Utilities Committee
Kansas Senate
Written Testimony of Bruce Snead

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SB 120

Mr. Chair and members of the committee, thank you for the opportunity to testify on this bill.

I support this bill and would like to address several aspects of it and its benefits.

The following section of my testimony is taken directly from the Kansas Energy Plan 2007 Policy and Program Recommendations presented to you on January 16.

2. Amend Existing Laws Relating to Energy Efficiency Disclosure on New Homes

a. Description

To ensure Kansas homebuyers receive timely, useful information about the energy performance of any new home they are considering, K.S.A. 66-1227 and K.S.A. 66-1228 need to be amended in several significant ways.

Currently, K.S.A. 66-1228 requires the person selling a previously unoccupied new residential structure to disclose to the buyer or prospective buyer, prior to closing or upon request, information regarding the thermal efficiency of the structure (single or multifamily units, three floors and under). However, because such information is important to prospective buyers, the existing law needs to be amended to require that realtors provide this disclosure on all new houses at the time the new house is offered for sale, upon request at any time, and at closing. Having energy efficiency information available to prospective buyers at listing is comparable to having mileage rating stickers when prospective buyers look at new cars.

In addition, K.S.A. 66-1228 needs to be amended to remove the disclosure form from the body of the law in order to allow the form to be revised by the Kansas Energy Office at the Kansas Corporation Commission. The form needs to be revised to (1) present the energy efficiency information in a quantitative and comparative way (see sample of revised disclosure form in Attachment A) and (2) to reflect latest national and international codes and standards.

K.S.A. 66-1227 adopts the International Energy Conservation Code 2003 (IECC 2003) as the applicable thermal efficiency standard for new commercial and industrial structures in Kansas and states that the "state corporation commission has no authority to adopt or enforce energy efficiency standards for residential, commercial, or industrial structures." This law needs to be amended to (1) allow standards for commercial and industrial structures to be routinely updated through the Rules and Regulations process and (2) include a provision authorizing the Kansas Energy Office at the KCC to propose guidelines through the Rules and Regulations process for local residential energy efficiency standards (see Policy Recommendation 4, below).

These amendments to K.S.A. 66-1227 and 66-1228 will ensure that Kansas consumers receive useful, quantitative data about the energy performance of new houses.

b. Recommended Actions

i) Responsible parties

Homebuilders cooperate with realtors to provide form at listing of new homes.

Kansas Energy Office staff will update form as needed to reflect current national and international standards.

ii) Legislative action

Amend K.S.A. 66-1228 and 66-1227, as described above.

iii) Budget requirements

No additional State funding required.

iv) Implementation timeline

Initiated upon effective date of enabling legislation.

c. Implications of Proposal

Pros

i) Provide timely, quantitative information about the energy efficiency of new housing.

ii) Raises homebuyer awareness of energy efficiency issues.

iii) Raises homebuilder awareness of energy efficiency issues.

iv) Allows the form to be updated as deemed appropriate by KCC.

Cons

Program success requires active participation of homebuilders and realtors without any provision for enforcement. *(end of KEC Plan 2007 section)*

First, why should we change the disclosure form and allow it to be updated by the KCC? Generally to:

- Provide timely, quantitative and comparative information about the energy efficiency of new housing, so people know what the energy components are in a new home, and have a basis for evaluating that component.
- Raise homebuyer awareness of energy efficiency issues.
- Raise homebuilder awareness of energy efficiency issues.
- To reflect the latest national standards and codes.

An important change is to the time of disclosure requirement. Requiring disclosure "at the time the residential structure is offered for sale, prior to closing, and at any time upon request of the buyer or prospective buyer" replaces the current text of "upon request or prior to closing". These changes will ensure that Kansas consumers receive timely, useful, quantitative data about the energy performance of new houses. The current form and the draft form prepared as part of the KEC planning process are attached.

