

Texas State Energy Conservation Office (SECO) Programs and No-Cost Resources

September 16, 2021

Dorothy Gilliam

North Central Texas Council of Government (NCTCOG)



Agenda

- Who We Are
- Why We Are Here
- Available Energy Management Resources
- SECO Programs and Resources
 - Texas Energy Engineering Services Inc. (TEESI) & Energy Systems Associates (ESA)
 - SECO
 - Eddy Trevino
 - John Kyere
 - LeShawn Manus
 - Fred Yebra
 - Denise Brooks



Who and What is NCTCOG?

Voluntary association of local governments

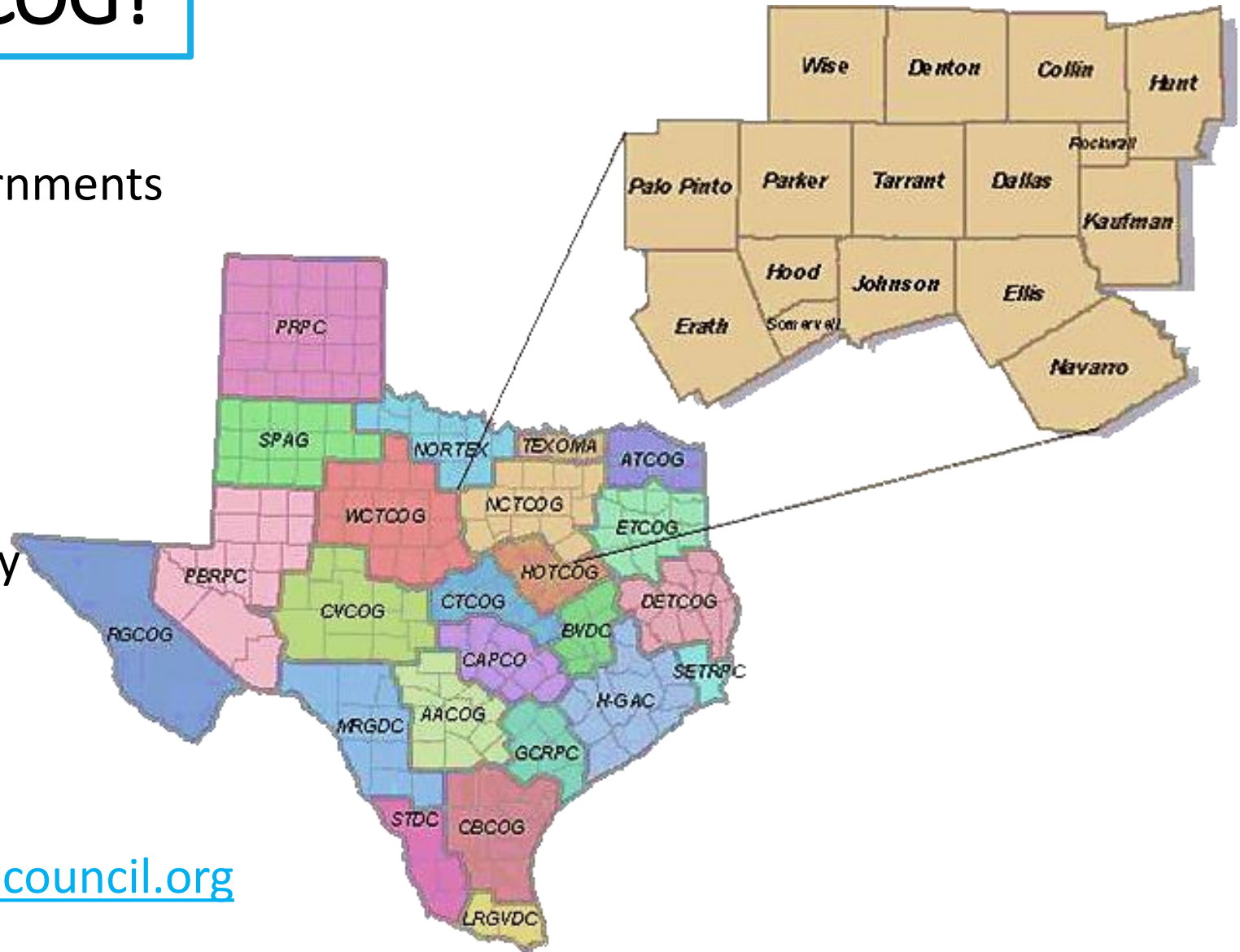
Established in 1966

Assists local governments in:

