

Approved: March 19, 2010
Date

MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:15 a.m. on February 9, 2010, in Room 785 of the Docking State Office Building.

All members were present except:

Representative Dan Johnson- excused
Representative Mike Burgess - excused
Representative Gail Finney - excused
Representative Mike Slattery - excused

Committee staff present:

Matt Sterling, Office of the Revisor of Statutes
Cindy Lash, Kansas Legislative Research Department
Iraida Orr, Kansas Legislative Research Department
Artur Bagyants, Kansas Legislative Research Department
Renaë Hansen, Committee Assistant

Conferees appearing before the Committee:

Representative Eber Phelps
Trudy Arons, American Institute of Architects
Hans Nettelblad, American Institute of Architects
Eric King, Board of Regents
Eric Stafford, Associated General Contractors
Tom Krebs, Kansas Association of School Board
Diane Gjerstad, Wichita Schools

Others attending:

Twenty-Eight including the attached list.

Hearing on:

HB 2624 - Concerning construction of new school buildings.

Matt Sterling, Office of the Revisor of Statutes, (Attachment 1), gave an overview of **HB 2624** to the committee.

Questions were asked and comments made by Representative Vern Swanson.

Proponents:

Representative Milack Talia, (Attachment 2), offered testimony in support of **HB 2624** a bill that he introduced.

Representative Eber Phelps, (Attachment 3), spoke to the committee in support of **HB 2624**.

Questions were asked and comments made by Representatives: Don Myers, Cindy Neighbor, and Forrest Knox.

Trudy Arons, American Institute of Architects, introduced Hans Nettelblad.

Hans Nettelblad, American Institute of Architects, (Attachment 4), spoke in support of **HB 2624** and noted some recommended changes.

Maril Hazlett, Climate and Energy Project, (Attachment 5), offered testimony in support of **HB 2624**.

Written Proponents:

Several individuals submitted written testimony in support of **HB 2624**.

- Chris Cardinal, Sierra club, (Attachment 6)

4/9

CONTINUATION SHEET

Minutes of the House Energy and Utilities Committee at 9:15 a.m. on February 9, 2010, in Room 785 of the Docking State Office Building.

- Daniel Wallach, Greensburg Green Town, (Attachment 7)
- Amy Martin, USD #233 Board of Education, (Attachment 8)
- Ashley Jones-Wisner, LISC Greater Kansas City, (Attachment 9)
- Robert Courtney, Energy Manager, USD #233 Olathe, (Attachment 10)
- Chad Althouse, LEED, (Attachment 11)
- Gerald R. Carter, AIA, RA, (Attachment 12)
- Jon Scantlin, Antella Consulting Engineers, Inc, (Attachment 13)
- Lindsey N. Piant, DLR Group, Architecture Engineering Planning Interiors, (Attachment 14)

Opponents:

Eric King, Board of Regents (Attachment 15), spoke to the committee in opposition to **HB2624**.

Eric Stafford, Associated General Contractors (Attachment 16), offered testimony against **HB2624**.

Tom Krebs, Kansas Association of School Boards (Attachment 17), spoke in opposition to **HB 2624**.

Diane Gjerstad, Wichita Schools (Attachment 18), gave opposing testimony on **HB 2624**.

Questions were asked and comments made to all conferrees by Representatives: Tom Sloan, Don Myers, Milack Talia, Tom Moxley, Vern Swanson, Forrest Knox, Carl Holmes, Cindy Neighbor, and Tony Brown.

The hearing on **HB 2624** was closed.

The next meeting is scheduled for February 10, 2010.

The meeting was adjourned at 10:44 a.m.

HOUSE ENERGY AND UTILITIES COMMITTEE GUEST LIST

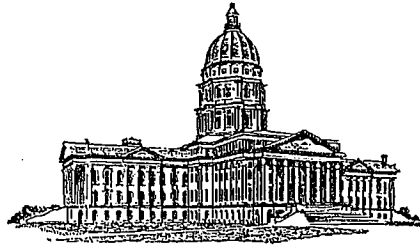
DATE: February 9, 2010

NAME	REPRESENTING
<i>D. FH</i>	<i>KEC</i>
<i>Diane Gjerstad</i>	<i>USD 259</i>
<i>Frudy Gron</i>	<i>Am Inst of Architects</i>
<i>Hans Nettelblad</i>	<i>"</i>
<i>LON STANTON</i>	<i>NORTHERN NATURAL GAS Co</i>
<i>Phil Waggers</i>	<i>KEPCO</i>
<i>Tom Kube</i>	<i>KNSB</i>
<i>ERIC KING</i>	<i>KS. ED. RECENTS</i>
<i>Covey Mohr</i>	<i>KDOC</i>
<i>Mark Schreiber</i>	<i>Westar</i>
<i>TOM DAY</i>	<i>KCC</i>
<i>Mail Hargett</i>	<i>CEP</i>
<i>Mick Urban</i>	<i>ONEOK</i>
<i>Scott Jones</i>	<i>KCCPC</i>
<i>Chris Cardinal</i>	<i>KS Sierra Club</i>
<i>Eric Stafford</i>	<i>AGU of Kansas</i>
<i>MARY BESS</i>	<i>HARRY BEAL CONSULTING</i>
<i>DAN MORGAN</i>	<i>Builders Assn.</i>
<i>Linda Lund</i>	<i>FACT</i>
<i>Nick Reeser</i>	<i>KIZ Inc.</i>

MARY ANN TORRENCE, ATTORNEY
REVISOR OF STATUTES

JAMES A. WILSON III, ATTORNEY
FIRST ASSISTANT REVISOR

GORDON L. SELF, ATTORNEY
FIRST ASSISTANT REVISOR



OFFICE OF REVISOR OF STATUTES
KANSAS LEGISLATURE

Legal Consultation—
Legislative Committees and Legislators
Legislative Bill Drafting
Legislative Committee Staff
Secretary—
Legislative Coordinating Council
Kansas Commission on
Interstate Cooperation
Kansas Statutes Annotated
Editing and Publication
Legislative Information System

MEMORANDUM

To: Chairman Holmes and members of the House Committee on Energy and Utilities
From: Matt Sterling, Assistant Revisor of Statutes
Date: February 9, 2010
Subject: House Bill No. 2624

HB 2624 would require, prior to construction of a new school building, that a cost study be conducted concerning the construction of an energy efficient school building and the construction cost of a traditional school building. The cost study would include the estimated operation and maintenance costs of the two types of buildings. If the study determined that the costs of an energy efficient school building would be 2.5% less than constructing a traditional school building over a five year period, then the board of education would be required to construct an energy efficient school building.

