Local Government Energy Reporting Workshop

January 23, 2025





Welcome & Housekeeping

- 1. Mute your mics
- 2. Take questions at the end
- 3. Type questions in the chat

Who We Are

How do we support energy management efforts for entities across the state?



In partnership with the State Energy Conservation Office (SECO), AACOG's Regional Energy Management Program provides resources to assist local government agencies, educational institutions, and private entities in the implementation of energy efficiency and energy management programs.



SECO partners with local governments, public K-12 schools, public institutions of higher education and state agencies, across Texas to reduce utility costs and maximize energy efficiencies.



SPEER's Local Governments Program support city energy management by facilitating sharing of best practices in energy efficiency, while strengthening relationships among local governments through the City Efficiency Leadership Council (CELC).

Workshop Sponsor



AACOG receives funding through SECO to work on energy management and efficiency projects within the region. As part of this work, AACOG provides webinars and technical assistance on a variety of energy management, energy efficiency, and renewable energy topics.

Why Does Local Government Energy Reporting Exist?



Pollutants and Health Effects



LEAD (PB)

A naturally occurring element resulting from refining activities.

Health Effects: It can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system.



OZONE

Ozone is a chemical reactions between oxides of nitrogen, volatile organic compounds, and sunlight. **Health Effects:** exposure to ozone can increase the frequency of asthma attacks, cause shortness of breath, aggravate lung diseases, and permanently damage the lungs. Elevated ozone levels are linked to increases in ER visits, & premature death.



SULFUR DIOXIDE

A colorless, odorless gas. **Health Effects:** Short-term exposure can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to the effects of SO2.



PM-10

A particulate matter of inhalable particles in diameters, generally 10 micrometers and smaller.

Health Effects: PM10 contains microscopic solids or liquid droplets so small that they can be inhaled and cause serious health problems.



Health Effects: Breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the bloodstream to critical organs like the heart and brain. People with some types of heart disease and cardiovascular problems are concerned about carbon monoxide.

Texas Counties in Non-Attainment by Pollutant and Years



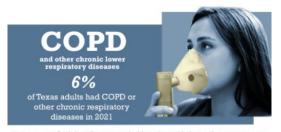


Link to Visualization

Air Pollution

7 million premature deaths annually (WHO, 2023).

Linked to COPD, respiratory infections, asthma, heart disease, and lung cancer. Chronic exposure to pollutants reduces life expectancy and leads to excess mortality.

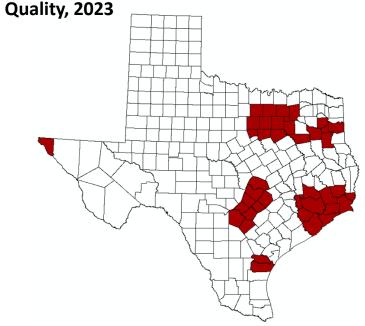


Percentage of adults 18 years and older who said that a doctor, nurse, or other health professional ever told them that they have COPD chronic obstructive pulmonary disease, emphysema, or chronic bronchitis

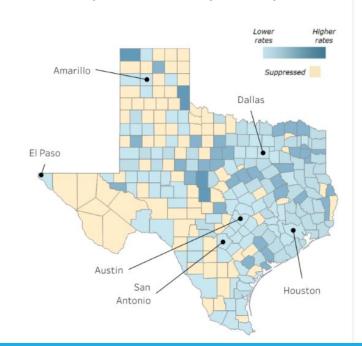


Percentage of adults 18 years and older who said that a doctor, nurse, or other health professional ever told them that they have asthma (and still have asthma)

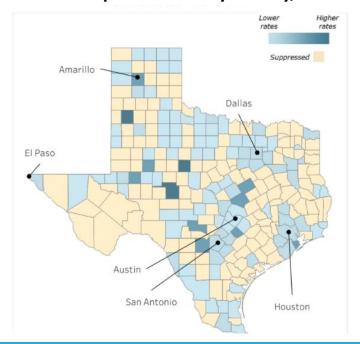
Non-Attainment and Affected Counties, Air



COPD Hospitalizations by County, 2021



Asthma Hospitalizations by County, 2021



History and Background



2001

This requirement, introduced in the 77th
Legislative Session by
Senate Bill 5 (SB5), was established to reduce air emissions associated with electricity consumption in ozone nonattainment or near nonattainment counties

2007

The 80th Legislature passed <u>SB12</u>, extended for entities to establish a goal to reduce electric consumption by 5% out to 2011

2011

In the 82nd Legislature, the passage of SB898 signified the continuance of establishing an energy reduction goal out to 2021. Allowed for exemption certification requests

2019

SB241 passed in the 86th
Legislature set 2019 as the baseline year for establishing a 5% reduction goal and extended the timeline for local governments to establish a goal to reduce electric consumption out to 2026

For full history, visit SECO's "History of Legislation for Public Sector Energy Reporting" webpage.

