

Renewables Highlights

Fiscal Year 2021¹



Today, TVA is the largest public power provider in the U.S. and one of the nation's largest power producers.

We partner with 153 local power companies (LPCs) to serve approximately 10 million people across seven Southeastern states and 57 directly served customers, including 50 industrial customers and 7 military and federal installations. We operate the nation's **third largest nuclear fleet**, one of the largest high-voltage transmission systems in North America, and we are top quartile in renewable energy-production in the Southeast.²

Residential Solutions

Green Switch

Green Connect

Dispersed Power Production

From the moment the TVA Act was signed and one of the world's great hydropower systems got its start, we've been **committed to producing clean, low-cost renewable power**. As market demand has evolved, so have our generation methods, partnerships and expertise.

In 2021, TVA achieved approximately 56% reduction in its carbon emissions compared to 2005 baseline standards. We are working to increase that number to 70% by 2030 through innovation and technologies that we believe will deliver meaningful, impactful progress.

Business & Industry Solutions

Green Invest

Green Flex

Green Switch

Dispersed Power Production

To meet carbon goals and the needs of our customers, TVA is building the energy system of the future. We are leveraging increased market demand for renewable energy solutions to drive economic development while also providing energy system and environmental benefits for our region. Companies and organizations with sustainability goals are looking for green reasons to locate or stay in the TVA service area and we have solutions for them.

To increase availability and reduce the cost of renewable energy, we have developed TVA Green³, a comprehensive portfolio of renewable solutions to meet the sustainability goals of business and residential customers, offered in partnership with local power companies. These programs are about more than a clean region. TVA Green is about working closely with partners to provide innovative solutions, making our region more competitive for jobs and investments, and a long-term commitment to make the TVA service region a great place to live and do business.

At the end of the fiscal year, TVA's existing and contracted renewable energy was over 8,200 MW, including solar capacity totaling nearly 2,800 MW⁴ across 3,950 installations in 7 states. Growth of our operating and contracted solar capacity was nearly 77% from FY20 to FY21.

¹ 1 Fiscal Year 2021: October 1, 2020-September 30, 2021

² FY21 TVA Annual Report.

³ TVA tracks renewable energy commitments and claims, in part, through the management of renewable energy certificates (RECs). This mechanism allows businesses and individuals to purchase RECs through TVA to meet their renewable energy and sustainability goals. TVA Green Programs are offered in partnership with LPCs, which makes it easy for end-use consumers to purchase RECs for their personal sustainability goals.

⁴ 1,978 contracted utility-scale solar projected to be online by 2024.

Renewables Highlights



2021 Highlights

- 8,269 MW Operating and Contracted Renewables Capacity in 2020
- Community solar available to over 1.5 million customers



Green Switch & Green Flex Programs

- 9,731 total participants
- 1,051,929 MWh Green Power Sales



Green Invest Program

- 2,205 MW utility-scale, new-to-the-world solar agreements to-date
- Contracted 246 MW battery storage
- Met sustainability needs for Google, Facebook, General Motors, Knoxville Utilities Board and Vanderbilt
- Generated \$2.7 Billion total in solar investments in TVA's service area



Partner Flexibility Option

Launched program that enables our long-term LPC partners to self-generate up to 5% of their energy needs, giving them more flexibility to meet their customers' unique needs or clean energy goals.

- 73 LPCs signed Flexibility Agreements
- 32 LPCs are actively engaged in planning 10 projects
- 2 operating solar projects



2021 RFP for Renewables

- Over 4,000 MW of renewables and storage submitted



Dispersed Power Production

- 369 operating projects
- 270 MW of power



Battery Technology

TVA's first owned and operated grid-scale battery energy-storage system, a 40 megawatt-hour demonstration system, will help ensure continued electrical reliability for up to 14 gigawatts of solar energy planned through 2038. The Vonore Battery Energy Storage System is due to be operational in late 2023.

TVA has another 246MW of battery storage contracted to come online by the end of 2024.



2021 Awards

- Top 100 Green Utilities in the world by Energy Intelligence
- Top 10 ranking for Green Power Sales by NREL for 8th year



TVA-Directed Solar Project

The land associated with the first potential TVA-directed utility-scale solar project is currently undergoing pre-decisional environmental and cultural due diligence investigations prior to land acquisition.

Testimonials:

Starkville Utilities

"As we transition into a cleaner future, the long-term partnership between Starkville Utilities and TVA demonstrates the leadership needed to bring more renewable energy to our community. Renewable energy is something that more businesses want, and having it available makes Starkville more competitive for development."

~Starkville Mayor Lynn Spruill
Green Invest Customer

Jack Daniels Distillery

"Our commitment to making great whiskey is only matched by our commitment to preserving the world we call home through sustainable practices. We're excited to be the first distillery to sign a Green Invest deal that will provide nearly three-quarters of our electricity needs. Now the world's most iconic whiskey is even greener."

~Melvin Keebler, Jack Daniel's Vice President and Assistant General Manager - Green Invest Customer