Once the energy efficient school building had been constructed, the board of education would be required to maintain a record of the operation and maintenance costs of the building for every month. The bill would not apply to construction of any new school buildings for which the bidding for construction has closed.

The bill defines "energy efficient" as the use of extra insulation, weather-proofing and any other features or equipment designed to reduce the cost of energy for heating, cooling, lighting and hot water.

Section 2 of the bill sets forth the same requirements for public universities and colleges.

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 1

MILACK TALIA
HOUSE OF REPRESENTATIVES

STATE CAPITOL
300 SW TENTH STREET
TOPEKA, KANSAS 66612
(785) 296-7646
MILACK.TALIA@HOUSE.KS.GOV



COMMITTEE ASSIGNMENTS
ENERGY & UTILITIES
GEN. GOVERNMENT BUDGET
JUDICIARY
ENGINEERING SUCCESS

STATE OF KANSAS | 23RD DISTRICT

February 10, 2010

Chairman Holmes, Vice-Chair Knox, Rep. Kuether, and Members of the Energy Committee,

The Olathe School District (USD 233) started an energy program in 1991 and since then, they have saved over \$15 million (almost \$1 million per year). During the 19 year run of the energy program, the district has grown 101% in size; while electricity consumption has increased only 49%. The 2008-09 energy costs for the district was \$0.92 per square foot—far below the national average for education buildings of \$1.22 per square foot.

The reason why I introduced HB 2624, with amendments, was to reduce the operations and maintenance costs for schools and universities, thereby saving taxpayers money. On average, energy efficient buildings cost 1-2% more, with an average cost of 1.7% or \$3 per square foot. Typically, energy efficient schools use 33% less energy and water than conventionally designed schools. Savings are approximately \$9 per square foot for electricity; \$1 per square foot for water and wastewater; and \$1 per square foot in emissions.

This bill does not create a mandate—it pushes school districts and universities to determine whether they should build an energy efficient building; and if it's too expensive, they are not required to build. Districts and universities would be required to conduct a life-cycle assessment to determine the cost and savings associated with energy efficient schools.

Also, **the bill creates incentives** for the industry to hit the 2.5% cost and/or 5-year saving targets established in the trigger section and incentives for school districts and universities to use the realized savings for retrofitting existing buildings.

In addition, **the bill ensures accountability** with an energy audit by having school districts and universities track energy costs and compare their costs to similar buildings across the US and, if available, within Kansas or the region.

Along with saving taxpayers money, there are benefits for our students and teachers. Over 70% of energy efficient schools reported reduced student absenteeism and improved student performance. On teacher retention, if we assume that a 3% reduction in teacher turnover and the cost of teacher loss is 40% of salary and benefits (about \$25,000), then a 3% increase in retention translates into \$4 per square foot of savings. Thank you for your consideration of this bill.

HOUSE BILL No. 2624

By Committee on Energy and Utilities

2-3

9 AN ACT concerning construction of new buildings; relating to schools,
10 colleges and universities; relating to energy efficiency.

11
12 *Be it enacted by the Legislature of the State of Kansas:*

A local board of education would conduct a savings study by estimating the operations and maintenance costs on an energy efficient building and on a non-energy efficient building.

13 Section 1. (a) Prior to the construction of any new school building,
14 the board of education shall conduct a cost study concerning the con-
15 struction of an energy efficient school building and the construction of a
16 non-energy efficient school building. In conducting the cost study, the
17 board of education shall include estimates of the operation and mainte-
18 nance costs of an energy efficient school building and a non-energy ef-
19 ficient school building.

20 (b) If the cost study determines the additional costs of building an
21 energy efficient school building is 2.5% less than the cost of constructing
22 the non-energy efficient school building, or if construction of the energy
23 efficient school building would result in avoided energy costs that are
24 equal to or greater than the additional costs over a five year period, then
25 the board of education shall be required to construct an energy efficient
26 school building.

The appropriations amount designated for operating costs shall not be reduced when savings from operation and maintenance costs are realized for the next fiscal year and the surplus shall be deposited in a capital retrofitting fund for existing buildings.

27 (c) After construction of an energy efficient school building, the
28 board of education shall monitor and maintain a record of the operation
29 and maintenance costs and savings for the building every month.

30 (d) The provisions of this section shall not apply to the construction
31 of any new school building if the bidding for the construction has closed
32 and that contract has been awarded prior to the effective date of this act.

Define metrics and calculations for performing the energy audit (see attachment)

33 (e) As used in subsections (a) through (d):

34 (1) "Board of education" means the board of education of any school
35 district.

36 (2) "Energy efficient" means the use of extra insulation, weather-
37 proofing and any other features or equipment designed to reduce the cost
38 of energy for heating, cooling, lighting and hot water.

provide energy and operational cost savings

39 (3) "School building" means any building or structure operated or
40 used for any purpose by, or located upon the land of, any school district
41 or any accredited private. "School building" does not mean any owner-
42 occupied, single-family dwelling in which instruction is provided by a
43 home school.

same changes as in Sec. 1, but for postsecondary institutions

1 Sec. 2. (a) Prior to the construction of any new building, the postse-
2 condary educational institution shall conduct a cost study concerning the
3 construction of an energy efficient building and the construction of a non-
4 energy efficient building. In conducting the cost study, the postsecondary
5 educational institution shall include estimates of the operation and main-
6 tenance costs of an energy efficient building and a non-energy efficient
7 building.

8 (b) If the cost study determines the additional costs of building an
9 energy efficient building is 2.5% less than the cost of constructing the
10 non-energy efficient building, or if construction of the energy efficient
11 building would result in avoided energy costs that are equal to or greater
12 than the additional costs over a five year period, then the postsecondary
13 educational institution shall be required to construct an energy efficient
14 building.

