

Office of Sustainability FY23 Annual Report

Presented by Laura Thomas
Director of Sustainability



OFFICE OF
SUSTAINABILITY

City of Richmond
RVAgreen
2050

Who We Are



We're Hiring!
Sustainability Coordinator



Jasmin Johnson
Energy Coordinator



Michael Smart
Sustainability Engagement
Coordinator



Bryan Epps
Sustainability Manager

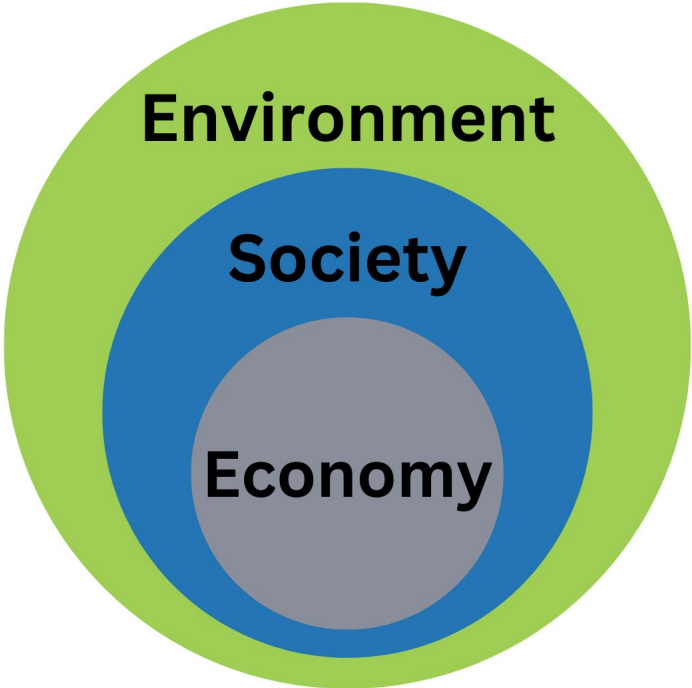


Dawn Oleksy
Energy Manager



Laura Thomas
Sustainability Director

Sustainability & Resilience



Nesting Model of Sustainability



Resilience as Social Determinants of Health

Frontlines of Climate Change

- Population (race, children, elderly, etc.)
- Household (renters, elderly living alone, etc.)
- Income & Education (SNAP, public assistance income, etc.)
- Housing & Transportation (internet access, vehicle access, etc.)

