

STATE OWNED PROPERTY

EXCESSIVE ENERGY USE

ANNUAL REPORT

DECEMBER 23, 2011

HOUSE ENERGY AND UTILITIES

DATE: 1.26.2012

ATTACHMENT 1

Legislation

This report is being provided per K.S.A 75-37,128 which requires the Secretary of Administration to provide a written report on buildings that use and excessive amount of energy. Per this K.S.A this report is intended to for the following Legislative committees.

Joint committee on state building construction

House committee on energy and utilities

Senate committee on utilities

An electronic copy is to also be provided to the Legislature. The above referenced K.S.A is shown below.

75-37,128. Rules and regulations concerning energy audits for state-owned real property and leased real property. (a) The secretary of administration shall adopt rules and regulations, within 18 months of the effective date of this act, for state agencies for the conduct of an energy audit at least every five years on all state-owned real property. On or before the first day of the 2010 regular session of the legislature and on or before the first day of each ensuing regular session of the legislature, the secretary of administration shall submit a written report to the joint committee on state building construction, the house committee on energy and utilities and the senate committee on utilities, or their successors, and an electronic copy to the legislature, identifying state-owned real property locations in which an excessive amount of energy is being used in accordance with rules and regulations adopted, within 18 months after the effective date of this act, by the secretary of administration concerning energy efficiency performance standards for state-owned real property.

Rules & Regulations

The information provided in this report is based upon information submitted by State Agencies as required by the rules and regulation adopted by the Department of Administration and filed with the Secretary of State on January 7, 2011. The following is a summary of the rules and regulations that deal with building audits and agencies identifying buildings that use and excessive amount of energy.

ARTICLE 66.—ENERGY AUDITS FOR REAL PROPERTY

1-66-1. Definitions. For purposes of this article, each of the following terms shall have the meaning specified in the regulation:

(a) "Agency Head" means an individual or body of individuals in which the ultimate legal authority of a state agency is vested by any provisions of law.

(b) "Division" means the division of facilities management within the Kansas department of administration.

(c) "Energy audit" means the utilization of a building energy-use benchmarking system, including the energy star portfolio manager, that generates a written report that details the conversion of a building's energy consumption data into energy-intensity metrics for the purpose of comparing the energy use of a building to the national average energy use of similar buildings.

(d) "Energy consumption data" means the monthly amount of energy consumed in the preceding 12-month period as recorded by utility distributing and selling energy or water services for a particular building.

(e) "Energy-intensity metrics" means the measurement of weather variations and changes in the physical and operating characteristics of each building.

(f) "Energy star portfolio manager" means an online energy management tool created by the United States environmental protection agency that uses an algorithmic formula for tracking and assessing energy and water consumption across a portfolio of buildings. The energy star portfolio manager can be accessed through the division's web site.

(g)(1) "Excessive amount of energy," when applied to a building subject to an energy audit, shall be determined by comparing the building's site and source energy-intensity metrics, annualized to a 12-month period, to the national average site and source energy-intensity metrics of similar buildings.

(2) If the site and source energy-intensity metrics of the building subject to an energy audit are greater than the national average site and source energy-intensity metrics, then the building shall be deemed to use an excessive amount of energy.

(h) "Secretary" means the secretary of the Kansas department of administration.

(i) "State agency" has the meaning specified in K.S.A. 75-3701, and amendments thereto. (Authorized by and implementing K.S.A. 2009 Supp. 75-37, 128; effective Feb. 4, 2011.)

1-66-2. Energy audit required for each state-owned building. (a) If a state agency owns real property, the agency head, or that person's designee, shall conduct and energy audit of each building on that real property and submit the written report to the division.

(b) An energy audit shall be conducted every five years for each building specified in subsection (a).

(c) If a state agency owns four buildings or less, the written reports for the first energy audits for all of the buildings shall be submitted no later than July 1, 2011.

(d) If a state agency owns five or more buildings, an energy audit for at least one-fifth of all those buildings shall be conducted each year. The written reports for the first energy audits shall be submitted no later than July 1, 2011.