15 (c) After construction of an energy efficient building, the postsecon-
16 dary educational institution shall monitor and maintain a record of the
17 operation and maintenance costs and savings for the building every
18 month.

19 (d) The provisions of this section shall not apply to the construction
20 of any new building if the bidding for the construction has closed and
21 that contract has been awarded prior to the effective date of this act.

22 (e) As used in subsections (a) through (d):

23 (1) "Building" means any building or structure operated or used for
24 any purpose by, or located upon the land of, any postsecondary educa-
25 tional institution or private postsecondary educational institution.

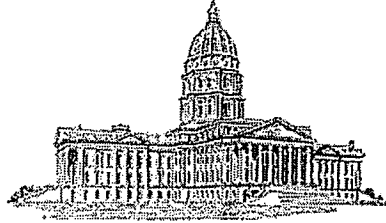
26 (2) "Energy efficient" means the use of extra insulation, weather-
27 proofing and any other features or equipment designed to reduce the cost
28 of energy for heating, cooling, lighting and hot water.

29 (3) "Postsecondary educational institution" has the meaning ascribed
30 thereto in K.S.A. 74- 3201b, and amendments thereto.

31 Sec. 3. This act shall take effect and be in force from and after its
32 publication in the Kansas register.

MILACK TALIA
HOUSE OF REPRESENTATIVES

STATE CAPITOL
300 SW TENTH STREET
TOPEKA, KANSAS 66612
(785) 296-7646
MILACK.TALIA@HOUSE.KS.GOV



COMMITTEE ASSIGNMENTS
ENERGY & UTILITIES
GEN. GOVERNMENT BUDGET
JUDICIARY
ENGINEERING SUCCESS

STATE OF KANSAS | 23RD DISTRICT

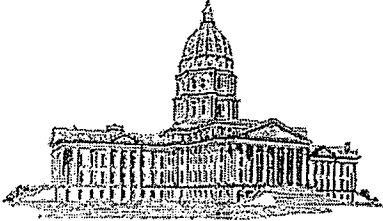
February 10, 2010

Proposed Amendments and Rationale HB 2624

- New Subsection after (a)
 - Adds: A local board of education or Regent institutions would conduct a savings study by estimating the operations and maintenance costs on an energy efficient building and on a non-energy efficient building.
 - Rationale: inadvertently forgotten
- Subsection (c)
 - Adds: the metrics and calculations for performing the energy audit:
 - Each district should divide its schools into elementary, middle, and high schools.
 - Calculate the square footage of each building.
 - Determine the number of students, faculty and staff for each building.
 - Determine the monthly utility costs for each building.
 - Calculate the utility costs per square footage for each building:
 - Electricity usage in kilowatt-hours (kWh) per square feet.
 - Water (and wastewater) usage in total gallons per square feet.
 - Natural gas usage in million cubic feet (MCF) per square feet.
 - Compare the district's utility costs per square feet with the Commercial Building Energy Consumption Survey (CBECS), published by the Department of Energy's Energy Information Administration (www.eia.doe.gov/emeu/cbecs)
 - Compare to US averages and, if available, Kansas or regional averages.
 - Rationale: give guidance in performing the energy audit.
- New Subsection after (c)
 - Adds: The appropriations amount designated for operating costs shall not be reduced when savings from operation and maintenance costs are realized for the next fiscal year and the surplus shall be deposited in a capital retrofitting fund for existing buildings.
 - Rationale: creates an incentive for districts and Regents institutions to build energy efficient buildings

MILACK TALIA
HOUSE OF REPRESENTATIVES

STATE CAPITOL
300 SW TENTH STREET
TOPEKA, KANSAS 66612
(785) 296-7646
MILACK.TALIA@HOUSE.KS.GOV



COMMITTEE ASSIGNMENTS
ENERGY & UTILITIES
GEN. GOVERNMENT BUDGET
JUDICIARY
ENGINEERING SUCCESS

STATE OF KANSAS | 23RD DISTRICT

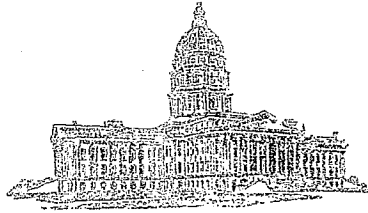
- Subsection (e), paragraph (2)
 - Adds: provide energy and operation cost savings
 - Deletes: reduce the cost of energy for heating, cooling, lighting and hot water
 - Rationale: aligns this bill with existing language within the FCIP statute (KSA 75-37,125)
- Section 2
 - Make same changes for postsecondary institutions
 - Rationale: technical changes

STATE OF KANSAS
HOUSE OF REPRESENTATIVES

EBER PHELPS

STATE REPRESENTATIVE, 111TH DISTRICT
ELLIS COUNTY
3103 OLYMPIC LANE
HAYS, KS 67601
(785) 625-5947

STATE CAPITOL—222-W
TOPEKA, KANSAS 66612
(785) 296-7691
1-800-432-3924 (DURING SESSION)
eber.phelps@house.ks.gov



OFFICE OF THE DEMOCRATIC WHIP

COMMITTEE ASSIGNMENTS
MEMBER: EDUCATION
AGING AND LONG TERM CARE
VETERANS, MILITARY AND
HOMELAND SECURITY
HEALTH CARE STABILIZATION
FUND OVERSIGHT
LEGISLATIVE BUDGET

TESTIMONY
H.B. 2624
House Committee on Energy and Utilities
Representative Carl Holmes, Chairman
February 9, 2010

Good morning Mr. Chairman and members of the committee. I am here this morning as a proponent of HB 2624.

My interest in high performance school buildings comes from being employed for 11 years in a building mechanical contracting firm. Due to my interest I attended a U.S. Green Building Council Summit where the focus was "Building Green Schools."

Some 55 million students spend their days in schools that are too often unhealthy and restrict their ability to learn. Conventional schools are typically designed to just meet building codes which are often incomplete. Few states regulate indoor air quality in schools or provide for minimum ventilation standards so it is not surprisingly a large number of schools across the country are unhealthy. The number one cause for absenteeism is related to asthma.

