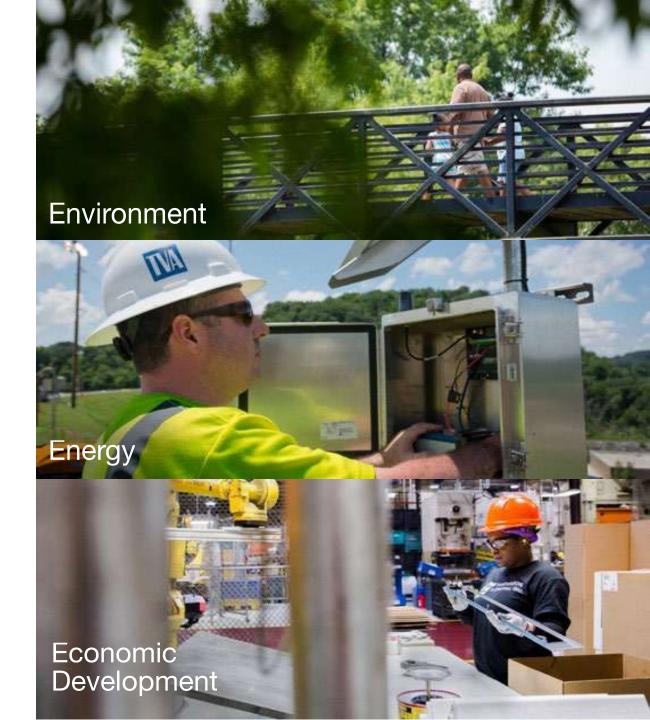


Mission of Service

Serving the People of the Valley to Make Life Better



Power is really a secondary matter.

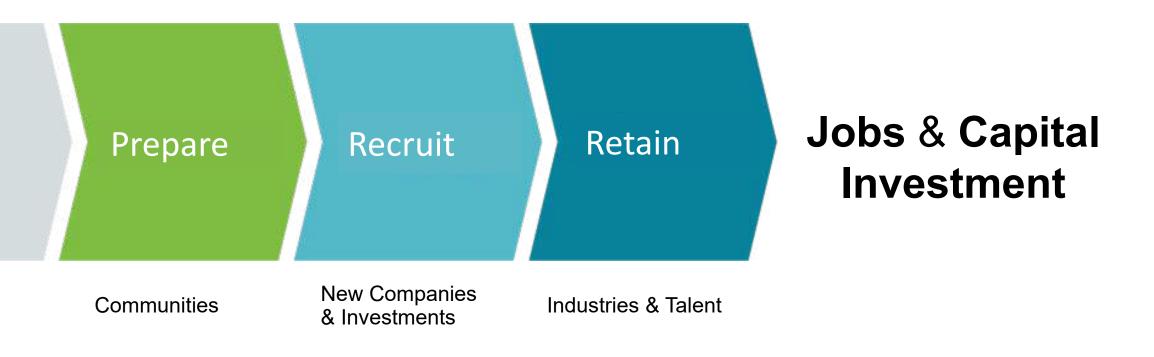
TVA is primarily intended to change and to improve the standards of living of the people of that Valley.

President Franklin D. Roosevelt

TVA Economic Development What we do



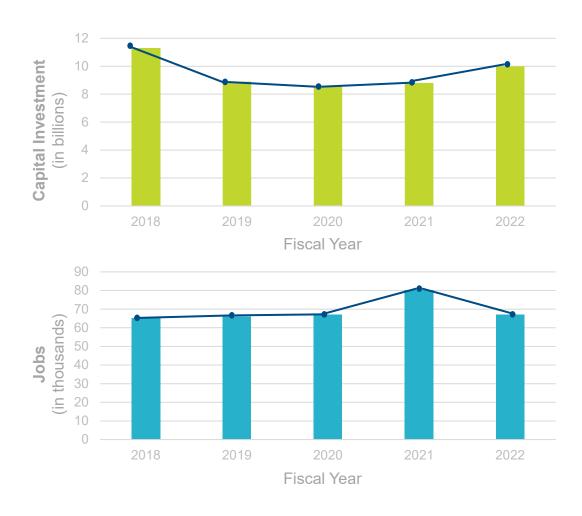
Strategies





Performance & Trends: FY18 – FY22

1,133 Projects announced	Non-Urban 680 60%	Urban 453 40%
\$44 Billion capital investment	\$22B 50%	\$22B 50%
340,000 Jobs created & retained	179K 53%	159K 47%



