

2025

# Climate Action Report



City of Charlottesville  
Office of Sustainability  
July 7, 2025

# Contents

---

Acknowledgements.....	3
A Note from the Office of Sustainability Director .....	4
Letter from the Climate Program Manager .....	5
Summary .....	6
Calendar Year 2023 Greenhouse Gas Inventory .....	6
Reporting and Scoring.....	9
City-Led Initiatives .....	10
Municipal Energy Efficiency and Use Reduction .....	10
Energy & Water Management Program .....	10
City and Schools Solar PV Program .....	12
Power Purchase Agreements.....	12
LED Streetlight Conversion.....	13
High Performance Building Standards.....	13
Municipal Energy Performance Program.....	13
Municipal Building Electrification Screening.....	14
Energy Demand Response Program Participation .....	14
Parks & Rec Landscaping Equipment Electrification Pilot.....	14
Community Energy Efficiency and Use Reduction .....	16
Community Energy Resource Hub .....	16
Energy Efficiency and Conservation Block Grant.....	17
Residential Energy Efficiency and Renewable Energy Deployment.....	17
C-PACE Program Establishment .....	17
Home Improvement/Energy Efficiency via HUD programs .....	18
Utilities-Led Efficiency Programs .....	18
Clean Energy Tax Abatement Program.....	19
Gas Decarbonization Study .....	20
Carbon Offset Natural Gas Program .....	20
Municipal Transportation Electrification .....	21
Transit Zero Emission Bus (ZEB) Transition .....	21
EPA Clean School Bus Rebate .....	21

School Bus Electrification Transition Planning .....	21
Municipal Fleet Electrification .....	21
Community Transportation Electrification .....	23
Community-wide EV Charging Infrastructure Study .....	23
EV Infrastructure Assistance Grant .....	23
E-Bike Incentive Pilot Program .....	23
Community Transportation Improvements .....	24
Bicycle Infrastructure & Micromobility .....	24
New Sidewalks & Pedestrian Infrastructure .....	24
Americans with Disabilities Act (ADA) Projects .....	25
Nature Based Solutions .....	26
Urban Forest Management Plan.....	26
Urban Tree Planting.....	26
Invasive Species Management.....	26
Charlottesville Invasive Plant Partnership .....	27
Energy Saving Trees Program .....	28
Schenks Branch Restoration Project .....	28
Community Waste Reduction .....	30
Composting Program .....	30
Resilience Building .....	31
Resilient Together .....	31
City Environmental Regulations Review .....	32
Other Program Activities .....	33
Community Education & Outreach Work.....	33
Working in a Sustainable Environment (WISE) Program Launch .....	35
Policy and Regulatory Activity .....	36
Community-Led Initiatives Updates .....	38
Community-led Solar and Electric Vehicle Adoption .....	38
Community Climate Collaborative (C3).....	38
Local Energy Alliance Program (LEAP) .....	40
Piedmont Housing Alliance .....	40
Piedmont Master Gardeners.....	41

ReLeaf Cville.....	42
Sierra Club Piedmont Group.....	43
Looking Ahead .....	44
What’s coming up in FY26? .....	44

## Acknowledgements

---

This report was authored by Office of Sustainability Climate Program staff Emily Irvine, Tray Biasioli, and Gabriel Sherzada with support from Director, Kristel Riddervold.

Special thanks to City staff who contributed and coordinated: Jill Greiner, Kirk Vizzier, Ben Chambers, Irene Peterson, Steve Gaines, Jason Vandever, Dan Frisbee, and Ashley Marshall.

Additional thanks to our community partners who shared update on their work to include in this report:

- Community Climate Collaborative (C3)
- Local Energy Alliance Program (LEAP)
- Piedmont Housing Alliance (PHA)
- Piedmont Master Gardeners
- ReLeaf C’ville
- Sierra Club – Piedmont Chapter
- Albemarle County Climate Team

# A Note from the Office of Sustainability Director

---

## **What a year this has been!**

We have a fully staffed and committed Climate Team in our Office of Sustainability, we have dedicated capital funding to support climate initiatives, our network of City colleagues and community partners engaged in climate work continues to grow, and we have a community that keeps us motivated and accountable. We also have political landscapes undergoing major shifts that threaten to present a host of additional challenges to our community and this climate and sustainability work.

I invite you to read this FY25 Annual Climate Action Report with two lenses.

## **First, take a moment to celebrate.**

Across sectors – both within municipal operations and in the broader community - we are making tangible progress. We are demonstrating that it is possible to bring down emissions locally and to integrate sustainability strategies in our local projects, programs, and services. Investments are being made that will result in future cost savings and provide for a healthier built environment. Our adaptation and resilience work will help our community reduce physical and financial exposure to climate and weather-related risks.

## **Second, consider the growing gap in federal leadership on climate.**

While the federal government is stepping away from climate leadership on the national and international front, local action needs to step in. Charlottesville joins peer local governments in doubling down on the important work of reducing our contribution to greenhouse gas emissions, actualizing resilience strategies, and operationalizing climate in our government. The climate crisis happening now - our efforts cannot be put on hold. The opportunity to drive meaningful solutions has never been greater.

The climate program is one of several programs trying to remain adaptive as external resources are pulled from our projects and new barriers are created. We are committed to pursuing alternate funding, forging effective partnerships, tracking evolving technologies, and learning alongside an inspiring cohort of peer communities.



Thank you to everyone who is contributing to this critical work, and I hope this report motivates us to continue with a much-needed sense of urgency.

With much appreciation,  
Kristel Riddervold  
Director, Office of Sustainability

## Letter from the Climate Program Manager

---

As reporting season approached, I spent a lot of time thinking about writing this letter. Last year's letter was so hopeful in tone and largely focused on the opportunities surely to trickle down to Charlottesville from unprecedented federal investment in climate action and clean energy. The landscape of climate action in America today is very different than it was at this time last year. The United States has retreated from climate science, climate action, and climate investment faster than I ever could have imagined. So fast in fact that we have already been impacted locally by the cancellation of several federal grants, including one supporting our adaptation and resilience planning and another supporting an update to our Urban Forest Management Plan. Additionally, 2024 once again shattered global temperature records and was the hottest year since record keeping began. Since I wrote last year's missive, Hurricane Helene brought massive damage to Western North Carolina and parts of Southwest Virginia too, places once considered safe havens from the more severe impacts of climate change. What could I possibly think of to say as a hopeful call to action?



However, assembling this report proved therapeutic. Revisiting all we have accomplished over these past twelve months, and planning for the next twelve, reminded me of all that can be done at the local level both to reduce emissions and to make our community safer, healthier, and more affordable. I am proud to say that we accomplished or made progress on every single item from last year's "Looking Ahead" list. We successfully launched the Energy Resource Hub, which is helping community members save energy in their homes and businesses. Nearly 50 community members were supported in accessing e-bikes. The new Bypass Fire Station has a solar system that provides more than 40% of its electricity needs. We kept the projects that were impacted by cancelled federal grants going. We started new engagement programs and built new relationships.

The impacts of climate change are increasing and affecting communities around the country in ways large and small. From extreme weather to the cost of insurance, conditions are changing around us. In the absence of federal leadership on addressing climate change, it is imperative that cities and states stay the course – even small cities like Charlottesville. In fact, I think we have a real opportunity to lead by example. Charlottesville has long had a commitment to environmental stewardship, and we have made much progress over the years. Continuing to do this work under challenging conditions and without federal support is in line with the City's values of commitment, integrity, and innovation. Continuing to do this work is an investment in the strength, health, and safety of our community. I am grateful to City leadership for their continued commitment to this work. I am grateful to all our partners – both internal and external – who are working to cut emissions or build resilience. Take a few moments to skim this report and recall (or learn about!) all the things we have done together over the past year. Enjoy that feeling of accomplishment for a moment, then let it resolve you for the work ahead.

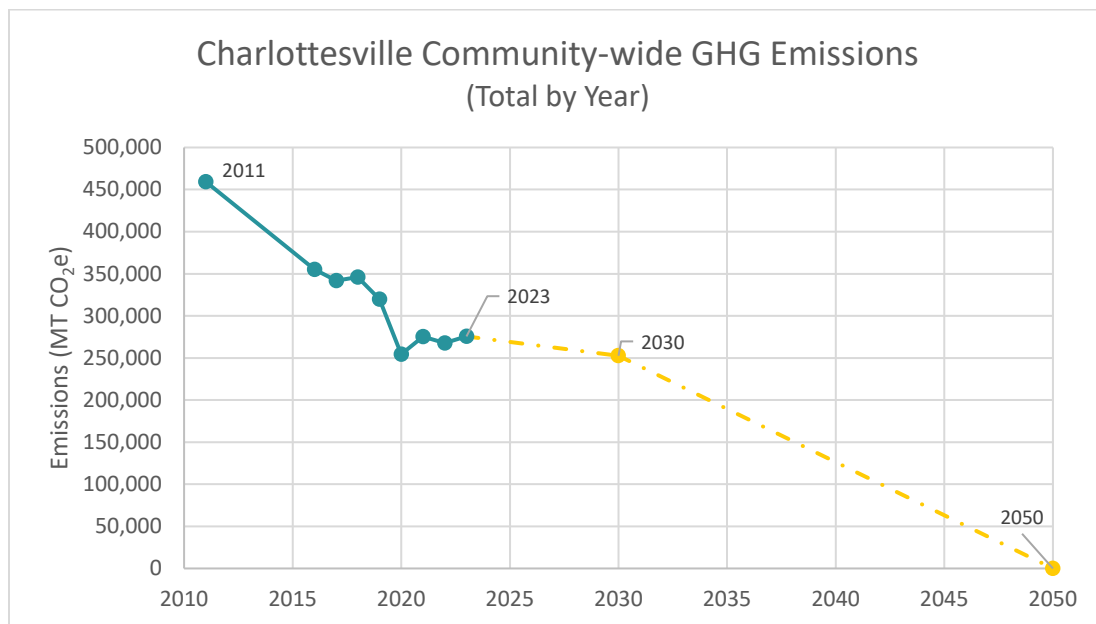
In service,  
Emily S. Irvine  
Climate Program Manager

## Summary

This report is Charlottesville's second annual Climate Action Update since the adoption of our Community Climate Action Plan (CAP) in January of 2023. It contains brief updates on all the initiatives and projects that were part of the City's FY25 Climate Action Workplan, plus a few others that were added over the course of the year. The FY25 Workplan did not include community-led projects and initiatives as logistics to establish those proved challenging. However, in the spirit of collaboration and co-ownership of climate solutions, this report does feature updates from many community-based organizations who are working alongside us. For this report, the projects and initiatives detailed herein are grouped together by sector, consistent with the revised structure of the new FY26 Climate Action Workplan that is being released with this report. This additional layer of organization should provide additional clarification of the intent and focus of the listed initiatives.

## Calendar Year 2023 Greenhouse Gas Inventory

In 2023, community-wide emissions were up slightly relative to 2022, with emissions down 40% relative to the 2011 baseline. The preceding three years (2020-2022) were impacted to varying degrees by pandemic-related closures and reductions in travel and showed sharp declines in emissions relative to pre-pandemic inventories. Although municipal and community activities had largely returned to normal by 2022, vehicle usage was still reduced relative to pre-pandemic trends. The 2023 inventory represents a return to pre-pandemic travel patterns, with vehicle miles traveled (VMT) at 99% of 2019 levels. This increase in VMT is the main factor driving the slight emissions increase from 2022.



While community-wide emissions showed a slight overall increase, there was notable variation between sectors. There was a 3% decline in emissions from building energy usage, but this was offset by a 20% increase in transportation-related emissions. The significant increase in transportation emissions highlights the importance of both incentives and regulations to advance vehicle efficiency and electrification *and* shifting mode share away from cars towards alternative modes of transportation.

