

Facilities & Real Estate Management initiatives towards CECAP goals

Parks, Trails and the Environment (PTE) Committee November 03, 2025

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Presentation Overview



- Purpose
- Background/History
- CECAP Initiatives
- Next Steps



Purpose



 Facilities and Real Estate Management (FRM) is responsible for facility maintenance/repair, nonbond-funded major maintenance in support of service to City departments, staff, and residents. The purpose of this presentation is to highlight various initiatives FRM is taking towards CECAP goals while providing the services listed above.



Background/History



- In May 2020, Dallas City Council approved the "Comprehensive Environmental & Climate Action Plan (CECAP)" which provides a comprehensive roadmap that outlines the activities that the City will undertake to;
 - > Improve quality of life,
 - > reduce greenhouse gas emissions,
 - > prepare for the impacts of climate change,
 - > and to create a healthier and more prosperous community





 CECAP comprises 8 different goals

- FRM core operations fall under the following goals related to;
 - Buildings
 - > Energy













Solid Waste

Water Resources

Ecosystems / Greenspace







Air Quality









GOAL 1: DALLAS' <u>BUILDINGS</u> ARE ENERGY EFFICIENT AND CLIMATE RESILIENT.

- FRM proactively pursues to implement various energy efficiency measures and best practices in City buildings where applicable
- The following slides provide an overview of recently completed and ongoing initiatives related to <u>Buildings</u>









GOAL 1: DALLAS' <u>BUILDINGS</u> ARE ENERGY EFFICIENT AND CLIMATE RESILIENT.

Energy Benchmarking (completed)

- Completed energy benchmarking for 195 City buildings in Energy Star Portfolio Manager tool
- Energy benchmarking buildings helps the City identify opportunities for energy efficiency savings, track building performance, and measure the effectiveness of energy efficiency measures.













GOAL 1: DALLAS' <u>BUILDINGS</u> ARE ENERGY EFFICIENT AND CLIMATE RESILIENT.

Energy Benchmarking (completed)



Examples of better-performing buildings compared to similar type buildings in City portfolio

Property Name	Site EUI (kBtu/ft²)	National Median Site EUI (kBtu/ft²)	% Difference from National Median Site EUI
Skillman Southwestern Branch Library	59.1	51.3	15.1
Polk-Wisdom Branch Library	38.4	51.3	-25.1
Park in the Woods Recreation Center	50.5	40	26.3
Lake Highlands North Recreation Center	35.6	40	-11.1
Fire Station #27	59.7	44.6	33.8
Fire Station #19	31.5	44.6	-29.3
Eco Park	35.7	34.7	2.9
City Hall	76.5	77.9	-1.8
Oak Cliff Cultural Center	53.8	39.1	37.5
South Dallas Cultural Center	32.8	40	-18
Jack Evans Police Headquarters	45.6	44.9	1.5
Southwest Patrol	60.4	44.6	35.4









GOAL 1: DALLAS' <u>BUILDINGS</u> ARE ENERGY EFFICIENT AND CLIMATE RESILIENT.

Energy Auditing (completed)

- State Energy Conservation Office (SECO) provides preliminary energy assessments (PEAs) at no charge to municipal governments
- In collaboration with SECO, City of Dallas completed PEAs for 45 City buildings to date to identify potential energy efficiency improvements to reduce building energy usage
- Information provided in PEA audit reports is used for programming various energy efficiency projects at City buildings











GOAL 1: DALLAS' <u>BUILDINGS</u> ARE ENERGY EFFICIENT AND CLIMATE RESILIENT.

Energy Auditing (completed)

Energy efficiency improvements recommended from energy audit

Facility Type	Facilities Audited	Lighting Improvements	Solar
Rec. Center	17	13	15
Library	12	10	7
Fire Station	9	9	8
Administrative	7	5	7
Total	45	37	37









GOAL 1: DALLAS' BUILDINGS ARE ENERGY EFFICIENT AND

CLIMATE RESILIENT.

City Hall Boiler Project (completed)

- Completed conversion of facility heating system at City Hall from steam to high efficiency hot water system in December 2024
- Total project cost: \$3.2M
- Estimated annual savings in gas usage: 20%
- Additional savings include reduction in annual O&M costs related to maintenance of steam traps, reduction in water loss from condensate blow down and reduction of chemical usage













GOAL 1: DALLAS' <u>BUILDINGS</u> ARE ENERGY EFFICIENT AND

CLIMATE RESILIENT.

High Efficiency Lighting (completed)

- Completed installation of high efficiency LED lighting fixtures and lighting controls in April 2023 at;
 - Juanita Craft Recreation Center
 - ➤ Hampton Illinois Branch Library
 - City Hall (Parking Garage)
- Total combined project cost: \$989,937
- Combined % energy savings from existing lighting: 35%
- Additional savings include reduction in annual O&M costs related to replacement and disposal of frequent burnout of fluorescent light bulbs















GOAL 1: DALLAS' <u>BUILDINGS</u> ARE ENERGY EFFICIENT AND CLIMATE RESILIENT.

