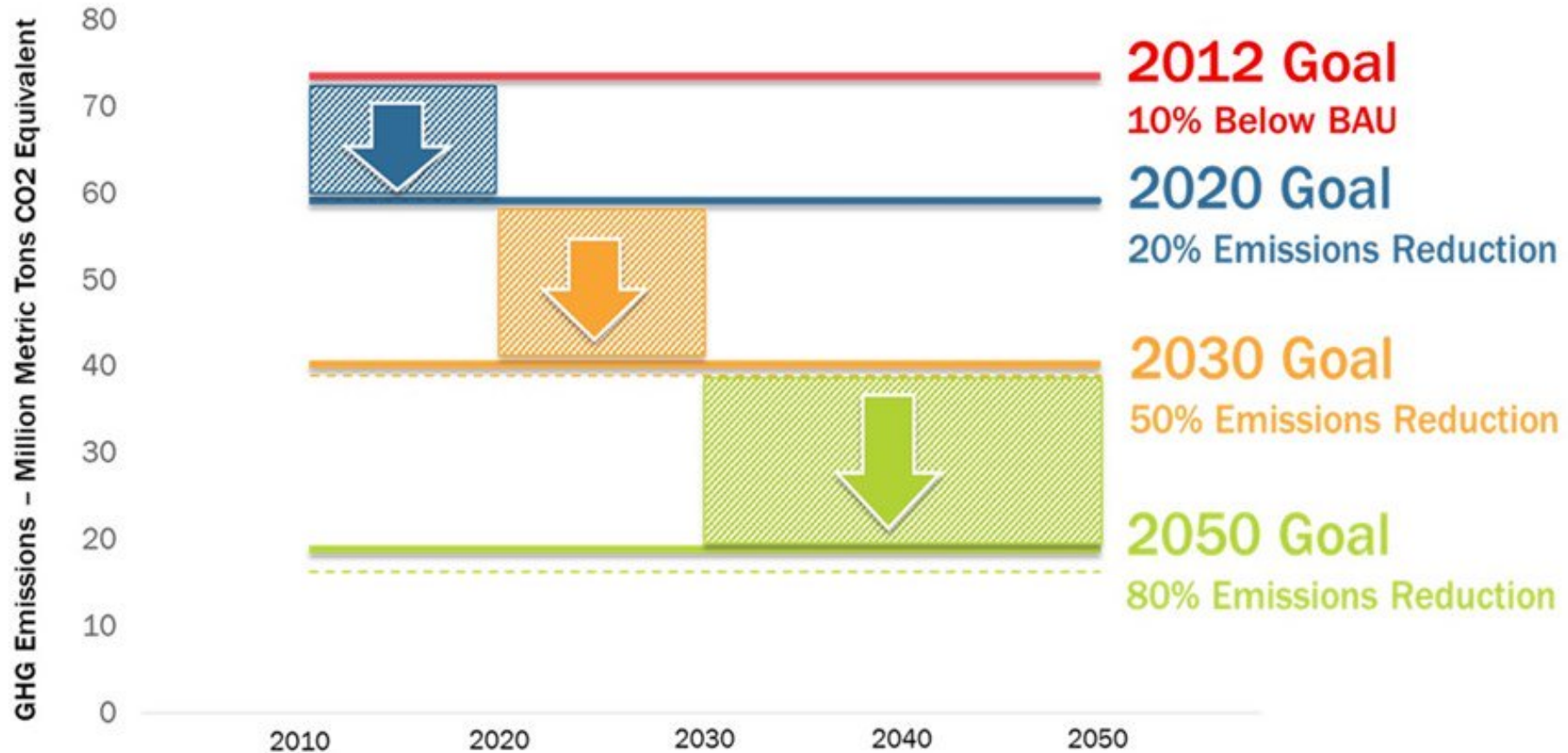
# New Transportation & Building Emissions Data for Montgomery County- 2022



The County's total estimated residential emissions are 3,470,000 tCO<sub>2</sub>e per year, and 1,810,000 tCO<sub>2</sub>e per year for non-residential.



