

Renewables Highlights

Fiscal Year 2020¹



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 and over 750,000 businesses across a seven-state area. We operate the nation's third largest nuclear fleet and second largest transmission network, and ***we produce more renewable energy than any other utility system in the Southeast.***²

Residential Solutions

Green Switch

NEW PROGRAM

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 2020, TVA achieved approximately 60% 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.

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.

Business & Industry Solutions

Green Invest

Green Flex

Green Switch

Dispersed Power Production

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 7,000 MW, including solar capacity totaling nearly 1,600 MW⁴ across 4,271 installations in 7 states. Growth of our operating and contracted solar capacity was nearly 70% in FY2020.

¹ Fiscal Year 2020: October 1, 2019-September 30, 2020

² Greenest power system in the southeast United States with nearly 50% more renewable energy generation than TVA's next closest regional peer.

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 1175 contracted utility-scale solar projected to be online by 2023.

Renewables Highlights



2020 Highlights

- 7,044 MW Operating and Contracted Renewables Capacity in 2020
- Community solar available to over 1 million customers



Green Switch & Green Flex Programs

- ~9,000 total participants
- 311,777 MWh Green Power Sales



Green Invest Program

- 1,110 MW utility-scale, new-to-the-world solar agreements to-date
- Contracted 50 MW battery storage
- Met sustainability needs for Google, Facebook, General Motors, Knoxville Utilities Board and Vanderbilt
- Generated ~\$1.4 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.

- 62 LPCs signed Flexibility Agreements
- 6 LPCs are actively engaged in planning 10 projects
- 2 Initiated solar projects



2020 RFP for Renewables

- 6,800 MW of renewables and storage submitted
- More than 1,000 MW of projects are expected to be announced in 2021



Dispersed Power Production

- 111 operating projects
- 268 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 2022.



2020 Awards

- Top 100 Green Utilities in the world by Energy Intelligence
- Top 10 ranking for Green Power Sales by NREL for 7th year
- Green Power Market Development Award (Center for Resource Solutions)
- TenneSEIA's 2020 Solar Champion Award- Chris Hansen, vice president of O&R



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:

Metropolitan Government of Nashville and Davidson County

"This public-private partnership will serve as a model for NES's other large customers to replicate. I challenge Nashville's corporate sector and major institutions to consider TVA Green Invest as a smart way to prepare for what must be a greener future."

~Nashville Mayor John Cooper-
Green Invest Customer

Knoxville Utilities Board

"KUB is proud to be the first TVA distributor to demonstrate our commitment to clean energy through the purchase of 502 megawatts of solar power. Our Green Invest partnership is an important part of our work to support Knoxville's emissions reduction goals and build on KUB's legacy of environmental stewardship."

~Gabe Bolas, KUB President and
CEO- Green Invest Customer