

OFPM Sustainability Report



“SMU’s commitment to sustainable design is a powerful expression of commitment in the upcoming summer completion of three new transformative campus projects: Cox School of Business, Garry Weber End Zone, and Smith-Perkins Residence Hall. These combined initiatives are 422,946 square feet of new sustainable-centric LEED design and will be ready for the Fall 2024 semester! This will greatly help our effort to reduce SMU’s carbon footprint and will increase our energy efficiency across the campus.”

**Michael Molina,
AIA, NCARB
Associate Vice President
& Chief Architect**

April 2024



SMU

**OFFICE OF FACILITIES
PLANNING & MANAGEMENT**

LEED Certifications in the last year...



Awarded: July, 2023, LEED Silver

Owen Arts Center

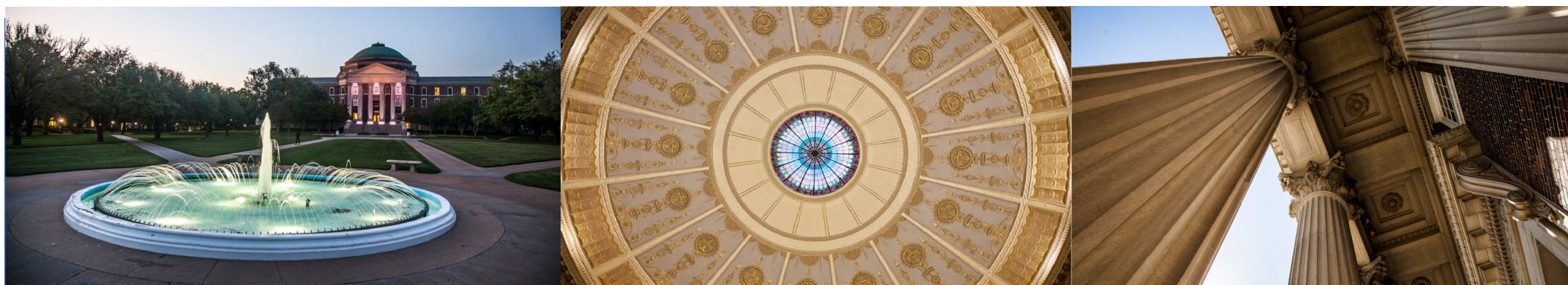
- The university is also committed to reducing and recycling as much of their waste as possible. The contractor recycled nearly 75% of the waste generated during construction of the building. Additionally, the campus wide recycling program collects plastics, metals, paper, cardboard, glass, e-waste, batteries, and furniture for reuse and recycling.
- The building engineers implemented improvements to the building envelope, mechanical system, and lighting controls to reduce energy consumption. The building is 22% more efficient than similar building's that were designed to minimum code requirements. To optimize efficiency, the project underwent building commissioning activities to ensure the building is running and operating as intended. These measures save approximately \$20,000 a year in utility costs.
- To offset fossil fuel consumption and reduced greenhouse gas emissions, SMU purchased 2 years of renewable energy for 70% of the building's predicted energy consumption. This is equivalent to offsetting greenhouse gas emissions from 1,220 gasoline-powered passenger vehicles driven for one year.
- Water conservation efforts focused on low flush and flow fixtures. These strategies result in a 39.94% indoor water use reduction. That's a savings of over 65,000 gallons of water a year.



Awarded: March, 2024, LEED Certified

Frances Anne Moody Hall

- The university is also committed to reducing and recycling as much of their waste as possible. The contractor's goal is to recycle over 75% of the waste generated during construction of the building. Additionally, the campus wide recycling program collects plastics, metals, paper, cardboard, glass, e-waste, batteries, and furniture for reuse and recycling. a savings of over 65,000 gallons of water a year.
- Water conservation efforts focused on low flush and flow fixtures and water wise landscaping. These strategies result in a 36% indoor water use reduction and landscaping that uses 38% less irrigation. That's a savings of over 72,000 gallons of water a year.
- SMU's environmental stewardship extends to responsible sourcing of materials. Building materials were selected based on durability as well as human health and environmental impacts. Over thirty products have Environmental Product Declarations (EPDs) and material ingredient reporting certifications. An EPD evaluates a material's environmental impacts over its life cycle. Material ingredient reporting provides transparency about the chemicals that are used in building products and disclose possible human health impacts.



Dallas Hall Receives USGBC South Award

"The USGBC South Central region communities are pleased to announce the project finalists for the 2023 Texas Community Leadership Awards. These prestigious awards celebrate excellence from the projects, people and partners that are working to create better buildings and better lives for all in their local communities. To signify a significant achievement above an already high bar, the Community Leadership Awards recognize projects that made a substantial impact in innovation, sustainability or community. Projects can also be recognized for overcoming obstacles, retaining historic character or persevering through particular challenges" (Rebecca Duffy).

