



TOWN OF CARRBORO

TRANSMITTAL

Manager's Office

DELIVERED VIA: *HAND* *MAIL* *FAX* *EMAIL*

To: Richard J. White III, Town Manager

From: Laura Janway, Environmental Sustainability Coordinator
Patricia McGuire, Planning Director

Date: February 8, 2022

Subject: Implementation Update: Energy and Climate Protection Plan (2014)
& Community Climate Action Plan (2017)

Summary

The purpose of this memo is to provide the Council with a progress report on implementation of the Energy and Climate Protection Plan (ECPP), adopted May 28, 2014, and the Community Climate Action Plan (CCAP), adopted January 24, 2017. Both plans were updated in 2020 with goals to reduce 2010 levels of municipal and per capita community greenhouse gas emissions 80% by 2030. Town staff are examining and pursuing several initiatives to reach the emissions reductions goals.

Staff have continued to implement the ECPP through two upcoming Requests for Proposals (RFPs), regarding renewable energy procurement and installation as well as an alternative fuels analysis for the municipal fleet.

Recent CCAP implementation measures include progress on the installation of two electric vehicle (EV) charging stations on Town property and the award of grant funding for two proposals to the Orange County Community Climate Action Grant Program. The funding will cover the full cost of a part-time staff member to monitor organics collection at the Carrboro Farmers' Market. It will partially fund the installation of a green roof and solar photovoltaic panels on the west roof of the 203 Project. Staff will submit a proposal to the next round of funding to request additional finances for the panels on the west roof of the 203 Project.

Additionally, staff are working to implement the green neighborhoods grant program and a transportation demand management project as well as finalizing guidelines and protocols for an independent invasive species removal volunteer program. Staff have also completed a dietary greenhouse gas emissions inventory for the Town and will use this information moving forward with outreach regarding food choices.

Energy and Climate Protection Plan

Request for Proposals: Renewable Energy Procurement and Installation

- *Policy Connections:* ECPP Section 2.B.ii Facility Energy Efficiency, 3.C Renewable Portfolio

Town staff have finalized a draft Request for Proposals for the phased implementation of solar photovoltaic (PV) systems at the following properties:

The 203 Building	203 S. Greensboro Street
Fire Station 1	301 W. Main Street
Century Center	100 N. Greensboro Street
Public Works	100 Public Works Drive
Anderson Community Park	302 Highway 54 West

The RFP will help the Town understand the potential design and installation possibilities for systems at these properties. It will also help the Town fully understand the cost implications of developing these systems through a variety of potential financing options such as full ownership, leasing, and/or debt financing. The RFP has been finalized by staff and will be posted in early February. Staff anticipate receiving responses by early March to coincide with the 203 Project timeline.

Town Fleet Electrification and Alternative Fuels Exploration

- *Policy Connections:* ECPP Section 2.C (Fleet Replacement and Efficiency)

Town staff have drafted a preliminary draft fleet study scope which will be used to inform the Request for Proposals (RFP) for this project. The draft scope is provided in Attachment C for comments from the Council.

Staff anticipate releasing the RFP in early 2022 in order to have information to share with the Town Council by the fall.

Environmental Planner Position

Staff advertised and opened the position to candidates and have begun application review. Staff anticipate reaching out to candidates to begin the interview process in early February 2022.

Community Climate Action Plan

Community Integration

Climate Action Team (CAT)

- *Policy Connections:* CCAP Community Integration Recommendation #5:
Expand Capacity

Nine members were appointed to the Climate Action team in Fall 2021. The CAT held their first meeting in November 2021 and have held two subsequent meetings. Meetings in 2022 will follow the adopted meetings schedule. In early 2022, the CAT will review a draft Environmental

Sustainability Work Plan for FY22-23. Staff anticipate additional Special Meetings to be scheduled throughout the year as needed to plan outreach events or discuss projects related to CCAP implementation.

Carrboro Connects Comprehensive Plan

- *Policy Connections:* Entire CCAP and ECPP

Staff are working to calculate estimates for greenhouse gas emission reductions for the projects listed in the implementation section of the plan in order to inform revisions to the Public Hearing Draft.

