# TOWN OF CARRBORO ENVIRONMENTAL ADVISORY BOARD





# AGENDA Environmental Advisory Board

August 5, 2021; 7:00 pm Zoom Virtual Meeting\*

Time	Item	Presenter
7:00 pm	Call to Order, Announcements Approve 7/22/21 minutes	Chair, All
7:10 pm	Discussion Items  Discuss Initiatives from FY21-22 Sustainability  Work Plan	Staff, Chair, All
9:00 pm	Announcements, Adjourn	Chair, All

\*To view the advisory board meeting, please email Laura Janway at <a href="mailto:ljanway@townofcarrboro.org">ljanway@townofcarrboro.org</a> to receive an invitation to view the meeting. If you wish to make public comment, at the time of the public comment, the staff person will be able to allow speakers to remotely enter the meeting one-by-one to comment. Please send any written statement or materials to the same email provided above. Requests to remotely attend the meeting shall be made within 24 hours of the meeting start time. The requester should also specify if they wish to make any comments in the email. All written statements and materials will be forwarded to the advisory board members

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# TOWN OF CARRBORO ENVIRONMENTAL ADVISORY BOARD – SUMMARY





Meeting on July 22, 2021, 7:00 pm

<b>Board Members</b>	Town Council Liaison	Staff	Guests
Kathy Kaufman		Laura Janway	
Chrissie Schalkoff			
María Julia Echart			

Note: Absent/Excused: Namdi Brandon, Alfonso Blanco

#### Call to Order, Announcements

Meeting convened via videoconference at about 7:18 pm by Chair Kathy Kaufman.

#### Approval of 5/6/2021 and 6/2/21 Meeting Minutes

Schalkoff motioned to approve the minutes for the 5/6//21 and 6/2/21 EAB Meeting, seconded by Echart. All voted in favor. AYES: (3) Kaufman, Schalkoff, Echart; NAYES: (0).

#### **Discussion of Green Neighborhoods Grant Program Outreach**

Staff member Janway described the Town's current plans for the Green Neighborhoods Grant Program. EAB members provided input on types of projects that Carrboro residents could design and implement using the funding. Project ideas included summer programs for children, holding a neighborhood workshop, and expanding or aiding existing initiatives such as community gardens. EAB members also provided input on program outreach, including using social media sites, neighborhood email listservs, creating a dedicated Town webpage and brochures with QR codes, and sending out mailings and flyers. EAB members also gave suggestions for other aspects of the program, including adding a category for long-term impact in the scoring rubric, defining neighborhood support, requiring a list of expenses, providing a budget and reporting template, giving residents and longer time to complete projects, providing support to help reporting, and holding a gathering to promote completed projects. EAB members also suggested that the Town clarify the geographic boundaries of participation in the program.

#### Discussion of FY21-22 Environmental Sustainability Work Plan

Staff member Janway provided additional information about the FY21-22 Environmental Sustainability Work Plan. EAB members decided to meet on August 5<sup>th</sup>, 2021 to continue discussion.

#### Adjourn

The motion to adjourn was made by Schalkoff and seconded by Echart, with all members voting in favor. The meeting was adjourned at approximately 8:37 pm.



#### **TOWN OF CARRBORO**

TRANSMITTAL Manager's Office

**DELIVERED VIA:** MAIL FAX EMAIL

To: David Andrews, Town Manager

From: Laura Janway, Environmental Sustainability Coordinator

Patricia McGuire, Planning Director

Date: March 1, 2021

**Subject:** FY21-22 Environmental Sustainability Work Plan

During FY21-22, staff will continue work on current sustainability projects while introducing several new comprehensive initiatives. Work throughout the fiscal year will address recommendations in all six sections of the Community Climate Action Plan (CCAP): Ecosystem Protection and Enhancement, Community Integration, Food Choice Measures, Transportation Measures, and Building Energy Efficiency Measures, and Renewable Energy Measures. Work will also address sections 2, 3, and 4 of the Energy and Climate Protection Plan (ECPP).