Departments

Product Development

Tech Services

Research

Incentives

Training & Development

Target Market Specialist

Marketing & Communications



Target Industry Sectors



Aerospace & Defense



Consumer Products



Advanced Manufacturing



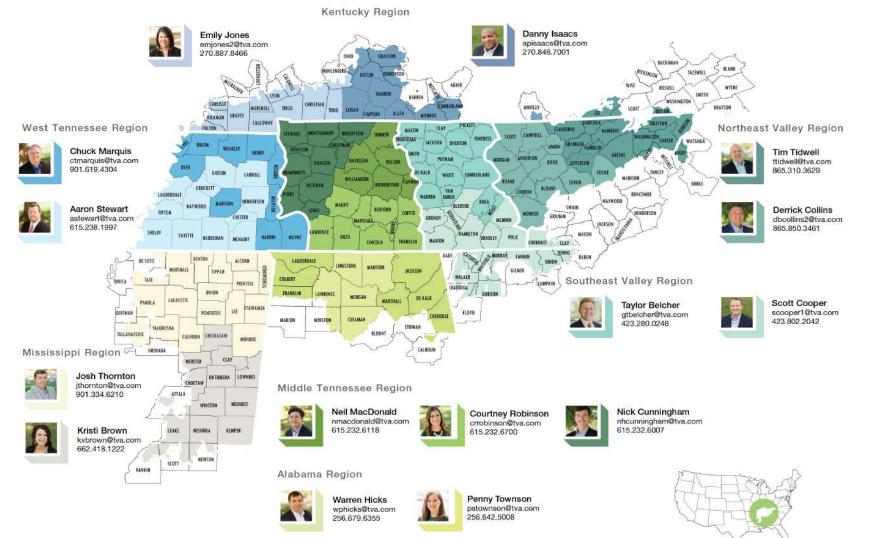
Industrial Products



Transportation
Related Manufacturing



Regional Development Specialists





Product Development

InvestPrep

Clear market-driven need

Matching financial participation

High potential for ROI

Megasites

Toyota | Blue Springs, MS PACCAR | Columbus, MS

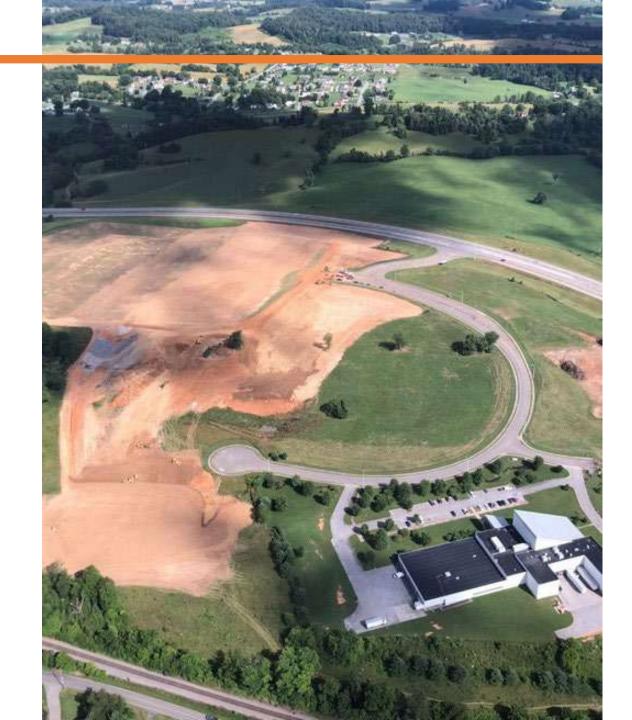
Steel Dynamics | Columbus, MS

Google | Clarksville, TN

Mazda – Toyota | Huntsville, AL

Volkswagen | Chattanooga, TN

InvestReady



Marketing & Communications

Support recruitment efforts

Internal and external communications

Community assistance

TVAsites.com

Relationship Marketing

Brand Management



Valley Incentive Programs





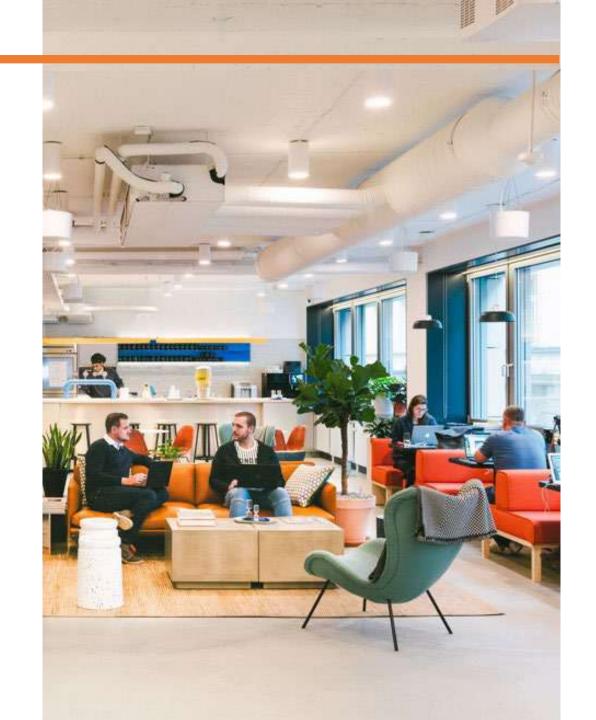




Grants

Telework Grant

TVA ED is now offering the TVA Telework Technology Grant. This grant is available to economic development organizations in TVA designated SOC (Special Opportunity County) communities to enhance their technology capabilities specific to remote work requirements.



