

Stimulating Energy Efficiency in Kentucky



***Collaborative Stakeholder Meeting #3:
Developing a Kentucky Action Plan for Energy Efficiency***

Convened by the Energy and Environment Cabinet's
**Department for Energy Development
and Independence (DEDI)**



Welcome
Introductions
Review of Project Goals

Secretary Len Peters - Energy &
Environment Cabinet

Greg Guess- DEDI





Energy Efficiency: Where Have We Been and Where are We Going?

Commissioner Linda Breathitt
KY Public Service Commission





Orientation to Today's Discussions

Sara Smith - Smith Management
Group (SMG)





Morning Break





Recap of Collaborative Meetings 1&2

Samantha Williams - Midwest Energy Efficiency Alliance





The Action Plan: A Discussion

Sara Smith - SMG



I. APPLICABLE TO ALL SECTORS



Overall Process Improvement

- A. Create Utility Peer Exchange for electric utilities to share information and experiences, to include all regulated and non-regulated utilities in Kentucky
- B. Develop voluntary reporting mechanism to ensure transparency of utility-run energy efficiency program performance (**in process**)
- C. Provide additional opportunities for contact/communication between DEDI and energy consumers, in conjunction with funding opportunities and other energy efficiency information.
- D. Increase education and training programs for each consumer sector



I. APPLICABLE TO ALL SECTORS



Section 50 Report available at:

<http://psc.ky.gov/agencies/psc/industry/electric/hb1report.pdf>



I. APPLICABLE TO ALL SECTORS (Cont.)



Utility Rate Design

- E. Initiate discussion on options, pros and cons concerning utility rate structure (straight fixed variable, return on investment in energy efficiency, etc.)

Municipal Utilities

- F. DEDI to provide support in the development of municipal utility programs suite (e.g., “Quick Start” programs)
- G. Via Utility Peer Exchange, provide support to municipal utilities concerning best practices in EE program design and implementation, evaluation, measurement and verification, cost-effectiveness, customer outreach/education, etc.



II. RESIDENTIAL EFFICIENCY



Short Term Action Items

- A. Expand and enhance Kentucky Home Performance Program



II. RESIDENTIAL EFFICIENCY (Cont.)



Potential Legislative Items

- B. Expand existing residential efficiency incentives in HB 2 (2008 Session) for home builders, landlords, and homeowners
- C. Energy Star manufactured homes requirement at vendor level
- D. Evaluate resources for training and inspection of manufactured housing installation
- E. Pilot for pre-1976 manufactured housing replacement program



II. RESIDENTIAL EFFICIENCY (Cont.)



Actions Requiring Funding

- F. Improve residential housing stock via energy efficiency programs
- G. Improve residential housing stock via uniform housing code enforcement (beyond recent efforts for state-wide HVAC inspection)
- H. Explore enhanced use of on-bill financing for all consumers, in all regions of Kentucky



III. COMMERCIAL EFFICIENCY ACTION ITEMS



Potential Legislative Items

- A. Amend existing tax incentive structure for commercial users, linked to EE upgrades and performance
- B. Allow for expanded energy efficiency tax credits and/or low interest financing, etc.
- C. Extend HB 2 (2008 Session) efficiency bond mechanism to commercial entities.
- D. Create incentive mechanism for landlords of commercial rental property to provide energy efficiency services, invest in EE building upgrades



III. COMMERCIAL EFFICIENCY ACTION ITEMS (Cont.)



Actions Requiring Funding

- E. Establish revolving loan fund, with zero to low interest, linked to energy efficiency upgrades
- F. Improve Kentucky's commercial building stock



IV. INDUSTRIAL EFFICIENCY ACTION ITEMS



Short Term Action Items

- A. Establish voluntary reporting mechanism to collect data from industries on energy efficiency upgrades and successes, potentially housed at independent organization.

Potential Legislative Items

- B. Increase financial incentives for industrial energy users, i.e. amending existing tax incentive structure, linked to energy efficiency upgrades and performance



IV. INDUSTRIAL EFFICIENCY ACTION ITEMS (Cont.)



Actions Requiring Funding

- C. Establish revolving loan fund with zero to low interest linked to energy efficiency upgrades
- D. Explore energy efficiency program financing for small to medium industrial customers (e.g. < 5 MW)

Long-Range Items

- E. Convene advisory group to review options governing industrial customer opt-out from DSM program and make recommendations



V. RECOMMENDATIONS AT THE FEDERAL LEVEL



- A. Explore how FEMA funds provided for home rebuilding or replacement in the wake of natural disasters could require new structures to be built better than code (e.g. ENERGY STAR).

- B. Seek LIHEAP reform to give states more flexibility in how to direct a greater percentage of funds to weatherization; link future weatherization funding prioritization to highest energy usage and potential energy savings through energy efficiency investments





Lunch





Kentucky's Energy Efficiency Goals: And How Do We Know When We Get There?

