

The United Nations Sustainable Development Goals (UN SDGs) provide a framework for governments, industry and communities to build a sustainable future for the world. Though TVA has identified 10 UN SDGs that are most fundamental to its mission of service, as described in the TVA Sustainability Report, TVA's mission and activities support all 17 goals. The chart below presents alignment between the 17 global goals and TVA's sustainability priorities, aspirational goals and progress in FY 2022.

TVA Alignment with United Nations Sustainable Development Goals

UN SDG **TVA Alignment TVA Priority Issues TVA Aspirational Goals FY 2022 Actions**



TVA was created to lift the Tennessee Valley region from the depths of the Great Depression of the 1930s. Today, TVA remains committed to the communities it serves. In addition to providing electricity at the lowest feasible cost, TVA strives to be a trusted neighbor through corporate giving, employee volunteer efforts, assisting with recovery efforts in the wake of natural disasters, and providing programs that give support and assistance to those in need.

- **Energy Affordability**
- Community Vitality and Engagement
- Continue Delivering Affordable Electricity Rates (Best-Quartile Nationally)
- Increase Investment in Energy Efficiency for Underserved Residents and Communities
- Residential rates lower than 70% of the top 100 U.S. utilities and industrial rates lower than 90% (based on Sept. 30, 2022, 12-month rolling average from U.S. Energy Information Administration)
- Donated over \$9 million in community contributions to organizations across the region, including \$1.3 million to disaster relief
- Helped restore impacted communities by providing immediate and longterm support after the February 2022 ice storms in Western Tennessee, December 2022 tornados in Western Kentucky, and other natural disasters



The Tennessee Valley region faces higher rates of food insecurity than other parts of the country. In partnership with local nonprofit organizations, TVA fights hunger in the communities it serves through corporate contributions. food drives, and employee volunteer efforts. TVA also supports resilient, sustainable agriculture through ongoing engagement with the region's farmers, erosion prevention programs that support soil health and water quality, and incentives for food system innovations such as indoor agriculture.

- Flood and Drought Management
- **Energy Affordability**
- Prioritize Social and Environmental Justice for Impacted Communities
- Enhance Safety and Well-Being of TVA Employees and the People of the Region
- Distributed over 8 million meals to families in need in 2022 through TVA's partnership with Feeding America
- Donated \$600,000 to health, hunger and housing initiatives, supporting projects like TVA's partnership with Mid-South Food Bank to create healthy school pantries in Memphis schools
- The TVA Boone Dam team volunteered with regional LPC partners to serve in mobile food banks throughout the duration of the project and collected 157.000 tons of food
- Planted 3,000+ feet of streambank vegetation, which helps prevent erosion and protect water quality



Protecting public health is a priority for TVA. In the face of diseases like COVID-19. TVA is working with its LPC partners to incentivize innovation in disease prevention and to support economic recovery in the pandemic's aftermath. TVA also strives to protect both environmental • Waste Management and human health by investing in clean air and clean water for the region through responsible waste management and aggressive pollution control.

- Health and Safety
- Prioritize Social and Environmental Justice for Impacted Communities
- Enhance Safety and Well-Being of TVA Employees and the People of the Region
- Continued support through the Community Care Fund with over \$4 million provided in 2022 to support local initiatives that address hardships created by the COVID-19 pandemic
- Provided a 2.5% monthly base rate credit, the Pandemic Recovery Credit, that applies to service provided to TVA's LPCs, their large commercial and industrial customers, and TVA's directly served customers, totaling \$228 million for 2022
- Invested \$6.8 billion to date to improve air quality in the Tennessee Valley region through emission controls