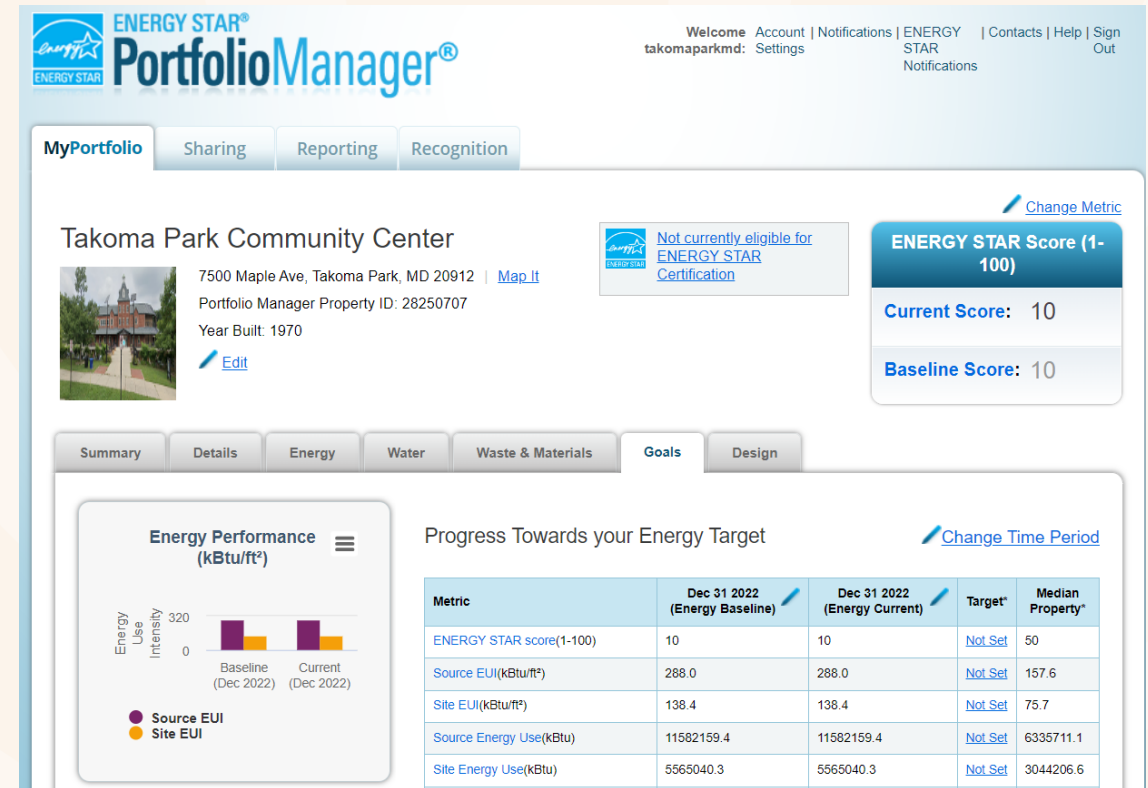
## Our Metropolitan Region is on Track for its Goals:



**Metropolitan Washington met both the 2012 and 2020 goals.**

# Climate Emergency Response Framework Update: Buildings

- Building Energy Performance Standards (BEPS) approved by Montgomery County, regulating buildings 25,000 sq. feet and above. The Community Center has a baseline energy audit conducted
- Strong emphasis on solar education and clean energy attainment for residents (homeowners & renters)- Mar. 12 event
- New MFBIG Grant for multifamily property owners- Opened in Jan. 2024
- ACEEE proposal for BEPS for buildings 10,000 – 25,000 sq. feet- still under review