It has been found that the financial costs and benefit of green schools compared to conventional schools cost less than 2% more than conventional schools. The financial savings are about \$70 per foot, 20 times as high as the cost of going green. Green school design provides an extraordinarily cost-effective way to enhance student learning, reduce health and operational cost and, ultimately, increase school quality and competitiveness. For an average conventional school, building green would save enough money to pay for an additional full-time teacher.

Those opposing this measure will be concerned about the up-front higher construction costs, however I contend the benefits outweigh the negatives.

Thank you Mr. Chairman and committee members for your time. I support HB 2624. If you'd like to access more information on high performance schools you can view the study done by Gregory Kats and sponsored by (1) American Federation of Teachers, (2) American Institute of Architects, (3) American Lung Association, (4) Federation of American Scientists and (5) U.S. Green Building Council.

Additional information on green schools can be found at www.greenschoolbuildings.org or www.usgbc.org/Showfile.aspx?DocumentID=2908

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 3



AIA Kansas
A Chapter of the American
Institute of Architects

President
J. Michael Vieux, AIA
Leavenworth
President Elect
Nadia Zinni, AIA
Lawrence
Secretary
Gary Nevius, AIA
Overland Park
Treasurer
Hans Nettelblad, AIA
Overland Park

Christie Carl, AIA
Abilene
Randle L. Clark, AIA
McPherson
Tim de Noble, AIA
Mannhattan
Keith Diaz-Moore, AIA
Lawrence
Dale R. Duncan, AIA
Olathe
Gwenda S. Gigous, AIA
Topeka
David S. Heit, AIA
Topeka
Joshua Herman, AIA
Wichita
Anthony Jacobs, AIA
Wichita
Alan Johnson, AIA
Overland Park
David Livingood, AIA
Lawrence
Craig Lofton, AIA
Lindsborg
Katherine Nichols, Assoc. AIA
Lawrence
Donald Norton, P.E.
Wichita
Charles Smith, AIA
Topeka
Daniel (Terry) Tevis, AIA
Lenexa
Jason VanHecke, AIA
Wichita

Executive Director
Trudy Aron, Hon. AIA, CAE
info@aiaaks.org

February 9, 2010

TO: House Energy Committee Committee
FROM: Trudy Aron, Executive Director
RE: Support of HB 2624; with amendments

Good Morning Chair Holmes and Members of the Committee. I am Trudy Aron, Executive Director of the American Institute of Architects in Kansas. I'd like to introduce Hans Nettelblad, AIA, who is our Board Treasurer who will speak to the bill.

AIA Kansas is a statewide association of architects and intern architects. Most of our 700 members work in over 120 private practice architectural firms designing a variety of project types for both public and private clients. Our members are designing tomorrow's buildings today, aiming to meet the "triple bottom line": buildings that are affordable, protect the health of the building occupants, and respect our environment.

HB2624 provides incentives for the design and construction of energy-efficient K-12 and university facilities. If the bill passed in its current form, it would limit the potential returns on investment and life-cycle costs of those facilities. While the AIA Kansas does show our support for the Bill, we strongly recommend the following amendments be considered:

- The bill should be focused on K-12 schools only; colleges and universities are already focusing efforts on these types of issues and the administration systems are vastly different between the two. Eliminating the post-secondary institutions would simplify the State's administration of the Bill.
- The cost study shall be conducted by a licensed architect and/or engineer, experienced in these types of studies.
- Increase the time period over which to compensate for the energy-efficient measures from five (5) years to ten (10) years. School Districts, unlike developers, will own and operate their facilities for several decades; the increased ROI period will allow the District an opportunity to implement additional measures, which will further increase efficiency and consequently further decrease life cycle costs

One item we note that appears to be a typographical error, and needs to be changed in order for the Bill to be applicable:

- Section 1(b), second sentence, change the word "less" to "more"; we might anticipate, and this is certainly in keeping with the logic of the remaining language of the Bill, that added energy efficiency measures would create an additional cost, when compared to the non-energy efficient building.

We believe providing K-12 school Districts an opportunity to build energy-efficient facilities will not only decrease expenditures significantly for the life of those building, but will also create a healthier learning environment for the student and teacher which will reduce absenteeism and increase test scores.

Thank you for allowing me to testify on HB 2624 and we urge you to pass it with the amendments above. If you have questions, I'll be happy to answer them.

700 SW Jackson, Suite 209 · Topeka, KS 66603 · 800-444-9853 or 785-357-5308 · www.aiaaks.org

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010
ATTACHMENT 4



Mr. Chairman, members of the Committee, thank you for the opportunity to address you regarding HB 2624.

CEP strongly supports efforts to make Kansas school buildings more energy efficient. HB 2624 requires school districts to seek out the necessary information to make the most cost-effective energy decisions possible. The bill represents an important cost-cutting measure that will reduce the energy costs per student, and help schools free up funds for other expenses.

According to the Department of Energy, today's buildings consume more energy than any other sector of the U.S. economy, including transportation and industry. EnergyStar estimates that the nation's 17,450 K-12 school districts spend more than \$6 billion annually on energy — more than on computers and textbooks combined. They also estimate that as much as 30 percent of a school district's total energy is used inefficiently or unnecessarily.

Clearly, Kansas schools, students, and taxpayers cannot afford this level of waste. Energy efficient school buildings provide multiple benefits (EnergyStar):

- Energy efficient schools mean spending less on utility bills. These savings free up taxpayer dollars for other uses.
- Studies show that energy efficient environments contribute to increased learning and productivity.
- Energy efficiency is healthy - using less energy means using less water and other resources. It also means less air pollution.
- When a school district participates in a lifecycle analysis, it will raise awareness about energy efficiency throughout the community.

CEP would suggest that rather than using the percentage-based targets, that a school district have the freedom to build an energy efficient school as long as the cost of the energy efficient building is paid for in the life-cycle savings over the term of the financing. This would bring the legislation closer in line with the criteria used by Kansas Corporation Commission's highly successful Facility Conservation Improvement Program (FCIP).

