Energy and Housing in the Modern World

TEPRI | March 2026

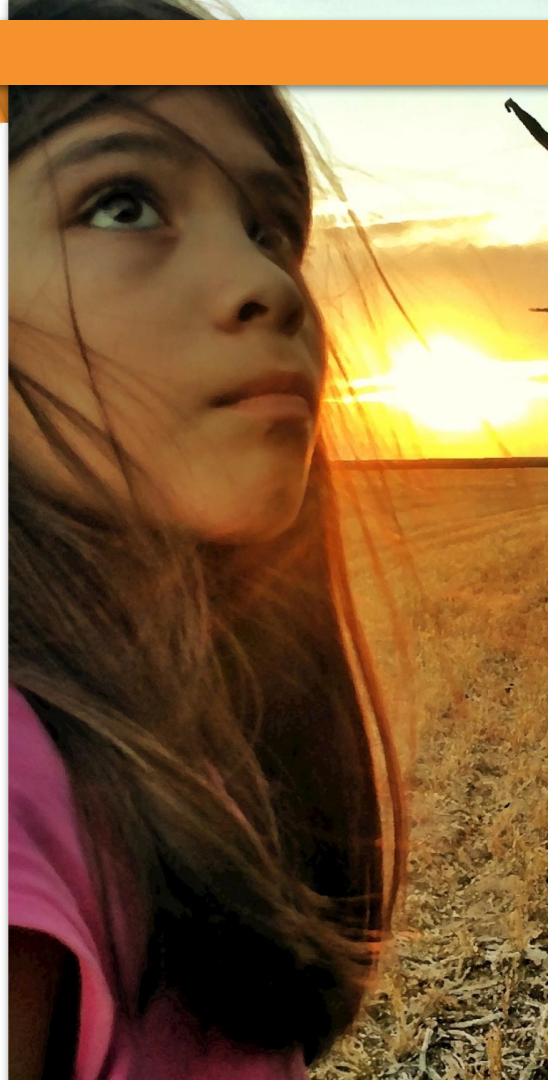
About TEPRI

TEPRI advances equitable solutions for affordable, reliable, and clean energy so all people are energy secure.

Conduct Research

Pilot Solutions

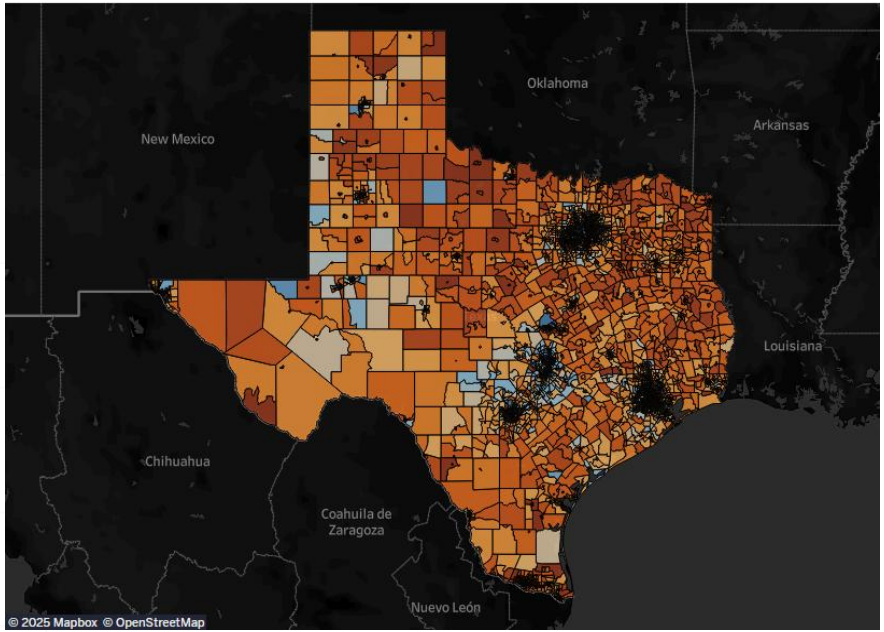
Support Community Partners



Why it Matters

The State of Texas

42%	TX Low/Moderate-Income Households
25%	TX Households - extremely to very low
7.8%	Average LMI energy burden in Texas
50%	of LMI Texans struggle to pay energy bills
80%	of household energy use = electricity



Energy Burden: 0.0% 15.0%

Sources: Texas Department of Housing and Community Affairs (2024), DOE LEAD & CDC SVI Metrics

Energy Burden

LMI Texans

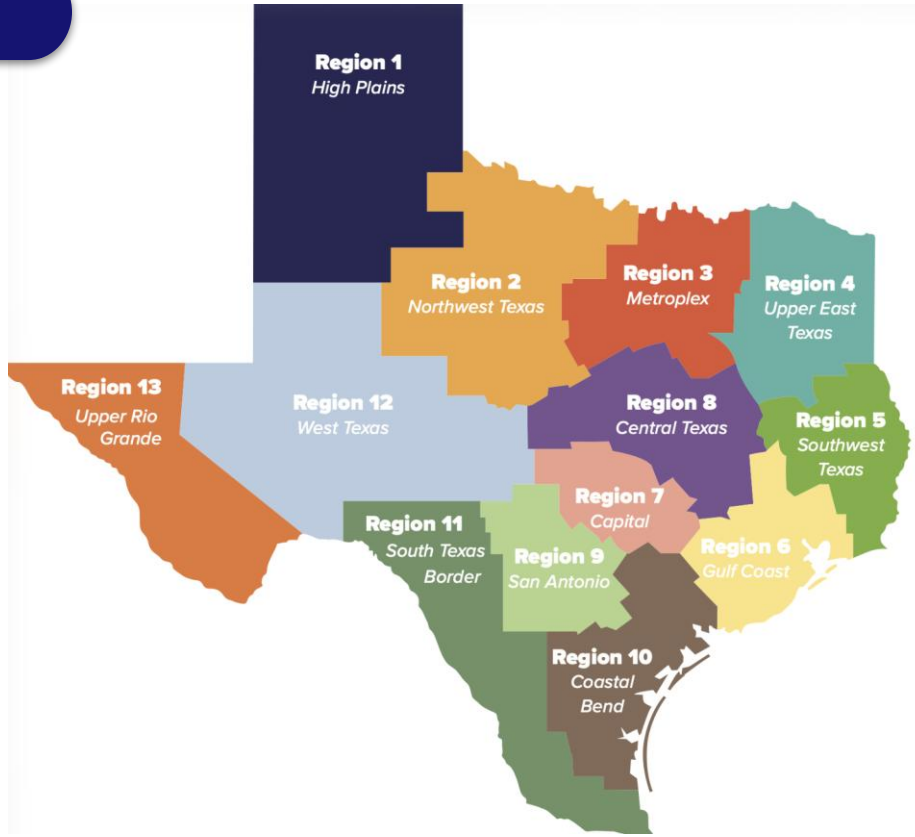
- are more likely to live in older, less efficient homes
- are more likely to rent
- are more vulnerable in a weather-related disaster
- have higher energy burdens

Jorge Sanchez home succumbed to 113 degree heat in his home in Laredo, TX. Credit: Jordan Vonderhaar for The New York Times

