

Turning Data Into Action: Energy Efficient Strategies

9.15.26 TARC Bi-Annual Meeting



2

Housekeeping



Questions are welcome during the presentation or at the end



Presentation will be provided in follow-up email directly to you with resources.

Please fill out the sign-in sheet.



Agenda

Programs Team

Who is SPEER

Who is in the room

Legislative Priorities

Workforce Development

Turning Data Into Action

Codes

Q&A Session

Closing Remarks



4

Programs Team



Shaun Auckland

Senior Manager,
Government and Community
Engagement



Randy Plumlee

Senior Manager,
Building Performance



Noah Oaks

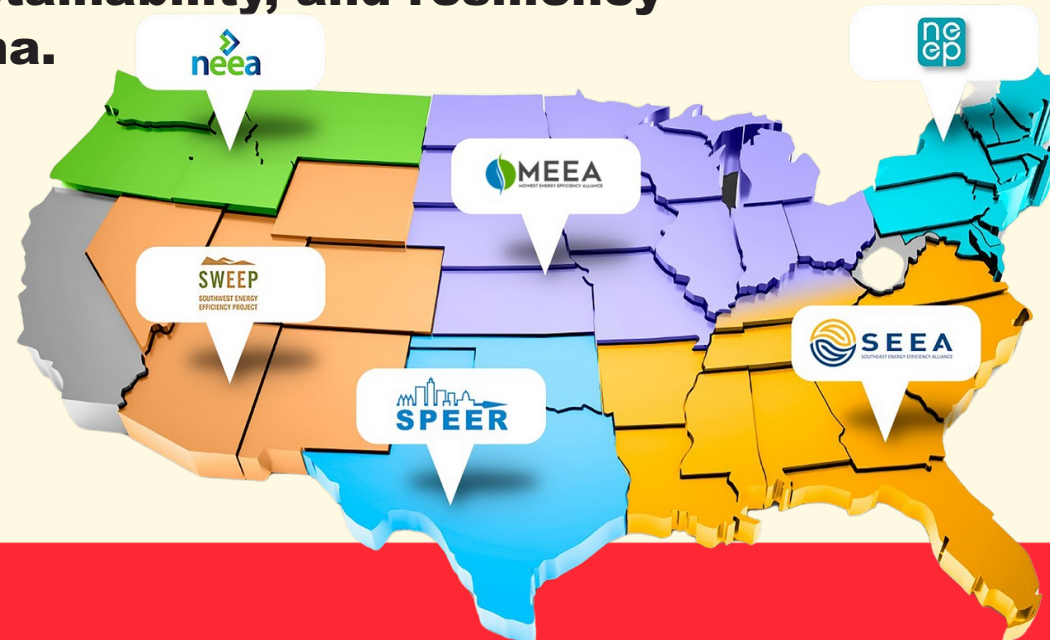
Senior Manager,
Policy Engagement



Who is SPEER?



SPEER is a trusted regional advisor driving energy efficiency, sustainability, and resiliency in Texas and Oklahoma.



BECOME A SPEER MEMBER

**ONLY \$250 /
YEAR**

FOR CITIES

Your city becomes part of SPEER's regional energy-efficiency network with access to:

- ✓ Training, webinars & professional development
- ✓ Technical expertise & direct support
- ✓ Industry networking & peer collaboration
- ✓ Member benefits and discounts
- ✓ Working groups on key energy-code issues
- ✓ Resources, guides & tools
- ✓ Updates on codes, standards & best practices



Scan to explore membership

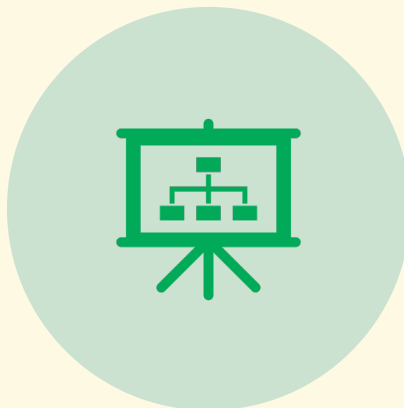


6

Round Robin



NAME



ORGANIZATION



TITLE



Your Energy Efficiency Action Worksheet

1 My key takeaways — biggest opportunity, one facility or corridor to benchmark, a coalition to explore (CELC - TEA-UP).

2 What I'll take back — one number for your board, one action for staff this quarter, one ask for partners.

3 My commitment — what I will do, for what target or measure, and by when.

SPEER the Sustainable Partnerships to Engage Efforts and Accelerate

SPEER • TURNING DATA INTO ACTION

Your Energy Efficiency Action Worksheet

Use the space below to capture what matters most for your organization today. Take these pages back to your board and turn one idea into a funded project.

