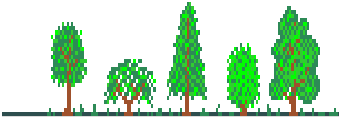


**TOWN OF CARRBORO  
CLIMATE ACTION TEAM**



**AGENDA**  
**Climate Action Team**

March 16, 2023; 7:00 pm  
Zoom Virtual Meeting\*

Time	Item	
	<b><u>Call to Order, Announcements</u></b>	
7:00 pm	Approve 2/16/23 Minutes	Chair, All
7:05 pm	Elect Chair, Vice-Chair	All
	<b><u>Action Items</u></b>	
7:15 pm	Presentation of Draft FY23-24 Environmental Sustainability Work Plan	Staff
7:45 pm	Provide feedback on Draft FY23-24 Environmental Sustainability Work Plan	Chair, All
	<b><u>Discussion Items</u></b>	
8:30 pm	Discussion Topics: <ul style="list-style-type: none"> <li>• Weatherization</li> <li>• Green Neighborhoods Program</li> <li>• Invasive Species</li> </ul>	Chair, All
9:00 pm	Announcements, Adjourn	Chair, All

\*To attend this virtual meeting, please use the link below:

Join Zoom Meeting

<https://townofcarrboro.zoom.us/j/83283022250?pwd=RWx1b1BOQmQwZDhPcnVMRnJHYXVtZz09>

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Passcode: 462044

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+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 360 209 5623 US

+1 386 347 5053 US

+1 507 473 4847 US

+1 564 217 2000 US

+1 669 444 9171 US

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Meeting ID: 832 8302 2250

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***TOWN HALL IS ACCESSIBLE FOR PERSONS WITH DISABILITIES. For more information, contact Laura Janway at (919) 918-7326.***

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**TOWN OF CARRBORO  
CLIMATE ACTION TEAM– SUMMARY**



Meeting on February 16, 2023, 7:00 pm

<b>Board Members</b>	<b>Town Council Members</b>	<b>Staff</b>	<b>Guests</b>
Rob Pinder	Randee Haven-O'Donnell	Laura Janway	Riz Rashdi (CAT Applicant)
Chrissie Schalkoff	Sammy Slade		Meg Molloy (CAT Applicant)
Tilly Pick			Greg Randolph (CAT Applicant)
Kathy Kaufman			Brooke Barton

Note: Absent/Excused: Caroline Zhou, Lauren Nyland, Heidi Paulsen

**Call to Order, Announcements**

The meeting was called to order at 7:08 pm. Chair Kaufman was experiencing internet issues, so members agreed that member Schalkoff would run the meeting until the Chair's internet issues were resolved.

**Approve 1/19/22 Meeting Minutes**

Pinder motioned to approve the 1/19/22 meeting minutes, seconded by Pick. All voted in favor. **AYES: (4)** Kaufman, Pinder, Schalkoff, Pick; **NAYES: (0)**.

**Elect Chair, Vice-Chair**

Pick motioned to move the election to the next meeting, seconded by Pinder. All voted in favor. **AYES: (4)** Pick, Schalkoff, Kaufman, Pinder; **NAYES: (0)**.

**Discussion Items**

**Discuss Ecosystem Module Presentation for National Invasive Species Awareness Week Outreach**

Staff member Janway provided a presentation of the latest version of the Ecosystem Module. Town Council Member Haven-O'Donnell recommended disseminating information about fertilizer use during the spring. Town Council Member Slade mentioned that they could integrate the Town's stormwater consulting program into module presentations. Member Pick mentioned the Green Neighborhood Program and that one of the best ways to get involvement will be to provide examples of potential projects. Applicant Molloy mentioned that they need to be sure that people can maintain the work that they begin and it might be helpful to show people the three simplest things they can do. Members agreed that talking to landlords is important and demonstration projects in visible places might be helpful. Town Council Member Haven-O'Donnell mentioned the possibility of a call for native plant cultivars to share with neighbors and community members.