(e) Each state agency conducting an energy audit shall indentify each state-owned building in which an excessive amount of energy is being used, pursuant to K.S.A. 75-37, 128 and amendments thereto. (Authorized by and implementing K.S.A. 2009 Supp. 75-37,128; effective Feb. 4, 2011.)

Information Provided by State Agencies

To date the Department of Administration has received 506 audits from agencies that own buildings in the state. To make sure we had good participation, the Department of

Administration sent written notifications to agency contacts first on February 16, 2011 and again on August 12th, 2011. This notification detailed the requirement of the new regulations noted above. The second notification also set a new deadline of October 1st for submission. The second notification helped get to get agency attention and increased the number of submission we received. Finally on December 7th, agencies that had not sent any information were called and asked when they would get the submissions to us. Most of these agencies were still working on the submissions and indicated that they would be getting something that could be included next year. The following are agencies that have not submitted any or incomplete information at this time.

Adjutant General
Insurance Department
Social Rehabilitation Services
University of Kansas
Kansas School for the Blind
Kansas School for the Deaf
Department of Wildlife and Parks

Many of the state agencies have indicated that they have had problems with the data entry and report retrieval from Energy Star program. The following are some of the most common issues we have heard reported back to us.

1. The natural gas data entry in Energy Star gives an option to pick the units on how the agency is being billed. Most natural gas bills are billed in Mcf which 1 Mcf is equal to 1,000 cubic feet of natural gas (the M is a roman numeral meaning 1,000). In Energy Star you are given the option to pick an Mcf, however it looks at an Mcf as being 1,000,000 cubic feet (the M is a metric system acronym that stand for 1,000,000). The agencies need to be picking a Kcf which stands for 1,000 cubic feet. We believe that this error has caused a number of the audits to come back showing buildings are extremely high energy users.
2. Many of the campuses have either central power, central steam or both that distributes energy to a number of buildings but comes back as one bill. We have told agencies that the best way to handle this if they do not have individual building metering is to ratio the bills out based upon the square footage of the buildings. Some of the agencies have done this while others have just accounted for all the energy going to the building that the utility bill is associated with. Again this ends up skewing data by making one building look extremely inefficient while others look efficient since they are shown not using any of the energy.
3. The Universities have noted that as they enter information on many of their buildings there is not a good category for Energy Star to compare them to. When they choose "Other - College/University (Campus-Level)" Energy Star gives and (NA) under the rating. However, while Energy Star does not give a rating it does do a comparison against a national average which will indicate if the building uses more or less energy than the average building of that type.

During this next year we hope to set up a meeting to try and point people in the right direction for avoiding the above mentioned problems.

Buildings that Use & Excessive Amount of Energy

Of the 506 building audits that were submitted, 153 of these audits indicated that the building used an excessive amount of energy. On the following pages is a list of these buildings. In support of this list is a copy of the audit that was submitted for each building.