#### **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

#### ECPP Policy Connections

• 3.D Urban Forestry Program

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Continue to Promote Ecosystem Protection and Enhancement Projects from FY20-21	<ul> <li>Work with Communications         Manager to continue to create         and disseminate outreach         discussing the Anderson Park         stream restoration project and the         new Managed Natural         Landscapes Ordinance</li> <li>Work to quantify carbon         sequestration impact of urban         forests</li> </ul>	<ul> <li>Produce outreach materials throughout duration of FY21-22</li> <li>Explore days of National awareness related to restoration and native plants</li> </ul>	<ul> <li>Restore water quality buffer in Anderson Park</li> <li>Create wildlife and pollinator habitat</li> <li>Sequester carbon through tree growth</li> <li>Quantify carbon sequestration of urban forests</li> </ul>	<ul> <li>Projects are focused on ecosystem resiliency and not direct mitigation</li> <li>Staff will work to quantify carbon sequestration of urban forests</li> </ul>
Bee City USA	<ul> <li>Recognize National Pollinator Week</li> <li>Hold outreach events</li> <li>Explore Bee City Camp for children; work with Rec. &amp; Parks</li> <li>Increase and enhance pollinator habitat in Carrboro</li> </ul>	<ul> <li>June 22-28, 2020: National Pollinator Week</li> <li>Membership renewal due February 28, 2022</li> </ul>	Meet annual requirements of Bee City USA participation to renew membership for 2022	Projects are focused on ecosystem resiliency and not direct mitigation
Invasive Species Removal Volunteer Initiative	<ul> <li>Continue to 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> </ul>	Program operational throughout fiscal year	Remove invasive species to improve habitat for native vegetation and wildlife	<ul> <li>Project is focused on ecosystem resiliency and not direct mitigation</li> <li>Staff will work to quantify carbon sequestration of urban forests</li> </ul>
Grant Exploration	<ul> <li>Examine funding opportunities, including the NCFS Urban &amp; Community Forestry (U&amp;CF) Grant Program</li> <li>Potential projects: Street Tree inventory and Street Tree Master Plan</li> </ul>	<ul> <li>Explore grants for a 2-year plan</li> <li>Planning GIS staff could assist with initial analyses</li> </ul>	Meet Urban Forestry goals outlined in Section 3.D of the Energy and Climate Protection Plan (ECPP)	<ul> <li>Projects are focused on ecosystem resiliency and not direct mitigation</li> <li>Staff will work to quantify carbon sequestration of urban forests</li> </ul>

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Eagle Scout Stormwater Project	<ul> <li>Collaboration with Stormwater Utility and Eagle Scout</li> <li>Restore rain garden to its proper function</li> </ul>	<ul> <li>Project work began in early 2021</li> <li>Project work will be complete by August 2021</li> </ul>	• Reduce negative impacts of stormwater runoff, including erosion, flooding, nonpoint source pollution (including nitrogen and phosphorus delivery to surface waters), and altered hydrology	Project is focused on ecosystem resiliency and not direct mitigation

#### **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
- Ecosystem Recommendation #3: Accelerate/Expand Organic Waste Collection/Composting
- Community Integration Recommendation #5: Expand Capacity to Pursue Community Sustainability Initiatives

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Green Neighborhoods Grant Program	<ul> <li>Implement grant program for residents to initiate neighborhood emissions reduction projects</li> <li>Hire intern to help administer program</li> <li>Utilize Grassroots Partnerships Funding</li> </ul>	<ul> <li>Spring 2021: Launch program</li> <li>Summer 2021: Grant awards announced</li> <li>Winter 2021-22: Launch phase 2 of program with a second round of grants</li> </ul>	Provide residents with funding to reduce emissions and build community within neighborhoods	• Goal: 9,412 MTCDE (9% community reduction/year)
Composting Bin Sales	• Sell composting bins at Town Hall and at Carrboro Farmers' Market	<ul> <li>Continue into FY21-22</li> <li>Staff will re-evaluate sales once COVID-19 precautions no longer need to be in place</li> </ul>	Increase backyard composting in Carrboro to reduce greenhouse gas emissions	• 164 MTCDE