Municipal emissions showed a slight decline across all sectors relative to 2022 and are now down 41% from the 2011 baseline. This drop in municipal emissions has been seen across all sectors, with the greatest reductions being seen from our stationary energy sources, which include buildings and lighting. The Office of Sustainability will continue working with other City departments to accelerate reductions in municipal emissions in FY26, as we implement streetlight upgrades, incorporate more electric vehicles into our municipal fleet, and deploy solar energy systems at several City buildings.

Beyond community-level actions, much of Charlottesville's progress on emissions reductions has been driven by regulatory and market changes in the electric and transportation sectors. Given recent changes in federal regulations and incentives, action at the state and local level will become increasingly important, as well as action driven by the improving economics of clean energy technologies.

In the electric sector, there was continued progress in reducing the carbon intensity of electricity generation. On a per kWh basis, emissions from electricity generation have declined 45% between 2011 and 2023, and over 7% relative to 2022.<sup>1</sup> The electric grid will get increasingly clean based on regulations in the Virginia Clean Economy Act (VCEA), which requires Dominion to provide 100% zero-emissions electricity in Virginia by 2045.

Regarding transportation, emissions from this sector increased relative to 2022, primarily driven by a 14% increase in VMT, with a 20% increase for diesel-fueled vehicles. In addition, the vehicle composition in 2023 trended toward less efficient vehicles such as light trucks. However, there is reason for optimism based on electric vehicle adoption rates within the City and surrounding jurisdictions. The number of electric vehicles registered within the City increased by 24% in 2023 (and by 37% from 2023 to 2024).<sup>2</sup> The overall number of electric vehicles is still modest, but given the current adoption rates in Charlottesville we expect to see an impact on vehicle emissions in the next several years.

In spite of the current federal retreat from climate action, there remain many opportunities to advance this work at the local level. Robust incentives for home electrification and efficiency improvements are anticipated to arrive in late 2025, and the City recently introduced additional incentives for home efficiency improvements.

The charts below detail Charlottesville's annual community-wide and municipal GHG emissions inventories. The Municipal Inventory covers the activities of the City government and includes our City and Schools buildings, as well as the City's vehicle fleet, school buses, and transit buses. The community-wide inventory is inclusive of the municipal inventory, so the total number of Charlottesville emissions is in the community-wide inventory (not the sum of both inventories).

---

<sup>1</sup> *Virginia Electricity Profile 2022*, (November 6, 2024). US Energy Information Administration. [https://www.eia.gov/electricity/state/virginia/state\\_tables.php](https://www.eia.gov/electricity/state/virginia/state_tables.php)

<sup>2</sup> *State EV Registration Data* (April 25, 2025). Atlas Public Policy <https://www.atlasevhub.com/market-data/state-ev-registration-data/#data>



Community-wide Inventories									
Sector	CO <sub>2</sub> e (MT)								
	2011	2016	2017	2018	2019	2020	2021	2022	2023
Transportation & Mobile Sources	128,835	92,648	92,218	90,938	91,205	73,995	74,183	75,874	90,902
Solid Waste	24,694	16,302	16,687	16,721	16,425	5,509	9,066	10,289	9,870
Water & Wastewater	-	271	271	271	271	196	286	196	196
Commercial Energy *	170,003	123,838	118,810	115,046	101,688	80,820	89,583	88,804	83,689
Industrial Energy	372	195	190	208	200	197	237	180	165
Residential Energy	135,405	108,393	100,986	107,699	96,389	82,891	89,475	79,962	79,680
Process & Fugitive Emissions	-	13,556	12,857	15,078	13,555	10,753	12,583	12,343	11,550
<b>Total</b>	<b>459,309</b>	<b>355,203</b>	<b>342,019</b>	<b>345,961</b>	<b>319,733</b>	<b>254,361</b>	<b>275,413</b>	<b>267,648</b>	<b>276,052</b>
% change from 2011		-23%	-26%	-25%	-30%	-45%	-40%	-42%	-40%

\* The Commercial Energy Sector includes Municipal and Non-Municipal Government energy consumption

Municipal Inventories									
Sector	CO <sub>2</sub> e (MT)								
	2011	2016	2017	2018	2019	2020	2021	2022	2023
Buildings & Facilities **	11,430	8,702	8,746	8,436	7,711	5,631	6,422	6,833	6,253
Street Lights & Traffic Signals	2,001	1,301	1,211	1,108	987	892	929	921	862
Vehicle Fleet	6,015	6,030	6,031	5,769	5,374	4,952	4,803	4,681	4,394
<b>Total</b>	<b>19,446</b>	<b>16,033</b>	<b>15,988</b>	<b>15,313</b>	<b>14,072</b>	<b>11,475</b>	<b>12,154</b>	<b>12,435</b>	<b>11,509</b>
% change from 2011		-18%	-18%	-21%	-28%	-41%	-37%	-36%	-41%

\*\* Includes City Government and City School Buildings and Facilities

## Reporting and Scoring

In compliance with our commitments to the Global Covenant of Mayors (GCoM), we continued with our annual emissions reporting in 2024. The Climate Program uses a reporting platform called “CDP” (formally Carbon Disclosure Project) to publicly report our greenhouse gas emissions. [CDP](#) is a global non-profit organization that helps thousands of businesses and governments across the world with environmental reporting. More than 200 Cities across the United States use CDP as for their emissions disclosure commitments. In 2024, Charlottesville maintained our CDP Score of “A-” which we first achieved in 2023.

Participation in GCoM commits Charlottesville to both mitigation and adaptation planning. Mitigation planning was completed by the adoption of our Climate Action Plan. Adaptation planning is ongoing through the Resilient Together project. In the 2024 evaluation cycle we maintained our GCoM badges for our commitment to ongoing climate action.



### Mitigation? Adaptation? *What’s the difference?*

“Mitigation” means reducing our emissions to help address the cause of climate change. It refers to things like reducing our energy use or switching to renewable energy sources. Some examples are:

- Weatherization
- Solar Power
- Using public transportation
- Electric Vehicles
- Heat Pumps

“Adaptation” means changing the way we do things in response to the impacts of climate change. It refers to things like strengthening our systems and preparing for more extreme weather. Some examples are:

- Putting power lines underground in storm-prone areas
- Relocating buildings and infrastructure away from floodplains
- Restoring ecosystems and planting native species
- Back-up power systems
- Forming a neighborhood preparedness group

## City-Led Initiatives

The following are brief, high-level updates on City-led climate and sustainability initiatives. This list is based on the City's [FY25 Climate Action Workplan](#) and also includes several projects that were not contemplated there. These initiatives were led by various City Departments. The Office of Sustainability led many of the initiatives and provided support and collaboration on others.

### Symbol Key:



In-progress Project



Ongoing program



Item Complete



Bonus Item, not in FY25 Workplan

## Municipal Energy Efficiency and Use Reduction



### Energy & Water Management Program

The City's Energy and Water Management Program (EWMP) is made up of staff from the Office of Sustainability and Public Works Department. They work to consistently track the utility usage and building performance of all municipal facilities, including schools, and implement programs and initiatives to save energy and water. In addition to the City's high level emissions reduction goals, the EWMP team has set and is working towards performance targets for the City's building portfolio:

- Greenhouse Gas Goal:
  - 45% reduction in Greenhouse Gas by FY2030
- Energy Goal:
  - 30% reduction in Energy Use Intensity by FY2030
- Water Goal:
  - 30% reduction in Water Use Intensity by FY2030

The EWMP is working to facilitate multiple strategies to reduce utilities and greenhouse gas emissions including the Municipal Energy Performance Program, municipal building electrification, energy demand response, City and Schools Solar PV Program, power purchase agreements, City and school outreach and education, and the LED streetlights conversion.

The team recently published their [annual report on energy and water performance for FY24 \(LINK\)](#)<sup>3</sup>. Of note from the report are lighting upgrades, a restroom reconfiguration with water efficient fixtures, and a roof replacement at Charlottesville High School. As of FY24, Charlottesville has achieved a 37% reduction in municipal greenhouse gas emissions related to stationary sources (buildings and streetlights/traffic signals) since the 2011 baseline (Figure 1). You can view more detailed municipal energy and water performance data on the [City's Performance Dashboard \(LINK\)](#).

<sup>3</sup> Note that the GHG Inventory in the opening section of the report is for calendar year 2023, whereas the Energy and Water Management Program tracks data on a fiscal year basis and is reporting for fiscal year 2024. This discrepancy is due to the varying timeline availability of different data sources.

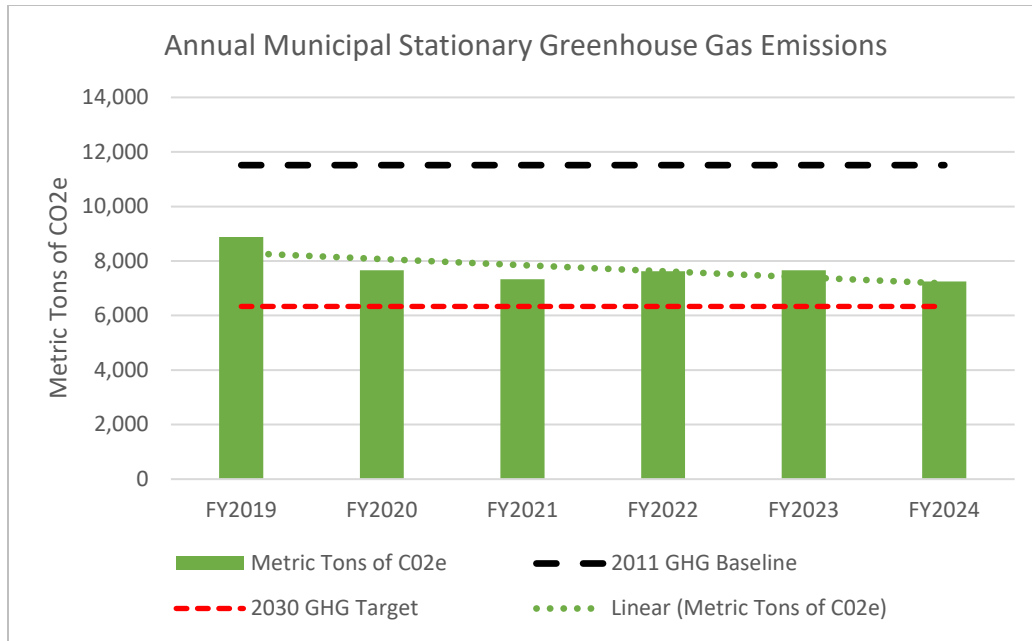


Figure 1: Greenhouse Gas emissions for the past 6 fiscal years, 2011 baseline year, and 2030 GHG target across all City and Schools buildings.

In FY25, the EWMP program and Charlottesville City Schools (CCS) were excited to announce that Johnson Elementary achieved ENERGY STAR certification, an acknowledgement that this school is performing in the top 25% of schools nation-wide in energy performance.

