

CITY OF TAKOMA PARK
PUBLIC WORKS DEPARTMENT



December 11, 2024

Sustainability & Climate Action

Update to City Council

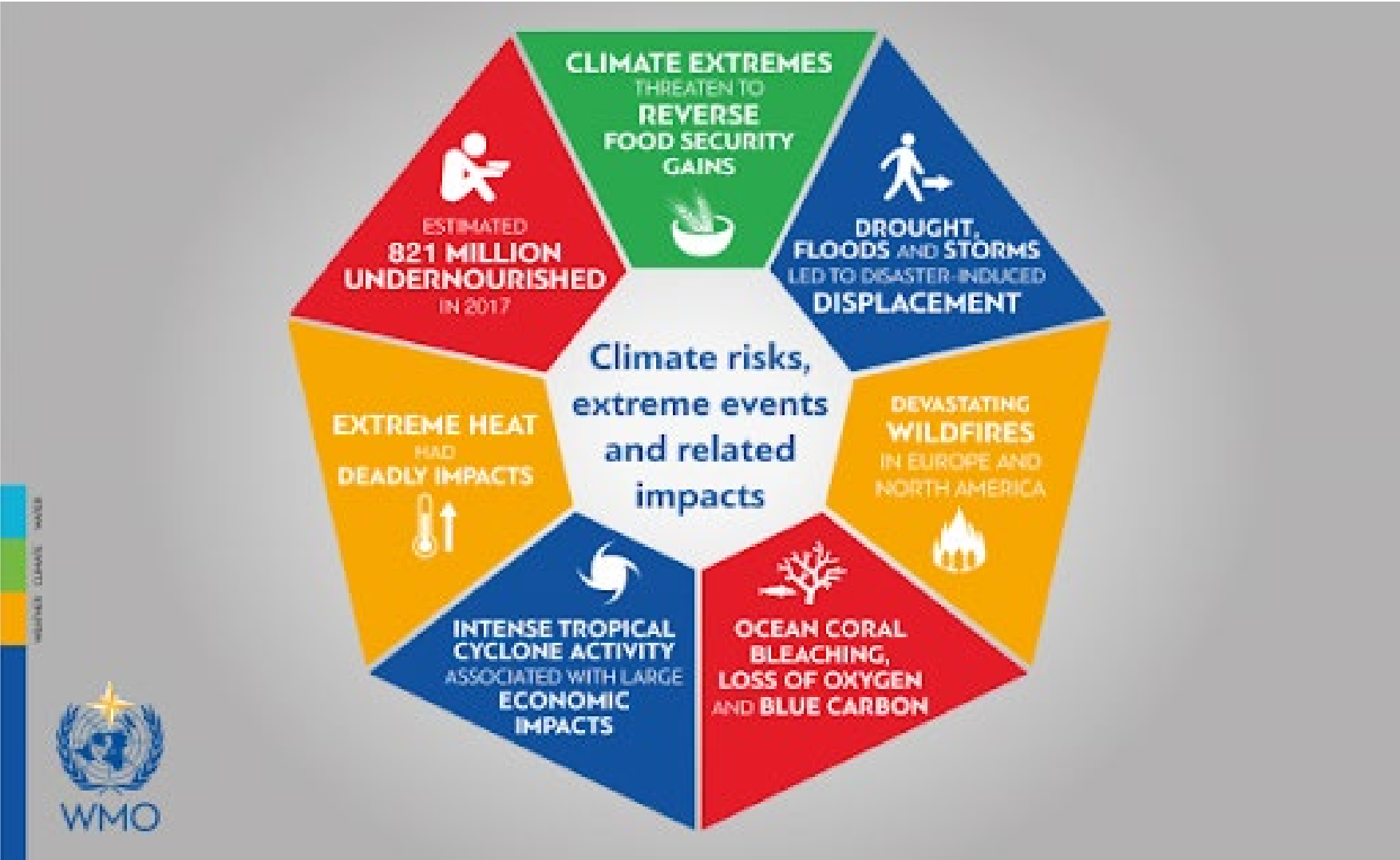
Presented by Dory Estrada



Overview

- 1. City, County, & State Climate Goals**
- 2. GHG Emissions Profile**
- 3. Climate Action Updates & Milestones from 2024**
- 4. TA Partnerships**
- 5. Communications, Outreach, and Reporting**
- 6. Budget Implications**

Context Setting:



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)