ORGANIZATION NAME / TITLE DATE

1 My key takeaways
What data point, case study, or policy shift will you act on first?

Biggest opportunity for my community DATA / FUNDING

One facility or corridor to benchmark or retrofit DATA → ACTION

Partnership / coalition to explore CELC • TEA-UP

2 What I'll take back
Pick your top three — one per box.

FOR OUR BOARD One number to tell them	FOR OUR STAFF One action to start this quarter	FOR OUR PARTNERS One ask to make
--	---	-------------------------------------



8

Energy efficiency is an *economic development strategy*.

01 • Local spend

Lower bills keep dollars on Main Street.

Every dollar a household saves on home energy is a dollar that stays — and circulates — locally.

02 • Jobs

2.38M

U.S. energy-efficiency jobs in 2024 — the fastest-growing energy sector.

+91,600 added in one year. Source: 2025 USEER, U.S. DOE.

03 • Affordability

\$372

Average annual savings per weatherized low-income home — staying in the household.

DOE Weatherization Assistance Program (WAP).



9

Why Energy Matters to Every Sector



Energy drives economic development and resilience



Energy efficiency frees budget dollars for core services

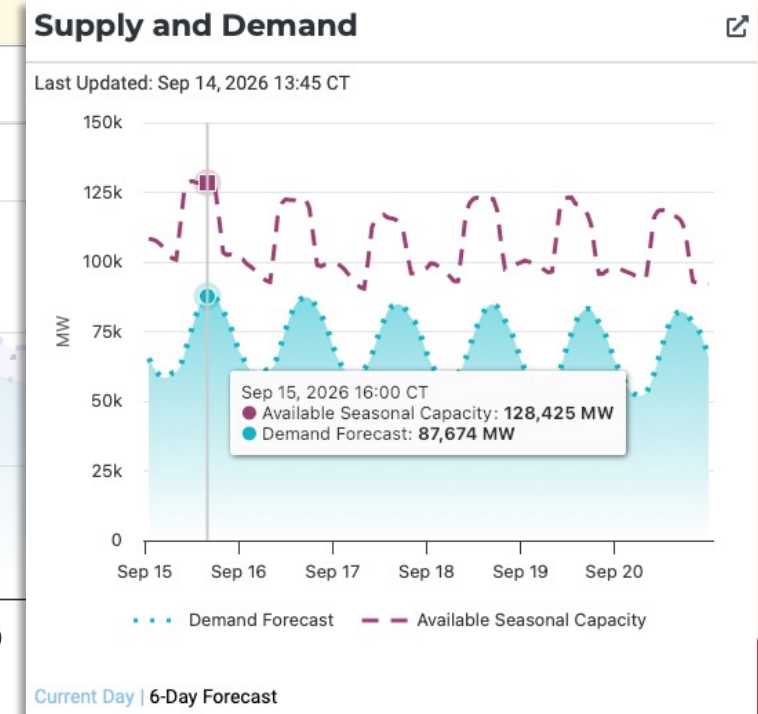
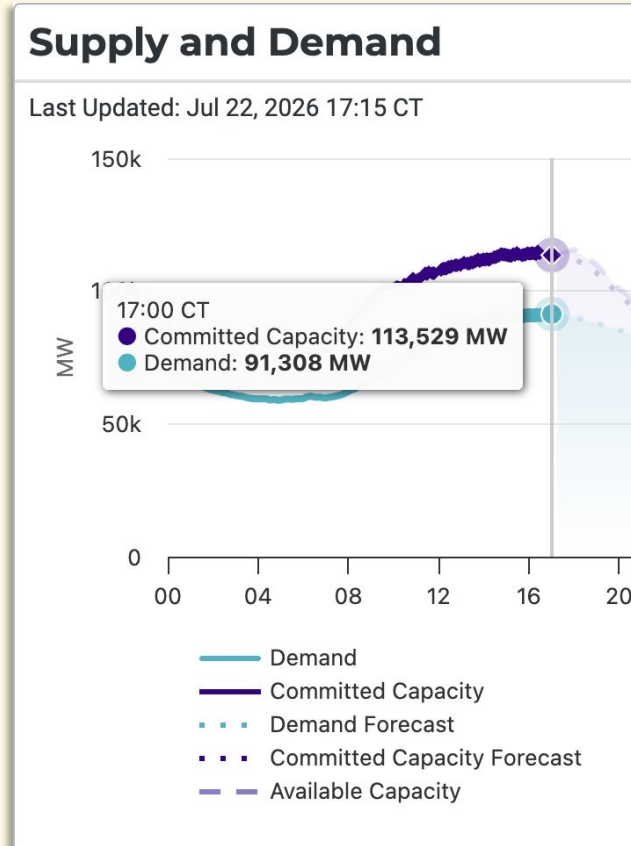


