# ITEM #9: Climate Action and Response Plan Implementation Update

#### **Council Question:**

As part of the presentation, could you please share how equity was considered in deciding what to prioritize for implementation/investment this FY and in the planning for next FY?

## Staff Response:

As climate change impacts increase and the Town continues to invest in transitioning to a low-carbon economy, we are starting the implementation of each project with equity by asking ourselves: "Who will be most impacted by this project?", and "Who will benefit most directly?".

Staff began asking these questions during the community engagement process that guided the creation of the climate plan. Equity was also a key factor as we moved into creating the implementation plan and selecting the priority projects that were shared with Council in September. As we identify or create the data sources to track our progress, we are prioritizing those that are informed by the community and those that illustrate community-scale impacts.

We recognize that advancing climate equity will be an ongoing process and one that will benefit from additional community input. Our team is working with Shenekia Weeks, the Town's Diversity, Equity, and Inclusion Officer, as part of the Equity Lab to identify opportunities to advance this work within the two-year implementation plan. We will be using the Equity Scorecard to refine our priorities and plan our engagement to guide future implementation.

A diagram to explain our equity prioritization process will be included in Wednesday's presentation.

Early examples of projects that include a focus on equity are:

- Extreme Heat Analysis on the parcel level to identify areas vulnerable to extreme heat.
- Energy Burden Analysis on the parcel level to identify areas vulnerable to disproportionate energy utility costs.
- Survey-informed Tree Planting and mapping.
- Priority Location analysis for future EV Charging Stations, guided by proximity to affordable housing, risk of air pollution, and other criteria.

### **Council Question:**

Do we have any metrics or methodologies for calculating cost-effectiveness or cost-benefit of our investments? There is a wide range of costs associated with various initiatives and it is hard to understand which will yield the "most bang for the buck." I assume the availability of non-Town funding also has a significant impact on decision-making.

## Staff Response:

The Climate Action and Response Plan and supplemental materials from our project consultant include estimates for the cost and impact potential of different action strategies. For the priority projects shared with Council as part of our September 22, 2021 staff presentation, prioritization was influenced by a variety of factors including cost-benefit for GHG mitigation, project readiness, advancement of equity, availability of funds, leveraged funds, partnership opportunities, and speed of implementation.

### **Council Question:**

Much of the data presented is either not Town-specific or is not under the Town's control. Can we try to focus on those things that we can actually control (or have influence over) or at least are Town-specific, for example, Town VMT?

# Staff Response:

In identifying the data sources to show progress on the Key Indicators in the adopted Climate Action and Response Plan, staff focused on data that was as local and current as possible. In some cases, local data was not available and larger-scale data was included or an effort was launched to create a local data set. Of the 15 Key Indicators, 2 are not specific to the Town. See the table below for more details about the scope of the Key Indicators.

Within Wednesday's presentation, there are data related to the adoption of electric vehicles, solar energy installations, and income that includes data beyond town boundaries. In part, this is due to data availability, and in part this reflects how policy decisions and investments made by the Town are tied to the broader context of a shared electricity grid, road network, and regional economy. As we find additional ways to track data specific to the Town, we plan to continue tracking metrics in our neighboring areas as long as they are relevant.

	Indicator	Scope	Notes
Buildings and Energy	<ul> <li>Town-wide Emissions from Buildings (metric tons CO2e)</li> <li>Emissions from Town Facilities (metric tons CO2e)</li> <li>Clean renewable energy on our grid</li> <li>Certified green buildings</li> </ul>	Town  Town  Duke Energy Carolinas  Town	North Carolina Electric Investor-Owned Utility Service Area Map  Duke Energy Carolinas Duke Energy Progress  Duke Energy is not specific to geographies smaller than the utility's service area. Once on the grid, power from various sources mixes.
Transportation and Land Use	<ul> <li>Vehicle Miles     Travelled</li> <li>Bike / Walk     Commute Mode     Share</li> <li>Bike lanes (miles)</li> <li>Walkability</li> </ul>	Town Town Town TBD, Town	Staff is reviewing the walkability factors used by EPA's National Walkability Index to create a more fine-grained and locally relevant walkability measure for the Town.
Waste, Water, and Natural Resources	<ul> <li>Town-wide Emissions from         Waste/Water (metric tons CO2e)</li> <li>Solid waste diverted from landfill (lbs recycled per capita)</li> <li>Stream buffers and urban forest (acres)</li> <li>Urban tree canopy (acres, % coverage)</li> </ul>	Town	Orange County collects recycling for the Town and since their routes often cross jurisdictional boundaries, the amount of recycling collected is not distinguished between the Town and the County overall.
Resiliency	<ul> <li>Time to recovery from event</li> <li>Population in Poverty</li> <li>Access to food/basic services (% pop. &lt;0.4mi of transit)</li> <li>Neighborhood cohesion</li> </ul>	Town	Staff is assessing opportunities to gather local data on time to recovery and neighborhood cohesion such as the Town's Community Survey.

#### **Council Question:**

As a part of our solid waste diversion efforts, have we thought about Zero Waste Town hosted event strategies?

# Staff Response:

A goal of the County-wide Solid Waste Master Planning process is to reach Zero Waste by 2045. Locally, the Chapel Hill Public Library is currently piloting a Zero Waste initiative, which includes an education component. Going forward, we plan to use the learnings from this pilot to expand our Zero Waste efforts in other Town facilities.

Orange County serves as a central resource for waste reduction planning and education. While the pandemic has temporarily reduced the number of in-person events where waste is generated, we will continue to work with Orange County to minimize event waste through materials selection, durable materials use, recycling, and composting. The Town's Outdoor Event Permit application asks that vendors for special events do the same. Overall, we expect waste reduction to take another significant step forward once the new County-wide plan is adopted and coordinated implementation towards the Zero Waste goal begins.

### **Council Question:**

How are the Town's goals being impacted by UNC's ongoing coal burning? What ongoing conversations are we in with the University regarding the coal plant and the negative impact it is having? What recourse options do we have?

### Staff Response:

From Sustainable Carolina's most recent  $\frac{report^2}{r}$  for 2020, stationary combustion makes up about half of the University's greenhouse gas emissions, 94% of which is derived from the cogeneration plant. In 2017, stationary combustion from the plant represented about 28% of Chapel Hill's community-wide emissions.

The Town does not have the regulatory authority to directly influence the University's use of coal at the cogeneration plant; however, the University's 2021 Climate Action Plan<sup>3</sup> includes a goal of reaching carbon neutrality by 2040 (10 years earlier than previously stated) — along with new strategies to eliminate coal use and to explore both next generation fuels and carbon capture. In 2019, the University announced an additional investment to convert more of the burners at their power plant to run on natural gas instead of coal. In September of 2021, UNC Chief Sustainability Officer Dr. Mike Piehler reported to the Council that the University has seen significant emissions reductions over the last two years that can be attributed, in part, to recent

<sup>&</sup>lt;sup>2</sup> https://sustainable.unc.edu/climate-action-plan/

<sup>&</sup>lt;sup>3</sup> https://sustainable.unc.edu/climate-action-plan/

fuel switching investments at the power plant. The University reports that since 2007, efforts like these have reduced coal use by 52% and emissions from stationary combustion by 28% (94% of which comes from the cogeneration plant).

In addition to UNC's recurring updates to Council, staff from both sustainability offices meet monthly to share updates, track progress, and explore opportunities to address shared climate action goals. Our staff will maintain continued coordination with UNC Sustainability staff to learn of and follow active strategies associated with the University's efforts to eliminate coal use and lower greenhouse gas emissions from the power plant.