- ❖ Planning for common needs
- ❖ Cooperating for mutual benefit
- ❖ Recognizing regional opportunity
- ❖ Resolving regional programs
- ❖ Making joint decisions

One of 24 COGs in Texas

www.nctcog.org or www.txregionalcouncil.org



NCTCOG Regional Energy Management Activities

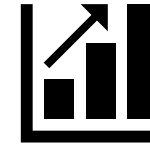
Fiscal Year 2021 - 2022



Regional Survey



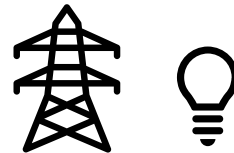
Training & Education



**Enhance Local
Government Energy
Reporting**



**Advance Local
Government Energy
Management Actions**



**Utility Engagement
and
Data Collection**



**Energy Code
Adoption**



Website Resources

Fiscal Year 2021

NCTCOG Energy Management Trainings + Webinars



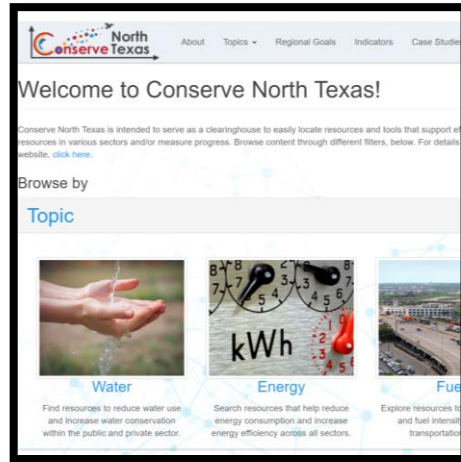
Virtual Trainings and Webinars

- **Local Government Energy Reporting: 2020 Updates and Newly Developed Resources**
- **Organic Waste, Anaerobic Digestion, and Renewable Natural Gas Roundtable Series**
- **Regional Property Assessed Clean Energy (PACE) Roundtable for Local Governments**
- **North Texas Solsmart Roundtable**
- **Renewables Aggregation Cohort Opportunity**
- **Electric Utility and Electric Vehicle Working Group** (presentation linked on DFW Clean Cities webpage: www.dfwcleancities.org/events)

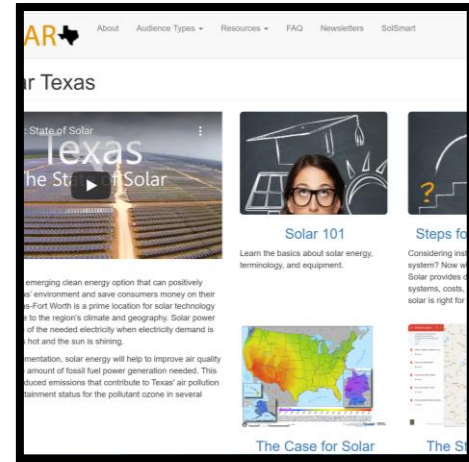
Past Webinar Recordings and Materials Available at
<http://conservenorthtexas.org/event-archive>

NCTCOG Energy Efficiency and Energy Management Resources

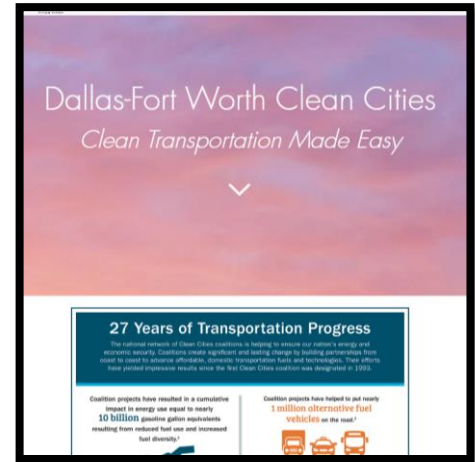
- Webinar Recordings
- Workshop Presentations
- Toolkits
- White Papers
- Case Studies
- Best Practices
- Videos
- Training Presentations



www.conservenorthtexas.org



www.gosolartexas.org



www.dfwcleancities.org

FOR MORE INFORMATION

Lori Clark

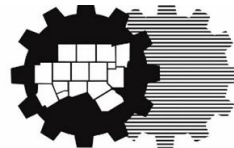
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North Central Texas
Council of Governments



PRELIMINARY ENERGY ASSESSMENT/ TECHNICAL ASSISTANCE

SALEEM KHAN, P.E. / TEESI ENGINEERING / 512-328-2533 / SALEEM@TEESI.COM



ELIGIBILITY FOR SECO PEAs

- Preliminary Energy Assessments are available at no cost to the following entities:
 - Municipal and County Governments,
 - Independent School Districts,
 - County Hospitals,
 - Port Authorities,
 - Major Airports,
 - Public Water Authorities,
 - and Municipally-Owned Utilities.