Energy resilience protects critical operations



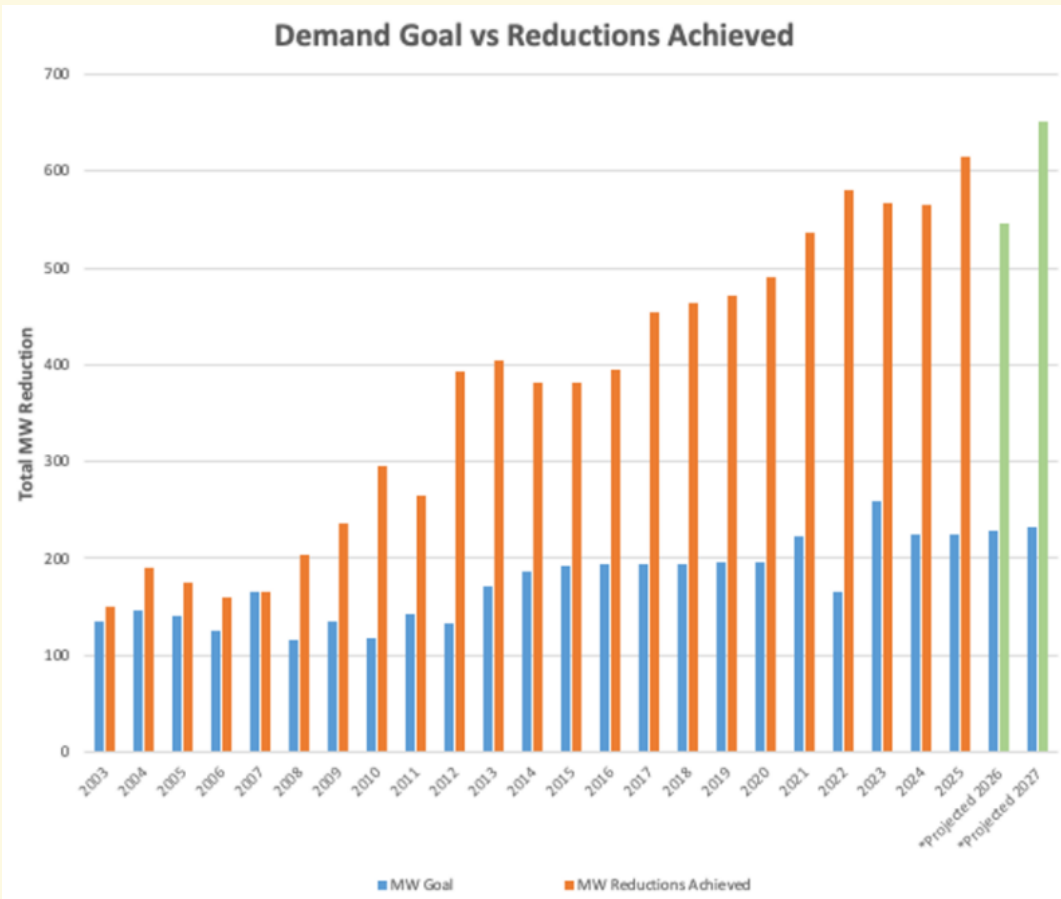
Texas Challenges – Setting the Stage

- **Grid Reliability and Resiliency**
- **Existing Load Profile ~ Residential and small commercial heating/cooling**
- **Large Load Development**
- **Long-term Load Forecast ~ 175GW by 2032 (ERCOT preliminary)**





How EE Can Help?