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Every-Other- Week (EOW) Garbage Collection Pilot	<ul> <li>Design and conduct EOW pilot program</li> <li>Use Green Neighborhoods Grant Program to select pilot neighborhood</li> <li>Targeted outreach to ensure equity</li> </ul>	<ul> <li>Spring 2021: Launch         Green Neighborhoods         Grant Program</li> <li>Summer 2021: Staff design         program</li> <li>Fall/Winter 2021: Grant         proposals accepted</li> <li>Winter 2021-22: Staff         select proposal(s) for         funding</li> </ul>	<ul> <li>Increase backyard composting in Carrboro to reduce greenhouse gas emissions</li> <li>Reduce emissions related to garbage transportation</li> <li>Reduce cost of garbage collection program</li> <li>Gauge success to evaluate the potential for EOW garbage collection on a larger scale</li> </ul>	Town-wide EOW program would reduce GHG emissions 47 MTCDE/year
Multifamily Composting Pilot	<ul> <li>Initiate a multifamily composting pilot</li> <li>Use Green         Neighborhoods Grant         Program to select pilot         neighborhood</li> <li>New category with higher         funding</li> <li>Explore use of         Community Waste         Reduction and Recycling         (CWRAR) grant to fund         bins and commercial         composting pick-up</li> </ul>	<ul> <li>Summer 2021: Staff design program</li> <li>Fall/Winter 2021: Grant proposals accepted</li> <li>Winter 2021-22: Staff select proposal(s) for funding</li> <li>February 2022: CWRAR grant proposals due</li> <li>Spring 2022: Program launch</li> </ul>	<ul> <li>Allow residents of multifamily housing the opportunity to compost</li> <li>Increase composting in Carrboro to reduce greenhouse gas emissions</li> <li>Gauge success for future programs in multifamily residences</li> </ul>	• 7.76 MTCDE
Farmers' Market Composting Staff	<ul> <li>Hire staff member to monitor compost drop-off at Farmers' Market</li> <li>Targeted composting outreach</li> </ul>	<ul> <li>Recreation and Parks staff hired to assist with COVID-19 precautions currently monitor the site</li> <li>Staff expect the need for a dedicated staff member when COVID-19 staff positions are no longer needed</li> </ul>	<ul> <li>See staffing memo for more details</li> <li>Staffing the compost collection site will result in a cost of \$88/MTCDE reduced</li> </ul>	• 43 MTCDE

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Climate Action Intern	Hire intern to assist with pollinator, food choices, and Earth Day outreach events	Hire intern in early 2022 in order to hold outreach events in Spring 2022	Assist Environmental     Sustainability Coordinator     with outreach events and     other project work	Staff member will contribute to all climate action mitigation and resiliency projects
Town Hall Waste Pad Enclosure Redesign for Composting Storage	Include composting station elements in redesign of Town Hall waste pad enclosure	Public Works has a current contract that can be extended if needed to next fiscal year	<ul> <li>Provide dedicated, streamlined area for Farmers' Market compost collection</li> <li>Enclose composting bins for security</li> <li>Create area for future staff composting outreach</li> </ul>	<ul> <li>43 MTCDE</li> <li>Potential for additional emissions reduction with staff outreach</li> </ul>
Climate Action Modules Project	<ul> <li>Work with volunteers to continue editing current module library</li> <li>Additional volunteers to create content for new modules on relevant topics</li> </ul>	<ul> <li>Spring/Summer 2021- Finish editing current module library (four modules) and begin dissemination of modules to the public by working with local partners</li> <li>Project work to continue throughout FY21-22</li> </ul>	<ul> <li>Identify climate crisis resilience, sustainability, and mitigation measures based on environmental education outreach topics</li> <li>Design and format climate outreach education and action modules</li> <li>Identify resources and areaspecific expertise for module presentations</li> <li>Train and collaborate presenters prior to outreach sessions</li> </ul>	Project will contribute to emissions reduction in all sections of the CCAP.

