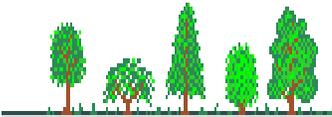


**TOWN OF CARRBORO
ENVIRONMENTAL ADVISORY BOARD**



AGENDA
Environmental Advisory Board

August 13, 2020; 7:00 pm
Zoom Virtual Meeting*

Time	Item	Presenter
7:00 pm	<u>Call to Order, Announcements</u> Approve 7/16/20 minutes	Chair, All
7:05 pm	Consideration of Energy Innovation and Carbon Dividend Act Resolution	Staff, Chair, All
7:55 pm	Create Climate Advisory Board Work Plan	Staff, Chair, All
8:50 pm	EAB EV Ready Requirements Petition - Introduction for New Members	Chair, Staff
9:00 pm	Announcements, Adjourn	Chair, All

*To view the advisory board meeting, please email Laura Janway at ljanway@townofcarrboro.org 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

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

**TOWN OF CARRBORO
ENVIRONMENTAL ADVISORY BOARD – SUMMARY**



Meeting on July 16, 2020, 7:00 pm, Virtual Zoom Meeting

Board Members	Town Council Liaison	Staff
Chrissie Schalkoff	Randee Haven-O'Donnell	Laura Janway
Kathy Kaufman		
Alfonso Blanco		
MariaJulia Echart		

Note: Absent/Excused: Tim Turner (Chair)

Call to Order, Announcements

EAB members agreed that Kaufman would act as temporary chairperson for the meeting in the absence of Chair Tim Turner. The meeting was called to order at 7:09 pm by Temporary Chair Kaufman.

Approval of Minutes – July 16, 2020 Meeting

Schalkoff motioned to approve the minutes from the July 16, 2020 meeting. This motion was seconded by Echart. **AYES: (4) Kaufman, Blanco, Schalkoff, Echart; NAYES: (0)**

Discussion Items - Information Session

Community Climate Action Plan (CCAP) and Energy and Climate Protection Plan (ECPP) Introduction

Staff member Janway provided an introduction to the Community Climate Action Plan (CCAP) and Energy and Climate Protection Plan (ECPP) for new members.

Current CCAP and ECPP Project Update

Staff member Janway provided an update on the implementation of the Community Climate Action Plan and Energy and Climate Protection Plan and the status of related projects.

Modules Project Update

Staff member Janway provided an update on the current implementation of the Modules Project.

EAB members discussed the Town's social media outreach related to climate action. Schalkoff motioned to add a discussion of social media outreach to a future agenda. The motion was seconded by Blanco, with all members voting in favor. **AYES: (4) Echart, Blanco, Schalkoff, Kaufman; NAYES: (0).**

Adjourn

The motion to adjourn was made by Blanco and seconded by Schalkoff, with all members voting in favor. **AYES: (4) Kaufman, Echart, Blanco, Schalkoff; NAYES: (0).** The meeting was adjourned at 8:48 pm.

Resolution No. _____
City _____, State _____

**Resolution urging the United States Congress to enact the
Energy Innovation and Carbon Dividend Act**

WHEREAS, an Intergovernmental Panel on Climate Change issued a special report on the impacts of global warming of 1.5°C above pre-industrial levels in October 2018 warning that global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.

WHEREAS, the United Nations climate science body said in a monumental climate report that we have only until 2030 to make massive and unprecedented changes to global energy infrastructure to limit global warming to moderate levels; and

WHEREAS, the United States government released its Fourth Annual Climate Assessment in November 2018 reporting that the impacts of climate change are already being felt in communities across the country, and that more frequent and intense extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to damage infrastructure, ecosystems, and social systems that provide essential benefits to communities; and

WHEREAS, conservative estimates by the world's climate scientists state that, to achieve climate stabilization and avoid cataclysmic climate change, emissions of greenhouse gases (GHGs) must be brought to 80-95% below 1990 levels by 2050; and

WHEREAS, presently the environmental, health, and social costs of carbon emissions are not included in prices paid for fossil fuels, but rather these externalized costs are borne directly and indirectly by all Americans and global citizens; and

WHEREAS, to begin to correct this market failure, Congress can enact the Energy Innovation and Carbon Dividend Act to assess a national carbon fee on fossil fuels based on the amount of CO₂ the fuel will emit when burned and allocate the collected proceeds to all U.S. Households in equal per-capita shares in the form of a monthly dividend; and

WHEREAS, for efficient administration, the fossil fuels fee can be applied once, as far upstream in the economy as practical, or at the port of entry into the United States; and

