

RANK

68 / 75

2019 CITY CLEAN ENERGY SCORECARD

# Charlotte

Recent policy developments helped Charlotte earn points for local government operations and community-wide initiatives. The Strategy Energy Master Plan that Charlotte adopted in 2018 established a municipal building retrofit strategy, as well as municipal and community-wide climate and energy goals; doing so helped its score in both categories. Charlotte has few clean energy policies otherwise, so it has substantial room to improve across the board. To jump-start its efforts, the city can pursue foundational clean energy policies like developing community-wide energy-savings and renewable energy goals, adopting clean energy requirements for buildings, and setting mode shift targets to encourage multimodal transportation. These could serve as stepping stones to a clean energy future in Charlotte.

OVERALL SCORE

16 / 100



## LOCAL GOVERNMENT OPERATIONS

3.5

3.5

9



## COMMUNITY-WIDE INITIATIVES

3

4.5

16



## BUILDINGS POLICIES

1

9

30



## ENERGY AND WATER UTILITIES

5

5.5

15



## TRANSPORTATION POLICIES

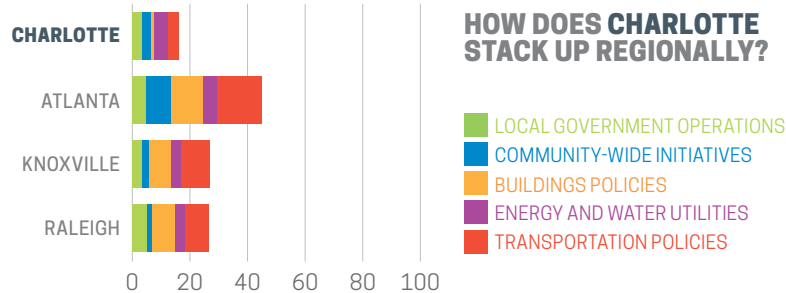
3.5

8.5

30

MEDIAN SCORE

MAXIMUM POINTS POSSIBLE



### LOCAL GOVERNMENT OPERATIONS (3.5 OF 9 POINTS)

Charlotte has renewable electricity and greenhouse gas (GHG) emissions reduction goals for local government operations. ACEEE does not currently project that the city will achieve its goal of reducing GHG emissions 100% by 2030. Charlotte sets green building requirements, benchmarks municipal building energy use, and retrofits buildings based on the results of audits. The city also has a fleet efficiency policy for vehicle procurement.

### COMMUNITY-WIDE INITIATIVES (3 OF 16 POINTS)

Charlotte has a community-wide GHG emissions reduction goal; however ACEEE does not currently project that Charlotte will meet its goal of reducing GHG emissions to 2tCO<sub>2</sub>e per capita by 2050. The city has developed a municipal combined heat and power (CHP) system. To inspire future clean energy efforts, the city can set energy-savings and renewable energy goals. It can take steps to achieve these goals by involving marginalized communities in planning and implementing initiatives, supporting efficient distributed energy systems, and taking greater steps to mitigate the urban heat island effect.

### BUILDINGS POLICIES (1 OF 30 POINTS)

North Carolina requires all jurisdictions to adopt the 2012 North Carolina Energy Conservation Code for residential and commercial buildings, but the code is not stringent. While Charlotte cannot adopt its own building energy codes, the city can advocate for more stringent energy codes. The city could further encourage energy efficiency in existing buildings by implementing a benchmarking and transparency ordinance, passing policies with required energy actions, and helping to grow the clean energy workforce.

### ENERGY AND WATER UTILITIES (5 OF 15 POINTS)

Charlotte is taking steps to encourage the decarbonization of the utility electric grid; this includes signing a memorandum of understanding with its utilities to foster a low carbon smart city. The city works to increase energy efficiency in water services and wastewater treatment plants, but more could be done. Compared to other utilities, Duke Energy Carolinas and Piedmont Natural Gas show low savings for both electric and natural gas efficiency programs. Duke Energy offers comprehensive programs for low-income households.

### TRANSPORTATION POLICIES (3.5 OF 30 POINTS)

The 2045 Metropolitan Transportation Plan sets the vision for an efficient transportation system and Charlotte's zoning code includes pedestrian and transit-supported overlay districts. Otherwise the city has few sustainable transportation initiatives. To improve its standing in the next Scorecard, the city could adopt vehicle miles traveled (VMT) or GHG emissions reduction goals for the transportation sector, encourage energy-efficient modes of transportation, and incentivize efficient vehicle and infrastructure uptake.