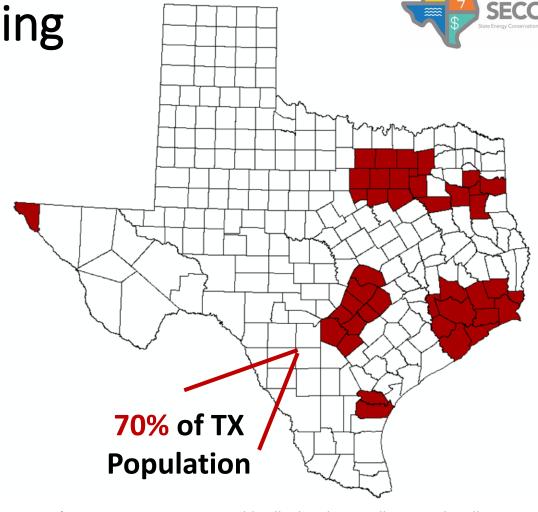
Local Government Energy Reporting

Section 388,005 Texas Health and Safety Code:

Purpose: Aid efforts to attain federal air quality standards by reducing demand for **electricity generation**

Who Reports: Political subdivisions, institutes of higher education or state agencies in 41 "affected counties" in Texas.* Political subdivisions include cities, counties, water districts, and other local government entities.

Requirements: Establish a goal of reducing electric consumption by at least 5% each state fiscal year for 7 years beginning September 1, 2019, and submit an annual report to SECO regarding the progress and efforts to meet the reduction goal



*Bastrop, Bexar, Brazoria, Caldwell, Chambers, Collin, Comal, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Gregg, Guadalupe, Hardin, Harris, Harrison, Hays, Henderson, Hood, Hunt, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Nueces, Orange, Parker, Rockwall, Rusk, San Patricio, Smith, Tarrant, Travis, Upshur, Waller, Williamson, Wilson, and Wise (Texas Administrative Code, Title 30, §114.629)

Impacts for State Air Quality

Local Government Energy Reporting Forms Submitted to SECO

Data Processed and Reported to the Texas A&M Energy Systems Laboratory (ESL)

ESL Estimates Total NO_X Reductions and Submits to Texas Commission on Environmental Quality (TCEQ)

TCEQ Includes in the Texas Emissions Reduction Plan (TERP) Biennial Report to the Texas Legislature 1.58

Tons per day NO_X Reduced in 2019

Impacts for Local Governments



Effectively Manage Energy Consumption Informed by Data Collection



Ability to Measure Performance Among Peer Entities Using SECO's "Energy Consumption Reporting Dashboard"



Identify Opportunities for Energy Efficiency Projects

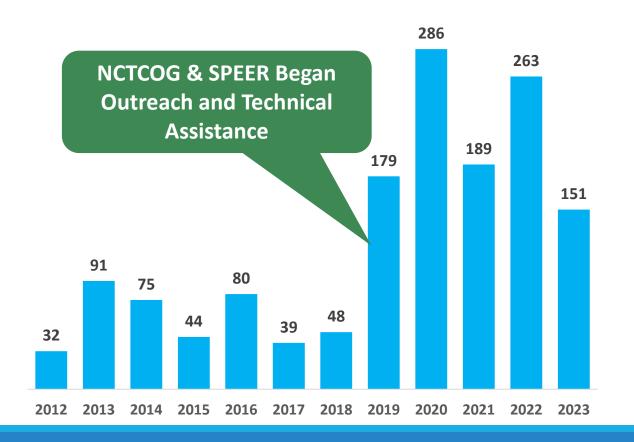


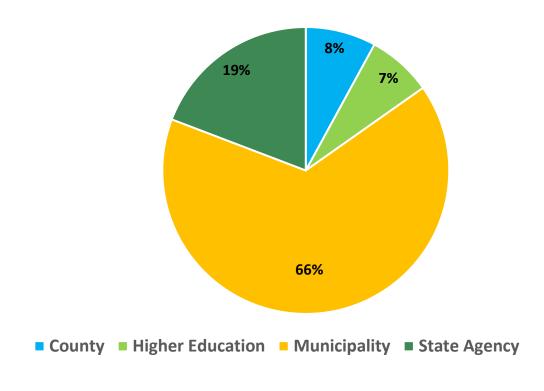
Pursue No-Cost Technical Assistance and Resources
Through SECO to Accomplish Energy Efficiency Projects