# **Food Choice Measures**

# Policy Connections

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

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Food Choice Events	<ul> <li>Hold events to promote plant-based food choices</li> <li>Virtual outreach to promote plant-based foods, including cooking demonstrations</li> <li>Create social media campaign</li> <li>Request that residents share recipes for climate-friendly food cookbook</li> <li>Intern to assist with event coordination</li> </ul>	<ul> <li>Begin outreach after dietary emission inventory is complete in Spring 2021</li> <li>Explore National awareness days for plant-based diets</li> </ul>	<ul> <li>Educate Carrboro residents on emissions related to food choices and benefits of plant-based diets</li> <li>Reduce emissions related to food choices in Carrboro</li> </ul>	<ul> <li>Annual reduction will be calculated when dietary emissions inventory is complete (Spring 2021)</li> <li>Dietary emissions GHG reduction goal: 9% community reduction/year (current estimate: 1,200 MTCDE)</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

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Partnership with Piedmont Electric Membership Corporation (PEMC) for Electric Vehicle (EV) Charging Station	<ul> <li>Partner with Piedmont EMC to provide 30% of Piedmont's match for a grant from the Volkswagen (VW) Emissions Mitigation Funding an EV Charging Station at Carrboro Plaza</li> </ul>	<ul> <li>Project extended due to COVID-19</li> <li>Funding recipients have two years to complete projects from the date of a signed, executed contract with NCDEQ</li> </ul>	Promote EV use in Carrboro to reduce emissions from transportation	• 9.02 MTCDE
Partnership with Center for Advanced Hindsight for Transportation Demand Management (TDM) Grant Proposal	<ul> <li>Design resident welcome packets outlining alternative transportation options to reduce single-occupant vehicle trips.</li> <li>Center for Advanced Hindsight will research the educational campaign's effectiveness</li> </ul>	<ul> <li>Funding awards were delayed due to COVID-19</li> <li>Project work will begin in Summer 2021</li> </ul>	<ul> <li>Help grant partners learn to incentivize and motivate residents to explore transportation options and find alternatives</li> <li>TDM is one of the most effective GHG reduction strategies per MTCDE reduced</li> </ul>	<ul> <li>TDM work will help the Town reach its transportation emissions reduction goal: 2954 MTCDE (9% community reduction/year)</li> <li>TDM: Efficient Strategy (\$88/MTCDE reduced)</li> </ul>
Electric Vehicle Charging Station Operation	<ul> <li>Electricity (\$3,200)</li> <li>Network Services (\$1,200)</li> <li>Explore solarizing potential to offset grid usage for EV charging station</li> <li>Potential proposal for Orange County Climate Action Grant Program</li> </ul>	<ul> <li>EV charging stations installed in summer 2021</li> <li>Stations will require electricity throughout the duration of FY21-22</li> </ul>	<ul> <li>Incentivize use of EVs in Carrboro to reduce GHG emissions from transportation</li> <li>Offset grid emissions with solar panels</li> </ul>	• 18.04 MTCDE

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Explore TDM Strategies for Town Employees	<ul> <li>Work with Transportation         Planner and other staff to         discuss potential Town         participation in Best         Workplace for Commuters         Program</li> <li>Cost: \$250/year, TJCOG         will cover the first year of         dues</li> </ul>	<ul> <li>Explore participation throughout FY21-22</li> <li>Applications for the 2022 Best Workplaces for Commuters List accepted from June 1- Oct. 31, 2021</li> </ul>	<ul> <li>Reduction in employee commuting trips from strategies such as hybrid telework schedules</li> <li>Resulting reduction in GHG emissions</li> <li>TDM is one of the most effective GHG reduction strategies per MTCDE reduced</li> </ul>	<ul> <li>Goal: 15 MTCDE (6% Town reduction/year)</li> <li>TDM: Efficient Strategy (\$88/MTCDE reduced)</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 50% by 2025

