MiGBC MICHIGAN GREEN BUILDING COLLABORATIVE

Project Case Study

Michigan State University
Veterinary Diagnostics Laboratory

Objective: Restore incinerator burners and improve safety, centralize facility-wide climate controls, reduce high gas consumption through infrastructure repairs, and implement a campus-wide thermostat setpoint initiative.

Solutions

- **Incinerator Refractory & Burner Replacement:** Animal Waste Disposal System
- **Boiler Deaerator System Optimization:** Feed Pump VFD Installation and Vent Control Upgrade
- **Walk-in Cooler Refrigeration System Upgrade:** Animal Storage Facilities
- **Laboratory HVAC Controls Modernization:** First & Second Floors
- **Advanced HVAC Control Optimization:** Airflow and Ventilation Reset
- **Campus-Wide Thermostat Setpoint Optimization:** Space Temperature Reset Policy Implementation

Project Highlights

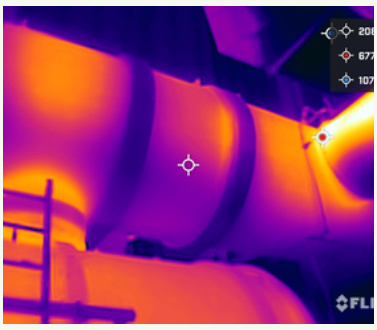
- 158,471 square feet
- 6 strategic projects focused on energy efficiency, safety, and reliability
- Accelerates MSU's progress toward it's goal of 50% emission reduction by 2030

Results

- 22% reduction in Weather Normalized Source Energy Use Intensity (EUI) from 2024 to 2025
- 34% reduction in natural gas consumption, which accounts for approximately 74% of the building's baseline energy use
- Reduction of 1,866 metric tonnes CO2e, representing a 19% emission reduction
- Awarded in the 2025 Michigan Battle of the Buildings competition

Financials

- Rebate through Consumers Energy in progress



"The Campus-wide Thermostat Setpoint Optimization proved to be one of the most cost-effective and scalable outcomes, achieving substantial energy savings through operational changes with minimal capital investment."

MICHIGAN STATE UNIVERSITY