



Texas' Mandated Local Government Energy Reduction Goal: Challenges and Best Practices

Background and Purpose

Since 2018, the North Central Texas Council of Governments (NCTCOG) has worked under a contract from the State Energy Conservation Office (SECO) to conduct outreach to increase awareness and compliance to the state-mandated Local Government Energy Reporting (LGER) required by Texas Health and Safety Code §388.005 (THSC §388.005).¹ The LGER reporting requirements were originally established in 2001 to support efforts to attain federal ozone standards by reducing electricity demand among institutes of higher education, state agencies and political subdivisions in affected counties that would then reduce emissions produced from electricity generation. The latest revision of the Dallas-Fort Worth (DFW) State Implementation Plan (SIP), adopted on March 4, 2020, forecasts that approximately 22 percent of point source nitrogen oxide (NO_x) emissions in the DFW ozone nonattainment area will result from electricity generation units (EGUs) in 2020.² As NO_x emissions are the dominant factor in determining ozone formation in DFW, efforts to reduce NO_x are critical to attaining federal standards.

While all applicable entities in affected counties are subject to the LGER reporting requirements, organizations fulfill these requirements using different reporting forms. This whitepaper focuses on the reporting completed by political subdivisions - primarily municipalities, counties, and special districts – including the challenges and associated best practices to assist in meeting reporting obligations and fulfilling the annual electricity reduction goal.

Introduction to the Local Government Energy Reporting Requirements

The THSC §388.005, which lays out the LGER requirements, has a long history spanning the last two decades. Since 2001, the Texas legislature has passed four bills in four separate legislative sessions, each of which extended the timeline that affected political subdivisions must establish a goal to reduce electric consumption and submit an annual report to SECO.³ The most recent change occurred in 2019, when Senate Bill 241 (SB 241) was passed by the 86th Texas Legislature, extending the timeline for applicable entities to set a goal of reducing their annual electric consumption until 2026, with a baseline starting in September 2019. Appendix A outlines in greater detail a matrix delineated by entity type of the other energy reporting requirements mandated in Texas.

In addition to establishing a goal to reduce electricity consumption, the THSC §388.005 requires reporting entities to submit an annual report to SECO that captures their annual electricity usage and progress towards meeting the five percent reduction goal. The complete process of how this data is used is visualized in Exhibit 1 below. Data submitted to SECO is transmitted to the Texas A&M Energy Systems Laboratory (ESL), who then utilizes the reported data to estimate the amount of total NO_x reductions associated with the reported energy conservation and efficiency measures. Once the annual NO_x emissions are quantified, ESL submits the data in an annual report to the Texas Commission on Environmental Quality (TCEQ), which is then included in the Texas Emissions Reduction Plan (TERP) Biennial Report to the Texas Legislature. The TERP Biennial Report includes information relating to impacts of energy efficiency programs, including SECO LGER program, and is posted on the TCEQ TERP webpage. The 2017 to 2018 TERP Biennial Report highlighted an annual electricity savings of 1,100,775 megawatt-hours per year, which is estimated to avoid 294 tons of NO_x emissions attributable to data reported under THSC §388.005 for calendar year 2016.⁴

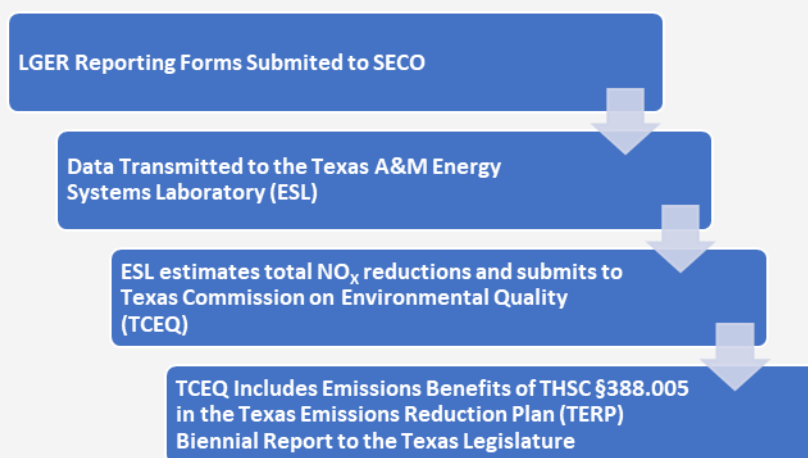


Exhibit 1: The Pathway of Submitted LGER Data

¹Tex. Hea. & Saf. § 388.005. Retrieved from <https://statutes.capitol.texas.gov/Docs/HS/htm/HS.388.htm#388.005>