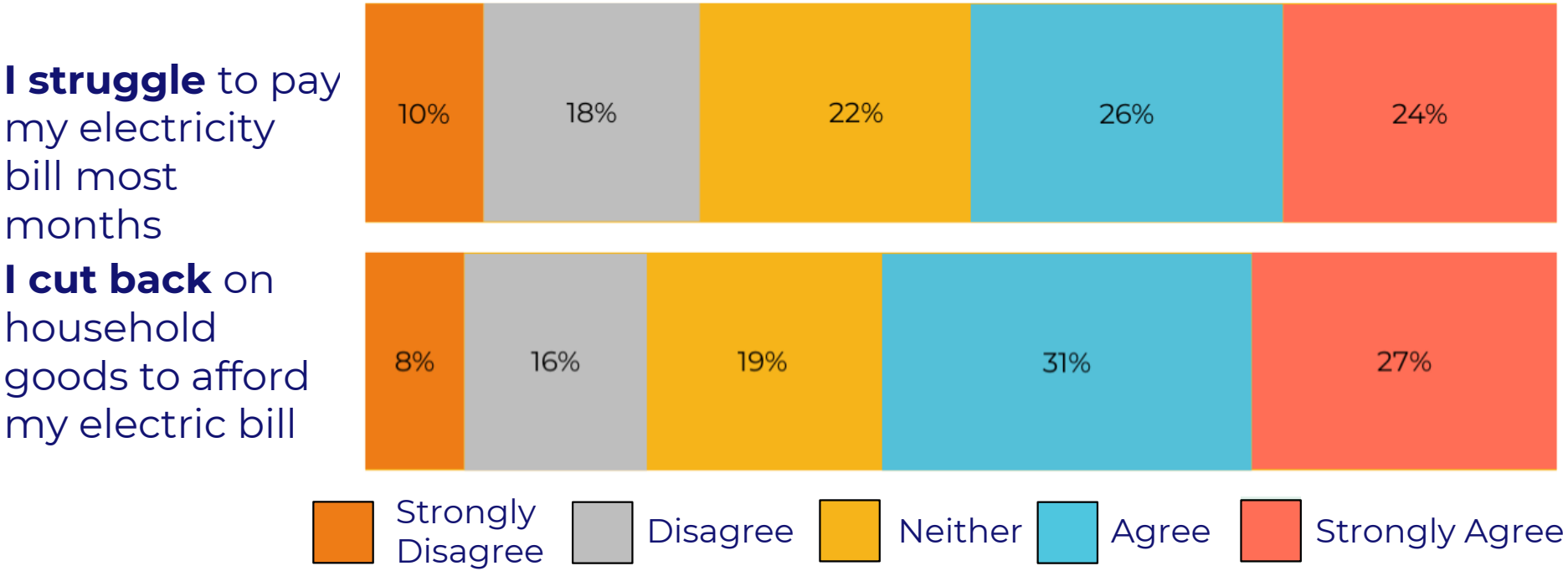
[1]Source: LMI data, https://www.huduser.gov/portal/datasets/il.html

Community Voices Survey

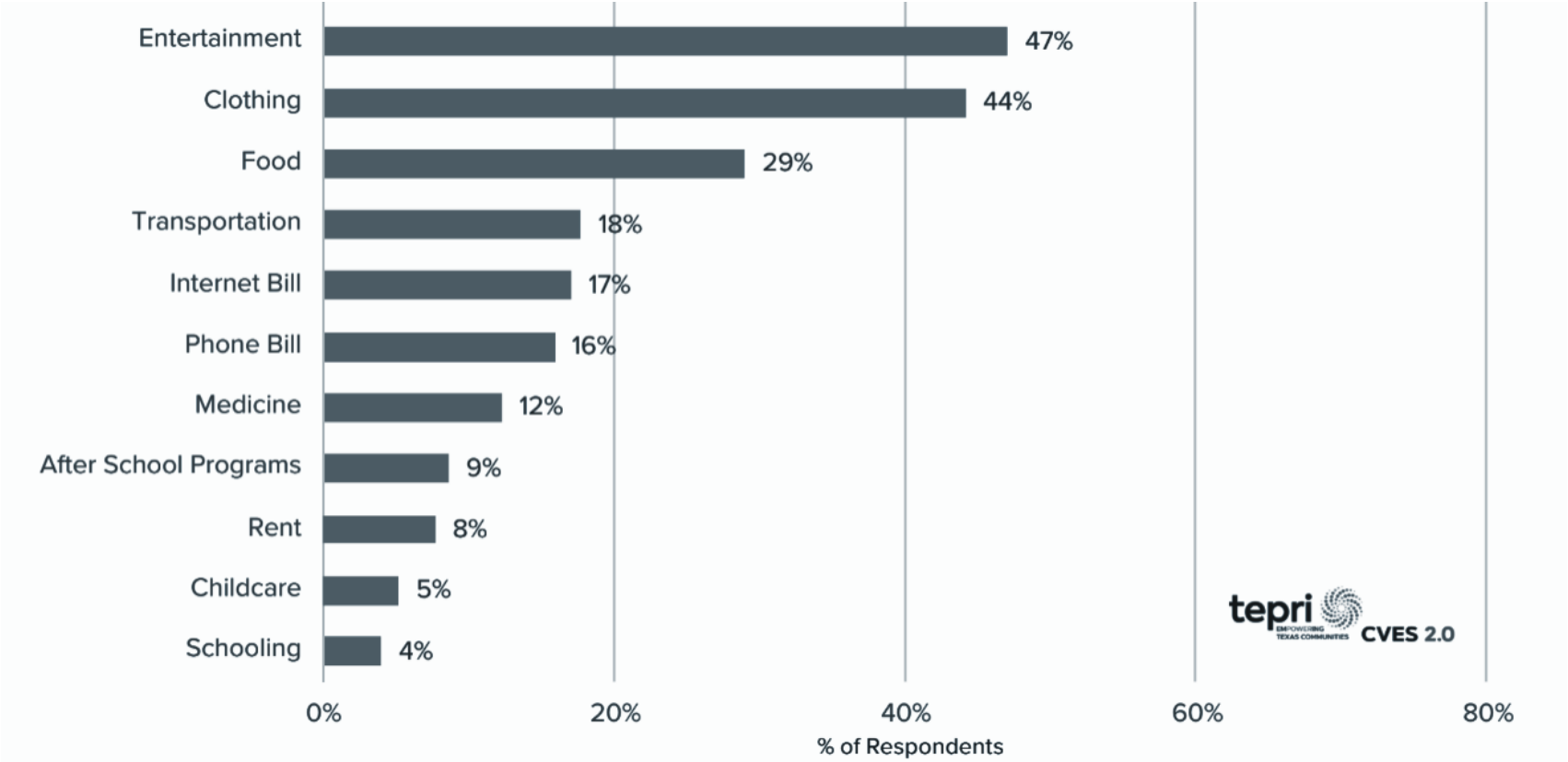
- 6,500 LMI Households
- Understand energy needs and challenges
- Use data to inform solutions
- Maintain a current, statewide dataset



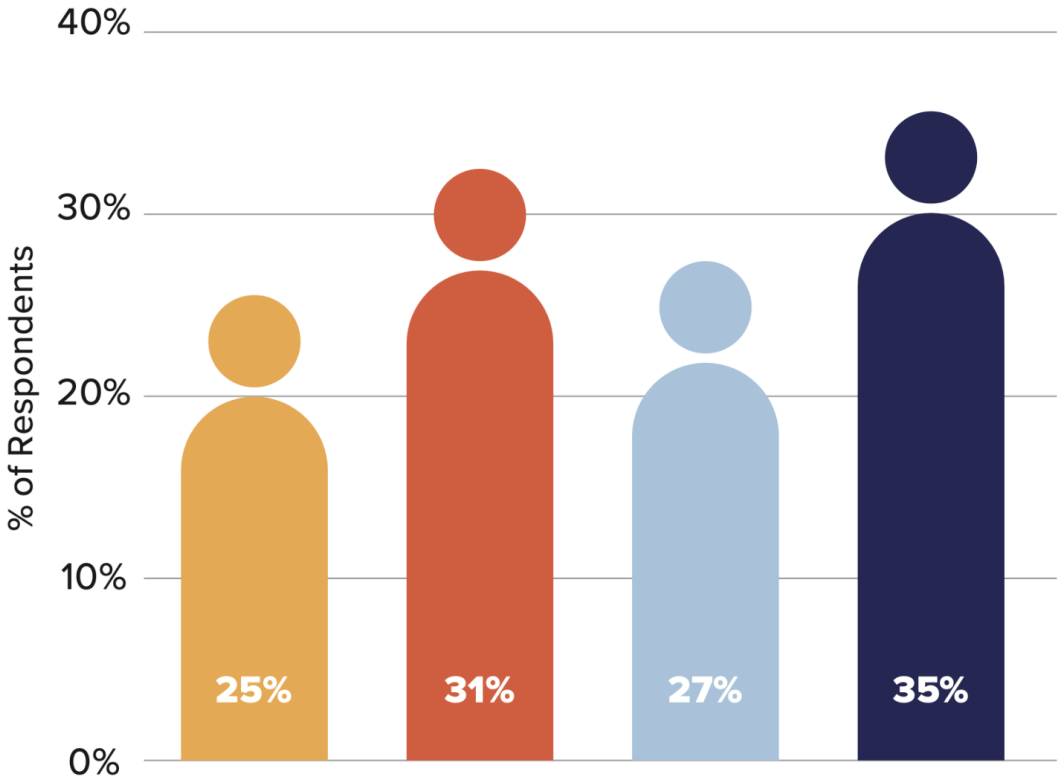
Financial Strain from Electricity Bills Drives Difficult Tradeoffs