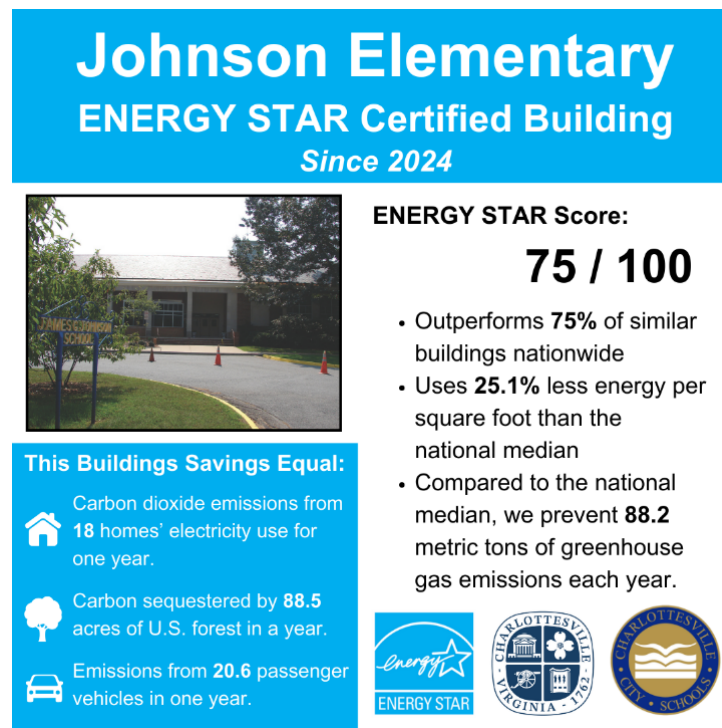


Figure 2: Johnson Elementary School ENERGY STAR scorecard.

## City and Schools Solar PV Program

The City allocates funds on an annual basis through the Capital Improvement Process (CIP) to the City Solar fund, which locally funds PV systems on both City Government and School facilities. In FY25, two solar system projects were initiated. A [new 31kW solar system](#) was installed on the newly completed Bypass Fire Station on the Route 250 Bypass. This system is made up of 68 panels and is expected to generate more than 40,000 kW of electricity each year, accounting for more than 40% of the fire station's annual power needs.

A second new system is being installed on the roof of CATEC (Charlottesville Area Technical Education Center) over the Summer of 2025. At 262kW, this will be the largest system in the City's solar portfolio.

These two solar projects are eligible for Internal Revenue Service (IRS) clean energy tax credits that have been made available to tax-exempt eligible entities. Office of Sustainability staff, with financial and legal team support, will be pursuing this opportunity.



Figure 3: Fire Chief Michael Thomas cutting the ribbon on the new Bypass Fire Station's solar array.

## »» Power Purchase Agreements

In support of the City's goal of 100% renewable power for city facilities by 2030, Office of Sustainability staff are exploring various ways to install as much renewable energy on our buildings as practical. During the development of the FY25 CIP, cost estimates were provided to inform considerations of a funding strategy for a set of large school facilities that present as strong candidates for on-site solar power systems. The two nearest term opportunities include Charlottesville High School (roof replacement will be complete in Summer 2025) and Charlottesville Middle School (the ongoing modernization project includes a new roof). Both facilities could support solar projects in the 1MW system size (Note: For context, the new Fire Station's new system is 31kW and 68 panels). As the CIP does not include local funding to support deployment of solar projects of this size on these two schools, the alternate strategy of a power purchase agreement (PPA) is being evaluated. A PPA is a long-term contract arrangement by which a third party installs, owns, and operates an energy system such as a solar PV system and the customer commits to purchasing the system's electric output at a negotiated rate. Formal proposals for

these projects have been received (via a cooperative contract held by another Virginia locality) and are currently under review.

### »» LED Streetlight Conversion

In 2023, streetlights and traffic signals accounted for approximately 7% of the City's municipal emissions. Though this is a small drop in the bucket of our community-wide GHG inventory, converting streetlights to LED (light emitting diodes) lighting technology will result in significant cost savings for the City, with a financial payback period of just a few years. LED bulbs use far less electricity than the high intensity discharge bulbs currently installed in most of the City's streetlights. In FY2024, City Council allocated \$600,000 in the Capital Improvement Program to convert all Dominion-owned streetlights to LED bulbs.

By Fall 2024, the City completed a pilot project with Dominion Energy converting 25 streetlights to LED along the 250 Bypass between Hydraulic Road and Emmett Street. The pilot project helped City staff evaluate color temperature and light levels to ensure that what is selected moving forward meets the City's safety and environmental needs. In addition, Office of Sustainability staff met with advocacy groups and lighting design professionals to understand the ecological impact of streetlight design and Dark Skies compliance. As a member of the Virginia Energy Purchasing Governmental Association (VEPGA), which negotiates the municipal electrical contract with Dominion Energy for over 260 Virginia localities including Charlottesville, Office of Sustainability staff worked with other member localities to request expansion to lighting options offered by Dominion Energy to better meet the city's needs, including light fixtures with lower color temperature (2700K) and more appropriate light patterns to reduce light trespass. A second demonstration batch of lights will be piloted to examine the expanded lighting options. Once City staff determine the streetlighting meets both safety and environmental concerns, the full streetlight replacement program will continue.

### »» High Performance Building Standards

Since 2008, Charlottesville has operated under a Green Building Policy that commits the City to incorporating high-performance building practices into all new municipal construction projects and major renovations. Since that time, all seven new City facilities that have been constructed have achieved certification through the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) program. Two additional ones are currently going through the certification process.

In Fall 2024, the Office of Sustainability and Public Works contracted with local architecture firm Thrive! to develop a High-Performance Building Standard (HPBS) for the City. The HPBS will consolidate many of the best practices that the City has employed over the last 20+ years and introduce opportunities and stretch goals for various building components. The Standard will also align with new mandates from the Commonwealth of Virginia, notably those found in the Code of Virginia § 15.2-1804.1, known as the Virginia High Performance Buildings Act of 2021. It will be applicable to new construction projects, major renovations, and operations and maintenance of existing buildings. This project is anticipated to be completed in 2025.

### ↻ Municipal Energy Performance Program

In FY22, the City selected an energy services company (ESCO), CMTA, to perform technical energy audits of over 40 City-owned facilities to identify energy and water savings opportunities through upgrading HVAC, lighting, and water-using equipment and to identify solar opportunities. The Technical Energy Audit reports were delivered in FY23, and the City entered into a design-build Master Energy Performance



Contract (EPC) with CMTA in FY24. This project delivery model can involve alternative methods for financing and implementing efficiency projects. Projects can be scoped as a budget-neutral approach whereby an ESCO identifies and implements energy and water savings projects with a guaranteed annual utility savings that covers the cost of the projects.

In FY25 the City completed the first project under the EPC, replacing critical HVAC units that support the information technology (IT) needs across the City's operations. The second project, started in June 2025, is the installation of the 262kW solar PV system at CATEC, noted above. A third EPC project is under contract for FY26 at City Hall, City Hall Annex, and Key Rec Center and will include upgrading lighting to LEDs, water fixtures to low flow fixtures, and installing a more efficient heat pump unit. Overall, the Municipal Energy Performance Program has allowed for the streamlining of facility upgrades that involve guaranteed energy and water efficiency and performance of facilities on a large scale as well as associated cost savings.

### »» Municipal Building Electrification Screening

Building electrification is a key strategy to reducing the City's reliance on fossil fuels (primarily natural gas) to heat City buildings. As a first step in understanding the opportunities to electrify, the Office of Sustainability commissioned an electrification review to provide a high-level understanding of facilities that are good candidates for electrification and the potential pathways to consider. Once the review is complete, facilities can be prioritized and sequenced, taking into consideration the costs to transition to alternative technologies and to upgrade electrical equipment to support higher electrical loads (building equipment as well as Dominion Energy infrastructure), available budget, greenhouse gas reduction potential, and impact on utility cost. The initial screening is will be complete in 2025.

### + ☒ Energy Demand Response Program Participation

In FY25 the City joined the Emergency Load Response Program offered through PJM (the regional electrical grid operator that transmits and distributes electricity to Virginia) to implement a demand side management strategy called "demand response". Through this program, the City will periodically reduce the energy load in specified facilities by adjusting settings on equipment to reduce electricity needs. This intentional adjustment reduces the amount of load our facilities are placing on the grid. PJM will provide alerts during peak periods when the grid is overloaded with too much energy demand from customers and the City's Public Works Facilities Maintenance team will implement a specific curtailment strategy at participating facilities. These efforts help to curb the risk of brownouts and blackouts. The City will be compensated for the amount of energy reduced, which can help fund future projects. Other Virginia municipalities and public entities (such as UVA) participate in similar programs to help protect grid reliability.

### »» Parks & Rec Landscaping Equipment Electrification Pilot

The Department of Parks & Recreation (DPR) is responsible for landscape maintenance of a variety of City properties and have traditionally relied on gas-powered equipment to meet these needs. The small engines that power leaf blowers, string trimmers, mowers, and other landscaping equipment are inefficient, resulting in noise and air pollution during operation, as well as greenhouse gas emissions. Fortunately, battery-powered alternatives have become increasingly capable and affordable in recent years, and DPR, with research and funding support from the Office of Sustainability, is currently piloting their use at the Downtown Mall and the Skate Park. DPR staff have found the equipment capable in their initial pilots and report that the reductions in noise and air pollution have improved both the visitor and

operator experience. Given the initial success of the pilot, the Department plans to expand the use of battery-powered equipment to other sites they manage in FY26.



**Figure 4: Skate Park staff welcome a new electric zero-turn mower to their fleet.**



## Community Energy Efficiency and Use Reduction

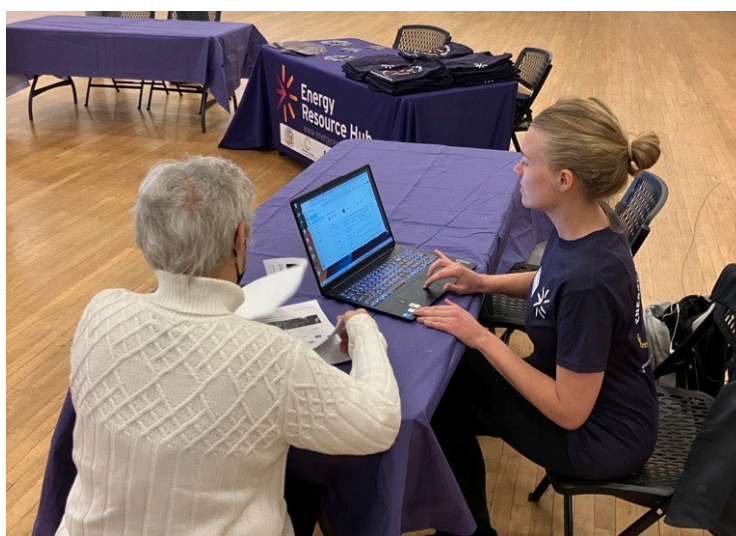
### ☑ **Community Energy Resource Hub**

After nearly a year of planning, in March 2025, the Office of Sustainability partnered with Albemarle County's Climate Program, the Local Energy Alliance Program (LEAP), and the Community Climate Collaborative (C3) to launch the [Energy Resource Hub](#). The Resource Hub is both an online and in-person service that helps community members navigate and access the many energy programs offered by Utilities and federal, state, and local governments. The Hub is available to homeowners, renters, and business owners at all levels of income in both the City of Charlottesville and Albemarle County.



Since its launch, Resource Hub staff have connected over 120 community members with information about the resources available to them based on their age, income, home, etc. (Note: This number does not include visits to the website). Of those community members served, nearly 20% have reported taking action by scheduling a home energy assessment, accessing a program, or taking advantage of a tax incentive. The Hub's Energy Navigator regularly holds office hours and attends local events to help raise awareness about the Hub's services.

The Hub website has regular traffic and many pages have a very high engagement rate. The number of users has grown steadily each month since it was launched, indicating that the community's awareness of the Hub is growing. The Office of Sustainability, along with our partners, will continue to support the Hub and expand the community's awareness of its services in FY26.