**MULTIFAMILY BUILDING  
IMPROVEMENT GRANT:  
Program Information**

# Climate Emergency Response Framework Update: Transportation

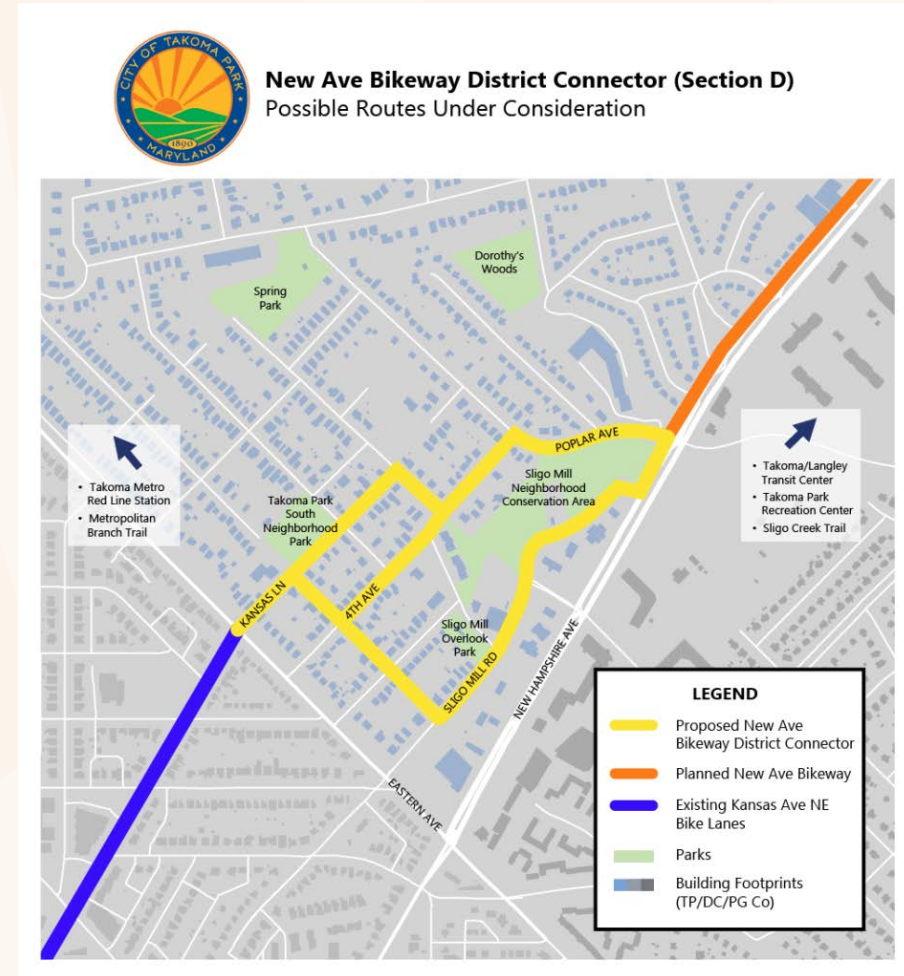
- Continued outreach and participation in curbside charging permitting for EVs
- Fleet Transition Plan – all electric city fleet by 2035. Still under review.
  - No new fossil fuel-powered vehicles purchased after 2028
  - Examining funding options to pursue charge infrastructure
  - Police pursuit-rated EV vehicles may soon become available
  - Make use if new Direct Pay option from IRS, effective this year
- MCPS received nearly \$4.7 million to purchase 50 school buses through EPA's first Clean School Bus Program's Grants





# Climate Emergency Response Framework Update: Multimodal Transit

- New Ave Bikeway planned for New Hampshire Ave. Overall, HCD has been successful in obtaining several MWCOG and state grants to support their Bikeways program
- Maple Ave. Connectivity Project is underway- RK&K was selected as the project consultant, and they have begun meeting with city staff to prepare the community engagement strategy since Fall 2023
- On September 14, 2023, the City was awarded a new grant from the (MDOT) Kim Lamphier Bikeways Network Program for the Metropolitan Branch Trail Upgrade; will allow the City to complete the design and then seek construction funds.
- 53 bike racks purchased in 2022; to be installed at locations in every ward and in City parks. As of 2023, about 10 have been deployed; other installations upcoming.