WHEREAS, as stated in the **Energy Innovation and Carbon Dividend Act**, a national, revenue-neutral carbon fee starting at a relatively low rate of \$15 per ton of CO₂ equivalent emissions and resulting in equal charges per ton of CO₂ equivalent emissions potential in each type of fuel or greenhouse gas should be assessed to begin to lower what are now dangerously high CO₂ emissions. The yearly increase in carbon fees including other greenhouse gases,

shall be at least \$10 per ton of CO2 equivalent each year, with the provision that the annual increase will be \$15 per ton of CO2 equivalent if statutory goals are not met; and

WHEREAS, the **Energy Innovation and Carbon Dividend Act** specifies that, in order to protect low and middle income citizens from the economic impact of rising prices due to the carbon fee, equal monthly per-person dividend payments shall be made to all American households (½ payment per child under 19 years old) each month from the fossil fuel fees collected. The total value of all monthly dividend payments shall represent 100% of the net carbon fees collected per month; and

WHEREAS, the **Energy Innovation and Carbon Dividend Act** encourages market-driven innovation of clean energy technologies and market efficiencies which will reduce harmful pollution and leave a healthier, more stable, and more prosperous nation for future generations; and

WHEREAS, the **Energy Innovation and Carbon Dividend Act** will, after 12 years, lead to a decrease in America's CO2 emissions of 40 percent and preserve national employment; and

WHEREAS, border adjustments - carbon content-based levies on products imported from countries without comparable carbon pricing, and refunds to our exporters of carbon fees paid - can maintain the competitiveness of U.S. businesses in global markets; and

WHEREAS, a national carbon fee can be implemented quickly and efficiently, and will respond to the urgency of the climate crisis because the federal government already has in place mechanisms, such as the Internal Revenue Service, needed to implement and enforce the fee, and already collects fees from fossil fuel producers and importers; and

WHEREAS, A national revenue-neutral carbon fee would make the United States a leader in mitigating climate change and in the clean energy technologies of the 21st century and would provide incentive to other countries to enact similar carbon fees, reducing global CO2 emissions without the need for complex international agreements, and

NOW, THEREFORE, BE IT:

RESOLVED, that the Town of Carrboro, North Carolina urges the United States Congress to enact without delay the **Energy Innovation and Carbon Dividend Act**, and

BE IT FURTHER RESOLVED, that the City Manager or City Clerk, no later than 30 days after passage of this Resolution, shall transmit copies of this resolution to the President and Vice President of the United States, to the Speaker of the House of Representatives, to the Majority Leader of the Senate, to each U.S. Senator and Representative from the State of North Carolina in the Congress of the United States, and to nearby city and county governments urging that they pass similar resolutions.

PASSED AND ADOPTED as a resolution of the City Council of the Town of Carrboro , State of North Carolina at its regularly scheduled meeting held on _____, 2020.

_____, Mayor
City of _____

_____, City Clerk

DRAFT



TOWN OF CARRBORO

TRANSMITTAL

Manager's Office

DELIVERED VIA: HAND MAIL FAX EMAIL

To: David Andrews, Town Manager

From: Laura Janway, Environmental Planner
Rebecca Buzzard, Project Manager

Date: May 14, 2020

Subject: FY20-21 Environmental Sustainability Work Plan

During FY20-21, staff will continue work on current sustainability projects while introducing several new comprehensive initiatives. Work throughout the fiscal year will address recommendations in five of 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. Staff will research grant funding for projects related to the Renewable Energy Measures section of the CCAP.

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

Project	Activities	Timeline	Goals
NC Urban Forest Council Grant Proposal	Obtain \$5,000 for tree saplings for creation of pollinator garden in Anderson Park through grant proposal written in collaboration between Manager's Office and Stormwater Utility	<ul style="list-style-type: none"> • May 15: Proposal due • Fall 2020 (pending success of proposal): Hold tree planting volunteer event(s) 	<ul style="list-style-type: none"> • Restore water quality buffer in Anderson Park • Create wildlife and pollinator habitat • Sequester carbon through tree growth
Anderson Park Pollinator Garden	<ul style="list-style-type: none"> • Plant native pollinator seed mix and/or seedlings with trees from NC Urban Forest Council Grant • Install outreach signs/kiosk 	Fall 2020: Hold volunteer event to plant seedlings and spread seed	<ul style="list-style-type: none"> • Increase and enhance native pollinator habitat • Meet goals of Bee City USA participation • Raise awareness of the roles of pollinators and water quality buffers