**Figure 5: Energy Resource Hub Navigator Rosina helps a Community Member at the March 11 Resource Hub Launch event at Carver Recreation Center.**

## »» Energy Efficiency and Conservation Block Grant

As part of the Inflation Reduction Act's Energy Efficiency and Conservation Block Grant program, Charlottesville was awarded \$76,840 to spend on energy efficiency projects or programs. Allocations were non-competitive and made to communities across the country based on population. The Office of Sustainability partnered with LEAP to provide low- or no-cost home energy assessments to low- and moderate-income (up to 150% AMI) community members using these funds. Without assistance, these assessments cost about \$400. The program is designed to complement the Energy Resource Hub, as residents who receive assessment reports are then referred to the Hub for help accessing programs and resources to support making the improvements outlined in the report. Through May 2025, LEAP has conducted 45 audits as part of this program. We expect to be able to support approximately 100 more audits through this program in FY26.

## ↻ Residential Energy Efficiency and Renewable Energy Deployment

The City of Charlottesville has long partnered with LEAP through an annual program support agreement to deliver affordable energy efficiency and renewable energy installation. In 2024, LEAP performed 193 Home Energy Assessments (HEAs, also known as Home Energy Audits) in the City of Charlottesville, with 62% of those being for age- or income-qualifying community members. LEAP went on to perform weatherization or energy efficiency services for 71 (or 37%) of the homes they assessed. In 2024, LEAP also supported installation of rooftop solar systems on 55 Charlottesville homes, the majority of which were completed through Dominion Energy's low-income solar program (51) and the rest through the 2024 Solarize campaign (4).

The Office of Sustainability is pleased to further partner with LEAP to design and deliver a new locally-funded energy incentive to add to the suite of energy programs available through the Resource Hub. The new program is called the [Residential Retrofit Mini-Grant](#) program and provides Charlottesville homeowners and renters with up to \$2000 per household toward a variety of home energy improvements including heat pumps, heat pump water heaters, electrical upgrades, insulation and air sealing, and duct sealing. The program is designed to complement the Energy Resource Hub and to stack with other utility or government-funded energy programs, making efficiency and electrification more affordable for City residents at all income levels. This program is designed to try to increase the percentage of community members who take action after receiving an HEA.

## ☑ C-PACE Program Establishment

In October of 2024, Charlottesville opted in to Virginia's State-wide Commercial Property Assessed Clean Energy (C-PACE) program. C-PACE is a clean energy financing tool that allows commercial building owners to borrow money for energy efficiency, renewable energy, and resilience building projects and make repayments via an assessment on their property tax bill. The program allows for clean energy, efficiency, and other environmentally beneficial investments in new construction, renovations, and retrofits of commercial and industrial properties through access to low-cost, long-term financing. Recently revised PACE legislation expanded eligible projects to include grid resiliency projects, electric vehicle charging infrastructure, stormwater management, environmental remediation, indoor air quality and the refinancing of previously completed projects. The C-PACE program is administered by the Virginia PACE Authority with support from Virginia Energy. To learn more about C-PACE, and find program guidance, forms and the application process, visit: <https://viriniapace.com/>.

## Home Improvement/Energy Efficiency via HUD programs

Through the Community Development Block Grants (CDBG) and HOME Investment Partnerships (HOME) programs, the City of Charlottesville partners with the U.S. Department of Housing and Urban Development (HUD) and a number of community nonprofit agencies to support residential energy efficiency (EE) improvements for income-eligible homeowners. The CDBG and HOME programs provide critical funding to support:

- LEAP's Solar Readiness program, through which LEAP helps make homes in Charlottesville safer, healthier, and more affordable through roof repairs/rebuilds for income-eligible homeowners who could otherwise not afford them to make these homes eligible for solar panel installations through Dominion Energy's Low-Income Solar program. As a part of their work, LEAP often expands their impact for these homeowners by using additional funding sources to facilitate additional EE-focused improvements, such as replacements of outdated, energy inefficient appliances, light fixtures and electrical panels/wiring, among other improvements.
- Albemarle Housing Improvement Program's (AHIP) Charlottesville Critical Rehabs program, through which AHIP also facilitates EE-focused enhancements for income eligible homeowners where possible during the course of a rehab project, including replacing outdated, energy inefficient appliances, light fixtures and electrical panels/wiring, among other improvements.

## Utilities-Led Efficiency Programs

Increasing awareness of energy efficiency programs provides an opportunity for improvement within Charlottesville Utilities' existing customer base. In the latest Gas Mitigation Survey conducted by the UVA Center for Research, approximately 70% of respondents reported being "not at all familiar" with attic insulation incentives. Additionally, around 57% were unfamiliar with the programmable thermostat program, and about 50% did not know about the income-qualified free weatherization programs.

In response, the Department of Utilities is developing a new campaign aimed at raising awareness of both existing and new energy efficiency initiatives. Information on Utilities-led programs is also available to community members through the Energy Resource Hub.

### Attic Insulation Self-Assessment

According to Energy Star® (an energy efficiency program of the U.S. Department of Energy), 90% of homes in the U.S. are under-insulated. The Utilities' staff developed the [Attic Insulation Self-Assessment](#), a resource that helps customers better understand their attic's insulation needs. Each assessment includes a complimentary, personalized evaluation for attic insulation, and guidance to help maximize the attic's energy efficiency potential. Open to homeowners and renters with landlord approval, the self-assessment is available to all Charlottesville Utilities customers. Eligible homes include single-family homes, duplexes, and townhomes, with a focus on older properties. The self-assessment is 100% free to use and can be accessed via smartphone, tablet, or computer. This new program was launched in FY25.

### Attic Insulation Rebate

Gas customers can maximize the most cost-effective way to improve their home's energy efficiency with upgraded attic insulation. Gas customers can receive [a \\$500 rebate towards upgrading their home's attic insulation](#) and take advantage of an available federal tax credit to claim 30% of the cost of the insulation, with a maximum of \$1,200 credited. Combining these incentives could significantly lower the cost of the insulation upgrade. This program was expanded this year to provide a \$500 rebate, up from \$300. 10 households took advantage of this program in FY25.

### Attic Air Sealing Rebate

For a limited time, gas customers can receive a [\\$150 rebate to cover the cost of measures that plug holes and seal cracks in their attic](#). This process improves home comfort, enhances air quality, and boosts energy efficiency by keeping conditioned air inside the house. Air sealing should be done at the same time as installing upgraded attic insulation to maximize the effectiveness of both measures. This new program was launched in FY25.

### Smart Thermostat Rebate

Gas customers can now receive a [\\$125 rebate towards a smart thermostat](#) to enhance the energy efficiency of their home. Smart thermostats use Wi-Fi to allow control of a home's indoor air temperature remotely from a smartphone or tablet. Providing convenience, control, and insight, a smart thermostat helps deliver optimal performance of an HVAC system. This new program was launched in FY25.

### Programmable Thermostat Rebate

A [\\$100 programmable thermostat rebate](#) is available to customers interested in this option, allowing them to program the indoor temperature of their home to adjust when they are at work, asleep, or on vacation. 19 households took advantage of this program in FY25.

### No-Cost Home Weatherization for Income-Qualified Households

In July 2019, the Department of Utilities started a partnership with the Local Energy Alliance Program (LEAP) to offer income-qualified gas customers a program designed to help increase the overall energy efficiency of their homes. The [Charlottesville Gas Energy Efficiency Program](#) (CGEEP) provides qualified households with free home weatherization improvements and funds the replacement of inefficient natural gas appliances.

Since its launch, 217 gas customers have benefited from the program. Of the total CGEEP recipients, 72% were Charlottesville homeowners, and 55% had at least one family member aged 60 years or older living in the same household. In addition to single-family home customers, the weatherization program was extended to the energy efficiency improvement project performed at Westhaven Apartments.

The energy-savings in these homes can vary significantly depending on the original condition of the dwelling (from 3% to 51% reduction in gas consumption). On average, a 20% reduction in gas consumption during the winter months was noticed.

In the spring of 2025, income qualification criteria expanded once again, enabling more customers to take advantage of the program. Eligible applicants include those with household earnings of 80% or below Area Median Income (AMI), and if the account holder is 60 or older, earnings of 120% or below State Median Income (SMI) are accepted. To date, the Charlottesville Department of Utilities has invested \$282,000 in the CGEEP program. In FY2025, 37 households in Charlottesville participated in the program with an investment cost of \$58,485.

### Clean Energy Tax Abatement Program

In order to boost uptake of solar, Charlottesville offers a tax incentive to both residential and commercial property owners who install solar. This incentive represents approximately 5% of system installation costs – more information about the program can be found on [the City's incentive website](#). Six property owners made use of this tax credit in FY25, representing over \$700,000 worth of solar installations.

## **Gas Decarbonization Study**

Initiated in 2023, the Charlottesville Gas Decarbonization Study was completed in December 2024, with the results presented to City Council in March 2025. The final report includes the methodology, assumptions, and decarbonization analysis for Charlottesville Gas to meet its proportional emissions reduction targets. The study indicates that Charlottesville Gas is on track to meet the short-term 2030 carbon reduction target of 45% for City-only natural gas-related emissions using a combination of its existing initiatives and efforts, which include energy efficiency measures and certified carbon offsets. To meet long-term goals, the study examines how the utility can promote more efficient gas usage, procure lower-carbon fuel supplies, and continually enhance its system to reduce methane emissions.

Recognizing that there are potential decarbonization strategies and options that were not considered in the study, the Office of Sustainability will continue to explore and learn about additional opportunities for gas decarbonization and diversification of the utility business model.

## **Carbon Offset Natural Gas Program**

Charlottesville Gas uses certified carbon offsets as part of its ongoing emissions reduction strategies. Certified carbon offsets have undergone third-party verification and certification processes to ensure that the carbon reduction or removal projects they support are credible, transparent, and permanent. The projects supported by Charlottesville Gas were verified by Verra and its Verified Carbon Standard (VCS) Program and by American Carbon Registry (ACR) and its stringent ACR Standard, both endorsed by the International Carbon Reduction and Offset Alliance (ICROA).

The investment in certified carbon offsets compensates for 25% of the emissions produced by natural gas in Charlottesville. Participation in the carbon offset program adds approximately 60 cents per month to the average bill for Charlottesville Gas customers. The carbon offset program has been generally supported, with 83% of respondents to Charlottesville Gas's residential survey, conducted by BeHeardCVA and the UVA Center for Research, indicating support for the existing program. Of the respondents, 43% support greatly expanding the offset program, 28% support slightly expanding the offset program, and 12% believe the program should remain as is.

Last year, four certified carbon offset projects were selected: Manantiales Behr Wind Farm (Renewable Energy), Bundled Solar Photovoltaic Project by ACME (Renewable Energy), Viet Nam Improved Cookstove Project by KCM (Clean Cooking), and Finite Carbon - Hiawatha Sportsman's Club IFM (Improved Forest Management).

# Municipal Transportation Electrification

## »» Transit Zero Emission Bus (ZEB) Transition

In February 2024, Charlottesville Area Transit (CAT) completed its Alternative Fuels Feasibility Study, which outlined plans for transitioning to a zero-emissions transit bus fleet. As part of this transition, CAT has begun working toward a pilot implementation of battery-electric buses (BEBs) and hydrogen fuel-cell electric buses (FCEBs). Two BEBs have been ordered and are anticipated for delivery in summer 2026, with another two BEBs planned for delivery in 2027. CAT staff are working to ensure adequate charging and fueling capabilities for their anticipated zero-emissions buses. They have completed planning for installation of DC Fast Chargers to serve their BEBs and have been joined by Office of Sustainability staff in multiple conversations with clean hydrogen producers and Virginia Energy regarding fueling of FCEBs planned for delivery in 2028. CAT is currently working on completing requirements to be eligible for future federal funding to support the ZEB transition.

