

# Energy Efficiency and Demand Response

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## **Delivering on Our Mission to You**

Energy | Environment | Economic Development



Provide affordable, reliable power.



Steward the Valley's natural resources.



Partner for economic growth.



# Partnering to Serve You & Your Community

Partnering with

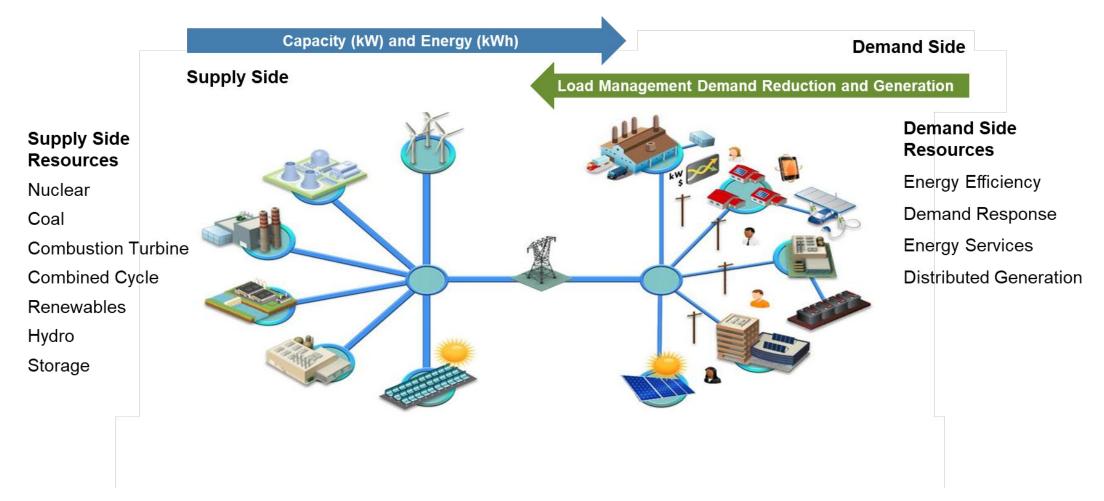
153 Local Power Companies

To serve

10 Million People700,000 Businesses in Parts of 7 States57 Large Industries & Federal Installations

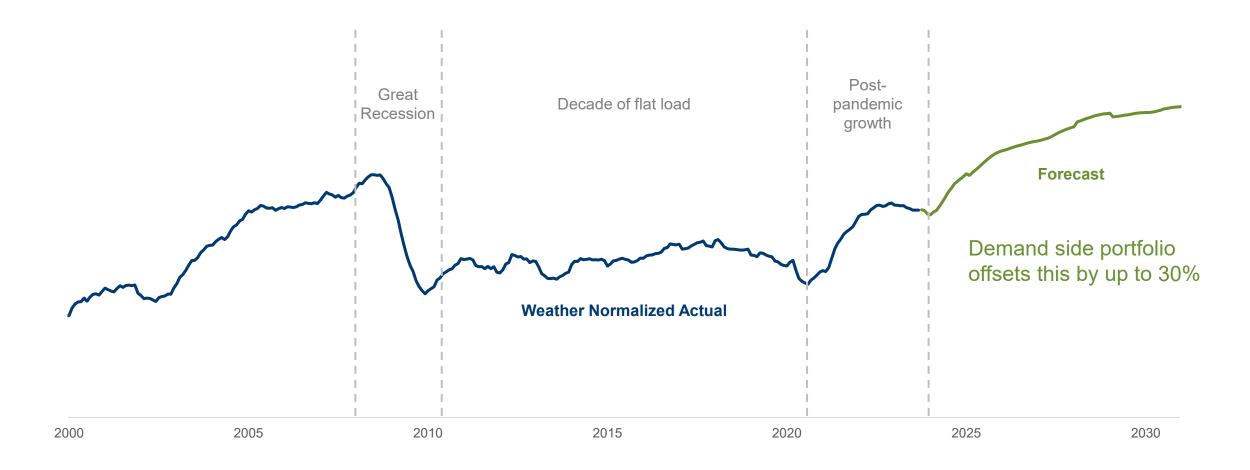


## TVA Operates in a Multidirectional Environment





## **TVA's Load Growth Forecast**





# **Demand-Side Management Objectives**



Develop and Maintain the Virtual Power Plant (VPP)

Balance system needs by lowering costs, shaping energy usage and improving TVA's capacity position



Optimize Community Energy Efficiency

Maintain impactful energy equity programs in the Valley



Promote Clean Energy Services
Provide programs and services to
meet consumer demand for clean
energy, EVs, and resiliency
offerings

