### rank 65 /100

**2020 CITY CLEAN ENERGY SCORECARD** 

## Charlotte

Charlotte did not have an exemplary performance in any one category but had its best achievements in the energy and water utilities category. Recent developments supporting electric grid decarbonization helped the city improve its score in the category. Charlotte and Duke Energy Carolinas entered into an agreement through which the utility aims to support the city's climate and energy goals; Charlotte took next steps on developing a utility-scale solar project, and the city submitted comments on Duke Energy's 2020 Integrated Resource Plan. Despite these achievements, the city still has significant room for improvement across all categories to advance its rank in the next edition of the *Scorecard*.



#### LOCAL GOVERNMENT OPERATIONS (3 OF 10 POINTS)

Charlotte has adopted greenhouse gas (GHG) emissions reduction and renewable energy goals for local government operations. ACEEE was unable to project if the city will achieve its local government operations carbon neutrality by 2030 goal. Charlotte benchmarks all municipal buildings and identifies energy efficiency opportunities through two to three annual audits. The city also requires the procurement of energy-efficient vehicles and converts streetlights to LED. To further ramp up its efforts, Charlotte can establish an energy reduction goal and install onsite renewable energy systems.

#### COMMUNITY-WIDE INITIATIVES (I.5 OF 15 POINTS)

Charlotte's GHG emissions reduction goal sets the vision for a clean energy future. ACEEE was unable to project if the city will achieve its community-wide GHG emissions reduction goal of 2tCO2e per capita by 2050 because insufficient GHG emissions data were available for our analysis. Charlotte supported the creation of a microgrid that integrated emissions-reducing technology. To mitigate the urban heat island effect, Charlotte aims to increase the urban tree canopy to 50% by 2050. To inspire future clean energy efforts, the city can adopt citywide clean energy goals and take an equity-driven approach to clean energy planning.

#### **BUILDINGS POLICIES (5 OF 30 POINTS)**

North Carolina requires local jurisdictions to enforce the 2018 North Carolina Energy Conservation Codes for residential and commercial buildings. Charlotte advocated for more stringent state energy codes in public comments submitted to the Executive Order 80 Clean Energy Plan. The city offers incentives such as density bonuses to spur clean energy investment. Charlotte can do more to reduce GHG emissions in its buildings sector by adopting energy efficiency policies (such as benchmarking requirements) for existing buildings and developing an equitable clean energy workforce.

#### **ENERGY AND WATER UTILITIES (6 OF 15 POINTS)**

Compared to other utilities, Duke Energy Carolinas shows moderate savings as a percentage of sales for electric efficiency programs. Piedmont Natural Gas does not report spending or savings on natural gas efficiency programs. Duke Energy Carolinas offers multiple low-income and multifamily energy efficiency programs, but Piedmont Natural Gas does not provide any programs. Charlotte has encouraged efforts to decarbonize the electric grid in multiple ways. For example, in January 2019, Charlotte and Duke Energy Carolinas of understanding to work toward a low carbon, smart city collaboration. Charlotte can increase energy and water efficiency in water services and wastewater treatment plants.

#### **TRANSPORTATION POLICIES (6.5 OF 30 POINTS)**

Charlotte's zoning code encourages transit-oriented communities. The city also provides subsidized access to efficient modes of transportation for low-income residents. While the Metropolitan Transportation Plan includes strategies to reduce vehicle miles traveled (VMT), Charlotte has not yet adopted quantitative goals to reduce VMT/GHG emissions from transportation or mode shift targets. Adopting and tracking progress toward these goals would help lay the groundwork for transportation action. Relative to other city systems, Charlotte's transit system is moderately funded and accessible.

# OVERALL SCORE



MAXIMUM POINTS POSSIBLE