SB 120 puts the state responsibility for adoption of thermal energy efficiency standards for new industrial and commercial structures on the shoulders of the KCC, which is appropriate given the regulatory nature of KCC function. It does not give the KCC authority to enforce these standards, including those for residential energy efficiency. That authority rests with local jurisdictions such as cities and counties. The bill does give the Kansas Energy Office at the KCC the authority to propose thermal energy efficiency standards for local jurisdictions.

Why are energy codes important in new construction? Energy codes establish minimum insulation and efficiency component requirements for both commercial and residential buildings. Residential codes provide insurance to homeowners that newly constructed homes make use of modern techniques and products that make houses energy-efficient. By complying with energy code requirements, energy bills are lower and comfort levels are often improved. Codes also level the playing field for builders by requiring a standard level

of quality in areas that homeowners might not see when they are buying a house, such as the insulation in the walls.

Thank you for your interest and I will try to answer any questions.

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As required by KSA 66-1228

KANSAS ENERGY EFFICIENCY DISCLOSURE

Kansas law requires the person building or selling a previously unoccupied new residential structure to disclose to the buyer or a prospective buyer, upon request or prior to closing, information regarding the thermal efficiency of the structure (single or multifamily units, three floors and under).

Common Address or Legal Description: _____

_____

_____

This residence (select one of the following options):

_____ 1. Has been built to meet the energy-efficiency standards of the International Energy Conservation Code 2003 (IECC 2003),

_____ 2. Has received a Home Energy Rating score of 80 or greater when performed in accordance with the Mortgage Industry National Home Energy Rating System Accreditation Standard (June 15, 2002) by a rater certified and listed by Residential Energy Services Network (RESNET), or

_____ 3. Has been built to include the following energy-efficiency elements:

(1) Insulation values (R-value of insulation installed) for each of the following:

Ceiling with attic above	(R-value)_____	Cathedral ceiling	(R-value) _____
Opaque walls	(R-value)_____	Floors over unheated spaces	(R-value) _____
Floors over outside air	(R-value)_____		

Foundation type: Slab-on-grade _____

Crawlspace _____

Basement (R-value, if applicable) _____

Percent of basement walls underground _____

(2) Thermal properties of windows and doors for each of the following:

Entry door(s)	(U-value or R-value)	_____
Sliding door(s)	(U-value)	_____
Other exterior doors	(R-value)	_____
Garage-to-house door	(R-value)	_____
Windows (determined from NFRC rating or default table)	(U-value)	_____ _____ _____

(3) HVAC equipment efficiency levels:

Heating systems:	Gas-fired, forced-air furnace	(AFUE rating)	_____
	Electric heat pump	(HSPF rating)	_____
Air-conditioning systems:	Electric unit	(SEER rating	_____
	Electric heat pump	(EER rating)	_____
	Ground-source heat pump	(EER rating)	_____
Duct insulation levels:	Insulation _____ (R-value of ducts outside building envelope)		
Thermostat:	Manual control type _____		
	Automatic setback type _____		

(4) Water heating efficiency levels:

Water heater fuel type _____

Water heater capacity _____

NAECA energy factor _____

Additional information: (Attach additional sheet if necessary.)

_____

_____

_____

Seller signature: _____ Date: _____

Seller name/address: _____

Buyer signature: _____ Date: _____

Buyer signature: _____ Date: _____

This form may be reproduced. Form available from Kansas Corporation Commission, Energy Programs, 1500 SW Arrowhead Road, Topeka, KS 66604; Phone: 785-271-3170; Fax: 785-271-3268; or for downloading at *www.kcc.state.ks.us/energy/energyform.pdf* (Rev. 6-03)

KANSAS ENERGY EFFICIENCY DISCLOSURE

As required by KSA 66-1228

Kansas law requires the person building or selling a previously unoccupied new residential structure to disclose to the buyer or a prospective buyer at the time the structure is offered for sale, prior to closing and at any time upon request of the buyer or prospective buyer, information regarding the thermal efficiency of the structure (single or multifamily units, three floors and under).