UN SDG **TVA Priority Issues TVA Aspirational Goals TVA Alignment FY 2022 Actions** Inclusive and equitable education is an important part of Awarded \$1 million in <u>STEM grants</u> in partnership with Bicentennial TVA's mission to give the people of the Tennessee Valley Volunteers Incorporated region a better opportunity to thrive. TVA's educational Continue to Attract and Grow Contributed \$2.9 million to education initiatives across the seven-state programs focus on building the workforce of tomorrow by Investments and Jobs That Power **EDUCATION** service region Community Vitality introducing students to STEM skills that offer steady, wellthe Region's Economy Supported 43 public schools with energy efficiency grants and training and Engagement paid careers right here in the Tennessee Valley region. Advance Employee and Community through EnergyRight School Uplift, saving each school an estimated \$7,700 TVA provides educational resources online and in-person Workforce Development Skilled Workforce for students of all socioeconomic backgrounds, genders **Availability** Create a Talent-Focused Collaborated with universities, trade schools and union partners to expand and abilities. For college students and lifelong learners, **Organization That Delivers** recruiting efforts in diverse communities TVA's CADnet School to Work program, Intern Program Performance and Service Connected with 3,800 children through environmental education and and entry-level training courses provide paid, impactful outreach events educational opportunities that go beyond the classroom.



Diversity, Equity, Inclusion and Accessibility is an integral part of how TVA does business. TVA works to advance gender equality in the communities it serves through outreach and advocacy, <u>Supplier Diversity</u> initiatives and more. To attract, develop and retain top talent reflective of the communities it serves, TVA is partnering to build a more diverse talent pipeline and taking steps to advance equity in the compensation structure, benefits packages and advancement opportunities TVA offers its workforce.

- Diversity and Inclusion
- Recruitment, Development and Retention
- Enhance Supplier Diversity Program Support for Women-Owned, Minority-Owned and Veteran-Owned Businesses
- Accelerate Impact of Inclusion with Diversity within TVA and the Communities it Serves
- Established representation goals aimed at increasing the number of women and people of color in leadership to match the available workforce by 2033
- Hired a third-party firm to conduct an independent review of TVA DEIA practices and began addressing gaps
- TVA Employee Resource Group Women Empowered continued to support women in the TVA workforce and beyond through networking, developmental opportunities and community outreach initiatives
- Launched the Ready Now supplier university program to help diverse small business owners prepare to work with TVA



TVA understands that clean water is vitally important – for plants, animals and people. Managing the Tennessee River system means balancing the needs of diverse stakeholder interests – including power production, navigation, industry, agriculture, recreation, aquatic biodiversity and public supply– through periods of both flooding and drought. More than 5 million people get their water from the Tennessee River and its tributaries every day. TVA supports a broad range of initiatives to protect and improve water resources, ensure adequate water quality and maintain water supply.

- Water Quality and Availability
- Habitat and Biodiversity Protection
- Flood and Drought Management
- Continue to Improve Integrated Environmental Footprint (Air, Water, Waste, Land, Biodiversity)
- Continue to Protect the Tennessee River System's Natural Habitats and Biodiversity
- Continue to Support \$12 Billion in Sustainable Recreational Activities on Public Lands and Waters
- Prepared <u>Water Use in the Tennessee Valley</u> Report to inform reservoir operating policy
- \$700,000 dedicated annually to environmental stewardship programs to protect and improve aquatic biodiversity
- Supported the recovery of the snail darter and its removal from the endangered species list in 2022 through long-term policies to improve water quality and aquatic habitat and maintain adequate reservoir flows
- Issued more than 1,800 <u>Section 26a permits</u> to protect land and shoreline

TVA Priority Issues UN SDG **TVA Alignment TVA Aspirational Goals FY 2022 Actions**

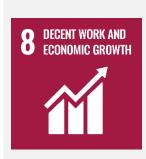


TVA is in a unique position and has a responsibility to lead in developing solutions that will deliver a carbon-free energy future. As TVA works toward an aspiration of netzero carbon emissions by 2050, it adheres to its original mission of generating affordable, reliable, resilient and clean energy. This is what customers and prospective customers deserve and expect. TVA EnergyRight® and TVA Green programs play a vital role in TVA's carbon leadership strategy while driving energy equity, efficiency and innovation. TVA is committed to building a greener future that leaves no one behind.