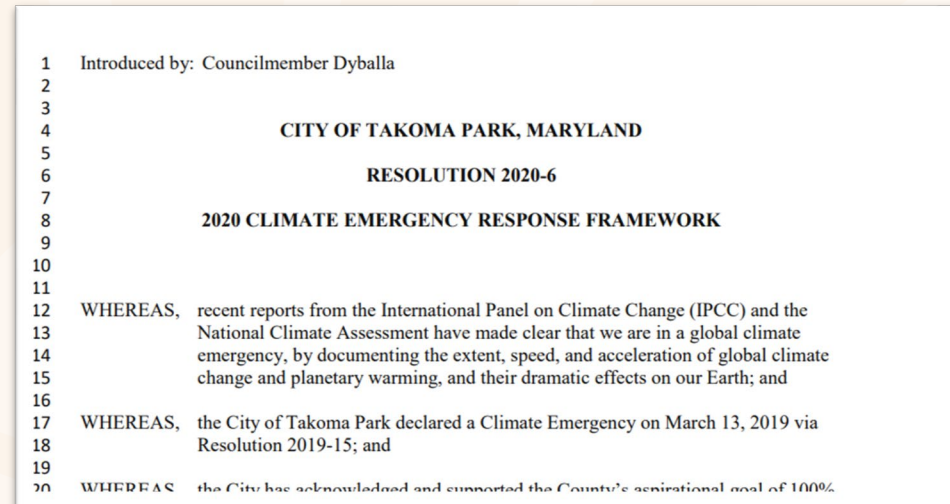
Environmentally Sustainable Community (Council Priorities) 2024-2025

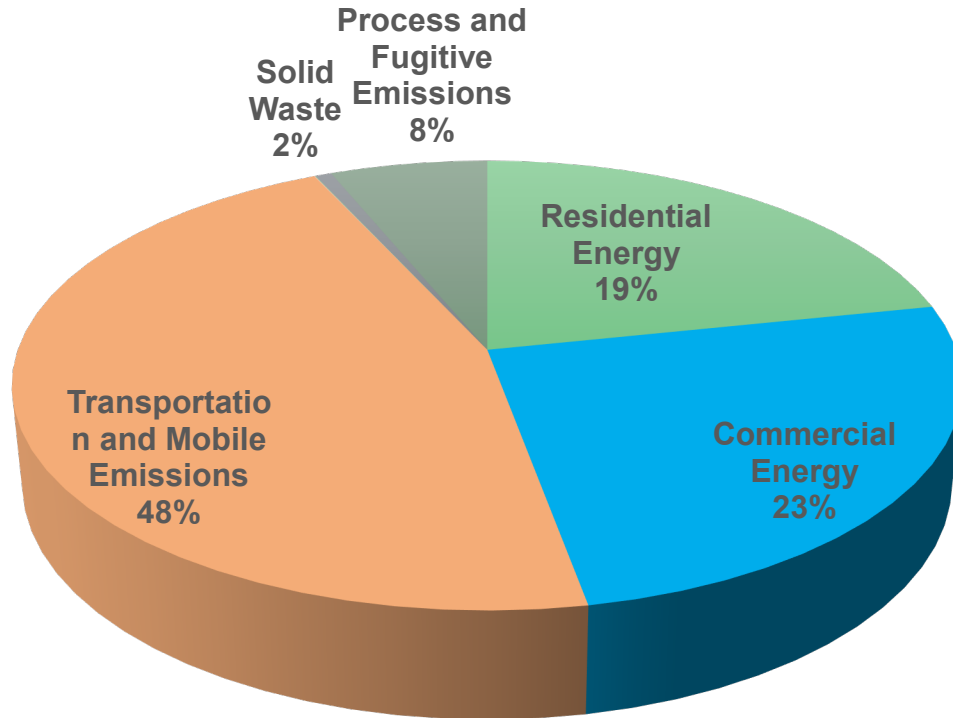
- *Coordinate and advocate for climate change mitigation, resiliency, and sustainability funds and programs with non-profits organizations, County, State, region and federal governments.*
- *Specifically in 2024:*
 - *Support legislation that prohibits deceptive recycling claims on packaging and products*
 - *Support the Responding to Emergency Needs from Extreme Weather (RENEW) Act and invest in disaster relief and preparedness*
 - *Support progress on Climate Solutions with an eye toward the impact on new construction in the City*
 - *Support for stormwater mitigation efforts, including funding and technical assistance geared to use in municipalities*



Takoma Park's Sustainability and Climate Action Plan:

- In 2019, The City of Takoma Park contracted with Cadmus Group consultants to create a new **Sustainability and Climate Action Plan (SCAP)**, replacing a plan from 2014
 - Analysis and strategic recommendations for the City to meet its goal of reducing greenhouse gas emissions 100% by 2035.
- In tandem, a **Climate Emergency Response Resolution** was adopted by Council in 2020
 - This Resolution commits to act on climate change. It specifies priority strategies for the City to explore.
 - ***Buildings, Transportation, Renewable Energy, and Towards a Fossil-Free Community*** were emphasized as priority strategies to achieve significant greenhouse reductions
- These areas have therefore been a key focus of the Sustainability office's projects and programs.