Project	Activities	Timeline	Goals
Bee City USA	<ul style="list-style-type: none"> Recognize National Pollinator Week Hold outreach events Increase and enhance pollinator habitat in Carrboro 	<ul style="list-style-type: none"> June 22-28, 2020: National Pollinator Week Membership renewal due February 28, 2021 	Meet annual requirements of Bee City USA participation to renew membership for 2021
Managed Natural Landscape Ordinance	Finalize amendments to Town Code to allow for Managed Natural Landscapes	Spring 2020: Draft is nearly complete; can be referred to the Town Council upon completion	Enhance wildlife habitat, improve water quality, improve stormwater retention, increase biodiversity
Invasive Species Removal Volunteer Initiative	<ul style="list-style-type: none"> Continue monthly volunteer events at Wilson Park Restore cleared areas with native vegetation 	<ul style="list-style-type: none"> Once-monthly events Potential to expand program with additional events 	Remove invasive species to improve habitat for native vegetation and wildlife

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

Project	Activities	Timeline	Goals
Green Neighborhoods Initiative	<ul style="list-style-type: none"> Hold outreach meetings throughout community Create meeting locations map 	<ul style="list-style-type: none"> TBD based on COVID-19 meeting precautions and guidelines Staff have held two initial meetings and are prepared to hold additional meetings 	<ul style="list-style-type: none"> Introduce program to potential community champions Allow community champions to meet and discuss project ideas with staff and other residents
Green Neighborhoods Grant Program	<ul style="list-style-type: none"> Design grant program for residents to initiate neighborhood emissions reduction projects Hire intern to help administer program Utilize FY19-20 and FY20-21 Grassroots Partnerships Funding 	<ul style="list-style-type: none"> Spring/summer 2020: design program Fall 2020: Open application period Winter 2020-21: Begin grant administration and projects 	<ul style="list-style-type: none"> Provide residents with funding to reduce emissions and build community within neighborhoods
Composting Bin Sales	<ul style="list-style-type: none"> Sell composting bins at Town Hall and potentially at Carrboro Farmers' Market 	<ul style="list-style-type: none"> TBD based on COVID-19 precautions and guidelines; staff have most protocols in place 	<ul style="list-style-type: none"> Increase backyard composting in Carrboro to reduce greenhouse gas emissions

Project	Activities	Timeline	Goals
Every-Other-Week (EOW) Garbage Collection Pilot	<ul style="list-style-type: none"> • Design and conduct EOW pilot program • Use Green Neighborhoods Grant Program to select pilot neighborhood 	<ul style="list-style-type: none"> • Fall 2020: Open application period • Winter 2020-21: Begin grant administration and projects 	<ul style="list-style-type: none"> • Increase backyard composting in Carrboro to reduce greenhouse gas emissions • Reduce emissions related to garbage transportation in Carrboro • Reduce cost of garbage collection program • Gauge success to evaluate the potential for EOW garbage collection on a larger scale
Multifamily Composting Pilot	<ul style="list-style-type: none"> • Work with Orange County and composting service to initiate a multifamily composting pilot • Use Green Neighborhoods Grant Program to select pilot neighborhood 	<ul style="list-style-type: none"> • Fall 2020: Open application period • Winter 2020-21: Begin grant administration and projects 	<ul style="list-style-type: none"> • Allow residents of multifamily housing the opportunity to compost • Increase composting in Carrboro to reduce greenhouse gas emissions • Gauge success for future programs in multifamily residences

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
Food Choice Events	<ul style="list-style-type: none"> • Hold events to promote plant-based food choices in Carrboro • Hire intern to help coordinate events 	<ul style="list-style-type: none"> • Spring/Summer 2020: Begin event planning and design • Summer/Fall 2020: Hire intern • Winter/Spring 2021: Begin holding events 	<ul style="list-style-type: none"> • Educate Carrboro residents on emissions related to food choices and benefits of plant-based diets • Reduce emissions related to food choices in Carrboro
Build Dietary Greenhouse Gas (GHG) Emissions Profile	Analyze results of CCAP Survey to build baseline dietary GHG emissions profile for Carrboro residents to add to Community GHG Inventory	<ul style="list-style-type: none"> • Final CCAP Survey was delivered to staff in early 2020 • Baseline profile will be complete Spring/Summer 2020 	<ul style="list-style-type: none"> • Create baseline profile to use for benchmarking and tracking success of food choice initiatives

