

Section 9.4: Public Sector

Topic/Issue Description

Many publicly owned buildings, from State government buildings to municipal fire stations, require large amounts of energy to power lighting and run heating, ventilation, and cooling systems, the costs of which are ultimately borne by Kansas taxpayers. As Governor Sebelius noted in her January 2007 Executive Directive on Energy Conservation and Management, the State of Kansas should be “at the forefront of appropriate and effective energy and environmental practices.”

During the 2008 session, the Kansas Legislature considered adopting standards for new state-funded construction (Senate Bill 452), including that all new construction projects by state agencies achieve energy consumption levels at least 25% below those set out by the International Energy Conservation Code (IECC) 2006.¹ In 2007, the Kansas Legislature adopted IECC 2006 as the statewide standard for commercial and industrial structures.

Adoption and implementation of state-level standards is consistent with the goals of the National Action Plan for Energy Efficiency, which encourage states to develop policies to ensure robust energy efficiency practices, including establishment and enforcement of energy efficiency building codes.²

Existing Policies and Programs

1. In Executive Directive 07-373, Governor Sebelius targeted energy conservation and efficiency throughout State government. The directive requires state agencies—primarily the Department of Administration, Kansas Corporation Commission, and Kansas Department of Health and Environment—to (1) survey state employees for energy saving suggestions; (2) require energy audits on any facility being considered as leased space and require landlords to make necessary improvements; (3) collect energy data associated with state-owned and leased space and identify locations using excessive energy; (4) ensure that the average EPA mileage rating for auto purchases and leases in 2010 is at least 10% higher than the 2007 average; (5) review purchasing practices to assure 100% compliance with existing energy conservation requirements and develop or increase standards for such products as appliances, light bulbs, and computers using Energy Star as a minimum; (6) turn off all computers not having a technical or operational need when not in use for four or more hours; (7) expand state recycling program to every state office by December 2007; (8) include information on fuel efficiency and driver behavior in driver’s handbook and exam; (9) use the Facility Conservation Improvement Program (FCIP) to implement cost-

¹ Senate Bill 452: <http://www.kslegislature.org/bills/2008/452.pdf> (accessed September 8, 2008)

² See Goal Six in the National Action Plan for Energy Efficiency Vision for 2025: A Framework for Change, Executive Summary, November 2008: http://www.epa.gov/cleanenergy/documents/vision_execsumm.pdf (accessed December 19, 2008).

effective conservation and efficiency measures in all state-owned buildings by 2010; (10) accelerate efforts to market FCIP to school districts and local governments; and (11) review all state construction projects, both new and remodeling, that exceed \$100,000 for possible inclusion in FCIP, including Regents facilities. The Governor's directive also established a new Energy Auditor position at the Department of Administration, responsible for oversight of these initiatives.

2. The Facilities Conservation Improvement Program (FCIP), administered by the Energy Programs Division at the Kansas Corporation Commission, works to promote and facilitate energy conservation in state, municipal, county, and educational facilities. The FCIP connects public agencies with qualified private energy service companies (ESCOs) that identify and evaluate energy-saving opportunities and recommend improvements. The money saved from reduced energy usage are then used to pay for the cost of the improvement project. The ESCOs guarantee that energy savings will cover the annual payments for all project costs. If actual savings are less than the annual payments, the ESCO pays the difference. To date, the FCIP has overseen over 60 projects with a collective annual energy savings estimated at \$12 million.
3. K.S.A. 75-3783 specifies the powers and duties delegated to the Secretary of Administration in overseeing the construction or renovation of state buildings and provides, in subsection (b), that the Secretary may adopt rules and regulations establishing standards for the planning, design and construction of buildings, and major repairs and improvements to buildings. These standards must include energy conservation standards. To date, the Secretary has not promulgated any regulations concerning energy conservation standards. However, the Division of Facilities Management in the Kansas Department of Administration has adopted a policy to use the 2003 International Energy Conservation Code (IECC) as its conservation standard for all new state-financed construction, though there are no formal design review or enforcement procedures. However, because industry standards generally exceed IECC 2003, there is an expectation that the standard is met.
4. Following the May 2007 tornado that destroyed much of the city, the Greensburg City Council passed an ordinance requiring all new and renovated municipally owned facilities (over 4,000 square feet) achieve a USGBC LEED rating of platinum. Additionally, all buildings are required to receive all 10 credits possible under the "Optimize Energy Performance" section of the LEED new construction standard (equivalent to achieving energy reductions of 42% below IECC 2006).
5. The U.S. Department of Energy (DOE), through its Building Technologies Program, funds several initiatives to advance research and development of energy efficient buildings, improve building codes and appliance standards, and promote education. Energy Star, a joint program of the U.S. Environmental Protection Agency (EPA), is a voluntary labeling program designed to identify and promote energy-efficient products; the Energy Star label is now on major appliances, office equipment, lighting, and home electronics, and EPA has extended the label to cover new homes

and commercial and industrial buildings. The Building Technologies Program also includes Rebuild America, and Zero Energy Buildings.

6. The Federal Energy Management Program, administered by DOE, targets the federal government for energy efficiency improvements, encouraging energy efficient equipment purchases, construction, retrofitting, and operations.
7. The Energy Policy Act of 2005 (EPA 2005) directs federal agencies to purchase only items approved by the Energy Star or Federal Energy Management program. In addition, all new federal buildings are required to be built 30% below the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 2004 standards—equivalent to 30% below IECC 2006 standards.³
8. On December 19, 2007, President Bush signed into law the Energy Independence and Security Act of 2007. Under this statute, the federal goal of reducing energy consumption is increased from 2% to 3% per year. The law also requires that 30% of hot water demand for new or renovated federal buildings be met through the use of solar hot water heating, provided the measures are cost-effective for the life-cycle of the building.
9. The National Action Plan for Energy Efficiency is a private-public initiative, which began in 2005 with the goal of promoting a “sustainable, aggressive national commitment to energy efficiency through the collaborative efforts of gas and electric utilities, utility regulators, and other partner organizations.”⁴
10. The Leadership in Energy and Environmental Design (LEED) rating system evaluates the energy efficiency and overall “environmental friendliness” of buildings on a four-tier scale: certified, silver, gold, and platinum. LEED is maintained by the U.S. Green Building Council (USGBC). In order to receive a LEED rating, a building project must register with the USGBC and undergo an audit; achieving any of the four certification levels requires a minimum number of points and the inclusion of points from certain categories. The USGBC now delegates certification to the Green Building Certification Institute (GBCI). Currently, LEED-based standards and incentives have been adopted by 90 U.S. municipalities and 24 states. Almost all standards are aimed at public buildings.⁵
11. Green Globes is another green rating system developed by the Building Research Environmental Assessment Method (BREEAM). Green Globes are awarded to buildings based on assessments provided in seven categories: energy, indoor environment, site, resources, water, emissions and effluents, and project management.

³ Database of State Incentives for Renewables & Efficiency (DSIRE), January 2008, Feder – Energy Goals and Standards for Federal Buildings:

http://www.dsireusa.org/library/includes/summtabsrch.cfm?Incentive_Code=US02R&Back=regeetab&state=US&type=Public&CurrentPageID=7&EE=1&RE=1 (accessed December 5, 2008).

⁴ U.S. Environmental Protection Agency (EPA), 2008, National Action Plan for Energy Efficiency: <http://www.epa.gov/cleanenergy/energy-programs/nape/index.html> (accessed December 2008).

⁵ U.S. Green Building Council (USGBC), 2007: <http://www.usgbc.org/> (accessed November 28, 2007)

Scoring of these seven categories is based on a simple online questionnaire through the GBI's website.