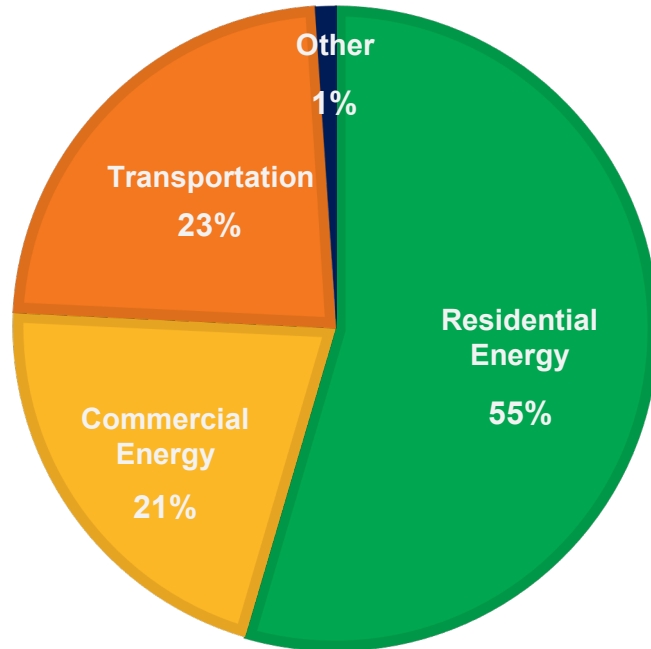
2020 emissions data

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

- 42% from buildings
- 48% from transportation

- 129,869 MTCO₂ in 2020
 - 27,485 MTCO₂ fossil fuel use in buildings
 - 26,419 MTCO₂ from electricity use
 - 62,406 MTCO₂ from transportation
 - 10,325 MTCO₂ fugitive sources
 - 1,978 MTCO₂ waste and water
 - (1,889) MTCO₂ trees & forestation

2023 EMISSIONS DATA



****Building Energy Use, particularly from residential,*** is the largest source of emissions in the City

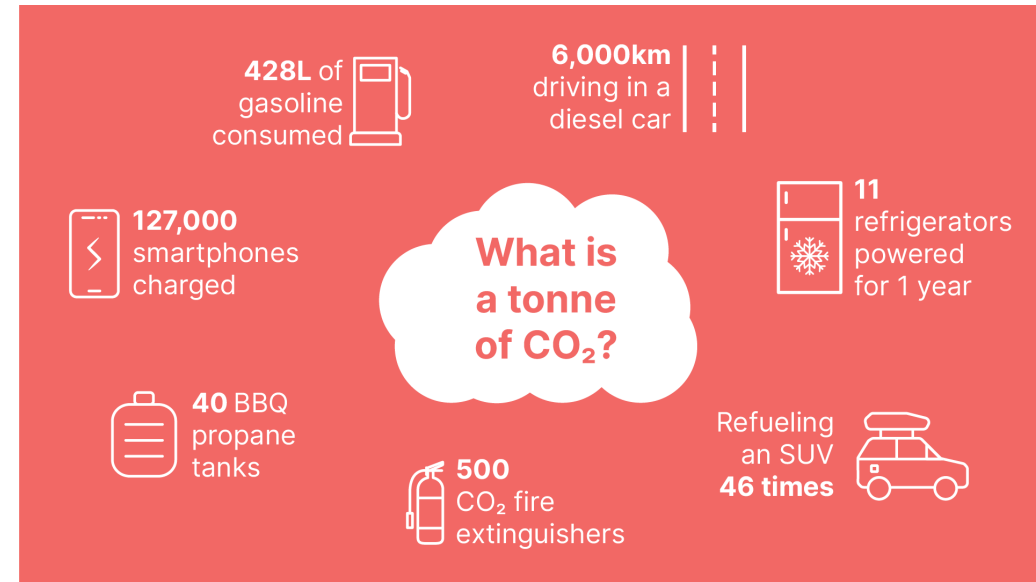
- 76% from buildings
- 23% from transportation

- 82,137 MTCO₂ in 2023
 - 21,902 MTCO₂ fossil fuel use in buildings
 - 40,137 MTCO₂ from electricity use
 - 20,082 MTCO₂ from transportation
 - 16 MTCO₂ form other sources

How Much is a Metric Ton of CO2?

