

Kansas City Energy Efficiency Forum 2.0

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Energy Efficiency Forum 2.0

Schedule

8:30 a.m.	Registration Begins
9	Energy Efficiency Forum 2.0 Begins Welcome Bob Regnier , Chairman of the Board, Greater Kansas City Chamber of Commerce and President, Bank of Blue Valley
9:10	Opening Remarks Mike Chesset , Chairman and Chief Executive Officer, Great Plains Energy Inc.
9:25	Remarks on the Latest Effort Mike Deggendorf , Vice President, Public Affairs, Great Plains Energy
10	Legislative Discussion Chuck Caisley , Director of Government Affairs, Kansas City Power & Light
10:30	Questions and Answers

For inquiries about today's program or to download a copy of the presentation, please visit www.kcenergyfuture.com.

CONVENE STAKEHOLDERS: *KC Energy Efficiency Forum #1*



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UNDERSTAND ALL POINTS OF VIEW: *Stakeholder Groups*



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BUILD CONSENSUS: *Energy Efficiency Forums 2.0*



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ENGAGE THE COMMUNITY: *Determine Solutions & Advocate*



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The Solution for Three Important Issues: Energy Efficiency

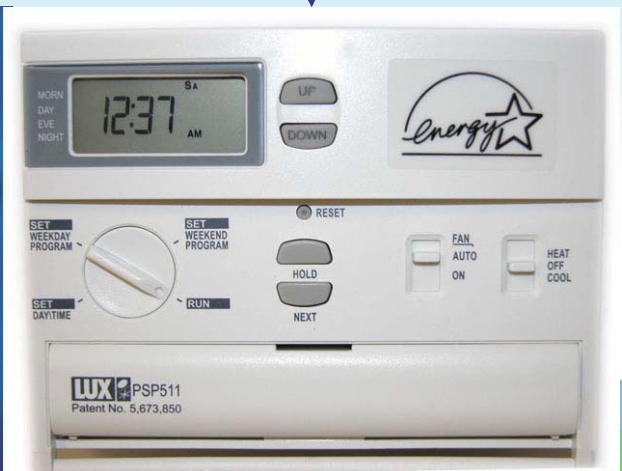
**Energy
Independence**

**Cleaner
Environment**

**Cost Effective
Supply**

**Energy
Efficiency**

A Complimentary Marriage: Renewables & Energy Efficiency



Energy Efficiency: Why should I care?

**Greater Kansas City Chamber of Commerce
Energy Policy Task Force
Climate Protection Sub-Group**

Nearly 78% of the greenhouse gas and carbon emissions reductions by 2020 come through EE

That is 1,389,842 of the 1,791,437 tonnes of GHG and carbon emissions

KC Energy Efficiency Forum I

- One of the largest such events in the U.S.
- Over 500 participants
- Many stakeholders:
 - State & local government officials (Sen. Claire McCaskill, Gov. Matt Blunt, Gov. Kathleen Sebelius)
 - Utilities (KCP&L, Aquila)
 - Environmental groups (Kansas & Missouri Sierra Club, MARC, Rocky Mountain Institute, NRDC, Missouri Votes Conservation)
 - Commercial Customers (Wal-Mart, General Electric)
 - Consumer advocates (AARP, OPC)

Small Group Discussions

Following two opening panel discussions, forum participants formed smaller stakeholder groups to discuss four aspects of **Energy Efficiency**:

- 1) Potential for EE in the Kansas City region.
- 2) Benefits to regional focus on improving EE.
- 3) Obstacles to the faster adoption of EE.
- 4) Aspects of EE that are most relevant to you and/or your organization.

KC Energy Efficiency Forum I Survey Results

Potential for energy efficiency in Kansas City?

Very high	58%
High	21%
Medium	12%
Don't Know	9%

What is the most compelling aspect of a regional focus on improving energy efficiency?

Collaboration between customers & utilities	44%
Sustainability	31%
Economic growth	19%
Energy Efficiency Infrastructure	6%

KC Energy Efficiency Forum I

Survey Results

Most significant obstacle to faster adoption of energy efficiency?

