

Section 9.2 Policy and Program Recommendations

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

Description

To ensure Kansas homebuyers receive timely, useful information about the energy performance of new homes, 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 of listing, in addition to 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 administrative recommendation 1, 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.

Recommended Actions

a. 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.

b. Legislative action

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

c. Budget requirements

No additional State funding required.

d. Implementation timeline

Initiated upon effective date of enabling legislation.

Implications of Proposal

a. 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.

b. Cons

- i. Program success requires active participation of homebuilders and realtors without any provision for enforcement.

*[Section 9.2 Policy and Program Recommendations, continued]***2. Encourage Local Units of Government to Adopt Minimum Energy Efficiency Standards for New [Residential] Construction.**

The Kansas Energy Office (KEO) should conduct a statewide survey of local county and municipal ordinances to ascertain the current status of energy efficiency codes and code enforcement. If the KEO deems it is necessary, based on the results of the survey, then it would develop workshops and offer training on energy efficiency codes and practices.

The KEO would also work with a task force, consisting of representatives of local government and homebuilders, to develop model energy efficiency codes.

Municipalities and counties with building codes are encouraged to adopt ordinances that require new residences to meet minimum energy efficiency standards. Specifically, municipalities and counties could:

- 1) incorporate the 2003 or 2006 version of the International Energy Conservation Code (IECC) in their next code update;
- 2) require submission of the Kansas Energy Efficiency Disclosure Form (see Attachment A) in the application for building permits (single or multi-family, three floors and under) and specify that posting requirements of the disclosure form be similar to those for posting building permits;
- 3) incorporate energy efficiency items in their code inspections, to verify information provided on Kansas Energy Efficiency Disclosure Form;
- 4) provide information about the Kansas Energy Efficiency Disclosure Form as a reference for homebuyers, homebuilders, and real estate agents; and/or
- 5) adopt ordinances that make issuance of an occupancy permit contingent upon meeting minimum energy efficiency standards.

More widespread adoption of energy efficiency codes for residential buildings will not only improve the energy efficiency of new housing stock, but should also provide homeowners with significantly lower energy bills (which may be offset by possibly higher home sale prices). Local codes will also raise homebuyer and homebuilder awareness of energy efficiency issues.

*[Section 9.2 Policy and Program Recommendations, continued]***3. Encourage Utility Implementation of PAYS® (Pay As You Save) and PAYS-type Pilot Programs.**

Kansas utilities are encouraged to implement pilot programs to demonstrate the effectiveness of financing energy conservation improvements through a PAYS® and PAYS-type financing system.

The Pay-As-You-Save, or PAYS®, system is designed to give building owners and tenants a way to finance the purchase and installation of energy conservation measures with no upfront expense or direct debt obligation.¹ PAYS® was first piloted by two New Hampshire utilities in 2003.² In its essence, PAYS® allows the participant to pay for the energy conservation improvements through an additional, tariffed charge on the participant's utility bill. The PAYS® charge is based on the useful life of and savings attributable to specific energy efficiency measures (not to exceed 75% of the expected savings), and appears on monthly utility bills for a prescribed period of time (not to exceed 75% of the life of the measure). The PAYS® charge is specifically designed to stay with the meter for the duration of the repayment period. If the participant moves, the PAYS® charge is passed on to the next owner/tenant, provided transfer of ownership/tenancy occurs prior to the end of the repayment period. To qualify for PAYS®, a qualified utility-sponsored energy audit must be performed and all proposed conservation projects are subject to inspection prior to initiation of PAYS® financing. Only permanently affixed conservation measures (e.g., insulation, HVAC, windows and doors) qualify for PAYS® funding. PAYS®-based tariffs would require regulatory approval.

A PAYS-type system could require the same standards for evaluating and financing as PAYS®, but the payments would be tied to the participating customer, not to the meter. Furthermore, rather than being a “banker,” the utility's role could be that of a conservation loan facilitator. To facilitate loans through a PAYS-type pilot program, the utility would probably engage in two basic steps. In the first step, the utility would perform (or facilitate the performance of) an energy audit. The audit would include, in addition to the performance of standard audit tests and inspections, the development of a customer-specific “Energy Action Plan,” which estimates dollar savings and the costs to achieve those savings; thus, identifying conservation measures that are likely to be cost-effective for that customer to install. The Plan would also contain “bid sheets” detailing installation costs, along with a list of utility-approved installation contractors. In the second step, the utility would offer its customers a prearranged credit program through the utility's bank (or a participating bank) and represent to the bank loan officer the net savings that are likely to result

¹ PAYS web site: <http://www.paysamerica.org/index.html>.

² GDS Associates, Inc., 2003, *Process Evaluation of the Pilot “Pay As You Save” (PAYS) Energy Efficiency Program: As delivered by the New Hampshire Electric Cooperative and Public Service Company of New Hampshire*,” December 2003 (<http://www.gdsassociates.com>).

from installing the proposed energy conservation improvements. Qualified customers can choose to repay the loan either by (1) making payments directly to the bank, or (2) making loan payments through the monthly utility bill (possibly using the PAYS® method for setting the size and term of the loan repayment). In the PAYS-type pilot, all customers (with the exception of low-income customers) would pay the full cost of the energy audit through the audit fee. Options for paying the audit fee include (1) direct payment by the customer at the conclusion of the audit (or possibly at a later date), (2) payment through a levelized monthly charge appearing on the customer's monthly bill, perhaps over a 36-month period, and (3) payment through the inclusion of the audit fee as part of the energy conservation loan principle.

Both the PAYS® and the PAYS-type pilot programs should be linked to the State's new low-income energy efficiency loan fund and the Weatherization Assistance Program, both operated by the Kansas Housing Resources Corporation. Depending on their income levels, utility customers who don't qualify for financing under the bank's underwriting rules may be eligible for a low-interest loan or for free weatherization assistance.

Small pilot programs would test the effectiveness of these promising financing systems and allow policy makers and utilities to evaluate for future, possibly broader applications. Utilities would be encouraged to initiate pilot programs by June 2007.

ATTACHMENT A:

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 listing and prior to closing, 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).

At Listing:

Seller Signature: _____ Date: _____

Seller Name and Address: _____

At Closing:

Buyer Signature: _____ Date: _____

Buyer Signature: _____ Date: _____

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

ATTACHMENT A:

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.