Households' Needs Are Impacted To Afford Electricity

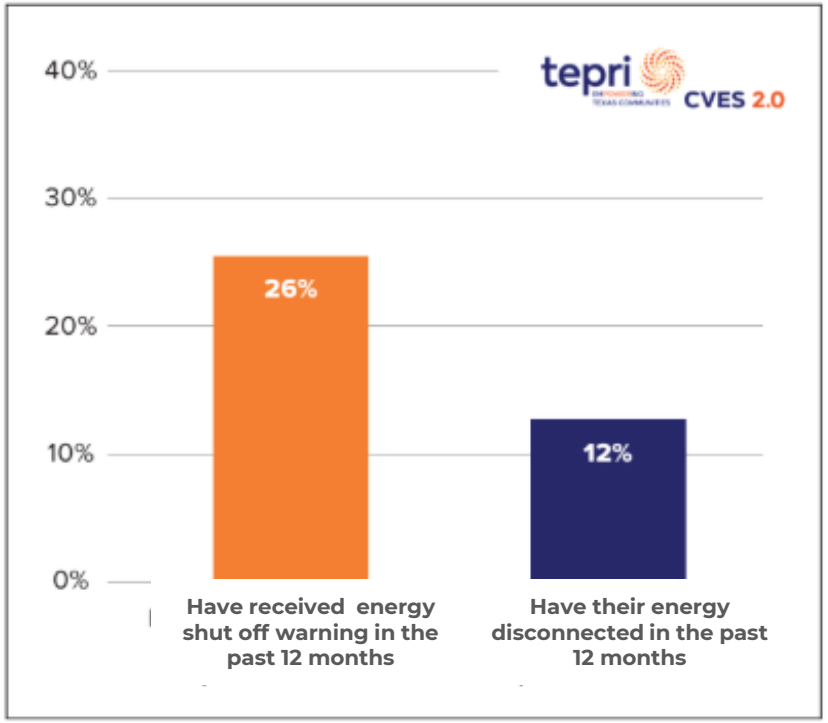


Respondents Reported Adjusting Thermostats to Save Money Statewide

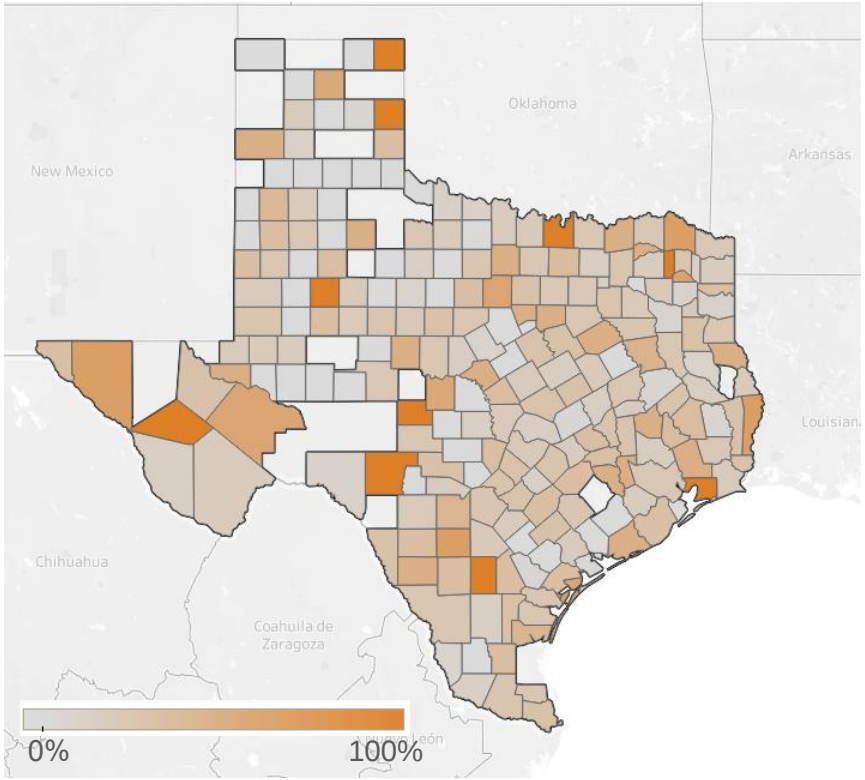


- Turn off heater in winter
- Lowered winter thermostat to save money
- Turn off cooling in summer
- Lowered summer thermostat to save money

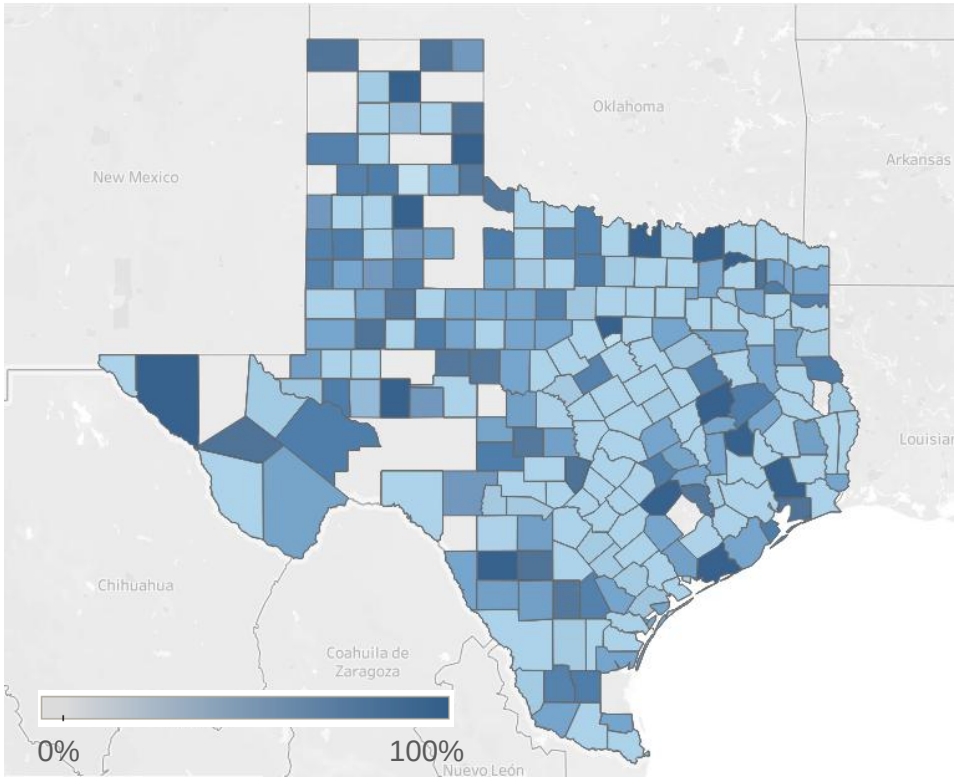
Respondents Reporting Receiving Utility Disconnections or Warnings



Turned Off Heater in Winter



Turn Off Cooling in Summer



Clean Energy

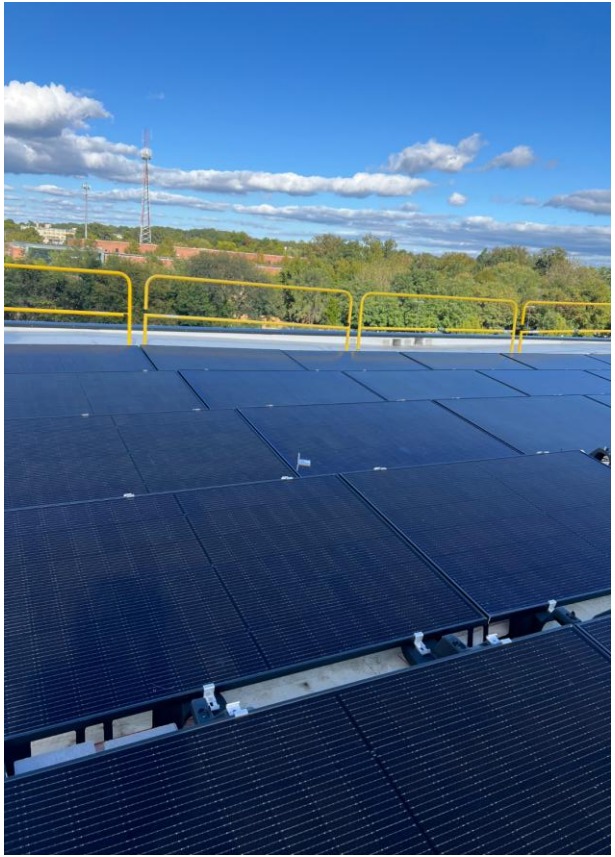
71%* want their electricity providers to use clean energy sources.