CEP would also encourage the Committee to think more broadly beyond new construction to other opportunities to introduce energy efficiency into the schools – renovations to existing structures can also offer significant cost savings.

| Maril Hazlett | Associate Director, CEP | hazlett@climateandenergy.org | 785.760.0558 |
www.climateandenergy.org

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 5



SIERRA CLUB, KANSAS CHAPTER
9844 GEORGIA, KANSAS CITY, KS 66109

STATEMENT OF CHRIS CARDINAL, LEGISLATIVE COORDINATOR
FEBRUARY 9TH, 2010
BEFORE THE HOUSE ENERGY AND UTILITIES COMMITTEE
PRESCRIBED BURNING IN THE FLINT HILLS

Chairperson Holmes and honorable members of the committee:

Thank you for the opportunity to provide testimony today, and for the fine work this committee and its members do for the state of Kansas. My name is Chris Cardinal, and I am writing on behalf of the Kansas Chapter of the Sierra Club, the nations largest and oldest grassroots environmental organization. The Sierra Club supports HB 2642.

Schools for Energy Efficiency (SEE)

Nearly 600 schools have participated in Schools for Energy Efficiency with an average annual energy savings of 13% (yet many reach over 20%) and together the schools currently reporting results have saved more than \$17 Million in utility costs in only five years.

Schools who have partaken in programs similar to the one proposed here have shown that it:

- Reduces energy waste. Nearly 1/3 of energy consumed in schools is not used efficiently.
- Saves money. Annual energy costs on average are \$250 per student and energy is a major source of avoidable spending.
- Shows responsibility to tax payers. Efficient operations use taxpayer money wisely and redirect money towards educational needs.
- Preserves the environment. 80% of greenhouse gas emissions are from the production, distribution, and disposal of energy. Saving energy reduces pollution and the use of nonrenewable resources.
- Educates students. Instilling wise energy habits in students creates lifelong conservationists and teaches them to care about the impact of their actions.
- Improves the learning environment. There is a positive correlation between the physical condition of the learning environment and student performance. Many energy efficient practices help create better lighting, temperature control, acoustics and air quality.

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 6-1

Energy Efficiency Gives American Business an Edge, why not Kansas Schools?

- Dow Chemical has saved \$8.6 billion through a \$1 billion investment in efficiency improvements since 1994. (Testimony before House Subcommittee on Energy and the Environment, 2/24/09)
- Ninety-five percent of Wal-Mart Supercenters and Sam's Clubs have daylight harvesting systems, which can reduce up to 75 percent of the electric lighting energy used during daylight hours, saving enough energy to power 73 single-family homes for an entire year. (Wal-Mart Stores, Sustainable Buildings Network Fact Sheet)
- Johnson Controls, a Fortune 500 manufacturer in Milwaukee, has seen explosive growth in the building efficiency sector, which now accounts for more than one third of the company's 140,000 employees and \$38 billion in sales in 2008. (The Pew Environment Group)
- Mosaic, a leading fertilizer company, has invested in heat recovery and electrical generation systems at its U.S. manufacturing plants for decades, reducing electricity purchases by approximately 90 percent. (Mosaic Co)

A Small Piece in the Larger Puzzle.

Lowering energy demand through efficiency investments decreases the price of electricity and other fuels, lowers carbon prices, and reduces the cost of cap and trade for all residential, commercial and industrial energy consumers. And saving energy is much cheaper than generating it – in the case of electricity, efficiency typically costs about 3 cents per kilowatt-hour, compared to 6 to 12 cents for generating electricity. Scaling up efficiency will also create new jobs because it is more labor intensive to weatherize homes, retrofit buildings and upgrade antiquated air conditioning systems than to operate power plants.

Energy efficiency standards are important tools in the arsenal of policies available to reduce greenhouse gas emissions, promote energy security, and reduce consumer costs. Efficiency would moderate electricity use such that renewable energy would begin to back out conventional generation and start cutting carbon emissions.

Mr. Chairman and Members of the Committee; thank you for the opportunity today to support HB 2642.



February 8, 2010

To Chairman Holmes, Vice-Chair Knox and the members of the Energy and Utilities Committee,

I am writing to offer my enthusiastic support for HB 2624. What this bill calls for is exactly the kind of program we need to ensure more efficient and effective schools. How wonderful that there is this kind of option where we can improve our schools while simultaneously saving money and model being good stewards of taxpayer dollars.

Green, energy efficient schools are a rare kind of investment with guaranteed returns for the life of the facility. This bill offers an innovative approach that is true to the great state of Kansas. It also models the best of good government by incentivizing instead of just mandating while also holding facilities accountable for the expenditure of their energy dollars.

Thanks very much for giving me the opportunity to comment on this exciting legislation. I hope that you will support it.

Sincerely,

Daniel Wallach
Founder and Executive Director
Greensburg GreenTown
402 S. Sycamore St.
Greensburg, Kansas 67054
620-723-2790

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 7

February 8, 2010

Chairman Holmes, Vice-Chair Knox, and Members of the Energy Committee,

The Olathe School District has been a leader in the area of energy efficiency for many years. The district maintains many aging facilities even as it continues to grow at the rate of almost one new school a year. Because of this, we've seen the advantages of incorporating energy efficient products and practices into our older buildings as well as into new construction.

The Olathe School District began an energy program in 1991. We saw the growth that was coming to Olathe, we wanted to find ways to operate our existing buildings more efficiently and build our new facilities to operate more efficiently, and we understood the importance of making data driven decisions.

Our most cost-effective measure in existing buildings has been to replace aging incandescent light fixtures with compact fluorescent fixtures. We've also incorporated programmable timers for lights, computer labs and heating/cooling systems and in some buildings we've replaced old windows with energy efficient windows.

We've incorporated these and other measures into the construction of our new buildings. One of our newest elementary schools, Woodland Elementary, recently received LEED Silver Certification from the U.S. Green Building Council. It was built with many energy savings features such as motion sensor lighting, additional windows to provide extra natural lighting, and a heating/ ventilation/ air conditioning system that meets or exceeds all current national standards as verified by a third-party company. We know this building must serve our community for many years and we are certain that the minimal cost of incorporating these features will pay itself back many times over the lifetime of the structure.

