

# METRO Environmental Management

Created by Environmental Services

10/7/2025

# METRO's Sustainability Commitment

- METRO will manage its operations to avoid or minimize environmental impacts on the health and safety of our customers and employees.
- METRO will apply green principles to the design and management of its facilities. METRO will foster sustainable use of natural resources by promoting energy management, energy creation / generation, recycling, re-use, and re-purposing of materials and waste reduction management opportunities.
- METRO will collaborate with educational institutions and community organizations to achieve shared environmental goals.

# Infrastructure and Management

- Environmental Management System (EMS)
- Environmental Aspects
  - Energy use
  - Emissions
  - Waste
  - Noise
  - Hazardous materials
- Uses the Plan-Do-Check-Act cycle

# Environmental Management System

- Review of Current Environmental Programs
- Setting up Environmental Data Infrastructure.
- Transportation Environmental Database (TED)
- Smart Water Meters

# Energy Management Plan

- Environmental Responsibility
- Goals
  - Guide METRO to reduce energy consumption
  - Ensure sustainability design within the facilities
  - Initiate the use of energy efficient equipment

# Energy Management Plan

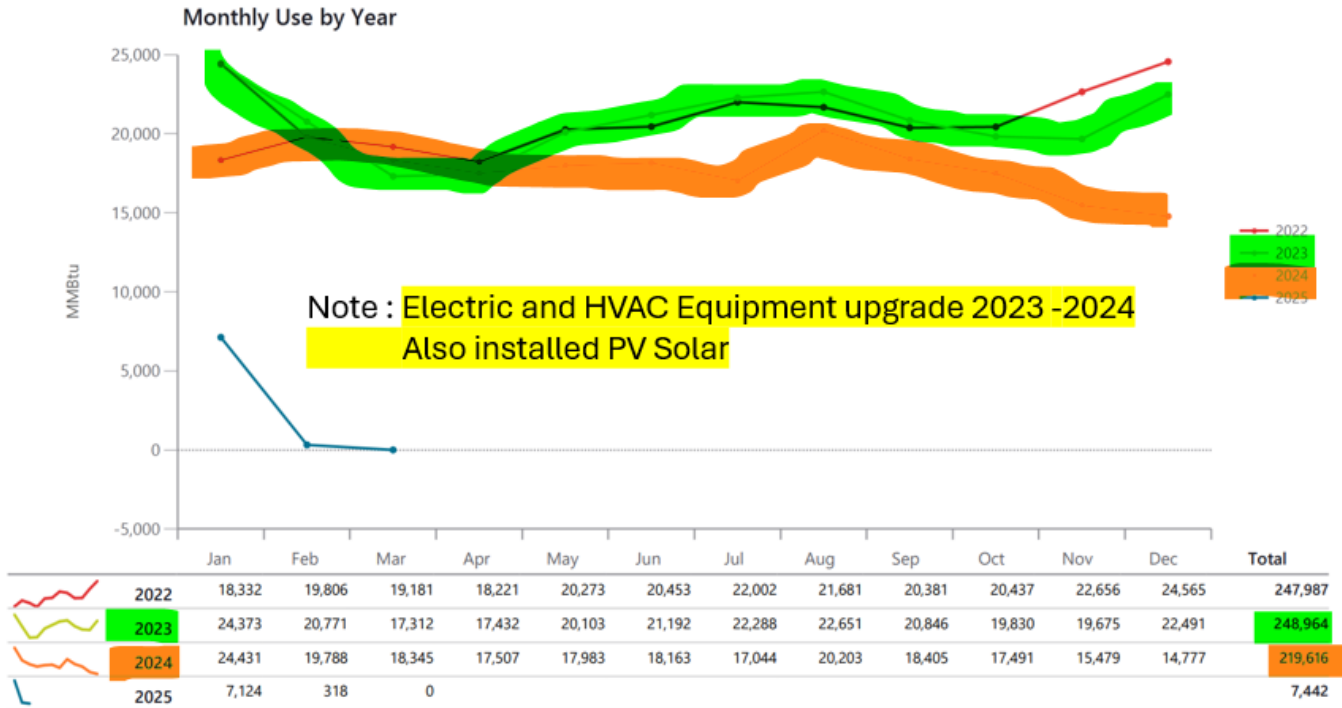
**ENERGYCAP.**

METRO - Harris County, TX

Monthly Trends - Comparing Year-to-Year

Monthly Use by Year

Executive Summary (MMBtu)



10/12/2025

Metro Energy Management Plan 2025 -2030

# METRO's Fleet

Fleet Type	Year Range	Number of Buses	NO <sub>x</sub> Emissions (g/bhp-hr)	PM Emissions (g/bhp-hr)
Diesel Fleet	2010-2024	700	0.20	0.01
Diesel Fleet	2024+	350	0.050	0.01

# METRO's CO<sub>2</sub> Emissions

- CO<sub>2</sub> Emissions
  - No set calculation standard
  - Previous data focused on length of bus
  - Moving towards focusing on types of engines as well
  - Re-evaluation
- Emissions reduced through:
  - Improved fuel economy
  - Lighter composite bus materials

# Solar Panels

- **Townsen Park & Ride**
  - 122.4 kWdc solar canopy
  - Generates ~174,000 kWh annually
  - Enhances rider safety and comfort
- **West Bus Operations Facility**
  - 814 kWdc solar system (1.02 GWh/year)
  - 3.1 MWh Tesla Megapack battery
  - Can fully recharge 6 electric buses during outages



# Key Takeaways

- METRO is committed to reducing environmental impact through strategic planning and data-driven decisions.
- Implementation of the Environmental Management System (EMS) ensures continuous improvement.
- Investments in energy efficiency, cleaner fleet technologies, and renewable energy are already showing measurable results.

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