Local Government Energy Reporting Statistics

Number of <u>Texas Entities</u>
Who Submitted a Local Government Energy Report

Composition of <u>Texas Entities</u> Who Submitted a 2023 Local Government Energy Report







Local Government Energy Reporting Cycle for TERP

Information to be Reported:

- 1. Name of the facility, and/or ZIP code.
- 2. Total electricity consumption during reporting period for the facility.
- 3. Square footage (conditioned area).
- 4. Reporting period (i.e., Calendar year or Fiscal year) Calendar year preferred.
- 5. Need date: On or before March 31st

Contact: jhaberl@tamu.edu or jbaltazar@arch.tamu.edu

Preliminary Energy Assessments (PEAs)



Preliminary Energy Assessments (PEAs) are provided by the State Energy Conservation Office (SECO) and offer cost effective resource efficiency measures entities can implement to decrease energy consumption at no cost to you!

- Help guide the development of an energy management policy
- Provide facility benchmarking using ENERGY STAR Portfolio Manager
- Recommended maintenance procedures
- Develop efficiency level guidelines for equipment purchases

Preliminary Energy Assessment Service Request Form			SECO
Form# 50-852			State Energy Conservation Office
Public Entity Name		Telephone	
Contact Person		Title	
Email Address		County	
Street Address	City	State	ZIP Code
Mailing Address	City	State	ZIP Code
De li de la companione de			
Preliminary Energy Assessment Service Eligibility			
The State Energy Conservation Office (SECO) provides free prelim ture. Eligible entities include municipal and county governments, pu water authorities and municipally owned utilities. Leased or rented	iblic school districts, county	hospitals, port author	ities, major airports, pu
Principles of Agreement			
By submitting this request form, the entity listed above must agree t	100		
 select a contact person to work with SECO and its designate energy efficiency goals; 	d contractor to establish an o	energy policy and set r	realistic
 allow SECO's designated contractor to provide walk-through 	assessments of selected faci	lities;	
· schedule a time for SECO's designated contractor to make a	presentation on the assessme	ent findings to key dec	cision-makers;
· consider implementing the PEA's energy savings recommend	lations; and		
· allow SECO to post portions of this report on its website			
Additional Questions			
Has this organization used SECO's technical assistance or PEA serv	vices in the past?	Yes No)
Is the primary contact for this PEA familiar with SECO's LoanSTA	AR revolving loan program?	Yes No)
Has this organization used SECO's LoanSTAR revolving loan prog		Yes No)
rias tilis olganization used 31500's Loan 31700 fevolving loan prog			
Signature This agreement must be signed by your organization's chief executive.	ve officer or other signing au	thority.	
Signature	re officer or other signing au	ithority.	
Signature This agreement must be signed by your organization's chief executive	ve officer or other signing au	thority.	
Signature This agreement must be signed by your organization's chief executive	ve officer or other signing au		
Signature This agreement must be signed by your organization's chief executive	re officer or other signing au		
Signature		Date	
Signature This agreement must be signed by your organization's chief executive Signature Print Name Submit completed forms to SECO at Margaret.Garcia@cpa.texas.go or by mail to: State Energy Conservation Office Attn: Margaret Garcia		Date	
Signature This agreement must be signed by your organization's chief executive Signature Submit Name Submit completed forms to SECO at Margaret.Garcia@cpa.texas.go or by mail to: State Energy Conservation Office		Date	

