

BUILDING CODES ASSISTANCE PROJECT



GETTING ON THE RIGHT TRACK

10.27.09



BCAP

Dedicated to the adoption, implementation,
and advancement of building energy codes

What is the Task Ahead?

2

Obligations & Goals

- 2009 IECC and 90.1-02007
- 90% Compliance by 2017

Barriers

- Associated Costs
- Resistance to Change
- New Solutions Needed

Resources & Opportunities

- Information/Data/Guidance/Best Practices
- Available Assistance

Goals

3

- **Adoption**
 - Widespread buy-in; Solid policy (no loopholes; timely local implementation); Regular updates
- **Compliance – Education & Training**
 - Widespread understanding of requirements and their value; Communicate a clear path to build to code and demonstrate compliance
- **Enforcement & Tracking**
 - One-stop checking; cost-effective enforcement infrastructure; collect data on energy savings



Checklist for Energy Code Activity

4

1. Determine which codes are in place - **BCAP maps**
2. Adopt model energy codes 2009 IECC & ASHRAE 90.1-2007, as needed
3. Develop Effective Training and Education Standards
4. Enforce and Track Compliance

Adoption = policy

5

Adoption

- Barriers
 - Too expensive
 - Too complicated
 - Unnecessary
 - Not appropriate for the state



Adoption = policy

6

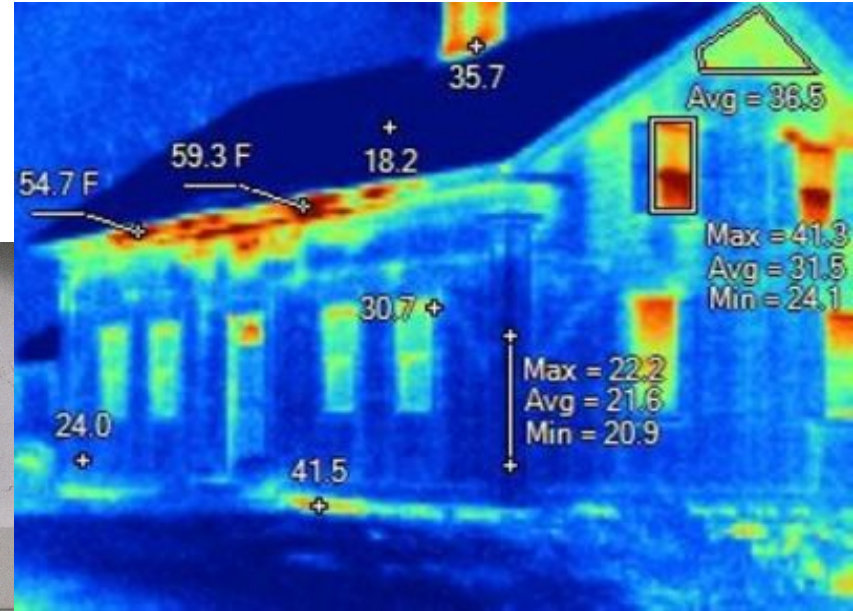
Adoption

- Barriers
 - Too expensive *Least cost/SAVE \$*
 - Too complicated *Prescriptive*
 - Unnecessary *Impacts peak/demand power, climate, operating costs; DOE's national energy savings analysis*
http://www.energycodes.gov/implement/nationwide_analysis_reports.stm
 - Not appropriate for the state *Climate-specific requirements*



Quality Assurance - Expectations

7



The Opportunity to do Better



“...consider an energy-saving home costing \$126,000 alongside a standard home costing \$125,000. The following table shows the comparative expenses of a standard home versus an energy-saving home, assuming that the interest rate is 6% and the term of the mortgage is 30 years: “

- Kentucky Office of Energy Policy

	Standard Home	Energy Saving Home
Monthly Mortgage	\$689	\$695
Monthly Energy Cost	\$50	\$20
Monthly Total	\$739	\$715

Summary

9

Benefits

- Codes save energy
- Boost the ability of the market to build better
- Provide quality homes and buildings (thermal comfort ... health)
- Save homeowners and businesses money

Key Messages

- Codes are cost-effective and utilize market-ready technology
- Good builders **BENEFIT** from codes (they don't have to compete with sub-standard buildings)

Adopt National Model Codes

10

- ❑ Adopt codes through Executive Order
 - Legislation/Rulemaking to keep pace with future versions of model codes
- ❑ Author or support legislation to establish model codes as baseline for construction
 - BCAP has language available
- ❑ Expedite existing process to adopt model codes

Compliance= education & training

11

Compliance

- Barriers
 - Lack of energy training requirements
 - Shortage of field trainers
 - Ineffective trainings



Compliance= education & training

12

Compliance

- Barriers
 - Lack of energy training requirements *available models & information*
 - Shortage of field trainers *BCAP Trainer Directory*
 - Ineffective trainings *available models*



Training and Education Standards

13

Draw from national “Best Practices”:

- ❑ Assess training content for up-to-date, thorough coverage of critical information for all key audiences
- ❑ Leverage code training resources and a variety of options; in-person, on-line, etc.
- ❑ Establish strict professional certification requirements

Enforcement = plan review/ inspection & data collection

14

Enforcement

- Barriers
 - No baseline in most states
 - Inadequate inspection infrastructure
 - No standard for collecting data/M&V on buildings for codes



Enforcement = plan review/ inspection & data collection

15

Enforcement

- Barriers
 - No baseline in most states *Some models available*
 - Inadequate inspection infrastructure *Current activity to leverage*
 - No standard for collecting data/M&V on buildings for codes *DOE State Compliance & Evaluation Procedures*
http://www.energycodes.gov/news/arra/compliance_evaluation.stm



Enforce and Track Compliance

- ❑ Maximize use of existing code resources (e.g., user guides)
- ❑ Identify resource/information gaps and develop remedies
- ❑ Establish current compliance level (baseline)
- ❑ Implement strategies for improved compliance
- ❑ Perform annual compliance measurement; including energy and carbon savings

Contact Information

17

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OCEAN LAUNCH – week of November 16

www.bcap-ocean.org



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