Common Address or Legal Description of Residence:

_____

_____

_____

_____

Part 1: Builder *must* describe the following energy efficiency elements of this house:

	Actual Value	Energy Star*
Wall Insulation R-Value	_____	18
Attic Insulation R-Value	_____	42
Foundation Insulation R-Value		
Basement Walls	_____	10
Crawlspace Walls	_____	15
Slab-on-Grade	_____	8
Floors over Unheated Spaces R-Value	_____	30
Window U-Value	_____	.34
Water Heater		
Gas or Propane (Energy Factor)	_____	.60
Electric (Energy Factor)	_____	.92
Heating and Cooling Equipment		
Warm-Air Furnace (AFUE)	_____	.93
Air Conditioner or Heat Pump - Cooling (SEER)	_____	14
Air-Source Heat Pump (HSPF)	_____	8.5
Ground-Loop Heat Pump – Heating (COP)	_____	3.9
Ground-Water Heat Pump – Cooling (EER)	_____	22
Ground-Water Heat Pump – Heating (COP)	_____	4.4

Part 2: Builder *may* provide the following additional information about this house:

_____ This residence has been/will be built to meet the energy-efficiency standards of the International Energy Conservation Code of 2006 (IECC 2006).

_____ This residence has received a Home Energy Rating (HERS) index score of 100 or less based on an energy audit performed in accordance with the Mortgage Industry National Home Energy Rating Systems Standards (July 1, 2006) by a rater certified by Residential Energy Services Network (RESNET).

Seller signature: _____ Date: _____

Seller name/address: _____

Buyer signature: _____ Date: _____

Buyer signature: _____ Date: _____

*See reverse for more information on existing standards and explanation of abbreviations.

R-value = Thermal Resistance Rating of insulation materials. The higher the R-value, the better the material resists heat flow (i.e., the better it insulates).

U-value = Heat Loss Rating of windows. The lower the U-value, the less the window loses heat (i.e., the better it prevents heat loss).

Equipment Performance Ratings (the higher the number, the more efficient the equipment)

- **AFUE = Annual Fuel Utilization Efficiency:** used to rate gas or propane warm-air furnaces and small boilers.
- **SEER = Seasonal Energy Efficiency Ratio:** performance indicator for residential air conditioners and air source heat pumps.
- **HSPF = Heating Seasonal Performance Factor:** measures heating performance of air-source heat pumps.
- **EER = Energy Efficiency Ratio:** used to rate window air conditioners and ground-loop or ground-water heat pumps in the cooling mode.
- **COP = Coefficient of Performance:** used to rate ground-loop or ground-water heat pumps in the heating mode.