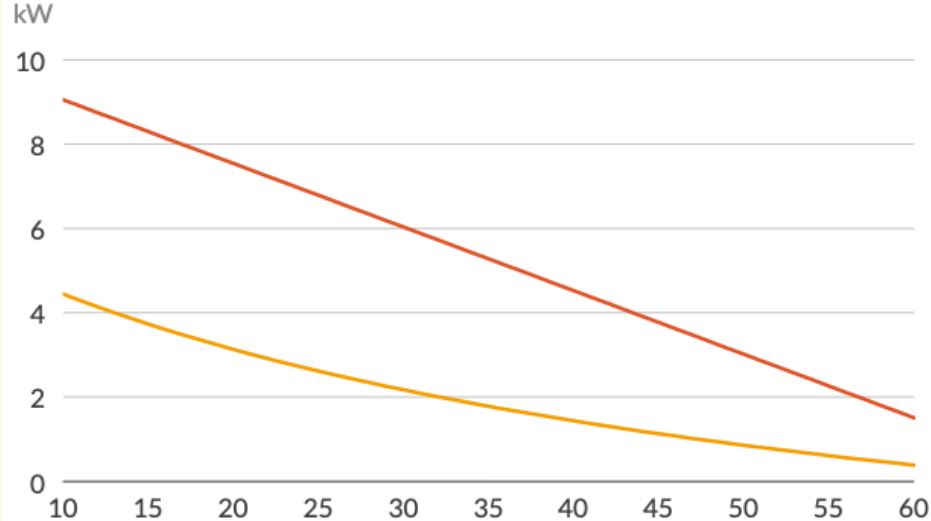


- **Energy efficiency reduces total demand on the grid = lower energy costs for ratepayers**
- **Texas EERS policy**
- **EE is cost effective with a B/C ratio of 3:1**