**Discussion Topics**

- **Weatherization**
- **Green Neighborhoods Program**
- **Invasive Species**

CAT members provided updates on discussions held by groups of CAT members and applicants outside of CAT meetings.

Chair Kaufman asked about the next steps for the invasive species group. Applicant Molloy mentioned that it is important to think about how to engage people who cannot afford to spend lots of financial resources on this topic.

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Members discussed how to present the module in neighborhoods. Applicant Rashdi left the meeting at 8:15 pm and member Pinder left at 8:22 pm.

Member Schalkoff and applicant Molloy discussed their meeting about food choices. They mentioned that there are not a lot of barriers to get started and the initiative can focus on individual food choice habits as well as the restaurant supply side. Their ideas included an overarching campaign with separate brands or logos for food choices and invasives, among others. They discussed an image that restaurants or businesses can publicly display and having a menu of climate action choices for restaurants, such as a once-a-week climate friendly meal, creating a separate menu section dedicated to climate-friendly food choices, introducing composting, or landscaping with natives. They stated that there is a question of how to give these restaurants recognition for their efforts. Schalkoff also mentioned that more educational materials could be created using the results from the Town's food choice survey and the Town could continue work on the climate friendly cookbook and consider holding a community fall harvest festival. Applicant Molloy mentioned that the best places for change are places like restaurants and schools and the messaging is important. Chair Kaufman mentioned that restaurants could also be informed of how they could get energy audits, tax credits and rebates. Town Council Member Haven-O'Donnell discussed the need to calculate the impact of eating local food. Applicant Randolph left 8:46 pm. Members asked staff how they can interact with other residents, businesses, and organizations to discuss climate action. Staff member Janway stated that she would get clarity from Town staff and report back.

**Adjourn**

Motion by Pick to adjourn, seconded by Schalkoff. All voted in favor. **AYES: (4)** Pinder, Kaufman, Schalkoff, Pick; **NAYES: (0)**. The meeting adjourned at 9:06 pm.

DRAFT

## FY23-24 Draft Environmental Sustainability Work Plan

### Ecosystem Protection and Enhancement

#### *CCAP Policy Connections*

- Ecosystem Recommendation #4: Tree Preservation, Protection and Conservation
- Ecosystem Recommendation #5: Improve Regulations and Community Capacity to Discourage Invasive Plants and Encourage Native Plants
- Ecosystem Recommendation #6: Pursue Watershed Restoration Actions to Protect Local Streams from Changes in Rainfall Due to Climate Change
- Ecosystem Recommendation #2: Evaluate Extent to Which the Deer Population and Climate Change affect Native Plant Ecosystems.
- Ecosystem Recommendation #3: Accelerate/Expand Organic Waste Collection/Composting

#### *ECPP Policy Connections*

- 3.D Urban Forestry Program

Project	Activities	Goals	Estimated Annual GHG Emissions Reduction
<b>Continue to Promote Projects from FY22-23</b>	<ul style="list-style-type: none"> <li>• Interpretive sign and citizen science projects for Anderson Park stream restoration project</li> </ul>	<ul style="list-style-type: none"> <li>• Outreach related to the restoration of the water quality buffer in Anderson Park and creation of wildlife and pollinator habitat</li> </ul>	<ul style="list-style-type: none"> <li>• Projects are focused on ecosystem resiliency and not direct mitigation</li> </ul>
<b>Bee City USA, Mayors' Monarch Pledge</b>	<ul style="list-style-type: none"> <li>• Recognize National Pollinator Week</li> <li>• Hold outreach events</li> <li>• Explore new Recreation, Parks &amp; Cultural Resources programming</li> <li>• Increase and enhance pollinator habitat</li> <li>• Collaborate with Public Works and Stormwater Utility</li> </ul>	<ul style="list-style-type: none"> <li>• Meet annual requirements of Bee City USA and Mayors' Monarch Pledge participation to renew membership for 2024</li> </ul>	<ul style="list-style-type: none"> <li>• Projects are focused on ecosystem resiliency and not direct mitigation</li> </ul>
<b>Invasive Species Removal Volunteer Initiative</b>	<ul style="list-style-type: none"> <li>• Continue to develop and support independent Volunteer Program</li> <li>• Hold group invasive species removal events</li> <li>• Look for partnerships for this program and Bee City USA, such as a Master Gardener Program</li> <li>• Develop an outline of a long-term Town invasive species management program (large-scale approach, communication/coordination with major landholding partners)</li> </ul>	<ul style="list-style-type: none"> <li>• Remove invasive species to improve habitat for native vegetation and wildlife</li> <li>• Develop a vision for the Town's long-term invasive species management program</li> </ul>	<ul style="list-style-type: none"> <li>• Project is focused on ecosystem resiliency and not direct mitigation</li> </ul>