The Olathe School Board uses data to drive our decisions, so we track the savings of the measures we take. Since the inception of the program we have saved about \$16 million. The district has grown in square footage of facility space by 101%, yet electricity consumption has increased by only 49% and natural gas consumption by only 13%. This equates to significant savings to our budget. Every dollar not sent to a utility company is a dollar that can be used for salaries and supplies.

School Boards must balance up front costs against long term gains in all our decisions. We must also strive to operate our schools as efficiently as possible. In Olathe, we've learned first-hand of the value of focusing on energy efficiency as we make decisions regarding the maintenance of our existing facilities and the construction of new buildings. I urge you to consider the value of HB 2624, which would lead to the same efficiencies and savings in new school construction across the state.

Thank you for your consideration of my thoughts on this bill.

Regards,
Amy Martin
USD233 Board of Education

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 8



February 9, 2010

Ashley Jones-Wisner
Local Initiatives Support Corporation
913-375-7264
www.lisc.org/KansasCity

RE: House Bill 2624

Chairman Holmes and Members of the Energy Committee,

I want to thank you for the opportunity to present written testimony. My name is Ashley Jones-Wisner and I am Director of State Policy at Greater Kansas City LISC. Greater Kansas City LISC is a program area of the Local Initiatives Support Corporation, the nation's largest community development organization, dedicated to revitalizing urban core and rural neighborhoods. Currently, Greater Kansas City LISC's signature program, NeighborhoodsNOW, serves three Kansas City, Kansas Neighborhoods: Douglass-Summer, Downtown KCK and St. Peter/Waterway.

Greater Kansas City LISC started the Kansas Housing Policy Network about three years ago. Although it began with only a hand-full of individuals from across the state, it has grown to include over 400 members interested in the creation of community development tools. The Kansas Housing Policy Network includes representations from the Homebuilders, Realtors, Homeless Providers and Advocates, Community Development Corporations, and many other interested entities.

House Bill 2624 creates green building incentives for schools, colleges and universities while also allowing them to use the realized savings for retrofitting existing buildings. One of the greatest challenges we face as we work with residents to revitalize their neighborhoods is the number of vacant, abandoned or dilapidated houses and buildings in the community. Tools, such as this bill provides, will allow the work we do in these neighborhoods to both move at a pace that will allow our programmatic and monetary resources to be used efficiently and effectively.

We encourage you to support House Bill 2624.

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 9

February 8, 2010

Chairman Holmes, Vice-Chair Knox, Rep. Kuether, and Members of the Energy Committee,

My name is Robert Courtney, Energy Manager for the Olathe School District (USD233). I am currently in my eighteenth year in this capacity. During this time our district has grown 105% in square footage and realized over \$17 million in avoided utility costs. Our school district is operating at \$0.92 per square foot for energy, below the national average of \$1.22 as reported in the Commercial Building Energy Consumption Survey administered by the Energy Information Administration.

I am lending support to HB 2624. One of the main reasons is the value of the monthly tracking of energy costs and consumption for each utility meter. The collected data over time gives a profile which allows you to evaluate the performance of each meter and the area that it serves. By accessing the profile, it is quickly discerned if there is a problem to be addressed or if conservation measures are doing what they are designed to do.

One of the other benefits of monthly data collection is that it points out any potential billing error in meter reading, rate classification, tax status or rate changes. (It is interesting to note that 95% of billing errors are in favor of the utility company. I have discovered \$50,000.00 worth of billing errors in 18 years.)

The data collection allows you to communicate with your community your district's efforts in being energy efficient. Benchmarking against state, national, or local performances provides another resource for giving valid comparisons for your constituents.

The Environmental Protection Agency (EPA) is proposing a commercial building rating system. The monthly auditing would fit right into their proposal.

House Bill 2624 could be of benefit to students, teachers, and communities by efficiently using utility dollars from the districts' budgets. It provides for wise use of taxpayers money which makes it of value to them.

Thank you for your consideration of this bill.

Robert Courtney
Energy Manager
Olathe School District 233

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 10

TO: Kansas House of Representatives – Energy and Utilities Committee

RE: Written Testimony in support of HB2624

I've worked in the construction industry for the past 15 years in various capacities both for contracting firms and design firms. K-12 schools have been a focus for me and I have experience working with school districts across the state of Kansas. When a school district chooses to construct a new facility they are making a long term investment in their community with facility life expectancies of 50 years or more. Contrary to this, many times districts focus only on the first cost of the facility without giving full consideration to the life cycle cost which includes the cost of operating and maintaining the facility. I am writing in support of HB2624 because it is important to consider long term costs such as energy usage. There are examples of districts in our state, such as Olathe USD 233, that take this approach and reap the benefits of the energy savings everyday. Considering the current budget situation in Kansas these savings are preserving teachers and other vital resources. We need to encourage all districts to take this approach.

Sincerely,



Chad Althouse, LEED AP
Project Developer

Trane Commercial Systems, a business of Ingersoll Rand
8014 Flint, Lenexa, KS 66214
Office: (913) 599-4664
Direct: (913) 307-8694
Mobile: (913) 269-8955
Email: chad.althouse@trane.com

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 11

Chairman Holmes, Vice-Chair Knox, Rep. Kuether, and Members of the Energy Committee.

I would like to give my professional support to HB 2624, as amended, as a means of reducing the operations and maintenance costs with schools and universities.

During my career as an architect, employed by the State of Kansas, I have had the pleasure in serving the public in a variety of positions, first as the Deputy Director for Planning and Design in the State Architect's Office, twice as the Interim State Architect in both Democratic and Republican administrations, a lengthy tenure as the University Architect at Kansas State University and most recently as the Senior Plans reviewer for all public and private pre-K thru 12 schools in the State. I have spent the better part of my career with large and complex public facilities, their maintenance, operations, design and construction.

The Energy Conservation Standards used by the State of Kansas, during my tenure as a responsible administrator, dated back to the early 1970's and an Executive Order issued by Governor Bennett at the height of the first energy crisis. This Executive Order gave us a basic standard to follow, and a few guidelines that were in vogue at the time. Unfortunately the implementation of these standards gave us many buildings that were less than successful in the long run when it came to saving energy and energy costs.