**Based on data from the U.S. Centers for Disease Control:
Social Vulnerability Index*

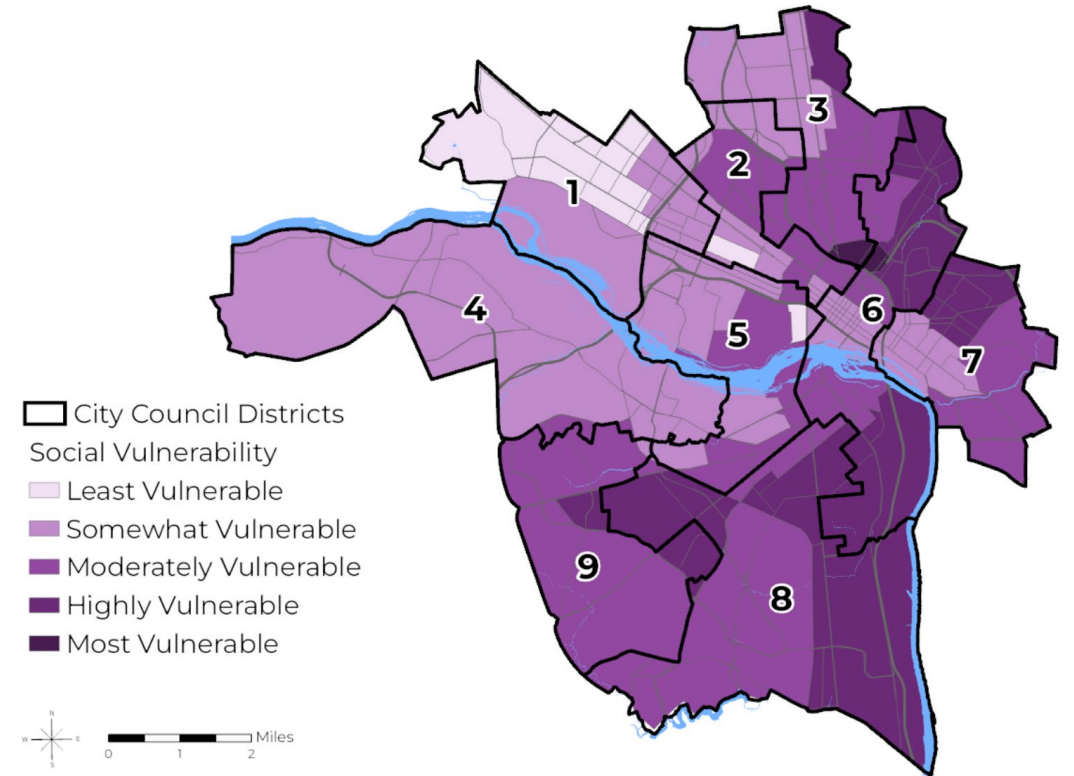
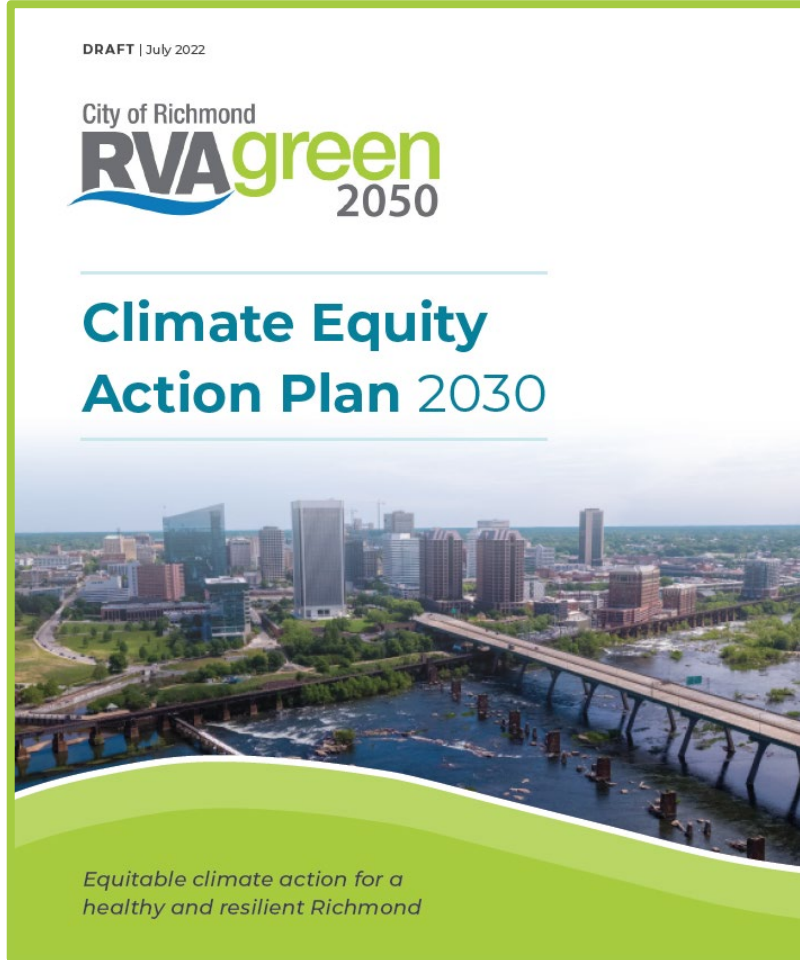