Project	Activities	Goals	Estimated Annual GHG Emissions Reduction
<b>Evaluate Extent to Which the Deer Population and Climate Change affect Native Plant Ecosystems</b>	<ul style="list-style-type: none"> <li>• Potential graduate student project</li> <li>• Reach to Duke Forest and UNC to ask about their data on impacts of grazing on native plant species and their invasive plant management programs</li> </ul>	<ul style="list-style-type: none"> <li>• Determine whether native plant ecosystem effects from grazing and climate change are apparent in the community forest.</li> </ul>	<ul style="list-style-type: none"> <li>• Project is focused on ecosystem resiliency and not direct mitigation</li> </ul>
<b>Explore Carbon Offsets</b>	<ul style="list-style-type: none"> <li>• Researching types of carbon offsets</li> <li>• Determining when and how to pursue</li> <li>• Potential costs and benefits</li> <li>• Compile information to share with the community; create module</li> </ul>	<ul style="list-style-type: none"> <li>• Determine how carbon offsets could be used to reach climate action plan goals</li> </ul>	<ul style="list-style-type: none"> <li>• Town contributions to GreenSource Advantage Program reduce approx. 4 mtCO<sub>2</sub>e annually</li> </ul>
<b>Explore SWIFR Grant for Curbside Composting Program</b>	<ul style="list-style-type: none"> <li>• Use results of Orange County Zero Waste Plan to inform Town's next steps</li> <li>• Continue to scope program components and budget and incorporate equity</li> </ul>	<ul style="list-style-type: none"> <li>• Be ready to move forward with either a SWIFR grant or a composting program aligned with County's plans</li> </ul>	<ul style="list-style-type: none"> <li>• These GHG emissions would occur in FY24-25 at earliest</li> </ul>
<b>Implement Composting in Town Buildings</b>	<ul style="list-style-type: none"> <li>• Explore grant opportunities and potential vendors</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce waste and emissions from Town facilities</li> </ul>	<ul style="list-style-type: none"> <li>• TBD</li> </ul>
<b>Composting Bin Sales</b>	<ul style="list-style-type: none"> <li>• Continue sales of composting bins at Town Hall</li> </ul>	<ul style="list-style-type: none"> <li>• Increase backyard composting in Carrboro to reduce greenhouse gas emissions</li> </ul>	<ul style="list-style-type: none"> <li>• 164 mtCO<sub>2</sub>e</li> </ul>
<b>Multifamily Composting Pilot</b>	<ul style="list-style-type: none"> <li>• Continue multifamily composting pilot <ul style="list-style-type: none"> <li>• Analyze participation and diversion rates and examine how the pilot could be expanded townwide using grant funding</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Provide residents of multifamily housing composting opportunities</li> <li>• Increase composting in Carrboro to reduce GHG emissions <ul style="list-style-type: none"> <li>• Gauge success for future multifamily programs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 7.76 mtCO<sub>2</sub>e</li> </ul>
<b>Farmers' Market Composting Staff</b>	<ul style="list-style-type: none"> <li>• Hire part-time staff member to monitor compost drop-off at Farmers' Market <ul style="list-style-type: none"> <li>• Targeted composting outreach</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Staffing the compost collection site will result in a cost of \$88/MTCO<sub>2</sub>E reduced</li> </ul>	<ul style="list-style-type: none"> <li>• 43 mtCO<sub>2</sub>e</li> </ul>