- Energy Affordability
- Renewable Energy
- Local Power Company **Partnerships**
- Sustainable Financing Framework

- Continue Delivering Affordable **Electricity Rates**
- Execute Strategy to Build the Clean Energy System of the Future (with path to ~80% carbon reduction by 2035 and aspiration of net-zero by 2050)
- Add 10,000 Megawatts of Solar by 2035 to Meet Customer Demand and TVA System Needs
- Increase Investment in Energy Efficiency for Underserved Residents and Communities

- Continued to be cleanest power system in the Southeast as a percent of net generation*
- Kept residential rates lower than 70% of the top 100 U.S. utilities and industrial rates lower than more than 90% (based on Sept. 30, 2022, 12month rolling average from U.S. Energy Information Administration)
- Helped avoid more than 315,000 tons of carbon through TVA EnergyRight® programs, with 50,947 people participating
- Provided energy efficiency upgrades to 1,543 homes through TVA EnergyRight's Home Uplift
- Completed the first renewable energy projects through TVA Green Invest. including the largest solar farm in Alabama



TVA powers economic success by providing affordable. reliable, resilient and clean energy that attracts innovative industries, jobs and investments to the region. TVA also drives economic development through grants, partnerships and resources for STEM education, helping today's students build the skills needed for the workforce

of tomorrow. TVA's commitment to bringing good jobs to the region starts with its own workforce. The strength of TVA is in its people – and TVA offers competitive wages, quality benefits, diverse career development opportunities and more to help ensure its team members have the

support they need to Do Good Here.

- Jobs Created and Retained
- Investor Relations
- Labor Relations
- Recruitment. Development and Retention
- Skilled Workforce Availability
- Health and Safety

- Continue to Attract and Grow Investments and Jobs that Power the Region's Economy
- Create a Talent-Focused Organization that Delivers Performance and Service
- Enhance Safety and Well-Being of TVA Employees and the People of the Region
- Advance Employee and Community Workforce Development

- Projected capital investments of over \$10.2 billion that are expected to create 26,512 jobs and retain 40,027 jobs
- Recognized as a Top Utility for Economic Development for the 17th consecutive year
- Contributed more than \$1 million in STEM grants and other education programs for schools across the region
- Named in Top 15 Best Employers in Tennessee for fourth consecutive year
- Continued strong tradition of partnership with 17 labor unions representing 58% of the TVA workforce
- Top quartile performance in recordable injury rate and top decile performance in serious injury incident rate



TVA's long history of leadership in developing and delivering new ideas and innovative solutions provides an opportunity to bring these investments to the region and build on that track record of excellence. The Energy System of the Future is being designed to help reinforce reliability, protect the environment and keep power costs low with a diverse portfolio of clean energy sources, advanced technologies and broad electrification. Elements • critical to this success include investments in energy storage integration, electric vehicle evolution. decarbonization options, Connected Communities. regional grid transformation, and advanced nuclear solutions. TVA is investing in the future today.

- Energy Innovations
- Reliability and Resiliency
- Cyber and Physical Security
- Build the Integrated and Reliable Grid of Tomorrow by 2027
- Partner to Develop New Clean **Energy Technologies for Deployment** in the 2030s and Beyond
- Develop and Deploy a Small Modular Reactor through Federal Partnership
- Become the Nation's Top-Performing Nuclear Fleet by 2025
- Pave the Way for More Than 200,000 Electric Vehicles on Valley Roads by 2028
- Provide Reliable and Resilient Power in the Energy System of the Future (Continue 99.999% Reliability)

- Joined a coalition of utilities to create the Southeast Hydrogen Hub to accelerate carbon reduction
- Partnered with Ontario Power Generation to develop advanced nuclear technology as an integral part of the clean energy future
- Received the 2022 Nuclear Energy Institute Top Innovative Practice Award for TVA's commitment to safety, cost-savings and industry leadership
- Launched the Fast Charge Network program with LPCs, TDEC and other state partners to ensure that electric vehicle drivers in the Tennessee Valley will never be more than 25 miles from a charging station
- Partnering with DOE. EPRI. national labs and others on initiatives to drive advancement of carbon capture, alternative fuels and advanced storage technologies