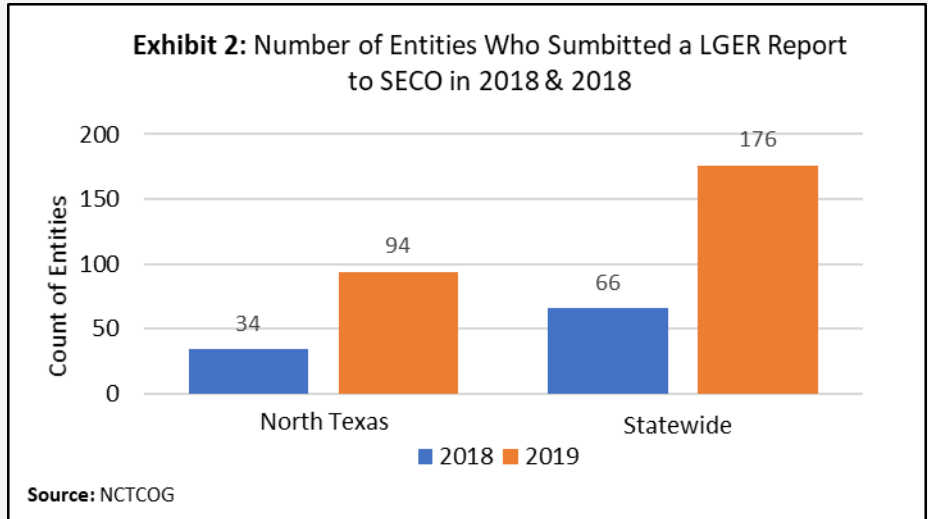
²The Texas Commission on Environmental Quality (TCEQ), "Dallas-Fort Worth Serious Classification Attainment Demonstration State Implementation Plan Revision for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard". Date Accessed July 13, 2020. Retrieved from https://www.tceq.texas.gov/assets/public/implementation/air/sip/dfw/dfw_ad_sip_2019/DFWAD_19078SIP_adopkg_web.pdf

³State Energy Conservation Office (SECO), "History of Legislation for Public Sector Energy Reporting." Date Accessed June 27, 2020. Retrieved from <https://comptroller.texas.gov/programs/seco/reporting/history.php>

⁴"TERP Biennial Report to the Texas Legislature," Texas Commission on Environmental Quality (TCEQ) Texas Emissions Reduction Plan (TERP), accessed June 26, 2020, <https://www.tceq.texas.gov/airquality/terp/leg.html#biennial>

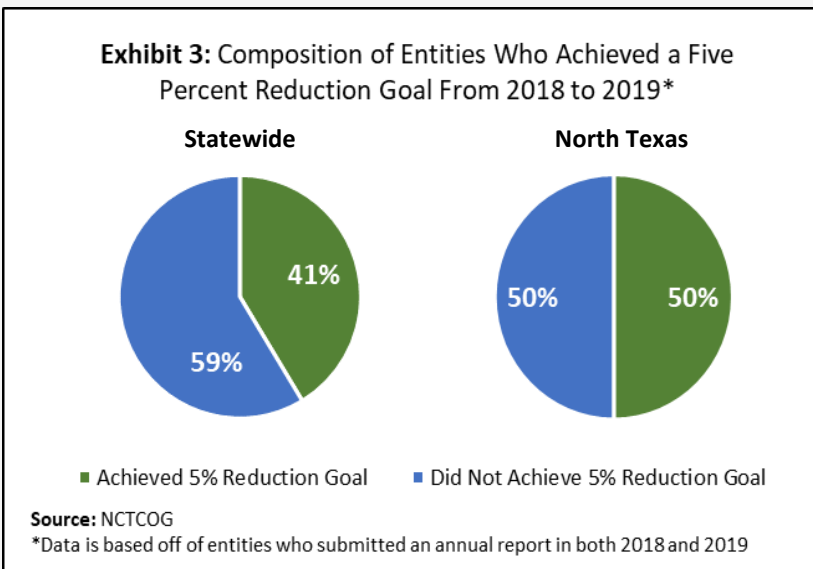
Affected political subdivisions that do not meet the annual five percent reduction goal but have implemented all cost-effective measures are eligible to request an exemption through SECO. To evaluate whether political subdivisions have established all cost-effective energy efficiency measures, each must consider cost-effectiveness according to the standards established for a contract for energy conservation measures under §302.004(b) of the Local Government Code.⁵ See

Appendix B for information on the deployment status of energy efficiency initiatives, based on responses received by SECO to the 2019 LGER report and compiled by the South-Central Partnership for Energy Efficiency as a Resource (SPEER).



In 2018, NCTCOG began outreach efforts to increase awareness of the LGER requirements among affected political subdivisions within the 16-county NCTCOG region. Concurrently, SPEER did similar outreach to jurisdictions in affected counties across the state. Exhibit 2 highlights the number of affected political subdivisions who reported in 2018 and 2019

and illustrates that sustained outreach has led to a substantial increase in response rate. NCTCOG believes that much of this increase is due to increased awareness, as many local governments indicated that they were not aware of this requirement. Of the North Texas entities who submitted both a 2018 and 2019 annual report to SECO, 50 percent reported meeting the required five percent reduction in electricity consumption, as shown in Exhibit 3. By submitting a LGER annual report year after year, affected political subdivisions can track progress towards meeting the five percent reduction goal.



