

# Energy Saver News

with campus energy information and tips to help keep KU energy-efficient

## Welcome to the first quarterly Energy Saver News for the University of Kansas

*Chevron Energy Solutions (CES) will be issuing this quarterly newsletter to help the University share information about energy consumption, ideas on how to save energy, and what the University has done and will continue to do to save energy.*

## DID YOU KNOW?

FOR EVERY DEGREE THAT YOU LOWER YOUR THERMOSTAT DURING THE WINTER, YOU COULD SAVE UP TO 5% ON YOUR HEATING COSTS.

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## Meet Chris Proctor, KU Energy Monitor

In this first issue of *Energy Saver News*, we highlight three campus buildings: Wescoe Hall, Fraser Hall, and Stauffer-Flint. CES has enlisted the help of Chris Proctor, a KU student, to act as an Energy Monitor for these buildings and help spread the word about energy conservation. Chris, who grew up in Ottawa, Kansas, is an Environmental Policy major, minoring in Urban Planning. He is currently a senior and will be graduating in Spring of 2007.



Chris states, "I've been monitoring two of the most popular buildings on campus—Wescoe Hall and Fraser Hall. I've become much more aware of the amount of energy that could be saved every day and it's staggering. My attempts to educate many students and faculty about this have started to show positive results in energy consumption savings. Let's continue this rising trend!" Below are the kilowatt-hour (units of electricity) and thermal consumption (units of natural gas) stats for these buildings for the period April 2006–June 2006, after Chris came on board.

	Electric – kWh		Gas – Therms	
	April 2006–June 2006	April 2005–June 2005	April 2006–June 2006	April 2005–June 2005
<b>Wescoe Hall</b>	281,910	304,880	17,234	24,637
<b>Fraser Hall</b>	211,630	223,040	1,833 *	13,264
<b>Stauffer-Flint</b>	27,237	34,037	1,960	1,004

\* KU Facilities Operations personnel replaced faulty steam valves in Fraser that helped reduce consumption.

**ENERGY QUIZ:** When should you turn off your lights when leaving a room?  
**(a)** when you will be gone for more than 5 minutes; **(b)** any and all times;  
**(c)** only once per day, when you go home.



This newsletter is written and published by Chevron Energy Solutions for the benefit of the KU students, staff and faculty. Chevron Energy Solutions provides energy services to the University of Kansas.



## Featured ECM: Energy-Efficient Fluorescent Lighting

In each issue of the *Energy Saver News* we will focus on an Energy Conservation Measure or ECM. In this issue we highlight **Energy-Efficient Fluorescent Lighting**.

Wescos, Fraser and Stauffer-Flint Halls have all been outfitted with new energy conservation measures. These ECMs include energy-efficient lighting, building automation control systems (BACS), VAV boxes (Wescos Hall only), and solar window film (Fraser Hall only). The following examples compare the energy-efficient lighting installed in 2003 with older inefficient lighting fixtures.

**T12s vs. T8s:** T12 is lighting-speak for a tubular shaped lamp that is 12/8ths of an inch in diameter. A typical two-lamp 4-foot T12 fluorescent light fixture with 34-watt lamps and standard magnetic ballast consumes 78 watts. This type of lighting was replaced with two 32-watt 4-foot T8 lamps with low-watt electronic ballasts, which consume 52 watts per fixture — a 33% savings in energy with the electronic ballasts lasting twice as long as the old magnetic ballasts.

**Incandescent Bulbs vs. Compact Fluorescent Lamps:** A typical 60-watt incandescent bulb consumes 60 watts and lasts 1,000 hours. This type of lighting was replaced with 15-watt compact fluorescent lamps that last 8,000 hours. This is a 75% energy saving with the bulbs lasting 8 times longer.

**Energy Myth:** You can warm up a house faster if you turn the thermostat up to 75 or 80 degrees initially.

**The house warms up at the same rate no matter at what temperature you set the thermostat.**

### ENERGY QUIZ ANSWER:

**(b) Any and all times**

Fluorescent lights use very little energy when first turned on. If the light is not needed, even if for only a few minutes, you would still save energy by turning them off during that time. This practice will also extend the life of the lamps. Turning lights on and off will slightly reduce operation life but not as much as leaving the lights on.

## It's in the Numbers

### DOLLARS SPENT ON ELECTRICITY AND GAS IN FISCAL YEAR 2006 BY BUILDING

Note the KU energy spend by building below. Some of the figures may seem intuitive but some may be surprising.