UN SDG **TVA Priority Issues TVA Aspirational Goals TVA Alignment FY 2022 Actions** Inclusion is a core value at TVA, and it continuously works Accelerate Impact of Inclusion with to integrate Inclusion with Diversity within its own Received multiple awards for TVA's focus on building an inclusive culture. Diversity within TVA and the workforce and in the communities it serves. TVA helps including DiversityInc's Top Companies for Utilities Award and the Urban Communities It Serves Diversity and REDUCED reduce economic inequality through initiatives such as its League of Greater Chattanooga's Inclusion by Design Award 10 REDUCED INEQUALITIES Enhance Supplier Diversity Program Inclusion Supplier Diversity program, which ensures small, local Spent \$518 million with diverse businesses, \$1.1 billion with small Support for Women-Owned, Minority-Supplier Partners and diverse companies have equitable opportunities to businesses, and \$2 billion with Valley businesses Owned and Veteran-Owned compete for TVA contracts. TVA is also creating more Board and 2022 Military Friendly Supplier Diversity Program Award – Ranked No. 1; Businesses structure around its Environmental Justice work to **Executive Diversity** Top 10 three years in a row Maintain "Top 10" Ranking for address disproportionate health, environmental, economic • Created a multidisciplinary Environmental Justice core team and a broader Environmental Military- Friendly® Supplier Diversity and climate impacts on disadvantaged communities. In Environmental Justice Regulatory and Policy Team for enterprise-wide Justice Program alignment with federal guidance, TVA has taken steps to perspective and coordination Prioritize Social and Environmental identify and address potential barriers to accessibility in Published a DEIA Report that includes many workforce metric highlights Justice for Impacted Communities these and other programs to ensure equal opportunity. TVA is part of every community it serves, and it invests in Strengthen Partnerships and Established 13 Connected Communities <u>pilot projects</u> leveraging tech and communities to make the future better. Together with its • Community Vitality Volunteer in Communities as Part of data-driven solutions, from addressing technological disparity in Columbus, partners, TVA is building resilient, Connected and Engagement SUSTAINABLE CITIES TVA's Mission of Service Mississippi, to driving equitable STEM education in East Tennessee **Communities** through programs that power equitable Local Power AND COMMUNITIES Prioritize Social and Environmental • Founding member of the Tennessee RiverLine partnership, which aims to economic development, provide support in the wake of Company connect communities along the 652 miles of the Tennessee River for a Justice for Impacted Communities disasters, and drive thriving ecotourism and recreation **Partnerships** Maintain "Best in the Nation" Status projected economic impact of \$104 million annually along waterways. TVA understands the significant Provided customers a total of \$449 million through Pandemic Relief Credits Reliability and on Flood Management and 99.999% benefits green and public spaces provide for human Resiliency Transmission Reliability in FY 2021 and Pandemic Recovery Credits in FY 2022



TVA believes in walking the walk of sustainability, starting with its own facilities. That's why it maintains a nationally recognized Internal Energy Management Program to make sure it is identifying, funding and implementing energy and water conservation projects in TVA buildings. TVA is committed to sustainability and continuous improvement, proactive stewardship in managing natural resources and its environmental footprint, and maintaining • Waste Management compliance with all applicable environmental and legal requirements. TVA expects its suppliers to share this commitment to responsible production, as detailed in the Supplier Code of Conduct.

health and community well-being, and ongoing

293,000 acres of public land TVA holds in trust.

environmental education and outreach initiatives help

make sure everyone has the opportunity to enjoy the

Energy Innovations

Cultural Resource

Management

- Air Quality
- Water Quality and Availability
- Supplier Partners
- Continue to Improve Integrated Environmental Footprint (Air, Water, Waste, Land, Biodiversity)