Identified Challenges and Best Practices to Meet the Energy Reduction Goal

While some affected political subdivisions have found benefit from complying with the LGER requirements, others have identified challenges in meeting the goal. This can be associated with the varying level of experience with this reporting requirement, especially when comparing affected political subdivisions that have rigorous facilities management programs against those that do not have the resources for energy management. For some, achieving the annual 5 percent reduction goal is challenging due to the proportion of facility electricity consumption that is tied to energy-intensive processes that are not completely

⁵Tex. Loc. Gov. §302.004. Retrieved from <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.302.htm#302.004>

controllable by their own organization's activities (e.g. the amount of electricity needed to power city-owned wastewater pumps is dictated largely by actions of residents and businesses, not municipal operations). Many other factors may increase electricity consumption at facilities, including facility expansion and electrical load increases associated with shifts toward electrification of appliances or fleet vehicles.

Outlined in this section are challenges facing affected political subdivisions in complying with the LGER requirements as well as recommended best practices that can be used to support more holistic energy management process and help achieve the annual five percent reduction goal.

CHALLENGE: Allocating and Implementing Resources to Complete Required Reporting

Various barriers in energy management have nothing to do with energy projects at all. Instead, barriers may be institutional, associated with accessibility of data or lack of managerial support to allocate staff time and resources to complete the paperwork, or to implement necessary measures to meet and set goals. These reporting/resource hurdles can then further act as barriers from showcasing all energy reduction progress that has been made. As a result of following LGER statutory requirements, affected political subdivisions in North Texas have experienced success in energy management and have made proactive changes within their organizations while becoming more transparent and organized with their energy management practices.

The following list of recommended best practices seeks to showcase efforts and connections to guide affected political subdivisions to have a better understanding of the reporting mandate, its corresponding data, and to leverage the requirement for various energy advancements.

BEST PRACTICE: Establish the Electricity Reduction Goal through Organizational Action

Affected entities have established the goal through a variety of means ranging from simply having a staff champion to taking a more formal approach. While a staff champion is often the easiest way to get the initiative started, this can lead to loss of institutional knowledge over time if that champion leaves the organization or moves into a new position. Setting the goal through a more formal mechanism can help give more "teeth" to the effort and ensure management buy-in at the highest levels, increasing the likelihood that adequate staff and resources are allocated to energy efficiency.

Suggested Strategies:

Adopt a goal to reduce electricity consumption through city council action, city manager directive, commissioners' court or board action, or some other 'formal' mechanism appropriate to the organization.

BEST PRACTICE: Leverage Other Institutional Priorities to Gain Management Buy-In

Due to lack of consequences and enforcement within the statute, management within affected political subdivisions may not prioritize completion of the LGER report or allocate resources to meet the annual reduction goal. However, many of these same managers may be engaged in, and actively support, efforts to attain federal ozone standards within the state's nonattainment areas, as ozone nonattainment can have economic consequences. Additionally, calculating the impacts of energy efficiency may help political subdivisions support broader goals, such as public health or economic objectives.

Suggested Strategies:

Remind managers that the original purpose of the statute is part of the larger TCEQ Texas State Implementation Plan to meet federal ozone standards. Cite impacts from the TERP Biennial Report to the Legislature.

Emphasize that the requirement is officially state law in the Texas Health and Safety Code, and while there are no enforcement mechanisms in place, entities should comply with all state laws.

Use the EPA Avoided Emissions and generation Tool (AVERT) to illustrate how in-house actions have led to reductions in air pollutants; while this tool is not used for State Implementation Plan purposes, it is useful in assessing the impacts of various activities.

<https://www.epa.gov/statelocalenergy/avoided-emissions-and-generation-tool-avert>

Use the EPA CO-Benefits Risk Assessment (COBRA) Health Impacts Screening and Mapping tool to estimate the health and economic benefits of clean energy policies. <https://www.epa.gov/statelocalenergy/co-benefits-risk-assessment-cobra-health-impacts-screening-and-mapping-tool>

BEST PRACTICE: Create and Foster Interdepartmental Collaboration/Communication:

The LGER annual reporting form covers a variety of data that for most organizations, does not live under a single department. This barrier can inadvertently cause data loss from the lack of communication of existing internal data to use in benchmarking and energy reduction action analysis.

Suggested Strategies:

Facilitate interdepartmental collaboration by organizing a group made up of staff from different teams that work on data relevant to some portion of the report (e.g. finance directors responsible for the utility bills, facilities managers, energy conservation and sustainability staff, etc.). This can help break down institutional barriers associated with division of responsibility that often can lead to breakdowns in communication or challenges in compiling comprehensive data.

Establish a line of communication across relevant departments to provide transparency and aid in gathering information to be included in the report each year.