#### ECPP Policy Connections

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

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Energy- Efficiency Revolving Loan Fund (EERLF)	Provide loans, grants for energy efficiency improvements in commercial buildings Targeted outreach	<ul> <li>Spring/Summer 2021: Staff continue developing program</li> <li>Fall/Winter 2021: Program relaunch</li> </ul>	<ul> <li>Reduce greenhouse gas emissions from buildings in Carrboro</li> <li>Reduce utility bills for Carrboro businesses</li> <li>15% energy savings/project</li> </ul>	Weatherization     Commercial: 1,987     MTCDE/project     Single-Family: 141     MTCDE/project     Multifamily: 93     MTCDE/project     Solar: 2.56 MTCDE/installation

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Town Facilities Rehabilitation Project	<ul> <li>Member of staff committee</li> <li>Outreach, partnerships, and education connections</li> <li>Assist with analyses, research as needed</li> <li>Intersection with future updates to GHG emissions inventory</li> </ul>	Project work will continue throughout the duration of FY21-22	<ul> <li>Reduce greenhouse gas emissions and heating and cooling costs from municipal buildings</li> <li>Quantification of GHG reduction will be part of project reporting and will come from Public Works</li> </ul>	<ul> <li>270 MTCDE</li> <li>18% reduction in Town emissions if Century Center, Town Hall, and Public Works reach Net Zero</li> </ul>

# **Renewable Energy Measures**

CCAP Policy Connections

• Renewable Energy Recommendation #2: Pursue Downtown Geothermal Heating and Cooling

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Facilities Rehabilitation Project	<ul> <li>Member of staff committee</li> <li>Outreach, partnerships, education connections</li> <li>Assist with analyses, research as needed</li> <li>Intersection with future updates to GHG emissions inventory</li> </ul>	Project work will continue throughout the duration of FY21-22	Reduce greenhouse gas emissions and heating and cooling costs from municipal buildings using renewable energy	<ul> <li>270 MTCDE</li> <li>18% reduction in Town emissions if Century Center, Town Hall, and Public Works reach Net Zero</li> </ul>

### **Additional Projects**

#### CCAP Policy Connections

- Community Integration Recommendation #4: Integrate Climate Action with Local Living Economy
- Community Integration Recommendation #5: Expand Capacity

### ECPP Policy Connections

• 4. Measurement, Inventory, Assessment, and Reporting

Project	Activities	Timeline	Goals	Estimated Annual GHG Emissions Reduction
Recognition Program for Climate Action- Friendly Businesses	Create program to recognize businesses in Carrboro for environmentally-friendly initiatives	<ul> <li>Fall/Winter 2021 – begin program design</li> <li>Spring 2022 – launch program</li> </ul>	Recognize businesses for taking actions consistent with CCAP goals to reduce emissions or enhance ecosystems in Carrboro	<ul> <li>Emissions reduction TBD</li> <li>Commercial buildings represent 25.7% of the community emissions in Carrboro</li> </ul>
Participation in Collaborative Initiatives	<ul> <li>Cities Initiative</li> <li>Orange County Climate         <ul> <li>Policy subcommittee</li> <ul> <li>Climate action</li> <li>reporting</li> <li>subcommittee</li> </ul> </ul></li> </ul>	Monthly meetings throughout 2021-22	<ul> <li>Strengthen partnerships with other local governments; collaborate on projects and grant proporsals</li> </ul>	Participation in collaborative initiatives will inform all CCAP and ECPP climate action mitigation and resiliency project work
Continue Participation in Sustainability Organizations	<ul> <li>Local Governments for Sustainability (ICLEI)</li> <li>Southeast Sustainability Directors' Network (SSDN)</li> </ul>	Regular meetings and collaboration throughout 2021-22	Utilize ICLEI and SSDN resources and tools to help inform current initiatives and plan future project work	Participation in sustainability organizations will inform all CCAP and ECPP climate action mitigation and resiliency project work