

CITY OF CHARLESTON

CLIMATE ACTION PLAN PROGRESS REPORT

This report highlights implementation progress from May 2021 (plan adoption) through December 2022. The 5-year action plan is estimated to be fully implemented by 2026.



TRANSPORTATION

- 63,185 TRIPS (119,561 MILES) IN BIKE SHARE PREVENTING 50 METRIC TONS OF CO₂E*
- \$7M LOWLINE GRANT TO SUPPORT UP TO 120M LESS VEHICLE MILES TRAVELED (Lifetime of project)
- 25% OF LEAF BLOWER FLEET IS ELECTRIC, ELIMINATING 80 METRIC TONS OF CO₂E*
- 7,358 REMOTE STAFF WORK DAYS, ELIMINATING 90 METRIC TONS OF CO₂E FROM COMMUTE*



CARBON SINKS

- 37 RAIN GARDENS INSTALLED AND 750,000 GALLONS OF WATER INFILTRATED AND DIVERTED FROM STORMWATER SYSTEM (Total as of 12/31/2022)
- 102.7 ACRES OF LAND RESTORED AND PRESERVED AS PERMANENT GREEN SPACE ABSORBING WATER AND CARBON (Total as of 12/31/2022)
- 1,335 TREES PLANTED ON PUBLIC PROPERTY*
- 384 STORM DRAINS ADOPTED (Total as of 12/31/2022)



WASTE

- OVER 50 TONS OF FOOD SCRAPS COMPOSTED, 1,100 HOUSEHOLDS COMPOSTING, AND 100 METRIC TONS OF CO₂E ELIMINATED*
- 426 MATTRESSES RECYCLED DIVERTING 11 TONS FROM THE LANDFILL, 15,000 CUBIC FEET LANDFILL SPACE SAVED, 15 METRIC TONS OF CO₂E ELIMINATED (2021 Data)



BUILDINGS

- BOARD OF ARCHITECTURAL REVIEW ENCOURAGES SOLAR PERMITS WITH POLICY STATEMENT
- 2 NEW CAPITAL PROJECTS PLANNED TO HAVE SOLAR, AND ALL NEW CITY CONSTRUCTION PLANNED TO INCLUDE ELECTRIC VEHICLE READY INFRASTRUCTURE
- PROGRESS PLANNING TO EXPAND ELECTRIC VEHICLE INFRASTRUCTURE CITYWIDE



EDUCATION AND COMMUNITY ENGAGEMENT

- 22 CLIMATE AMBASSADORS GAVE 43 PRESENTATIONS, INSPIRING 1,178 PEOPLE TO TAKE CLIMATE ACTION (Total as of 12/31/2022)
- 150 RESIDENTS AT ELECTRIC LAWN CARE EXPO TESTED EQUIPMENT AND PURCHASED OVER 50 PIECES OF BATTERY POWERED TOOLS (April 2022)

- 470 RESIDENTS REACHED ABOUT COMPOSTING AT WEST ASHLEY FARMERS MARKET (April - June, 2022)
- 12 MONTHLY COMMUNICATION CAMPAIGNS WITH HUNDREDS OF SOCIAL MEDIA POSTS*
- 100+ VOLUNTEERS

* = 2022 DATA

CO₂E = CARBON DIOXIDE EQUIVALENT

VISION

To substantially reduce carbon pollution in an equitable way and improve the health and quality of life of Charlestonians now and in the future.