Figure 3.6. Social Vulnerability to Climate Change (RVAgreen 2050 Climate Equity Index, 2019)

RVAgreen Adoption



1 Vision: all Richmonders, regardless of their identity or neighborhood, thrive in a climate-resilient and climate neutral community

2 Goals: 45% reduction in GHG emissions by 2030 and net zero by 2050; Prepare for, adapt, and improve the community's resilience to local climate impacts



» Buildings & Energy -



» Environment -



» Transportation & Mobility -

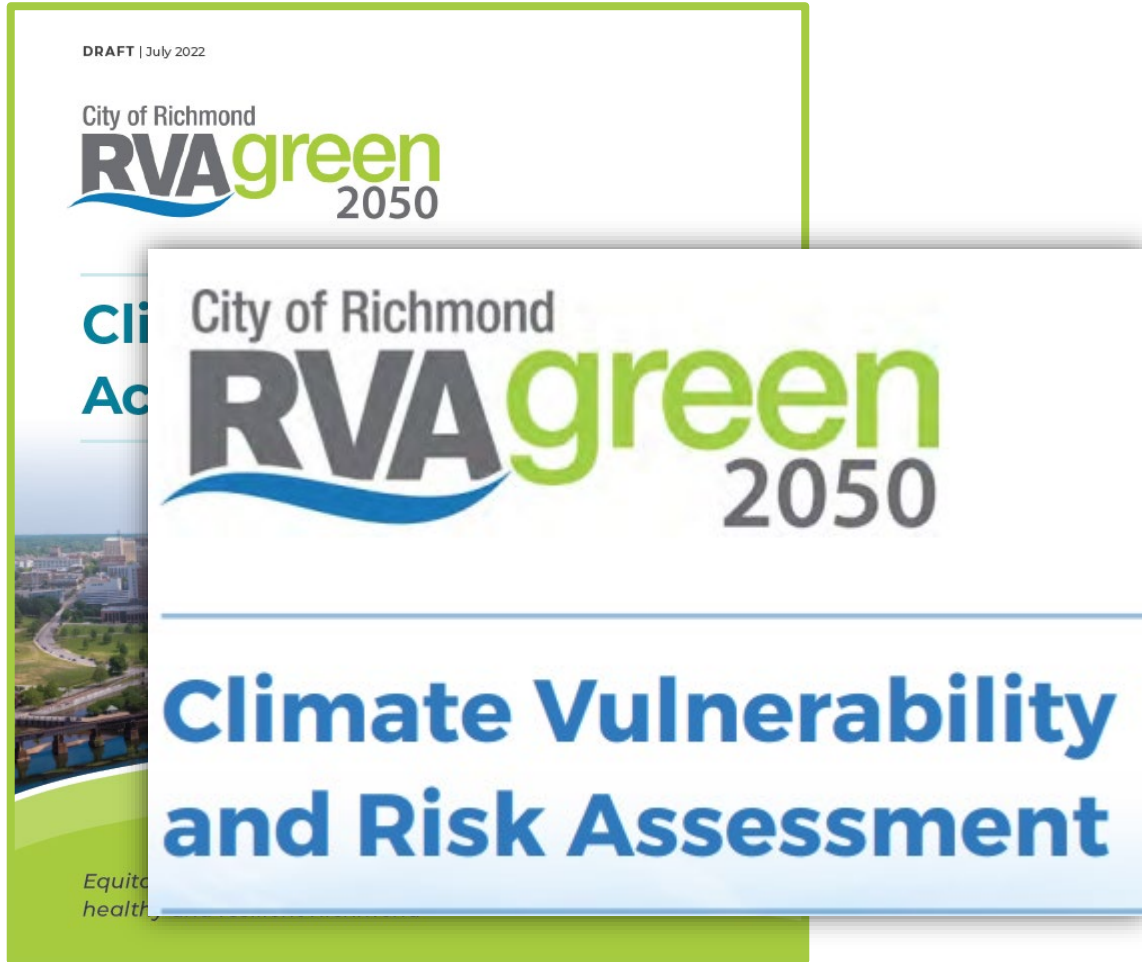


» Community -



» Waste Reduction &
Recovery -

Climate Vulnerability Assessment



How vulnerable are our assets to climate change?

