rank 43/100 1

overall score **29/100**

RECOMMENDATIONS

- → Adopt more stringent building energy codes.
- → Adopt location-efficient zoning codes that apply to the entire city.
- → Establish and track metrics related to energy equity.
- → Adopt solar- and EV-ready requirements in building codes.
- → Adopt policies and programs targeting energy efficiency in existing buildings, such as retrocommissioning and audit requirements and incentives, particularly targeting low-income housing.
- → Create a sustainable transportation plan.
- → Expand high-quality transit access for lowincome residents.





ENERGY AND WATER UTILITIES



LOCAL GOVERNMENT OPERATIONS



American Council for an Energy-Efficient Economy

2021 CITY CLEAN ENERGY SCORECARD

KNOXVILLE, TN

Knoxville performed best in local government operations and improved its position from the previous *Scorecard*. The city can improve across all policy areas to advance its rank in the next edition, most notably in community-wide initiatives and buildings policies.

HOW DOES KNOXVILLE STACK UP TO PEER CITIES?



COMMUNITY-WIDE INITIATIVES (4.5 OF 15 POINTS)

Knoxville's climate change mitigation goal sets the vision for a clean energy future. Based on emissions data from past years, ACEEE projects the city will achieve its near-term, community-wide GHG emissions reduction goal of 80% below 2005 levels by 2050. Knoxville gave marginalized community residents a formal decision-making role through its Climate Council Equity Working Group. To mitigate the urban heat island effect, Knoxville requires low-impact development in certain zones.

BUILDINGS POLICIES (5.5 OF 30 POINTS)

Knoxville requires residential and commercial buildings to comply with the 2018 International Energy Conservation Code. The city has not yet adopted solar- or EV-ready requirements. Knoxville offers incentives to spur clean energy investments in existing buildings. Residential and commercial property owners may access tax increment financing for retrofits if they qualify, and the city's Community Development Department offers financial assistance for residential improvements through the Blighted Properties Redevelopment Program. Knoxville's Extreme Energy Makeover program helps grow the energy efficiency workforce.

TRANSPORTATION POLICIES (8 OF 30 POINTS)

Of low-income households in Knoxville, 0% have access to high-quality transit. With 62.9 per 100,000 people, the city has a moderate number of EV charging station ports available for public use. Knoxville has neither a sustainable freight transportation plan in place nor any policies that address freight efficiency, nor has it codified VMT or transportation-related GHG reduction targets. Transportation entities that serve Knoxville have received roughly \$76.52 per capita on average in local transit funding annually between 2015 and 2019, a low funding level.

ENERGY AND WATER UTILITIES (7 OF 15 POINTS)

Compared to other utilities, the municipally owned Knoxville Utilities Board (KUB) shows very low savings as a percentage of sales for electric efficiency programs and in 2019, did not report natural gas savings. While KUB does not offer a multifamily energy efficiency program, the utility partners with the Tennessee Valley Authority (TVA), its electric power provider, to implement a program for low-income customers that includes health and safety measures. While KUB provides some community building energy usage data to support the city's GHG inventories, Knoxville does not advocate for better ratepayer access to utility data. In 2019, TVA emitted 5.7 metric tons of CO₂ per capita; it has committed to a moderate goal of reducing GHG emissions 70% by 2030 and 80% by 2035 from 2005 levels.

LOCAL GOVERNMENT OPERATIONS (4 OF 10 POINTS)

Knoxville has a goal to reduce municipal GHG emissions 50% below 2005 levels by 2030. Based on ACEEE's analysis of emissions data from past years, it projects that the city will meet 97% of its goal. Knoxville's Green Fleet Policy requires the city to consider fuel efficiency when purchasing new vehicles. It has converted all streetlights to LEDs and has installed 210 kW of solar capacity on municipal facilities. The city's contracting and procurement policies include goals for contracting minority- and women-owned business enterprises and staff use these goals in the contract selection processes. Knoxville has not developed a comprehensive retrofit strategy.