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
Partnership with Piedmont Electric Membership Corporation (EMC) for Electric Vehicle (EV) Charging Station at Carrboro Plaza	Partner with Piedmont EMC to provide 30% of Piedmont's match for a grant from the Volkswagen (VW) Emissions Mitigation Funding	<ul style="list-style-type: none"> • Spring 2020: Grant awards announced • Funding recipients have two years to complete projects from the date of a signed, executed contract with NCDEQ 	<ul style="list-style-type: none"> • Promote EV use in Carrboro to reduce emissions from transportation
Partnership with Center for Advanced Hindsight for Transportation Demand Management (TDM) Grant Proposal	<ul style="list-style-type: none"> • Design welcome packets for Carrboro residents outlining alternative transportation options to reduce single-occupant vehicle (SOV) trips in Carrboro. • Center for Advanced Hindsight will research the educational campaign's effectiveness 	<ul style="list-style-type: none"> • April 2020 (Tentative): Notification of awards • Summer/Fall 2020: Project design and implementation 	Help grant partners learn to incentivize and motivate residents to explore transportation options and find alternatives which suit their needs

Building Energy Efficiency Measures

CCAP Policy Connections

- Buildings Recommendation #1: Reduce Emissions Attributed to Carrboro Buildings by 50% by 2025
- Buildings Recommendation #2: Energy Audit/Performance Rating
- Community Integration_Recommendation #4: Integrate Climate Action with Local Living Economy:
- Community Integration_Recommendation #6: Facilitate Low Cost Financing for Energy Efficiency and Renewable Energy Projects

Project	Activities	Timeline	Goals
Energy-Efficiency Revolving Loan Fund (EERLF)	Provide loans for energy efficiency improvements in commercial buildings	<ul style="list-style-type: none"> • Spring/Summer 2020: Staff discusses program administration and determines schedule moving forward 	<ul style="list-style-type: none"> • Reduce greenhouse gas emissions from buildings in Carrboro • Reduce utility bills for Carrboro businesses

Additional Projects

Policy Connections

- Energy and Climate Protection Plan (ECPP) Section 4: Measurement, Inventory, Assessment, and Reporting

Project	Activities	Timeline	Goals
Municipal and Community Greenhouse Gas Emissions Inventories	<ul style="list-style-type: none"> • Complete 2018 and 2019 Municipal Greenhouse Gas Inventories • Staff or UNC PhD student complete 2019 Community Greenhouse Gas Emission Inventory 	<ul style="list-style-type: none"> • Spring/Summer 2020: staff completes municipal inventories • May-August 2020: UNC PhD student works to complete community inventory 	<ul style="list-style-type: none"> • Track emissions reduction progress for municipal and community climate action plans
Green Business Recognition Program	Create program to recognize businesses in Carrboro for environmentally-friendly initiatives	<ul style="list-style-type: none"> • Spring/Summer 2020: Project design • Fall 2020: Open period for award nominations • Winter 2020-21: Awards announced 	Recognize businesses for taking actions consistent with CCAP goals to reduce emissions or enhance ecosystems in Carrboro
International Council for Local Environmental Initiatives (ICLEI) Membership	Utilize ICLEI's Clearpath software to calculate municipal and community greenhouse gas emissions inventories	<ul style="list-style-type: none"> • Spring 2020: staff works to complete municipal inventories • May-August 2020: Fellow works to complete community inventory 	<ul style="list-style-type: none"> • Track ECPP and CCAP emissions reduction progress • Utilize other ICLEI tools to help reach CCAP goals • Network with other ICLEI members

To: Patricia McGuire, Carrboro Planning Director

Subject: Petition to add Electric Vehicle Ready Requirements to the LUMO

Meeting Date: December 13, 2018

Recommendation: The Environmental Advisory Board (EAB) petitions the Board of Alderman to start a process to amend the Land Use Ordinance (LUO) to add Electric Vehicle Readiness requirements. The EAB has researched and developed the text below for new developments:

Whereas, the Town of Chapel Hill Transportation Advisory Board with concurrence from the Chapel Hill Environmental Stewardship Board petitioned the Chapel Hill Town Council to consider modifying the LUMO to include provisions for, under certain circumstances, either installation of a minimum number of operating EV-capable parking spaces or a minimum number of parking spaces pre-wired to facilitate upgrade to full EV-capability in the future;

Whereas, both of the Town of Carrboro and Town of Chapel Hill are leaders in environmental protection and carbon reduction efforts;

Whereas, both of the Town of Carrboro and Town of Chapel Hill have similar environmental goals;

Whereas, many other governmental entities have adopted similar regulations (See references);

Whereas, many building and trades organization have drafted guidelines for implementing EV readiness (See references);

Whereas, Vision 2020, dated December 5, 2000 outlines Town goals to mitigate climate change, lower carbon emissions and increase energy efficiency that align with this proposal, namely

- **5.50 Energy**

- **5.51** The town should publicly promote every available means of energy conservation.