Cost	30%
Education	25%
Regulatory Structure	25%
Cost/Education	20%

Aspects of energy efficiency most relevant to you as an individual?

Weatherization	26%
Lowering Bills	26%
Green Initiatives	15%
No answer / Not sure	14%
Education	11%
Sustainability	8%

Four Obstacles to Broader Adoption of Energy Efficiency

COST

High upfront technology costs for both consumers and producers has delayed broader adoption of EE practices.

COMPREHENSION

Many consumers are uneducated about EE's potential and how they can participate.

CONVENIENCE

Many consumers unlikely to adopt EE programs if they are inconvenienced.

COHESION

Lack of alignment among stakeholder interests has delayed adoption of EE practices:

- utility / customer
- builder / owner
- owner / renter

KC Energy Efficiency Forum I

Several tactics were commonly suggested to promote EE:

- Align the interests of stakeholder interests through changes in public policy.
- Gradually raise prices, replacing subsidies with rebates or financing for technology purchases.
- Focus marketing on the cost of *not* being efficient and tailor initiatives to customer segments.
- Provide better real-time usage data to consumers to promote understanding of consumption.
- Involve all local stakeholders in the creation of a set of standards and performance goals.
- Enforce existing environmental codes and implement scoring systems for existing buildings.

Topic 1: Potential for EE in the Kansas City Region

Key Workshop Discussion Points

- **Significant untapped potential for EE:**
 - ✓ Political climate is favorable to EE
 - ✓ Businesses still haven't gone after "low-hanging fruit"
 - ✓ Residential buildings don't meet energy codes (i.e. MEC, ANSI/ASHRAE, ICC)
 - ✓ Too few transportation alternatives
 - ✓ Lack of local support for LEED compliance
 - ✓ Home weatherization programs limited to low-income consumers while the middle class consumes far more energy
- **Education will go a long way toward improving EE:**
 - ✓ Communication tactics aren't working (i.e., bill stuffers)
 - ✓ Messages not tailored to particular consumer segments
 - ✓ Programs such as Fannie Mae and Freddie Mac EE mortgages are largely unknown
 - ✓ Education programs in schools focus on safety but not efficiency

Representative Quotes

- *"Companies haven't yet gone after the low hanging fruit such as shutting off their computers at night."*
--Commercial Customer
- *"Large houses and SUVs are desirable in today's society. Efficiency is not ingrained in people."*
--Utility Company Employee
- *"Firms are finally starting to take their energy use seriously because they expect a carbon tax."*
--Channel Partner
- *"We need to show the cost of not using energy efficiently."*
--Local Government Official

Topic 2: Benefits to a Regional Focus on Improving EE

Key Workshop Discussion Points

- **Programs can be designed to meet the needs of both producers and consumers:**
 - ✓ Energy Optimizer thermostat
 - ✓ JOCO pumping water at night due to dual rate structure
- **Consumers more likely to feel a stake in their local environment:**
 - ✓ Effect of pollution on their children
 - ✓ Traffic congestion
 - ✓ Water quality
- **Multiplier effect from EE's can be captured and retained at the local level:**
 - ✓ Green programs will attract new businesses and jobs
- **KC Region doesn't need Fed involvement**
 - ✓ No reason stakeholders can't act now.
 - ✓ Political climate favorable to EE action

Representative Quotes

- *"We're approaching a tipping point. EE is moving forward regionally and nationally even though the SMART MOVES initiative failed."*

-- Local Government Official
- *"Handling EE at the local level lets us tailor programs to the region's needs and capture the multiplier effect locally."*

-- Channel Partner
- *"A regional focus could promote less Federal intervention where we really need it (e.g. around air quality)."*