SECO No-Cost Technical Assistance

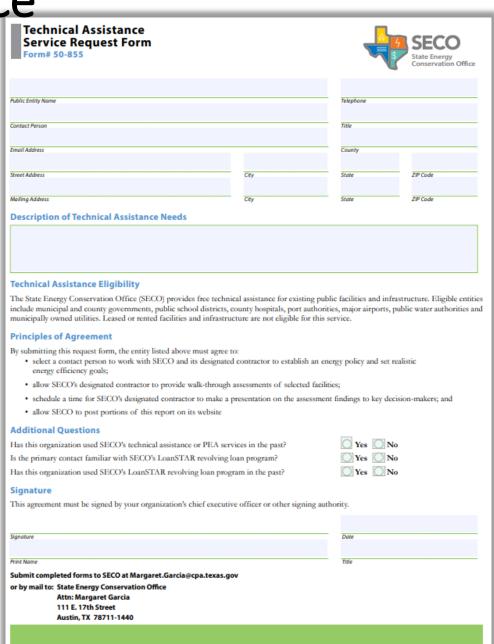
Through this program, SECO contracts with engineering firms to provide customized, onsite, energy-related services ranging from basic consultation to feasibility studies.



Eligible entities may request assistance with either **energy** or **water**-related technical matters.

Upon determination that the requested services are reasonable and within the contractors' scope of work, SECO will assign an engineer to contact the entity officials to determine the level of service necessary to provide assistance.

For more information, visit SECO's Technical Assistance webpage.



Texas LoanSTAR Revolving Loan

Finances Projects that Reduce Energy/Water/Utility Costs

- Simple Payback Period of 15 Years or Less
- •2.5% Loan Interest Rate; 1.5% ARRA Fund Interest Rate (More Reporting)

Open Enrollment until August 31, 2025

- Maximum \$6 Million Loan for traditional, 2.5% rate, limited to one loan
- Maximum \$8 Million Loan for ARRA Funded, 1.5% rate, limited to two loans

For more information visit the LoanSTAR Webpage





https://www.youtube.com/watch?v=4IFuj_5ZeGI

Next Steps

SECO State Energy Conservation Office

Visit SECO's Funding Opportunities webpage and

Sign up to receive SECO updates and announcements using the QR below:



Benjamin Teddlie benjamin.teddlie@cpa.Texas.gov (512) 463-4096

Energy Reporting FAQ Guide

Local Government / State Agency Energy Reporting Frequently Asked Questions:

SPEER has developed a **Frequently Asked Questions guide** to support political subdivisions with their 2022 reporting, and we are available to answer questions or provide technical support to any reporting entities. If you have questions about reporting requirements please reach out to SPEER's Local Government Program Manager at **cities@eepartnership.org**.

Each political subdivision, institution of higher education or state agency in the affected counties is required by state law to:

- Establish a goal to reduce the entity's electricity consumption by at least 5 percent annually for 7 years, beginning Sept. 1, 2019; and
- Submit a report annually to the State Energy Conservation
 Office (SECO) regarding the entity's progress and efforts to
 meet the 5 percent annual reduction goal.

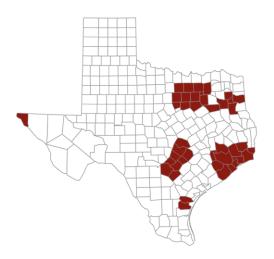
Find more information on the State Energy Conservation Office **here**.

Download this **Reporting Template** for collecting data and submitting the report.

Training and Educational Outreach:

Online and in person training on statute requirements, developing an energy plan, data collection and analysis, and energy management best

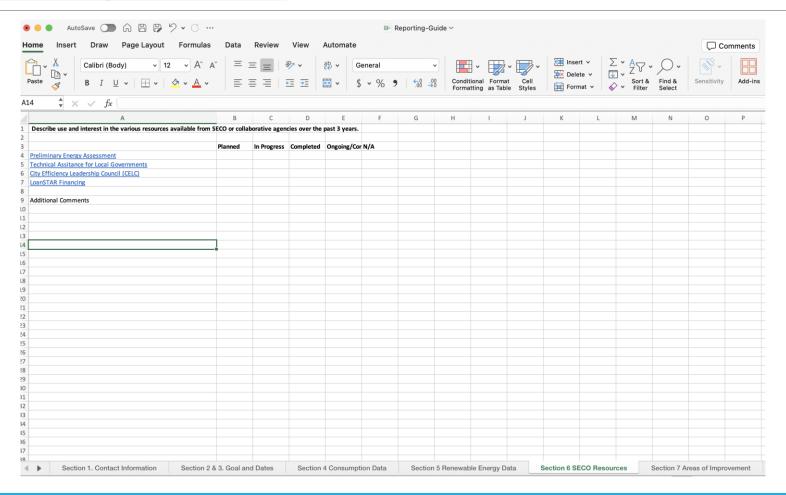
Energy Report FAQ Guide



One-on-One Support:

SPEER's local government program staff is available to meet with city staff and elected officials to facilitate energy efficiency planning and reporting.