Agency #	Agency Name	Building Name	City	Gross Floor Area (ft ²)	Energy Performance Rating	SEU Total Energy (kbtu)	Electricity (kWh/ft ² /yr)	National Average SEU	% Difference from National Average	Excessive Energy Use
276	Kansas Department of Transportation	District 1 Office/Shop Complex	Topoka	117,995	11	12,108,626	103	63	63	Yes
276	Kansas Department of Transportation	District 3 - 6 Bay Subarea & Complex	Hoxie	8,818	18	811,138	92	63	45	Yes
276	Kansas Department of Transportation	District 5 - 6 Bay Subarea & Complex	Newton	9,603	33	564,683	59	49	20	Yes
276	Kansas Department of Transportation	District 6 - Area Crew Office & Complex	Dodge City	27,464	10	2,850,207	104	63	66	Yes
385	Pittsburg State University	Axe Library	Pittsburg	90,560		298,355,727	3,295	120	1178	Yes
385	Pittsburg State University	Porter Hall	Pittsburg	34,014		155,427,973	4,570	120	1622	Yes
385	Pittsburg State University	Weede P. E. Building	Pittsburg	131,975		9,186,037,127	69,605	120	25947	Yes
715	Wichita State University	Yates Hall	Pittsburg	40,698		244,095,556	5,998	120	2157	Yes
715	Wichita State University	Blake Hall	Wichita	6,878		266,527,697	38,751	120	14446	Yes
715	Wichita State University	Garvey International Center	Wichita	9,571		139,686,516	14,595	120	5383	Yes
715	Wichita State University	Henriot Hall	Wichita	36,684		54,055,784	1,474	120	474	Yes
715	Wichita State University	Hughes Metropolitan Complex	Wichita	75,313		2,248,617,810	29,857	120	11091	Yes
715	Wichita State University	Intensive English Language Center	Wichita	10,971		188,942,662	17,222	120	6367	Yes
715	Wichita State University	Charles Koch Arena	Wichita	211,385		17,085,080,550	80,824	120	30719	Yes
715	Wichita State University	Marcus Welcome Center	Wichita	29,320		2,519,080	86	120	3	Yes
715	Wichita State University	Mcknight Art Center	Wichita	74,275		80,863,166	1,089	120	333	Yes
715	Wichita State University	National Institute for Aviation Research	Wichita	78,848		1,596,618,248	20,249	120	7562	Yes
367	Kansas State University	Ackerly/Chalmers	Manhattan	192,069		35,415,692	184	120	21	Yes
367	Kansas State University	Ahearn Field House	Manhattan	9,096		20,833,371	231	120	77	Yes
367	Kansas State University	Beach Art Museum	Manhattan	48,920		9,019,277	184	120	21	Yes
276	Kansas Department of Transportation	District 1 Highway Patrol Office and Complex	Topoka	14,025	1	2,280,649	163	57	183	Yes
367	Kansas State University	Bill Snyder Family Stadium	Manhattan	125,006		23,048,736	184	95	28	Yes
367	Kansas State University	Bluemont Hall	Manhattan	122,700		22,529,572	184	120	21	Yes