TYPICAL UTILITY COST REDUCTION MEASURES (UCRMs) AND PAYBACKS (PB)

- | | |
|---|----------------|
| ■ Low Cost/No Cost Measures | 0 – 6 months |
| ■ Interior & Exterior Lighting Retrofit | 3 to 10 years |
| ■ HVAC Retrofits | 7 to 25 years |
| ■ Commissioning | 2 to 6 years |
| ■ Water Conservation | 4 to 8 years |
| ■ Renewables | 15 to 25 years |
| ■ Energy Management Controls | 4 to 12 years |
| ■ Building Envelope | 8+ years |
| ■ Wastewater Facilities | 5 to 15 years |

PEA PROCESS SUMMARY

I. Gather Basic Data

- Facility Square Footage
- Utility Data (Electric, Natural Gas, Water, etc.)
- Energy Management Plan

2. On-Site Survey

- Walkthrough of facilities
- Identify Low Cost/No Cost Measures
- Identify Utility Cost Reduction Measures (UCRMs)

3. Analysis

- Energy Performance Indices (EUI/ECI)
- Quantify UCRM Costs & Savings

4. Develop PEA Report

- Baseline Energy Use
- O&M Measures
- UCRM Implementation (Cost/Savings/PB)
- Funding Options

5. PEA Report Presentation

- Present Report of Findings
- Provide Recommendations for Action Items

CASE STUDIES



- City of Austin, City of Laredo*, City of El Paso, City of San Marcos, Arlington ISD, Dallas County Community College District, Alamo Colleges, San Antonio ISD, etc.
- *City of Laredo implemented projects using LoanSTAR program at the Jefferson Water Treatment Plant
 - Measures Implemented: High Service Pump VFDs (2300 Volts, 600 HP), Controls Integration, HVAC & Power Factor Correction
 - Implementation Cost \$1,033,558
 - Annual Cost Savings \$159,803
 - Simple Payback 6.5 years


PEA BENEFITS

- Valuable planning tool
 - Budgeting & funding options
 - LoanSTAR application
- Baseline development
 - Energy tracking
- Prioritizing investments
 - Estimated cost, savings & payback(s)
- Low cost/no cost measures
- Technical assistance
 - ENERGY STAR certifications, energy management plans, energy efficiency design guide, etc.
- Roadmap to utility cost savings

HOW DO I SIGN UP?

- Visit SECO website & fill out Service Request Form
 - For School Districts:
<https://comptroller.texas.gov/programs/seco/programs/schools/pea.php>
 - For Local Government Entities:
<https://comptroller.texas.gov/programs/seco/programs/local/pea.php>
- Contact LeShawn Manus or Saleem Khan if you have any additional questions

Preliminary Energy Assessment Service Request Form
Form# 50-852



<input type="text"/>		<input type="text"/>	
<small>Public Entity Name</small>		<small>Telephone</small>	
<input type="text"/>		<input type="text"/>	
<small>Contact Person</small>		<small>Title</small>	
<input type="text"/>		<input type="text"/>	
<small>Email Address</small>		<small>County</small>	
<input type="text"/>		<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<small>Street Address</small>	<small>City</small>	<small>State</small>	<small>ZIP Code</small>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<small>Mailing Address</small>	<small>City</small>	<small>State</small>	<small>ZIP Code</small>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Preliminary Energy Assessment Service Eligibility

The State Energy Conservation Office (SECO) provides free preliminary energy assessments (PEAs) for existing public facilities and infrastructure. Eligible entities include municipal and county governments, public school districts, county hospitals, port authorities, major airports, public water authorities and municipally owned utilities. Leased or rented facilities and infrastructure are not eligible for this service.