## »» EPA Clean School Bus Rebate

Charlottesville was awarded funding to support the purchase of two electric school buses from the 2023 round of the Environmental Protection Agency's (EPA) Clean School Bus (CSB) Rebate Program. Two Thomas "Jouley" buses were ordered in late 2024 and delivery of the buses is anticipated in late 2025. Rebate funding was officially received by the City in May 2025. Office of Sustainability staff, in coordination with CAT and CCS, applied for funding for two additional ESBs from the 2024 round of CSB rebates and are awaiting funding decisions from the EPA for this latest round of rebates. DC Fast Chargers for the buses are being provided by Dominion Energy through their Electric School Bus Charging Program, which provides no cost installation of V2G (Vehicle-to-Grid) charging infrastructure to support school bus electrification. The BEBs are eligible for IRS clean vehicle tax credits (\$40,000 per bus) which will be pursued by the Office of Sustainability.

## ☑ School Bus Electrification Transition Planning

In late 2024, Charlottesville applied for and was awarded a Clean Bus Planning Award to assess opportunities for further electrifying its school bus fleet. The award consisted of no-cost technical assistance from a third-part consultant (VEIC) via the National Renewable Energy Lab (NREL), as part of a joint initiative by the federal Departments of Transportation and Energy. A team of staff from City Schools, CAT, Public Works, and the Office of Sustainability have been involved in this project, which is assessing the viability of currently available electric school buses to meet the operational needs of the school system, as well as the long-term financial and environmental considerations associated with a transition to electric school buses. The high-level planning project is nearing completion, and we anticipate using the report to inform future purchasing decisions and understand where electric school buses can best be deployed.

## + Municipal Fleet Electrification

An all-electric Ford e-Transit cargo van joined Public Works' fleet this year. It is assigned to the Facilities Maintenance HVAC crew and can be spotted around town serving various city facilities. It joins six other all-electric vehicles in the City's fleet.

The ongoing Community EV Charging Infrastructure study (see more information below) includes an analysis of the City's light-duty vehicle fleet. This will help staff better understand the City fleets' charging infrastructure needs. Adequate charging is the first step in the successful integration of electric vehicles into the City's fleet.





**Figure 6: Public Works added a Ford E-Transit cargo van to its Facilities Maintenance fleet this year.**

## Community Transportation Electrification

### »» Community-wide EV Charging Infrastructure Study

As mentioned in the GHG Inventory section, electric vehicle adoption has been increasing rapidly in Charlottesville. However, the number of charging stations has not kept pace and the lack of charging locations is a known barrier to EV adoption. Given the large number of renters and other residents who cannot easily install home chargers, ensuring widespread availability of public charging will be essential in accommodating future electric vehicle growth. In November 2024, the Office of Sustainability engaged the Cadmus Group to examine future needs for EV charging and priority locations for charging within the City. This project will wrap up in Summer 2025, and the findings will be useful to encourage the development of additional EV charging throughout the City.

The study also includes an analysis of the City's light-duty vehicle fleet and can inform development of a Green Fleet Policy as well as assess the infrastructure needs for successful conversion of City vehicles to electric alternatives.

### ↻ EV Infrastructure Assistance Grant

In Fall 2023, the Climate Program renewed and relaunched the EV Charging Infrastructure Grant program. Since that time, the program has engaged with several interested businesses but has not yet provided any funds for infrastructure installation. The program is now being marketed through the Energy Resource Hub with the hope of supporting the build-out of our local charging network with a more targeted approach after the completion of the Community EV Charging Infrastructure Study.

### »» E-Bike Incentive Pilot Program

In January of 2025, Neighborhood Development Services (NDS) and the Office of Sustainability worked together to launch a pilot [e-bike incentive program](#). In a small, hilly city like Charlottesville, e-bikes are a good alternative to cars for many people. Reducing the number of cars on the road has many benefits: less traffic, cleaner air, and of course fewer emissions. The e-bike program helps people access e-bikes by providing \$1000 mini-grants to residents that can be used at one of the three local bike shops to purchase an e-bike of their choice. The program offers 25 mini-grants each quarter, and community members must sign up for the drawing each cycle. As of the publication of this report, two cycles of the program have run, with over 1000 community members signing up for each time.

E-bike Program staff are aware that \$1000 may not be enough of an incentive to support some community members in accessing an e-bike and are currently working with the Departments of Human and Social Services to design a program to assist their clients.



Figure 7: Happy community members picking an e-bike mini-grant voucher.



# Community Transportation Improvements

## **Bicycle Infrastructure & Micromobility**

The City recognizes that making it safer and easier to travel by bicycle is key to increasing the number of community members who choose to get around by bike. Making improvements to bicycle infrastructure and increasing the bikeability of the City are key actions in the Climate Action Plan. The those ends, City staff made the following improvements to bicycle infrastructure in FY2025:

- Through the Safe Routes to School program, the City piloted a new traffic configuration on Belmont Avenue to improve student safety during morning arrival, which included a new bike lane.
- The City is expanding its school bike fleet, adding around 60 bikes to the existing fleet of 95 bikes, in order to open usage to afterschool and Parks and Recreation summer programs. New bikes will be delivered in late 2025.
- The City is working with VDOT to finalize a recommended design for a protected bikeway on 5<sup>th</sup> Street Southwest between Cherry Avenue and 5<sup>th</sup> Street Station.
- Neighborhood Development Services (NDS) has deployed over 200 new bike racks since 2023 and continues to look for new opportunities for publicly accessible short-term and long-term bike parking locations.
- Launched [BikeCville.com](https://www.bikecville.com), a new regional brand and website for promoting biking and providing rider resources during a successful Bike Month in May. The website's calendar advertised dozens of Bike Month events, including Family Bike Day, Saturday Morning Easy Rides, Fridays After 5 Bike Valet, and the Family Bike Parade.

Veo continues to serve the City as a permitted dockless mobility service. Veo saw 251,156 rides on its scooters and e-bikes in 2024, covering 302,225 miles of travel in the City. A survey of Veo's local customers found that 78% of users have been able to decrease car use. Along with reducing car trips and associated emissions, Veo also found that 17% of its users did not have a driver's license, which demonstrates the critical role Veo serves in fulfilling the City's goal of providing mobility options for all.

## **New Sidewalks & Pedestrian Infrastructure**

Improving pedestrian infrastructure and making it easier, safer, and more pleasant to walk are key ways to support community members in choosing walking as a viable transportation alternative. The following pedestrian infrastructure projects and improvements were worked on in FY25:

- Completed sidewalks on Azalea Drive, Quarry Road, Monticello Avenue, Hillcrest Drive, and Belmont Avenue. City Council adopted a capital budget for new sidewalks in FY26 that is nearly 10 times larger than previous years. The FY26 operating budget includes a new concrete crew in Public Works to accelerate the construction of new sidewalks.
- Identified and began deploying 67 "quickbuild" projects to improve pedestrian safety. These include pilot testing of new devices like speed tables, mini-roundabouts, synced "No Right on Red" variable signage with pedestrian push buttons, and rapid flashing beacons.
- Adopted Move Safely Blue Ridge Regional Safety Action Plan and developed designs for a demonstration project to improve pedestrian safety on East High Street.

- Kicked off new STARS studies with VDOT to develop recommendations for pedestrian improvements in two areas within the City with heavy traffic: US29/Emmet Street between Barracks Road and Hydraulic Road and the intersection of West Main Street, Ridge Street, South Street, Water Street, and Ridge-McIntire Road.



### **Americans with Disabilities Act (ADA) Projects**

Charlottesville is committed to becoming compliant with the Americans with Disabilities Act (ADA). When it is safe and easy for community members of all abilities to get around the city without a car, it means increased walk- and bike-ability for everyone. The City is working to complete its ADA transition plan, which has identified ADA-compliance issues throughout the City's pedestrian network. City Council adopted a capital budget of \$8.7 million over the next five years to address the priorities of the ADA transition plan quickly upon the plan's adoption.

## Nature Based Solutions

### »» Urban Forest Management Plan

In 2023, the City received a \$150,000 grant from the United States Department of Agriculture Forest Service Urban and Community Forestry Inflation Reduction Grant Program to support Urban Forest Management Planning. In 2025, the grant was one of many terminated by the federal administration. Components of the project scope that have been able to be completed include an updated tree canopy assessment and historic analysis, on-the-ground vegetation analysis, and updated street tree inventory. The team is exploring options to fund the remainder of the scope, involving the development of a comprehensive, adaptive management plan that aligns with related, relevant materials, including the current Comprehensive Plan, the Climate Action Plan, and the Climate Risk and Vulnerability Assessment.

### ↻ Urban Tree Planting

Each year, the City plants new trees in City rights-of-way, schools and parks. Tree planting on City property is carried out by Park and Recreation Department staff and managed by the City's Urban Forester, who is tasked with monitoring and caring for all trees on City-owned property.

In Fall 2024, 152 trees were planted in public rights of way, schools, and parks. An additional 22 trees were planted by volunteer organizations in select parks in the Fall of 2024. Spring of 2025 showed the installation of 21 trees in City Parks and Rights of Way. Projected plantings for Fall 2025 include 150-170 trees (2" caliper), with an additional 20-30 trees planted by volunteer organizations (Charlottesville Area Tree Stewards and Re Leaf Cville).

### ↻ Invasive Species Management

In the Fall 2023, Parks and Recreation initiated an ambitious forest restoration initiative to manage invasive species in select locations throughout the city. The overarching goal for these projects has been to increase tree canopy by removing invasive vines from mature trees (liberating trees on management sites and preserving the trees we have) and removing invasive shrubs/small trees/vines from a growth space so replacement trees and native groundcovers can become established (planting trees that will contribute to increased tree canopy). Management plans were created for each individual management area (park/easement), each with specific timelines and objectives.

In general, management objectives for each management area included:

- Control/contain invasive vegetation on urban forestland to eliminate seed sources and provide conducive environment for replacement vegetation
- Restore native vegetation
- Preservation of water quality and stream bank integrity
- Enhance existing wildlife habitat
- Preserve/enhance recreational integrity of property
- Public Education (regarding invasive plant ecology, wildlife enhancement, outdoor recreation, and site restoration)

The Invasive Vegetation control/containment continued in 2024, with active management generally divided into two separate activities: forestry mulching (September 2024– March 2025) and chemical control/monitoring through summer of 2025. Parks and Recreation carefully selected new focus areas, with primary intentions of expanding the new program to new sites and diligent maintenance of older sites

where restoration efforts are just starting to become evident. In total, 22.52 additional acres have been subject to active restoration management; bringing the total acreage for Parks and Recreation's invasive control efforts over all management units to 42.42 acres.

### **Charlottesville Invasive Plant Partnership**

The Charlottesville Invasive Plant Partnership (CHIPP) is a coalition of groups that work together to protect Charlottesville's tree canopy from invasive vines. The participating partners in CHIPP include: Parks and Recreation, the Office of Sustainability, the City Tree Commission, Charlottesville Area Tree Stewards, Rivanna Conservation Alliance, Blue Ridge PRISM, Piedmont Master Gardeners, Rivanna Master Naturalists, Virginia Native Plant Society, ReLeaf Cville and the Botanical Garden of the Piedmont. CHIPP volunteers work together to organize neighborhoods through engagement with community members and Neighborhood Associations to manage invasive vines on private property. They lead neighborhood walks, presentations, demonstrations, and organized workdays to help neighbors understand the importance of protecting mature trees from vines and training people how to safely remove them.