Aurora Energy Report

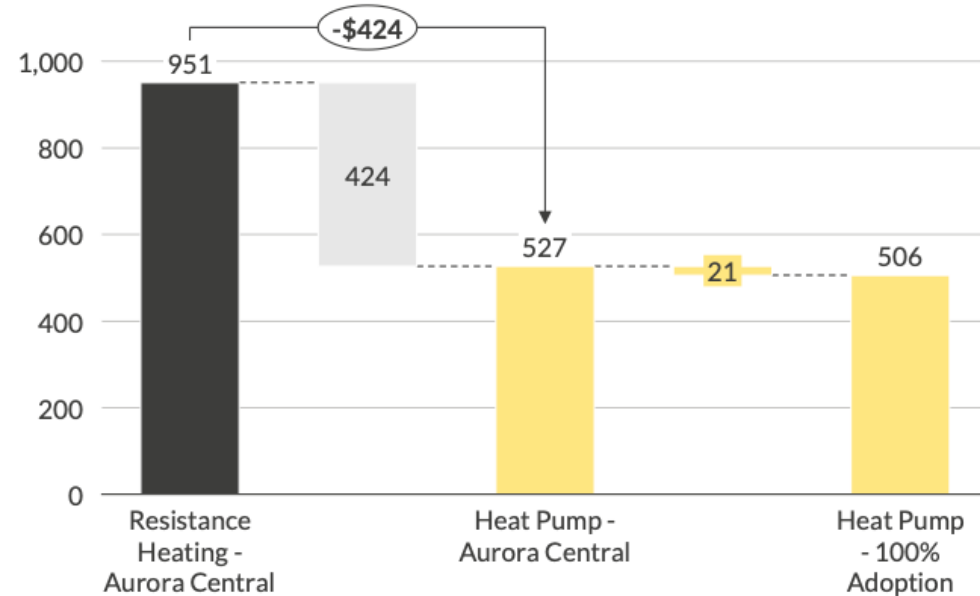
Electricity required to heat a home¹



- **Resistance heat** converts electricity to thermal energy directly, while a **heat pump** works like an air conditioner in reverse. The **efficiency of resistance heat is limited to 100%**, while **heat pumps can achieve much higher efficiencies** across the normal range of operating temperatures.
- For houses that use heat pumps, this translates to lower household electricity use in wintertime, which **helps lower residential electricity bills and reduces strain on the electricity grid** during winter storms.

— Heat Pump — Resistance Heat

Heating electricity cost to an average Texas household, 2030²
\$ (2023 real)



- For the average Texas household, converting to a heat pump instead of resistance heat can **decrease the yearly cost of electricity by \$424**, approximately 45%.
- Increased heat pump adoption across ERCOT lowers electricity prices, and an additional \$21/year can be saved in the 100% adoption scenario.



SPEER Policy Actions

SPEER Heat Pump Working Group

- **OEMs and implementors identifying policy hurdles and opportunities**
 - TDHCA QAP
 - TRM Update for VSHP
- **Workforce Development**
 - **Contractor Training Series**
- 2026 rebate pull: Oncor \$600 · Austin Energy ~\$3,000 · CenterPoint \$400+ heat pumps





90th Legislature – What to Expect

- **Data centers, data centers, data centers**
- **Generation development**
- **765kV lines**
- **Restrictions on renewables**
- **Affordability**





Texas Legislative Priorities

Affordability

IOU Energy Efficiency Improvements

Data Center Community Benefit Plans

Flexibility

Distributed Energy Resources

Demand Response

AMI 2.0 Preparation

Grid Reliability and Resiliency

Residential Building and Energy Codes

Building Performance Standard Incentive

Eliminating Electric Resistance as Primary





16

Turning Data Into Action

1

**Collect –
Benchmark
facilities,
utilities,
operations**

2

**Analyze – Identify
inefficiencies**

3

**Act – Retrofits,
operational
improvements**

4

**Reinvest – Track
results, reinvest
savings**



17

Collaboration is Key



- **Federal**
- **State**
- **Utilities**
- **Public Agencies**
- **Higher Education**
- **Non-profits**
- **Service Providers**



1

Case Study: Clyde CISD – Building Economic & Energy Resilience Through Facility Upgrades

- **Cost & Funding:** Implemented district-wide lighting, HVAC and controls upgrades via an energy savings performance contract (ESPC) — capturing more than \$1.16 million in guaranteed savings over 20 years.
- **Benefits & Data:**
 - Annual savings of about \$78,856 in energy/maintenance expenses.
 - Enabled \$2.6 million in improvements without issuing a bond.
- **Resilience:**
 - Upgrades to LED lighting,
 - HVAC rooftop units and building-automation enhanced operational reliability,
 - Reduced energy burdens and
 - Improved learning-environment comfort.

Case Study in Partnership with Schneider Electric
– **[Best Practices in Strategic Energy Management \(SEM\) for Local Texas School Districts](#)**





2

El Paso LED Streetlight Retrofit – A PACE/LoanSTAR Success



Data: inventory revealed 28,000 lights instead of 25,000.

Partners: City + Utility + SECO + PACE

Action: phased LED retrofit.

Outcome: \$2.4M annual savings.

Case Study: [LED Streetlight Retrofits](#)



3

Economic Development Through Efficiency: **Barfield Building, Amarillo**

Data: Analysis identified 73% electric, 79% natural gas, and 40% water savings potential.

Partners:

**City of Amarillo + Building Owner
+ TX-PACE + RAHILL Capital**

Action: Used TX-PACE financing to upgrade HVAC, lighting, water systems, and building envelope.

Outcome: Revitalized a historic downtown building, created 55 jobs, and significantly reduced operating costs.

