

State Fair Community College

Sustainable efforts reduce costs, engage students, & generate revenue for the college

Reduce costs, develop new programming for potential students, and strengthen the communities the college serves. Those are the driving forces behind Dr. Marsha Drennon's innovative efforts at State Fair Community College (SFCC), where she has served as President since 2003.

It all began in 2009 when SFCC formed a partnership with local and state agencies and businesses to develop the Missouri Center for Waste to Energy; a unique community-led alternative energy research, development, commercialization, and training center. The center has three purposes: 1) Convert methane gas from the local landfill into electricity that will supplement college and community energy needs, 2) Provide educational and training opportunities in advanced energy systems, and 3) Provide an incubator for emerging business to explore and prove next generation energy technologies.

Aligned with the Waste to Energy Project, SFCC developed the Renewable Energy Technology degree program. SFCC recognizes that working in the field of renewable energy is the "wave of the future" and they are prepared to train the workforce in the areas of biomass, solar, and wind energy. Their Associate of Applied Science degree program includes general education courses as well as curriculum related to renewable energy technology. The program also includes a short-term Solar Electric Installation Skill Certificate.



State Fair Community College (SFCC), located in Sedalia, Missouri, opened its doors in 1968 and has served the educational needs of rural central Missouri for over 43 years. SFCC is a public, nonprofit college that serves the educational needs of 14 counties in west central Missouri. It is the only open access higher education institution in the region. SFCC's service area, nearly the size of Vermont, is the largest of all the community college's in the state. Currently, the college serves more than 5,000 students and provides both online and on-ground classes throughout west central Missouri.



Pictured Above: The William C. Hopkins Student Services Center received high efficiency lighting upgrades, high efficiency water conservation fixture upgrades, a new building control system and energy efficient HVAC upgrades.

The innovative Waste to Energy Project and Renewable Energy degree program will provide educational training and additional revenue to the general operating budget for SFCC, but the college's sustainable vision did not stop there. In August of 2011, the board of trustees approved a \$6.4 million energy savings performance contract with Trane to complete energy efficient upgrades to 13 buildings on the campus in Sedalia, Missouri.

The campus-wide facility improvement project is funded with an energy performance contract in accordance with the Missouri statutory fiscal tool RSMO 8.231 authorizing the funding of public infrastructure improvement projects with the energy and operational savings that result. A performance contract is a model that enables building owners to use future energy and operational savings to finance infrastructure improvement projects.

Board President Gary Noland said the board spent several months reviewing the assessment and discussing the benefits of a performance contract provided by state statute. "We feel confident that this is an excellent opportunity for the college to improve campus facilities at no extra cost to taxpayers," Noland said.

"Some of our buildings are aging and this agreement will allow us to make them more energy efficient and in turn ensure the long-term sustainability of our campus infrastructure. It's important that we maintain our campus facilities as well as ensure a high standard of fiscal responsibility to the taxpayers of our district."

The most significant changes students and faculty will notice is the thermal and visual comfort improvements generated from upgrading the HVAC and lighting systems. All buildings on campus have received energy efficient lighting upgrades that dramatically enhance the learning environment and improve energy efficiency. Additionally, high-efficiency heating, ventilation and air conditioning (HVAC) equipment and control system upgrades have been made to improve indoor air quality, ventilation and classroom comfort. Additional improvements include low-flow water fixture upgrades in all buildings and new 30-year roof systems with increased insulation on three buildings.

Energy savings will be realized along with reducing the amount of money the college spends maintaining aging equipment that has exceeded their useful service lives. With the new energy-efficient upgrades, State Fair Community College is expected to save nearly \$314,000 annually. These savings are achieved through a \$210,000 annual reduction in utility expense, \$5,000 in water and sewer savings, and \$99,000 in operational savings plus an additional \$263,000 in deferred maintenance savings.

The campus-wide facility improvement project coupled with the Waste to Energy Project will allow Dr. Drennon to leave behind a legacy of sustainability as she plans her retirement in 2013. Her innovative vision will reap rewards for the college, its students, and the communities it serves for years to come—a true model of sustainability.

Upgrades at State Fair Community College Included:

- Efficient lighting upgrades and occupancy sensors
- Building automation systems installed
- Energy efficient HVAC replacements
- Low-flow water fixture upgrades
- 30-year roof systems installed