Green Neighborhoods Grant Program

- *Policy Connections:* CCAP 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

The Green Neighborhoods Grant Program seeks to provide Town funding to help bring neighbors together to pursue projects which will reduce greenhouse gas emissions, create natural areas that are more resilient to the impacts of climate change, and ultimately benefit the entire community.

Staff have incorporated comments from the Town Council into the program and are working to finalize program documents. Staff anticipate that the program will be open for applications in early 2022. As part of the program's outreach campaign, staff plan to hold several information sessions for potential applicants. Staff also plan to deliver targeted engagement to several Carrboro neighborhoods utilizing approaches centered on equity employed by the Town during Comprehensive Plan development.

Modules Project

- *Policy Connections:* CCAP Community Integration Recommendation #5: Expand Capacity

The Community Climate Action Plan Modules Project is a community-driven outreach initiative aimed to educate and engage Carrboro residents in climate action. The initiative involves designing materials for Carrboro residents to educate others about specific climate action topics. The materials will be organized into modules, which will act as templates for residents to customize for presentations or demonstrations.

Four modules related to transportation, ecosystems, composting, and food choices have been reviewed by the Environmental Advisory Board and edited by volunteers and staff. Staff

anticipate working with the Climate Action Team to review additional several modules in 2022 before publishing the modules library for public use.

Orange County Community Climate Action Grant Program

- *Policy Connections:* CCAP Buildings Recommendation #1: 80% Challenge; Ecosystem Recommendation #3: Accelerate/Expand Organic Waste Collection/Composting; ECPP Recommendation 3.C: Renewable Portfolio

Staff submitted two proposals to this program in July 2021 to fund several projects, involving solar photovoltaic panels (west roof) and a green roof for the 203 Project, as well as staffing the Carrboro Farmers' Market organics collection/composting. Staff were notified in October 2021 that the following funding was awarded to the projects:

- Solar photovoltaic panels (west roof) and a green roof for the 203 Project: \$40,567.50
- Compost monitor staff member: \$3,765.00

Staff will work to move forward hiring the compost monitor in early 2022. Town staff will apply for additional funding for the west roof solar photovoltaic panels in the next round of funding this spring.

Building Energy Efficiency Measures

Energy Efficiency Revolving Loan Fund (EERLF)

- *Policy Connections:* Buildings Recommendation #1: Reduce Emissions Attributed to Carrboro Buildings by 80% by 2030, #2: Energy Audit/Performance Rating; Community Integration Recommendation #4: Integrate Climate Action with Local Living Economy, #6: Facilitate Low Cost Financing for Energy Efficiency & Renewable Energy Projects

Staff have held meetings and discussions regarding the planned updates to this program. Staff are now working to draft new program guidelines and will also examine opportunities to leverage this funding with larger-scale Federal programs.

Transportation

Volkswagen (VW) Settlement Phase 1 – Level 2 Charging Station

- *Policy Connections:* ECPP Goals; CCAP Transportation Recommendation #1: Reduce Greenhouse Gas Emissions from Motor Vehicle Use by 80% by 2030.

The North Carolina Department of Environmental Quality has offered all applicants an extension on agreements for electric vehicle (EV) charging stations. The stations have been installed and Duke Energy has been notified for the final power activation. Staff are working with ChargePoint to ensure cloud services are configured and the stations will be available on public

charging station maps. Staff will ensure that all final grant requirements are met, including signage. Stations will be in operation by March 2022.

EV Charging Stations Priority Analysis

- *Policy Connections:* ECPP Goals; CCAP Transportation Recommendation #1: Reduce Greenhouse Gas Emissions from Motor Vehicle Use by 50% by 2025.

Staff are meeting regularly with employees from other local jurisdictions to design a county-wide Geographic Information Systems (GIS) analysis to prioritize locations of EV charging stations in order to ensure a well-planned network of stations around Orange County. This analysis will allow staff to be prepared for future funding opportunities. The group is currently working to designate and rank points of interest and other criteria for site considerations.

