

10-21-2020 Town Council Meeting

Responses to Council Questions

ITEM #1: Progress Report on Climate Action Plan

Council Question:

How do streetlights and traffic signals emit GHG?

Staff Response:

Greenhouse gas emissions from streetlights and traffic signals are attributed to the purchased electricity needed to power the equipment. The same is true for the electricity used in buildings. Indirect emissions like these are called “scope 2” emissions, and they differ from “scope 1” emissions, which are derived directly from the activity of an organization (e.g., fuel for driving fleet vehicles or heating buildings).

Council Question:

I am more curious about how community GHG in Chapel Hill compares to comparably sized towns and cities. Can you provide comparable MTCO₂e/capita data from similarly situated towns and cities like Charlottesville, VA, Apex or Burlington, NC, Burlington, VT, etc.?

Staff Response:

We researched available emissions data for similarly sized college towns and found the following information.

Municipality (Year of GHG report)	Metric Tons GHG per capita	Community Emissions (MTCO₂e)	Operational Emissions (MTCO₂e)	Population (GHG Year)
Burlington, VT (2010)	9.5	404,778	16,476	42,436
Bloomington, IN (2018)	15.18	1,290,030		84,981
Chapel Hill, NC (2017)	11.88	698,710	16,617	58,997
Charlottesville, VA (2016)	7.66	362,192	37,120	47,236
Corvallis, OR (2012)	22.79	1,257,115	18,942 (2018)	55,138
Fayetteville, AR (2018)	16.16			86,751
Flagstaff, AZ (2016)	11.05	787,315		71,227

MTCO₂e – metric tons of carbon dioxide equivalent

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Regarding actions that will lower emissions the most, has consideration been given to limiting or restricting activities which may generate emissions from idling vehicles such as fast food drive-thrus, pick-up/drop-off zones, etc.?

Staff Response:

Idling has been an important focus for greenhouse gas emissions reduction from the transportation sector. The Town has standard operating procedures in place to curb this for our own vehicles, and we've also used zoning regulations to limit the number of drive-thru windows. With more recent increases in fuel economy standards, we've also seen significant improvements in vehicle technology. For example, many newer model gasoline or hybrid vehicles come equipped with engine shutoffs when the vehicle is stopped.

For the draft Climate Action Plan, our focus on (1) increasing sustainable transportation options (biking, walking, transit), (2) planning for a future city that requires less driving, and (3) transitioning those that need a car to electric vehicles, will all help to reduce vehicle tailpipe emissions. At the same time, more information and advocacy around anti-idling would be a good element to any climate action effort (e.g., "driving is exhausting" campaign at Phillips Middle School).

Council Question:

How has the pandemic affected the plan/schedule for the summit and other meetings and deadlines?

Staff Response:

This project has been impacted by COVID-19 in three main ways: (1) traditional public engagement was limited to one event (Climate Summit), (2) project staff have been involved in COVID-19 response and recovery, and (3) the effects of 1 and 2 have resulted in project delays.

In response to impacts on public engagement, our team shifted to online engagement and created a project video and opinion survey that ran throughout the spring and summer. The video and survey were published in three languages (English, Mandarin, Spanish) and we worked with our community partners to share the information more broadly.

In addition to the 20 local and regional organizations represented at the Climate Summit, we received over 450 survey responses. Our next step is to share the draft Plan with these same stakeholders and continue working with our community partners to try and broaden our reach.

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Council Question:

While the draft seems to acknowledge the connection between land use and transportation, I do not see any specific actions that address this connection, or is that intended to be addressed through the LUMO rewrite?

Staff Response:

We will share some additional information on Wednesday evening that should help make this connection clearer. Additionally, our team sees the Future Land Use Map project and the LUMO rewrite as actions that can help to significantly reduce community emissions over time by creating more walkable, bikeable and transit-served neighborhoods.

Council Question:

Since transportation is the second largest contributor to greenhouse gas emissions, I expected to see targets around VMT reductions, but I see none. How will this be addressed?

Staff Response:

Again, we will share some additional information on Wednesday evening that should help make this connection clearer. Specifically, we will present some targets for increased modeshare of non-automobile travel, as well as electric vehicle charging station targets that are calculated based on electric vehicle displacement of VMT (vehicle miles traveled) by fossil fuel powered vehicles. We will also talk about the emissions reduction benefits of walkable, transit-served neighborhoods, which reduce VMT relative to traditional development patterns.

Council Question:

While sustainable development is mentioned, it is not clear what the actions would be – change in building codes, incentives for green development, others?

Staff Response:

On Wednesday evening, we will present some targets around (1) carbon neutral development and, again, (2) the emissions reduction benefits of walkable, transit-served neighborhoods.

Council Question:

Are any means of retrofitting existing buildings under consideration since the existing building stock is far larger than the amount of new construction we can expect in the coming decades?

Staff Response:

On Wednesday evening we'll point to some actions and targets for our existing building stock, including the emissions reduction benefits of (1) phasing out natural gas and (2) reaching 50% carbon neutrality across multiple building sectors.

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Council Question:

How does our plan integrate with UNC's and Orange County's?

Staff Response:

Along with UNC and our municipal partners, we view our climate action work in Chapel Hill as part of a larger effort, where there are points of integration around each of the major action categories in the draft presentation: greening the grid, sustainable development, electric vehicles, green building retrofits and sustainable transportation. Specific examples of this work might include clean energy advocacy, community scale solar, electrification of transit and fleet vehicles, phasing out natural gas, and planning for sustainable patterns of future development. In addition to our joint participation in the Orange County Climate Council, we are also preparing an application to the Orange County Climate Action Grant Program to help support ongoing project activities. We will say more about that on Wednesday. We also plan to share our draft plan with UNC and our municipal partners to help spark additional conversation around collaboration and joint action.

Council Question:

Have any efforts been made to address costs of the various interventions – both to the Town and the private sector – and will any cost/benefit analyses be done?

Staff Response:

The draft Plan, which we are working to release in early November, includes cost ranges for several of the specific actions. These cost estimates include both public and private sector estimates.