High Efficiency Lighting (ongoing)

- City of Dallas received a grant from the U.S. Department of Energy, under the Energy Efficiency and Conservation Block Grant program in the amount of \$1.13M
- Grant funds would be used for installing high efficiency lighting and lighting controls in the following 5 City buildings listed below;
 - K.B. Polk Rec. Center
 - Martin Weiss Rec. Center
 - Park in the Woods Rec. Center
 - Lakewood Branch Library
 - Skyline Library



U.S. DEPARTMENT of ENERGY







GOAL 1: DALLAS' <u>BUILDINGS</u> ARE ENERGY EFFICIENT AND CLIMATE RESILIENT.

High Efficiency Lighting (completed/ongoing)

• Based on the SECO audit of 45 City buildings, lighting improvements were recommended in 37 City buildings. To date 3 projects were completed and 5 are in planning stages for a total of approximately 22% of total recommended projects.

Facility Type	Facilities Audited	Lighting Improvements	Lighting Projects Completed/Planned
Rec. Center	17	13	4
Library	12	10	3
Fire Station	9	9	0
Administrative	7	5	1
Total	45	37	8









GOAL 2: DALLAS GENERATES AND USES RENEWABLE, RELIABLE AND AFFORDABLE *ENERGY*.

- FRM proactively pursues to implement various renewable energy projects on City buildings where applicable and sourcing renewable energy for City operations
- The following slides provide an overview of recently completed and ongoing initiatives related to <u>Energy</u>









GOAL 2: DALLAS GENERATES AND USES RENEWABLE, RELIABLE AND AFFORDABLE *ENERGY*.

Energy for City operations (completed)

- City signed a new utility contract with TXU in 2019 to source 100% energy generated from wind energy for City operations under the City Council adopted Green Energy Policy
- City has been recognized by U.S. Environmental Protection Agency (EPA) Green Power Partnership (GPP) organization as one of the top users of renewable energy for City operations. Dallas is ranked No.2 in annual green power use in EPA's 2024 Green Power Partnership Top 30 Local Governments list











GOAL 2: DALLAS GENERATES AND USES RENEWABLE, RELIABLE AND AFFORDABLE *ENERGY*.

Renewable energy projects (completed)

- Completed installation of solar PV on three City buildings in April 2023 at;
 - Fretz Park Recreation Center
 - Pleasant Oaks Recreation Center
 - Dallas West Branch Library
- Total combined project cost: \$993,938
- Combined % energy savings from baseline building energy usage: 37%
- Combined total capacity installed: 422 kW











GOAL 2: DALLAS GENERATES AND USES RENEWABLE, RELIABLE AND AFFORDABLE *ENERGY*.

Renewable energy projects (ongoing)

- Pilot solar PV (75 kW) + battery energy storage (90 kW) project at Bachman Recreation Center
- Total project cost: \$1.675M (\$975k for solar + \$700k for electrical switchgear)
- Estimated project completion: December 2025

Renewable energy projects (ongoing)

- Solar PV project at Beckley Saner Recreation Center
- Total project cost: \$500,000
- Estimated project completion: June 2026











GOAL 2: DALLAS GENERATES AND USES RENEWABLE, RELIABLE AND AFFORDABLE *ENERGY*.

Renewable energy projects (completed)

- As of today, there are currently 11
 City buildings with solar PV installed
- Combined total capacity installed: 910 kW

City Building Name	Estimated Electric Load (kW)	Installed
Dallas Fire Station #27	21	2013
Dallas Fire Station #6	26	2015
Kiest Park Recreation Center	90	2016
North Central Police Station	100	2016
Northeast Police Station	100	2016
Southeast Police Station	82	2016
Vickery Meadow Library	51	2020
Dallas Fire Station #58	18	2022
Fretz Park Recreation Center	119	2022
Pleasant Oaks Recreation Center	155	2022
Dallas West Branch Library	148	2022









GOAL 2: DALLAS GENERATES AND USES RENEWABLE, RELIABLE AND AFFORDABLE *ENERGY*.

Renewable energy projects selection criteria

- Public facing building
- Facility electrical system in compliance with current City electrical code
- Roof replaced within the last 5 years
- Availability of adequate roof space with minimal shading from foliage
- Facility energy offset from solar of at least 20%

Current status of solar installed on City public facing buildings;

		Solar	
Facility Type	No. of Facilities	Installed/Planned	% Installed/Planned
Rec. Center	44	5	11%
Library	29	2	7%



Next Steps



 Continue to implement various energy efficiency measures and best practices in City buildings where applicable

 Coordinate with other City departments for pursuing grant funding for implementing projects





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