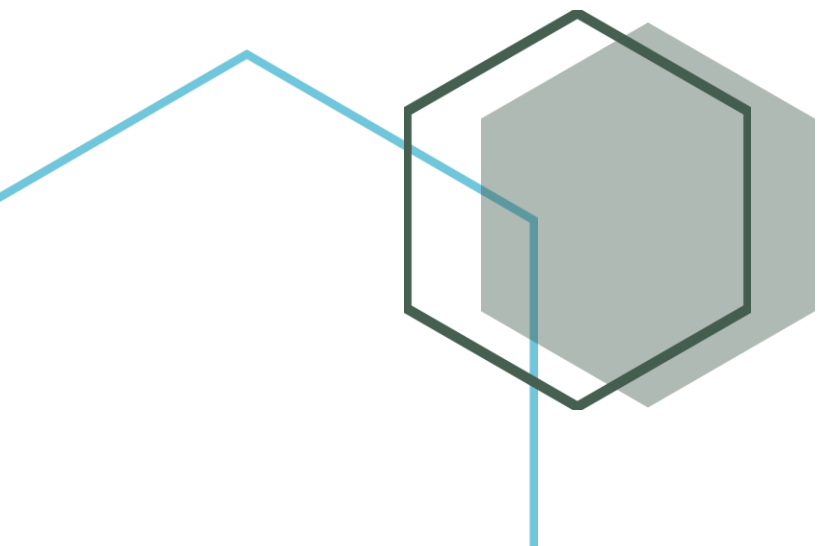# [22-0144] - FY22 & FY23 Climate Action Implementation Report

Feb 23, 2022

The following is a report on the implementation of the Town's adopted Climate Action and Response Plan including available data for the plan's key indicators. This information will be updated on a quarterly basis.

# [22-0144] - FY22 & FY23 Climate Action Implementation Report

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## Key Indicators – Status and Progress to Date[1]

| $470,000<br><br>**Town Budget for Climate Action** | $391,450<br><br>**Additional Resources Applied for** | **Actions Completed**<br><br>8 of 97, 8% | **Actions Advanced**<br><br>65 of 97, 67% |
|---|---|---|---|
| | | **Priority Actions Completed**<br><br>3 of 34, 9% | **Priority Actions Advanced**<br><br>23 of 34, 68% |

| | | | | |
|---|---|---|---|---|
| **Buildings and Energy** | **659,647**<br><br>Town-wide Emissions from Buildings (metric tons CO2e) | **3,244**<br><br>Emissions from Town Facilities (metric tons CO2e) | **4%**<br><br>Clean renewable energy on our grid | **3,104**<br><br>Certified green buildings |
| **Transportation and Land Use** | **5,988,020**<br>Vehicle Miles Travelled | **2% / 12%**<br>Bike / Walk Commute Mode Share | **32**<br>Bike lanes (miles) | **TBD**<br>Walkability |
| **Waste, Water, and Natural Resources** | **35,992**<br><br>Town-wide Emissions from Waste/ Water (metric tons CO2e) | **264**<br><br>Solid waste diverted from landfill (lbs recycled per capita) | **1,418.3**<br><br>Stream buffers and urban forest (acres) | **7,368, 41.8%**<br><br>Urban tree canopy (acres, % coverage) |
| **Resiliency** | **TBD**<br>Time to recovery from event | **19.5%**<br>Population in Poverty | **74%**<br>Access to food/basic services (% pop. <0.4mi of transit) | **TBD**<br>Neighborhood cohesion |

## Town and Community Goals

The Town of Chapel Hill is committed to reducing Greenhouse Gas (GHG) emissions at the Community-wide level and for Town operations.
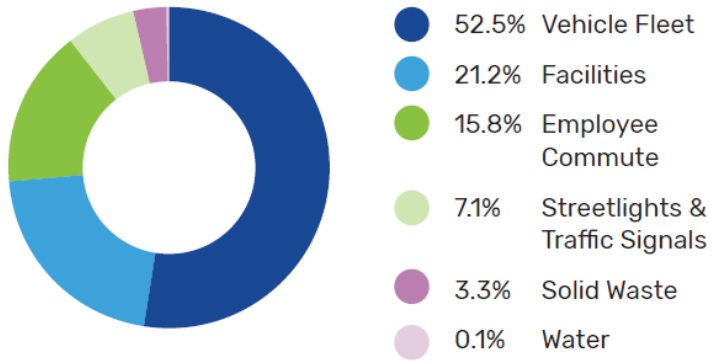
# 50% reduction
by 2030