Rural Development

Partners in Progress

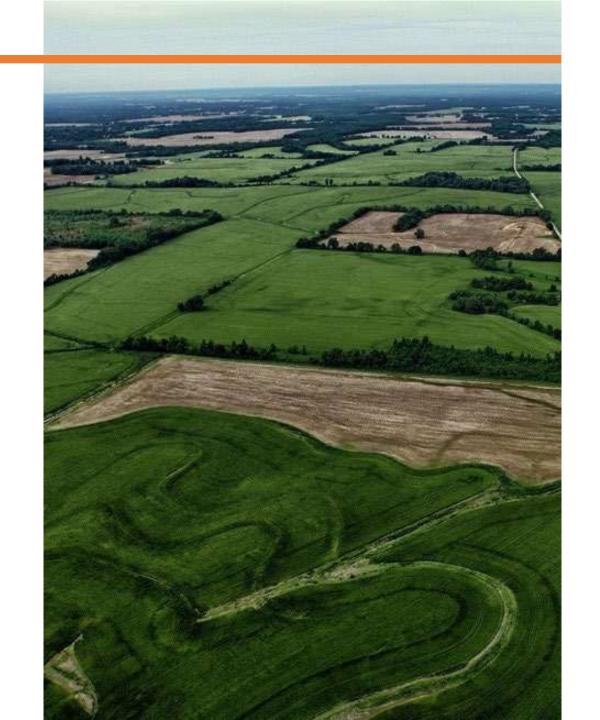
Special opportunity counties

Tennessee Valley Rural Leadership Institute

Rural economic development cabinet

Plant closure assistance

Leveraging resources



Training & Development

Quality of Place

Preparing for the prospect

Customized training & facilitation services

Proposal development

Program of work assistance

Leadership training

Young talent development

Valley sustainable communities



Research

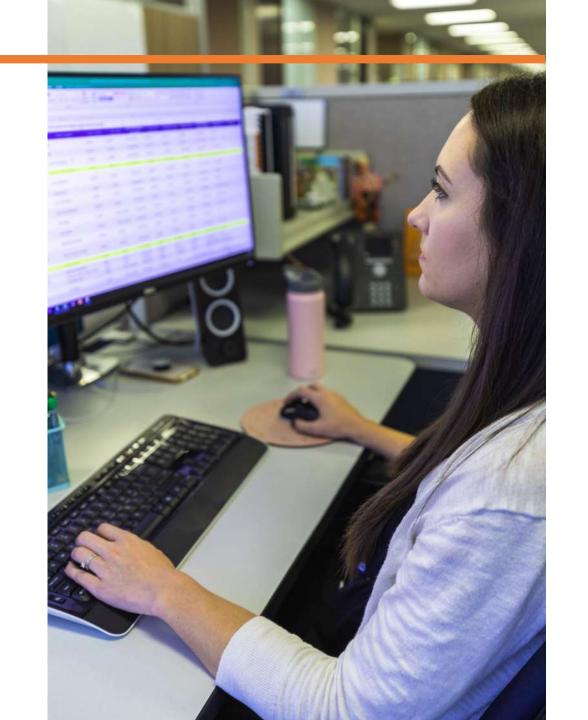
Leveraging Resources

Public and subscription sources/databases

Summaries, maps and detailed data

Data analysis on the strengths of the site and region

Custom research



Serve: Teamwork with Partners

Local Power Companies

Regional Partners

Federal Partners

State Agencies

Local Economic
Development Organizations



Q&A



TVA in Context: America's Largest Public Power Provider

Among the largest utilities in the U.S.

89 years in business

10 million service area population

37,900 MW diverse power system

3rd largest nuclear owner in the U.S.