Principles of Agreement

By submitting this request form, the entity listed above must agree to:

- select a contact person to work with SECO and its designated contractor to establish an energy policy and set realistic energy efficiency goals;
- allow SECO's designated contractor to provide walk-through assessments of selected facilities;
- schedule a time for SECO's designated contractor to make a presentation on the assessment findings to key decision-makers;
- consider implementing the PEA's energy savings recommendations; and
- allow SECO to post portions of this report on its website

Additional Questions

Has this organization used SECO's technical assistance or PEA services in the past?	<input type="radio"/> Yes	<input type="radio"/> No
Is the primary contact for this PEA familiar with SECO's LoanSTAR revolving loan program?	<input type="radio"/> Yes	<input type="radio"/> No
Has this organization used SECO's LoanSTAR revolving loan program in the past?	<input type="radio"/> Yes	<input type="radio"/> No

Signature

This agreement must be signed by your organization's chief executive officer or other signing authority.

<input type="text"/>	<input type="text"/>
<small>Signature</small>	<small>Date</small>
<input type="text"/>	<input type="text"/>
<small>Print Name</small>	<small>Title</small>
<input type="text"/>	<input type="text"/>



PRELIMINARY ENERGY ASSESSMENT/ TECHNICAL ASSISTANCE

JIM BROWN, P.E. / ESA ENERGY SYSTEMS ASSOCIATES, INC. 512-258-0547 / JWB@ESA-ENGINEERS.COM



Common Requests:

- Improve Maintenance and Operations
- Lighting Upgrades (Indoor / Outdoor)?
- Smart Meters?
- Upgrade HVAC / Chiller / Boiler?
- Update Building Control?

SECO TECHNICAL ASSISTANCE REQUESTS

CITY OF PORT LAVACA

REPLACE 6 RTU'S, 2 SPLIT SYSTEMS

REPLACE INDOOR AND EXTERIOR LIGHTING WITH LED

INSTALL DDC AUTOMATIC CONTROLS FOR HVAC SYSTEMS

- **21% Energy Consumption Reduction**
- **Load Factor Improvement**
 - IE, very high Consumption compared to Peak Demand
 - Focused renovation effort on reducing operating hours
- CUMULATIVE 24 MONTH COST SAVINGS: \$118,900
- LOANSTAR LOAN: \$530,500
- SAVINGS ESTIMATION PAYBACK PERIOD: 9½ YEARS
- ACTUAL PROJECTED PAYBACK PERIOD: **9 YEARS**



SECO

State Energy Conservation Office

INTRODUCTION TO SECO

EDDY TREVINO

LoanSTAR

Technical Assistance



Energy Program

Energy Codes

Pantex

RECENT GRANTS AND EVEN LOWER INTEREST LOANS

2022 LED & EV GRANT PROGRAM → \$3.2M

Applications

Local Gov't Interior Lighting: 49

Electric Vehicle Charging Station: 11

ISD Interior Gym/Commons Areas: 32

ISD Exterior Wall Pack/Parking Lot: 22

COOL SCHOOLS → **\$20M Funding Availability/ 0.25% Interest/**
\$500,000 per Loan/ 12 Year PB

Applications 7





LOANSTAR

JOHN KYERE / 512-463-4867 / JOHN.KYERE@CPA.TEXAS.GOV



GENERAL GUIDE

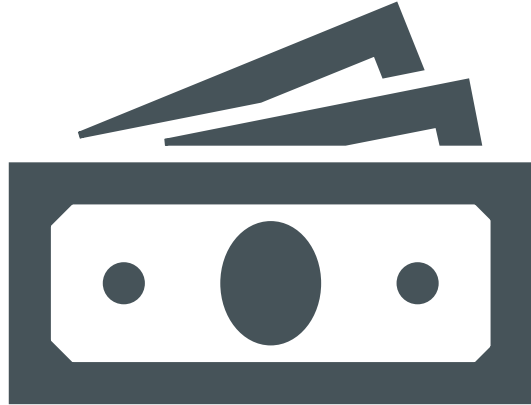
Eligible Borrowers

- Public taxpayer supported entities
 - 10 Texas Gov't Code
 - §2305.032
 - 34 Tex.Admin. Code
 - §19.41-45

Loan Qualification Criterion

- Permanently affixed
- Own Facility

Third Party Review



COMING SOON

NOTICE OF LOAN FUND
AVAILABILITY
OCTOBER 2021



SECO

SECO FUNDING OPPORTUNITIES

Throughout the year, SECO announces various funding opportunities to support efficiency programs. Funding opportunities include Notice of Loan Fund Availability for the LoanSTAR program, Request for Applications for energy efficiency grants and Requests for Proposals for qualified firms to contract with SECO on projects.