This includes

74% of renters

76% of those earning less than $13,000/year

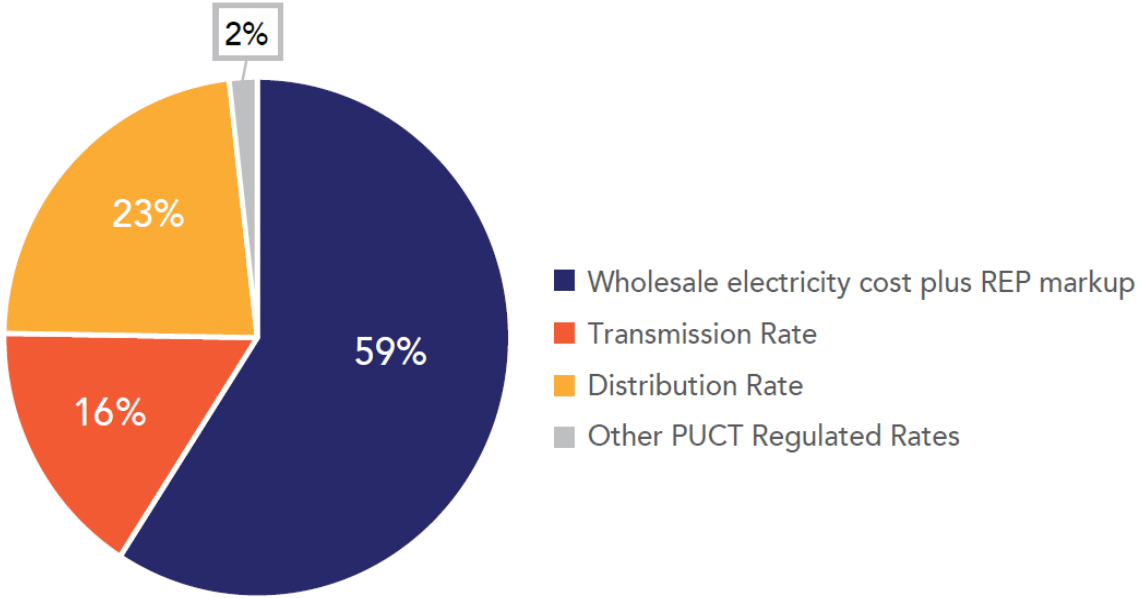
48% willing to pay more to support clean energy



Evaluate Electricity Affordability in Texas ERCOT Competitive Market

Residential Price Components

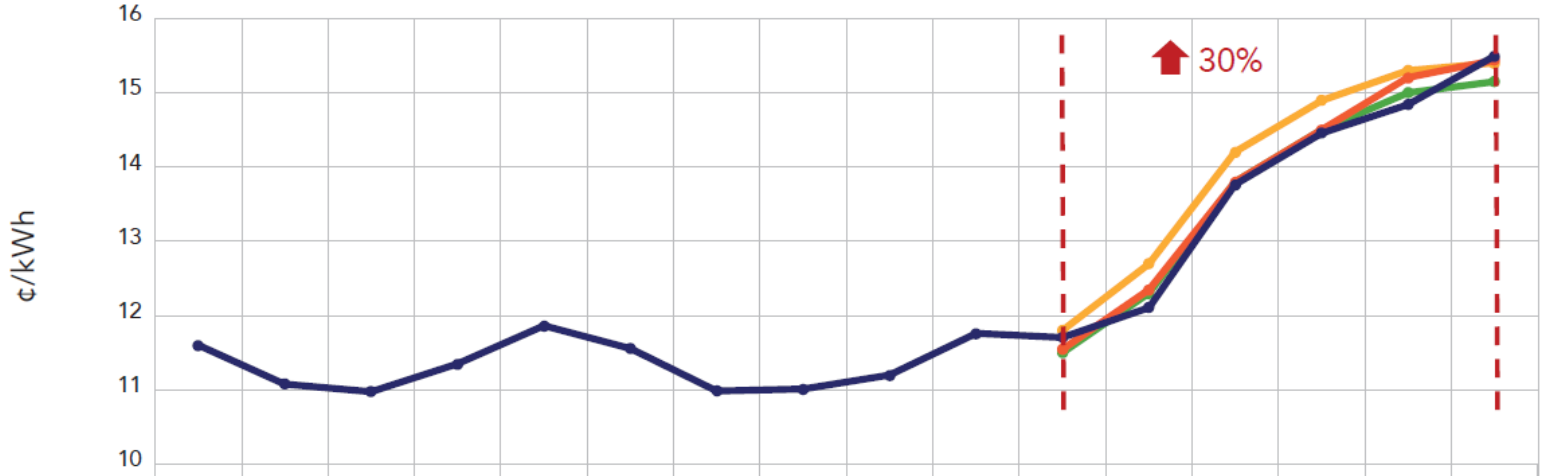
Since 2002, the transmission and distribution rate portion of residential bills has increased from 28% to 39%.[33]



** Not inclusive of taxes and other fees*

Historical Price Trend (2010–2025)

U.S. Avg: 17.47 ¢/kWh



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CenterPoint											11.8	12.7	14.2	14.9	15.3	15.4
Oncor											11.5	12.3	13.8	14.5	15	15.15
AEP S&NW											11.55	12.35	13.8	14.5	15.2	15.44
AVG. All Service Providers in Texas	11.60	11.08	10.98	11.35	11.86	11.56	10.99	11.01	11.20	11.76	11.71	12.11	13.76	14.46	14.84	15.49

Historical Price Trend (2010–2025)

Texas rates remain below U.S. average but rising faster than peer states.

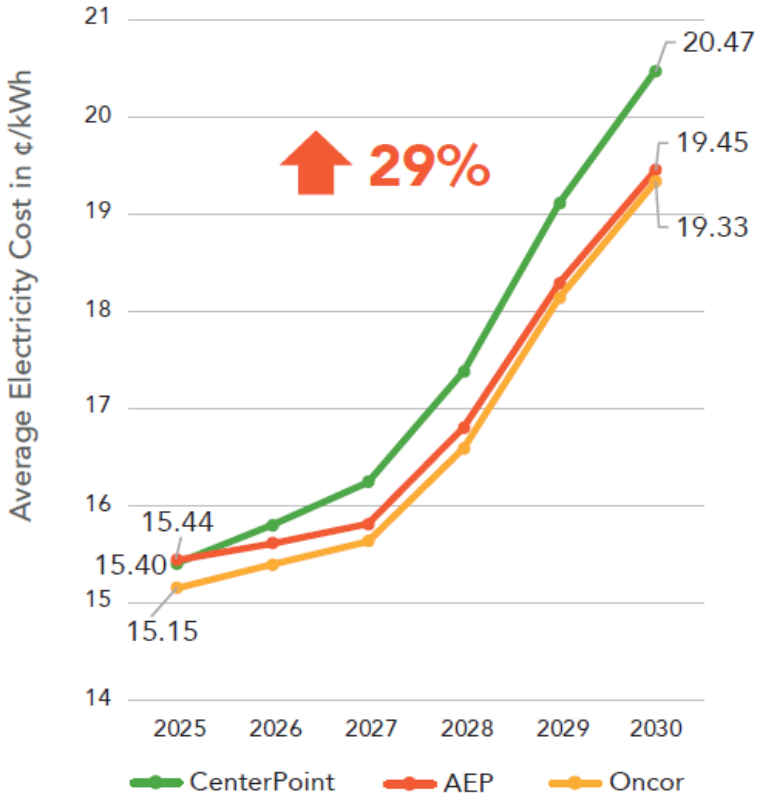
State	2020 (¢/kWh)	2024* (¢/kWh)	4-yr change
Texas (All Providers)	11.7	15.1	29%
U.S Average	13.15	16.48	25%
Arizona	12.27	15	22%
Louisiana	9.67	11.7	21%
Oklahoma	10.1	12.2	21%
Alabama	12.6	15.2	21%
Arkansas	10.4	12.3	18%