16,400 mile transmission system

\$11 billion annual revenues

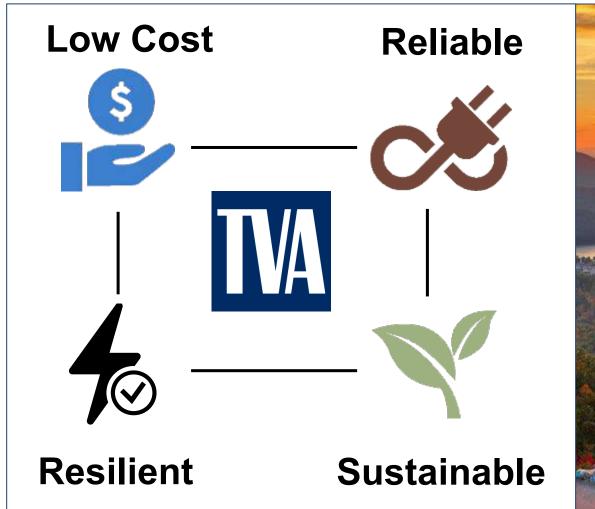
\$53 billion total assets

Entirely self-funded





TVA - Dimensions of Value







TVA's Primary Historic Sources of Funding

1. Revenues – from power sales and other sources



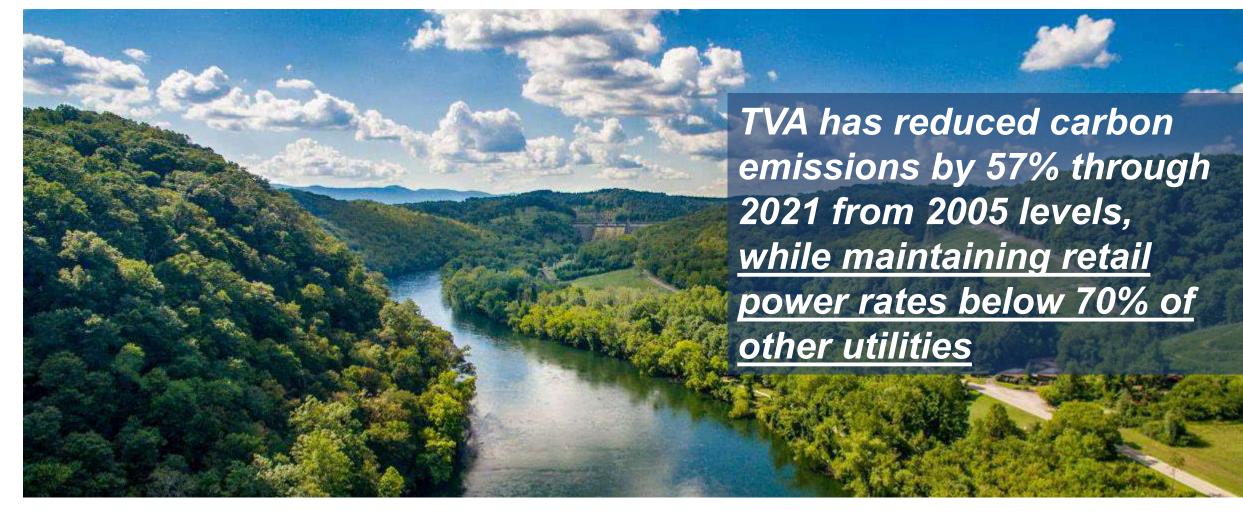
2. Financing – funding from debt and other obligations



3. U.S. Government <u>Appropriations</u> – none since 1999



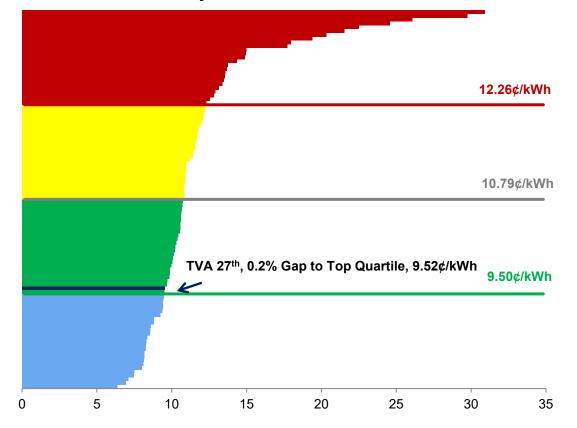
Laying the Foundation for the Clean Energy Economy



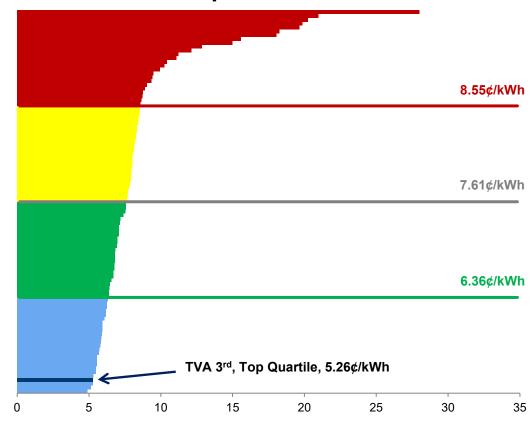


Retail Rate Competitiveness

Average Retail Rate (¢/kWh) Top 100 U.S. Utilities



Average Industrial Rate (¢/kWh) Top 100 U.S. Utilities





TVA's Agency Status

Legal Status: Wholly-Owned Government Corporation (U.S. Code)

Not a "Government Sponsored Enterprise"

U.S. government sole equity holder

TVA holds real property as an agent of the U.S.