What is the impact?

Climate Vulnerability Assessment



Public Housing

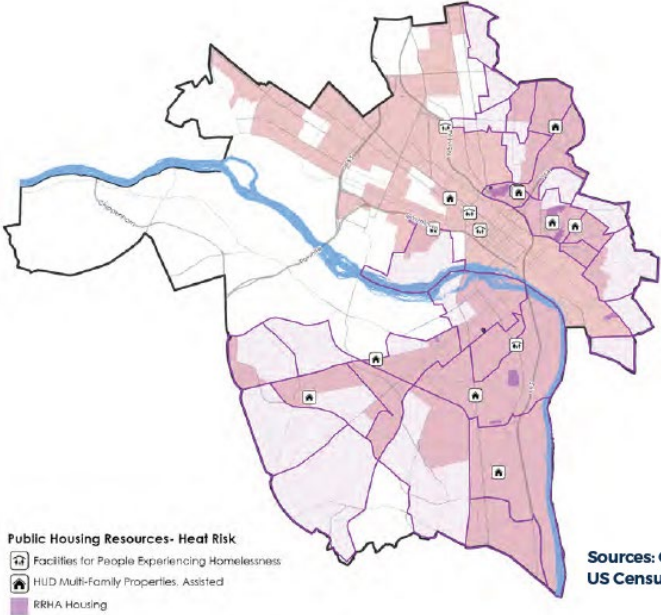
Those living in public housing are among Richmond's most vulnerable populations. These communities often have lower average incomes, more limited resources, and experience more chronic stressors such as poor housing conditions, crime, and health conditions. Climate impacts intersect with existing social, health, and economic vulnerabilities for these residents.

Built Assets Vulnerability and Risk



Built Assets at Risk

Public Housing Resources	Heat Risk	Flood Risk
HUD Multifamily Properties	13	2
RRHA Housing	36	42



Sources: City of Richmond, US Census Bureau

Climate Vulnerability Assessment Complete

Asset Class

Asset Class	Heat Risk	Flood Risk	Consequence
Communications Infrastructure	Medium	Medium	Medium
Community Buildings	Med-High	Med-High	Med-High High
Education	Medium High	Medium Med-High	Medium Med-High
Health and Social Services	Medium Med-High	Med-High	Med-High
Historic	Med-High High	Med-High High	Medium Med-High
Economic Development and Planning	Medium Med-High	Med-High High	Medium Med-High
Energy Infrastructure	Med-Low High	Low High	Low Med-High
Food System Assets and Resources	Med-High	Med-High	Med-High
Government Facilities	Med-High	Med-High	Med-High
Parks and Open Spaces	Med-High High	Med-High High	High
Public Housing Resources	High	High	High
Public Safety and Emergency Response	Medium Med-High	Med-High	Med-High
Stormwater and Sewer Infrastructure	Medium	High	High
Waste Management Infrastructure	Medium	Med-High High	Med-High High
Water Supply Infrastructure	Medium Med-High	Med-High High	High

Asset Class

Asset Class	Heat Risk	Flood Risk	Consequence
Roads and Bridges	Medium	Med-High	Med-High
Bike/Ped	Med-High	Med-High	Med-High
Rail and Transit	Medium	Med-High	Med-High
Marine	Med-Low	Med-High	Med-High
Airport	Med-High	Med-High	Med-High
Parks and Open Spaces	Med-High	Med-High	High
Terrestrial Habitat	Med-High	Med-High	High
Trees & Vegetation	Med-High	Med-High	High
Water Bodies	Med-High	Med-High	High