Between September 2024 and June 2025, CHIPP launched pilot programs in the Kellytown and Little High neighborhoods, making connections with neighborhood leaders to learn about each neighborhood's unique needs. Each pilot began with a neighborhood walk, followed by invasive identification trainings, vine removal demonstrations, and designated workdays for invasive removal. In Kellytown, 378 properties were surveyed, with 151 identified as having trees with invasive vines. Nineteen CHIPP and neighborhood volunteers removed vines from 140 trees in the Robinson Woods HOA Forest. In Little High, 295 properties were surveyed and 147 had affected trees; 19 volunteers removed vines from 78 trees. These pilot programs are ongoing and will continue to promote awareness and education, hands-on demonstrations, group workdays, and encourage follow-through on the removal of vines from at-risk neighborhood trees.



**Figure 8: CHIPP volunteers at Washington Park after completing a survey of the trees in the Kellytown neighborhood in March 2025.**



### **Energy Saving Trees Program**

In Spring 2022, the Utilities Department began partnering with the Arbor Day Foundation and its Energy-Saving Trees Program. This program gives away free trees to Utilities' customers in Charlottesville to strategically plant on their property, providing energy- and cost-saving benefits to their households and the broader community. Strategically planted trees provide cooling shade from the sun in warm months and act as a barrier to cold winds during the winter months. In Fall 2024, Utilities increased the frequency of the Energy-Saving Trees Program to occur twice a year, once in the spring and once in the fall. In FY25, 340 trees were given away to community members.



### **Schenks Branch Restoration Project**

In Spring 2024, the City's Water Resources Protection Program completed the Schenks Branch Restoration project. The project involved the restoration of 840 linear feet of Schenks Branch Tributary, a stream in McIntire Park that runs through the Botanical Garden of the Piedmont (BGP). The restored section extends from the railroad right-of-way to the John Warner Parkway bridge overpass.

With a grant from the Stormwater Local Assistance Fund (SLAF) and supplemental funds from the City's Stormwater Utility Capital Improvement Program (CIP), the City partnered with the environmental engineering firm Hazen and Sawyer, the Virginia Department of Environmental Quality (DEQ), and the BGP to design and implement innovative techniques to restore the stream. The project addressed severe erosion that was causing significant deterioration of the stream, sending excessive amounts of sediment



and nutrient pollution downstream. Additionally, the deteriorated stream provided poor habitat for aquatic and riparian plant and animal species and was largely inaccessible to the public.

Restoration took six months to complete, from Fall 2023 to Spring 2024. Construction involved grading the steep banks of the stream, raising the stream bed and connecting it to a new floodplain, and realigning the stream into a more stable pattern. The work necessitated the removal of the existing vegetation and trees along the stream, but many of the trees were being undermined by the eroding stream banks and invasive plant species were prevalent. The City and BGP developed a revegetation plan that resulted in the planting of over 1,400 new native trees, shrubs, and herbaceous plants.

The restoration has helped the City meet regulatory requirements, improved the health of our local waterways, and enabled the public to access and enjoy a thriving natural area that has been seamlessly integrated into the Botanical Garden of the Piedmont.



**Figure 9: Before and After views of Schenks Branch. The restored stream is adjacent to the Botanical Garden of the Piedmont, near Charlottesville High School.**

# Community Waste Reduction



## Composting Program

Public Works, Parks & Recreation, and the Office of Sustainability work in partnership to offer compost collection to Charlottesville residents. A seasonal compost drop-off station at the City Market is provided on Saturdays during the market season, including the Holiday Market. There has been a fairly significant change to the market program from 2024 to 2025. Parks staff has assumed full management of the compost collection bins and there is no longer a staffed composting booth at the Saturday Market. Over the past few years, there has been a significant drop in traffic to the booth and the decision was made to shift resources towards expanding the number of drop-off locations rather than staffing the booth.

There is also a year-round 24/7 drop-off location in the downtown area. Expansion of that program by establishing additional drop-off locations in other areas of the City is underway. Both programs are serviced by Black Bear Composting. In 2024, Charlottesville residents dropped off 7.01 tons of compostable food scraps, down from a program high of 9.5 tons in 2023.

Additionally, Public Works collects leaves through the Fall City leaf collection program and delivers them to Panorama Farms for composting.

# Resilience Building

## »» Resilient Together

Resilient Together, the City, County, and UVA collaborative climate adaptation and resilience planning project, which kicked off in the Fall of 2023, continued in 2024. An October 2024 [progress report](#) summarized the themes heard during the “Discover Phase” and presented the project’s guiding principles and long-term goals. In November, the project team gave a presentation to a joint meeting of the City and County Planning Commissions, the first joint PC meeting in several years.

After the completion of the Discover Phase, project staff transitioned to the Define Phase, which involved the distillation of a list of potential resilience strategies that our community could adopt to prepare for the impacts of climate change. In the first half of 2025, the team has been meeting with staff from across the three partner organizations, meeting with community-based organizations, and holding resilience focused community design workshops to refine the strategies and gain local context from community members. This part of the project is referred to as “the Design Phase”.

The project is nearing readiness to being writing the plans. Charlottesville, Albemarle, and UVA have been working together at every step of the project, but will develop separate plans in parallel, so that each jurisdiction’s elected body will be presented a jurisdiction-specific plan for adoption. Climate adaptation and resilience planning is a requirement of the City’s commitment to the Global Covenant of Mayors for Climate and Energy. Office of Sustainability staff plan to bring the Resilience Plan forward for adoption as an amendment to the Comprehensive Plan, as was done for the Climate Action Plan.

More information about the project is available at [www.resilient-together.info](http://www.resilient-together.info).

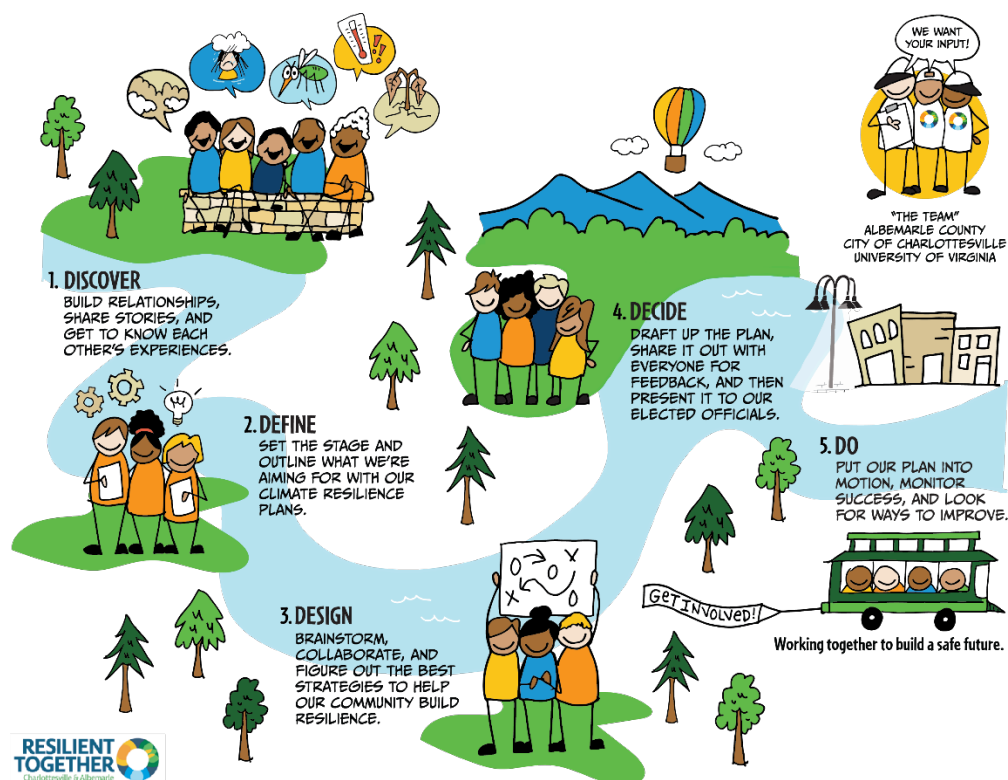


Figure 10: Journey map outlining the five phases of the Resilient Together project.



## Climate Resilience Cohort

The impacts of climate change will not be felt equally across the community, and people who are already vulnerable will feel the effects first and most. For example, elderly people, children, and people who work outdoors will be more impacted by extreme heat or poor air quality. People without housing will be impacted by every kind of extreme weather event. Developing plans that center the needs of our most vulnerable community members will result in plans that ultimately keep us all safer and healthier as the impacts of climate change increase. For this reason, the Climate Resilience Cohort (CRC) was formed as a central part of the Resilient Together Project. The CRC is a group of nine community-based organizations that serve some of our most vulnerable community members to support the Resilient Together project team with community engagement, development of the plans, and implementation of community-led resilience projects.

In October 2023, the Resilient Together Project was selected to receive \$460,000 to fund the CRC through the EPA's Environmental Justice Government-to-Government (EJG2G) program. The team moved forward with selecting the organizations who would be sub-grantees and project partners through a competitive application process. Each organization would get up to \$15,000 for supporting engagement and plan development (Phase 1) and another \$25,000 in seed funding to develop and implement resilience projects (Phase 2). The first CRC meeting was held in September 2024 to begin onboarding the participating organizations and planning for community engagement events.

In March 2025 Albemarle County, the lead recipient of the EPA grant, received a letter of cancellation of the EJG2G grant and was ordered to stop all work on the CRC project. This led to a period of uncertainty around how to move forward with this important piece of the larger Resilient Together project. Charlottesville and Albemarle are working together to co-fund Phase 1 of the planned CRC work and although delayed, are moving forward with that part of the Cohort's work. All project partners have remained committed to participating in some way with community engagement and in the development of the Resilience Plans. However, there is disappointment with the loss of federal funds that were programmed to directly support community-led resilience projects on the ground in Charlottesville and Albemarle, as that project funding was a driving part of what motivated and enabled community groups, who are already working to support vulnerable community members, to participate in the project.

## »» City Environmental Regulations Review

During the process of drafting the Charlottesville Development Code, there were numerous requests for changes to the City's environmental regulations, addressing topics such as critical slopes, stream buffers, stormwater management, green buildings, and other rules related to reducing the risk of climate change and increasing climate resilience. An Environmental Policy Review and Ordinance Revisions project has been initiated by NDS, with anticipated coordination with several other City stakeholders. The purpose is to develop a new policy framework, implementation recommendations, and regulatory revisions to align the City's regulations for natural resources with the Comprehensive Plan. Information-gathering was initiated in FY25 with plans to complete project scoping effort in Summer 2025. The project is anticipated to take 2 years to complete.

## Other Program Activities

### Community Education & Outreach Work

A large part of the work of Climate Program staff is helping both community members and staff across the City organization understand their role in reaching our community climate goals. When working with community members, we strive for clear, simple communication and try to make climate solutions accessible. When working with other departments, we aim to be a partner and resource through information sharing, staff support, and sometimes financial support.

Office of Sustainability staff strive to have an active and visible presence in the community and participate in a wide variety of public-facing activities throughout the year. From presenting at public meetings, guest lecturing at schools (elementary through college!), participating in community events, and appearing in local media, OS staff work to help the Charlottesville community understand their role in saving energy and protecting our shared environment. A few highlights from FY2025 include:

- Westhaven Community Day (August 2024)
- Several EV showcases (both public- and staff-facing)
- Panel participation at the Virginia Clean Energy Summit (October 2024)
- Hosted a “Climate Action Trek” in partnership with UVA’s Career Center for Public Service Awareness week
- A presentation by the Resilient Together project team to a joint session of the City & County Planning Commissions (November 2024)
- Several guest lectures at UVA (Public Policy & Climate Justice)
- An E-bike Demo in collaboration with NDS and local bike shops
- Tabling at many local events including Pride, VegFest, Grand Illumination, UVA EcoFair, Riverfest
- Kid-friendly activity booths at Kid\*Vention and CCS STEM-Fest
- Panel Participation focused on Community Resilience at TomTom (April 2025)

The Office of Sustainability’s approach to education and outreach is grounded in relationship-building and amplifying the contributions of City staff, residents, and partners who are advancing climate action in our community. Through events, programs, public gatherings, and hands-on initiatives, we have been able to strengthen existing partnerships with other City departments, Charlottesville City Schools, the Jefferson-Madison Regional Library and build new partnerships through Resilient Together and the Charlottesville Invasive Plant Partnership. To increase our reach and elevate “climate connections” across sectoral and organizational boundaries, we have developed new tools for engagement such as the Charlottesville Climate Cafe Series (climate-focused community connection events), the Mobile



Figure 11: Office of Sustainability Director Kristel Riddervold helps a young visitor with an activity at Kid\*Vention in April 2025.