-- Environmental Group

Topic 3: Obstacles to Faster Adoption of EE

Key Workshop Discussion Points

- **Cost justification for new technologies**
 - ✓ Long payback for upfront investments– 3 years is realistic
 - ✓ Lack of financing options
 - ✓ Low energy prices are a disincentive to reduce usage and invest
 - ✓ Hard to justify a technology replacement is it's not broken.
 - ✓ Rebates (e.g. for A/C) are beneficial, but too small to matter
 - ✓ Prices drop quickly so there's risk when purchasing today
- **Lack of education on EE**
 - ✓ Consumers unaware of available programs or financial benefits of efficient technologies
 - ✓ Tragedy of the Commons – “Not my problem”
 - ✓ Real estate professionals don't sell “green” benefits
 - ✓ Consumers don't have real-time visibility of energy usage
- **Inconvenience of being green**
 - ✓ Consumers are used to driving their own cars or living in large houses
 - ✓ Companies haven't gone after the low hanging fruit like shutting computers off at night
- **Lack of cooperation amongst stakeholders**
 - ✓ Too many stakeholders involved with varying requirements
 - ✓ No standardized, agreed upon efficiency goals
 - ✓ Consumers are skeptical of utilities' efforts at EE

Topic 4: Aspects of EE Most Relevant to You or Your Organization

Key Workshop Discussion Points

▪ **Assistance Agencies**

- ✓ People still don't believe in global warming.
- ✓ There's not one program. One size doesn't fit all
- ✓ Price incentives are key, perhaps based on income level

▪ **Channel partners**

- ✓ EE programs need to make financial sense. Emphasize green aspects of sustainable design
- ✓ Manufacturers/distributors need to offer efficient products

▪ **Commercial, Industrial and Financial Customers**

- ✓ Real-time usage data needed to implement EE programs
- ✓ No great incentive to act now due to low prices

▪ **Employees**

- ✓ We need incentives to get our companies to do the right thing

▪ **Environmentalists**

- ✓ Eager to partner with utility companies. Want to be engaged in constructive ways.
- ✓ Large urban utilities have the clout to push EE programs that might hurt rural coops

▪ **Local government**

- ✓ Auditing and insulation of every home and building
- ✓ Energy inspections as part of every real estate transaction
- ✓ Job creation through increased efficiency regulation

Costs & Comprehension Top Issues

Stakeholders	Costs	Comprehension	Convenience	Cohesion
Assistance Agencies	Prices too low. Landlord/tenant relationship discourages EE.	Lack of real-time data. Consumers uneducated on weatherization.		
Business Customers	Risky to invest today. Prices too low to incentivize change.	Customers don't understand incentives.	Still low hanging fruit (i.e. computer monitors off.)	No government mandates.
Channel Partners	Long payback periods. Realtors can't sell "green." Don't fix if it's not broken.	Current problems aren't utilized. Consumers are apathetic.		Lack of energy code enforcement.
Utilities	Customers want 1-year payback. Builders only build to code. Financing needed.	Customers need consistent message. Education is the biggest issue.		Collaboration across various groups is essential.
Employees	Incentivize residential & commercial customers. Upfront costs are too high.		SUVs & big houses are a social issue. Consumers are apathetic.	No consistent regulations. Don't wait for Feds. Advocacy groups aren't aligned.
Environmental Groups	EE in rentals. EE rebates too small. Financing needed.	Consumers need to see usage in real-time. More education on weatherization needed.		
State & Local Governments	Incentivize consumers & producers to change. Reduce urban sprawl.	Consumers still not aware global warming is real.	Better mass transit. Green space and buildings.	Feds should act on some issues (air quality). Legislature modifies bills. What works elsewhere?
MO/KS Regulatory Commissions	Long payback periods. Low income consumers must be protected.	Federal programs are unknown. Bill staffers go unread.		