## Community Integration

### *CCAP Policy Connections*

- Community Integration Recommendation #3: Create Participatory Green Neighborhood Budgeting Program to Reduce Carbon Emissions, Build Community, Save Money, and Reallocate Savings to New Green Project Initiatives
- Community Integration Recommendation #5: Expand Capacity to Pursue Community Sustainability Initiatives

Project	Activities	Goals	Estimated Annual GHG Emissions Reduction
<b>Green Neighborhoods Grant Program</b>	<ul style="list-style-type: none"> <li>• Round two of grant program</li> <li>• Initiate additional neighborhood emissions reduction projects</li> <li>• Refine program for year three if needed based on results of first and second rounds</li> </ul>	<ul style="list-style-type: none"> <li>• Provide residents with funding to reduce emissions and build community within neighborhoods</li> <li>• Refine program if needed</li> </ul>	<ul style="list-style-type: none"> <li>• Goal: 9,412 mtCO<sub>2</sub>e (9% community reduction/year)</li> </ul>
<b>Climate Action Intern</b>	<ul style="list-style-type: none"> <li>• Hire intern to assist with outreach events and specific projects/initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Assist Environmental Sustainability Coordinator and Environmental Planner with outreach events and other project work</li> </ul>	<ul style="list-style-type: none"> <li>• Staff member will contribute to all climate action mitigation and resiliency projects</li> </ul>
<b>Climate Action Modules Project</b>	<ul style="list-style-type: none"> <li>• Work with volunteers to continue editing current module library</li> <li>• Additional volunteers to create content for new modules on relevant topics, such as carbon offsets</li> </ul>	<ul style="list-style-type: none"> <li>• Identify climate resilience, sustainability, and mitigation measures based on outreach topics</li> <li>• Design and format climate outreach education and action modules</li> <li>• Identify resources and area-specific expertise for module presentations</li> <li>• Train and collaborate presenters</li> </ul>	<ul style="list-style-type: none"> <li>• Project will contribute to emissions reduction in all sections of the CCAP.</li> </ul>

## **Food Choice Measures**

### *Policy Connections*

- Food Choice Recommendation #1: 50% Challenge
- Food Choice Recommendation #2: Develop Local Dietary Consumption and Associated GHG Profile

<b>Project</b>	<b>Activities</b>	<b>Goals</b>	<b>Estimated Annual GHG Emissions Reduction</b>
<b>Food Choice Events</b>	<ul style="list-style-type: none"> <li>• Request recipes for climate-friendly food cookbook</li> <li>• Virtual outreach, including cooking demonstrations; work with Recreation, Parks, and Cultural Resources and Climate Action Team</li> <li>• Create social media campaign</li> <li>• Disseminate information on how to make climate-friendly choices and impacts of food waste</li> </ul>	<ul style="list-style-type: none"> <li>• Educate Carrboro residents on emissions related to food choices and reducing food waste</li> <li>• Reduce emissions related to food choices in Carrboro</li> </ul>	<ul style="list-style-type: none"> <li>• Dietary emissions GHG reduction goal: 9% community reduction/year (current estimate: 1,575 mtCO<sub>2</sub>e)</li> </ul>

## **Transportation Measures**

### *Policy Connections*

- Transportation Recommendation #4: Further Promote Walking, Biking, Transit
- Transportation Recommendation #1: 50% Challenge, Reduce Greenhouse Gas Emissions from Motor Vehicle Use by 50% by 2025