Reporting Guide



State Energy Reporting

home » programs » seco » reporting



LOCAL GOVERNMENT ENERGY REPORTING

The Texas Health and Safety Code §388.005(c) requires each political subdivision in a non-attainment area or an affected county to establish a goal to reduce electric consumption by at least five percent each state fiscal year. In 2019, the 86th Legislature passed Senate Bill 241, extending the timeline for this requirement seven years beginning September 1, 2019.

Each political subdivision, institution of higher education or state agency must submit a report annually to SECO regarding the entity's progress and efforts to meet the five percent annual reduction goal. The deadline to submit reports is **March 4**, **2024**. An entity that does not attain the established goals must justify in their annual report to SECO that the entity has already implemented all cost efficiency measures.

Who Reports

The reporting requirements apply to each political subdivision, institution of higher education and state agency facility located in the 41 non-attainment areas or affected counties in Texas: Bastrop, Bexar, Brazoria, Caldwell, Chambers, Collin, Comal, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Gregg, Guadalupe, Hardin, Harrison, Hays, Henderson, Hood, Hunt, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Nueces, Orange, Parker, Rockwall, Rusk, San Patricio, Smith, Tarrant, Travis, Upshur, Waller, Williamson, Wilson and Wise.



Energy Consumption Reporting Dashboard

Related Links

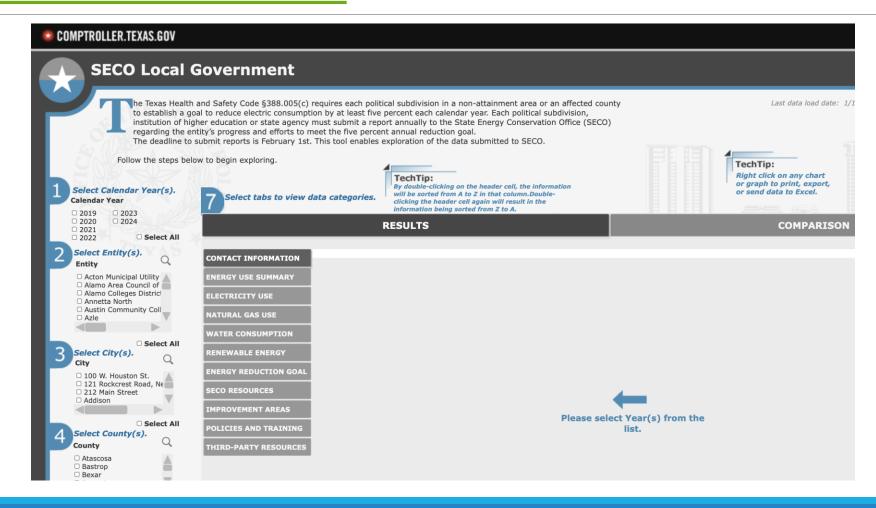
State Agencies and Instititions of Higher Ed. Reporting

Local Government Energy Reporting

Public Utility Energy Reporting School Energy Reporting

History of Local Government Reporting

SECO Dashboard



Walkthrough of Local Government Energy Report

Local Government Reporting Form

Report Sections

- 1. Reporting Entity Information
- 2. Reduction Goal
- 3. Calendar Year of Report
- 4. Consumption Data
- 5. Renewable Energy Data (Optional)
- 6. Use and Interest in SECO Assistance Resources
- 7. Areas of Improvement & Resources
- 8. Additional Feedback
- 9. Progress Toward Goal

Sections 1, 2, 3, 6, 7, 9 and portions of Section 4 of the Local Government/State Agency Energy Report must be completed by all reporting entities. <u>Section 5: Renewable Energy Data is optional</u>.

Getting Started

- Create a Data Checklist (see reporting help guide)
- Know your data sources
- Keep your data organized, consistent and "tidy"
- Prep for next year now!

How to Report

Submit a Report

Note: Requirement for saving an incomplete energy reporting form. The user must resume/complete their survey using the same computer they started preparing the form. The user cannot clear their browser cookies while the form is being prepared or the user will lose the prior entered information. Incomplete forms are saved to a cookie in the user's browser, which remains until the cookies are cleared in the browser. Since cookies are local to a specific device, the user must resume/complete their survey using the same computer.

