Delivering Sustainable Solutions

Yesterday. Today. Tomorrow.



FY 2022 SUSTAINABILITY REPORT / EXECUTIVE SUMMARY



A mission that matters

Delivering sustainable solutions ... yesterday, today, tomorrow

TVA was created to benefit the public good, and this mission has stood the test of time. While it wasn't called "sustainability" at its founding in 1933, TVA has been focused on sustainability throughout its history. Today, the challenges are different, yet they are just as critical.

Sustainability for TVA means ensuring its ability to provide the region with affordable and reliable energy, a healthy environment and a prosperous economy – now and for future generations.

TVA's sustainability work is focused in four areas

- Economic Impact: Partnering to build the region's clean energy economy and providing affordable, reliable energy
- Environment: Stewarding the region's natural resources, including protection of the biodiversity that makes the region so unique, and being a transformational leader in the fight against climate change
- Social: Making life better for communities throughout the region and championing inclusion for its employees and the people TVA serves
- Governance: Driving progress through accountability and transparency

TVA serves this region and the nation by developing innovative solutions to solve complex challenges. By the nature of its mission, TVA fills a unique role as a leading electric utility and as a living laboratory – sharing potential solutions with the world.





Since TVA's founding in 1933, it has worked to holistically manage and restore 293,000 acres of public land.



A MISSION THAT MATTERS



FY 2022 Highlights

- Celebrating nearly 90 years of sustainability
- Continued operation of the cleanest power system in the Southeast as a percent of net generation, per Edison Electric Institute's June 2022 reporting database
- Avoided 315,231 total tons of carbon through TVA EnergyRight[®] programs
- Saved 3.35 gigawatt hours of energy through energy efficiency improvements in TVA buildings
- Recognized as a top-ranked federal agency in the country for energy use intensity reduction against a 2003 baseline
- Sponsored 449 total environmental outreach and stewardship projects across the region
- Completed 120 biodiversity projects and initiatives in FY 2022
- Achieved 97% reduction in NO_x emissions from 1995
- Achieved 99% reduction in SO₂ from 1977
- Recycled 82% of coal combustion residuals produced in 2022
- Averted \$3 million in estimated flood damage in the Tennessee Valley in 2022 alone

- Attracted projected capital investments of \$10.2 billion to the region, which are expected to create 26,512 jobs and retain approximately 40,027 jobs
- Provided electricity at residential rates lower than 70% of the top 100 U.S. utilities and industrial rates lower than more than 90%
- Spent \$518 million with diverse businesses,
 \$1.1 billion with small businesses and \$2 billion with Tennessee Valley region businesses
- Committed \$3 million in grant funding for 13 pilot projects between 2022 and 2024 through TVA's Connected Communities initiative
- Donated more than \$9 million in community contributions and disaster relief
- Named among the Top 15 Best Employers in Tennessee by Forbes magazine in 2022 for the fourth consecutive year
- Ranked #1 in the 2022 Military Friendly[®] Top 10 Supplier Diversity Program
- Became first U.S. federal agency to receive Compliance Leader Verification[™] from Ethisphere[®]

Carbon reduction leadership

Driving toward a clean energy future



Carbon reduction is one of today's most pressing issues.

TVA takes the challenge very seriously. More than half of TVA's energy supply comes from carbon-free sources and TVA has made significant investments to modernize its power system, including retiring coal units, adding modern gas generation and investing in its industry-leading transmission system.

TVA details forecasting and climate preparedness efforts in its Climate Action Adaptation and Resiliency Plan, which equips TVA planners with the analytical tools, framework and guidance needed to ensure that its policies, projects and plans are climate resilient.

While much has been done, TVA recognizes it must do much more. It aspires to achieve net-zero carbon emissions by 2050 while supporting broader national efforts to create a clean energy economy.

Meeting this aspiration will require partnership, innovation and continued investment in new technologies. TVA is working to add 10,000 megawatts of solar capacity to its system by 2035 and is focused on innovative projects and partnerships in new nuclear, renewable energy, energy storage and hydrogen, among others.

It is supporting the electrification of vehicles, using increasingly clean energy to support broader carbon reduction in the region.