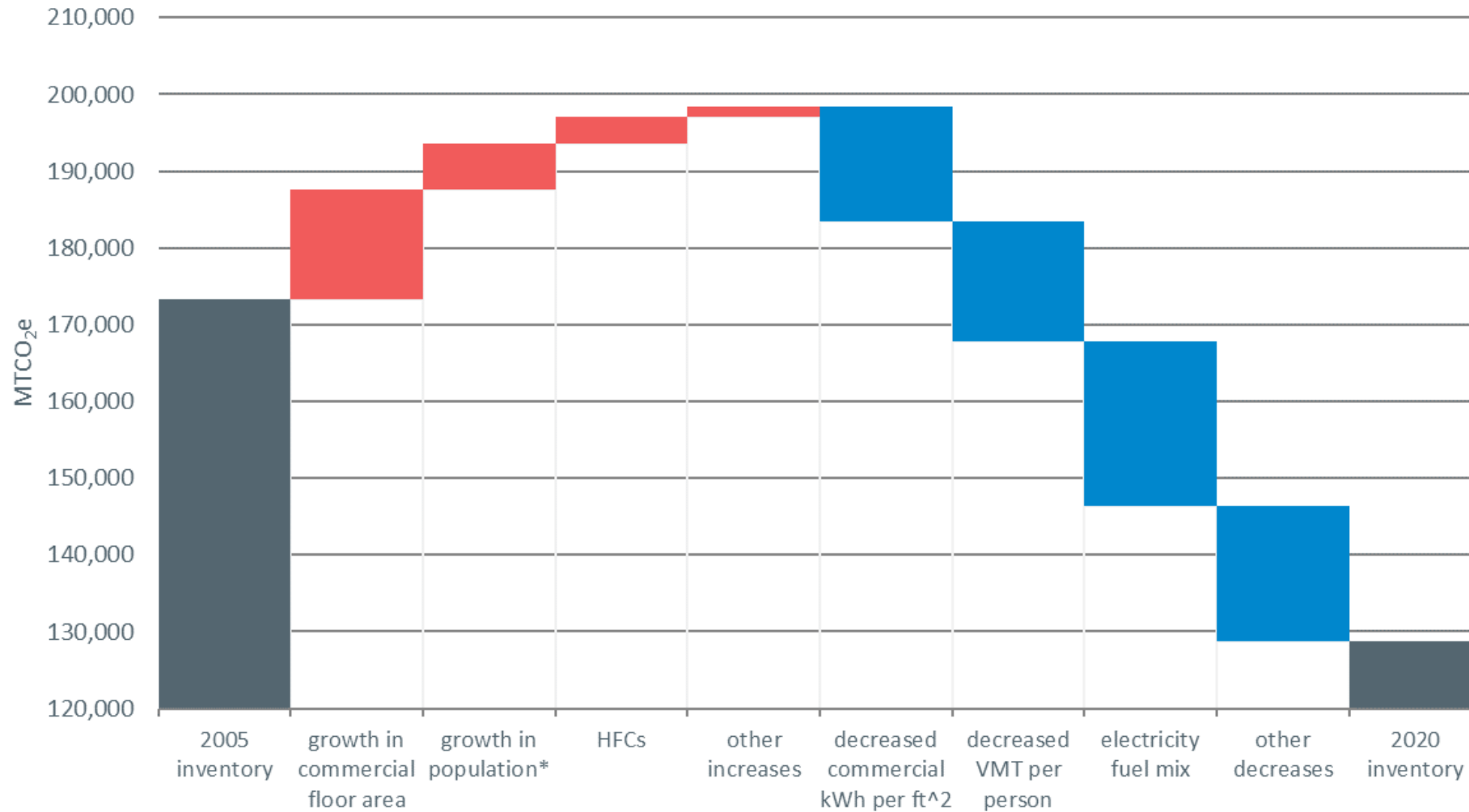


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Sources of Increases and Decreases in Takoma Park, 2005-2020:



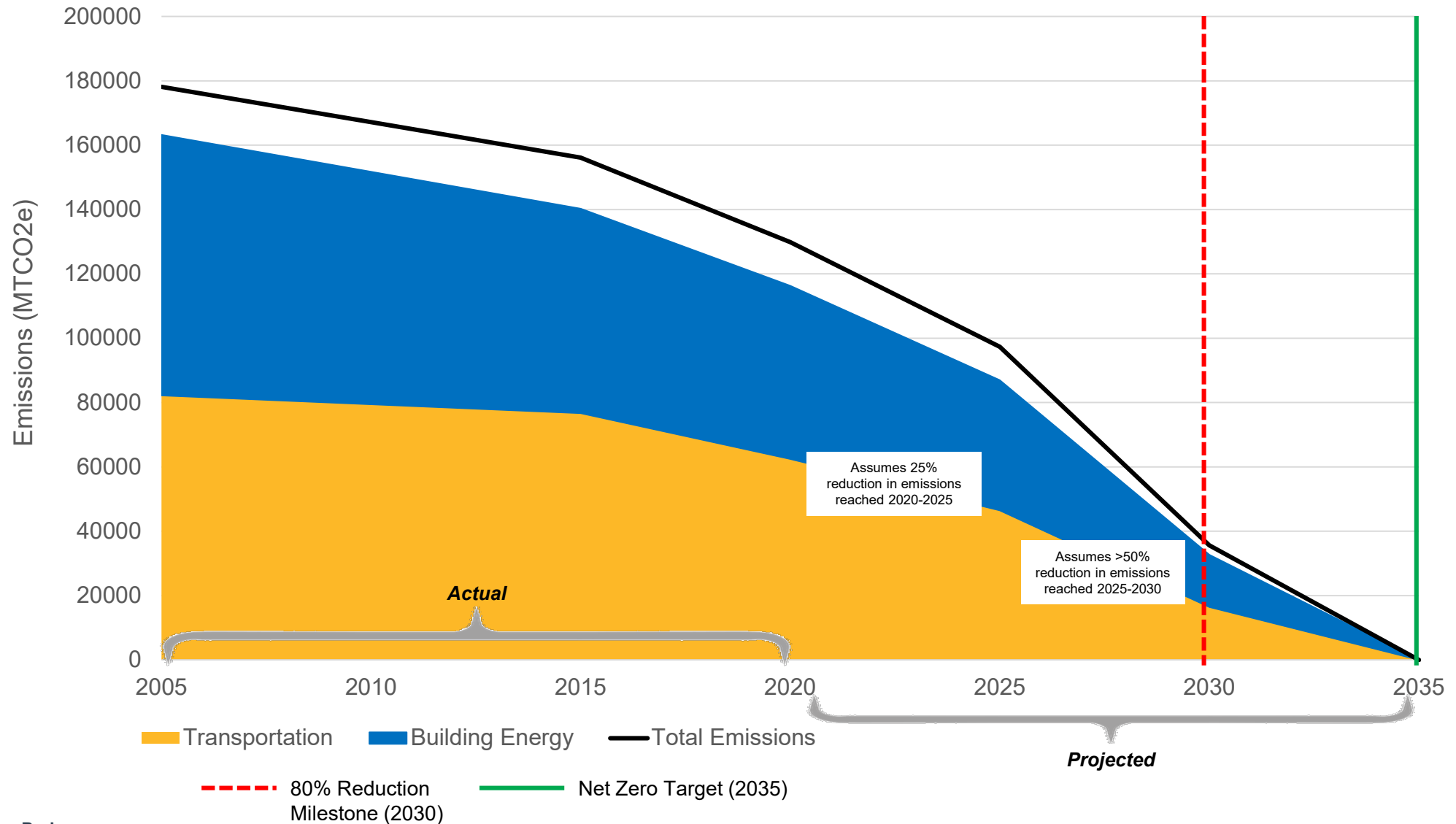
Emission Increase:

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

Emissions Decrease:

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

Takoma Park GHG Reductions Goal Trajectory (2005-2035)



Climate Actions Update: Buildings

- **Building Energy Performance Standards (BEPS):** required reporting was completed in June for 7500 Maple Ave., municipal energy audit and upgrade plan underway
- **Solar Adoption:** City currently has **381** households with rooftop solar, **16** commercial buildings, **163** households subscribing to community solar, and **65** new households registered with Capital Area Solar Switch
 - Households with rooftop solar **has increased 162% since 2020!**
- **Building Electrification:** Between 2023-2024, **53 new sign-ups** for Electrify MC have occurred, with 11 site visits and 3 completed projects
 - **Multifamily Building Improvement Grant Program (MFBIG)** completed **7 energy audits** of MF properties, and deployed **6 grant awards** of over **\$576k** towards electrification and decarbonization projects. More projects are expected in FY26.



MULTIFAMILY BUILDING
IMPROVEMENT GRANT:
Program Information

Climate Action Updates: Transportation

- Continued outreach and participation in **curbside charging** permitting for EVs; 12 applications, 3 permits issued
- 7 EV charging stations with 22 individual chargers as of November 2024
- **Fleet Transition Plan** – Drafted in Nov. 2024
 - Full evaluation of City Fleet (no-cost TA program) with incentives on discounted EVSE for participation
 - Detailed analysis using total cost of ownership comparison and EV market aspects
 - Examining funding options to pursue charge infrastructure
 - Make use if new Direct Pay option from IRS, effective this year
- Several grants applied to support installation of more EVSE (EV supply equipment)
 - **SUCCESSFUL grant from MDOT** via Montgomery County coalition application; approx. \$1 million for DCFC at Community Center and Public Works
 - Two additional grants applied for; would promote charging and MF housing, commercial, and institutional locations in the City



Climate Emergency Response Framework Update: Multimodal Transit

- COG grant issued for **New Ave Bikeway Purple Line Connection Study**; will examine bikeway connectivity between the transit center and the planned New Ave Bikeway along the New Hampshire Avenue corridor.
 - Will determine routing and infrastructure recommendations for a safe and comfortable bike and pedestrian connection that will support transit access
- City was awarded a federal **Safe Streets For All** grant to develop a City-wide Safety Action Plan.
 - On-going program work with **Safe Routes to School** on pedestrian and bike safety education and programming
- Maple Ave. Connectivity Project- final design underway
- MDOT funding from 2023 supporting the **Metropolitan Branch Trail Upgrade**