Continue to Support \$12 Billion in

Public Lands and Waters

Sustainable Recreational Activities on

- Achieve 100% Sedan and SUV Electric Fleet by 2030
- Execute Strategy to Develop the Clean Energy System of the Future (with path to ~80% carbon reduction by 2035 and aspiration of net-zero by 2050)
- Recognized by the Federal Energy Management Program as the top-ranked federal agency in the country for reductions of building energy use intensity against a 2003 baseline

Continued to protect approximately 12,500 archaeological sites on TVA-

Sponsored 449 outreach and stewardship projects across the region

managed land

- The TVA vehicle fleet now has 78 Plug-in Electric Vehicles; TVA plans to purchase more than 1,100 EVs by FY 2030
- Reduced emissions of NO_x by 97% and SO₂ by 99% from historic peaks in 1995 and 1977, respectively
- Recycled 82% of coal combustion residuals (CCR) produced
- \$25.4 million spent on purchase order lines compliant with federal sustainable procurement goals in FY 2022



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TVA's aspiration is to achieve <u>net-zero carbon emissions</u> by 2050 and support broader national efforts to create a clean energy economy. As severe weather events like storms, droughts and floods become more frequent and extreme, TVA's climate change adaption planning allows it to operate in a secure, effective and efficient manner in a changing climate. In the aftermath of natural disasters, TVA rallies to help impacted communities – by restoring power and by joining community members to distribute food and water, clean up and rebuild.

- Climate Change and Resilience
- Flood and Drought Management
- Reliability and Resiliency
- Systemic Risk Management
- Enhance Climate Adaption Planning to Improve Overall Resiliency for the Region
- Reduce Carbon Emissions by Approximately 80% by 2035
- Aspire to Net-Zero Carbon Energy by 2050 While Maintaining Low Costs and Reliability
- Maintain "Best in the Nation" Status on Flood Management and 99.999% Transmission Reliability

- Hosted the Tennessee Valley Regional Resiliency Summit, providing a platform for key stakeholders to share perspectives and collaborate on the future of resiliency
- Continued partnership to implement the Sentinel Monitoring and Aquatic Ecology Management programs to improve understanding and drive action to mitigate climate impacts on aquatic resources
- Began the Valley Pathways Study in 2023, a project in partnership with the University of Tennessee's Baker Center that will look at all sectors of the economy to accelerate the region's clean energy future
- Issued a request for proposal for up to 5,000 megawatts of carbon-free energy that must be operational before 2029, which is one of the largest clean energy procurement requests in the nation
- Prevented an estimated \$3 million in flood damage along the Tennessee River in 2022, with \$9.7 billion avoided in the Valley and along the Ohio and Mississippi rivers in TVA's recorded history



As stewards of a region with some of the highest aquatic biodiversity in the world, TVA is committed to sustainable • Water Quality and management of the Tennessee River and the fisheries it provides. TVA biologists conduct annual sampling in streams and reservoirs across the watershed and work with its partners to protect and expand populations of threatened aquatic species. TVA monitors and adjusts river flow to maintain healthy conditions for aquatic life and human needs, ensuring future generations can enjoy the same world-class aquatic resources the Tennessee River provides today.

- Availability
- Habitat and **Biodiversity** Protection
- Reservoir and Stewardship Benefits
- Continue to Protect the Tennessee River System's Natural Habitats and Biodiversity
- Continue to Support \$12 Billion in Sustainable Recreational Activities on Public Lands and Waters
- Continue to Improve Integrated Environmental Footprint (Air, Water, Waste, Land, Biodiversity)
- Partnered with Conservation Fisheries to help propagate and reintroduce at-risk fish species like the sickle darter and boulder darter in streams to reestablish viable populations for the future
- Provided funding to numerous partners in the Little Tennessee Native Fish Conservation Partnership to help projects including riparian buffer establishment, mussel releases, and aquatic life assessments
- The Tennessee River's world-class fisheries helped draw 160,000 people to the 2023 Bassmaster Classic held on Fort Loudoun and Tellico lakes
- Reached a total of 45 marinas certified as Tennessee Valley Clean Marinas to recognize efforts to protect water quality