Climate Vulnerability Assessment Complete

Table 6.4 – Prioritized Needs – Critical Flood Risk

Asset Category	Asset Name	Assets at Risk in Highly Socially Vulnerable Areas	Resources Serving SV Groups at Risk Outside Most SV areas	Units	Critical Flood Risk		Districts
					Most Vulnerable Assets with exposure to Critical Flood Risk (located within or serving socially vulnerable groups)	Consequence	
Community Buildings	Community Centers	2	0	centers	Creighton Court Community Center; Calhoun Community Center and Playground		3 rd District, 7 th District,
	Religious Centers	4	0	Centers	Saint Kim Taegon Catholic Church; Fifth Street Baptist Church; Bethlehem Baptist Church; Grayland Baptist Church		6 th District, 7 th District 8 th District
	Voting Stations	3	0	stations	Calhoun Center; John Marshall High School; 5th Street Baptist Church		3 rd District, 6 th District
Economic Development and Planning	CARE Zones	2	11	zones	*Belt Boulevard, *Brookland Park Boulevard, *Fulton Hill, *Hull Street, *Jackson Ward, *Midlothian Turnpike, *North Avenue, *North 25th Street, *Shockoe Bottom, *Swansboro, *Upper Hull Street, Lombardy/Chamberlayne, Meadowbridge,		5 th District, 6 th District, 7 th District, 8 th District
	Community Unit Plans	4	0	plans	See map for locations		Various
	Enterprise Zones	3	0	zones	III (2746.8 acre), III (47.1 acre), I (3611.2 acre)		Various
Education	Childcare Centers	4	0	centers	North Richmond Branch YMCA; Fairfield Elementary School; Oak Grove Child Care Center; Bethlehem Baptist Church Child Development Center		3 rd District, 7 th District, 8 th District
	K12 Public Schools	4	0	schools	Oak Grove Elementary School; John Marshall High School; REAL School; Thomas H Henderson Middle School		3 rd District, 6 th District,
	Private Schools	1	0	schools	Geara Group/Educational Developmental Center		6 th District

Climate Vulnerability Assessment Complete

Table 6.2 Prioritized Needs - Critical Heat Risk

Asset Category	Asset Name	Assets at Highest Heat Risk in Most Socially Vulnerable Areas	Assets Serving SV Groups at Highest Heat Risk Outside Most SV Areas	Units	Critical Heat Risk - Afternoon Mean High Temp >96*		District
					Assets/locations exposed to Critical Heat Risk (Above 96*)	Consequence	
Education	Childcare Centers	1	0	centers	Oak Grove Child Care Center - 2200 Fairfax Avenue Richmond VA 23224		8 th District
Health and Social Services	Dialysis Clinics	0	1	clinics	*DaVita Richmond Community Dialysis - 913 North 25th Street Richmond VA 23233		7 th District
	Homeless Facilities	1	1	facilities	Caritas - 1125 Commerce Road Richmond VA 23224, *Pilgrims Passage - 1500 Sherwood Road Richmond VA 23220		3 rd District, 6 th District
	Nursing Homes	0	1	homes	*Brook Haven Rest Home - 610 Fourquarean Lane		6 th District
Historic	National Register Historic Districts	4	0	Districts	Union Hill; Southern Stove Works; Chesapeake Warehouses; Highland Park Plaza		3 rd District, 6 th District, 7 th District
	State Federal Historic Sites	1	0	sites	Southern Stove Works Manchester		3 rd District
Economic Development and Planning	CARE Zones	1	2	zones	*Lombardy/Chamberlayne, *North 25th Street, Meadowbridge		Various
	Enterprise Zones	2	0	zones	III (2746.8 acre), I(3611.2 acre)		Various

