



## TOWN OF CARRBORO

**TRANSMITTAL**

**Manager's Office**

**DELIVERED VIA:**  HAND  MAIL  FAX  EMAIL

**To:** David Andrews, Town Manager

**From:** Laura Janway, Environmental Planner  
Patricia McGuire, Planning Director

**Date:** January 19, 2021

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

### Summary

The purpose of this memo is to provide the Board 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. The ECPP concentrates on lowering municipal greenhouse gas (GHG) emissions and the CCAP has recently been updated with an 80% reduction goal in per capita greenhouse emissions by 2030. Town staff are examining and pursuing several initiatives to reach the emissions reductions goals.

Staff have continued to implement the ECPP through the Facilities Rehabilitation and Renovation Project. The Town Council and the Environmental Advisory Board have provided input on the definition of net zero for Town buildings. Staff are also providing guidance to a graduate student who is working to update the Town's municipal and community GHG inventories and analyze additional emissions related to natural gas usage.

Recent CCAP implementation measures include the drafting of a proposal for the Green Neighborhoods Grant Program and work to design a program for independent volunteer work to remove invasive species. Staff also worked to draft a charge for a new advisory board, the Climate Action Team (CAT) and bring to the Town Council for approval. Planning Department and Public Works staff organized a volunteer event to plant landscape-sized trees in Henry "Hank" Anderson III Community Park as part of a grant received from the NC Urban Forest Council. Additionally, staff, along with a volunteer from the Environmental Advisory Board (EAB), are in the final stages of an analysis to create a baseline food emissions profile for the Town to inform future implementation of CCAP Food Choices recommendations.

### Energy and Climate Protection Plan

#### Facilities Rehabilitation and Renovation

- *Policy Connections:* ECPP Section 2.B.i: Building Assessments and Ratings

Planning Department and Public Works staff worked to coordinate the presentation of net zero choices for the Facilities Rehabilitation and Renovation project to the Environmental Advisory Board. On January 11, 2021, Christian Kaltreider and Ish Sud from Sud Associates, P.A. presented to the EAB. The EAB provided comments and agreed with the definition chosen by the Town Council. Staff will bring a resolution to the Council to approve the definition before moving forward on the project.

### **Municipal and Community Greenhouse Gas Inventories**

- *Policy Connections:* ECPP Section 4 (Measurement, Inventory, Assessment, and Reporting). Pursuing these activities will inform actions and stakeholders and create transparency.

The Town's Environmental Sustainability Coordinator has continued to work with Mr. Jacob Becker to update Carrboro's municipal and community greenhouse gas inventories for his Master's Project. The project will have three goals:

- Explore the effectiveness of Carrboro's policies in decreasing greenhouse gas emissions from the Town's most recent municipal and community greenhouse gas inventories.
- Quantify the impact of fugitive methane on GHG inventories.
- Recommend additional policies to meet Carrboro's goal of 80% carbon reduction by 2030 compared to 2010 levels.

Public Works staff have been instrumental in helping Town staff access utility bills for analysis. Mr. Becker plans to complete this project by Spring 2021.

### **Southeast Sustainability Directors' Network (SSDN) Membership**

In January 2021, the Town Environmental Sustainability Coordinator joined the SSDN. Membership in this organization will allow the Environmental Sustainability Coordinator to participate in meetings and topic-based workgroups with other sustainability staff in the Southeast. The SSDN will provide also provide staff with resources and advice related to sustainability and climate action.

## **Community Integration**

### **Climate Action Team (CAT)**

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

The Town Council adopted a Town Code Amendment to create the Climate Action Team on October 20, 2020. The Town Code has been updated and the Town Clerk is promoting open seats and collecting applications for this advisory board. As of January 15, 2021, three

applications have been received. The timeline for bringing applicants to the Town Council for appointment will be determined as additional applications are received.

### **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

Staff have drafted a proposal for this project (Attachment D) and have requested comments from the Town Council in a resolution (Attachment B).

Planning Department staff will work with the Town's Communications Team to pursue non-traditional methods of outreach to inspire entire community involvement in this program, as outlined in the Town's Inclusive Communications & Community Engagement Plan.

### **Modules Project**

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

Staff have been working with members of the community to create a library of modules to share with the public and local partners. Three modules created by Carrboro residents have been edited by staff and volunteers and reviewed by the Environmental Advisory Board. These modules discuss transportation, ecosystems, and composting. Staff and volunteers are working to incorporate the EAB's comments into these presentations.

### **Orange County Climate Council**

- *Policy Connections:* CCAP Community Integration Recommendation #2: Community Integration Recommendation #2: Expand Public Partnerships to More Explicitly Consider Climate Action.

The Climate Council held its first Annual Community Update Event virtually on October 22nd. The meeting recording can be found on the Climate Council's webpage: <https://www.orangecountync.gov/2228/Orange-County-Climate-Council>.

## **Building Energy Efficiency Measures**

### **Energy Efficiency Revolving Loan Fund (EERLF)**

- *Policy Connections:* Buildings Recommendation #1, #2: Reduce Emissions Attributed to Carrboro Buildings by 50% by 2025; Energy Audit/Performance Rating; Community Integration Recommendation #4, #6: Integrate Climate Action with Local Living

Economy; Facilitate Low Cost Financing for Energy Efficiency and Renewable Energy Projects

Staff expect to be actively working to move forward with this program in the next quarter. Staff 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 50% by 2025.