Ideas and Recommendations of Participants

Obstacle	Ideas & Recommendations
Costs	<ul style="list-style-type: none"> ▪ Provide low interest financing for purchase of green technologies & appliances ▪ Leases should stipulate efficiency requirements ▪ Greater incentives for those who self-supply their own power ▪ Energy prices based on time of day to encourage off peak usage ▪ Encourage development of dense residential and commercial buildings ▪ Provide more funding for weatherization education and implementation
Comprehension	<ul style="list-style-type: none"> ▪ Audit and code residential dwellings with efficiency ratings ▪ New tiered tax structure for residential energy consumption (gas guzzler tax) ▪ Focus marketing messages on the cost of <i>not</i> being energy efficient ▪ Implement school programs that address EE along with safety ▪ Provide real-time meters so consumers can see their usage ▪ Use social consciousness as a marketing tool to speed adoption
Convenience	<ul style="list-style-type: none"> ▪ Align information and resources ▪ One-stop shop concept for education, incentives, implementation and validation ▪ Improve mass transit. Add more buses, trains and provide more comfort
Cohesion	<ul style="list-style-type: none"> ▪ Work on developing alignment of interests outside of regulatory proceedings ▪ Develop coalitions and educate stakeholders as to benefits available to each ▪ Change public policy to align interests: energy efficiency, building codes & appliance standards legislation

Legislation

- Bills to promote EE have been drafted for introduction in the coming sessions.
- Bills incorporate key issues and messages we heard from all stakeholders.
- They will be leading-edge, if not cutting-edge. Goal is to get the process started.
- Success will mark our region as a national leader in EE.
- Align stakeholder interests

Missouri Legislation

An Act to Make Energy Efficiency a Competitive Resource Alternative to Supply for Missouri Electric and Gas Corporations

AN ACT

To amend Chapter 386, RSMo, by adding thereto ___ new sections.

Purpose: It is the general assembly's intent to ensure that any energy efficiency programs approved by the public service commission for electric and natural gas corporations are cost-effective for all customer classes served by the corporation, funded by each customer class in proportion to the benefits received by that class from the program processes to remove impediments to investments and expenditures that will further energy efficiency goals.

1. The commission shall provide oversight and may adopt rules and procedures and/or approve corporation-specific settlements and tariff provisions, as necessary, to ensure that electric and gas corporations can achieve the goals of this section. Further, the commission may approve or select a consultant to assist in design, pre-implementation evaluation, and post-implementation evaluation of energy efficiency investments.
2. All energy efficiency proposals or investments offered or agreed upon by the corporation and approved by the commission shall be set forth in the corporation's tariffs and shall be subject to continuing review by the commission. Such programs may be implemented only if they are reasonably designed to be cost-effective for each customer class, meaning that the costs for utility service that are expected to be avoided by each customer class as a result of the program must equal or exceed the authorized expenditures to be recovered from each customer class in the corporation's rates for utility service. Such programs may be terminated at any time by the commission on its own motion or at the request of the gas or electric corporation or any other proper party for good cause shown, provided that all costs prudently expended by the corporation in compliance with the terms of such programs are recovered under the provisions set forth in section 3. All energy efficiency proposals must be reviewed by the commission and re-approved by the commission if they are to continue to be in effect after their expiration date, if any, unless the tariffs authorizing such provide otherwise. All energy efficiency proposals must be implemented within a period no later than six months of the effective date of the new tariff authorizing such, unless a different term is defined in the corporation's tariff.
3. The commission shall authorize electric and gas corporations to recover all prudently incurred expenditures made by the corporation for energy efficiency in the rates charged by the corporation. The commission may authorize such expenditures to be

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recovered in rates as an ongoing expense item, or as a rate base item provided that any capital expenditures made by a corporation pursuant to an approved energy efficiency program shall be treated and recovered as a rate base item once such item is fully operational and in use. If the capital expenditure is to be recovered as a rate base item, the investment shall accumulate carrying costs at the corporation's short-term borrowing rate until such time as the investment is included in the corporation's rate base in its next general rate case proceeding. Such investment shall be included in rate base in the same manner as other rate base items, provided that the commission shall presume a ten year service life for such investments, unless a different term is defined in the corporation's tariff.

4. At the time a corporation seeks to recover an expenditure incurred pursuant to an authorized energy efficiency program, such expenditures shall be recovered from each customer class in proportion to the benefits received by that class from the program.
5. Nothing herein shall preclude the approval of programs with energy efficiency incentive costs that exceed the costs the corporation is expected to avoid as a result of the program provided that such excess costs are funded by the customers participating in the program or through tax or other governmental credits or incentives specifically designed for that purpose.