Governance - All board members appointed by U.S. President

TVA debt comprises the majority of U.S. federal agency debt

TVA debt not guaranteed by the U.S. (per TVA Act)

TVA debt not counted against U.S. Treasury debt limit





Key Credit Rating Support Factors

- Wholly-Owned by U.S. government
- TVA Board sole power rate-setting authority
- Service area protections

TVA's Credit Ratings

- > Aaa/AAA/AA+ (Moody's, Fitch, S&P)
- > Highest ratings of any U.S. power utility







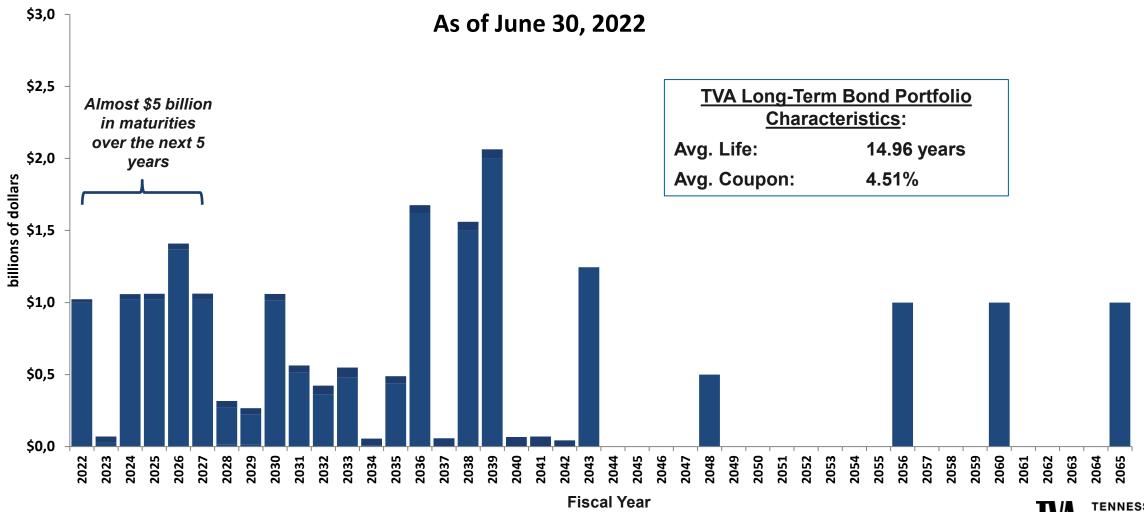


Financing Program Key Facts

- Power system self-financing since 1959
- TVA Board has sole authority to set power rates
- Power revenues must cover debt service (requirement of TVA Act)
- U.S. government sole equity holder
- Bonds and notes subject to \$30 billion limit (set in TVA Act)
- Maximum bond maturities of 50 years (set in TVA Act)
- Selective use of alternative financing
- TVA debt comprises the majority of U.S. federal agency debt
- TVA debt not guaranteed by the U.S. (per TVA Act)
- TVA debt not counted against U.S. Treasury debt limit



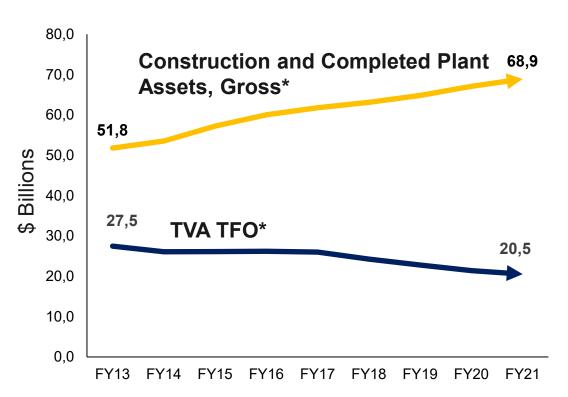
Debt Maturities Profile

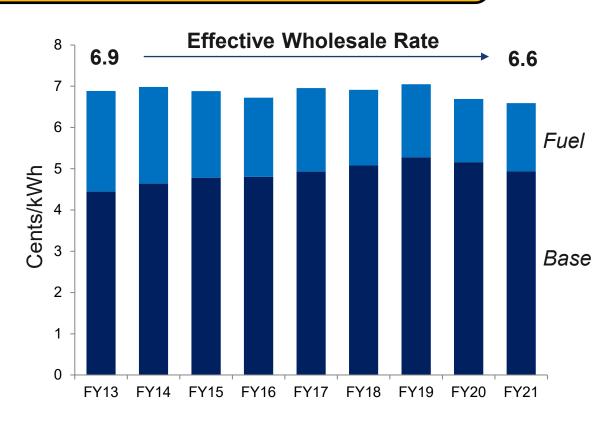




Positive Financial Health Trends

TVA has invested over \$17 billion in its asset base, while reducing debt by \$7 billion, and maintaining flat effective rates.