TABLE 1: BUILDINGS ACTION PLAN

ID	ACTIONS	STATUS	PROGRESS
STRATEGY: Increase energy efficiency and conservation			
B1	Support efforts to strengthen the energy code at the state level and advocate for state building policies that align with carbon neutrality by 2050 and other initiatives in the SC Energy Efficiency Roadmap	Underway	Support continues for SC to adopt a more recent Energy Code (than 2009) and to realign its update with automatic building code updates.
B2	Support state efforts and explore local equitable gap funding opportunities for energy efficiency in new construction and upgrades to existing construction	Coming Soon	
B3	Consider expanding incentives for sustainable construction and renewable energy via the zoning code, such as building certification programs like Charleston RISES	Coming Soon	This action will be pursued as part of the City's zoning code rewrite.
B4	Increase staff capacity and funding to conduct a Facilities Assessment Plan and continue improving energy efficiency of existing City buildings, and to ensure new City buildings lead by example by being energy efficient and pursuing industry best practices that align with carbon neutrality by 2050	Underway	A Facilities Analyst position was approved in the budget to begin this process. New capital projects pursue energy efficient equipment.
B5	Create mechanical, electrical and plumbing standards that include energy efficiency for City facilities	Coming Soon	Pending staff capacity and future Facilities Assessment Plan.
B6	Consider creating stronger guidelines above minimum code for new City construction, include total cost of ownership standards and consideration of a tailored Charleston RISES certification	Underway	New City owned construction pursues LEED and Charleston RISES best practices.
B7	Assess feasibility of expanding staff capacity and training to strengthen enforcement of energy code compliance	Coming Soon	Pending staff capacity.
B8	Consider developing or adopting alternative standards that expand allowable construction method options to include those which are inherently more energy efficient and sustainable, such as rammed earth, etc.	Coming Soon	Pending staff capacity.
B9	Explore opportunities to restart the Green Business Challenge	Coming Soon	A new Communication and Community Engagement Manager was approved in the 2023 budget and will pursue this.
B10	Support state efforts for the disclosure of utility data by property sellers	Coming Soon	

TABLE 1 (CONTINUED): BUILDINGS ACTION PLAN

ID	ACTIONS	STATUS	PROGRESS
STRATEGY: Promote and plan for renewable energy			
B11	Support renewable energy projects including community solar and other initiatives, such as those in the SC Energy Efficiency Roadmap	Underway	Community education efforts about renewable energy will continue and research about potential community solar initiatives are underway.
B12	Create design guidelines for renewable energy standards in the historic district	Complete	The Board of Architectural Review adopted a policy statement for solar to provide direction and encourage the use of solar in the historic district.
B13	Investigate the feasibility of renewable energy and battery storage opportunities for City facilities and plan for future funding opportunities	Underway	New capital projects are considering solar energy in their design, including a new fire station on Johns Island and the new Public Service and Safety Operations Center. Electric vehicle ready infrastructure is now standard in new City construction. A solar feasibility assessment for existing structures is dependent upon the completion of a Facilities Assessment Plan that will inform proactive maintenance for City facilities, including a roof replacement schedule.

TABLE 2: TRANSPORTATION ACTION PLAN

ID	ACTIONS	STATUS	PROGRESS
STRATEGY: Increase use of public transit systems			
T1	Require new large development projects located along existing or planned transit corridors to install bus stop shelters and transportation infrastructure like turnouts	Complete	This is now required in the zoning code as part of the Technical Review Committee's process.
STRATEGY: Increase employee commuter options			
T2	Explore opportunities with CARTA to create an employer transit program for part-time City staff riders, such as charging fees based on use	Coming Soon	Discussions determined to wait for the new Lowcountry Rapid Transit.
T3	Review existing temporary City telecommuting policy and adopt permanent policy	Ongoing	A telecommuting policy was made permanent in 2021. Expanding this program beyond two days remote will reduce staff commute pollution more.
STRATEGY: Embrace electric and other low or no emission motors			
T4	Expand publicly-accessible electric vehicle charging infrastructure, especially at ride share, mobility hubs, on-street peninsula access and City parking facilities	Underway	Planning complete and funding approved in 2023 budget to replace 8 charging stations in City garages with networked, dual port stations, doubling capacity. A regional planning effort began in 2022, it will inform EV infrastructure needs for all public parking, it will include City garages.
T5	Create policy to require charging stations in new large commercial construction and consider EV ready requirements for smaller projects	Underway	Planning and research complete. An ordinance is being drafted for public comment. City is particularly interested in hearing more feedback from the development community in early 2023.
T6	Create a plan to transition the City fleet and other small engines to alternative fuel vehicles, include vehicle replacement standards and charging infrastructure	Underway	Planning is in process to pilot our first electric vehicles and create a detailed plan to transition the entire fleet. Federal funding opportunities are being researched and considered.
T7	Consider options to phase in alternatives to gas powered small inefficient engines	Ongoing	The City committed to replacing the fleet of 85 leaf blowers with alternatives. About 25% have been converted so far. The funding to convert the remainder was approved in the 2023 budget. An Electric Lawn Care Expo event was hosted in April 2022 to raise awareness of alternatives available.
STRATEGY: Improve land use policy to reduce vehicle miles travelled			
T8	Concentrate development in compact, walkable centers that are well connected to public transit and offer a mix of uses, services and housing options	Ongoing	The City's Comprehensive Plan and zoning code already address this, and it will remain a priority in the zoning code rewrite.
T9	Right-size parking codes including implementing parking maximums and explore opportunities to allow developers to pay into a parking in-lieu fund	Coming Soon	This will be considered in the zoning code rewrite.