<b>Project</b>	<b>Activities</b>	<b>Goals</b>	<b>Estimated Annual GHG Emissions Reduction</b>
<b>Town Alternative Fuels Fleet Study</b>	<ul style="list-style-type: none"> <li>• Examine study and how its results could be incorporated into the Capital Improvements Program</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce emissions from Town fleet 80% by 2030</li> </ul>	<ul style="list-style-type: none"> <li>• 712 mtCO<sub>2</sub>e by 2030</li> </ul>
<b>TDM Strategies for Town Employees</b>	<ul style="list-style-type: none"> <li>• Estimate GHG emissions reductions related to Town's Flexible Work Policy</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in employee commuting trips from strategies such as hybrid telework schedules</li> </ul>	<ul style="list-style-type: none"> <li>• Goal: 15 mtCO<sub>2</sub>e (6% Town reduction/year)</li> <li>• TDM: Efficient Strategy (\$88/ mtCO<sub>2</sub>e reduced)</li> </ul>
<b>EV Charging Stations</b>	<ul style="list-style-type: none"> <li>• Manage existing EV charging stations</li> <li>• Develop Town program guide for EV charging stations</li> <li>• Explore pursuing additional grant funding for EV charging stations</li> </ul>	<ul style="list-style-type: none"> <li>• Use EV Suitability/Priority map generated in work with other jurisdictions to help site new stations</li> </ul>	<ul style="list-style-type: none"> <li>• 27 mtCO<sub>2</sub>e /year</li> </ul>



## Building Energy Efficiency Measures

### CCAP Policy Connections

- Community Integration Recommendation #6: Facilitate Low-Cost Financing for Energy Efficiency and Renewable Energy Projects
- Buildings Recommendation #1: Reduce Emissions Attributed to Carrboro Buildings by 80% by 2030
- Buildings Recommendation #4: Create Rental Property Task Force and Process
- Renewable Energy Recommendation #3: Create Rental Property Task Force and Process

### ECPP Policy Connections

- 2.B.i Building Assessments and Ratings
- 2.B.ii Facility Energy Efficiency
- 3.B Community Buildings

Project	Activities	Goals	Estimated Annual GHG Emissions Reduction
<b>Energy-Efficiency Revolving Loan Fund (EERLF)</b>	<ul style="list-style-type: none"> <li>• Provide loans for energy efficiency improvements in commercial and residential buildings</li> <li>• Expansion of the program to residential buildings planned; staff will perform targeted outreach to owners of rental properties                             <ul style="list-style-type: none"> <li>• Engagement campaign, focus groups, surveys</li> <li>• Leverage IRA funding and opportunities for residents</li> <li>• Work with Finance, Housing and Community Services, and Economic Development</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Launch redesigned program: Mid-year FY23-24</li> <li>• Reduce greenhouse gas emissions from buildings in Carrboro</li> <li>• Reduce utility bills</li> <li>• Benefit LMI households (rentals as well as owner-occupied)</li> </ul>	<ul style="list-style-type: none"> <li>• 15% energy savings/project</li> <li>• Weatherization                             <ul style="list-style-type: none"> <li>• Commercial: 1,987 mtCO<sub>2e</sub> /project</li> <li>• Single-Family: 141 mtCO<sub>2e</sub> /project</li> <li>• Multifamily: 93 mtCO<sub>2e</sub> /project</li> </ul> </li> <li>• Solar: 2.56 mtCO<sub>2e</sub> /installation</li> </ul>
<b>Town Solar Installations</b>	<ul style="list-style-type: none"> <li>• Solar will be installed on the 203 Project in 2023</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce greenhouse gas emissions and heating and cooling costs from municipal buildings</li> </ul>	<ul style="list-style-type: none"> <li>• 203 Project solar installation: 90.6 mtCO<sub>2e</sub></li> <li>• Total: 9% reduction in Town's projected annual GHG emissions footprint with the construction of the 203 Project</li> </ul>
<b>Rental Property Task Force</b>	<ul style="list-style-type: none"> <li>• Recruit representatives for task force to address how to align landlord and renter interests towards improved energy efficiency and achieving renewable energy in rental units</li> </ul>	<ul style="list-style-type: none"> <li>• Task force will develop policy recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Approx. 56% of properties in Carrboro are rental properties; emissions reductions to be determined</li> </ul>

## Renewable Energy Measures

### CCAP Policy Connections

- Renewable Energy Recommendation #1: Pursue Community Solar Projects
- Renewable Energy Recommendation #2: Pursue Downtown Geothermal Heating and Cooling