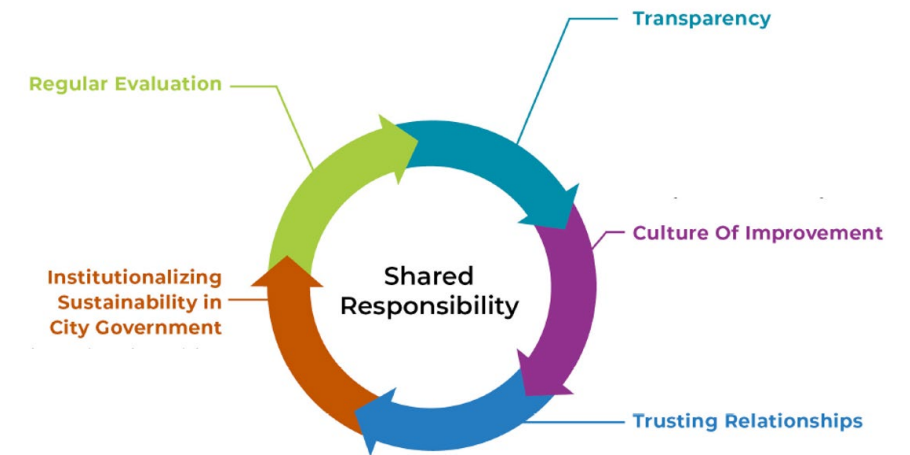
RGGI- Regional Greenhouse Gas Initiative

- Clean Energy & Community Flood Preparedness Act of 2020
- RGGI established the Community Flood Preparedness Fund (CFPF)
- Richmond has received \$8.7M
 - McGuire & Chapel Drive Drainage
 - Floodwall Digital Baseline
 - Staff planning & capacity building
 - Windsor Farms resilience plan
 - Mayo Island Acquisition



