



Meijer 163A - Fort Gratiot

Objective: Replace an end-of-life HydroFluoroCarbon (HFC) refrigeration system with a new distributed CO2 system. This project aimed to master the transition of a fully operational store from HFC to CO2 refrigeration and ensure alignment with upcoming environmental legislation.

Solutions

- **Upgraded Equipment:** Installed new cases, evaporator coils, condensers, and racks
- **Refrigeration Efficiency:** Replaced traditional open cases with doored units and enclosed the previously open meat preparation space to reduce cooling loss and better maintain temperature
- **Phased Implementation:** Managed a gradual changeover of the system to prevent service interruptions

Financials

- \$8,200 projected annual energy savings

Project Highlights

- 216,093 square feet
- Comprehensive equipment overhaul
- 5% reduction in Weather-Normalized Source EUI between 2024 and 2025

Project Partners

- Hussmann Corporation
- Siwek Construction

Results

- 5% reduction in Weather Normalized Source Energy Use Intensity (EUI) between 2024 and 2025
- Transitioning the refrigerant from HFC to CO2 reduced the system's Global Warming Potential from 3,922 to 1
- New infrastructure significantly reduced the risk of equipment failure and subsequent food loss
- The location now serves as a vital hands-on training hub for Meijer technicians to master CO2 technology
- Awarded in the 2025 Michigan Battle of the Buildings competition



This project serves as a successful "proof of concept," demonstrating that Meijer can transition to cleaner refrigeration systems without impacting the shopping experience. While Meijer has already surpassed its goal of a 50% carbon reduction in Scope 1 & 2 emissions, site-specific energy efficiencies like these are vital to maintaining that momentum.