367	Kansas State University	Bramlage Coliseum	Manhattan	176,073		32,467,928	184	95	28	Yes
367	Kansas State University	Brandeberry Indoor Practice	Manhattan	25,915		4,778,793	184	104	60	Yes
367	Kansas State University	Burt Hall	Manhattan	39,291		7,245,924	184	120	21	Yes
367	Kansas State University	Campus Creek Complex	Manhattan	22,175		4,089,567	184	120	21	Yes
367	Kansas State University	Chemical Storage Building	Manhattan	2,608		480,897	184	120	21	Yes
367	Kansas State University	Chemistry/Biochemistry	Manhattan	89,380		16,475,016	184	120	21	Yes
367	Kansas State University	Coles Hall	Manhattan	106,030		27,830,894	262	120	90	Yes
367	Kansas State University	Dickens Hall	Manhattan	31,435		5,795,037	184	120	21	Yes
367	Kansas State University	Dole Hall	Manhattan	32,923		3,416,007	104	120	24	Yes
367	Kansas State University	Durland-Rahbone-Fiedler Hall	Manhattan	245,041		45,183,277	184	120	21	Yes
367	Kansas State University	Dykstra Hall	Manhattan	37,095		6,839,782	184	120	21	Yes
367	Kansas State University	East Stadium	Manhattan	22,357		4,122,834	184	120	21	Yes
367	Kansas State University	Edwards Hall	Manhattan	54,758		10,097,051	184	120	21	Yes
367	Kansas State University	Eisenhower Hall	Manhattan	54,893		10,120,096	184	120	21	Yes
367	Kansas State University	English Counseling Services	Manhattan	33,666		6,207,533	184	120	21	Yes
367	Kansas State University	Environmental Research Lab	Manhattan	6,762		1,248,087	185	120	22	Yes
367	Kansas State University	Facilities Grounds Storage	Manhattan	5,250		969,101	185	120	22	Yes
367	Kansas State University	Facilities Grounds	Manhattan	4,018		740,990	184	120	21	Yes
367	Kansas State University	Facilities Shops	Manhattan	8,785		1,620,505	184	120	21	Yes
367	Kansas State University	Fairchild Hall	Manhattan	58,828		10,847,538	184	120	21	Yes
367	Kansas State University	Feed Technology	Manhattan	18,837		3,473,421	184	120	21	Yes
367	Kansas State University	Ford Hall	Manhattan	125,132	45	150,160,857	184	120	5	Yes
367	Kansas State University	General Richard B. Myer Military Science Hall	Manhattan	39,206		7,228,134	184	120	21	Yes
367	Kansas State University	Greenhouse D	Manhattan	2,279		418,657	184	120	21	Yes
367	Kansas State University	Gymnasium	Manhattan	73,703		13,590,765	184	120	21	Yes
367	Kansas State University	Hal Ross Flour Mill	Manhattan	26,739		4,930,159	184	120	21	Yes
367	Kansas State University	Hale-Farrell Library	Manhattan	357,927		65,998,654	184	120	21	Yes
367	Kansas State University	Handball Building	Manhattan	4,980		917,849	184	120	21	Yes