The TVA service area is home to a vast array of plant and animal species, some of which occur nowhere else on the planet. Environmental stewardship is part of the mission with which TVA was charged in 1933, and the enterprise continues to recognize the importance of biodiversity to the quality of life of the region's residents. TVA works to proactively protect biodiversity through stewardship of public lands, management of the Tennessee River system, local and regional partnerships, and the integration of species and habitat conservation into project planning.

- Reservoir and Stewardship Benefits
- Air Quality
- Water Quality and Availability
- Waste Management
- Habitat and Biodiversity Protection

- Continue to Improve Integrated Environmental Footprint (Air, Water, Waste, Land, Biodiversity)
- Continue to Protect the Tennessee River System's Natural Habitats and Biodiversity
- Continue to Support \$12 Billion in Sustainable Recreational Activities on Public Lands and Waters
- Partner with Communities and Conservation Partners to Plant 1 Million Trees

- Implemented the <u>TVA Biodiversity Policy</u>, supporting biodiversity investments in TVA projects and community support partnerships
- Supported pollinators like bees and butterflies through integrated vegetation management on TVA rights-of-way and establishing native plant gardens at TVA sites
- Removed 166 tons of litter from land and water in cleanup events involving almost 5,000 volunteers
- Planted more than 3,000 feet of streambank vegetation to reduce erosion, protect water quality and support aquatic biodiversity
- Engaged with 3,800 children through outreach and environmental education programs



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TVA is foremost a public power company, and it serves the public interest. Earning and maintaining stakeholders' trust is integral to fulfilling TVA's mission of service, and it has been since 1933. TVA's first Code of Ethics, written and distributed less than 60 days after its establishment, stated: "The affairs of the Tennessee Valley Authority shall be conducted in all respects with honesty and openness." Today, TVA remains committed to transparency and accountability. We expect every employee, contractor and supplier to embrace and uphold our core values of Integrity, Safety, Inclusion and Service.

- Ethics
- Transparency
- Investor Relations
- Supplier Partners
- Local Power Company **Partnerships**
- Prioritize Social and Environmental Justice for Impacted Communities
- Create a Talent-Focused **Organization That Delivers** Performance and Service
- Enhance Safety and Well-Being of TVA Employees and the People of the Valley
- First federal agency in the nation to earn the Compliance Leader Verification[™] designation from Ethisphere®
- Refreshed and reaffirmed the TVA Employee Code of Conduct, Executive Code of Conduct and Supplier Code of Conduct; and the TVA Board of Directors adopted a Board Code of Conduct
- Achieved the highest score on the Voice of the Customer Survey recorded in the survey's history, reflecting TVA's strong customer partnerships
- Offered numerous opportunities for public input, including through public listening sessions before every Board meeting, through meetings with two independent stakeholder advisory councils, and during the National Environmental Policy Act review process for every major TVA action



At TVA, partnerships are everything — with local power companies, directly served customers, industry partners, governments, communities and schools. We are stronger together. TVA continues to work to establish and strengthen partnerships that enable the development of tools, processes, projects and understanding to drive a sustainable future in the Tennessee Valley region and beyond.

- Local Power Company **Partnerships**
- **Supplier Partners**
- Community Vitality and Engagement
- Strengthen Partnerships with Local Power Companies and Direct-Served Customers
- Partnered with 153 local power companies to supply electricity to approximately 10 million people across seven Southeastern states and 58 directly served customers
- Implemented TVA's regional model to strengthen partnerships with local organizations and better align priorities and resources to meet communities' needs
- Continued to work with numerous partners on research and innovation initiatives to drive economy-wide carbon reduction, from electric vehicle deployment to small modular nuclear reactor development



Read the full Sustainability Report at tva.com/sustainabilityreport