^{*} See Appendix – Regulation G Reconciliation



"Safe Harbor" Statement

This document contains forward-looking statements relating to future events and future performance. All statements other than those that are purely historical may be forward-looking statements. In certain cases, forward-looking statements can be identified by the use of words such as "may," "will," "should," "expect," "anticipate," "believe," "intend," "project," "plan," "predict," "assume," "forecast," "estimate," "objective," "possible," "probably," "likely," "potential," "speculate," or other similar expressions. Although TVA believes that the assumptions underlying the forwardlooking statements are reasonable, TVA does not guarantee the accuracy of these statements. Numerous factors could cause actual results to differ materially from those in the forward-looking statements. For a discussion of these factors, please see the annual, quarterly, and periodic reports that TVA files with the Securities and Exchange Commission. New factors emerge from time to time, and it is not possible for management to predict all such factors or to assess the extent to which any factor or combination of factors may impact TVA's business or cause results to differ materially from those contained in any forward-looking statement. TVA undertakes no obligation to update any forward-looking statement to reflect developments that occur after the statement is made.



Appendix – Regulation G Reconciliation

September 30, 2021			September 30, 2020	
Total Outstanding Debt	\$	20,314	\$	20,889
Exchange Gain - Current Exchange Gain - LT Unamortized Discounts, Premiums, Issue Costs and Other Notes Payable Debt of Variable Interest Entities		- 58 122 - (1,056)		73 80 131 - (1,098)
Bonds and Notes, Gross	\$	19,438	\$	20,075
Energy Prepayment Obligations Notes Payable Leaseback Obligations Membership Interests of Variable Interest Entity Subject to Mandatory Redemption Debt of Variable Interest Entities		- 25 24 1,056		- 223 25 1,098
Total Debt and Other Financing Obligations, Gross ("TFO")	\$	20,543	\$	21,421

Construction and Completed Plant Assets, Gross = Completed Plant + Construction in Progress

Interest Coverage Ratio: (Net Income + Interest Exp., net + Depreciation Exp.) / (Interest Exp., gross)

Debt to Asset Ratio: (Short-term debt, net + Current maturities of power bonds + Current maturities of long-term debt of variable interest entities + Total Long-term debt, net)/Total Assets

Financing Cost as a Percent of Revenue: Interest Expense / Total Operating Revenue

Note numbers may be adjusted for rounding

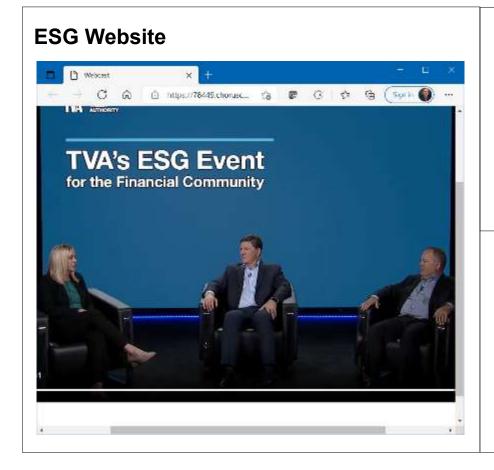


Quick Reference – Key Facts

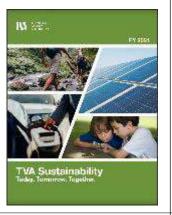
Mission	Governance & Oversight	Operations	Financial
 Three-Part Mission: Affordable Energy Environmental Stewardship Economic Development 10 Million Service Area Population 153 Local Power Companies Various Directly-Served Customers 	 U.S. Agency (not a GSE) "Wholly-Owned Government Corporation" under U.S. Code Holds Real Property as Agent of the United States 9-Member Board of Directors Board Sets Power Rates Board Members Appointed by U.S. President (Confirmed by U.S. Senate) CEO Oversees Daily Operations Oversight by Independent Inspector General Congressional Jurisdiction: U.S. Senate Environment & Public Works Committee U.S. House Transportation & Infrastructure Committee 	 Among the Largest Power Providers in the U.S. Power to Seven States 37,896 MW Power Capacity Over 16,000 Miles Transmission 80,000 Square Mile Service Area 99.999% Reliability 3rd Largest Nuclear Owner Approximately 10,000 Employees TN River System Managed by TVA for: Power, Navigation, Recreation, Flood Control 	 \$10.5 Billion Annual Revenue \$52.5 Billon Total Assets Profit-Neutral Self-Funded - No Federal Appropriations Power Bonds: Backed by Power Revenues \$30 Billion Limit (TVA Act) Max Maturity of 50 Years Power Revenues Must Cover Debt Service (TVA Act) High Credit Ratings - Same as U.S. Government: Aaa by Moody's AAA by Fitch AA+ by S&P Annual, Quarterly, Current Reports Filed with SEC Sarbanes-Oxley Compliant



Online Resources for the Financial Community



Sustainability Report



Sustainable Financing Framework



TVA EEI ESG Template Report

Strategic Intent & Guiding Principles



Link: TVA - Environmental, Social, & Governance Website (https://tva.q4ir.com/esg)