### ECPP Policy Connections

- 3.C Renewable Portfolio

Project	Activities	Goals	Estimated Annual GHG Emissions Reduction
<b>Facilities Rehabilitation Project</b>	<ul style="list-style-type: none"> <li>• Member of staff committee</li> <li>• Outreach, partnerships, education</li> <li>• Assist with analyses, research as needed</li> <li>• Intersection with future updates to GHG emissions inventory</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce GHG emissions and heating and cooling costs from municipal buildings</li> </ul>	<ul style="list-style-type: none"> <li>• 270 mtCO<sub>2e</sub> in FY24-25 or later</li> <li>• 18% reduction in Town emissions if Century Center, Town Hall, and Public Works reach Net Zero</li> </ul>
<b>Solarize the Triangle Membership</b>	<ul style="list-style-type: none"> <li>• Second round of TJCOG regional-scale solarize campaign to launch in spring 2023</li> </ul>	<ul style="list-style-type: none"> <li>• Solarize campaigns allow jurisdictions to educate residents on solar and to promote solar installations in their communities</li> </ul>	<ul style="list-style-type: none"> <li>• TBD based on participation; contract deadline is March 31, 2023</li> </ul>
<b>Exploration of Large-Scale Energy Generation</b>	<ul style="list-style-type: none"> <li>• Continued exploration of solar and other large-scale electric generation with local partners</li> </ul>	<ul style="list-style-type: none"> <li>• Determine viability and opportunities for the Town</li> <li>• Determine associated GHG emissions reductions and other benefits</li> </ul>	<ul style="list-style-type: none"> <li>• TBD</li> </ul>

## Additional Projects

### CCAP Policy Connections

- Community Integration Recommendation #4: Integrate Climate Action with Local Living Economy
- Community Integration Recommendation #5: Expand Capacity
- Community Integration Recommendation #8: Environmental Justice and Climate Equity