Convene a meeting with various department points of contact once a quarter to discuss data collection needs, recordkeeping practices, consumption/cost trends, etc. and other strategic initiatives such as master planning or long-term goal setting. This cross-functional team can help identify options to integrate statutory goals into broader organizational strategies.

BEST PRACTICE: Reporting and Data Barriers

Many reporting barriers are attributed to the access and organization of specific data. More underlying challenges are due to lack of internal entity electric data organization practices, including the need to define and categorize Electric Service Identifiers (ESIDs), causing an overwhelming load of unorganized and unidentifiable data, almost impossible to categorize for reporting purposes.

Suggested Strategies:

Organize both facility/building energy consumption data and non-facility (street & traffic lighting, park lighting) energy consumption

Establish a central repository of all information so it is in one place and try to ensure a cloud backup to prevent any loss of data.

Use EnergyStar Portfolio Manager to track facility data and usage to help guard against loss of files or staff turnover.

EnergyStar Portfolio Manager training videos and additional resources can be found at www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/new-energy-star-portfolio-manager

While EnergyStar portfolio manager is an important tool in tracking buildings, some municipal ESIDs do not fit within EnergyStar categories (such as light poles and parks). However, these non-facility ESID's continue to add in to total energy usage, so must be included within the annual report. To mitigate this issue, internal utility bill tracking systems can be used for the entity alongside EnergyStar.

Use Smart Meter Texas as a tool to understand electricity usage. All data should be accessible from the Smart Meter Texas website tool at www.smartmetertexas.com.

Smart Meter Texas is a data access portal established by and jointly managed by the Electric Reliability Council of Texas (ERCOT), region transmission and distribution utilities (CenterPoint, Oncor, American Electric Power (AEP), and Texas-New Mexico Power Co.) in conjunction with advanced meter deployment to allow customers to access their energy data.

Entities can utilize tools on this site to help decipher electricity usage already associated with your account.

Contact your Energy Service Company (ESCO) or Retail Electric Provider (REP) and inquire if they can provide meter analysis for free as a service to help organize and collect usage data for your entity.

Take advantage of a free Preliminary Energy Assessment (PEA) from SECO which provides recommendations for cost-effective efficiency measures that could be implemented to reduce utility consumption or utility costs. SECO's PEA service also includes data access, organization, and analysis for the facilities included in the assessment.

BEST PRACTICE: Connect with Peers

Affected political subdivisions have identified multiple barriers preventing the submittal of their annual report to SECO including lack of reporting awareness and limited availability to previous reporting history.

Suggested Strategies:

Connect with NCTCOG or SPEER to request a copy of previous reports or determine if/what years a report was submitted.

Connect with SPEER at www.eepartnership.org or cities@eepartnership.org

Connect with NCTCOG at www.conservenorthtexas.org or energy@nctcog.org

For Cities: Participate in SPEER's City Efficiency Leadership Council (CELC) regional roundtable lunches and city calls to engage in dialogue among cities of all sizes on energy management/efficiency initiatives.

CHALLENGE: Falling Short of the Five Percent Reduction Goal

The ability to attain an annual five percent electricity reduction has remained a significant challenge for affected political subdivisions. Those who do not achieve this goal can feel discouraged or may feel that submitting the annual report to SECO is "self-incriminating" because they are going on the record publicly with data that shows a failure to achieve an established goal.

The following list of recommended best practices seeks to aid affected political subdivisions to not feel discouraged and showcase how to utilize the LGER requirements to their advantage.

BEST PRACTICE: Complete the Full LGER Annual Report, Including Optional Data, Notes and Comments, to Provide a Holistic Picture of Energy Use

Electricity consumption is the only type of energy reduction required by statute. However, beginning in 2019, the reporting form was expanded to include other energy consumption categories including water (which is directly related to energy due to power requirements for water pumping) and natural gas. While the natural gas and water data are optional, affected political subdivisions have found that reporting this data has proven useful because it serves as an accountability measure to monitor the consumption year after year, thus making consumption data transparent and providing an opportunity for entities to evaluate all the variables that influence energy consumption at their facilities.

A shortfall in meeting the five percent electricity reduction goal could be associated with broader efforts that increase electricity consumption but achieve progress toward overall air quality goals. For example, a shift from natural gas to electric appliances, or the addition of electric vehicles (EVs) to the fleet, can result in energy efficiency, criteria pollutant, and greenhouse gas (GHG) emissions benefits, especially when combined with the use of renewable energy. Such measures may either increase or offset reductions in electricity consumption but offer real-world benefits by reducing emissions in other sectors. Holistically evaluating facility energy consumption may not reduce any direct load on the grid but could reveal potential for implementation of other energy projects, which are indirect ways of reducing their total emissions impact.

In addition, air quality benefits can be achieved not only through conservation of electricity, but also through shifts toward cleaner electricity generation such as solar and wind. Transition towards increased use of cleaner energy generation achieves the air quality goals of the statute, even though such measures are not specifically described in statutory language.