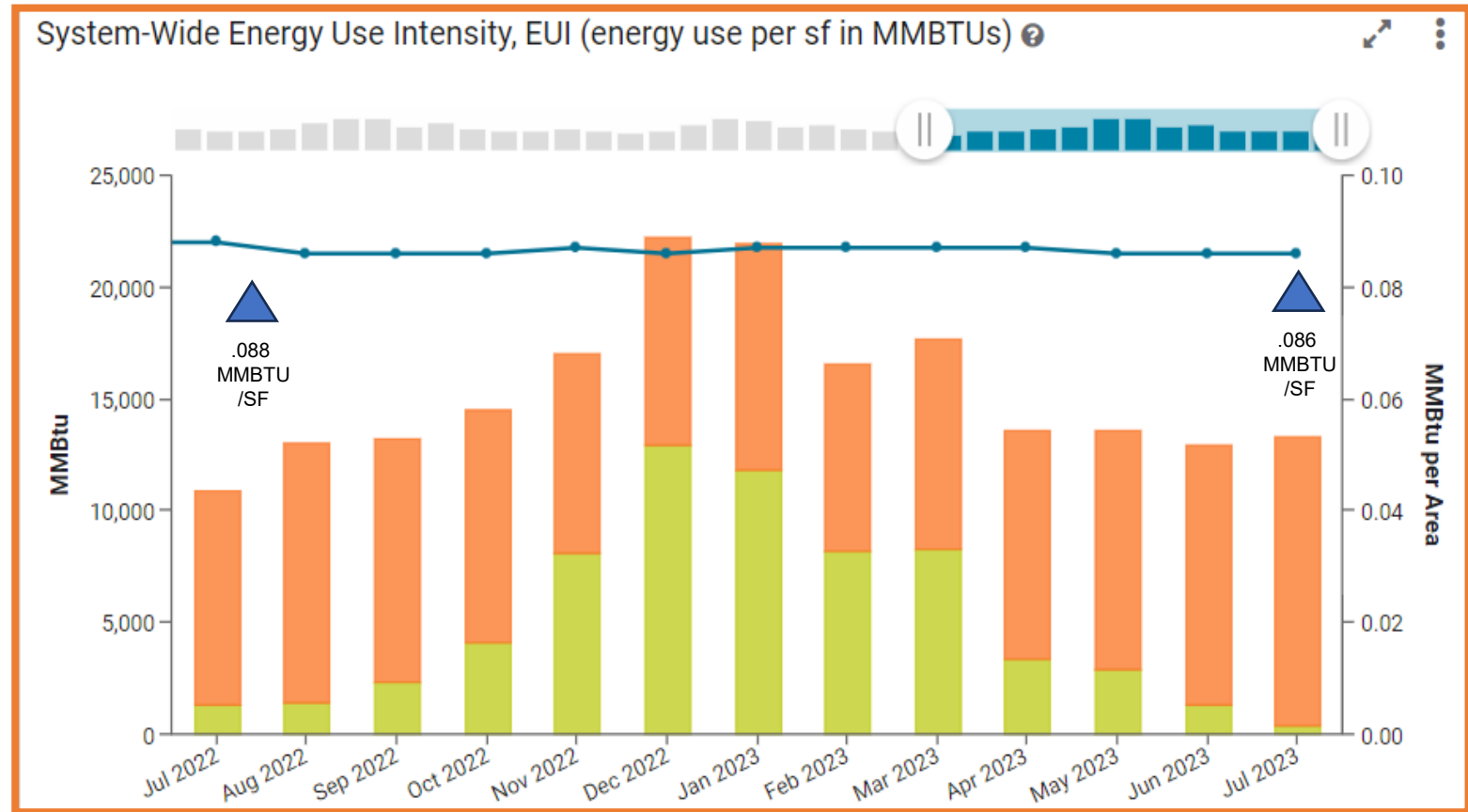
Energy Program Creation

- Mayor's 2023 50% Renewable Energy Goal
- Joint Energy Committee (JEC)
- Automated Utility Tracking
 - Dominion Key Account Portal
 - EnergyCAP Database
- EECBG | Household Energy Burden Relief



Energy Program Progress & Reporting

- Carbon footprint from municipal energy usage down 7.6% (2021 to 2022)
- 10 electric vehicles purchased
- Energy Expenditures:
\$22,695,857
 Electricity- \$16,717,229
 Natural Gas- \$2,215,323
 Fleet Fuel- \$3,763,304
- Energy Cost Avoidance Year 1:
\$168,326



Community Engagement

- Neighborhood Climate Resilience Grant Program (ARPA) \$865,000
- Oakgrove/Bellemeade SAP
- Over 200 ongoing individual community-member connections
- 40+ participants in the Federal Climate Funding sessions



Grants – Federal Climate Funding Convening

- First-in-the-nation model (CBOs, quasi/gov't) for Federal Funds
- OOS supporting \$14,341,231.04 in applications (Federal, State, other)
 - ARPA, EECBG, Urban Forestry, etc.
 - Active: \$8,140,000
 - Anticipated FY24 applications: \$7,000,000-\$15,000,000+
- More announcements to come!



Other Successes

- The New OOS!
- 12% RVA Green 2050 Actions Completed
- VCAP- DPU/Green City Commission
- C-PACE
- Urban Forester | Climate & Sustainability Grant Writer
- Started first GHG Inventory since 2018



FY24 Focus Areas

- Federal Grants, cont'd
- Data Informed Program and Policy Delivery
- Community-Built Neighborhood Climate Tour
- “Get on the Bus” Campaign
- Sustainability Guide for Residents
- Energy Efficiency and Renewables Installation (Direct Pay)
- Support Redevelopment Projects, Small Area Plans, etc.
- Greenspace Support (UFMP, Parks MP, etc.)
- EECBG | \$265,000 Energy Efficiency in Low-Income Homes
- IRA Developer Forum – Nov 8th @ 4pm (Main St. Station)

Thank You

Questions?

Join us! September 27th at 4pm



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