Resource Hubs in the Central Library (information stations with resources and materials related to climate action), and informational and supportive materials used during extreme heat events.



Figure 12: FY25 Office of Sustainability outreach and education materials. L: Mobile Resource Hub at the Central Library. C: A sign marking the Central Library as a Cooling Center and helping community members understand the dangers of extreme heat. R: Tabling materials.

### Climate Kits

In May 2025, all 4<sup>th</sup> and 5<sup>th</sup> graders (over 700 students) at CCS received Climate Action Kits created by the Community Climate Collaborative (C3) and the Virginia Discovery Museum in partnership with the Climate Program and EWMP. The kits were designed to help students gain a greater understanding of home water and energy use and climate emissions, while connecting families to local climate solutions and energy savings resources. Materials were translated in Spanish, Dari, and Pashto to increase access to this resource. [A special video was developed to introduce the kits to the students and included a special message from Mayor Wade \(LINK\).](#)



Figure 11: Kids at Walker Elementary school loved opening their climate action kits. The kits were full of fun activities to help CCS students learn about acting on climate!

### Curriculum & Schools

The Energy and Water Management Program (EWMP) engages Charlottesville City Schools (CCS) directly to educate the staff and students about their buildings and empower them to contribute to the efficient performance of the facility. The EWMP has developed energy and water education tailored for CCS curriculum and has incorporated lesson plans into the CCS Science Pacing Guide. These materials are available to all science teachers with the resources necessary to deliver the activities. Additional



activities will be added to cover additional climate-related topics. All activities align with grade relevant Standards of Learning (SOLs) and state science curriculum.



The EWMP distributed mirror clings with water saving messages and light switch reminders to all schools. School visits and direct engagement with students occur throughout the school year including classroom visits, attending career fairs, and supporting the City’s Community Youth Attention Internship Program to support climate and efficiency programs. They also message out seasonal reminders to staff around no space heater use in CCS buildings and energy and water conservation reminders before heading out for holiday breaks.

### Climate Café Series

Since December 2024, the Office of Sustainability and the Community Climate Collaborative (C3) have jointly hosted a bi-monthly “Climate Cafes” in which community members gather to share resources, upcoming volunteer opportunities, and learn from City Sustainability staff, C3, and that month’s featured partner. Each Café in the series has a different theme, and featured partners so far have included Generation 180, The Charlottesville Invasive Plant Partnership, the Local Energy Alliance Program, and Resilient Together. Beyond sharing updates and opportunities, the Climate Café series offers a welcoming space for reflection and action. Attendees have the chance to connect with community members who share their interest in local climate solutions but also acknowledge the emotional dimensions of climate change by providing space to process climate anxiety and foster community connection.



Figure 14: Images from recent Climate Cafes, held the second Friday of every other month at The Bradbury on the Downtown Mall.



### Working in a Sustainable Environment (WISE) Program Launch

City leadership has issued a directive to “Operationalize Sustainability” and make sure climate action is happening across every department. The Working In a Sustainable Environment (WISE) Program is an initiative led by the Office of Sustainability to help City staff integrate sustainability and climate practices into their everyday work. The program aims to achieve policy adherence across the organization,

operationalizing both the City's Climate Action Plan as well as the Energy and Water Management policy through practical, team-based efforts that promote water and energy efficiency, reduce greenhouse gas emissions, and promote overall well-being.

In the inaugural year, the team worked to launch the WISE program in a way that was fun and accessible for City staff. To maximize visibility, a memorable logo was designed and energy and water saving workplace reminders for light switch and near water faucets were distributed. Additionally, a series of events were hosted to engage staff around the idea of working in a sustainability environment in unique ways. These events included a plant swap, extreme heat first aid training, and co-branded of events with other City Departments like the EV showcase and educational bike and pedestrian safety content.

Lastly, to further inform the design and rollout of the WISE program, Office of Sustainability staff conducted focus groups with 22 colleagues who were prompted to provide feedback on the structure of a more formal WISE Workplace certification process, the priorities of the WISE program, and preferred communication strategies. All these efforts reinforce WISE's goal to make sustainability tangible, actionable, and relevant to all staff regardless of the nature of one's role and help foster a City-wide culture of stewardship and resilience.



Figure 15: Images from several WISE events throughout the year: staff attend a focus group to help inform program design. The inaugural Earth Day plant exchange was very popular!

## Policy and Regulatory Activity

As stated in the CAP, the City has routinely taken the opportunity to provide public comment or adopt a resolution on various climate and clean energy legislative and regulatory items. Office of Sustainability staff continued to participate in advocacy at the state level around decisions or policies that shape our work, including through active participation in the Virginia Energy and Sustainability Peer Network (VESPN) which receives support from the Southeast Sustainability Director's Network (SSDN) and assists local government sustainability staff across the Commonwealth to understand, engage in, and advocate for climate-friendly state policies.

This year, the City of Charlottesville engaged on the following state energy and climate issues:

- State Corporation Commission’s (SCC) proposed amendments to the Regulations Governing Shared Solar Program, requesting that the rules adopted go further to establish a baseline of benefits to be considered in calculating the minimum bill and a determination of how much capacity will be made available. An effective Shared Solar Program can provide renters and low-income community members with an easy way to access a clean energy option for their electricity usage, helping contribute to our climate goals and equitably increasing access to solar energy across Virginia.
- Virginia Electric and Power Company (Dominion Energy)’s proposed Integrated Resource Plan (IRP) filed October 15, 2024, to the SCC noting failure to comply with the carbon reduction requirements outlined in the Virginia Clean Economy Act and need to fully develop energy efficiency and demand-side management programs prior to the addition of costly generation systems.

As mentioned in last year’s report, the City of Charlottesville’s participated in a 2024 amicus brief for a legal case related Virginia’s withdrawal from the Regional Greenhouse Gas Initiative. The revenue generated through RGGI is used for low-income home weatherization work and community flood preparedness, both of which impact Charlottesville’s sustainability work. Staff continue to closely track the related legal proceedings.

## Community-Led Initiatives Updates

Charlottesville's Climate Action Plan is a community-wide plan with GHG reduction goals that require action and involvement by the whole community. While the City as a local government can and should be leading many projects, programs, and initiatives, progress is dependent on many other community groups doing important climate work. Below are updates provided by some of the organizations we partner with or who lead work in this space.

### Community-led Solar and Electric Vehicle Adoption

In 2024, Charlottesville residents and businesses applied for 79 permits for installing rooftop solar panels and 27 permits for installing at-home electric vehicle charging. While solar installations have declined since their high in 2022, this is the highest number of annual EV charger installs, up nearly 70% from 2023.

In addition to the increase in residential charger installations, electric vehicle adoption has continued to increase rapidly within the City. In 2024 there were 1,023 electric vehicles registered in Charlottesville (including both plug-in hybrid and fully electric vehicles), representing 3.5% of all vehicles in the City and an increase of 37% from 2023.

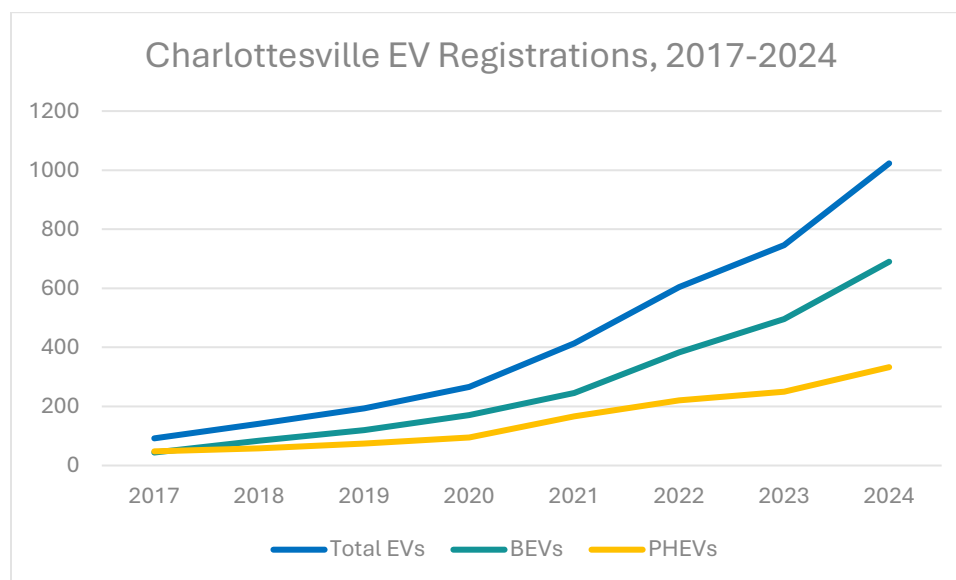


Figure 16: Graph showing the number of electric vehicles registered in the City of Charlottesville from 2017 thru 2024.

### Community Climate Collaborative (C3)

#### Green Business Alliance

The Green Business Alliance now stands at 26 member organizations. Total emissions reduction are nearly 8,000 metric tons, and the first cohort (original 15 members) is at 40% emissions reduction, with one year left to achieve their 45% reduction goal. This has been accomplished by a collective effort focused on energy efficiency, solar power, and fleet management and vehicle conversions. Members have also engaged in secondary actions such as creating Climate Action Plans, installing EV charging,



implementing on-site composting, and providing green benefits to employees to encourage non-car commuting and help access in-home climate solutions like solar and EVs.

### Community Outreach

C3 hosted its third annual Party for the Planet in October of 2024. The Party for the Planet brought together more than 400 attendees to learn about ways they can take action for climate in their community. Attendees were able to sign up for solar assessments, energy efficiency audits, composting, and EV test drives while learning about other non-profits in the community who are working to build a livable and sustainable future. C3 also gave out awards for outstanding businesses, advocates, and nonprofit organizations who are taking action to improve our community. In partnership with Charlottesville's Office of Sustainability, C3 began hosting Climate Cafe's bimonthly on different topics, starting in December 2024 with a Cafe focused on EV resources. Other topics since then have included native plants, and access to solar.

### Climate Kits for Kids

C3 delivered Climate Activity Kits to all of the City elementary schools for the fifth year on May 16, 2025 in 4 languages. Fifth grade students at Walker Upper Elementary helped unload the truck and some acted as kit ambassadors for the classrooms. These ambassadors learned about the kit contents and were equipped to facilitate meaningful engagement with their peers. Climate Kits this year also included an e-bike I-Spy to link to the City's new e-bike voucher program. Also included was an Energy Resource Hub workbook for families.

### Energy Resource Hub – Climate Services and Commercial Education

C3 has served over 20 Charlottesville-area non-profits and local businesses in the past year with free energy walkthrough and analysis services. C3 also delivered two educational workshops to community non-profits to teach about energy and climate solutions in commercial buildings. One was for faith organizations and the other for general community-serving NGOs. This work is now directly supported through the Energy Resource Hub.