Case Study: [Barfield Building, PACE](#)



AFTER



TEXAS FACILITIES COMMISSION AT A GLANCE

CONSTRUCTION PROJECTS

\$6.1 B
work portfolio



NEW OFFICES
RENOVATIONS
DPS ACADEMY
SPECIAL PURPOSE FACILITIES

MAINTAINING THE PORTFOLIO

107,910

maintenance work orders
completed in FY 2025

FACILITIES NEVER SLEEP



98
state agencies
supported



24/7
support

200

facilities
supported
across Texas



ENERGY EFFICIENCY THAT PAYS BACK

\$3+ M

annually in utility
cost avoidance

6 M sq. ft.

of LED lighting
installed

20%

reduction in utility costs
from efficiency projects

MONETIZING PORTFOLIO ASSETS



\$3.8 M

parking revenue
generated FY2025

\$9.6 M

surplus property revenue
returned to the
State FY2025





Recommendations to Improve Energy Waste Reduction

- **Expand Energy Audits:**
Conducting regular energy and water audits to identify operational inefficiencies and prioritize cost-effective improvement projects.
- **Upgrade Building Systems:**
Replace aging HVAC equipment, lighting, controls, and water fixtures with high-efficiency technologies that meet or exceed current energy codes.
- **Leverage Performance Contracting:**
Utilize Energy Savings Performance Contracts (ESPCs) and utility incentive programs to fund energy efficiency improvements with minimal upfront capital.
- **Strengthen Interagency Collaboration:**
Establish a statewide energy management network to share best practices, technical expertise, and successful energy conservation strategies among agencies.
- **Establish Performance Goals:**
Set measurable annual energy and water reduction targets and report progress to agency leadership.



23

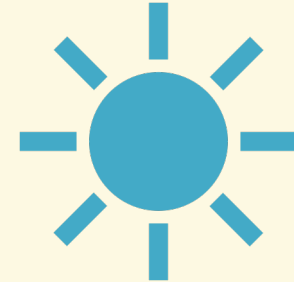
Community and Public Sector



**Technical Support-
State Energy Reporting**



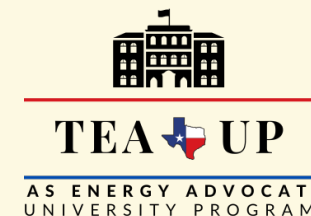
State-wide Coalitions



**Air Quality & Energy
Nexus**



Coalitions: The Power of Partnerships



Community Efficiency Leadership Coalition (CEL)

A collaborative network of Texas cities, school districts, and public entities advancing energy management best practices.

Key Benefits:

- ✓ Monthly Professional Development Meetings
- ✓ 1,000+ professional network
- ✓ 10 hours/year of technical assistance
- ✓ Policy templates & case studies
- ✓ Professional Learning Opportunities



TEXAS Energy Advocacy University Program (TEA-UP)

A coalition that brings leaders from universities, energy managers, academics, students, industry, and the energy sector together to drive progress in energy efficiency.

Key Benefits:

- ✓ Focused largely on higher education & specific needs
- ✓ Quarterly coalition meetings
- ✓ Expert insights & workshops
- ✓ Policy initiative exploration
- ✓ Resource & partnership connections
- ✓ Regional collaboration
- ✓ Professional Learning Opportunities



SPEER Energy Codes Program

Supporting Better Buildings through Education, Training & Technical Assistance

SPEER helps communities, code officials, builders, designers, and industry professionals successfully adopt and implement modern building energy codes across Texas and Oklahoma. Our goal is to improve energy efficiency while creating buildings that are more comfortable, durable, healthy, and affordable to own and operate

Energy Code Ambassador Program

Local Experts. Statewide Impact

SPEER operates the largest Energy Code Ambassador network in the US, recognized by the ICC. Energy Code Ambassadors are experienced building energy efficiency professionals who receive advanced training and serve as a local resource by providing peer-to-peer support, practical guidance, and real-world solutions for energy code implementation. The program is conducted in partnership with ICC, SECO, and BCAP

Randy Plumlee / rplumlee@eepartnership.org



SPEER ENERGY CODE SUPPORT FOR YOUR CITY

ENERGY CODE ADOPTION & AMENDMENT ASSISTANCE

Guidance on adopting the latest IECC and evaluating local amendments to meet your community's needs.