Project Highlights

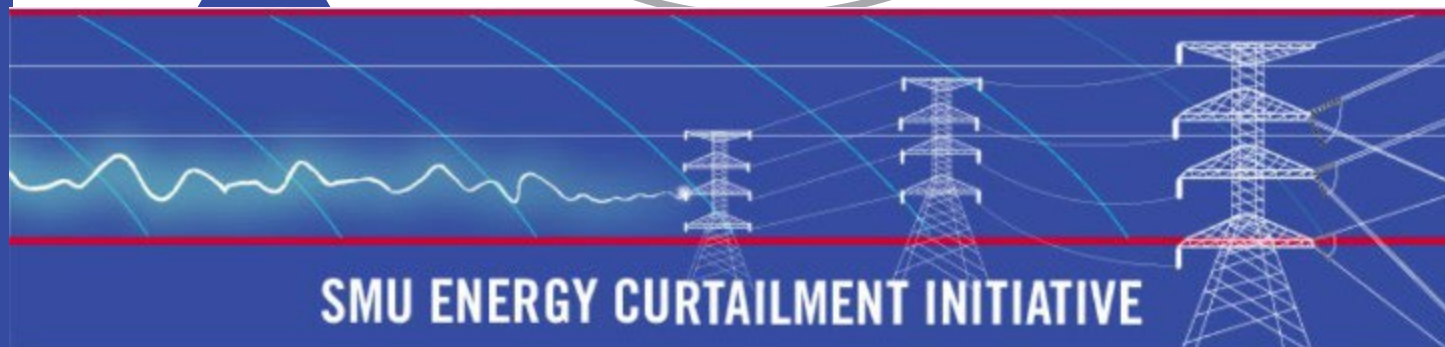
- Installation of MERV 13 HVAC heavy filtration media to capture a wide variety of particles, including lint, dirt, carpet fibers, dust, dust mites, mold bacteria, pollen, and animal dander.
- 100% energy usage from renewable energy sources purchased with Renewable Energy Credits (RECs).
- Voluntary submission reporting of emissions to a third-party to aid in the collection of data to develop benchmarks and establish goals for reducing emissions from energy use.

Energy Management Program



***In FY24 SMU
consumed
3,047, 111
Kilowatt-Hours,
saving \$228,533 off
the 2017 baseline.***

SMU now realizes an **average** annual **energy saving** of **\$2.5M** while creating a positive impact on campus-wide **comfort** and **efficiency**, as well as streamlined operations, **system reliability**, and **extended component lifecycle**.



SMU participates in energy curtailments during periods of high demand in North Texas. When the region's electrical grid nears capacity, SMU reduces energy consumption by allowing building temperature set points to increase two degrees.

Due to the University's participation in the ERCOT Demand Response Program, we received \$30,000, and help to "preserve system reliability, mitigate price spikes, and rolling blackouts" (Electric Reliability Council of Texas).

Landscaping



Agronomy

To improve soil structure in the landscape, we apply an organic treatment called Holganix. This treatment incorporates the soil with over 800 species of soil microbes to improve plant performance with the following results.

- Maximize Soil Health
- Boost Root Architecture
- Faster establishment of new plants
- Fewer Fertilizers and Herbicides needed

Core aeration is used to reduce compaction in the soil and allow additional water and air to pass through to the root system.

Recycling

We use mulching mowers to reduce the amount of organic material removed.

Clippings are cut into fine pieces that fall easily to the soil surface. There, they can be rapidly broken down by soil microorganisms, which release nutrients from the mulched plant material back into the soil. All organic materials not worked back into soil are transplanted to Organic recycling partners at University Park and Organic Recyclers. This material is processed into mulch which we then use in our beds to control weeds and maintain moisture to the roots of our plants. In the 2022-2023 fiscal year, we installed 482 cubic yards of recycled hardwood mulch on campus.

Irrigation

Over 1500 irrigation zones are inspected each month and repairs made as needed to keep proper moisture on the landscape while reducing water waste from leaks or broken heads. The system is also modified as the requirements of the landscape changes and the plants mature. The system at SMU is connected to an on-campus weather station that allows us to monitor weather conditions. In addition, all zones are regulated by a central control system allowing us to access everything remotely by computers or phone.



Perennial Transplanting Project

We use perennial flowering plants along with annuals in our flower beds. This allows us to transplant the perennials to permanent locations on campus once the flowerbeds are changed out for the winter. Each year, we can transplant 4,800 plants permanently onto the campus grounds.

Landscape Upgrade/ Installation

All plants considered for use on campus are evaluated for the following traits.

- Doesn't have a known significant insect or disease problem.
- Drought tolerance (once established).
- Not invasive
- Long-lived