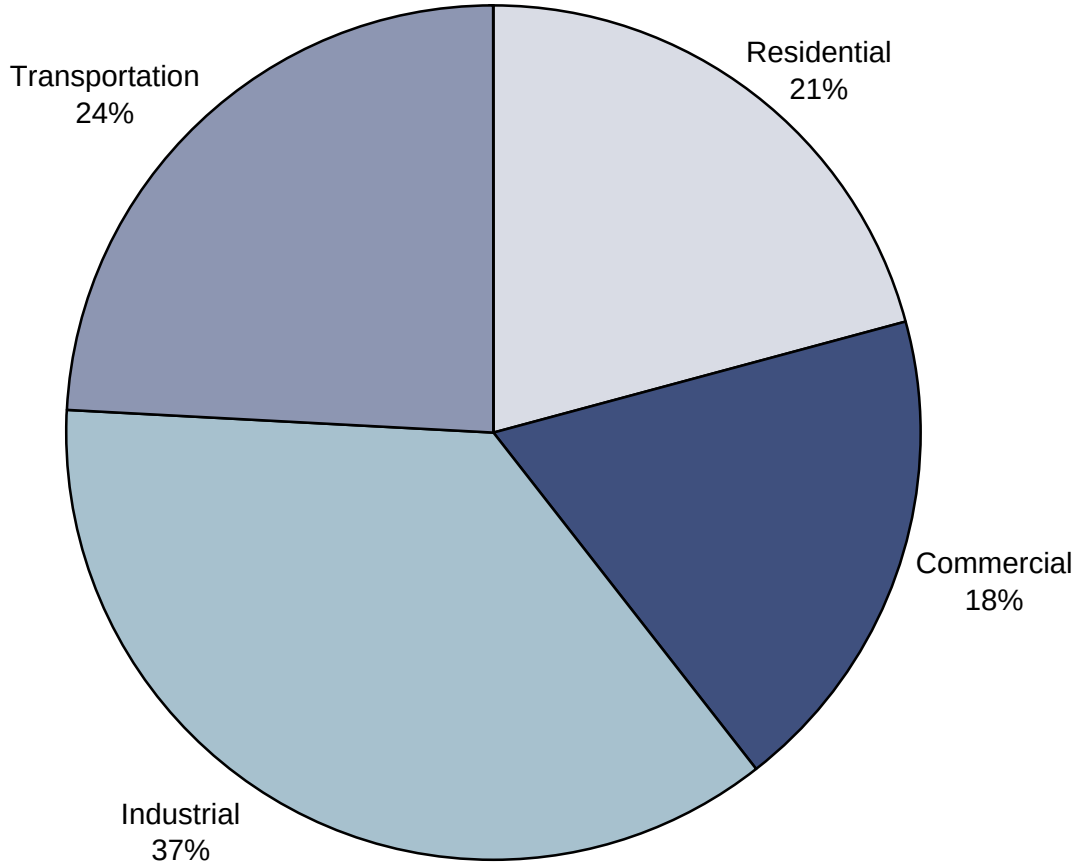
Energy Star qualified homes are at least 15% more energy efficient than homes built to the 2006 International Energy Conservation Code (IECC). Energy Star is a joint program of the U.S. Environmental Protection Agency and Department of Energy.

The International Energy Conservation Code (IECC), developed by the International Code Council, sets standards for energy efficiency in homes and commercial and industrial buildings. It is revised on a three-year cycle, with a supplement issue midway through each cycle.

The HERS Index is a scoring system established by the Residential Energy Services Network (RESNET) in which a home built to the specifications of the HERS Reference Home (based on the 2006 International Energy Conservation Code) scores a HERS Index of 100, while a net zero energy home scores a HERS Index of 0. The lower the score, the more energy efficient a home is in comparison to the HERS Reference Home. Each 1-point decrease in the HERS Index corresponds to a 1% reduction in energy consumption compared to the HERS Reference Home. Thus a home with a HERS Index of 85 is 15% more energy efficient than the HERS Reference Home and a home with a HERS Index of 80 is 20% more energy efficient.

RESNET Standards ensure that accurate and consistent home energy ratings are performed by accredited home energy rating systems nationwide; increase the credibility of the rating systems with the mortgage finance industry; and promote voluntary participation in an objective, cost-effective, sustainable home energy rating process. This accreditation process will be used by the mortgage industry to accept home energy ratings and by the states to assure accurate, independent information upon which a state may recognize the home energy ratings as a compliance method for state building energy codes; as qualification for energy programs designed to reach specific energy saving goals; and as a way to provide its housing market the ability to differentiate residences based on their energy efficiency. The Mortgage Industry National Home Energy Rating Systems Standards (July 1, 2006) can be found at http://www.natresnet.org/standards/mortgage/RESNET_Standards-2006.pdf.