# Climate Emergency Response Framework Update: Renewable Energy and Toward a Fossil Fuel-Free Community

- Electrify MC- Direct incentives program for the County; info sessions held, outreach at City level. Still running, # of city residents pending
- Development of comprehensive electrification education & outreach campaign (IRA calculator tool, partner for Apr. 6<sup>th</sup> event)
- Montgomery County Community Choice Energy (CCE) for 100% renewable electricity; pilot moving forward
- Montgomery County passed gas powered lawn care equipment ban; sales prohibited from July 01, 2024



**YOUR SAVINGS CALCULATOR**

## How much money can you get with the Inflation Reduction Act?

Enter your household information to find out. [Reset calculator](#)

Zip Code ⓘ 90210	Rent or Own ⓘ Homeowner	Household Income ⓘ \$0
Tax Filing ⓘ Married Filing Jointly	Household Size ⓘ 2 people	<b>Calculate!</b> ⌵



# Climate Emergency Response Framework Update: Natural Resources

- **Stormwater**

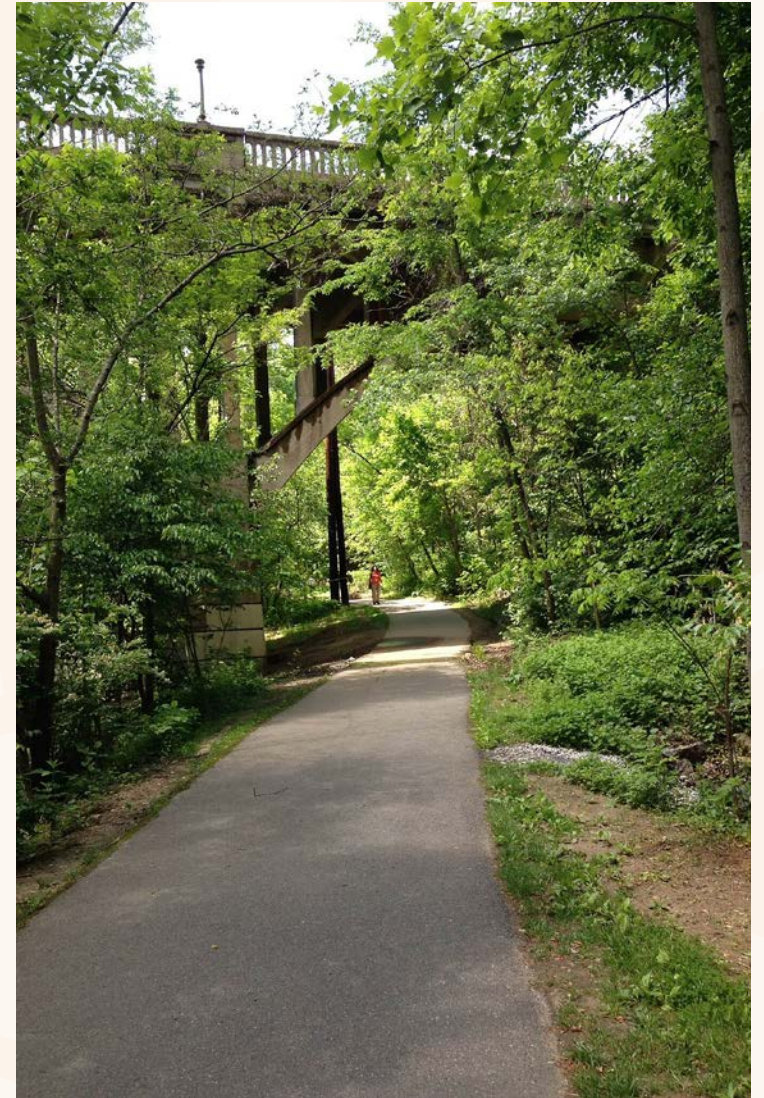
- Low Impact Development Center stormwater resiliency study still underway
- My Rainplan tool on the website
- 3<sup>rd</sup> community meeting in the near future
- Takoma Branch Stream restoration completed (Poplar and NH Ave.)
- Brashier's Run outfall repair is out to bid (Maple Ave and Sligo Creek Pkwy)
- Houston Ave Filtera Project that is currently in the design phase and will be out to bid to be built before the end of FY24

- **Urban Forestry Report 2023**

- Number of Trees Planted Public Space Trees Planted- 24
- Tree Takoma Trees Planted- 279
- Removal Permit Replacement Trees- 53
- Takoma Park's urban forest canopy remains impressive and commendable for an inner suburban community.
- The rate of tree loss appears to have decreased substantially.