TEPRI Electricity Price Forecast 2025 - 2030

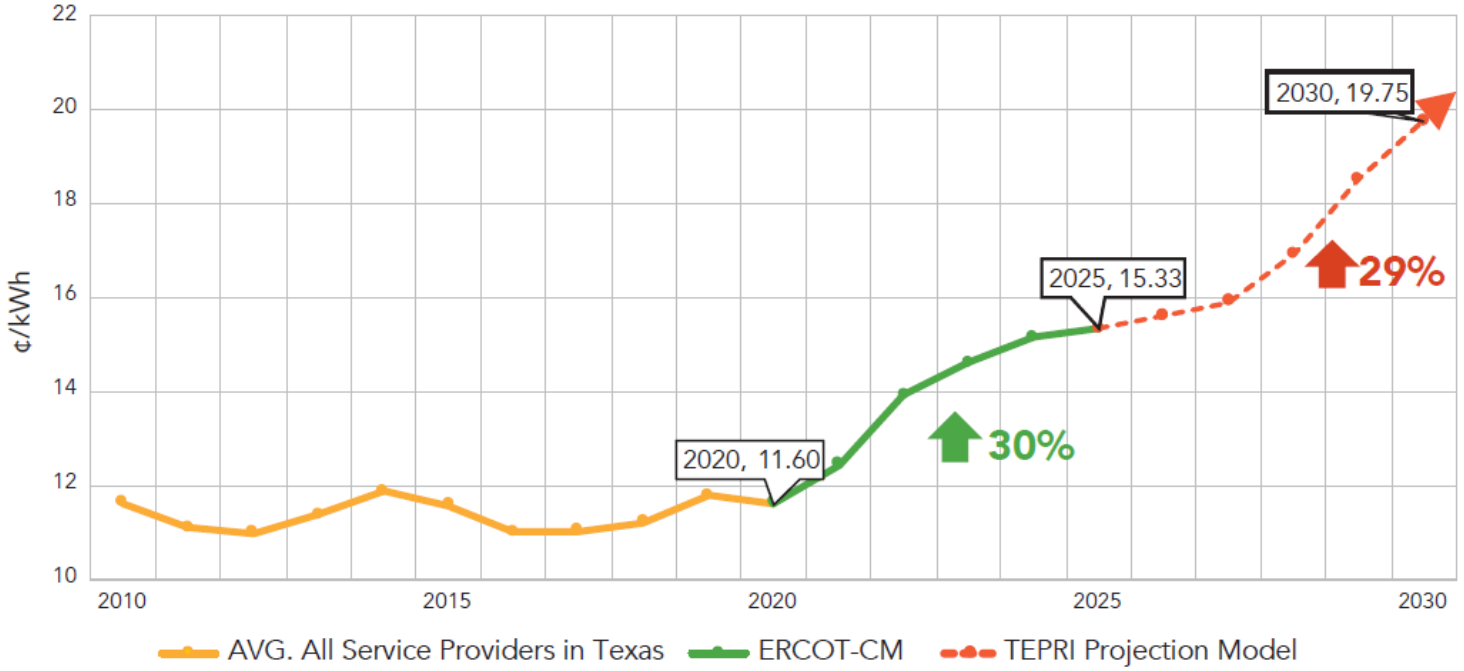
CenterPoint Energy +33%

ONCOR +28%

AEP TEXAS An AEP Company +26%



TEPRI Electricity Price Forecast
2010 - 2030



Additional Potential Impacts to Rates

Extreme Weather

More frequent severe events = higher infrastructure spending.

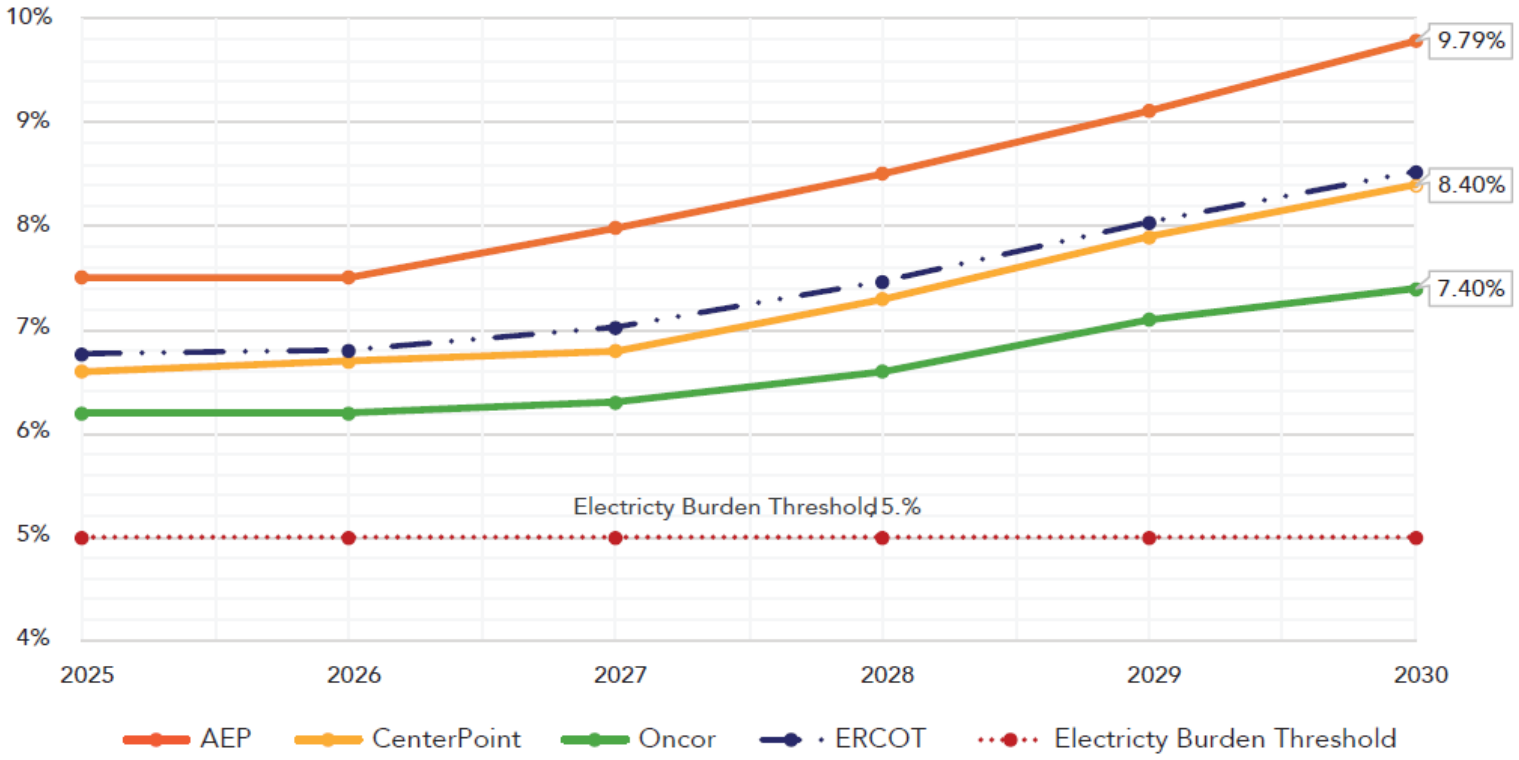
Policy & Legislation (Public Law 119-21)

Potential resulting increase in natural gas prices; greater than expected drop in interconnection queue; likely impacts post 2028