Use this Reporting Help Guide (PDF) of the report to gather all necessary information prior to reporting online. Scanned copies will not be accepted. Reports must be completed online.

Section 1: Background Information

- City Information
- Contact Information
- Ensure to update contact information for those who will be completing next years reporting

Salutation: * Entity name: Contact Name: 2 Entity type: Municipality O County State agency Contact Title: Higher education Other (please specify) Contact Email Address: Contact Information: City: Contact Phone Number 2 Zip Code: Contact Phone Number Extension: County: Next

SECTION 1: Reporting Entity Information

Section 2: Reduction Goal

- Reduction goal established (Y/N)
- Goal can take several forms
- Denton historically does this through council resolution
- Updates with each new iteration of the SB to reflect length of time and start date

SECTION 2: Reduction Goal

* Has your organization complied with <u>Texas Health and Safety Code §388.005(c)</u>, which states that "Each political subdivision, institution of higher education, or state agency [in an ozone non-attainment or affected county as identified by the <u>Texas Health and Safety Code §386.001</u>] shall establish a goal to reduce the electric consumption by the entity by at least five percent each state fiscal year for seven years, beginning September 1, 2019?"

Note: This question simply asks if your organization has set a goal, not whether your actual consumption decreased.



O No

Section 3: Reporting Period

- Reporting period for local governments Jan 1 to Dec 31
- As stated your January data or December data may overlap into other months
- Current Practice: split months based on meter read date (before or after the 15th of the month)

SECTION 3: Reporting Period

Reports should be submitted to reflect a 12 month period of the preceding year. State agencies and higher education should report fiscal year data (September – August) and local and county governments should report on a calendar year basis (January – December). Since billing cycles may not break "cleanly" across a calendar month, it is acceptable for consumption data to be based on utility billing months of the previous year.

welve-month reporting period						
Start (MM/DD/YYYY):	01/01/2021					
End (MM/DD/YYYY):	12/31/2021					
		Prev	Next			

Section 4: Consumption Data

- Checklist helps in this section
- Know your data sources
- Organization starts with data collection create a SB 241 field if possible (BF, ST, TS, W, WW, NA)
- Get informed on account changes

Section	▼ Description	Metric	▼ Source	▼ Value
4	No. of Buildings	units	Risk Mgmt	192
4	Building Sqft	sqft	Risk Mgmt	1,382,813
4	Total Building kwh	kwh	DME/Billing/Oncor/Cos	serv x
4	Number of Traffic Lights	units	DME	х
4	Traffic Light kwh	kwh	Billing	Х
4	Number of Street Lights	units	DME	Х
4	Street Light kwh	kwh	Billing	Х
4	Potable water supplied (MGD)	Avg MGD	Water	Х
4	Water Supply kwh	kwh	Billing	Х
4	Wastewater Treated (MGD)	Avg MGD	Wastewater	Х
4	Wastewater Treatment kwh	kwh	Billing	Х
4	Total number of Evs in fleet	units	Fleet Services	Х
4	kwh used in EV charging	kwh	Billing	Х
4	Other uses	NA	Billing/Facilities	Х
4	Other uses kwh	kwh	Billing	Х



Section 4: Consumption Data

- Buildings
 - Risk management is a great resource
 - Keep billing codes in mind
- Lighting
 - Metered vs unmetered
 - Owned vs unowned
- Water and Wastewater
 - You may or may not have a treatment plant to report
 - You will have pumps and lift stations

Potable water supply facilities (Ave. Million Gal/Day) (optional):			
Potable water supply facilities (kWh) (optional):			
Wastewater treatment (Ave. Million Gal/Day) (optional):			
Wastewater treatment plants (kWh) (optional):			
Total number of electric vehicles (EVs) (includes both battery-electric and plug-in hybrid electric vehicles) (optional			
Total electric use (HWh) of electric vehicles (EVs) charging stations (only include stations that are NOT sub-metere (optional):			
Other (please specify) (kWh) (optional):			
REQUIRED: Total electricity consumption (kWh):			
500000			

Section 4: Consumption Data

- Natural Gas
 - Check your units
 - Different data set than electricity
 - Data storage tip have at least one linking data field (ex. address)
- Water Usage
 - Billing category vs usage category

