

Energy Solutions to Meet Growth in Tennessee



220,035 energy workers statewide

Nearly 7% of state employment



\$20B in capital expenditure invested

in energy and manufacturing projects since Q2 2022



Natural gas + renewables = 35%

of Tennessee's power generation



\$4.4M in rural revenue

from clean power projects

The United States is already experiencing sharp increases in energy demand coupled with concerns about rising energy costs. A recent report by S&P Global Commodity Insights predicts that [U.S. electricity demand will surge by 35 - 50%](#) over the next few decades, driven by AI, data centers, and the onshoring of U.S. manufacturing.¹

A broad portfolio of energy solutions are ready to meet this demand growth and provide economic benefits for communities across the country. In 2024, the United States deployed [\\$338 billion in financing](#) for energy technologies, including renewable energy, EVs, and power grid investment, up from \$303 billion in 2023 – a 0.8% increase year on year. Nevertheless, China continued to lead the global market, with \$818 billion of investment in 2024, a 20% increase year on year.²

We need more energy now from a broad portfolio of all-of-the-above energy solutions. **This fact sheet highlights energy projects driving economic growth in Tennessee** – and policy solutions to meet growing energy demand.

Energy Policy Solutions in Tennessee

The [Business Council for Sustainable Energy \(BCSE\)](#) and the [Clean Energy Business Network \(CEBN\)](#) are working with Congressional and state offices to enact policy solutions that will lower energy costs and ensure competitive Tennessee leadership, including:

- Expanding and **modernizing the electric grid and energy infrastructure**, to support integration of new and flexible energy resources.
- Reforming and expanding capacity for **permitting and siting processes** at all levels to enable the build-out of efficient energy infrastructure and buildings.
- Funding **research, development, demonstration, and deployment (RDD&D)** of energy and carbon management technologies, to support Tennessee's innovation in these expanding markets.
- Employing market-based tools, like **tax policy**, that create signals to invest and that leverage private sector dollars.



Tennessee's Expansive Energy Industry

ENERGY PRICES: From May 2024 to May 2025, [average residential energy prices](#) in Tennessee increased by 12.1%.³ As of June 2025, average residential electrical rates in Tennessee are [13.98 cents per kWh](#), which are the 13th lowest in the country.⁴

UTILITY EFFICIENCY SPENDING: In 2023, Tennessee utilities invested \$29 million in [electric efficiency](#).⁵

ENERGY EFFICIENCY ADVANCEMENT: The American Council for an Energy-Efficient Economy ranked Tennessee [number 28 in the nation](#) for policies and programs to advance energy efficiency in 2025.⁵

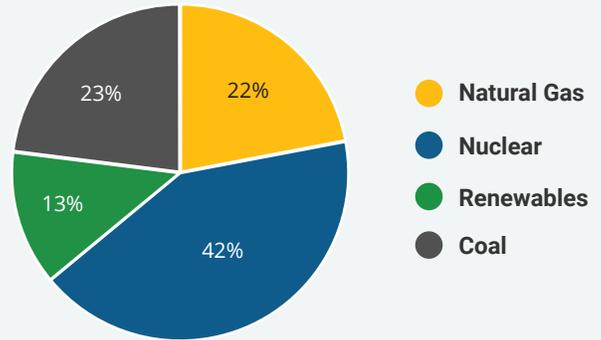
INVESTMENT: [\\$20 billion](#) in capital expenditure has been invested in 82 Tennessee energy and manufacturing projects since Q2 2022.⁶



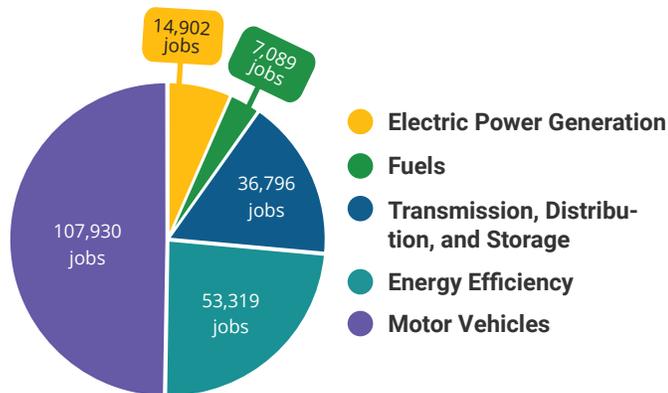
RURAL BENEFIT: Clean power projects provide extra income to farmers, ranchers, and other private landowners. Annually, these drought-proof land lease payments total [\\$4.4 million](#).⁷