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Missouri Legislation

Competitive Alternative: Remove the disincentive for utility companies to invest in EE and they will facilitate faster adoption. Allow utility companies to recover on EE investments in their rates just like they do investments in generating electricity, creating an equal playing field when considering how to supply energy to customers.

Costs Apportioned by Class: The costs of the EE programs would be funded by each customer class in proportion to the benefits they receive under the programs.

Consultants: The PSC is given ability to select consultants to help design and implement and measure EE programs.

Cost Effective: One manner by which EE programs should be judged is whether they are cost effective, meaning that customers should realize a net savings from EE programs over what they would have had to pay in rates without them.

Expiration Date: Each EE program is given an expiration date and must be re-approved by the commission after expiration.

Implementation: All EE programs must be implemented within 6 months of approval.

Kansas Legislation

74-616

Chapter 74.--STATE BOARDS, COMMISSIONS AND AUTHORITIES Article 6.--STATE CORPORATION COMMISSION

74-616. State corporation commission; powers and duties relating to energy resources. In addition to other powers and duties provided by law, in administering the provisions of this act the state corporation commission shall:

- (a) Adopt rules and regulations necessary for the administration of this act;
 - (b) ~~Develop a comprehensive state energy conservation plan and the procedures for implementing the plan according to federal requirements;~~
 - (c) ~~allow, at the option of the requesting utility, the capitalization and addition to rate base of investments in commission approved energy efficiency, conservation and demand management programs;~~
 - (c) make requests for and accept funds and other assistance from federal agencies for energy conservation and other energy-related activities in this state, including, but not limited to, the state energy conservation program, the energy extension service program and the institutional building conservation program;
 - (d) administer federal energy conservation programs in this state;
 - (e) collect and compile necessary data on energy resources and monitor energy resources supplies in this state;
 - (f) prepare an energy resources emergency management plan for adoption during any energy resources emergency proclaimed to exist by the governor under K.S.A. 74-619, and amendments thereto, which plan shall include the system of priorities for energy resources allocation and curtailment of energy resources consumption established under K.S.A. 74-620, and amendments thereto;
 - (g) cooperate in the implementation of any emergency energy rationing program which may be imposed by the federal government or any agency thereof;
 - (h) prepare and have available for public inspection an annual report which describes the energy resources emergency management program; and
 - (i) make and enter into all contracts and agreements and do all other acts and things necessary or incidental to the performance of functions and duties and the execution of powers under this act.
- History: L. 1983, ch. 258, § 1; L. 1994, ch. 248, § 28; July 1.

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74-618

Chapter 74.--STATE BOARDS, COMMISSIONS AND AUTHORITIES Article 6.--STATE CORPORATION COMMISSION

74-618. Energy resource defined. As used in K.S.A. 74-616 to 74-621, inclusive, unless the context requires otherwise: "Energy resource" means any recognized substance or process which can be utilized to obtain energy, or any form of energy, and shall include but not be limited to: (a) Propane, butane, gasoline, kerosene, home heating oil, diesel fuel, other middle distillates, aviation gasoline, kerosene-type jet fuel, naphtha-type jet fuel, residual fuels, crude oil, and other petroleum products and hydrocarbons as may be determined by the state corporation commission to be of importance;

- (b) all natural gas, including casinghead gas and all other hydrocarbons not defined as petroleum products in paragraph (1) and including liquefied petroleum gas;
 - (c) all types of coal and products derived from its conversion and used as fuel;
 - (d) all agricultural fertilizers which are manufactured or derived from hydrocarbons or other fossil materials;
 - (e) all types of nuclear energy and special nuclear material;
 - (f) all electrical energy;
 - (g) ~~energy efficiency, conservation and demand management programs; and~~
 - (h) ~~every other energy resource, whether natural or man-made, which the state corporation commission determines to be important to the production or supply of energy, including but not limited to, energy converted from solar radiation, wind, hydraulic potential and geothermal sources.~~
- History: L. 1983, ch. 258, § 3; July 1.