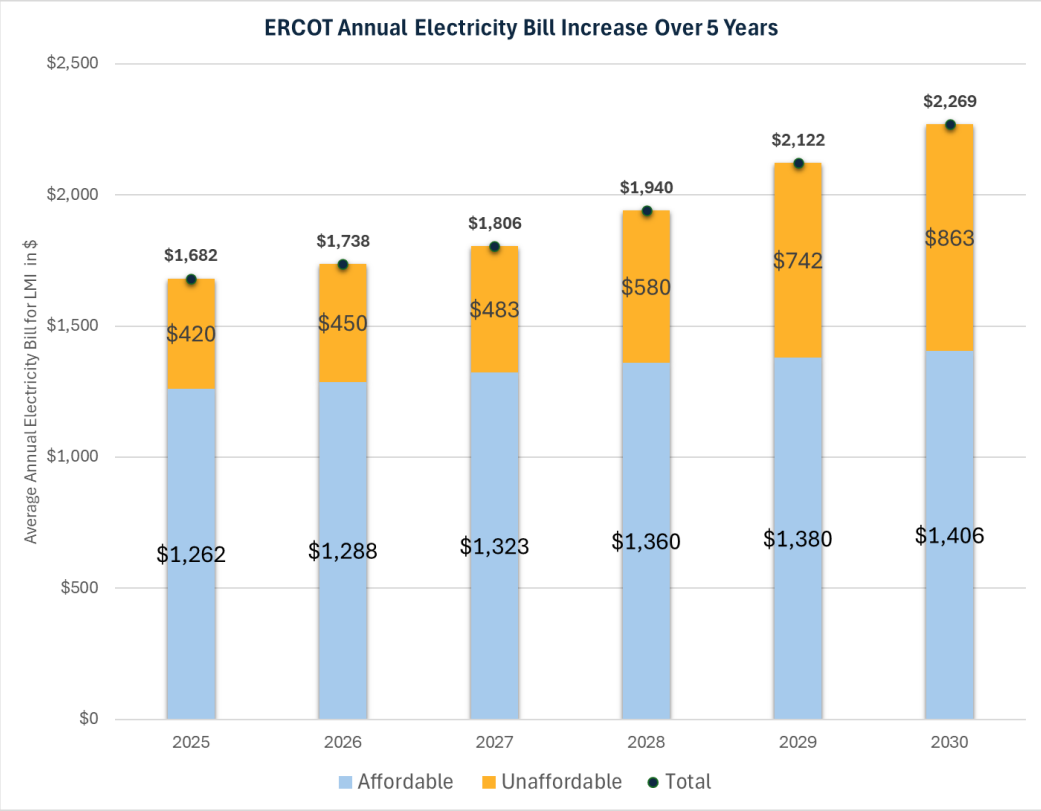
Transmission Cost Reforms (SB 6 / 4CP)

Residential rates could fluctuate depending on allocation formula

Electricity Affordability Forecast



Electricity Burden Forecast 2025 - 2030



Health Implications of Energy Affordability

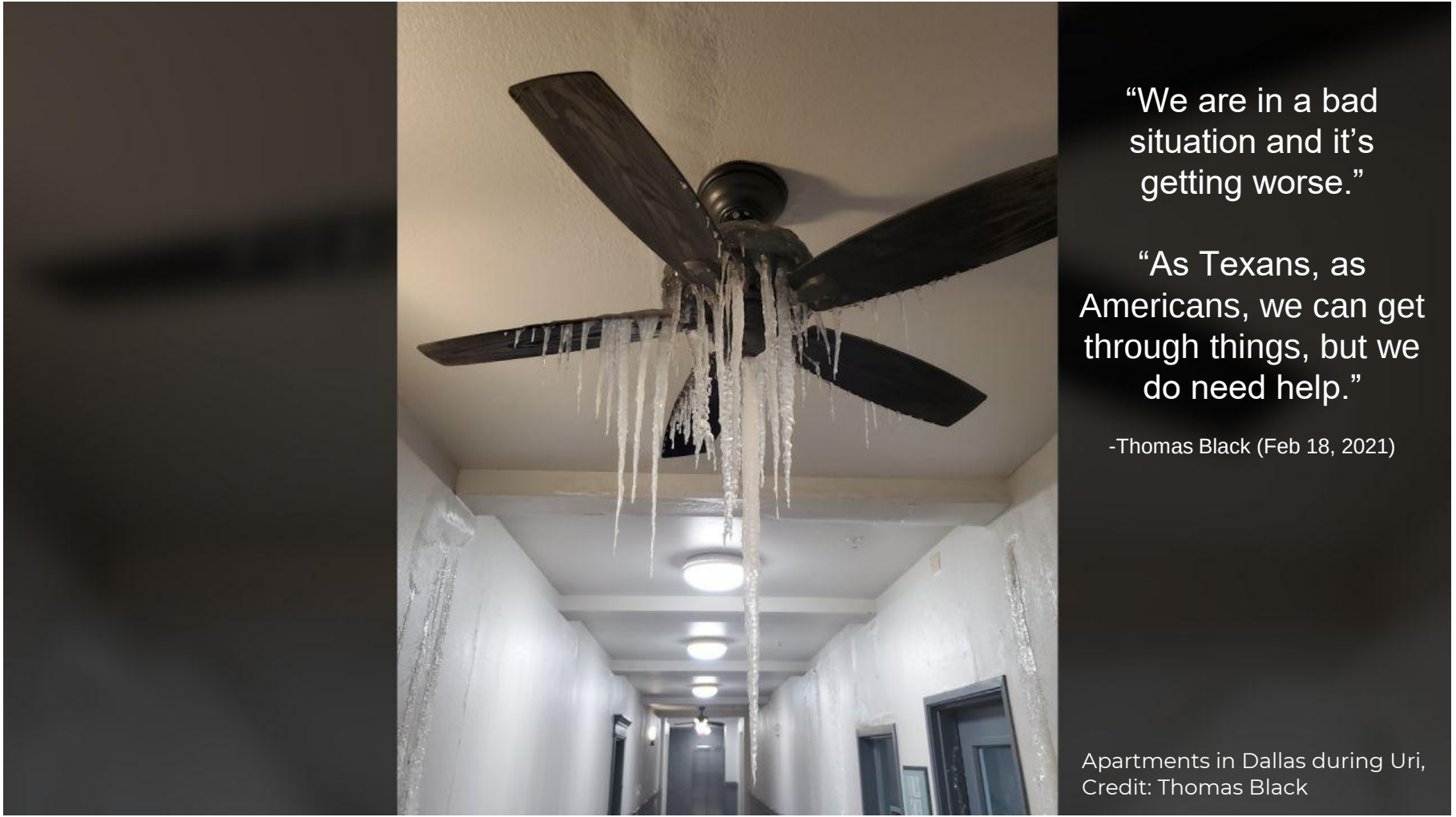
- Energy limiting behaviors can create unhealthy living environments
- Giving up medications, food, or other necessary items
- Older housing that isn't well-insulated
- Increased stress to meet basic needs

Energy Reliability and Resilience

Marguerite Thomas lost power during Hurricane Beryl , Surfside Beach, Texas, 2024. Credit: REUTERS

J.P. Garza lost his brother Alfredo Jr. during a heatwave in 2023. His brother died in a bedroom of their shared home with two broken air-conditioners, in Laredo. Credit: The New York Times

Christopher Garcia's family in Killeen could not run his pulse oximeter or oxygen concentrator during Winter Storm Uri. CNN 2021



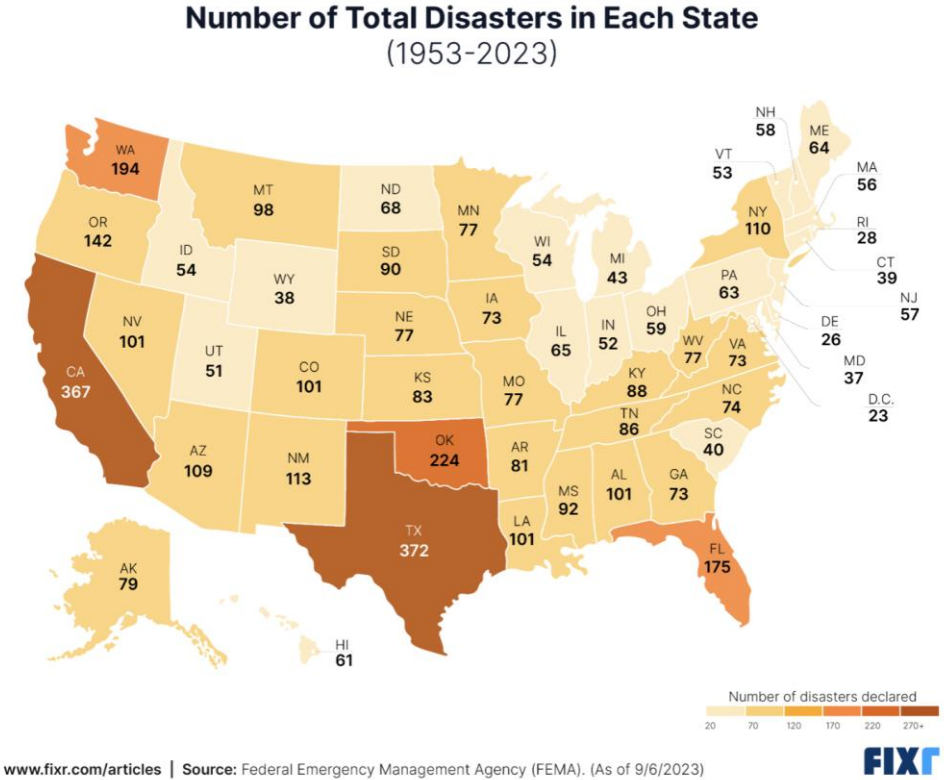
“We are in a bad situation and it’s getting worse.”