- The town's own alternative and renewable energy targets should include passive and active solar, and composted waste co-generation to fuel public vehicles and the heating of town facilities

- **5.52** The town should set a goal of reduced energy costs in all town buildings and increased fleet mileage for all town vehicles.

Whereas, the Town of Carrboro adopted the **Community Climate Action Plan**, Dated January 24, 2017 with various provisions that align with this proposal, namely,

- **Transportation Recommendation #1: 50% Challenge (Page 28)**, Reduce Greenhouse Gas Emissions from Motor Vehicle Use by 50% by 2025.
- **Carbon Free in 10 Years**, Page 76, Year 5 – Purchase an Electric car.

Whereas, the EAB has been recommending the following provisions in many SUP/CUP/rezoning reviews for almost a year with generally positive feedback from applicants,

Whereas, recommendations from the EAB are not legally enforceable,

Whereas, the EAB passed a motion to forward the proposal to Town government on December 13, 2018,

Therefore resolved, The EAB requests the following provisions be added to the Town of Carrboro LUO.

EV Ready Requirementsⁱ

These requirements apply to new or expanded parking lots and parking structures and developments which require a CUP or SUP or rezoning. They are not required retroactively for existing parking lots.

1. In parking lots with more than 50 spaces, EV charging stations installed in at least 3% of all parking spaces used by the project.
 - o Minimum of two EV charging station parking spaces for each project. At least one of which must be ADA compliant, per NCDOT's guidelines.
 - o Provide a Level 2 charging capacity (208 – 240 volts) or greater
 - o Comply with the relevant regional or local standard for electrical connectors, such as SAE Surface Vehicle Recommended Practice J1772, SAE Electric Vehicle Conductive Charge Coupler so that they are compatible with all types of chargers
 - o EV charging station spaces must be separate from and in addition to preferred parking spaces for green vehicles

2. Signage for parking of electric vehicles shall include:
 - o Information on the charging station to identify voltage and amperage levels and any time of use, fees, or safety information.
 - o As appropriate, directional signs to effectively guide motorists to the charging station space(s).
 - o Station(s) reserved for electric vehicles
 - o QR code linking to Town website for greenhouse gas emissions generation information

3. 20% of all total parking spaces will be made "EV Ready" for charging stations, meaning:
 - o Installation of dedicated electrical circuit and underground conduit required to run electricity to EV charging spot
 - o Electrical panels labeled "EV Ready"

SUMMARY OF ENVIRONMENTAL ADVISORY BOARD ACTION

Vote: Motion O'Connor, Second Sinclair

Ayes: Sinclair, Turner, O'Connor

Nays: 0

References

- <https://www.chargepoint.com/blog/contractors-guide-ev-ready-building-codes/>
- <http://www.transportationandclimate.org/ev-ready-codes-built-environment>
- <https://www.usgbc.org/credits/new-construction-core-and-shell-schools-new-construction-retail-new-construction-healthca-25>
- http://www.b3mn.org/guidelines2-2/s_12.html
- Full Electric Vehicle Ordinance Text
<http://www.codepublishing.com/WA/MountlakeTerrace/html/MountlakeTerrace19/MountlakeTerrace19126.html#19.126.070>
- Siting and Design Guidelines for Electric Vehicle Supply Equipment
http://www.transportationandclimate.org/sites/default/files/EV_Siting_and_Design_Guidelines.pdf
- <http://files.masscec.com/research/WatertownCleanEnergyRoadmap.pdf>
- <http://www.theenergycollective.com/greatplainsinstitute/2417956/making-city-ev-ready>
- Reducing Barriers to Electric Vehicle Adoption through Building Codes
<https://aceee.org/files/proceedings/2012/data/papers/0193-000012.pdf>
- Page 90 <https://www.ladbs.org/docs/default-source/publications/misc-publications/2010ca-green-building-standards-code.pdf?sfvrsn=11>
- Creating EV-Ready Towns and Cities: A Guide to Planning and Policy Tools
http://www.transportationandclimate.org/sites/default/files/EVSE_Planning_and_Policy_Tool_Guide.pdf
- City of Palo Alto - EV Code
<https://www.cityofpaloalto.org/civicax/filebank/documents/42838>
- Carrboro [Climate Action Plan](#)
<https://www.townofcarrboro.org/DocumentCenter/View/4116/Community-Climate-Action-Plan>
- [Carrboro Vision 2020](#) <http://www.townofcarrboro.org/785/carrboro-vision-2020>