TABLE 2 (CONTINUED): TRANSPORTATION ACTION PLAN

ID	ACTIONS	STATUS	PROGRESS
STRATEGY: Increase bicycle and pedestrian activity			
T10	Continue to work on the bike share program and provide micromobility services for all City employees	Ongoing	The City launched the new e-bike bike share program in spring 2022. Discussions continue on providing an incentive discount program for City employees.
T11	Improve and expand bicycle and pedestrian facilities and infrastructure, such as intersection improvements, bicycle repair service stations and bicycle corridors identified in the People Pedal Plan	Coming Soon	It was determined additional staff are needed to implement the People Pedal Plan. The two new staff positions were approved in the 2023 budget and include a Transportation Planner and a Transp. Project Manager to assist with implementation of the plan.
T12	Establish temporary and permanent car free areas such as rethinking curb spaces	Underway	Temporary car free areas were piloted during COVID. 2nd Sunday on King St continues to be successful.
T13	Transition existing Complete Streets resolution into ordinance prioritizing pedestrians at key crossings	Coming Soon	Pending staff capacity.
T14	Expand consistent wayfinding signage to increase safety and the user experience	Coming Soon	Pending staff capacity and resources.
STRATEGY: Reduce idling			
T15	Explore creative options to improve enforcement of the City's existing anti-idling policy	Coming Soon	Pending staff capacity. (This ordinance is enforced by the Livability Department)
T16	Improve traffic signals on the peninsula by synchronizing 88 of the traffic signals to benefit all modes	Underway	Some funding has been allocated by BCDCOG to have the traffic signals retimed on the peninsula. This is in coordination with SCDOT's Road Safety Audit.
T17	Encourage virtual community meetings or those located along transit routes and near stops, as possible	Ongoing	Many committees now meet virtually or as a hybrid, such as: the Resiliency and Sustainability Advisory Committee, 3x3 Advisory Committee, Special Events Committee, City Council, Ad hoc Committees, Design Review Board, Design Review Committee, and more.