“As Texans, as Americans, we can get through things, but we do need help.”

-Thomas Black (Feb 18, 2021)

Apartments in Dallas during Uri, Credit: Thomas Black

Texas- Natural Disasters



"Texas has seen its number of natural disasters increase by 244% over the past four decades."[1]

According to the State Climatologist, by 2036, Texas will experience record-breaking heat, as much as 50 percent more flooding, and severe droughts.[2]

Home insurance premiums are increasing most in highest-risk states, up 40 percent in Texas, since 2015.[3]

[1] Insurancenews.net. January 9, 2020.
[2] Texas A&M University. Office of the Texas State Climatologist. Assessment of Historic and Future Trends of Extreme Weather in Texas, 1900-2036 ; also in https://geonews.tamu.edu/news/2021/10/state-climatologist-texas-future-depends-on-extreme-weather-preparedness.php
[3] New York Times (5-7-23) and ClimateCheck

Reliability & Resilience (CVES)

27% Have experienced a shutoff or a warning in past 12 months

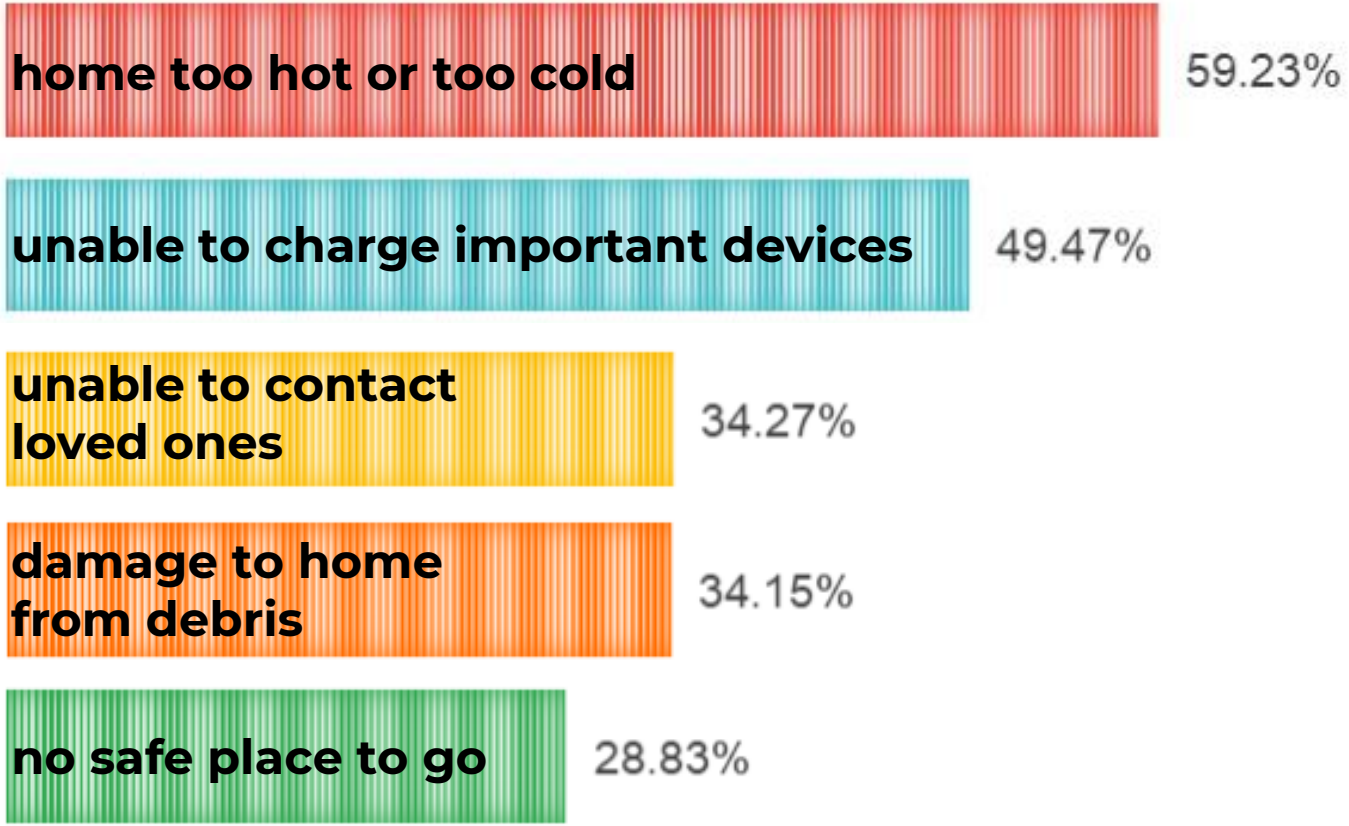
87% Are concerned about events that could lead to a power outage

29% Have no safe place to go in a weather-related emergency

48% Would stay at home in an emergency

56% Support having a backup energy supply

What Worries People Most About Power Outages in Extreme Weather?



TX Back-Up Power Package

- State Program to allocate $1.8 billion to back-up critical facilities
- Hospitals, nursing homes, schools, water treatment plants
- Smaller systems – max of 2.5 megawatts
- Hybrid systems: solar, battery, gas generator
- Details in 2026

Strategies

Affordable, Reliable, Clean Energy

- System: Grid hardening & weatherization
- Fair allocation of T&D costs
- Bill assistance
- **Weatherization & efficiency**
- **Community resilience hubs**
- **Distributed Resources & grid “flexibility”**

Community Resilience Hubs, Arlington Texas

Housing Partner:

Foundation Communities

Affordable Solar Home Programs

DREAMBUILD
CHOICE | DESIGN | COMMUNITY
An innovation powered by cdcb bc

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Building a better world.

Conclusion & Key Takeaways

1. Affordability and Resiliency Pressures Are Intensifying

2. Outlook: Rising Costs Through 2030

3. Mitigation Opportunities Exist — Need Scaling

TEPRI Resources

Community Voices in Energy Survey (CVES)(2023).

The **Energy Equity Explorer Tool (EEE)**: a geospatial tool designed to clarify the key energy metrics

ERCOT Electricity Affordability Outlook: Forecasting Residential Electricity Prices and Burdens (2025-2030):

A synthesis and review of exacerbated inequities from the February 2021 winter storm (Uri) in Texas and the risks moving forward. Sergio Castellanos, et al. January 2023.

tepri
EMPOWERING
TEXAS COMMUNITIES

TEPRI advances equitable solutions for affordable, reliable, and clean energy so all people are energy secure