The proposed bill, HB 2624, will provide much better guidance to the requirements for energy conservation. It will tie in nicely with the Kansas Fire Prevention Code's use of the International Energy Conservation Code as one of the family of building codes used for all projects undertaken by the State, public and private schools. The savings can be considerable. If properly designed, the long term maintenance and operational costs will grow at a much smaller rate than if no standards were in place. I have seen the problems incomplete standards have created in the State versus the successes that good standards can achieve.

This bill, HB 2624 provides good and timely guidance for those of us in the design, construction, maintenance and operations arena need to reduce our costs logically at this time of shrinking revenue. I urge your consideration of this bill.

Sincerely,

Gerald R. Carter, AIA, RA

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 12

TO: Kansas House of Representatives – Energy and Utilities Committee

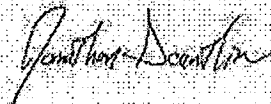
RE: Written Testimony in support of HB2624

I am a mechanical engineer licensed in the state of Kansas and have been designing heating, ventilating and air conditioning (HVAC) systems for commercial buildings, including K-12 schools, for over 10 years. The mechanical systems that I propose and design for school districts focus primarily on indoor air quality first and energy efficiency & first cost second. Ironically the mechanical systems that provide the best indoor air quality typically are the most energy efficient systems as a result of air delivery method. HVAC systems account for more than 30% of total energy consumption across the united states and between 35%-40% in climates similar to Kansas. The first cost for HVAC systems that provide excellent indoor air quality while using less energy do have a higher first cost but not by an unreachable amount, therefore I am in full support of HB2614 to allow schools and Kansas Taxpayers the opportunity to verify if they can afford such systems paid for by energy cost savings. As a father of children who attend Kansas schools, I would not hesitate as a taxpayer to pay 2.5% more up-front for facilities that provide better indoor air quality and uses less energy. Over the life of the school, we will save money. The Olathe School District example is a prime example of how districts can enjoy the benefits of sustainable schools with a net neutral tax implications.

Sincerely,

Antella
CONSULTING ENGINEERS INC.

Jon Scantlin PE*, LEED® AP



Vice President - Mechanical

jscantlin@antella-inc.com

Ph 816.421.0950

Cell 816.223.1926

*Licensed in KS, MO, OK, VT, TX, MA

HOUSE ENERGY AND UTILITIES
DATE: 2/9/2010
ATTACHMENT 13

TO: Kansas House of Representatives – Energy and Utilities Committee

RE: Written Testimony in support of HB2624

I've worked in the Architecture/Engineering/Construction industry for the past 7 years in various capacities both for federal government and as a member of many project design teams. During my time with General Services Administration (GSA), I was educated early in my career on the importance in investing public money wisely. It is the responsibility of government agencies to appropriate taxpayer dollars towards programs that benefit the common good of a community and our country, which is why it's important that our monies are not being wasted to continue poor building facility management and operations. Buildings consume over 70% of electricity consumption, this is largely in the way we operate and maintain our existing building stock (the life cycle cost). Now as a member of a number of K-12 project design teams, I have realized firsthand the hurdle Kansas School Districts must overcome to even build facilities needed to educate our state's students, but to do so in a matter that is healthy and safe (indoor environmental quality) while reducing consumption of energy and water is even more difficult to do without support of our state's legislators.

I am writing in support of HB2624 because it is important to consider long term costs such as energy usage. This bill will be an important step in addressing proper utilization of our taxpayer dollars, while providing school district and universities to build better, long term facilities which will not add burden to our state's future budgets. There are examples of districts in our state, such as Olathe USD 233, that have witnessed firsthand the power of changing the way we approach building design and construction. This is an important first step in our state's ability to reduce energy consumption while providing our students a superior learning environment.

Sincerely,

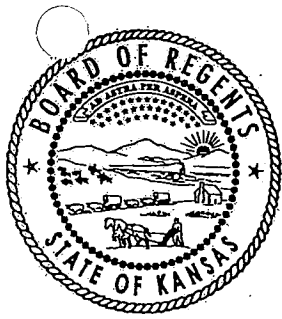
Lindsey N. Piant, Assoc. AIA, LEED AP
Associate
lpiant@dlrgroup.com

DLR Group
Architecture Engineering Planning Interiors
o: 913/897-7811
7290 West 133rd Street Overland Park, KS 66213-4748
dlrgroup.com | listen.DESIGN.deliver

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 17



KANSAS BOARD OF REGENTS

1000 SW JACKSON • SUITE 520 • TOPEKA, KS 66612-1368

TELEPHONE – 785-296-3421
FAX – 785-296-0983
www.kansasregents.org

HOUSE ENERGY & UTILITIES COMMITTEE

February 9, 2010

Testimony in Opposition to House Bill 2624

Eric King, Director of Facilities

Chairman Holmes, Ranking Member Kuether, and members of the Committee, I am here this morning on behalf of the Kansas Board of Regents and the state's public higher education institutions to testify in opposition to House Bill 2624, legislation that would require energy efficiency cost studies prior to constructing new buildings and subsequent monthly monitoring.

Comparing the estimated operation and maintenance costs of non-energy efficient buildings to energy efficient buildings seems to be a meaningless and costly effort since we have no intention of constructing non-energy efficient buildings. As a result of block grant funding, the state universities are responsible for their utility budgets and it is in their best interest to include energy efficiencies to the degree possible in both new and renovated buildings.

The state universities employ design professionals, architects and/or engineers, on their staffs that have sophisticated knowledge of design features necessary to produce energy efficiencies in building projects. Further, we are required by the Department of Administration to comply with the International Energy Conservation Code 2006 as the applicable energy standard for buildings.

We are supportive of integrating energy efficiency into our state university buildings, but we oppose the cost and time required to compare theoretical non-efficient buildings to the buildings we will construct. Additionally, we are opposed to the time-consuming monitoring of operational and maintenance costs and savings for buildings on a monthly basis. In the midst of today's challenging budget environment – where higher education institutions are forced to stretch diminishing state dollars as far as possible, where the Regents and state policymakers clamor for increased operational efficiencies, and where the state no longer provides funding for new campus construction – this bill appears to be an impediment when it comes to fully realizing operational efficiencies.