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Kansas Legislation

Energy Efficiency Already Encouraged: Kansas already allows a 0-2% incentive on top of normal rate base for renewable energy and energy efficiency programs.

Competitive Alternative: Remove the disincentive for utility companies to invest in EE and they will facilitate faster adoption. Clarify that utilities may elect to capitalize EE investments and recover them in their rates just like they do investments in generating electricity, creating an equal playing field when considering how to supply energy to customers.

Definition: Define EE as an energy resource just the same as oil, coal or nuclear energy.

ENGAGE THE COMMUNITY: *Determine Solutions & Advocate*



Removing Barriers & Changing Public Policy

COST

- Funding for Public Counsel
- Time Limit on Complaint Cases
- Tax Holiday
- Tax Incentives
- Utility Rebates
- Market Expansion

COMPREHENSION

- Elected Officials Elevate the Issue
- EE Day / Day at Capitol
- Utility Bill Inserts and Websites
- Develop Primary Curriculum
- Continue Events
- Regional Action Plans

CONVENIENCE

- Leverage Utility / Customer Relationship
 - Trust
 - Communication
 - Ability to Service
 - Capital
 - Experience

COHESION

- Pass Legislation to Align Stakeholder Incentives:
 - utility / customer
 - builder / owner
 - owner / renter

What Can You Do?

- **CFL**
Replace incandescent lights with compact fluorescent lights. Replace those you use the most. CFLs save 75% of the energy.
- **Nightlights**
Install nightlights rather than leaving the room light on
- **Programmable thermostat**
Install a programmable thermostat
- **Energy Star appliances**
Buy Energy Star appliances
- **Dish washer**
Air dry your dishes
- **Clothes washer**
Wash clothes in cold water as much as possible
- **Second refrigerator**
Unplug/don't use/get rid of the second refrigerator
- **Refrigerator coils**
Vacuum refrigerator coils every few months
- **Air conditioner and furnace**
Have your air conditioner and furnace maintained once or twice a year by a professional HVAC contractor
- **Air conditioner coils**
Keep air conditioner coils clean and free of obstructions for free air flow
- **Stop drafts in your home**
Install weather-stripping and outlet gaskets
- **Ceiling fan**
Install a ceiling fan to cool in the summer and circulate air in the winter
- **Phantom loads**
Turn off computers, unplug cell phone chargers

KCP&L Energy Efficiency - 2008

Program	Type	Aff	Res	Sm Com	Med C&I	Large C&I
Affordability						
· Affordable New Homes	Dir Imp	✓				
· Low Income Weatherization	Dir Imp	✓				
Energy Efficiency						
· Online Analysis	Educ		✓			
· Home Performance-Training	Educ		✓			
· Change a Light, Change the World	Dir Imp		✓			
· Cool Homes Program	Dir Imp		✓			
· Energy Star Homes	Dir Imp		✓			
· PAYS-type program	Dir Imp		✓			
· Online Analysis	Educ			✓	✓	✓
· C&I Audits	Educ			✓	✓	✓
· C&I Custom Rebates-Retrofit	Dir Imp			✓	✓	✓
· C&I Custom Rebates-New Const	Dir Imp			✓	✓	✓
· Bldg Operator Certification	Dir Imp				✓	✓
· Research	Research					
Demand Response						
· Energy Optimizer A/C Cycling	Dmd Rsp		✓	✓		
· The Alliance, an Energy Partnership	Dmd Rsp				✓	✓

Aquila Energy Efficiency - 2008

1st Quarter Launch

- Residential Programs
 - *Residential Lighting, Home Performance with Energy Star, Energy Star Homes*
- Commercial & Industrial Programs
 - *Commercial Audits, Customer Rebates, Building Operator Certification*
- Public Purposes Programs
 - *Low Income Weatherization, Affordable New Homes*

2nd Quarter Launch

- Curtailable Rates, Optimizer, Cool Homes

Kansas City Energy Efficiency Forum 2.0

Discussion
Questions & Answers
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