### ECPP Policy Connections

- 4. Measurement, Inventory, Assessment, and Reporting

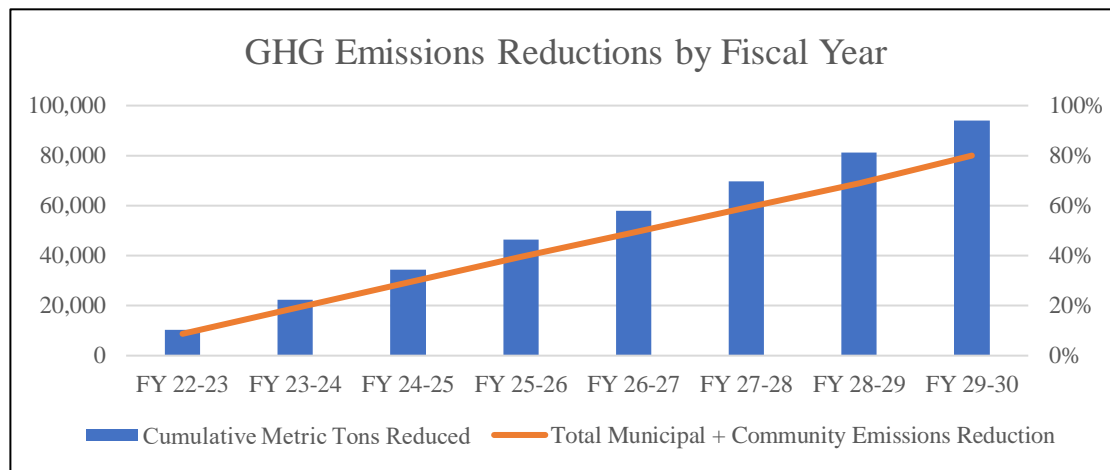
Project	Activities	Goals	Estimated Annual GHG Emissions Reduction
<b>Dashboard Exploration</b>	<ul style="list-style-type: none"> <li>• Continue to work with staff to develop and/or identify a platform for a dashboard which visualizes progress on the Town's priorities</li> </ul>	<ul style="list-style-type: none"> <li>• Allows information to be more accessible to the public</li> </ul>	<ul style="list-style-type: none"> <li>• Tracks progress on GHG emissions reduction goals</li> </ul>
<b>Educational Display</b>	<ul style="list-style-type: none"> <li>• Design educational display for 203 Project to highlight sustainable features</li> </ul>	<ul style="list-style-type: none"> <li>• Provide educational material to members of the public</li> </ul>	<ul style="list-style-type: none"> <li>• The 203 Project will be a LEED Gold-equivalent building</li> </ul>
<b>Recognition Program for Businesses</b>	<ul style="list-style-type: none"> <li>• Continue exploring potential for program to recognize businesses in Carrboro for environmentally-friendly initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize businesses for taking actions consistent with CCAP goals to reduce emissions or enhance ecosystems in Carrboro</li> </ul>	<ul style="list-style-type: none"> <li>• Emissions reduction TBD</li> <li>• Commercial buildings represent 25.7% of the community emissions in Carrboro</li> </ul>
<b>Racial Equity Analyses</b>	<ul style="list-style-type: none"> <li>• Utilizing REAL (racial equity assessment lens), Decision Making for Racial Equity (DRE tool), and Pocket questions to perform racial equity analyses</li> </ul>	<ul style="list-style-type: none"> <li>• Embedding equity in town governance and informing decision-making</li> </ul>	<ul style="list-style-type: none"> <li>• Item is focused on racial equity and not GHG emissions reduction</li> </ul>
<b>Collaborative Initiatives</b>	<ul style="list-style-type: none"> <li>• Cities Initiative</li> <li>• Orange County Climate Council</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen partnerships with other local governments; collaborate on projects and grant proposals</li> </ul>	<ul style="list-style-type: none"> <li>• Participation will inform all CCAP and ECPP climate action mitigation and resiliency project work</li> </ul>
<b>Continue Sustainability Organization Participation</b>	<ul style="list-style-type: none"> <li>• Local Governments for Sustainability (ICLEI)</li> <li>• Southeast Sustainability Directors' Network (SSDN)</li> </ul>	<ul style="list-style-type: none"> <li>• Utilize ICLEI and SSDN resources and tools to help inform current initiatives and plan future projects</li> </ul>	<ul style="list-style-type: none"> <li>• Participation in sustainability organizations will inform all climate action mitigation and resiliency work</li> </ul>
<b>Staff Support to Climate Action Team</b>	<ul style="list-style-type: none"> <li>• Agenda, minutes, presentation preparation</li> <li>• Scheduling, attending meetings; providing public notice</li> </ul>	<ul style="list-style-type: none"> <li>• Identify activities to educate and engage Carrboro residents in Town climate action initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• TBD based on community participation</li> </ul>

# Greenhouse Gas (GHG) Emissions Reduction Model and 10-Year Climate Emergency Cost Estimate Projection

Figure A: Greenhouse Gas Emissions Reduction Model - FY22-23 through FY29-30

Department	Expense or Project description	Total Metric Tons CO2e Reduced							
		FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
Advisory Boards	Advisory Boards	See Climate Action Org Code							
Econ Devel, Housing & Comm Services, Public Works	EERLF, Critical Home Repair	223	1,115	1,115	1,115	1,115	1,115	1,115	1,115
Planning, Public Works, Human Resources	CH Transit, Greenways, Sidewalks, Ped Safety Improvements, Bike Plan Implementation, Bicycle Friendly Comm, Bike Loop Detectors, Go Passes, Contractual-Reg Transp Planning	481/TBD	481/ TBD	481/TBD	481/TBD	TBD	TBD	TBD	TBD
Stormwater Utility, Public Works, Planning	Org Code, Contrib. to NC GreenPower, Tree Protection (Carbon Sequestration)	7,799	8,511	8,511	8,511	8,511	8,511	8,511	8,511
Climate Action	Org Code	1,768	1,953	1,953	1,953	1,953	1,953	1,953	1,953
Multiple	Solarize the Triangle Initiative, Staff Time, Flexible Work Schedules, Fleet Study Implementation (80% Reduction), Town Building Renovations (80% Reduction), CH Transit Electric Buses	TBD	TBD	TBD	TBD	TBD	TBD	TBD	1336.8
<b>Total</b>		10,271	12,060	12,060	12,060	11,579	11,579	11,579	12,916