- **Environmental Restoration**

- Circle Woods invasive removal project received PEPCO grant; contracted work for invasive removal has been completed. Some planting has been done but tree planting will be in March and signage being installed
- Stuart Armstrong project also grant funded; work has started with invasive removal
- Continuous removal of invasive horticultural species from our designed sites





# New Federal and State Funding Programs:

- **Climate Pollution Reduction Grant (CPRG)**- EPA's new \$5 billion program to provide grants to states, local governments to develop and implement ambitious plans for reducing GHG emissions. The City is planning to join coalition applications with Montgomery County and possibly State
- **Maryland Energy Administration (MEA)**- various 2024 grant opportunities. City has submitted to OPEN program to support tenant engagement for MFBIG
  - Pursuing an additional grant for solar expansion on top of new library
- **Inflation Reduction Act (IRA)**- New **Elective Pay** allowance. Allows municipalities to now claim clean-energy investment tax credits. Currently being pursued; collaboration with PW and Finance.
- **Maryland Department of Transportation (MDOT) NEVI (National Electric Vehicle Infrastructure)** funding- Round 1 open, City is not in a high-priority corridor. Will look into applying for round 2 for community charging.
  - Examining options for MF chargers with partner Avanza EV.





“It is not enough to ask people to see themselves in the consequences of climate change. They need to see themselves in the promise of climate action.”

-Governor Wes Moore

# Activating Strong Partnerships:

- **Chesapeake Conservation and Climate Corps-** City DPW was successfully selected as a Host Organization; pending a match with a Corps member based in our local area. Runs Aug. 2024-Aug. 2025



- Since Sept. 2023, introductory calls and collaboration meetings have been held with the following groups:

- Montgomery County Department of Environmental Protection
  - Takoma Park Mobilization- Climate Action Coffee
  - The Village of Takoma Park
  - Friends of Sligo Creek
  - Takoma Park Emergency Preparedness Committee
  - Nature Forward
  - FONTT- Friends of Native Trees Takoma
  - Takoma Park Youth Council
  - Sierra Club
  - Maryland Clean Energy Center
  - Chesapeake Climate Action Network
  - Chesapeake Bay Trust
  - Metropolitan Washington Council of Governments (MWCOG)
  - Capital area Sustainability Circle
  - Urban Sustainability Directors Network (USDN)
  - Climate Mayors/C40 Cities
  - Takoma Park Presbyterian Church
  - Greater Washington Clean Cities Coalitions
  - Electrification Coalitions
  - National League of Cities
  - UMD Center for Global Sustainability
  - Avanza EV
  - CHEER
- .... and counting*



# Communications, Outreach, and Reporting:

- **Newsletter and Social Media**

- Reactivation of accounts
- Relaunch of e-newsletter- has seen a growth to 927 subscribers, a growth of 60+ new subscribers since November 2023, and increase in open rate
- Contributions to City podcast, newsletter, and other communications channels
- Multi-lingual and equity-focused outreach

- **Sustainable Maryland Program**

- City achieved 'bronze' certification in 2020; new category of 'silver' is open; City will be applying for that. Due June 2024.

- **CDP (Carbon Disclosure Program)**

- City received a 'C' score in 2023; has had a call to discuss areas for improvement. Reporting due in Sept. 2024

- **Events**

- A series of upcoming events this spring



# Upcoming Events:



**BECOME A  
CONSERVATION  
CORPS MEMBER  
IN TAKOMA PARK!**

**WHAT YOU'LL GAIN:**

- ✓ Earn full-time, 1-year stipend support of \$31,200
- ✓ Leadership skills, professional development training, and mentorship
- ✓ Experience work in Clean Energy, Urban Forestry, Community Engagement & More!

**FOR YOUTH  
AGES 18-25**



[cbtrust.org/chesapeake-climate-corps/](https://cbtrust.org/chesapeake-climate-corps/)  
ESTRANSKY@CBTRUST.ORG | (410) 974-2941

**APPLY NOW!**  
*Deadline March 7th.*  
*Scan for more info*



**LET'S  
GO SOLAR  
TKPK!**



**Community Info Session:  
March 12th, 2024 | 7:00-9:00 PM  
City Auditorium - 7500 Maple Ave.**

For both renters AND home-owners!  
Learn about solar co-ops, community solar, RECs,  
tax incentives, & more!

