

Illinois Climate Change Advisory Group

7/3/2007

Subgroup: Power/Energy

Policy Name: #13 and #43 Establish residential and commercial energy efficiency construction codes beyond International Code Council model standards

Policy Type: Regulation

Estimated 2020 Reductions Compared to BAU: 4.32 million metric tons CO₂

Affected sectors, subsectors or entities (As the case may be)

Sector: Multi-sector

Subsector: Commercial, Residential, Government

Entities: Building contractors, engineers, architects, local building code officials, state agencies

Description

This is a Zero Net cost to consumers policy proposal.

Adopt Environment Illinois' proposal (in *A Blueprint for Action: Policy Options to Reduce Illinois' Contribution to Global Warming*) that Illinois by 2010 adopt a residential energy code equivalent to the current Energy Star Homes standard, and a commercial code capable of reducing energy consumption by 25 percent from the current code. Energy Star Homes currently achieve a 15% energy reduction from the most recent International Energy Conservation Code (IECC). As with the current energy efficiency building code for commercial buildings, the stricter building code would also apply to state buildings.

Rough estimate of reductions from BAU in 2020

Projecting Environment Illinois' estimated emission benefits in 2018 to the year 2020, shows an emission benefit of **4.32 million metric tons**. The Governor's Energy Independence Plan recommends adoption of a model residential energy efficiency building code. Adoption of the most recent IECC code for residential construction would reduce emissions by an estimated 1.66 million metric tons in 2020, based on a USDOE study. Therefore, Environment Illinois' proposal would achieve an additional 2.66 million tons annually beyond the 1.66 million from the Governor's Plan by 2020.

Timetables, duration and stringency

Environment Illinois suggests adopting the enhanced standards in 2010. The standards could also be improved over time to reflect technological advances.

Barriers to implementation

Meeting the enhanced energy efficiency building code standards could result in a slight increase in upfront capital costs (1-3%), although when amortized the monthly energy cost savings would exceed the additional costs.

Interstate Cooperation

Legislation has been introduced in Washington, DC, requiring all new commercial buildings to be LEED certified. Normal, Illinois also currently requires LEED certification for new commercial buildings.

Sources:

Environment Illinois, *A Blueprint for Action: Policy Options to Reduce Illinois' Contribution to Global Warming*, January 2007

R.G. Lucas, *Assessment of Impacts from Adopting the 2006 International Energy Conservation Code for Residential Buildings in Illinois*, Pacific Northwest National Laboratory, for USDOE, January 2007