

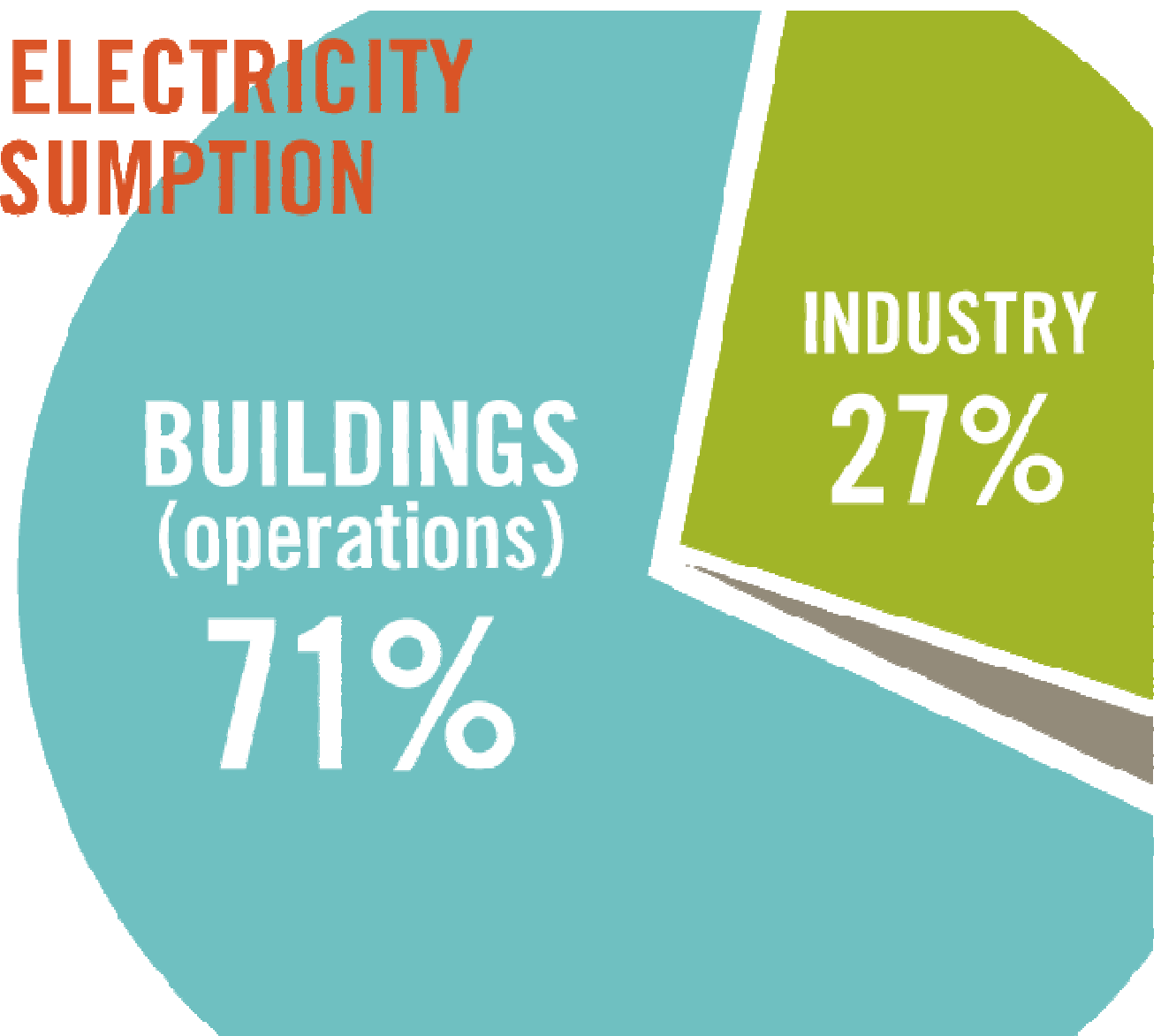
The 2012 IECC

A Rare Opportunity for Major Energy Savings



THE AMERICAN INSTITUTE
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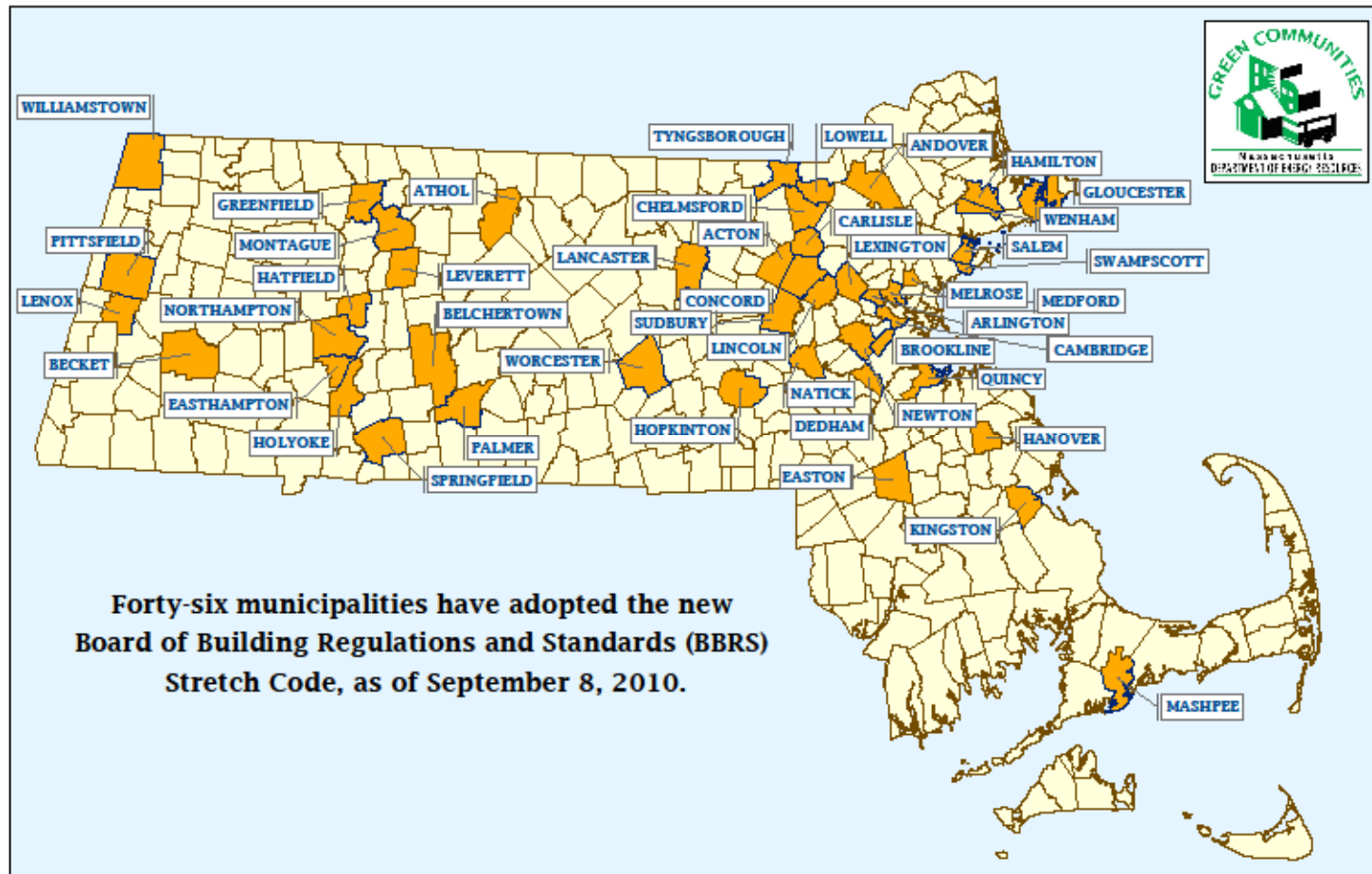
The 2012 IECC Commercial Proposals

...most comprehensive changes in a generation to the commercial chapter of the IECC that will result in practical, feasible and necessary energy use reductions approaching 30% for commercial buildings.

2012 IECC is the Logical Next Step of Building Codes Process

- IECC is one of two national model energy codes
- The IECC framework is maintained
- Energy performance can still be modeled
- ASHRAE 90.1 – 2010 the other national model code is referenced
- Clarity and enforceability of code language typical of I - codes

MA: First of Many Energy Code Adoptions



Support & Momentum Built on Stakeholder Involvement

- October 2009 - proposals all passed with majorities at the Baltimore hearings
- November 2009 – July 2010 proponents worked with broad stakeholder interests to improve proposals
- July 2010 – proponents submit comments based on stakeholder input; total of 34 comments submitted in support of EC 147 and only 2 submitted in opposition
- Summer 2010 – similar advancements in ASHRAE Standard 90.1-2010 were approved this year

“Ready-to-adopt” Energy Efficiency up for vote in Charlotte

- Primary proposals of commercial package are EC 147, EC 157 and EC 165
- Comments reflecting stakeholder improvements to be voted upon separately
- *2012 IECC proposed* values and criteria **parallel several “reach code” and voluntary programs** for HVAC, Lighting, Envelope, Fenestration

