

University of Arkansas

Fayetteville, Arkansas



Total Annual
Energy Consumption
Reduced by 30%

“ This partnership between ESG and the University of Arkansas underlines our commitment to sustainability and green environmental initiatives. It is a definite plus that ESG is able to guarantee these improvements will pay for themselves, and, in the long term, save money for both the University and the Arkansas taxpayers.”

G. David Gearhart,
*University of Arkansas
Chancellor*

Project Background

In 2008, the University of Arkansas partnered with Energy Systems Group (ESG), a leading energy services provider, to design and install more than \$30 million of facility improvements. The goals of the project were to reduce energy consumption and address deferred maintenance issues in 73 buildings on the Fayetteville campus. The program was named “Razors EDGE,” for Efficiently Delivering Green Energy. The work was completed in 2011.

The energy performance agreement guaranteed that energy savings over a 13-year period would cover the cost of building improvements, reducing the campus’ total annual energy consumption by 30 percent.

Energy savings data reports indicate that the University of Arkansas has exceeded the anticipated impact of its campus-wide energy savings and facility modernization program by approximately 24 percent in the second year since the program’s completion. The program also exceeded anticipated savings results in its first year of completion by about 20 percent.

Strategies & Solutions

Renovations included the installation of more efficient lighting, heating and cooling systems, water conservation equipment, and installation of a solar powered heater for the swimming pool in the Health Education and Recreation building.

In addition, ESG developed a campus-wide communications campaign about the energy savings performance initiatives. The

“Razors EDGE” program provides students, faculty, staff and facility maintenance specialists with timely information regarding construction schedules, program benefits and training on use of the new equipment and controls.

ESG also implemented a \$3.6 million modernization and facility improvement program for the John W. Tyson Center of Excellence for Poultry Science. This program significantly reduces energy consumption while enhancing the learning and working environment. The program included retrofitting 57 laboratory fume hoods with low flow technology, new and updated HVAC controls, a new filter system, and improved communications and alarms.

Environmental Benefits

By implementing these energy conservation and sustainability measures, the university has reduced its carbon footprint by more than 18,800 metric tons of carbon dioxide, which is equivalent to one of the following annual environmental benefits:

- Planting about 15,500 acres of forest;
- Generating enough energy to power about 1,000 homes; or
- Reducing emissions from 4,000 vehicles.



Efficiently Delivering Green Energy™