Affordable

Decrease energy burdens for low-to-moderate income houses

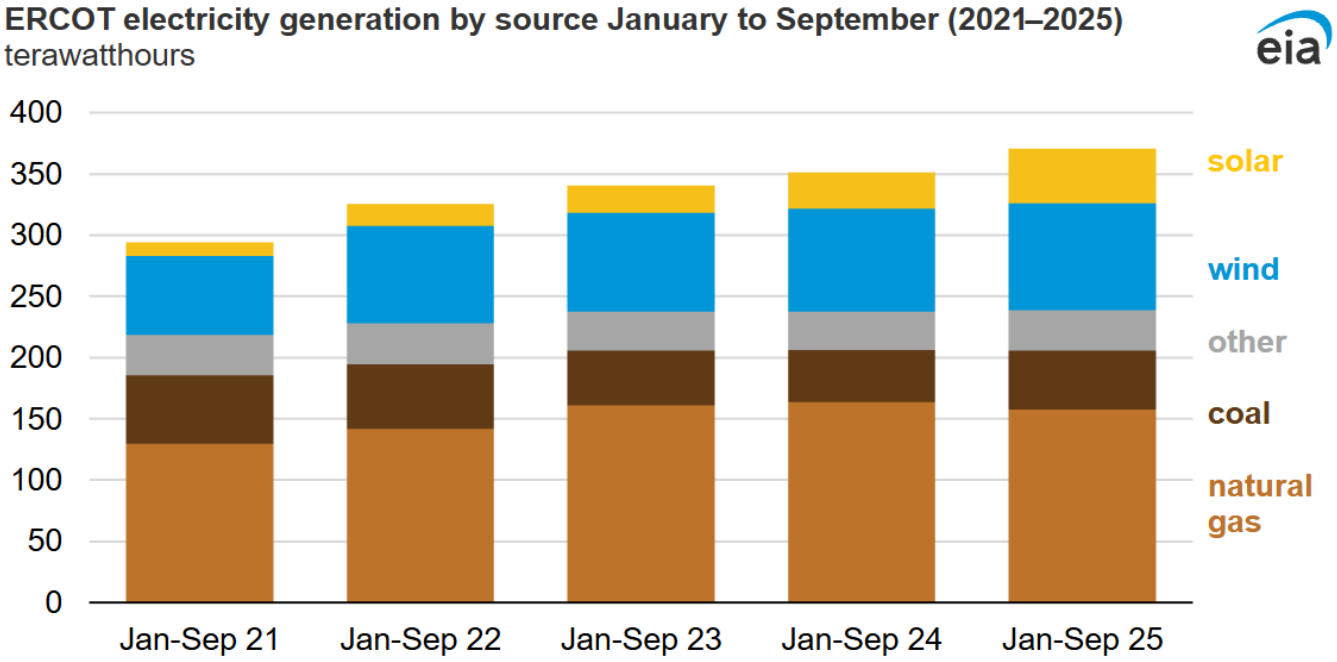
Reliable

Improve energy resilience, address energy access, and respond to energy outages

Clean

Increase parity in clean energy technology access and adoption

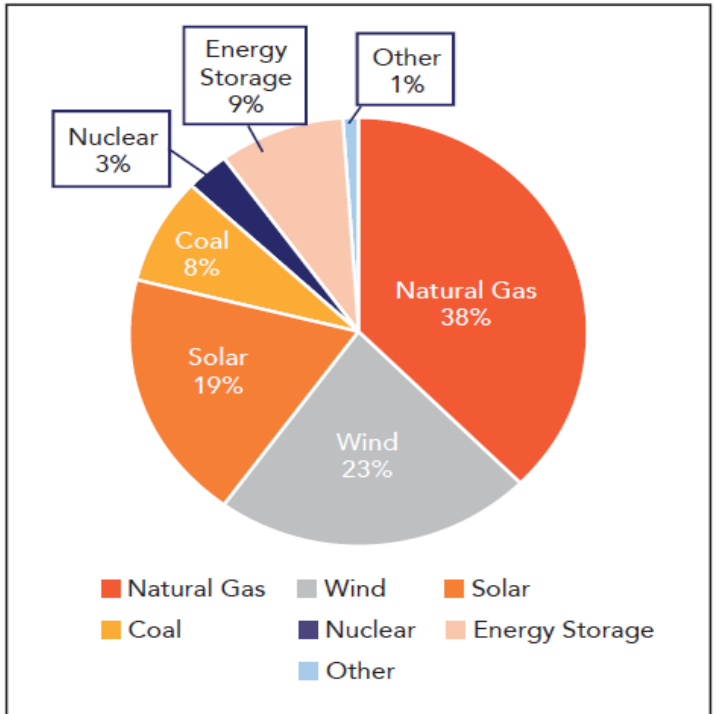
ERCOT Generation mix



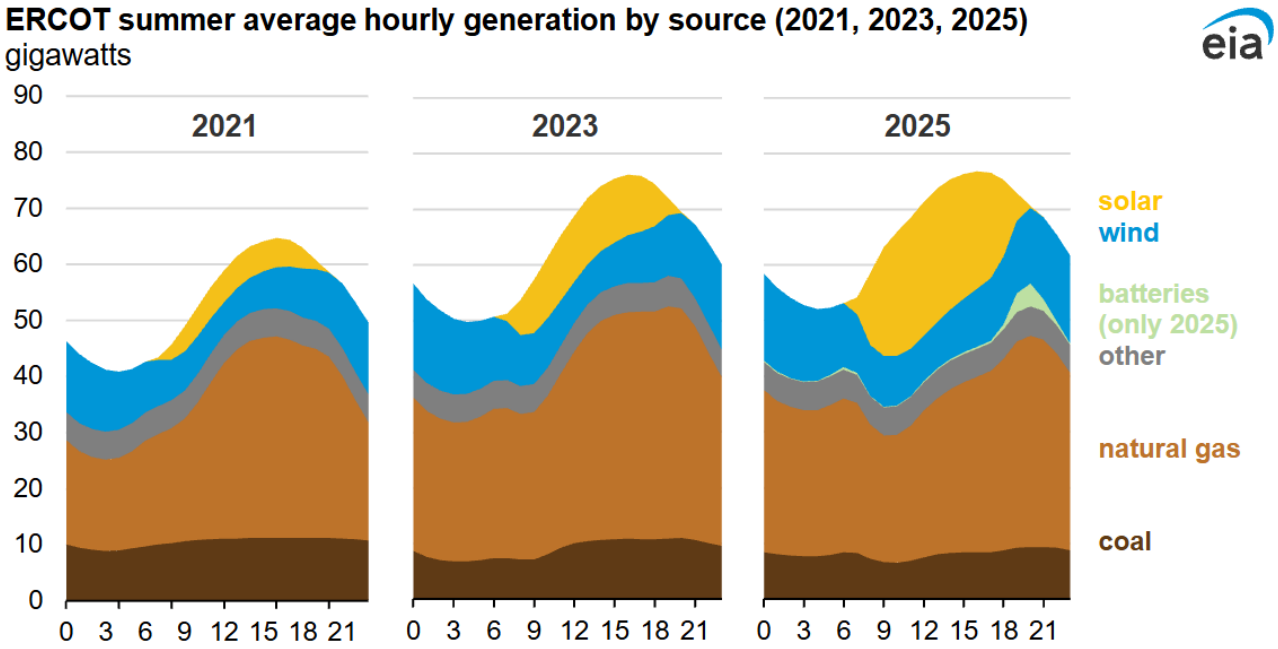
Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*
Note: The *other* category includes nuclear, hydroelectric, biomass, batteries, and other nonrenewable sources. ERCOT=Electric Reliability Council of Texas

ERCOT Generation mix

ERCOT fuel mix (GWh) by Resource, as of October 2025



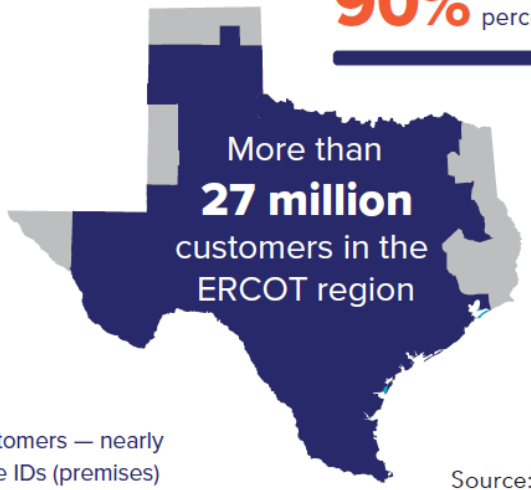
ERCOT Generation mix



Data source: U.S. Energy Information Administration, *Hourly Grid Monitor*, October 2025
Note: The *other* category includes nuclear, hydroelectric, biomass, batteries (for 2021 and 2023), and other nonrenewable sources. Summer=June, July, August, and September hourly values for each year; ERCOT=Electric Reliability Council of Texas

ERCOT Competitive Market

90% percent of Texas Load



75% of load is competitive-choice customers — nearly 8 million electric-service IDs (premises)

Source: ERCOT Fact Sheet, October 2025