Affected political subdivisions can look for opportunities in the report to add notes or explanation to showcase a more holistic energy story that may give context to any shortfall in achieving the statutory goal.

Renewable Energy Use

Renewable energy use will not contribute to the five percent reduction goal. However, it can be an important element to track. By using renewable energy sources, affected political subdivisions can reduce the emissions associated with electricity generation, which achieves the same end goal as a reduction in electricity consumption.

Suggested Strategies:

Choose a renewable energy plan from the respective REP, or opt into a power purchase agreement, community solar arrangement, or another mechanism to participate in or benefit from renewable electricity generation from off-site sources.

Evaluate deployment of on-site renewables. Resources specific to local government projects are available on the Go Solar Texas website at www.gosolartexas.org.

NCTCOG has been designated as a SolSmart region and serves as a resource for North Texas entities interested in solar energy deployment.

Electrification of Transportation and Buildings

EVs are projected to encompass approximately 30 percent of the entire fleet of vehicles in the United States by 2040.⁶ Unlike other fleet vehicles, the fuel needed to power EVs may increase the total electricity use of a facility if EV charging infrastructure is added to an existing facility. Isolating the increase may be challenging if charging stations are not separately sub-metered. Depending on the speed, quantity, and use of these charging stations, a significant spike in energy use for the building could occur. Affected political subdivisions that record the total number of EVs and EV charging stations each year can show that a portion of their electricity consumption is associated with fleet fueling. Because of the annual electricity reduction goal, some entities may be deterred from investing in EV infrastructure for fear it would increase their reported consumption. However, a shift to EVs is likely to achieve a reduction in net energy consumption and emissions associated with the transportation sector, so an increase in electricity consumption due to use of EVs may actually result in a net decrease in emissions overall.

Additionally, the TCEQ modeling for the DFW ozone nonattainment area shows that total daily NO_x emissions is increasing in the area source sector, while emissions are decreasing in almost every other sector.⁷ Based on discussion with the TCEQ staff, NCTCOG understands that part of this increase is attributed to growth in population and building stock, which leads to an increase in the population of appliances powered by fossil fuels (e.g. natural gas water heaters or stoves). While each appliance has a very small rate of fugitive emissions, these emissions may become more consequential as other emissions sources are reduced and building stock increases. Beyond ozone impacts, The US EPA indicates that buildings contribute about 12 percent of the carbon dioxide and other GHGs released into our atmosphere from the use of fossil fuels, primarily natural gas, for heating, cooking, and other uses. To offset emission impacts, some buildings are choosing electric-only appliances and equipment. Electric heat pumps for example, use only one-third to one-half of the energy input as heaters using natural gas, without the direct emissions.⁸

Suggested Strategies:

If possible, separate fleet-related electricity consumption from facility-related electricity consumption

Sub-meter EV charging stations when possible to differentiate fleet-related electricity consumption from facility-related electricity consumption.

Leverage data reports from networked EV charging stations – networked stations keep track of the amount of kWh electricity dispensed. If an EV charging station is not sub-metered, this report would enable the fleet-related electricity consumption to be subtracted out of the total meter consumption.

⁶Bloomberg Electric Vehicle Outlook 2020, retrieved from <https://about.bnef.com/electric-vehicle-outlook/>

⁷The Texas Commission on Environmental Quality (TCEQ), "Dallas-Fort Worth Serious Classification Attainment Demonstration State Implementation Plan Revision for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard". Date Accessed July 13, 2020. Retrieved from https://www.tceq.texas.gov/assets/public/implementation/air/sip/dfw/dfw_ad_sip_2019/DFWAD_19078SIP_adopkg_web.pdf

⁸EPRI, U.S. National Electrification Assessment, Retrieved from <http://mydocs.epri.com/docs/PublicMeetingMaterials/ee/000000003002013582.pdf>

If an EV charging station is neither sub-metered, nor networked, make note of the annual mileage traveled by the EVs using that charger. The mileage can be used to estimate kWh consumed for vehicle travel, which could then be subtracted from the overall meter consumption

If electricity consumption cannot be separated, ensure that the report includes data that illustrates fleet electrification efforts to provide context for associated increases in electricity consumption

Utilize a best practice document for fleet electrification such as the U.S. Department of Energy developed a resource for fleet managers related to fleet electrification called “Plug-In Electric Vehicle Handbook for Fleet Managers”, https://afdc.energy.gov/files/pdfs/pev_handbook.pdf

For no-cost fleet evaluations and additional EV resources contact the Dallas Fort Worth Clean Cities Coalition (DFWCC) at cleancities@nctcog.org or visit www.dfwcleancities.org

Identify appliance options prior to purchasing and consider long-term impacts, including economic, energy, and emissions, to choose a product that fits long-term institutional goals. Determining what electrification options are most cost-effective is dependent upon many factors. More information is available in the Rocky Mountain Institute’s Report, “The Economics of Electrifying Buildings” at <https://rmi.org/wp-content/>