### Transportation Equity

C3 led youth and community members in successfully advocating for the City to pursue additional electric bus funding, strengthening local transit sustainability. In partnership with transportation and public health planners from Albemarle County, Charlottesville, and UVA, C3 also secured VWAI funding for a community guidebook on walkability quick-builds in Charlottesville, incorporating local artists into the project. Additionally, with the backing of 22 organizations and numerous community members, C3 played a key role in securing dedicated climate funding in Albemarle County to improve cross-jurisdictional collaboration with the City and expand community access to climate-forward programs, including the e-bike lottery.

### Energy Equity

To advance energy equity, C3 convened solar industry experts and hosted a public workshop ahead of Albemarle County's Draft Solar Ordinance hearing, helping approximately 20 local residents and advocates—many of them teens—prepare to give informed public comment. Around a dozen participants later spoke in support of policies that encourage local solar development, especially projects with co-benefits like agrivoltaics. Additionally, C3 collaborated with Livable Cville to publish a blog response to the Charlottesville Gas Decarbonization study, hosted educational meetings with local



decision makers, and held a well-attended hybrid panel at the Central Library on carbon offsets and their role in gas utility practices, drawing about 30 registered attendees.

### Youth Internships and Green Teen Alliance

Working together, students in the City and County have raised their voices for issues in the City that affect them. In December 2024, we had several teens attend City Council to talk about why it was important to them that the City to apply for additional funding for Zero Emission School Busses.

### Local Energy Alliance Program (LEAP)

In 2024, LEAP performed 193 assessments in Charlottesville, with 62% (120) of those assessments being income-and-age qualifying. The others were Market Rate clients. LEAP also completed 55 solar installs for the City of Charlottesville - 51 of which were through Dominion's low-income solar program and 4 through Solarize! Virginia. We performed additional weatherization services on 71 homes after they received their assessments.

### Piedmont Housing Alliance

#### Kindlewood Redevelopment

Phase 1 of the Kindlewood redevelopment was completed in 2024, and its residents are actively benefiting from the rooftop solar installations and high energy efficiency standards that directly reduce their utility bill costs.

Phase 2 of the Kindlewood redevelopment broke ground in January of 2025; construction is expected to be completed in 2026. This Phase will begin construction of Kindlewood park, a resident-designed open space that will include native plants and trees, shade structures, playground structures, and a sports court. Kindlewood Park will also include a community garden to be operated by Cultivate Charlottesville.

Phase 2 will also include the Community Resource Center (CRC) which will contain Piedmont Housing Alliance's new office spaces, community spaces, and an early learning center. The CRC will have roof-mounted solar panels and a Battery Energy Storage System that will allow the facility to continue essential operations for residents in grid-down scenarios and act as a resilience center.

All Phase 2 Buildings will implement rooftop solar as well as adhere to Enterprise Green Community and Zero-Energy Ready Home certification standards of energy efficiency.

#### Green Business Alliance and Partnerships

Piedmont Housing Alliance (PHA) continues to be a Green Business Alliance partner and participate in the events and opportunities it provides while reporting all our development's common area electricity usage for progress reports in reducing our carbon footprint across all our operations. Additionally, PHA is beginning to engage in conversations regarding potential partnerships for Electric Vehicle (EV) Charging Stations to be installed at our pipeline developments and available for our residents' use.

#### Inflation Reduction Act Bootcamp

PHA was not awarded Phases 2 or 3 of the Department of Energy's Community Power Accelerator, but with the initial funds from Phase 1, PHA created the Solar Development Project Manager position to oversee the development of solar, battery backup, EV charging stations, and energy efficiency at existing and pipeline PHA developments, while participating in policy and advocacy in the community of large scale, affordable renewable energy.

PHA has also been implementing the Department of Energy’s Low Income Communities Bonus Credit program, which adds an additional 20% tax credit to the Inflation Reduction Act’s 30% Solar Investment Tax Credit for eligible and qualifying communities.

### Policy and Advocacy Initiatives

PHA joined the Climate Resilience Cohort – a partnership between The City of Charlottesville, Albemarle County, and the University of Virginia – to collaborate with other local nonprofit organizations in creating events that promote community participation in climate resilience discussions and local policy.

PHA also worked with the Virginia Department of Energy to inform their application for the EPA’s Solar for All program to ensure alignment with our goals and opportunities for capacity building for organizations like ours. Executive Director, Sunshine Mathon, was appointed to the Virginia Solar for All advisory board (Note: PHA was recently informed that this advisory board is now defunct).

## Piedmont Master Gardeners

### Healthy Landscapes Program

The Healthy Landscapes Program empowers residents of Charlottesville and Albemarle County to transform their yards into climate-resilient, ecologically beneficial spaces. By promoting native plantings, water conservation, and reduced chemical use, the program directly supports urban biodiversity, water quality, and climate adaptation goals. In 2024, 47 volunteers conducted 52 site visits, engaging 72 homeowners and addressing invasive species on every property. This initiative not only enhances local ecosystems but also fosters community-wide environmental stewardship through personalized education and outreach.

### Healthy Virginia Lawns (HVL)

The Healthy Virginia Lawns program advances sustainable land care by guiding homeowners in science-based lawn management practices that reduce chemical runoff and greenhouse gas emissions. In 2024, Piedmont Master Gardeners evaluated over 218,000 square feet of lawn across 20 site visits, introducing new tools and a revised Nutrient Management Plan. This initiative supports the CAP’s goals for water quality, sustainable land use, and emissions reduction while building public awareness of environmentally responsible lawn care.

### Home Landscaping Partnership with Habitat for Humanity

This collaborative project with Habitat for Humanity integrates sustainability and equity by helping new homeowners in Southwood Village design and install low-maintenance, climate-adaptive landscapes. In 2024, 16 volunteers landscaped eight homes, contributed 111 hours, and distributed \$2,400 in plants and garden tools. Through community events and outreach to builders, the project promotes biodiversity, water-wise practices, and neighborhood resilience, aligning with CAP goals for inclusive climate action and urban ecology.

### Rose and Pollinator Garden at The Center at Belvedere

The Rose and Pollinator Garden serves as a vibrant educational hub that demonstrates pollinator-friendly and organic gardening practices. With 80% native plantings and extensive public engagement through signage, workshops, and events, the garden supports biodiversity, climate resilience, and sustainable landscaping. In 2024, 15 volunteers contributed 335 hours, reaching over 100 community members. This living classroom exemplifies how public spaces can foster environmental awareness and ecological stewardship.

### Sentara Martha Jefferson Hospital Demonstration Garden

This demonstration garden near the cancer treatment center offers a restorative, educational space that models sustainable landscaping with over 70% native plants. In 2024, 21 volunteers contributed 273 hours to maintain the garden, install interpretive signage, and host public workshops. The garden enhances urban ecology, supports pollinators, and builds climate resilience through diverse, seasonally adaptive plantings—making it a vital asset for both community well-being and environmental education.

### Horticultural Help Desks (Main & Mobile)

The Horticultural Help Desks are a cornerstone of public outreach, providing year-round, science-based guidance on sustainable gardening, soil health, and climate-resilient practices. In 2024, 44 volunteers logged over 1,300 hours at the Main Help Desk, responding to 584 inquiries, while Mobile Help Desks reached hundreds more at 17 community events. These services empower residents to adopt low-impact gardening methods, reduce waste, and support biodiversity, directly advancing CAP goals for education, conservation, and resilience.

### Plant Virginia Natives Campaign & Community Information Racks

Through strategic partnerships with local retailers and public venues, this initiative promotes native plant use and sustainable gardening. In 2024, 23 volunteers distributed nearly 6,000 brochures and labeled over 12,000 native plants, helping consumers make climate-smart choices. By increasing access to eco-friendly landscaping resources and engaging the public in biodiversity conservation, this campaign supports CAP objectives for sustainable consumption, habitat protection, and community education.

### Speakers Bureau & Educational Workshops

The Speakers Bureau delivers targeted presentations on sustainable gardening topics such as composting, biodiversity, and native plants. In 2024, 13 presentations reached over 300 attendees, with high satisfaction and strong intent to implement learned practices. These workshops foster behavior change, build ecological literacy, and support CAP goals for emissions reduction, soil health, and habitat protection through accessible, community driven education.

### Garden Basics Workshops

Garden Basics introduces foundational horticultural practices to novice and intermediate gardeners, emphasizing sustainability and climate resilience. In 2024, nine sessions engaged 266 participants, with 99% reporting the content met their needs and 86% planning to apply what they learned. With strong volunteer support and partnerships with local organizations, this program advances CAP priorities in soil health, biodiversity, food systems, and equitable access to environmental education.

### ReLeaf Cville

Releaf Cville, a project initiated by the City's Tree Commission, promotes tree planting, tree-canopy preservation, and education. To support their ongoing Neighborhood Tree Restoration, ReLeaf was awarded a 3-year, \$189,900 grant from the Virginia Department of Forestry (VDOF) to preserve mature trees in neighborhoods with low tree cover, one of only two such programs in the state. Subsequently, ReLeaf preserved 48 trees for 28 homeowners in Fifeville this winter. Since 2022, VDOF has awarded ReLeaf nearly \$107K to plant over 300 trees on public and private properties in 10th and Page, Rose Hill and the Woolen Mills.

ReLeaf's Green Team is now going on its fourth summer of teaching and inspiring kids to care about the environment, trees and the impacts of climate change on people and their neighborhoods. Partnering with the Rivanna Conservation Alliance (RCA), ReLeaf's Green Team will canvas Fifeville and the Woolen

Mills neighborhood during the Summer of 2025, offering free trees and free tree care. They also will help RCA get rid of invasive plants and plant saplings along the Rivanna River.

### **Sierra Club Piedmont Group**

The Sierra Club Piedmont Group co-hosted a climate forum for the candidates for City Council and the Albemarle Board of Supervisors, held informational meetings about green burials, data centers and the bicycle issue at Ragged Mountain Natural Area. We also hosted a talk with the author of “Am I Too Old to Save the Planet? A Boomer’s Guide to Climate Action” and awarded Earth Flags to honor unsung environmental heroes to the area's "Composting Queen", the Crozet Trails crew, the Five-Hundred Year Forest Foundation, St. Anne's-Belfield's environmental program and to other long-term environmental activists.

## Looking Ahead

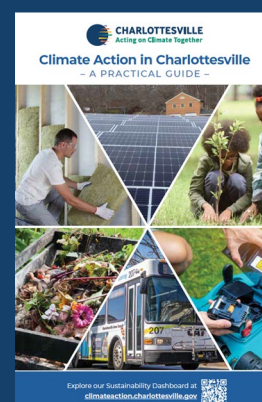
### What's coming up in FY26?

In spite of the retreat from clean energy and climate action at the federal level, Charlottesville remains committed to our emissions reduction goals and making progress here at home. Once again, City Council allocated \$1 million annually to the Climate Initiative Fund FY26 through FY29. Office of Sustainability staff will continue to support other departments and the wider community on projects and programs that lower our GHG emissions and build climate resilience. Highlights of the <sup>update</sup> updated FY26 Workplan include:

- Continued support for the Energy Resource Hub
- Installation of the City's largest-to-date solar PV system at CATEC
- Completion of Charlottesville's Climate Adaptation and Resilience plan
- Arrival and integration of the first two Electric School Buses and charging infrastructure
- Energy efficiency upgrade projects at City Hall, City Hall Annex, and Key Rec Center
- Deployment of shade structures at various City parks
- Anticipated completion and LEED certification of Charlottesville Middle School
- Repurposing the old solar panels from CHS (removed for roof replacement) at various Parks & Rec facilities
- New, locally funded energy efficiency rebate program for residents
- Expansion of the E-bike program to specifically serve low-income community members

### Interested in keeping up with the Office of Sustainability?

Check out our freshly updated *Guide to Climate Action in Charlottesville* or visit our Climate and Sustainability Action Dashboard!



Click on the images to access!