Agency #	Agency Name	Building Name	City	Gross Floor Area (ft ²)	ENERGY Performance Rating	SEU Total Energy (kWh)	Site E-Source (kWh/ft ² /yr)	National Average Site EUI	% Difference from National Average Site EUI	Excessive Energy Usage
367	Kansas State University	Haymaker Hall	Manhattan	125,132	41	15,461,468	124	112	11 Yes	
367	Kansas State University	Hoefflin Stone House	Manhattan	16,273		3,531,810	217	120	60 Yes	
367	Kansas State University	Holtz Hall	Manhattan	6,950		1,281,734	184	120	21 Yes	
367	Kansas State University	Indoor Practice Facility	Manhattan	97,248		17,929,631	184	120	21 Yes	
367	Kansas State University	International Grains Program	Manhattan	19,732		3,636,733	184	120	21 Yes	
367	Kansas State University	International Student Center	Manhattan	6,439		1,187,269	184	120	21 Yes	
367	Kansas State University	Intramural Fields Bldg	Manhattan	576		107,892	187	120	23 Yes	
367	Kansas State University	Justin Hall	Manhattan	148,768		27,432,373	184	120	21 Yes	
367	Kansas State University	Kedzie Hall	Manhattan	41,616		7,684,972	185	120	22 Yes	
367	Kansas State University	King Hall	Manhattan	44,559		8,216,189	184	120	21 Yes	
367	Kansas State University	KSU Garden Maintenance	Manhattan	2,250		415,775	185	120	22 Yes	
367	Kansas State University	Leadership Studies	Manhattan	28,475		6,880,374	242	120	43 Yes	
367	Kansas State University	Mosler Hall	Manhattan	272,640		71,563,633	262	120	90 Yes	
367	Kansas State University	Natorium	Manhattan	49,554		9,138,087	184	120	21 Yes	
367	Kansas State University	National Gas Machine Lab	Manhattan	12,400		2,286,292	184	120	21 Yes	
367	Kansas State University	Nichols Hall	Manhattan	74,277		13,697,505	184	120	221 Yes	
367	Kansas State University	Parking Structure	Manhattan	443,887		81,846,992	184	120	21 Yes	
367	Kansas State University	Pat Roberts Hall	Manhattan	112,955		20,828,021	184	120	21 Yes	
367	Kansas State University	Peters Recreation Center	Manhattan	169,995		31,345,978	184	120	21 Yes	
367	Kansas State University	Phy. Facil. Storage Bldg.	Manhattan	6,650		1,226,509	184	120	21 Yes	
367	Kansas State University	Power Plant	Manhattan	52,792		9,735,480	184	120	21 Yes	
367	Kansas State University	President's Residence	Manhattan	9,096		1,678,501	185	120	22 Yes	
367	Kansas State University	Public Safety Service II	Manhattan	3,600		663,795	184	120	21 Yes	
367	Kansas State University	Seaton Court	Manhattan	45,515		8,391,640	184	76	100 Yes	
367	Kansas State University	Seaton Hall	Manhattan	235,967		43,508,246	184	120	21 Yes	
367	Kansas State University	Shellenberger Hall	Manhattan	551,051		9,413,024	184	120	21 Yes	
367	Kansas State University	Tasting Lab-Civil Eng.	Manhattan	6,000		1,105,640	184	120	21 Yes	
367	Kansas State University	Thompson Hall	Manhattan	33,092		6,102,848	184	120	21 Yes	
367	Kansas State University	Throckmorton Hall	Manhattan	392,058		72,291,533	184	120	21 Yes	
367	Kansas State University	Track Locker Facility	Manhattan	2,800		517,883	185	120	22 Yes	
367	Kansas State University	Trotter Hall	Manhattan	104,601		27,456,303	262	120	90 Yes	
367	Kansas State University	Umlberger Hall	Manhattan	58,611		10,806,884	184	120	21 Yes	
367	Kansas State University	Van Zile Hall	Manhattan	53,921	37	7,302,389	135	118	15 Yes	
367	Kansas State University	Ward Hall	Manhattan	4,122		7,601,134	184	120	21 Yes	
367	Kansas State University	Waters Hall Annex	Manhattan	15,658		2,888,048	184	120	21 Yes	
367	Kansas State University	Waters Hall	Manhattan	147,102		27,123,978	184	120	21 Yes	
367	Kansas State University	Weber Hall	Manhattan	133,161		24,553,771	184	120	21 Yes	
367	Kansas State University	West Stadium	Manhattan	28,156		5,190,904	184	120	21 Yes	
367	Kansas State University	Willard Hall	Manhattan	10,459		20,183,234	184	120	21 Yes	
367	Kansas State University	Wind Erosion Lab	Manhattan	11,920		2,199,977	185	120	22 Yes	
367	Kansas State University	Leasure Hall	Manhattan	44,354		8,179,389	184	120	21 Yes	
367	Kansas State University	Manufacturing Ln. Ct.	Manhattan	22,683		4,216,931	186	120	23 Yes	
367	Kansas State University	McCain Auditorium	Manhattan	112,639		20,770,737	184	120	21 Yes	
367	Kansas State University	Mechanical Engineering Lab	Manhattan	10,800		1,992,408	184	120	21 Yes	
367	Kansas State University	Meyers Field - Baseball Compound	Manhattan	13,055		2,407,472	184	120	21 Yes	
367	Kansas State University	Moore Hall	Manhattan	125,132	43	15,449,129	123	114	9 Yes	
694	Commission on Veteran's Affairs	Nimitz Hall	Fort Dodge	10,700		961,054	90	89	38 Yes	
694	Commission on Veteran's Affairs	Lincoln Hall	Fort Dodge	20,484		1,826,071	89	89	37 Yes	
694	Commission on Veteran's Affairs	Halsey Hall	Fort Dodge	38,906		17,103,214	440	107	123 Yes	
694	Commission on Veteran's Affairs	Grant Hall	Fort Dodge	21,155		1,849,892	87	89	34 Yes	
694	Commission on Veteran's Affairs	Eisenhower Hall	Fort Dodge	7,626		666,784	91	77	17 Yes	