BEST PRACTICE: Use the Required Square Footage Data to Assess An Energy Use Index (EUI)

The energy use index (EUI) of a building is an expression of its energy use as a function of its size or other characteristics. The EUI is defined as the total amount of energy used by a building (electricity, natural gas, and other fuels) per building square foot area and can be used to establish the baseline energy use of a facility. Within the annual reporting from, affected political subdivisions must record total gross square footage of their buildings/facilities as well as total electricity consumption. Both metrics are required for ESL to complete emissions quantification calculations. The reporting entity benefits from submitting total electricity consumption, natural gas consumption and building square footage enabling entities the ability to normalize electricity consumption and control for addition of buildings or facility expansion. While statute requires an overall decrease in total electricity consumption, evaluating building energy performance on an EUI basis can help a reporting entity identify if individual facilities are becoming less efficient over time, which can help identify a need for an energy audit or other strategy to improve efficiency.

Suggested Strategies Mitigating Measures:

Focus on reducing electricity consumption per square foot rather than based upon a specific percent energy reduction.

If affected political subdivisions observe that facility energy consumption per square foot is increasing, a free energy audit can be conducted by SECO. These remote energy audits help identify measures that affected political subdivisions can take to improve energy efficiency and reduce facility energy consumption per square foot. For full details on the SECO remote energy audits, visit the program webpage, <https://comptroller.texas.gov/programs/seco/programs/schools/rea.php>

Calculate the full EUI of buildings to include both natural gas and electric consumption and compare the energy use across buildings as some facilities may have an artificially high or low electricity use intensity if they have fewer or more gas systems.

BEST PRACTICE: Adoption and Enforcement of Latest and Greatest Building Codes

Model energy codes for residential and commercial buildings are projected to save \$126 billion in energy costs, and avoid 841 million metric tons (MMT) CO₂ emissions between the years 2010 and 2040.⁹ While 90 percent of cities in Texas with more than 10,000 people have adopted the 2012 International Energy Conservation Code (IECC) or newer, many smaller communities are still using older codes that fail to realize these benefits. Even in the communities with more current code adoption, enforcement of the code is critical to achieving the expected energy efficiency benefits.

Suggested Strategies:

Update code adoption to the most recent version of energy and building codes to ensure that new facilities are built in an energy-efficient manner, as new construction is the most cost-effective phase in the life of a building to establish energy efficiency elements.

Utilize building code guidance and resources found on the SPEER Building Tech Optimization webpage, <https://eepartnership.org/program-areas/bto/>

⁹ U.S. Department of Energy, "Building Energy Code Program", retrieved from <https://www.energycodes.gov/about/why-building-energy-codes>

BEST PRACTICE: Evaluate Potential Energy Efficiency Actions for Cost Effectiveness Every Year

Affected political subdivisions should evaluate cost-effectiveness of various energy efficiency measures on a yearly basis due to the rapid development of technology. For example, the cost of light emitting diode (LED) lighting has dropped over 80 percent throughout the past 10 years.¹⁰ Due to the rapidly evolving technological improvements in efficient lighting fixtures, what might not be cost-effective one year may be cost-effective the next.

Per statute, [Section 302.004 of the Texas Local Government Code](#), all new project decisions should be based upon whether a measure is cost-effective based on a 20-year payback threshold. However, entities should also consider the value of proactive versus reactive investment. An evaluation of payback and return on investment in the context of benefits achieved through preemptive upgrades versus replacement of broken systems (which may trigger need for emergency procurement, cause unnecessary downtime or lapses in service, and cause other non-financial burdens) is important in identifying the most advantageous path forward. It is also important to note that while initial capital costs of efficiency upgrades might be higher, payback is achieved over time through reduced energy costs.

Suggested Strategies:

Utilize SECO's free resources to identify cost-effective measures your entity might not be implementing. These services are provided **at no cost** by SECO contractors. More information, including request forms, can be found at <https://comptroller.texas.gov/programs/seco/programs/local/>

Remote Energy Assessments – designed to identify operational and capital energy efficiency savings using data analytics where adequate electricity consumption data is available

PEAs – provides detailed recommendations for cost-effective efficiency measures that could reduce energy consumption or costs

Technical Assistance for Local Governments – provides services of engineering firms who provide customized, on-site services for energy or water technical matters

Utilize SECO's financial support resources to identify actions cities/entities can take or low-cost effective measures that can be implemented

LoanSTAR Revolving Loan Program – finances energy-related, cost-effective facility retrofits supported by the state

Energy Savings Performance Contracting (ESPC) – allows a facility to complete energy-saving improvements within an existing budget by paying for them with avoided utility expenditures

Capitalize on best practices and guidance in assessing cost effectiveness through resources including:

Useful life and criteria to determine payback established in [Section 302.004 of the Texas Local Government Code](#).