Major Events in 2024:

- An estimated 1,500+ people have been impacted by direct education/engagement at these events:



• March 12	Go Solar, TkPk!	60 attendees
• April 06	Health Homes Fair	100 attendees
• April 14	TPSS Coop Earth Day Event	65 attendees
• April 20th	City Earth Day Celebration	600 attendees
• May 30th	Power in the Park	70 attendees
• June 18	Pollinator Week Speaker's Event	90 attendees
• June 19	Juneteenth Celebration	60 attendees
• September 17	Senior Tour of the Materials Recycling Facility in PG County	12 attendees
• October 06	Takoma Park Street Fair	407 attendees
• October 10	Sustainable Maryland Walking Tour of Takoma Park	30 attendees
• December 03	Green Business Info Session	20 attendees



Activating Strong Partnerships for Technical Assistance:

- During 2024, direct technical assistance (TA) engagement has taken place with the following groups:

• Climate Action Bootcamp	WRI, USDN, Bloomberg, C40 Cities	Oct. 2023- Feb. 2024	Leveraging IRA funding, Direct Pay, EV charging, building electrification
• BEPS Data verification	Pulse IQ, MCGB	Feb.-June 2024	Conducting square footage calculation and data verification via EnergyStar Portfolio Manager for BEPs
• CFI Application Assistance	Build America Center, UMD	Feb.-July 2024	CFI EV charger site analysis
• Lighthouse Cohort	L4GG,USDN	March 2024- Present	Accessing Direct Pay
• Implementation Working Group	Electrify DC	April 2024- Present	Building a network of contractors, workforce development, and education on home electrification
• MEEHA, Pepco Small Business Incentives	ZeroDraft	Aug. 2024- Present	Leverage state incentives to fund MF building energy audits
• PEPCO Fleet Assessment Program	ICF and MD Energy Advisors	Aug. 2024- Present	Completion of a draft Fleet Electrification report for the City
• Better Climate Challenge	US Department of Energy	Sept. 2024- Present	Goal setting and support for energy efficiency and decarbonization goals
• Solar procurement services	MCEC	Oct. 2024- Present	Procurement and selection support for rooftop solar vendor for new library
• ICLEI Member reactivation	ICLEI	Dec. 2024	Rejoining national network of sustainable cities

- ... this is equivalent to **tens of thousands of dollars in no-cost services.**



Funding Milestones & Wins from 2024:

<u>Name of Grant</u>	<u>Amount Awarded</u>	<u>Date Applied</u>	<u>Status</u>	<u>Scope</u>
Maryland Energy Administration Public Facilities Solar Grant	\$125k	Applied March 2024	SUCCESSFUL	Rooftop solar expansion
MDOT Emissions Reduction Funding (coalition with Montgomery County)	Approx. \$1 million	Applied July 2024	SUCCESSFUL	EV charging sites
Chesapeake Conservation and Climate Corps Program	Placement of Fellow	Applied Dec. 2023	SUCCESSFUL	Placement of a CCCC Fellow in PW Sustainability programs for 1 year (no match)
Sustainable Maryland Action Grant	\$20 k	Applied Oct. 2024	PENDING	Expansion of MF food waste collection
Charging and Fueling Infrastructure Grant (CFI)	\$1 million	2 coalition applications, July 2024	PENDING	EV charging sites
Climate Pollution Reduction Grant (CPRG) Coalition application	\$96 million	Applied April 2024	UNSUCCESSFUL	Several regional decarbonization projects



- **IRS Elective Pay Benefit:** City enrolled in Lighthouse Cohort program, received free TA to guide the process to apply for \$7,500 credit for 2023 EV purchase.
 - **Excellent mechanism for funding stack in future projects (i.e. Library Solar project).**

Climate Action Updates: Natural Resources

- **Stormwater**

- Low Impact Development Center Stormwater Resiliency Study complete, 20 recommendations. 14 have been included in the stormwater capital program FY25-30
- My Rainplan tool deployed on city website; no cost virtual site review
- Takoma Branch Stream restoration completed (Poplar and NH Ave.)
- Brashear's Run outfall completed (Maple Ave. and Sligo Creek Parkway)
- Houston Ave.- 2 new filtration facilities, funded through CDBG

- **Urban Forestry Report 2024**

- Number of properties submitting requests- 108
- Tree Takoma Trees Planted- 176
- Takoma Park's urban forest canopy remains impressive and commendable for an inner suburban community