For the most part, it is important to note that the state no longer provides funding for new construction on state university campuses. State universities now rely on private and federal sources for new construction projects, and, due to Board policy enacted in 2007, the state universities are prohibited from seeking funding for future maintenance on new construction from the state. In addition, the state does not own the buildings and does not provide funding for

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2010

ATTACHMENT 15-1

new construction on the campuses of Washburn University, the 19 community colleges, and the 6 technical colleges. Construction projects are approved by local governing boards, and a number of these institutions have expressed concern that House Bill 2624 represents an unnecessary intrusion into important local investment decisions.

While the bill is undoubtedly well-intentioned, the Board of Regents must respectfully oppose House Bill 2624. Thank you for your consideration.



Building a Better Kansas Since 1934
200 SW 33rd St. Topeka, KS 66611 785-266-4015

**TESTIMONY OF
ASSOCIATED GENERAL CONTRACTORS OF KANSAS
BEFORE HOUSE COMMITTEE ON ENERGY & UTILITIES
HB 2624**

February 9, 2010

By Eric Stafford, Associated General Contractors of Kansas, Inc.

Mister Chairman and members of the committee, my name is Eric Stafford. I am the Director of Government Affairs for the Associated General Contractors of Kansas, Inc. The AGC of Kansas is a trade association representing the commercial building construction industry, including general contractors, subcontractors and suppliers throughout Kansas (with the exception of Johnson and Wyandotte counties).

The AGC of Kansas opposes House Bill 2624 and asks that you do not recommend it favorably for passage.

HB 2624 requires secondary and postsecondary educational institutions to conduct a cost study on the cost of building an energy efficient school versus a non-energy efficient school. AGC is concerned that the burden and cost of conducting such a study could possibly deter owners from investing in their local school district or postsecondary infrastructure.

The additional requirement for record keeping of the energy cost savings on a monthly basis is also burdensome and unnecessary. Would this data be used for a specific reason, and if so, who is responsible if the building is not more efficient? Typically new construction or renovations will be more efficient than older schools, thus making the cost audit an unnecessary step.

When determining the efficiency of a building, many uncontrollable factors could come into play such as the temperature of the thermostat, leaving doors open for prolonged periods of time, or increased traffic in and out of a building. Additionally, the costs for building an energy efficient building (for instance if an owner chooses to obtain LEED certification) are significantly more than construction costs of a non-LEED structure so the payoff will not be seen for some time.

Again, the AGC of Kansas respectfully requests that you do not recommend HB 2624 favorably for passage. Thank you for your consideration.

HOUSE ENERGY AND UTILITIES

DATE: *2/9/2010*

ATTACHMENT *16*

KANSAS
ASSOCIATION



OF
SCHOOL
BOARDS

1420 SW Arrowhead Road • Topeka, Kansas 66604-4024
785-273-3600

Testimony before the
House Energy and Utilities Committee
on
HB 2624

by
Tom Krebs, Governmental Relations Specialist
Kansas Association of School Boards

February 9, 2010

Good Morning, Mr. Chair and members of the Committee. Thank you for the opportunity to testify on **HB 2624**.

KASB stands as an opponent to this bill. This opposition is based on our long-standing belief local control, as carried out by locally elected board members, makes the best decisions when allocating local, state and federal resources. We believe our members are acutely aware of the role of operating costs when considering building plans, particularly in light of the fact the community as a whole, not just the board, must weigh in on construction decisions. We believe they will take energy savings into account while balancing other needs. Mandating the process as described in the bill implies local boards are not sensitive to the both the short- and long-term costs of new buildings.

Each year our Board of Directors identifies legislative priorities. One of them reads, "Local decision- making: School districts should have more ability to make decisions regarding the most effective use of resources in meeting the needs of their community. KASB opposes additional state limits or mandates on the management of public schools by locally elected boards."

As a result, we oppose the bill.

Thank you for your consideration.

HOUSE ENERGY AND UTILITIES

DATE: 2/9/2016

ATTACHMENT 17



House Energy and Utilities

Representative Holmes, Chair

H. B. 2624 – Construction of New Buildings

*Presented by Diane Gjerstad
Wichita Public Schools*

February 9, 2010

Mr. Chairman, members of the Committee:

Bills such as H.B. 2624 raise a concern whether public buildings are using the latest energy efficient construction technology; and when we rise in opposition it appears we are opposed to efficiency – both are far from reality. Our concern with this bill is the increased cost of design, administration and uncertainty of what is the baseline for comparison.

Section 1 would require a cost study of an energy efficient building compared to a non-energy efficient building. What or who would determine what is 'non energy efficient' and what constitutes 'energy efficient'? Section 1 (b) would require construction of an energy efficient building when the cost is within 2.5% of a non energy efficient building. What or who would determine the baseline of a non energy efficient building? And even after building an energy efficient building Section 1 (c) requires the Board of Education to maintain records of the monthly costs and make a determination of the costs they would have incurred in a non energy efficient building. To comply with section one districts would have architects and engineering teams design two buildings – one efficient and one not – which increases the cost of design.

The schools we will build in the next four years will be more efficient than the 2000 projects. This reflects the changes in materials and standards in the construction industry and availability of more energy efficient systems. Some examples include: low flow, high volume bathroom fixtures; heat absorbing and reflective glass; aluminum frames on windows and doors with greater insulation properties; high efficiency lighting systems, lamps and fixtures; multi-level lighting in classrooms and libraries to take advantage of natural lighting; insulation systems for exterior walls; greater emphasis on weather stripping and sealing air infiltration points; digital control systems for HVAC; high efficiency boiler and furnace systems; and USD 259's fifteen year old energy management program monitoring building energy consumption.

Mr. Chairman, be assured schools are using updated construction design, systems and materials. We consider schools a long term investment in our community's infrastructure; and our objective is to get the best value for taxpayer dollars. This bill would add unneeded administrative overhead and design costs.

HOUSE ENERGY AND UTILITIES

DATE: *2/9/2010*

ATTACHMENT *18*