City of Denton

City Hall
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AGENDA INFORMATION SHEET

DEPARTMENT: **Environmental Services & Sustainability**

ACM: **Frank Dixon, Assistant City Manager**

DATE: **October 14, 2025**

SUBJECT

Receive a report, hold a discussion, and give staff direction on the update regarding GreenSense Energy Efficiency Incentive Program results for Fiscal Year 2023-2024.

BACKGROUND

For Fiscal Year 2023-2024 the GreenSense Energy Efficiency Incentive Program underwent substantial changes. Incentive amounts were increased for all energy efficiency rebates, and a new incentive was added for HVAC tune-ups. A fan giveaway and weatherization kits were also included for future years.

While funding in FY2022-2023 covered only 4% of the total average cost of energy efficiency upgrades, it was estimated that the proposed FY2023-2024 rebates would provide approximately 18% of the total average cost. The actual overall percentage of total costs covered by rebates was 11% during FY2023-2024.

Many applicants submit for multiple rebates. The comparison below uses rebates submitted specifically for only HVAC, insulation, and windows.

Most Popular GreenSense Rebates Fiscal Year 2023-2024

	Number of Rebates	Average Cost	Average Rebate	Percent of Total Cost
HVAC	327	$16,979	$2,052	12%
Insulation	55	$3,093	$1,161	37%
Windows	74	$15,781	$1,389	9%

Kilowatt hour (kWh) reduction estimates and greenhouse gas equivalent reduction are estimated for HVAC and Insulation. Calculations are based on the first 12 months rather than the lifetime of the equipment, which can vary.

	kWh Reduced	Cost Per kWh Reduced
HVAC	686,064	$1.09
Insulation	90,324	$0.84

During Climate Action Plan discussions, staff noted that more than 74% of homes in Denton were built in 2009 or earlier, creating a large portion of housing stock that would need to be upgraded to achieve climate goals. The GreenSense Energy Efficiency Incentive Program assists residents in making necessary energy efficiency upgrades. Homes constructed in 2009 and earlier accounted for 94% of energy efficiency rebates during FY2023-2024. Homes constructed from 2010 to current only accounted for 6 HVAC applications, and most applications were for HVAC Tune-up and Smart Thermostats.

A total of 776,388 kWh was reduced by HVAC and Insulation rebates, which is equivalent to 444 metric tons of greenhouse gas (GHG) emissions avoided. Greenhouse gas equivalent reduction for this region was estimated using U.S. Environmental Protection Agency Greenhouse Gas Equivalencies Calculator. 444 metric tons of carbon dioxide equivalent (CO2e) is equivalent to:

- GHG emissions from 1,129,412 miles driven by an average gasoline-powered vehicle
- GHG emissions from 157 tons of waste
- GHG emissions avoided by 37,701 trash bags of waste recycled instead of sent to landfill
- Tons of carbon sequestered by 445 acres of US forest in one year
- CO2 emissions from 49,905 gal of gasoline consumed
- CO2 emissions from 492,652 lbs. of coal burned

Staff are working to develop GHG emissions avoided for other rebate types and hope to present them in next year's update.

EXHIBITS

1. Agenda Information Sheet
2. Presentation

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