- **Environmental Restoration**

- Circle Woods invasive species removal and native replanting project completed (PEPCO grant funded); educational signage installed
- Stuart Armstrong project underway; invasive removed and initial planting; educational programming forthcoming (SM/PEPCO funded)



Communications, Outreach, and Partners:

• Communications Metrics

- 16 *Sustainable TkPk* e-newsletters issued-
 - Growth to **1000+ subscribers**, increase in open rate
- 6 interviews on the City radio show
- 4 Takoma Park Newsletter articles
- Reactivation and weekly posting on social media (459 Facebook followers, 105 IG followers, 255 X followers)
- Multi-lingual and equity-focused outreach

• Regional Coalitions and Partners

- Active membership in 12 regional and national climate and sustainability networks (USDN, MC4A, MWCOG, IWG, etc.)
- Engagement with **30+ community partners** during the year

• Conferences

- Participation in 4 major conferences
 - Presentation about MFBIG program and Elective Pay at USDN Annual Meeting in Minneapolis



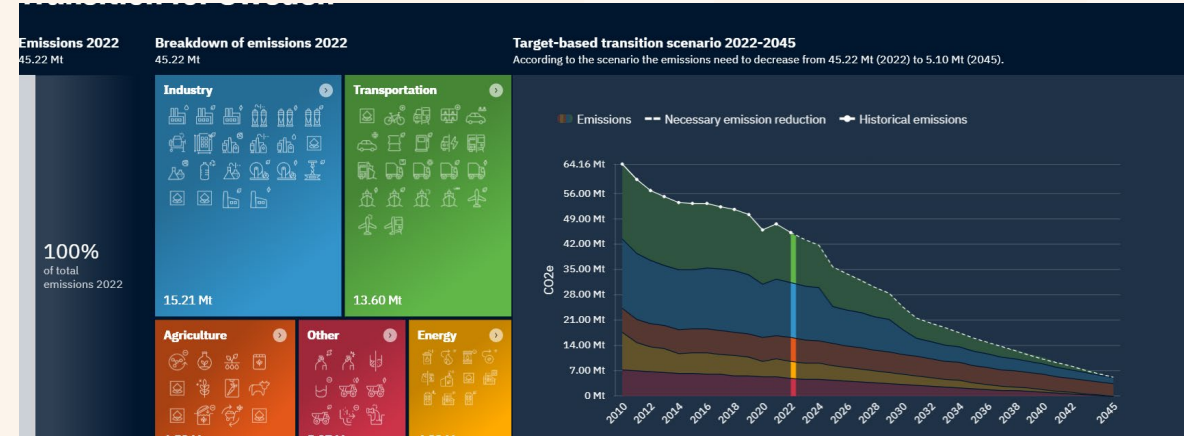
Reporting and Awards:

- **Sustainable Maryland Committee**
 - Full membership (9) as of this year;
Adoption of new Green Team Action Plan
- **Sustainable Maryland 2024 ‘Sustainability Champion’ Award**
 - City received Silver status (the current highest award category), and the highest point total of Maryland communities year at **730 points!**
 - Points distributed across all 10 Action Areas
 - Certification valid for next 3 years
- **CDP Reporting**
 - International carbon disclosure rating system; completed annually
 - Reporting completed in September 2024; score should be available in early 2025



FY2025 Upcoming Initiatives and Projects:

- **Sustainability Platform/Dashboard:** A public-facing dashboard tool to communicate progress across different areas of the Climate Action Plan, and allow for internal reporting
- **Door-knocking Campaign:** Utilizing expert outreach team to clarify incentives, tax credits, and assistance programs.
 - Targeted city-wide but with a focus towards equity emphasis areas; LMI
- **Green Homes & Businesses Grant Program:** Funding allocated towards business owners/operators, SF homeowners, multifamily tenants, for electrification/decarbonization projects; prioritization of low and moderate income individuals



Upcoming Events:

****Anticipated Feb.-March 2025**



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



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

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



FREE EVENT!

(Scan for more info)



healthyhomesfair.org

SATURDAY MARCH 29, 2025

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



Upcoming Events:



SAVE THE DATE!



Takoma Park Earth Day Celebration



Saturday, April 26, 2025

(*Rain date April 27)

Because there is no Planet B.