Kansas Direct Energy Consumption by Sector, 2002

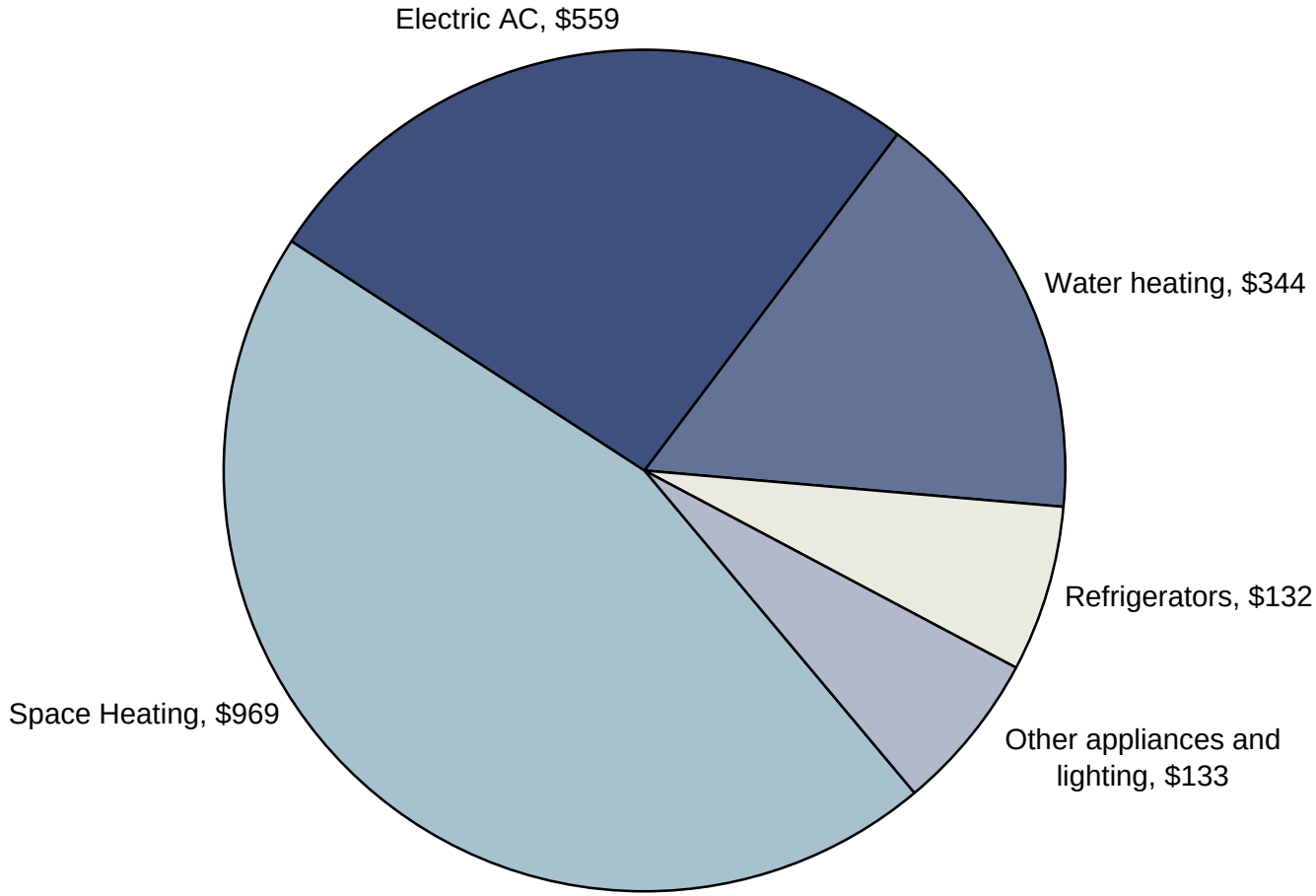


Agriculture sector consumption is negligible and not separaated out in these data.

Kansas Energy Chart Book, Chapters 9, 11

Source: U.S. Department of Energy, Energy Information Administration, State Energy Data 2002.

Kansas Average Annual Household Energy Expenditures



Source: Alliance to Save Energy, http://www.ase.org/content/article/detail/2798 (October 2, 2006)