#### **Impacts**

2,000 GWh of energy savings and 2,400 MW of demand reduction by 2028

\$200 million in energy expense savings for low-income communities by 2027

More than 10 million tons of CO2 reduced and 200,000 EVs on Valley roadways by 2028





### **Virtual Power Plant Benefits**

#### **Demand Response**

Zero emissions
Shapes load, lowers system costs
Increases reliability
Improves power quality
Facilitates low rates for consumers

#### **Energy Efficiency**

Positions LPCs and TVA as trusted energy advisors

Helps consumers manage energy costs

Improves quality of life

Helps Valley businesses remain competitive

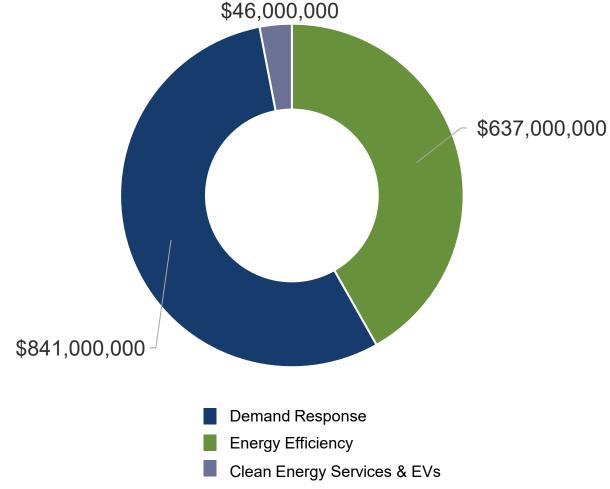


## FY24-28 Portfolio Investment & Impact

\$1.5 Billion invested in demand management

2,200 MW of carbon-free peak reduction capacity

2,200 GWh of annual energy savings





### Portfolio At-a-Glance

#### **Energy Efficiency**

#### Residential

- Home Energy Rebates & Financing
- New Homes Incentives for builders
- Home Energy Assessments & Evaluations
- Home Uplift
- Home Energy Workshops

#### Business & Industry

- Energy Efficiency Incentives
- Strategic Energy Management
- Federal Energy Services Program
- Industrial Energy Assessments
- School Uplift
- Small Business Uplift

#### **Demand Response**

- Interruptible Power
- Peak Power Partners
- Voltage Optimization
- Piloting Bring Your Own Thermostat in FY24

#### Clean Energy Services and Electric Vehicles

- Fast Charge Network
- EV consumer awareness
- Efficient Electrification Incentives



# If you've participated, what is your experience with TVA EnergyRight programs?

- Residential
- Business/Commercial
- Industrial



# For those who haven't participated, what barriers have you experienced?

Are there partnerships or information that would make these programs more accessible to you and your communities?

- Residential
- Business/Commercial
- Industrial



# Appendix



# **Program Descriptions**

Home Uplift	Provides an average of \$12,000 in free home energy upgrades to incomeeligible customers (e.g., new HVAC units, attic and wall insulation, appliances). Matched funding by LPC and other external partners.
Interruptible Power	Accounts for over 90% of TVA's Demand Response portfolio
	Interruptible Power 5 (IP5) and Interruptible Power 30 (IP30) help improve system reliability by providing a credit to participants to temporarily lower electricity use
	TVA is currently re-designing IP (IP 2.0) for facilities already in the region, with a contracted load greater than 1 MW and a 500 kW annual average onpeak interruptible demand. Existing IP5 and IP30 participants are encouraged to transition to this program. Participants will earn monthly demand credits up to \$9.47/ kW-month plus incentives and event-specific energy credits of \$100/MWh.
Small Business Uplift	Partnership between TVA EnergyRight and LPCs to provide LED lighting, HVAC replacement, and efficient refrigeration upgrades at no cost to businesses in underserved communities.



# **Engagement Opportunities**

#### **Demand Response Webinar**

April 10, 2024 | 1:00 CT

Businesses and industries in the Valley are invited to join TVA EnergyRight's Demand Response team for a webinar for a new program unveiling! This webinar is open to current demand response participants and those interested in learning more.

To register, please <u>click here</u>.

#### **Industrial Summit**

April 16, 2024 | 9:00 – 2:30 CT

Powering Progress Together: Solutions for a Sustainable Tomorrow, a 2024 TVA Industrial Summit.

This one-day event is taking place April 16, 9:00 – 2:30 CT at the Embassy Suites Nashville Cool Springs in Franklin, TN



Scan the QR code or visit EnergyRight.com/TVAIndustrialSummit to register today!



# TENNESSEE VALLEY AUTHORITY