¹⁰ U.S. Energy Information Administration (EIA), "LED Bulb Efficiency Expected to Continue Improving As Cost Declines", retrieved from <https://www.eia.gov/todayinenergy/detail.php?id=15471#>

The Environmental Protection Agency (EPA) Guide “Quantifying the Multiple Benefits of Energy Efficiency and Renewable Energy: A Guide for State and Local Governments” found on the following EPA webpage, <https://www.epa.gov/statelocalenergy/part-one-multiple-benefits-energy-efficiency-and->

Closing Remarks

NCTCOG hopes that the challenges and suggested strategies summarized in this paper help affected political subdivisions improve their capacity to complete the annual reporting and realize the internal organizational benefits associated with reporting. Similarly, the suggested strategies serve as best practices for consideration and are not all encompassing. For additional information and resources related to energy management and efficiency visit www.conservenorthtexas.org or contact NCTCOG staff at energy@nctcog.org.

Appendix A Matrix of Applicable Energy Reporting Requirements in Texas

Energy Efficiency Reporting Requirements in Texas			
Entity	Applicable Program/ Statute	Required Deliverable(s)	Reporting Exemption?
All Governmental Entities	<p>Statewide</p> <p>Transparency - Recording and Reporting Electricity, Water, and Natural Gas Consumption Government Code §2265</p> <p>Effective: 09/01/2007 Texas Administrative Code Rule §19.1</p>	<p>Each shall post consumption and spending information for the metered amount of electricity, water, or natural gas consumed for which it is responsible to pay on a publicly accessible Internet website.</p> <p>Each state agency or institute of higher education shall also submit utility consumption data to SECO.</p> <p>Due: October 31 (annually)</p>	N/A
Cities and Counties	<p>In Affected Counties as defined by Texas Health and Safety Code §386.001</p> <p>Local Government Energy Reporting</p> <p>Health and Safety Code §388.005</p> <p>Established by Senate Bill (SB) 5 (77R) in 2001 and amended by SB241 (86R) in 2019 Effective: 09/01/2019</p>	<p>Each shall implement all cost-effective energy efficiency measures. Definition of cost-effective is defined in Local Government Code §302.004(b).</p> <p>According to SB898 (82R) each shall establish a goal to reduce electric consumption by 5 percent per year beginning in 2011. SB898 (82R) was amended in 2019 by SB241 (86R) requiring each entity to reduce electric consumption by 5 percent per year for seven years beginning in 2019.</p> <p>Each entity shall report to SECO annual electricity consumption and progress toward meet the 5 percent energy reduction goal in the previous calendar year, using an online standard reporting form.</p> <p>DUE: February 1 (annually) to reflect electricity consumption during the preceding calendar year (January to December)</p> <p>Report Linked on SECO Local Government Energy Reporting</p>	<p>Entities are required to submit a report to SECO every year but are exempt from demonstrating the 5 percent annual reduction requirement if they submit evidence that no additional energy reduction measures were cost effective to implement.</p>

Energy Efficiency Reporting Requirements in Texas			
Entity	Applicable Program/ Statute	Required Deliverable(s)	Reporting Exemption?
Independent School Districts (ISDs)	<p>Statewide School Energy Reporting Education Code §44.902 Effective: 06/19/2009</p>	<p>Each ISD shall establish a long-range energy plan with the goal of reducing the district's annual electricity consumption by 5 percent beginning with 2008 state fiscal year. Plan must include strategies for energy savings and cost effectiveness.</p> <p>Energy Savings Performance Contracts and Pay For Success Programs are encouraged (Education Code §44.901 and §44.904)</p> <p>ISDs are not required to submit their long-range energy plan to SECO however SECO can help identify a variety of funding opportunities for districts that voluntarily submit their plan. SECO funding opportunities are announced throughout the year and can be found on the SECO Funding Opportunities webpage.</p>	N/A
Municipally Owned Utilities (MOUs) or Electric Cooperatives with Retail Sales of More Than 500,000 MWH	<p>Statewide Public Utility Energy Efficiency Reporting Utilities Code §39.9051 and §39.9052 Effective: 09/01/2011</p>	<p>The legislative goal is for MOUs to administer energy savings incentive programs and for Cooperatives to consider administering energy savings incentive programs.</p> <p>A report of the utility's energy efficiency activities from the previous calendar year to SECO. This includes the utility's annual goals, programs enacted to achieve those goals and any energy demands or savings goals reached. DUE: April 1 (annually)</p>	N/A