Notice of Loan Fund Availability — LoanSTAR Program

Posted Oct. 19, 2018 — The Texas LoanSTAR (Saving Taxes and Resources) revolving loan program provides low interest rate loans to assist Texas private and public entities by financing their energy-related cost-reduction retrofit projects.

Open enrollment through August 30, 2019

Sign Up!

[Sign up](#) to receive notifications from SECO when new funding opportunities become available.



LOCAL GOVERNMENTS

LESHAWN MANUS / 512-936-5201 / LESHAWN.MANUS@CPA.TEXAS.GOV



SECO and NCTCOG



NCTCOG works in collaboration with SECO to facilitate a regionally focused energy management program for North Texas

- Outreach to increase awareness to North Texas cities
- Promotes building codes and annual energy use reporting
- Coordinates avenues to gather feedback from its member governments to help identify the region's most pressing energy management needs and prioritize the development of appropriate resources
- Provides free, convenient education and training opportunities to local governments

CITY EFFICIENCY LEADERS PROJECT

SECO collaborates with city leaders across Texas to learn about and share their best practices in energy efficiency while strengthening ties among local governments. Support efforts through partnership with the South-central Partnership for Energy Efficiency as a Resource (SPEER) and the Houston Advanced Research Center (HARC) are done to coordinate and share what works among the state's six largest cities: Houston, San Antonio, Dallas, Austin, Fort Worth and El Paso.

BEST PRACTICES ARE DOCUMENTED THROUGH A SERIES OF WHITE PAPERS TO PROVIDE INSIGHTS, IDEAS, AND INFORMATION FOR CITIES.





ENERGY CODES

FRED YEBRA/ 512-475-0753 / FRED.YEBRA@CPA.TEXAS.GOV



CURRENT ENERGY CODES

H.B. 1736: Mandates energy efficiency for single-family residential construction; Chap. 11 of the 2015 IRC, effective 09/01/2016

TAC 19.53: 2015 IECC for commercial construction; effective 11/01/2016

TAC 19.32: ASHRAE 90.1-2016 Standard or IECC-2018 for state funded new construction; effective 06/01/2016

TAC 19.32: Water Conservation Design Standards for State Buildings and Institutions of Higher Education Facilities, effective 06/01/2016

Programs

STATE ENERGY CONSERVATION OFFICE

SECO partners with Texas local governments, county governments, public K-12 schools, public institutions of higher education and state agencies, to reduce utility costs and maximize efficiency. SECO also adopts energy codes for single-family residential, commercial, and state-funded buildings.



Funding & Incentives

[SECO Funding Opportunities](#)

[LoanSTAR Revolving Loan Program](#)

[Other Funding Resources](#)



Programs

[Alternative Fuels Program](#)

[Clean Energy Incubators](#)

[Industrial Energy Efficiency](#)

[Innovative Energy Demonstration Program](#)

[Local Governments Program](#)

[Schools Program](#)

[State Agency and Higher Ed. Program](#)

[Pantex Program](#)



Energy Codes

[Training & Code Compliance](#)

[Energy Code Adoption Process](#)

[Code Contacts](#)

[Commercial & Multi-Family Construction](#)

[Single-Family Construction](#)

[State-Funded Buildings](#)

[Local Ordinances](#)

[Texas Water Conservation Standards](#)



Energy Reporting

[State Agencies and Institutions of Higher Ed.](#)

[Local Government](#)

[Utilities](#)

[Schools](#)



Resources

[Combined Heat and Power in Texas](#)

[Energy Efficiency Best Practices Guide](#)

[Energy Savings Performance Contracting](#)

[SECO Reports](#)

[Remote Energy Audits](#)



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PANTEX

DENISE BROOKS / 512-463-5876 / DENISE.BROOKS@CPA.TEXAS.GOV



WASTE ISOLATION PILOT PLANT (WIPP) PROGRAM

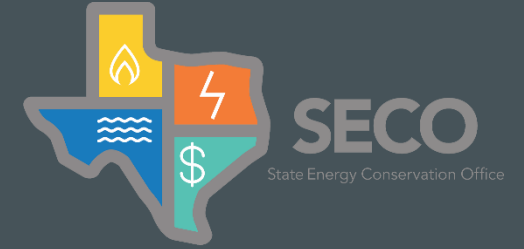
Provides for the safe and uneventful shipment of defense transuranic waste across Texas to the DOE's WIPP facility located 26 miles southeast of Carlsbad, New Mexico.

SECO Contracts with the following:

Texas Department of State Health Services (DSHS)
Texas Division of Emergency Management (TDEM)



CONTACTS



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