Q&A



Topics

Integrated Tennessee River System Overview

River Management Policy

Planning for Climate Change

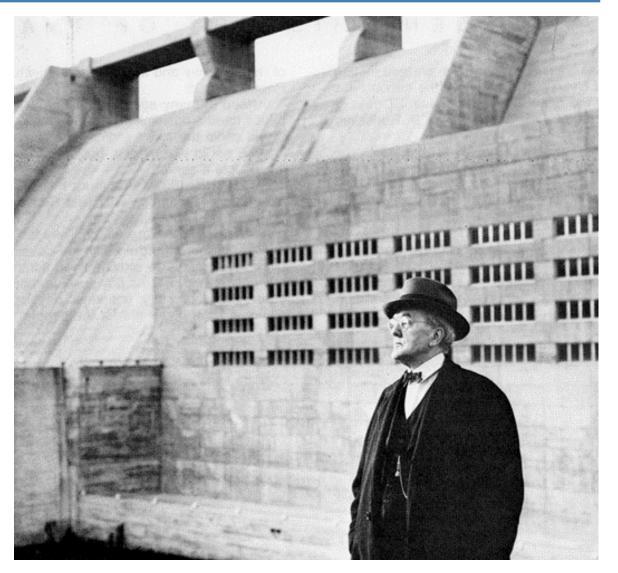
Summary



Integrated Resource Management

River system assigned multipurpose role through TVA Act in 1933.

(section 9a) ...to regulate the stream flow primarily for the purposes of promoting navigation and controlling floods. So far as may be consistent with such purposes, ...for the generation of electric energy...



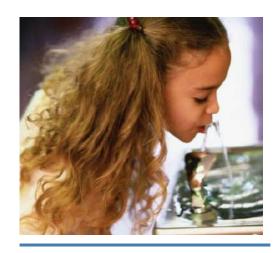
"Father of TVA," Senator George Norris



Integrated Tennessee River System Overview



Navigation



Water Supply



Flood Damage Reduction



Recreation

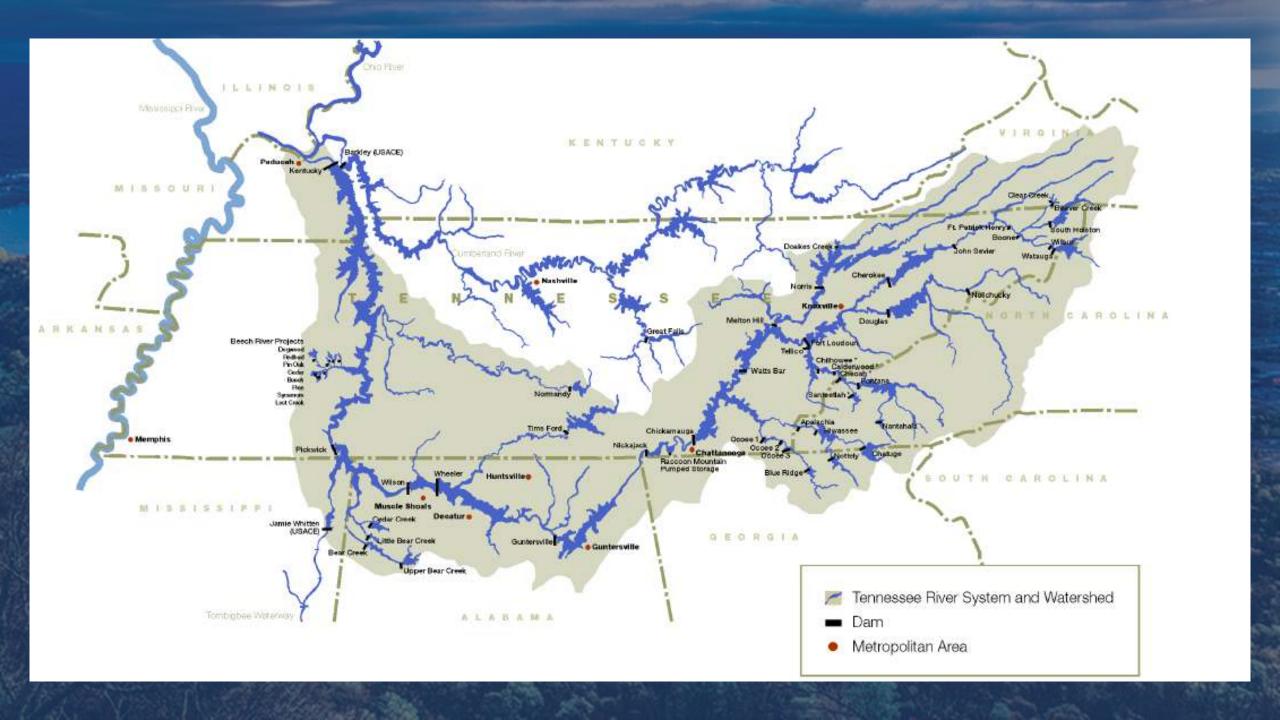


Power Generation



Water Quality





Reservoir Operating Policy





Reservoir Operations Study - 2004

- Included a Draft Programmatic Environmental Impact Statement (DEIS)
- Called on two stakeholder review groups
 - 17-member Interagency Team
 - 13-member Public Review Group
- Included TVA response to comments and development of a Preferred Alternative
- Developed Final Programmatic Environmental Impact Statement (FEIS)
- Presented for approval to TVA Board of Directors
- Filed Record of Decision in 2004



PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT



Tennessee Valley Authority Reservoir Operations Study



Record of Decision

May 2004





In cooperation with U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service.