Natural Gas Consumption	n Data in MCF (optional) (1 MCF = 1,000 CF)
Buildings (MCF):	
Potable water supply facilities (MCF):	
Wastewater treatment plants (MCF):	
Other (please specify) (MCF):	
Total natural gas consumption (MCF):	
Water Usage in kGal (opti	onal) (1 kGal = 1,000 gallons):
Buildings (kGal):	
Potable water supply facilities (kGal):	
Wastewater treatment plants (kGal):	
Other (please specify) (kGal):	
Total water usage	

Section 5: Renewable Energy Data

- Solar, Wind, Biomass, Geothermal
- On site summary
 - Entity energy footprint
- PPA Summary

Solar Photovoltaic (kWh): Total quantity from on site solar photovoltaics (kWh): Total electricity purchased from off-site sources (e.g. through a "green energy" contract, Power Purchase Agreement, etc.) Additional Comments: Wind (kWh): Total quantity generated from on site wind (kWh): Total electricity purchased from off-site sources (e.g. through a "green energy" contract, Power Purchase Agreement, etc.) Additional Comments:

SECTION 5: Renewable Energy Data (Optional)

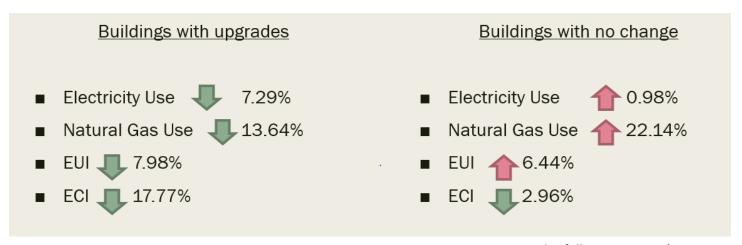
Section 6: SECO Resources

- Preliminary Energy Assessment
- Technical Assistance
- LoanSTAR financing
- Denton PEA experience

S	SECTION 6: Use and Interest in SECO Assistance Resources						
D	Describe use and interest in the various resources available from SECO or collaborative agencies over the past 3 years.						
	Note: Data will be saved upon clicking the "next" button. Upon returning to the survey after completion, the section 6 entries will be visible as previously entered (as with all other data).						
*	* Retrofits and Upgrades						
		Planned	In Progress	Completed	Ongoing/Continuous	N/A	Interested In Learning More
	Preliminary Energy Assessment (PEA) [<u>link</u>]						
	Technical Assistance for Local Governments [<u>link</u>]						
	City Efficiency Leadership Project (CELC) [<u>link]</u>						
	LoanSTAR Financing [link]						
A	dditional Comments:						

Section 7&8: Areas of Improvement and Progress

- Physical upgrades
 - HVAC
 - Insulation
 - Management systems
- Policies and Training
 - Internal Energy Policy
 - Trainings (Denton has incorporated into monthly safety training in the past)



upgrades following Denton's PEA

Section 9: Exemption Request

- Did you reach your goal?
 - Calculate based on 2019 baseline totals
- Claim exemptions if applicable after report has been completed

Local Government Energy Reporting Frequently Asked Questions

- Developed by SPEER using feedback and interviews with reporting entities
- Covers general questions and section-by-section guidance

Download Here!

Local Government / State Agency Energy Reporting Frequently Asked Questions

November 19, 2020



Prepared for the State Energy Conservation Office by The South-central Partnership for Energy Efficiency as a Resource (SPEER)



Kelsey Delgado

City of Fair Oaks Ranch

Key Takeaways and Next Steps



Local Government Energy Reporting Deadline





Calendar Year Reporting Period: January 1 – December 31



Minimum Required Data Points Include

- ✓ Reporting Timeframe (e.g., Calendar Year 2022)
- ✓ Annual Electricity Consumption in Kilowatt Hours (kWh)
- ✓ Gross Square Footage of All Entity Owned Buildings/Facilities



Review Prior Reporting Data on SECO's "Energy Consumption Reporting Dashboard"

SPEER Resources

- •Rethinking Texas' IOU Energy Efficiency Programs
- •<u>Building Operation Certification</u>: Building Operator Certification (BOC) training teaches you how to bring your building to peak performance, saving energy and money. BOC graduates make their buildings more comfortable, efficient, and environmentally friendly.
- •<u>SPEER YouTube Channel</u>: Over 100 professional development videos with content covering topics such as code and funding opportunities.
- Follow us on Linkedin: Updates and current energy news
- •Newsletters: Covers Statewide Policy, Code, and Local Government



Take Our Survey

Let us Know What Future Workshops You Want to See





Have Feedback on Today's Workshop?

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