More info: takomaparkmd.gov/sustainability | dorothe@takomaparkmd.gov | (301) 891-7623

Part II: May 6th, 2025 – In Person



GREEN BUSINESS INFO SESSION



**Interested in learning more
about ways your business can
become more sustainable?**

**Join the City of Takoma Park's online info session
to hear about incentives, grants, and strategies
for commercial sustainability practices!**

**HEAR FROM PARTNERS
INCLUDING:**

- MD Energy Advisors
- Blue Whale EV
- Solar United Neighbors
- Montgomery County Green Business Certification program



DECEMBER

3

12-1:30PM

**ZOOM
WEBINAR**

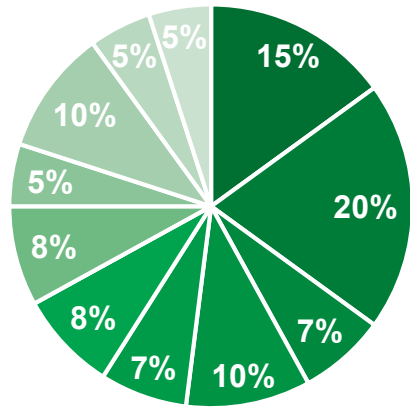
RSVP HERE:





Sustainability Budget Implications:

- **Support for enhancing existing programs**
 - Further expansion of **grant funding/programs for commercial sector**; collaboration with HCD department
 - Enhancement of **food waste collection program** to include multifamily pilot expansion (equity-focus)
 - Continued cross-departmental funding support for **MFBIG program**; joint multifamily decarbonization program between PW and HCD
- **Cost Efficiencies:**
 - Chesapeake Climate & Conservation Corps Fellow placement (tentative)
 - Continued participation in partner programs (ie, Electrify MC) and no-cost technical assistance (DOE, ICLEI, etc.)
- **Capacity Enhancement:**
 - To achieve climate goals, will require additional FTE for energy projects
 - Continued pursuit of grant funds (state and federal) to support clean energy projects, Elective Pay
 - 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



Sustainability Manager:



- Sustainability Reporting (BEPs, CDP, SM)
- Events Coordination
- Communications
- Climate Goals Dashboard
- Regional Partner Collaboration
- Resilience Planning
- Building Electrification Programs
- Grants and TA Programs
- EV Policy
- Solar Projects/Programs
- Commercial Programs
- Food Waste Program

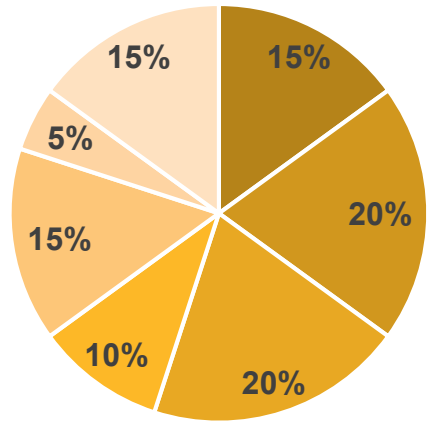
Proposed FTE Role: Energy Project Coordinator

- **Capacity currently limited for existing programs**
 - Level of projects for an office of 1 FTE is unrealistic
 - Request consideration for an additional full-time staff to support implementation of clean energy projects
 - Intern and Fellow are great assets, but temporary role does not allow for continuity

- **Efficiency and Growth**
 - Faster completion of reporting, project installations, and deployment of grants/incentives
 - Supports organizational growth so team can scale operations effectively; avoids bottlenecks

- **The time is critical to go after additional funding:**
 - Additional staff needed to support successful grants; currently no more capacity
 - IRA federal funding and State funding will likely remain intact for the next year or so, but potentially small window to go after it

Energy Projects Coordinator:



- Fleet Electrification
- Commercial Electrification
- Incentive Programs
- Energy reporting
- EVSE Installation
- Solar programs
- MFBIG Support

The Economic Cost of Climate Change Inaction:

“Insufficient action on climate change **could cost the global economy \$178 trillion over the next 50 years**, a 7.6% cut to global gross domestic product (GDP) in the year 2070 alone.” *(Deloitte, 2022)*

A Massive Opportunity:

“The societal benefit of emissions reduction is estimated to be **\$135 billion** based on estimates for the social cost of GHG emission. Meeting Maryland’s climate targets can bring positive economic impacts to the state. Between now and 2031, up to **27,400 additional jobs** will be generated under the new policies of this plan; total personal income will increase by \$2.5 billion; and Gross Domestic Product (GDP) will increase by \$5.3 billion.

“....this plan also yields significant benefits for air quality and public health through emissions reductions of co-pollutants. Overall, this plan delivers additional health benefits of **\$142 million to \$321 million in 2031** compared to current policies... The largest contributors in terms of monetized benefits across the state are **reductions in mortality, nonfatal heart attacks, and minor restricted activity days.**”

(Maryland's Climate Pollution Reduction Plan, 2023).

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>
- Legislative Priorities: <chrome-extension://efaidnbnmnibpcjpcglclefindmkaj/https://documents.takomaparkmd.gov/government/city-council/agendas/2023/supplemental-documents/Takoma-Park-Legislative-Priorities-2024.pdf>

References:

- Maryland's Climate Pollution Reduction Plan: <https://mde.maryland.gov/programs/air/ClimateChange/Maryland%20Climate%20Reduction%20Plan/Maryland%27s%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>



THANK YOU

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