



Review Two-Minute Pitch: Rooftop Solar and Gardens

Background

- On November 25, 2024, Council Member Beck submitted a two-minute pitch to explore the installation of rooftop and wall gardens and solar panels with batteries on City Buildings. On December 3, 2024, the Council provided consensus for staff to publish an Informal Staff Report (ISR) addressing the feasibility of the pitch.
- On January 24, 2025, an ISR was published in the Friday Report.
- On August 7, 2025, the Agenda Review Committee recommended sending the pitch to the Sustainability Framework Advisory Committee.

City of Denton Facilities

- 206 Buildings
- Facilities Condition Assessment (FCA)
- Funding for maintenance and repair
 - Focus of FCA funding
- Delay of projects due to current budget

Considerations for New Buildings

Rooftop and Wall Gardens

- When considering new construction, the addition of rooftop or wall gardens adds an estimated \$143 to \$250 per square foot.

Solar/Battery Installation

- New building installation cost to be considered.

Considerations for Existing Buildings

Rooftop and Wall Gardens

- 28 of the City's 206 facilities have roof structures potentially suitable for roof gardens. Facilities would require structural modifications and engineering surveys with an estimated cost between \$50,000 to \$200,000 to assess each building.

Solar/Battery Installation

- The cost of these improvements is estimated to be between \$100,000 and \$1,800,000 depending on facility size and energy use.
- The estimated annual energy cost savings from solar panels are variable, but estimates range from \$2,500 to \$25,000 for each facility based on energy consumption.

Next Steps

- Sustainability Framework Advisory Committee to consider:
 - Option 1: Identify and evaluate existing buildings for Rooftop Gardens and recommend to City Council for inclusion in Fiscal Year 2026-2027 City Budget.
 - Option 2: Identify and evaluate existing buildings for Solar Panels with or without battery storage and recommend to City Council for inclusion in Fiscal Year 2026-2027 City Budget.
 - Option 3: Consider inclusion of rooftop and/or wall gardens on new construction
 - Option 4: Consider inclusion solar panels with or without battery storage on new construction
 - Option 5: Do not move forward with the pitch

Staff Recommendation

- Current projects do not have sufficient funding to consider rooftop and wall gardens as well as solar/battery installations on existing City buildings.
- Staff will consider these options in the design and planning of new construction projects, where such features can be integrated more cost-effectively and efficiently from the outset.