1	MALOTT HALL	\$992,835	25	REGNIER HALL	\$138,753	52	CONTINUING EDUCATION	\$38,714
2	HAWORTH HALL	\$871,824	26	NICHOLS HALL	\$134,878	53	YOUNGBERG HALL	\$38,373
3	MULTIDISCIPLINARY RESEARCH FACIL	\$376,082	27	DOLE INSTITUTE	\$130,191	54	ANSCHUTZ SPORTS PAVILION	\$34,747
4	ROBINSON HEALTH & PHYS ED CTR	\$344,213	28	JOSEPH R. PEARSON HALL	\$119,346	55	SMISSMAN RESEARCH LAB	\$33,675
5	LEARNED HALL	\$322,516	29	GREEN HALL	\$119,129	56	STAUFFER-FLINT	\$33,103
6	ANSCHUTZ SCIENCE LIBRARY	\$318,571	30	BLAKE HALL	\$118,499	57	ELLSWORTH TELECOM ANNEX	\$31,138
7	SPENCER MUSEUM OF ART	\$263,086	31	SNOW HALL	\$116,659	58	BURT HALL	\$30,962
8	SIMONS BIOSCIENCES RESEARCH LABS	\$243,703	32	COMPUTER SERVICES FAC	\$114,642	59	PARKING GARAGE # 2	\$28,506
9	ALLEN FIELDHOUSE	\$240,277	33	DYCHE HALL AND MUSEUM	\$111,353	60	PRINTING SERVICES	\$28,477
10	WESCOE HALL	\$231,588	34	FRASER HALL	\$106,211	61	BAEHR AUDIO-READER /KPR	\$27,058
11	KANSAS UNION	\$217,723	35	WAGNON STUDENT ATH CTR	\$101,159	62	CHILD CARE FACILITY	\$24,769
12	EATON HALL	\$213,402	36	LINDLEY HALL & OBERVATORY	\$99,745	63	HOREJSI ATHLETIC PRAC FAC	\$23,812
13	STUDENT REC CENTER	\$210,142	37	MOORE HALL	\$84,392	64	PARROTT ATHLETIC CENTER	\$22,323
14	INTER X (CENTER FOR RESEARCH)	\$196,221	38	REGENTS CENTER	\$82,331	65	FO CONSTRUCTION/LANDSCAPE SHOP	\$19,995
15	ART AND DESIGN	\$188,433	39	STRUCTURAL BIOLOGY CTR	\$79,879	66	LIPPINCOTT HALL	\$19,427
16	LIED PERFORMING ARTS CTR	\$185,127	40	SUMMERFIELD HALL	\$78,125	67	FACILITIES OPERATIONS MAIN BLDG	\$18,776
17	SPENCER RESEARCH LIB	\$184,208	41	ANDERSON STRENGTH CTR	\$77,000	68	CHANCELLOR'S RESIDENCE	\$17,104
18	STRONG HALL	\$177,676	42	POWER PLANT (Electric only)	\$71,370	69	TWENTE HALL	\$16,535
19	MURPHY HALL	\$175,319	43	BAILEY HALL	\$68,456	70	FO VEHICLE MAINT SHOP	\$15,025
20	BUDIG HALL (HOCH)	\$174,946	44	MARVIN HALL	\$65,036	71	OLDFATHER STUDIOS	\$14,688
21	MEMORIAL STADIUM	\$174,530	45	MCCOLLUM LAB	\$60,707	72	SPOONER HALL	\$12,552
22	DOLE HUMAN DVLPMNT CTR	\$162,095	46	BURGE UNION	\$57,955	73	HIGUCHI PHARMACEUTICAL CHEM LAB	\$12,070
23	WATSON LIBRARY	\$145,230	47	CARRUTH O'LEARY HALL	\$53,980	74	SMITH HALL	\$11,114
24	WATKINS STUDENT HEALTH CTR	\$144,152	48	MILITARY SCIENCE BUILDING	\$50,701	75	AIRPORT HANGAR #1	\$10,866
			49	FO WAREHOUSE & SHOPS	\$43,727	76	PARKER HALL	\$10,640
			50	PARKING GARAGE & OFFICES	\$39,687			
			51	NUNEMAKER HALL	\$39,115			

To learn more about what you can do to save energy at KU, contact Rod Ideker at (785) 550-7014.