Data Collection and Modeling



River Forecast Center

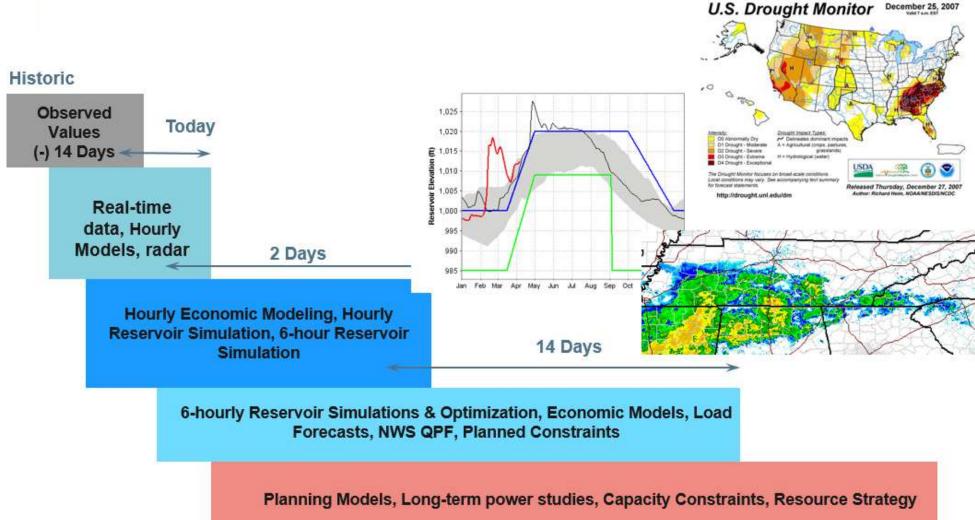
- Staffed 24/7/365
- Teams issue 2-4 forecasts per day
- Data validation, modeling and system monitoring
- Emergency Response

- Hydropower Scheduling
- Stakeholder Engagement
- Real-time response to weather





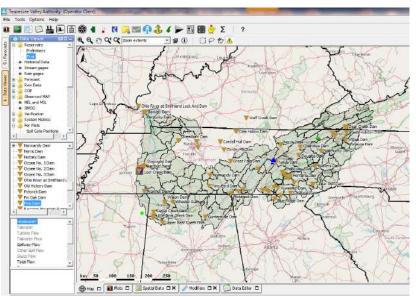
Decision Horizons and Tools



Flood Early Warning System (FEWS)

- Developed by Deltares Netherlands
- Used in over 40 countries
- Platform used by the National Weather Service (NWS)
- TVA leveraged partnerships with NWS and others to develop and customize FEWS for our own application over a 3-year development period







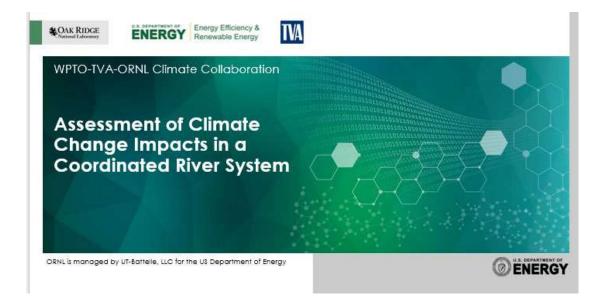
Planning for Climate Change





Planning for Climate Change

- TVA is in year 1 of a 3-year project to assess future climate change projections on our impact to meet key River Management benefits
 - Partnership between TVA, DOE Water Power Technologies Office (WPTO) and Oak Ridge National Lab (ORNL)
 - TVA goal will be to utilize information to better inform future operations
 - ORNL will utilize the project to further provide guidance to other national hydropower stakeholders





Timeline (FY2022 – FY2024)

Year 1 (FY2022)

- Development of detailed research plan (TVA and ORNL)
- Model / data collection and exchange (TVA and ORNL)
- Climate model selection and downscaling (ORNL)
- Execute TVA-specific assessment (TVA)

Year 2 (FY2023)

- Execute TVA-specific assessment on water quantity and quality control (TVA)
- Assess results and draft publication of climate change study (TVA and ORNL)

Year 3 (FY2024)

- Publish TVA-specific climate change assessment results (TVA).
- Publish general practices to support the broader hydropower community (ORNL).



Summary

- TVA continues to fulfill our River Management mission dating back to the TVA Act
- Operations are driven by rainfall and runoff as guided by Reservoir Operations Policy and the Policy has served the Valley well under hydrologic variability
- Integrated operation allows TVA to balance numerous river system benefits
- More information available:







Q&A

TENNESSEE VALLEY AUTHORITY