(Scan for more info)



[takomaparkmd.gov/sustainability](https://takomaparkmd.gov/sustainability)



For more info, contact:  
dorothy@takomaparkmd.gov or (301) 891-7623



# Upcoming Events:

**FREE EVENT!**

(Scan for more info)



**HEALTHY HOMES FAIR** 

[healthyhomesfair.org](https://healthyhomesfair.org)

## SATURDAY APRIL 6, 2024

DC Armory | 9am-12pm professionals + 12pm-5pm general public

**50+ EXHIBITORS / COOKING DEMONSTRATIONS / APPLIANCE "PETTING ZOO"**

presented by **AC Smith**  
Innovation has a name.

brought to you by **ELECTRIFYDC**

supported by



in partnership with



Saturday, April 20, 2024  
(\*Rain date April 21)



# Takoma Park Earth Day Celebration!



**Because there is no Planet B.**

**10 AM-2 PM | Sligo Creek Stream Valley Park Playground**

Snowcones • Art • Games • Guided Tree Walk • EV Showcase





## Sustainability Budget Implications:

- **Support for enhancing existing programs**
  - Specifically seeking support for a full time intern for FY25- would lead to enhanced capacity for community outreach
  - Support for special events funding; program returning post-pandemic
- **Cost Efficiencies:**
  - Chesapeake Conservation Corps member placement (tentative)
  - Building on existing partner programs (ie, Electrify MC) and no-cost technical assistance (NLC, Green Bank, etc.)
- **The time is now to build on the IRA's momentum:**
  - Pursuing grant funds (state and federal) to support clean energy projects, vehicle replacement, and charging stations
  - Macro-level funds -→ micro-level solutions
  - Grant dollars are critical to put emissions-reducing technologies in place that will get us to our Net Zero target.



# THANK YOU

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**TAKOMAPARKMD.GOV**

## References:

- CDP: <https://www.cdp.net/en>
- Chesapeake Conservation and Climate Corps: <https://cbtrust.org/chesapeake-climate-corps/>
- City of Takoma Park Climate Action Plan: <https://takomaparkmd.gov/government/sustainability/>
- Deloitte's Global Turning Point Report: <https://www2.deloitte.com/xe/en/pages/about-deloitte/press-releases/deloitte-research-reveals-inaction-on-climate-change-could-cost-the-world-economy-usd-178-trillion-by-2070.html>
- Electrify MC: <https://www.montgomerycountymd.gov/green/energy/electrify-mc.html>
- EnergyStar Portfolio Manager: <https://portfoliomanager.energystar.gov/pm/login?testEnv=false>
- Google Environmental Insights Explorer: <https://partnerdash.google.com/apps/environmental-insights/places/ChIjH6O4gzUytokRc2ipdwYZC3g?a=1451576161>
- Maryland's Climate Pollution Reduction Plan: <https://mde.maryland.gov/programs/air/ClimateChange/Maryland%20Climate%20Reduction%20Plan/Maryland%207s%20Climate%20Pollution%20Reduction%20Plan%20-%20Final%20-%20Dec%2028%202023.pdf>
- Metropolitan Washington Council of Governments GHG Inventory: <https://www.mwcog.org/environment/planning-areas/climate-and-energy/greenhouse-gas-inventories/>
- Race to Zero: <https://climatechampions.unfccc.int/the-ipcc-just-published-its-summary-of-5-years-of-reports-heres-what-you-need-to-know/>
- Rewiring America IRA Calculator Tool: <https://www.rewiringamerica.org/app/ira-calculator>
- Sustainable Maryland: <https://sustainablemaryland.com/>
- Takoma Park Bikeways Program: <https://takomaparkmd.gov/government/housing-and-community-development/planning-and-community-development/bikeways-program/>
- World Meteorological Administration: <https://wmo.int/resources/documents>