Lee Colten - DEDI

Discussion to follow, moderated by Sara Smith, SMG



DOE Grant and Governor's 7 Point Strategy

- ❖ **REQUIREMENT OF GRANT** – “DOE is seeking applications from states and groups of states to achieve an annual minimum target electricity savings of 1 percent through energy efficiency. Should a state decide to address them, natural gas and transportation fuel savings should be additional to the minimum 1 percent electricity savings.”

- ❖ **GOVERNOR'S GOAL** (7 Point Strategy) – “Energy efficiency will offset at least 18 percent of Kentucky's projected 2025 energy demand.”
 - To achieve this a “combination of both utility-sponsored and non-utility-sponsored energy efficiency programs will be developed and implemented.” See Energy Strategy, p. 7 (<http://eec.ky.gov/Documents/Kentucky%20Energy%20Strategy.pdf>)

Measuring Progress Towards Governor's Energy Efficiency Goals

Goal is

- ❖ Statewide – not utility-specific
- ❖ Aspiration – not mandate
- ❖ Method for measuring goal still requires US DOE approval – not final

Method for Measuring Goal

- ❖ Annual targets ramps up gradually to cumulative reduction by the end of 2025
- ❖ Baseline – Expressed as average of energy consumption from three year period (normalized for weather)
- ❖ Measuring annual goal – calculated as percentage of current years energy consumption to Baseline (3-year average) in MWh
- ❖ First measured year will be 2013
- ❖ May track natural gas consumption, but no NG-specific goal
- ❖ Other option being evaluated:
 - Modeled approach – accounts for population, economics, weather, price, population, income, etc.

Measuring Progress Towards Governor's Energy Efficiency Goals

Calendar Year	Incremental Electric Consumption Reduction	Cumulative Electric Consumption Reduction
2013	0.2%	0.2%
2014	0.3%	0.5%
2015	0.5%	1%
2016	1%	2%
2017	1%	3%
2018	1%	4%
2019	1%	5%
2020	1%	6%
2021	1%	7%
2022	1%	8%
2023	1%	9%
2024	1%	10%
2025	1%	11%

Note – Natural gas consumption reductions will be added to make up the remainder of 2025 goal.

Standard Data Reporting: Committee Process

- Several utilities involved in discussions over last couple of months

Standard Data Reporting: Purpose

- ❖ Measure progress toward Gov's EE goals, provide talking points for Gov and state officials
- ❖ Demonstrate at state level, and nationally, the success of Kentucky's programs, one of leaders in Southeast region
- ❖ Demonstrate and document the positive performance of the utilities with respect to wise use of ratepayers funds and benefits they provide to Kentucky and their customers
- ❖ Sharing of best practices, performance and support reasonable, fact-based planning towards future goals
- ❖ Provide for collaborative reporting structure

Standard Data Reporting

- ❖ Reporting is voluntary
- ❖ DEDI will be repository of data
- ❖ DEDI will analyze and report summaries of data
- ❖ Information to be reported will include:
 - Basic utility information
 - Annual utility data
 - Programs
 - Program metrics/performance

Standard Data Reporting: data elements

❖ Utilities

- Name
- Address
- City/State
- Zip

Standard Data Reporting: data elements

❖ Annual utility data

- Energy type, i.e. natural gas or electricity
- Energy sold – residential, commercial, and industrial (in mcf or MWh)
- Number of customers - residential, commercial, and industrial
- DMS program costs - residential, commercial, and industrial
- Utility peak season, i.e. winter or summer

Standard Data Reporting: data elements

❖ Program

- Program name, description
- Sector
- Time frame and budget
- Projected annual savings
- TRC value
- Program approval date

Standard Data Reporting: data elements

❖ Program metrics

- Gross incremental annual energy savings
- Winter and/or summer demand savings
- Program participation (and type) – e.g. number households participating, no. of CFLs, no. of load control devices, etc.
- Reporting time frame – can accommodate staggered calendars

Who's agreed to report?

- AEP
- Duke Energy
- EKPC – aggregate of all G&T coops.
- LG&E / KU

Additional notes

- ❖ PSC role? PSC will have access to data, as well as any summary reports
- ❖ Should the overall goal be reduced given the wholesale industrial opt-out from DSM programs?
Or set sector-specific goals? Must negotiate with US DOE



Review of Progress - Next Steps

Moderated by Sara Smith, SMG

- Timeline for Action Plan
- Continued opportunities to participate, provide feedback



ACEEE Research Project Status

Department for Energy Development and Independence



Study 1 – Kentucky Electricity & Natural Gas Forecast	(Complete)
Study 2 – Assessment of Utility Program Portfolios in Other States	(Complete)
Study 3 – Cost Effective Resource Assessment for Kentucky	(Complete)
Study 4 – Assessment of Utility Program Portfolios in Kentucky	(Complete)
Study 5 – Macroeconomic Impacts of Energy Efficiency Investments	(Forthcoming)

Full Reports Available Online at:

<http://energy.ky.gov/Programs/Pages/SEE-KY.aspx>





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