09-25-2019 Town Council Meeting Responses to Council Questions

<u>ITEM #11:</u> Adopt a Resolution Committing to Plan for Chapel Hill to Transition to 100% Clean, Renewable Energy Community-wide by 2050

Council Question:

While Town operations make up only 2% of the community's total carbon footprint, the policies we enact as a Council can also have a significant impact on GHG reductions. Because transportation is the biggest contributor to GHG, our transit and land use policies and investments are important tools towards achieving meaningful reductions. Are there tools/software that we can use to model the impact that shifts in policy and increase in investments could have on GHG reductions? If so, do we currently have access to those tools and if not, how could we get access?

Staff Response:

Based on the trends from our most recent greenhouse gas emissions inventories, utility electricity and natural gas usage combine for the largest emissions sector at the <u>community scale</u> (63%), while transportation (including Transit) is the largest emissions sector for Town operations (over 50%). Although our community emissions profile is lower than the national average for transportation (~29%), we also know that Chapel Hill is one of the highest ranking cities in North Carolina for electric vehicle ownership. So, as the EV market continues to grow we also expect a shift from fuel-based transportation emissions to utility-based electricity emissions. Regarding tools, we are in the final stages of evaluating a software tool called Urban Footprint that we believe can help us better understand the climate impacts of future land use and transportation decisions as they relate to community-wide greenhouse gas emissions.