TABLE 3: WASTE ACTION PLAN

ID	ACTIONS	STATUS	PROGRESS
STRATEGY: Reduce waste and consumption			
W1	Continue supporting the elimination of single-use plastics	Ongoing	Provide support to businesses who request assistance to comply with single use plastic code or reduce plastic waste in general. Discussions to strengthen existing code are underway.
W2	Perform a garbage can audit and use the data to evaluate and restructure the way garbage and trash are collected to incentivize recycling and composting	Underway	The audit started in 2022 and more funding was allocated to continue it in 2023.
W3	Promote zero waste office practices for City staff to reduce, reuse and recycle and consider establishing sustainable procurement standards for City operations	Ongoing	City Green Team created a reusable water bottle campaign to help reduce waste from single use water bottles.
W4	Strengthen partnerships to enhance edible food recovery and donation, such as Food Rescue US	Ongoing	A partnership with Fields to Families donates edible unsold produce at City farmers markets to people in need.
W5	Support the reuse, repair, recovery and refurbishment economy, including for construction waste	Coming Soon	The reuse industry is strongly supported. Seeking external partners to support more focused work on the repair, recovery and refurbishment economies, please contact us.
STRATEGY: Increase recycling and composting			
W6	Explore ways to create more opportunities for community wide composting, such as drop centers	Ongoing	A residential compost drop site program was piloted and proven so successful regional partners joined and now host their own drop sites at minimal cost and capacity to them. Funding to make the program permanent and expand to more drop sites was approved in the 2023 budget.
W7	Explore opportunities to make composting more available in City buildings, at City sponsored events such as Farmers Markets, and private events held on City property	Underway	Composting is being piloted in one City department's break room. Grant funding was secured to pilot composting at farmers markets in 2023.
W8	Continue to add recycling bins next to garbage cans in public places and label them with consistent signage	Ongoing	Actions include recycle right education and purchasing of new signage to better label recycling cans in Parks that are frequently contaminated.
W9	Support Charleston County's efforts to promote education for event and commercial recycling, and examine options to encourage businesses and events to recycle	Underway	Planning for the creation of a Sustainable Events Manual has begun, work commenced in early 2023.
W10	Support mattress recycling	Ongoing	A new program was piloted but did not receive funding to continue. Partners were invited to join to reconsider this. Support for BedShred continues.

TABLE 4: CARBON SINKS ACTION PLAN

ID	ACTIONS	STATUS	PROGRESS
STRATEGY: Protect and promote natural ecosystems			
C1	Collaborate with regional and state partners to increase preservation and restoration of saltwater ecosystems like our marshes and wetlands as these are key carbon sequestering assets	Ongoing	Support and marketing for key partner led programs including oyster shell replanting and marsh grass planting is ongoing. Marsh restoration NFWF grant project happening in Oldtown Creek.
C2	Continue with opportunities to acquire flood damaged properties and convert the land use to natural conditions that capture carbon and water	Ongoing	Over 46 properties have been acquired so far resulting in 8.7 acres of new green space. Staff have plans for more as capacity allows. 94 acres at Oakville were preserved in a conservation easement with support from partners.
C3	Examine land use policy to make room for existing marshes to migrate, such as adjusting zoning and developing more stringent marsh buffers	Underway	An analysis occurred as part of the Comprehensive Plan and the data will be used to inform the zoning code rewrite.
C4	Continue to expand Charleston Rainproof and Adopt a Drain programs as ways to protect water quality and health of blue carbon	Ongoing	The 2022 Rainproof Mini Grant Program resulted in 19 new rain gardens. Adopt a Drain expanded to a regional program with partnership of Charleston County. Charleston is now a Bee City USA Affiliate. The pilot of super sink plants is pending staff capacity and resources, or support from a partner. Please contact us if interested.
C5	Pilot the application of super sink plants in appropriate public spaces, such as non-invasive native bamboo, and adapt practices to be pollinator friendly	Underway	
STRATEGY: Plant and protect tree canopy			
C6	Plant and prioritize tree plantings in areas that need it most, such as underserved communities with less overall canopy and communities with aging inventory	Underway	Pending Street Tree Inventory. Some general analysis has occurred and a new storymap shares the results publicly.
C7	Consider strengthening tree protection regulations in zoning per recommendations in the Trees to Offset Stormwater project report	Underway	Planning is complete and this will be pursued in the complete zoning code rewrite.
C8	Encourage tree plantings on private property	Ongoing	A new tree resource webpage was created to connect property owners to resources that will help them plant trees. There is a dedicated communication focus to supporting trees.
C9	Continue the City's Street Tree Program planting trees in the ROW in partnership with residents	Ongoing	The program continues but is experiencing a lack of staff capacity to complete all requests and has a wait list.
C10	Perform street tree inventory and use data to guide funding to maintain existing canopy and seek opportunities to grow canopy and diversify species	Coming Soon	Funding to perform a Street Tree Inventory was approved in the 2023 budget.
C11	Explore partnerships to create an urban forestry workforce training program with local school programs, such as Trident Tech horticulture program	Coming Soon	Seeking support from external partners, please contact us if interested.