# net-zero
by 2050

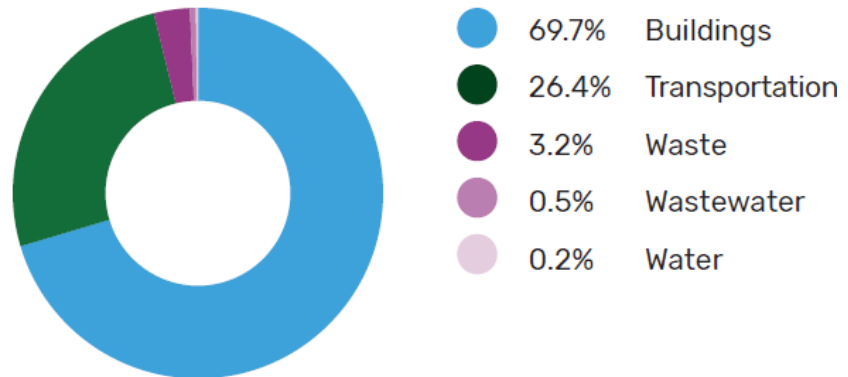# 80% clean,
renewable energy
by 2030

# [22-0144] - FY22 & FY23 Climate Action Implementation Report

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## Municipal GHG Emissions by Sector

| | | |
|---|---|---|
| ● | 52.5% | Vehicle Fleet |
| ● | 21.2% | Facilities |
| ● | 15.8% | Employee Commute |
| ● | 7.1% | Streetlights & Traffic Signals |
| ● | 3.3% | Solid Waste |
| ● | 0.1% | Water |

## Community GHG Emissions by Sector

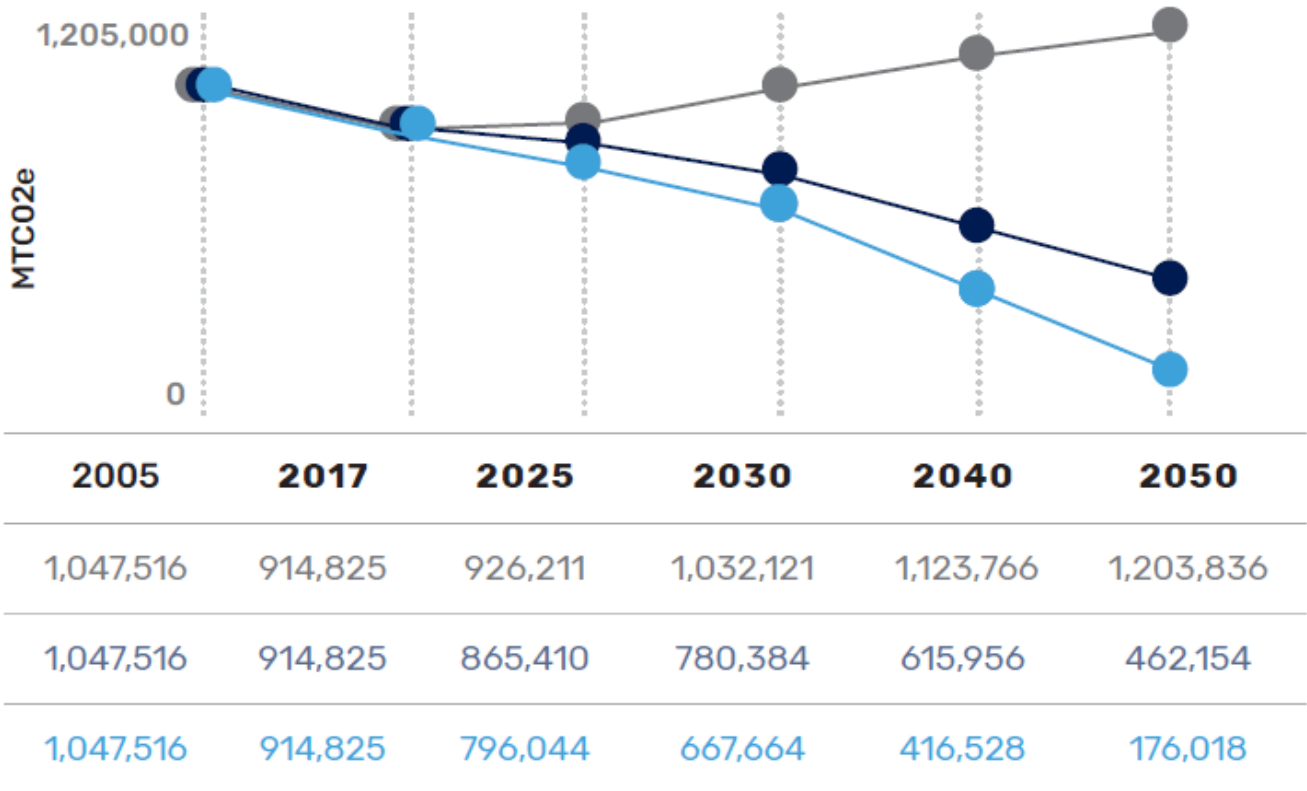| | | |
|---|---|---|
| ● | 69.7% | Buildings |
| ● | 26.4% | Transportation |
| ● | 3.2% | Waste |
| ● | 0.5% | Wastewater |
| ● | 0.2% | Water |