Transportation Demand Management (TDM) Grant – Fresh Starts Project

- *Policy Connections:* CCAP Transportation Recommendation #4: Further Promote Walking, Biking, Transit

The Fresh Starts Project involves a partnership between the Center for Advanced Hindsight, the Town of Carrboro, and Orange County to design and study the efficacy of transportation welcome packets for new residents. The Center for Advanced Hindsight (CAH) presented the project to advisory boards in November 2021. Advisory boards discussed the potential information topics in the box, including the following:

- Personalized Routes
- Transportation Partners/Mentors
- User-Centered information to reduce barriers to participation
- Carpool matching guidance

The study protocol and materials have been submitted to Duke's Institutional Review Board (IRB) for ethical review. Staff are working to review additional items for the welcome boxes, including a social norms letter and informational flip cards, which will both be translated into English and Spanish versions for the welcome box.

CAH will begin to mail boxes in late February/early March 2022 after the IRB review is complete. The project measurement period will take place from April-June.

Transportation Demand Management (TDM) Grant – Triangle Transportation Choices

- *Policy Connections:* CCAP Transportation Recommendation #4: Further Promote Walking, Biking, Transit

Staff are working with the Town of Chapel Hill and the University of North Carolina to develop a set of activities, outreach, and events as part of the upcoming FY23 TDM grant application. The Triangle J Council of Governments (TJCOG) has recently updated the TDM program, adding a new emphasis on race and equity. Staff will submit an application for FY23 Triangle J Council of Government's FY23 Triangle Transportation Choices grant program as a subrecipient of the Town of Chapel Hill.

Contribution to Piedmont Electric Membership Corporation (PEMC) for Electric Vehicle (EV) Charging Station at Carrboro Plaza

- *Policy Connections:* ECPP Goals; CCAP Transportation Recommendation #1: Reduce Greenhouse Gas Emissions from Motor Vehicle Use by 50% by 2025.

The Town finalized a payment contributing towards PEMC's match for the grant in June 2021. Staff attended a ribbon-cutting ceremony for the station in November 2021. The station is now fully operational.

Ecosystem Protection and Enhancement

Riparian Restoration Project – Henry “Hank” Anderson III Community Park

- *Policy Connections:* Ecosystem Recommendation #4: Tree Preservation, Protection and Conservation; Ecosystem Recommendation #6: Pursue Watershed Restoration Actions to Protect Local Streams from Changes in Rainfall Due to Climate Change

Staff continue to monitor the health and condition of the trees planted through the NC Urban Forest Council Legacy Tree Fund Grant. Staff are currently working with a local Boy Scout to plan a tree-planting Eagle Scout Service Project at the park involving an assessment of tree survival in the project area and replacement of trees if necessary.

Bee City USA, Mayors' Monarch Pledge

Staff submitted the 2021 Mayors' Monarch Pledge report in December 2021. The report was reviewed and approved by the Mayors' Monarch Pledge Team. Staff anticipate requesting participation in the initiative for 2022.

Invasive Species Volunteer Events

- *Policy Connections:* Ecosystem Recommendation #5: Improve Regulations and Community Capacity to Discourage Invasive Plants and Encourage Native Plants

Staff are finalizing the documents, requirements, and protocols for a potential new volunteer program to allow independent volunteer work to remove invasive species.

Staff have also investigated areas infested with kudzu (*Pueraria*) discovered by a Carrboro resident on Town property bordering Morgan Creek. Staff are exploring options for removing the kudzu without exacerbating erosion issues along the banks of the creek.

Planning Department staff are coordinating with Stormwater Utility staff to plan outreach for Creek Week in early March. Staff plan to work with several volunteers to create and present a virtual invasive species workshop. Information will include:

- Introduction to invasive species
- Community Climate Action Plan implementation
- Overview of the most common invasive species in Carrboro
- Species identification techniques
- Best practices for treatment

Food Choice Measures

Build Dietary Greenhouse Gas (GHG) Emissions Profile

- *Policy Connections:* CCAP Food Choice Recommendation #2: Develop Local Dietary Consumption and Associated GHG Profile

Using the 2019 CCAP survey's annual self-reported meat and dairy consumption among Carrboro residents, the Town's Environmental Sustainability Coordinator worked with Doctoral Candidate and Climate Action Team (CAT) member Chrissie Schalkoff to perform an analysis of associated greenhouse gas emissions. The final report can be found as Attachment D.