

AGENDA ITEM #4

MEETING: Community Health, Environment, & Culture Committee

DATE: October 12, 2021

DEPARTMENT: Office of Sustainability

DEPARTMENT HEAD: Douglas R. Melnick, AICP, ISSP-SA, CNU-A

COUNCIL DISTRICTS IMPACTED: All

SUBJECT:

A briefing on the City of San Antonio's Energy Efficiency Fund and Municipal Building Energy Benchmarking Program.

SUMMARY:

In accordance with the SA Climate Ready Climate Action and Adaptation Plan (CAAP), the City has committed to improving the efficiency of municipal buildings and facilities with a goal of Net Zero by 2040. The primary mechanism to achieving goal has been the benchmarking of energy and water use utilizing EPA's Energy Star Portfolio Manager and by completing energy efficiency improvements through the Energy Efficiency Fund that was established by City Council in 2011. CoSA's first Municipal Building Energy Benchmarking Report was released in 2020. Between 2011 and 2020, 418 projects were completed in 190 municipal facilities which has reduced the City's carbon dioxide emissions by 58,597 metric tons.

BACKGROUND INFORMATION:

In 2019, the City adopted SA Climate Ready, its first Climate Action & Adaptation Plan (CAAP). In this Plan, the City maps out an equitable pathway to achieving net carbon neutrality by 2050, prioritizing clean air, public health, water quality and conservation, good jobs, transportation choices, clean and secure energy, and emergency preparedness. SA Climate Ready identifies the reduction of building energy consumption as a driver for achieving our community's climate goals, noting that 48% of San Antonio's GHG emissions come from buildings and over half of that energy use - 27% is attributed to commercial and industrial buildings specifically. To reach the goal of carbon neutrality by 2050, emissions contributed by the building energy sector must be reduced 41% by 2030 and 74% by 2040.

As part of the SA Climate Ready Plan, the City of San Antonio is reducing energy consumption in municipal buildings by measuring and managing its energy use. The San Antonio City government accounts for 3 percent of GHGs citywide, with 22% of all municipal GHGs attributed to energy use in City-owned buildings. In 2020, the Office of Sustainability released the first Municipal Building Energy Benchmarking Report where the City discloses its own energy benchmarking data. Based on calendar year 2019 data,

there are more than 600 facilities in the City of San Antonio's building portfolio, 300 of which are currently benchmarked, serving a variety of functions from public safety and libraries to parks and recreation and administrative offices. These buildings range in size from large airport facilities measuring in the hundreds of thousands of square feet, to smaller neighborhood fire stations and community centers.

The City's Energy Efficiency Fund (EEF) is an example of leadership in municipal energy efficiency programs. The only city fund of its kind in Texas, this Fund was established as a revolving loan fund in 2011, created through a one-time inflow of Federal American Recovery and Reinvestment Act (ARRA) grant funding along with utility cost savings and CPS Energy rebates. This fund has grown into a permanent source of revenue for municipal energy projects. Between 2011 and 2019, this Fund has been used to complete 418 projects within 190 municipal facilities, resulting in over \$3.3 million in annual utility cost savings for the City. These savings are considered "avoided" costs because if the City did not implement energy projects the utility costs in municipal buildings would be much higher. In fiscal year 2019, the City has seen an 11% reduction in electricity consumption within municipal facilities when compared to baseline year 2011.

ISSUE:

The SA Climate Ready Plan calls for achieving net zero carbon by 2050 and identifies the following municipal strategies:

- **BENCHMARKING AND PUBLIC DISCLOSURE OF BUILDING ENERGY CONSUMPTION** - Benchmark and publicly disclose building energy and water use for municipal buildings.
- **ZERO NET ENERGY (ZNE) BUILDINGS** - Achieve ZNE for all municipal buildings by 2040.

To achieve these goals, the Office of Sustainability manages the Energy Efficiency Fund to benchmark and undertake energy efficiency projects to reduce energy and provide a fiscal return on investment. A major benefit of benchmarking is it helps the building owner identify spikes and dips in energy consumption that may be the result of an underlying problem in the building, such as an equipment malfunction or the need for repairs.

Other benefits of municipal benchmarking:

- Reduces greenhouse gas (GHG) emissions, improves indoor and outdoor air quality, and enhances the health of our community.
- Drives the market to value energy as a resource, reduces waste, and demonstrates the value of efficiency gains.
- Saves taxpayer dollars.

This briefing will provide an overview of the Energy Efficiency Fund (EEF), municipal building energy trends, and a description of the municipal benchmarking process.

ALTERNATIVES:

This is for briefing purposes only.

FISCAL IMPACT:

This is for briefing purposes only.

RECOMMENDATION:

This is for briefing purposes only.