1.) See reference page for data sources on all key indicators

# [22-0144] - FY22 & FY23 Climate Action Implementation Report

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| | 2005 | 2017 | 2025 | 2030 | 2040 | 2050 |
|---|---|---|---|---|---|---|
| | 1,047,516 | 914,825 | 926,211 | 1,032,121 | 1,123,766 | 1,203,836 |
| | 1,047,516 | 914,825 | 865,410 | 780,384 | 615,956 | 462,154 |
| | 1,047,516 | 914,825 | 796,044 | 667,664 | 416,528 | 176,018 |

● Business as Usual

● Climate Action & Response Plan (CARP) Implementation

● CARP + UNC Climate Actions

*2005 GHG estimates are based on Orange County data, apportioned based on population.

## Reference Page:

**Buildings and Energy**
1. Town-wide Emissions from Buildings and Town Facilities - Chapel Hill Climate Action and Response Plan (CARP), https://www.sustainchapelhill.org/featured/2020/2/18/climate-action-and-response-plan. Emissions estimated for 2017 calendar year.
2. Clean renewable energy on our grid – Duke Energy Carolinas, Accountable Carbon Calculating Tool, Customer Report for Town of Chapel Hill, Feb 16, 2022.
3. Certified green buildings - USGBC LEED Project Database , GBI Green Globes Certified Building Directory, US EPA Energy Star Certified Building and Plant Locator, Home Innovation Research Labs NGBS Certified Homes List

# [22-0144] - FY22 & FY23 Climate Action Implementation Report

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**Transportation and Land Use**
1. Vehicle Miles Travelled - Based on the most recent NC DOT count of <u>Annual Average Daily Travel</u> between 2015 and 2018. Average of AADT along route used for road segments with no AADT count station.
2. Bike/Ped Mode Share – US Census Bureau. <u>2019 ACS 5-Year Estimates</u>.
3. Bike lanes – Internal data
4. Walkability – TBD. This indicator requires additional analysis and/or data sets to begin tracking. Currently available walkability ratings from "Walkscore" or the EPA's National Walkability Index are useful for single addresses and small areas but introduce errors when applied to the Town overall.

**Water, Wastewater and Natural Resources**
1. Town-wide Emissions from Waste/ Water - <u>Chapel Hill Climate Action and Response Plan (CARP)</u>, <u>https://www.sustainchapelhill.org/featured/2020/2/18/climate-action-and-response-plan</u>. Emissions estimated for 2017 calendar year.
2. Solid waste diverted from landfill - County Per Capita Recycling Performance, <u>https://deq.nc.gov/environmental-assistance-and-customer-service/local-govt/north-carolina-county-recycling-program-performance-fy-2019/download</u>
3. Net stream buffers and urban forest – Internal data on Jordan Buffer Area. Future numbers to be presented in "Net" terms per the adopted plan, i.e. – acres lost or gained.
4. Net urban tree canopy – Internal data derived from LiDAR analysis, 2015. Future numbers to be presented in "Net" terms per the adopted plan, i.e. – acres lost or gained.

**Resiliency**
1. Time to recovery from event - TBD. This indicator requires additional analysis and/or data sets to begin tracking.
2. Population in Poverty - American Community Survey, 2019 <u>https://www.census.gov/quickfacts/chapelhilltownnorthcarolina</u>
3. Access to food/basic services (% pop. <0.4mi of transit) – Internal data.
4. Neighborhood cohesion - TBD. This indicator requires additional analysis and/or data sets to begin tracking.