GENERATION MIX: Natural gas and renewables provided [35% of Tennessee's power generation](#) in 2024, up from 20% a decade ago.²

- Tennessee is the [sixth-largest hydropower producer](#) in the nation.⁸
- Renewable energy, including hydropower, provides [13% of Tennessee's electricity generation](#). Solar, wind, biomass, waste-to-energy, geothermal, and hydropower have cumulatively installed more than 3,209 MW of power generation to date.²



JOBS: Tennessee had [220,035 energy workers](#) statewide in 2024, representing 2.6% of all U.S. energy jobs. From 2023 to 2024, energy jobs in the state increased by 3,789 jobs, or 1.8%. The energy sector in Tennessee represents 6.7% of total state employment.⁹



Energy at Work



TRANE TECHNOLOGIES: [Energy-Efficient HVAC and Supply](#)

- Multi-billion-dollar company focused on heating, ventilation, and air conditioning (HVAC) and refrigeration systems
- Operates [Thermo King](#) and [Trane](#) brands
- 24 facilities in Tennessee, providing residential and commercial HVAC and refrigeration



SCHNEIDER ELECTRIC: [Manufacturing Facilities](#) in Mt. Juliet and Smyrna

- Facilities manufacture custom electrical switchgear and medium voltage power distribution products and more
- Mt. Juliet facility was created and Smyrna facility upgraded in 2024 as part of Schneider Electric's \$140 million investment in smart factory transformation
- Recruited and employed an additional 455 manufacturing workers across both locations in 2024



PLUG POWER: [Hydrogen Liquefaction Plant](#) in Charleston

- Liquefies 10 metric tons per day of hydrogen
- Cryogenic trailer fleet delivers liquid hydrogen from the Tennessee plant to customers throughout North America
- Plant operations re-started in 2024, with design improvements to enhance overall plant efficiency

 **The Business Council**
for Sustainable Energy®

 **CLEAN ENERGY**
BUSINESS NETWORK

The Business Council for Sustainable Energy (BCSE) is a coalition of companies and trade associations that deploy clean energy and decarbonization solutions, with a sector focus on energy efficiency, natural gas, and renewable energy. Members include investor-owned utilities, public power, independent power producers, project developers, technology providers, equipment manufacturers, environmental and energy market service companies, and more.

BCSE collaborates frequently with its small business division, the Clean Energy Business Network (CEBN), which encompasses a network of more than 8,000 cleantech business and community leaders across all 50 states. Collectively, BCSE and CEBN mobilize the full breadth of the clean energy economy, from innovators and small businesses to industry leaders and the trade associations that represent them.

Citations

- 1** 2025 US National Power Demand Study. Conducted by S&P Global Commodity Insights and commissioned by the American Clean Power Association.
- 2** 2025 Sustainable Energy in America Factbook. Conducted by BloombergNEF and commissioned by the Business Council for Sustainable Energy.
- 3** U.S. Energy Information Administration Electricity Data Browser.
- 4** Electricity Rates by State. Conducted by Choose Energy (2025).
- 5** 2025 State Energy Efficiency Scorecard. Conducted by the American Council for an Energy-Efficiency Economy.
- 6** Clean Investment Monitor. Conducted by MIT and Rhodium Group.
- 7** Clean Power State by State. Conducted by the American Clean Power Association.
- 8** U.S. Energy Information Administration. Tennessee State Profile and Energy Estimates.
- 9** United States Energy & Employment Report 2025. Conducted by the U.S. Department of Energy.