In February 2023, TVA announced a partnership with the Baker Center for Public Policy – a non-partisan think tank at the University of Tennessee – to look at all segments of the economy, not just the power industry, to find ways everyone can reduce emissions and move the region toward a clean, secure energy future.

TVA's path to a clean energy future may not always be linear, but its end goal is to follow a defined strategy to accelerate the process and expand carbon-free technologies that will power the nation's sustainable clean energy economy without impacting power affordability, reliability or resiliency.





Dams are one of TVA's original clean sources of energy. Hydro facilities provided 9% of TVA's energy in FY 2022.

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Environmental leadership

Protecting and enhancing natural resources



From its beginning, TVA tamed the floods of the wild Tennessee River and protected and improved the region's natural resources.

Today, TVA adheres to an Environmental Policy that defines its commitment to environmental protection and compliance, continuous improvement, partnership and transparency. The policy reflects today's changing customer requirements and bedrock corporate responsibility.

TVA serves a seven-state region that is among the most biodiverse in the country. In FY 2022, TVA completed 120 biodiversity projects and initiatives. As an example, TVA installed 10 acres of pollinator habitat at its new Primary System Operations Center in rural Meigs County, Tennessee.

TVA manages 293,000 acres of public lands and more than 40,000 miles of rivers, streams and tributaries, including the 652-mile Tennessee River. Its river management has averted \$9.7 billion in flood damage since 1936, and its environmental stewardship leads to nearly \$12 billion in annual spending on recreation in the region.

TVA is committed to limiting the environmental impact of its operations and seeks opportunities to improve the quality of the region's land, water and air. TVA has spent \$6.8 billion to date to improve air quality in the region through emission controls on existing generation units.

In an increasingly developed world, TVA continues to play a critical role in ensuring the region's resources are well-protected and available for generations to come.

TVA



TVA provides abundant recreation opportunities through management of 293,000 acres of public lands and more than 40,000 miles of waterways.

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Economic development leadership

TVA, partners attract good jobs to region



As growth in the region reaches unprecedented heights, businesses and industries continue to leverage the value of TVA's affordable, reliable, clean energy and focus on sustainability in their decisions to locate or expand here.

In partnership with customers, state and local leaders, and community organizations, in FY 2022, TVA helped attract approximately \$10.2 billion in projected capital investments – with 26,512 jobs expected to be created and 40,027 jobs retained.

Over the past five fiscal years, TVA supported economic development projects in the region that total almost \$48 billion in capital investment with 117,354 jobs created and 229,560 retained.

Many of these capital investments are tied to a clean energy economy. For example, First Solar – the nation's largest solar panel manufacturer – is investing \$1.1 billion and expects to create more than 700 jobs in Lawrence County, Alabama. Similarly, LG Chem is investing \$3.2 billion and projecting 860 jobs at a new facility in Clarksville, Tennessee, for building components of electric vehicle batteries.

Economic development involves collaboration with a variety of stakeholders to make life better for the people of the region. Together with its partners, TVA is moving the economy and a sustainable future forward.





TVA's stewardship helps lead to nearly \$12 billion in annual spending on recreation in the region.

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Community leadership

Built for the people, TVA serves the public good

TVA was built for the people.

In its first decades, TVA improved life in the Tennessee Valley region by bringing affordable electricity to rural and agricultural areas, controlling flooding from the Tennessee River, and supporting public health through programs to control disease.

TVA remains committed to building a better tomorrow for the people it serves today.

It strives to be a trusted neighbor through corporate giving, employee volunteer efforts, and innovative programs that build on the agency's long history of providing support and assistance to those in need.

TVA recognizes its responsibility to ensure that no one is left behind as it builds a clean energy future. It is committed to maintaining affordability and reliability throughout the transition. As its generation portfolio evolves, TVA is working with employees and communities impacted by facility retirements to determine an equitable path forward.

In partnership with local power companies and local, state and federal organizations, TVA offers energy efficiency programs that reduce energy costs, lower carbon footprints and, in many cases, improve energy equity.

It also is building more structure around its environmental justice work to align with presidential executive orders that frame federal agencies' efforts to address disproportionate health, environmental, economic and climate impacts on disadvantaged communities.

For the benefit of employees as well as the communities it serves, TVA is integrating Diversity, Equity, Inclusion and Accessibility (DEIA) into its business activities and decision-making processes.