Town staff are working to complete an application for a Level 2 Charging Station, due January 25, 2021. The Town Council authorized Town staff to submit a proposal on December 4, 2018.

### **Transportation Demand Management (TDM) Grant – Fresh Starts Project**

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

The Center for Advanced Hindsight has informed Town staff that funding will be available for the Fresh Starts in early 2021. The project will involve 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. An oversight committee will be working with the Center for Advanced Hindsight to revisit the project timeline in mid-January, and all partners will then move forward with a kickoff workshop.

### **Contribution to Piedmont Electric Membership Corporation (PEMC) for Level 1 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.

Piedmont Electric Membership Corporation is listed as an awardee from the Volkswagen Settlement Phase 1 Zero Emission Vehicle Infrastructure Program for a DC Fast Charging Station in Carrboro Plaza ([https://files.nc.gov/ncdeq/Air%20Quality/motor/vw-phase-1-images/DCFAST\\_AWARDEES.pdf](https://files.nc.gov/ncdeq/Air%20Quality/motor/vw-phase-1-images/DCFAST_AWARDEES.pdf)). The FY20-21 Climate Action Budget contains funding to contribute to PEMC's match for the grant, as it will help Carrboro work toward CCAP goals. Staff will be in discussion with PEMC to discuss moving forward with this contribution.

## Ecosystem Protection and Enhancement

### NC Urban Forest Council Grant

- *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

In early November 2020, Public Works staff worked to prepare the site for tree planting. Preparations included grading, application of native seed and biodegradable erosion control matting, and installation of rip-rap to create a stormwater feature. On November 16, Planning Department and Public Works staff held a volunteer tree planting event. At the event, staff introduced the project and provided volunteers with educational background material on native tree species and their ecological benefits. Staff explained the importance of vegetated riparian stream buffers and also provided educational material to guide volunteers in proper tree planting procedures.

Volunteers worked through the morning to plant 28 landscape-sized trees along the stream and in several other locations in Henry “Hank” Anderson III Community Park. Staff from the NC Urban Forest Council attended to assist with planting trees and help volunteers. All volunteers wore masks through the entire event, which was covered by local media.

Staff were actively working to organize a second volunteer event on January 16<sup>th</sup> to plant live stakes along the stream. However, due to high levels of local and statewide COVID-19 cases and the extension of the Governor’s recent Stay-at-Home Order, which recommends leaving home only for essential activities and avoiding gatherings, staff have postponed the event. Staff will work to reassess conditions for rescheduling the event in February.

Planning Department staff are also working with a volunteer from the Stormwater Advisory Commission to create outreach materials for the site, including an educational sign which will be placed in the park to explain the project’s significance to park visitors.

### Bee City USA

Staff are working to submit a yearly report and renew the Town’s participation in Bee City USA by February 28<sup>th</sup>, 2021.

### Invasive Species Volunteer Events

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

The Town’s Environmental Sustainability Coordinator has continued to supervise small monthly meet-ups at Wilson Park to control invasive species. Public Works staff have also worked to coordinate pickups to remove the vegetation. Staff are now working on a new direction for this

project and are pursuing the creation of a program for volunteers to work independently by February. Staff have reached out to local municipalities with Adopt-a-Park/Trail programs for input and will be modeling the program to meet the Town's needs. Staff are also working to create communication and outreach material to promote Invasive Species Week from February 22-28, 2021.

### **Composting Bin Sales**

- *Policy Connections:* Ecosystem Recommendation #3: Accelerate/Expand Organic Waste Collection/Composting

Town staff have launched composting bin sales and are working with the Town's Communication Manager to promote the sales and perform additional outreach with a composting how-to video. Carrboro residents can purchase compost bins by mailing an order form and payment to Town Hall. Planning Department staff will provide contactless bin delivery. Staff will work to provide additional purchasing options, including in-person purchasing, when COVID-19 precautions no longer need to be in place.

### **Managed Natural Landscape Ordinance**

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

Town staff worked to bring this item to the Town Council on October 20, 2020. As requested by the Council, staff reached out to the North Carolina Botanical Garden and new Hope Audubon Society for comments. Staff are now working to update a new draft ordinance incorporating this input, which will be brought to the Council at a later date.

### **Stormwater**

Planning Department staff have been working with a local Boy Scout to discuss a potential Eagle Scout Service Project to upgrade the rain garden stormwater control feature at the intersection of James Street and Hillsborough Street. Stormwater Utility staff will also be providing input and expertise if the project moves forward.

## **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

The Town Environmental Sustainability Coordinator has continued to work with Ms. Chrissie Schalkoff, a Doctoral Student at UNC Gillings School of Global Public Health and member of

the EAB, to build the Town's dietary GHG emissions profile using data from the CCAP survey. The analysis is in its final stages and will be finished in early 2021 and brought to the Town Council.

After completing the profile, staff will move forward with guidance from the FY20-21 Environmental Sustainability Work Plan to and develop outreach material to educate Carrboro residents about dietary choices and related GHG emissions and hold events to promote plant-based food choices in Carrboro. Staff will also hire an intern by Spring 2021 to support the Environmental Sustainability Coordinator with management of the Green Neighborhoods Grant Program and assist with the organization, coordination, and promotion of the food choices events and outreach program

### **Green Business Recognition Program**

Staff will also be working to initiate other projects outlined in the FY20-21 Environmental Sustainability Work Plan, including a Green Business Recognition Program. The Town Environmental Sustainability Coordinator is working to draft a rubric and outline for this program.