Agency #	Agency/Name	Building Name	City	Gross Floor Area (ft ²)	Energy Performance Rating	SEU Total Energy (kWh)	Site EUI (kWh/ft ² /yr)	National Average Site EUI	% Difference from National Average	Excessive Energy Use
195	El Dorado Correctional Facility	Energy Center	El Dorado	14,000		1,549,400				Yes
195	El Dorado Correctional Facility	Maintenance	El Dorado	12,876		1,424,085				Yes
195	El Dorado Correctional Facility	Auto Maintenance	El Dorado	9,470		1,047,382				Yes
195	El Dorado Correctional Facility	Warehouse	El Dorado	18,700		2,068,220				Yes
195	El Dorado Correctional Facility	Weapons Storage - Sally Port	El Dorado	120		3,984				Yes
195	El Dorado Correctional Facility	South Sally Port - Shakedown	El Dorado	400		44,240				Yes
195	El Dorado Correctional Facility	Quonset Building	El Dorado	4,000		132,800				Yes
195	El Dorado Correctional Facility	Compound Shakedown - West	El Dorado	450		49,770				Yes
195	El Dorado Correctional Facility	Compound Shakedown - East	El Dorado	340		38,710				Yes
195	El Dorado Correctional Facility	Hazardous Caustic/Toxic Stor	El Dorado	300		9,960				Yes
195	El Dorado Correctional Facility	Heartbeat Detector Building	El Dorado	2,001		66,433				Yes
660	Topeka Correctional Facility	Central Unit - Central Storage	Topeka	5,535		375,273				Yes
660	Topeka Correctional Facility	Central Unit - Gym	Topeka	12,317		835,093				Yes
280	Kansas Highway Patrol	Power Plant	Salina	8,004		278,173		30		Yes
352	Kansas Juvenile Correctional Complex - West	Pool Building	Topeka	7,645		872,752				16 Yes
352	Kansas Juvenile Correctional Complex - West	Greenhouse #1	Topeka	1,100		125,576				Yes
352	Kansas Juvenile Correctional Complex - West	Horticulture/Landscape	Topeka	5,012		572,169				Yes
352	Kansas Juvenile Correctional Complex - West	Vocational/Maintenance	Topeka	22,818		2,604,899				Yes
352	Kansas Juvenile Correctional Complex - West	Power Plant	Topeka	4,568		521,482				Yes
300	Department of Commerce	Kansas City Workforce Center	Kansas City	19,108		1,633,416		85		22 Yes
352	Kansas Juvenile Correctional Complex - West	Greenhouse #2	Topeka	288		328,780				Yes
83	Kansas Bureau of Investigation	KBI - Great Bend	Great Bend	10,624		2,134,710		201	69	192 Yes
683	KU Medical Center	Murphy Administration	Kansas City	51,256	13	10,391,618	203			Yes
683	KU Medical Center	Wahl Annex	Kansas City	17,877	11	6,635,089	371			Yes
683	KU Medical Center	Wascos Pavilion (B)	Kansas City	78,050	37	14,535,088	186			Yes
683	KU Medical Center	Hixon	Kansas City	21,585	2	4,801,657	222			Yes
683	KU Medical Center	Wesco Pavillion (C)	Kansas City	25,244	8	5,481,188	217			Yes
683	KU Medical Center	Sudler	Kansas City	95,754	3	23,760,368	248			Yes
683	KU Medical Center	Delp Pavillion (D)	Kansas City	118,117	7	27,460,394	232			Yes
683	KU Medical Center	Eaton (E)	Kansas City	34,408	1	9,614,751	279			Yes
683	KU Medical Center	Wahl West (WHW)	Kansas City	69,014	4	16,545,978	240			Yes
683	KU Medical Center	Taylor (ET)	Kansas City	33,357	38	7,212,389	216			Yes
683	KU Medical Center	Student Center	Kansas City	58,148	17	11,526,955	198			Yes
683	KU Medical Center	Robinson (I)	Kansas City	62,100	24	12,378,388	199			Yes
683	KU Medical Center	Children's Development Unit (CDU)	Kansas City	27,552	6	5,878,654	213			Yes
683	KU Medical Center	Wahl East (WHE)	Kansas City	126,751	19	26,180,464	207			Yes
683	KU Medical Center	Dykes Library	Kansas City	59,064	26	12,519,499	212			Yes
683	KU Medical Center	Research Support	Kansas City	77,810	1	21,279,312	275			Yes
683	KU Medical Center	Smith West	Kansas City	12,635	1	2,791,558	221			Yes
683	KU Medical Center	Smith East	Kansas City	45,406	11	10,032,441	221			Yes
683	KU Medical Center	Breidenthal Annex	Kansas City	7,920	1	5,079,469	641			Yes
683	KU Medical Center	Miller	Kansas City	54,684	19	11,125,658	203			Yes
683	KU Medical Center	4125 Rainbow - Design & Constr.	Kansas City	39,363	48	5,148,493	131			Yes
683	KU Medical Center	Blendenhal	Kansas City	40,620	16	6,956,581	171			Yes
683	KU Medical Center	Orr Major	Kansas City	118,157	4	27,959,832	237			Yes
683	KU Medical Center	Lied Biomedical	Kansas City	80,250	1	24,969,206	311			Yes
683	KU Medical Center	HLSIC	Kansas City	211,457	1	66,750,157	316			Yes
683	KU Medical Center	School of Nursing	Kansas City	104,971	20	21,679,022	207			Yes
683	KU Medical Center	Landon Center on Aging (CHIA)	Kansas City	59,010	17	9,080,955	154			Yes
683	KU Medical Center	Hoglund Brain Imaging Center	Kansas City	9,720	1	3,034,613	312			Yes