TAKE CLIMATE ACTION TODAY, CHARLESTON

CREATING A MORE RESILIENT
AND SUSTAINABLE FUTURE.

A CHECKLIST FOR CLIMATE ACTION AROUND YOUR HOME

You can make a difference by taking action in your home with small changes. Here are some suggestions of how you can help right now. The actions with the highest impact are marked .



SUSTAIN YOUR LIFESTYLE

- Consume foods which are grown locally and/ or are grown organically. Join a [farm share](#) and shop at [farmers' markets](#). Plant fruits and vegetables in your own garden or participate in a [community garden](#). Eat at restaurants that feature local and seasonal foods, including [seafood](#).
-  Eat a plant rich diet. [Reduce your consumption of meat and dairy](#). Try "meatless Mondays". Avoid food waste.
- Buy [local products](#).
- Support [environmentally-conscious businesses](#).
- Communicate with your elected officials regarding new and emerging solutions. Attend the City's [Resiliency and Sustainability Advisory Committee](#) public meetings.

PROTECT YOUR AIR, WATER AND CARBON SINKS

-  [Plant trees](#), especially where they'll provide shade for your house, and [native plants](#) for their resilience.
- Reduce pesticide and fertilizer use. Enrich your soil with compost. [Purchase compost](#) made locally.
- Properly dispose of waste including pet waste. It should not go down the storm drain.
-  Participate in marsh restoration programs like [SC Oyster Restoration](#) and [From Seeds to Shoreline](#) (at school).

REDUCE YOUR WASTE

- Buy only items that are necessary and that you are sure you will use. Focus on enduring purchases instead of disposable items.
- Avoid single-serving packaging, especially plastic. Buy in bulk with reusable bags or jars.
-  [Compost](#) your organic (food, yard) waste.
- Take your own reusable bags to the store.
- Donate unused clothes and electronics to charity.
- Opt-in for electronic catalogs and billing statements. [Try these 4 tips](#) to stop junk mail.
- Use extra paper as scrap paper and print double sided.
- Recycle. Find out [what can be recycled](#). View Charleston County's recycling [pick up schedule](#).

MAKE YOUR HOME MORE RESILIENT

- [Adopt a storm drain](#) to help maximize the amount of water that can flow into drains and protect water quality.
- Connect a [rain barrel](#) to your gutter system.
- [Rainproof](#) your home and install a rain garden, native plants, a green roof, or permeable pavement.
- Establish a household emergency plan and kit for storms, heat emergencies and other disasters.

LIGHTEN YOUR TRANSPORTATION FOOTPRINT

-  Reduce single-destination and single-occupant trips.
-  Walk, [ride a bike](#), use public transit, or carpool. Use tools like [Lowcountry Go](#), or [plan your CARTA route](#) online or in the easy [Transit app](#).
- Use the most efficient vehicle when feasible.
- Avoid idling your vehicle, such as in the carpool pick up.
- Ride in a more efficient or alternative fuel car, such as a hybrid or electric vehicle.

USE ENERGY EFFICIENTLY AND RENEWABLY

- Get a free energy assessment from [Dominion](#) or [Berkeley Electric](#). Or use the [SC Energy Saver Tool](#).
-  Perform energy efficiency improvements, like insulation. Utilize free weatherization programs (if income qualified) such as [Energy Conservation Corps](#) and [Palmetto CAP](#).
-  Consider installing solar on your home. Do an [initial assessment](#). Get the facts about [how solar works](#) and understand [consumer information](#).
- Use CFL and LED bulbs, they save energy and last longer.
- Unplug electronics and turn off lights. Use power strips.
- Adjust your thermostat to save while asleep or away from home. Install a programmable thermostat.
- Replace refrigerators and other appliances with those labeled ENERGY STAR®.
- Only run the dishwasher, dryer and washer when full.
- Wash clothes in cold water and hang out to dry.
- Take shorter showers. Install a low-flow showerhead.