

AGENDA ITEM #5

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 Municipal Solar Strategy to reach 100% renewable electricity for municipal buildings and facilities.

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 and to accomplish this goal, the procurement or on-site generation of renewable energy must be utilized, with the end objective of 100% renewable electricity for City operations. In FY21, the City's municipal facilities used 160,617,187 kilowatt hours of electricity. To offset this usage it would require approximately 110 megawatts (MW) of solar energy either procured or produced at CoSA buildings and facilities. To meet this objective, the Office of Sustainability has been coordinating with CoSA's Public Utilities Division and CPS Energy to develop a pathway to 100% renewable energy for CoSA.

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 and the production and procurement of renewable energy will be a key strategy to meeting this goal.

To reduce emissions from municipal buildings, the SA Climate Ready Plan identifies the following municipal strategies that requires the procurement or on-site generation or renewable energy:

- **ZERO NET ENERGY (ZNE) BUILDINGS** - Achieve ZNE for all municipal buildings by 2040.

The CAAP defines ZNE buildings as buildings that combine energy efficiency and renewable energy generation to consume only as much energy as can be produced by dedicated renewable sources over a specific period of time.

The City of San Antonio (CoSA) has the following onsite solar assets, totaling 632 kW across all facilities to date and that represents less than 1% of the 110 MW goal:

- a. Claude W. Black Community Center (87 kilowatt (kW))
- b. Fire Stations #1 (100 kW), #50 (30 kW), and #51 (10 kW).
- c. Hardberger Park Urban Ecology Center (25 kW) and Hardberger Nature Center (30 kW)
- d. Palm Heights Community Center (100 kW)
- e. Ramirez Community Center (15 kW)
- f. SAT Campus - Parking Garage-Short Term (235 kW)

The Office of Sustainability and Public Utilities has been working with CPS Energy to evaluate the potential for CoSA to participate in the CPS Energy Green Tariff Program. The Green Tariff Program allows large commercial customers to contract with a renewable energy source, through CPS Energy, channeling the costs and benefits for the renewable procurement to that customer. CoSA continues to evaluate this option with CPS Energy including eligible accounts, renewable energy mix, and potential costs. In addition to reviewing the Green Tariff, CoSA is currently developing a Request for Proposals (RFP) for on-site solar systems at City-owned buildings and properties.

ISSUE:

The SA Climate Ready Plan identifies a target of carbon neutrality for San Antonio by 2050 and includes a target of 2040 for net zero municipal buildings. In order to accomplish this goal, CoSA must procure renewable energy or install on-site renewable systems at CoSA buildings and facilities.

The Office of Sustainability has convened an interdepartmental team to develop the RFP that includes the following: Office of Sustainability, Public Utilities, City Attorney's Office, Finance, CMO, SWMD, Parks, CSEF, Library, and Aviation. This team is being

supported by American Cities Climate Challenge technical assistance partners including the Rocky Mountain Institute (RMI) and World Resources Institute (WRI).

This RFP will solicit market-based solutions to provide onsite behind-the-meter solar energy at a range of municipal facilities. Projects would be sited either on eligible rooftops, parking facilities, or adjacent land as available and cost-effective.

These installations would be connected behind-the-meter and would achieve multiple CoSA goals, including:

- Advances CoSA's CAAP by investing in visible solar projects locally for city facilities;
- Seeks a market-driven response to drive optimal project size, terms, and price;
- Achieves greater economies of scale and streamlines solar procurement through an aggregated procurement across multiple potential facilities compared to individual facility planning; and,
- Third-party developed projects where neither CPS Energy nor the City would be responsible for operations and maintenance of the solar projects.

The objectives of this on-site solar procurement are to:

- Identify feasible locations for siting solar energy on CoSA facilities;
- Determine an ownership and financing model that complements city operations; and
- Sign contract for winning bid in competitive procurement for solar energy.

It is projected that the RFP will be released in Q1 of 2022.

ALTERNATIVES:

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FISCAL IMPACT:

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RECOMMENDATION:

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