Energy Efficiency Reporting Requirements in Texas

Entity	Applicable Program/ Statute	Required Deliverable(s)	Reporting Exemption?
<p>Institutes of Higher Education</p>	<p>In Affected Counties as defined by Texas Health and Safety Code §386.001 Local Government Energy Reporting Health and Safety Code §388.005 Established by SB5 (77R) in 2001 and amended by SB241 (86R) in 2019 Effective: 09/01/2019</p>	<p>Each shall implement all cost-effective energy efficiency measures. Cost effective defined in §302.004(b), Local Government Code.</p> <p>According to SB898 (82R) each shall establish a goal to reduce electric consumption by 5 percent per year beginning in 2011. SB898 (82R) was amended in 2019 by SB241 (86R) requiring each entity to reduce electric consumption by 5 percent per year for seven years beginning in 2019.</p> <p>Each entity shall report to SECO annual electricity consumption and progress toward meet the 5 percent energy reduction goal in the previous calendar year, using a standard reporting form.</p> <p>DUE: February 1 (annually) to reflect electricity consumption during the preceding calendar year (January to December)</p> <p>Report Linked on SECO Local Government Energy Reporting Page</p> <p>*SECO will accept an Energy and Water Management Plan (EWMP) acceptable to completing Local Government Energy Reporting requirements*</p>	<p>Entities are required to submit a report to SECO every year unless they have claimed an exemption based on demonstration that no additional cost-effective measures are available to implement. Even if exempt, they may be required to provide notice to the SECO.</p> <p>Any institution of higher education that SECO determined, before September 1, 2007, had adopted a plan and goal for conserving energy, and annually submits reports on the conservation plan to the governor, the Legislative Budget Board, and SECO.</p>
<p>Staterwide</p> <p>State Agencies and Institutes of Higher Education Energy and Water Management Plan (EWMP) Reporting Texas Government Code §447.009 Energy and Water Management Plan (EWMP): 34 Texas Administrative Code §19.14 Long-range Utility Services Plan: 34 Texas Administrative Code §19.16</p>	<p>DUE: October 31 (annually)</p> <p>Each shall prepare a long-range plan for the delivery of reliable, cost-effective utility services to the agency or institution, and shall update every 5 years and post plan on a public website. DUE: Provided to SECO Upon Request</p>	<p>Each shall develop a comprehensive plan that outlines percentage goals for reducing electric, water, transportation fuel, and natural gas consumption. SECO aids in developing an EWMP. Reporting includes a record of monthly electric, water, and natural gas consumption data in the ENERGY STAR Portfolio Manager tool.</p>	<p>N/A</p>

Energy Efficiency Reporting Requirements in Texas

Entity	Applicable Program/Statute	Required Deliverable(s)	Reporting Exemption?
<p>State Agencies</p>	<p>In Nonattainment or Near Nonattainment Counties</p> <p>Local Government Energy Reporting</p> <p>Health and Safety Code §388.005</p> <p>Established by SB5 (77R) in 2001 and amended by SB241 (86R) in 2019 Effective: 09/01/2019</p>	<p>Each shall implement all cost-effective energy efficiency measures. Cost effective defined in §302.004(b), Local Government Code.</p> <p>According to SB898 (82R) each shall establish a goal to reduce electric consumption by 5 percent per year beginning in 2011. SB898 (82R) was amended in 2019 by SB241 (86R) requiring each entity to reduce electric consumption by 5 percent per year for seven years beginning in 2019.</p> <p>Each entity shall report to SECO annual electricity consumption and progress toward meet the 5 percent energy reduction goal in the previous calendar year, using a standard reporting form.</p> <p>DUE: February 1 (annually) to reflect electricity consumption during the preceding calendar year (January to December)</p> <p>Report Linked on SECO Local Government Energy Reporting Page</p> <p>*SECO will accept an Energy and Water Management Plan (EWMP) acceptable to completing Local Government Energy Reporting requirements*</p>	<p>Entities are required to submit a report to SECO every year but are exempt from demonstrating the 5 percent annual reduction requirement if they submit evidence that no additional energy reduction measures were cost effective to implement.</p> <p>Any state agency that SECO determined, before September 1, 2007, adopted a plan for conserving energy and annually submits reports on the conservation plan to the governor, the Legislative Budget Board, and SECO.</p>
<p>Statewide</p> <p>State Agencies and Institutes of Higher Education Energy and Water Management Plan (EWMP) Reporting</p> <p>Texas Government Code §447.009</p> <p>Energy and Water Management Plan (EWMP): 34 Texas Administrative Code Rule §19.14</p> <p>Long-range Utility Services Plan: 34 Texas Administrative Code Rule</p>	<p>Each shall develop a comprehensive plan that outlines percentage goals for reducing electric, water, transportation fuel, and natural gas consumption. SECO aids in developing an EWMP. Reporting includes a record of monthly electric, water, and natural gas consumption data in the ENERGY STAR Portfolio Manager tool.</p> <p>DUE: October 31 (annually)</p> <p>Each shall prepare a long-range plan for the delivery of reliable, cost-effective utility services to the agency or institution, and shall update every 5 years and post plan on a public website.</p> <p>DUE: Provided to SECO Upon Request</p>	<p>N/A</p>	<p>N/A</p>

Appendix B Status of Potential Energy Efficiency/Renewable Energy Measures 2019 Local Government Energy Reporting Responses

Status of Potential Energy Efficiency/Renewable Energy Measures from 2019 Local Government Energy Reports

Statewide Responses, Compiled by SPEER

