

Building Energy Code Compliance:

A Low-Cost Tool to Boost Jobs, Cut Pollution, and Advance Energy Independence; Every Dollar Spent Yields \$6 in Energy Savings

Strong building energy codes are one of the most fundamental, affordable, and effective mechanisms for increasing the long-term efficiency of the nation's buildings. Energy codes require that buildings employ a minimum level of cost-effective and energy-efficient technologies that prevent costly energy waste, improve comfort, and provide substantial health and air quality benefits. Strong energy codes can also create tens of thousands of clean energy jobs and reduce utility bills for U.S. homeowners and businesses. Though many states have adopted or will soon adopt the latest model energy codes, many new homes and businesses fail to comply with efficiency requirements, consuming far more energy and money to operate than they should. By simply providing the resources needed to fully enforce the energy codes already in place, states and local governments can achieve dramatic energy and emissions reductions at a relatively modest cost.

What are Energy Codes?

Building energy codes are the minimum energy efficiency requirements for newly constructed or renovated buildings, typically adopted and enforced at the local and state levels. Such standards often cover building envelope (walls, roofs, windows), lighting, water heating, and space conditioning. Along with other building and safety codes, energy codes are intended to ensure sound design and construction practices. What's more, energy codes offer the unique opportunity to lock in lasting energy savings at a much lower cost than later in a building's life.

The Benefits of Building Energy Codes

Building operations consumed \$406 billion worth of energy in 2009 – 38% of total U.S. energy spending.¹ Buildings that comply with codes are more efficient and use less energy across their lifetimes. The benefits of adopting, implementing, and enforcing codes extend well beyond utility bill savings. Energy codes can improve comfort, enhance our country's energy independence, and reduce emissions of harmful pollutants. Moreover, and perhaps more importantly in the current economic climate, well-enforced building energy codes can provide tens of thousands of local jobs at all skill levels in the building inspection, construction, and design industries.

Code Compliance

Achieving code compliance is essential to effective building codes. Energy codes can deliver their potential energy savings only when projects actually comply with the code, yet the vast majority of jurisdictions lack the necessary training and enforcement resources to ensure compliance. Compliance rates in many jurisdictions are well below 50%.² For building energy codes to be truly effective, we must greatly enhance state and local efforts to educate, train, and enforce codes.

Low-Cost Energy Savings

Full compliance with energy codes would produce significant annual and cumulative energy savings for American consumers. The average American household spends \$2,150 each year on home energy bills.³ Meeting the energy standards in building codes typically cut such costs by 15% or more, saving the average household more than \$300 each year. Allocating to code compliance and enforcement initiatives just a fraction of one percent of the value of construction projects would provide sufficient resources to achieve 90% compliance with energy codes.⁴ Each dollar spent achieves a six-fold payoff in energy savings; full funding will eventually save American consumers \$10.2 billion annually while improving air quality and home comfort.⁵

What can you do?

Policymakers can take the following steps to ensure achievement of high levels of code compliance:

- ✓ Enhance or, at minimum, maintain existing budgets for building departments
- ✓ Convey political support for the strict and uniform enforcement of building energy codes
- ✓ Encourage building departments, design professionals and builders to take advantage of existing training tools
- ✓ Communicate to citizens the value of codes and standards
- ✓ Encourage your congressional representatives and local utilities to increase funding for code compliance efforts

¹EIA Annual Energy Outlook, 2010.

²Brian Yang, "Residential Energy Code Evaluations." BCAP, 2005.

³Alliance to Save Energy, U.S. Household Energy Expenditures, 2010.

⁴Findings from a recent analysis by a task force of experts; see

<http://imt.org/files/FactSheet-EnergyCodeComplianceFunding.pdf>.

⁵Ibid.



For more information, visit www.bcap-ocean.org

For questions regarding this factsheet, please see www.imt.org/codecompliance or contact Sarah Stellberg, IMT at (202) 525-7005, sarah@imt.org