BUILDING OFFICIAL & INSPECTOR TRAINING

Practical, enforcement-focused residential and commercial energy code training.

PLAN REVIEWER TRAINING

What to look for on plans, permits, compliance reports, and supporting documentation.

ENERGY MODELING & COMPLIANCE PATH TRAINING

REScheck, COMcheck, performance-based compliance, and understanding common modeling pitfalls.

ACCA MANUAL J / S / D TRAINING

Understand load calculations (J), equipment selection (S), and residential duct design (D).

FIELD VERIFICATION & ENFORCEMENT

Blower door, duct leakage, ventilation, insulation, air sealing, and other key field checks.

ONGOING TECHNICAL ASSISTANCE

Have a difficult energy code question? SPEER is here when your staff needs support.



Tools & Funding



[Energy STAR Portfolio Manager](#): Free benchmarking software



[SPEER Local Government Hub](#): Training, templates, peer network



[Community Centers Energy Efficiency Retrofits for the State Energy Program](#)



[Property Assessed Clean Energy \(PACE\)](#) Financing: 100% upfront funding for private upgrades



[Texas LoanSTAR \(Saving Taxes and Resources\) Revolving Loan](#)



SPEER Resources



**LOCAL
GOVERNMENT
REPORTING GUIDE**



**CITY EFFICIENCY
TOOLKIT**



**TEXAS ENERGY
ADOPTION TOOLKIT**



**TEMPLATES &
MESSAGING GUIDES
FOR POLICY**



**SPEER'S YOUTUBE
CHANNEL- OVER 167
VIDEOS**



Check-in

Your Energy Efficiency Action Worksheet

1 · My key takeaways — biggest opportunity, one facility or corridor to benchmark, a coalition to explore (CELC · TEA-UP).

2 · What I'll take back — one number for your board, one action for staff this quarter, one ask for partners.

3 · My commitment — what I will do, for what target or measure, and by when.

SPER · TURNING DATA INTO ACTION

Your Energy Efficiency Action Worksheet

Use the space below to capture what matters most for your organization today. Take these pages back to your board and turn one idea into a funded project.

ORGANIZATION	NAME / TITLE	DATE
1 My key takeaways What data point, case study, or policy shift will you act on first? Biggest opportunity for my community DATA / FUNDING		
One facility or corridor to benchmark or retrofit DATA · ACTION		
Partnership / coalition to explore CELC · TEA-UP		
2 What I'll take back Pick your top three — one per box.		
FOR OUR BOARD One number to tell them	FOR OUR STAFF One action to start this quarter	FOR OUR PARTNERS One ask to make
3 My commitment — this quarter I WILL (ACTION) FOR (TARGET / MEASURE) BY (DATE)		



Key Takeaways & Call to Action



Data drives smarter decisions — know your numbers



Efficiency strengthens economic & community resilience



Partnerships & peer learning accelerate results



SPEER provides tools, training, and networks to support your work



31

Connect with us:



**CELC- Success through
Partnership**



**TEA-UP- Connect to the
Workforce Pipeline**



**Newsletters- Stay up to
date on Energy in Texas**

**SPEER- overall for Texas and
Oklahoma**

**CELC- Government Focused
Community**

**Energy Code- Focused on all
aspects of Energy Code**

**Policy- ERCOT, Policy, and
new reports**

Oklahoma Energy



**Calendar- Upcoming
Events and Webinars**



32

Thank you for all that you do for the great state of Texas





HAPP-EE HOUR



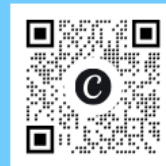
Monday, October 5th
4:00 PM – 6:00 PM

October is **Energy Awareness Month** and **October 7th** is **National Energy Efficiency Day**.

Come celebrate early with SPEER!
Enjoy drinks, light bites, and great conversation.



Register **here**:





34

Thank you & Questions

Shaun Marie Auckland, Noah Oaks,

**M.S.I.S. , LEED Green Associate
Senior Manager, Government and
Community Engagement**

SPEER

512-279-0765

sauckland@eepartnership.org

Senior Manager, Policy Engagement

SPEER

(614)769-1570

noaks@eepartnership.org