Figure B: GHG Emissions Reductions by Fiscal Year



Legend	
Climate Action Plan Section	Color
Community Integration	Yellow
Buildings	Light Blue
Transportation	Light Green
Ecosystem Protection & Restoration	Light Orange
Multiple Sections	Blue
Multiple Sections, Emissions Reductions TBD	Grey

Figure C: 10-Year Climate Emergency Cost Estimate Projection

CCAP Section	Recommendation	Departmental Budget	Expense or Project description	FY22-23 Total	FY23-24 Total	FY24-25 Total	FY25-26 Total	FY26-27 Total	FY27-28 Total	FY28-29 Total	FY29-30 Total	Total Cost	Type of Funding
Community Integration	#1: Grassroots Partnerships; #5: Expand Capacity	Advisory Boards	Advisory Boards	\$1,475	\$1,475	\$1,475	\$1,475	\$1,475	\$1,475	\$1,475	\$1,475	\$11,800	Existing
Buildings	# 1: Reduce Emissions Attributed to Buildings by 80% by 2030; ECPP 2.B.ii: Facility Energy Efficiency	Econ Devel, Housing & Comm Services, Planning	EERLF	\$285,227	\$1,426,135	\$1,426,135	\$1,426,135	\$1,426,135	\$1,426,135	\$1,426,135	\$1,426,135	\$10,268,172	New
		Housing & Comm Services	Critical Home Repair, Weatherization	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
Transp.	#2: Enhance Transit Service; #4: Promote Walking, Biking, Transit; #6: Improve Bicycle and Pedestrian Infrastructure	Planning, Public Works, Human Resources	CH Transit, Greenways, Sidewalks, Ped Safety Imprvmnts, Bike Plan Implemen., Bicycle Friendly Comm, Bike Loop Detectors, Go Passes, Contract.-Reg Transp Planning	\$4,669,494	\$2,158,291	\$2,158,291	\$2,158,291	\$2,158,291	\$2,158,291	\$2,158,291	\$2,158,291	\$19,777,531	Existing
Ecosystem Protection & Restoration	#1: Stormwater Utility; #4: Tree Preservation; #5: Invasive Plants; #6: Watershed Restoration; #8: Carbon Offsets & Research Protection	Stormwater Utility, Public Works, Planning	Org Code, Contrib. to NC GreenPower (x9), Tree Protection (Carbon Sequestration)	\$1,138,960	\$1,142,191	\$1,142,191	\$1,142,191	\$1,142,191	\$1,142,191	\$1,142,191	\$1,142,191	\$9,134,297	New + Existing
Multiple	Comm Integration: #3-6, Buildings: #1; Transp: #1, 4; Ecosystem P&R: #2-6; Renewable Energy: #2, Food Choices: #1,2; ECPP: 2Bi, 2Bii, 3B, 3C, 4	Climate Action	Org Code	\$217,846	\$302,846	\$302,846	\$302,846	\$302,846	\$302,846	\$302,846	\$302,846	\$2,119,922	New + Existing
Multiple		Multiple	Staff Time, Flexible Work Schedules, Fleet Study Implementation (80% Reduction), Town Building Renovations (80% Reduction)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	New
			<b>Total*</b>	<b>\$6,393,002</b>	<b>\$5,109,463</b>	<b>\$5,109,463</b>	<b>\$5,109,463</b>	<b>\$5,109,463</b>	<b>\$5,109,463</b>	<b>\$5,109,463</b>	<b>\$5,109,463</b>	<b>\$42,159,243</b>	

\*Additional potential annual revenue needed starting in FY23-24: Between \$0-\$1,514,366 to achieve emissions reductions needed. Figure C models an expansion of the EERLF, increasing the Town’s contribution to NC GreenPower, expanding the Green Neighborhoods Grant Program, and adding additional EV charging stations. The emissions reductions can be reached by using multiple pathways; costs and emissions reduction projections will be refined annually based on the results of Town initiatives and grassroots efforts of community members to reduce their carbon footprints.