There is much work to be done, but TVA is working together with its partners to enable a just transition toward a brighter future.

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TVA, MLGW and the City of Memphis celebrate with Yvonne Becton, the 500th Memphis resident to receive a Home Uplift renovation.

Governance leadership

Ethical conduct, commitment to service remain vital



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TVA's first Code of Ethics, written in 1933, stated: "The affairs of the Tennessee Valley Authority shall be conducted in all respects with honesty and openness."

TVA's first leaders understood something that still holds true today: The success of the public power model relies on trust between TVA and its customers, stakeholders and the communities it serves.

TVA maintains high ethical standards and a commitment to transparency and engagement with stakeholders. TVA's governance structure provides the oversight and perspective necessary to manage risk, drive progress and maintain the trust at the heart of fulfilling TVA's mission of service.

The TVA Board of Directors provides oversight, as do the Securities and Exchange Commission and Sarbanes-Oxley Act requirements. In addition, TVA has oversight from Congress, the Government Accountability Office, Office of Management and Budget, the U.S. Treasury and an independent Office of the Inspector General.

Members of TVA's Board of Directors are nominated by the president of the United States and confirmed by the U.S. Senate. On Jan. 4, 2023, TVA welcomed six new Board members:

- Beth Geer of Brentwood, Tennessee
- Bobby Klein of Chattanooga, Tennessee
- Michelle Moore of Midlothian, Virginia
- Bill Renick of Ashland, Mississippi
- Joe Ritch of Huntsville, Alabama
- Wade White of Eddyville, Kentucky

They joined existing members Bill Kilbride, Chair, of Chattanooga, Tennessee; Beth Harwell of Nashville, Tennessee; and Brian Noland of Johnson City, Tennessee.

TVA's strong governance structure drives robust resilience planning. This guidance helps TVA learn, anticipate and respond to challenges as it works with partners to ensure a secure energy future.







overcoming challenges that ultimately improve the lives of about 10 million people. I am honored to join a team that seeks to simultaneously work to decarbonize our energy future while keeping rates low and the power system reliable."

"TVA's history is highlighted by consistently

Beth Geer TVA Board member

"I'm grateful to join the Board to help carry its mission into the future by ensuring the resilient, clean, affordable power TVA is building will support its decarbonization goals and the region's growth while benefiting the people it was created to serve."

Michelle Moore TVA Board member



"From my own experience, I know that the strength of TVA is defined by the people who work there, including the almost 60% that are union-represented. I look forward to contributing to the work the TVA team performs every day on behalf of everyone in our seven-state region."

Bobby Klein TVA Board member







"I've been privileged to work with many members of the TVA team over the years to bring new opportunities to northeast Mississippi. With the continued challenges rural communities are facing, TVA's mission remains as critical as ever, and I look forward to doing my part to serve the entire region."

Bill Renick TVA Board member

"My previous time on the TVA board provided me with the unique opportunity to experience all that TVA does to benefit the people of the region. It also reinforced for me the ongoing need for TVA to do even more, and I am honored to have another chance to serve."

Joe Ritch TVA Board member

"While serving the people of Lyon County, I've seen TVA's impact on the lives of people, in both good times and bad. Whether it is helping bring new businesses or jobs to an area or helping recover after storm damage, I am honored to be part of a TVA team that cares about the communities it serves."

Wade White TVA Board member



TVA's seven-state region includes some of the most biodiverse habitats in the world. Its mission includes protecting the region's natural resources – today and tomorrow.

Sustainable together

Building a brighter tomorrow

In a changing world, TVA believes operating transparently, sustainably and with strong governance is not just good business. It was TVA's foundation and is the way to a brighter tomorrow.

TVA's sustainability strategy is informed by conversations with partners and stakeholders throughout the region. These conversations help TVA understand what its neighbors and partners want, incorporate what regulators expect, and determine a path forward.

The Sustainability Report provides a look at TVA's impact and opportunities. TVA leverages industry-accepted frameworks, including the Global Reporting Initiative and Sustainability Accounting Standards Board standards, which are the backbone of TVA's Sustainability Reporting. It also aligns with the United Nations Sustainable Development Goals.

TVA has a strong history of leading in sustainable practices, and it is well-positioned to continue that track record into the future.









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