EC 147 – A Revised Chapter 5

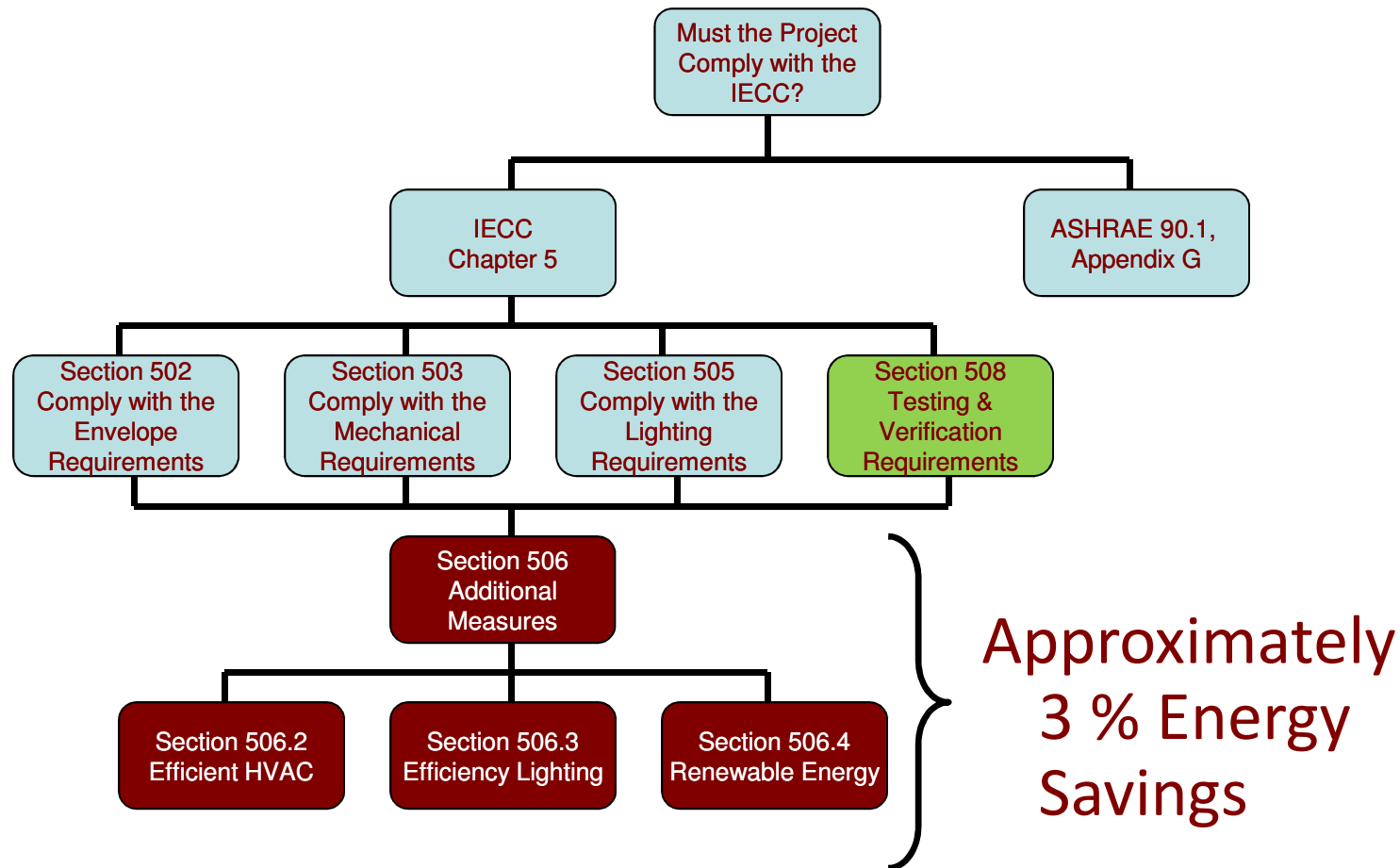
- Clarifies many points of scope, language and definitions
- Adds section for insuring Effective, continuous air barriers
- Improves Calculations for Mechanical Load and adds new complete language for economizers
- New emphasis on Testing and Verification of HVAC Systems and daylight controls in new Section 508
- Reduces energy needed for lighting by optimizing daylighting and control strategies

Simple Testing and Acceptance HVAC Systems + Lighting Controls

- Section 508 Elements
 - “Commissioning” Plan
 - Systems adjusting and balancing
 - Functional performance testing
 - Equipment
 - Controls
 - Acceptance
 - Completion requirements
 - Drawings
 - Manuals
 - System balancing reports
 - Reporting to owners



Additional Flexibility Added to the IECC



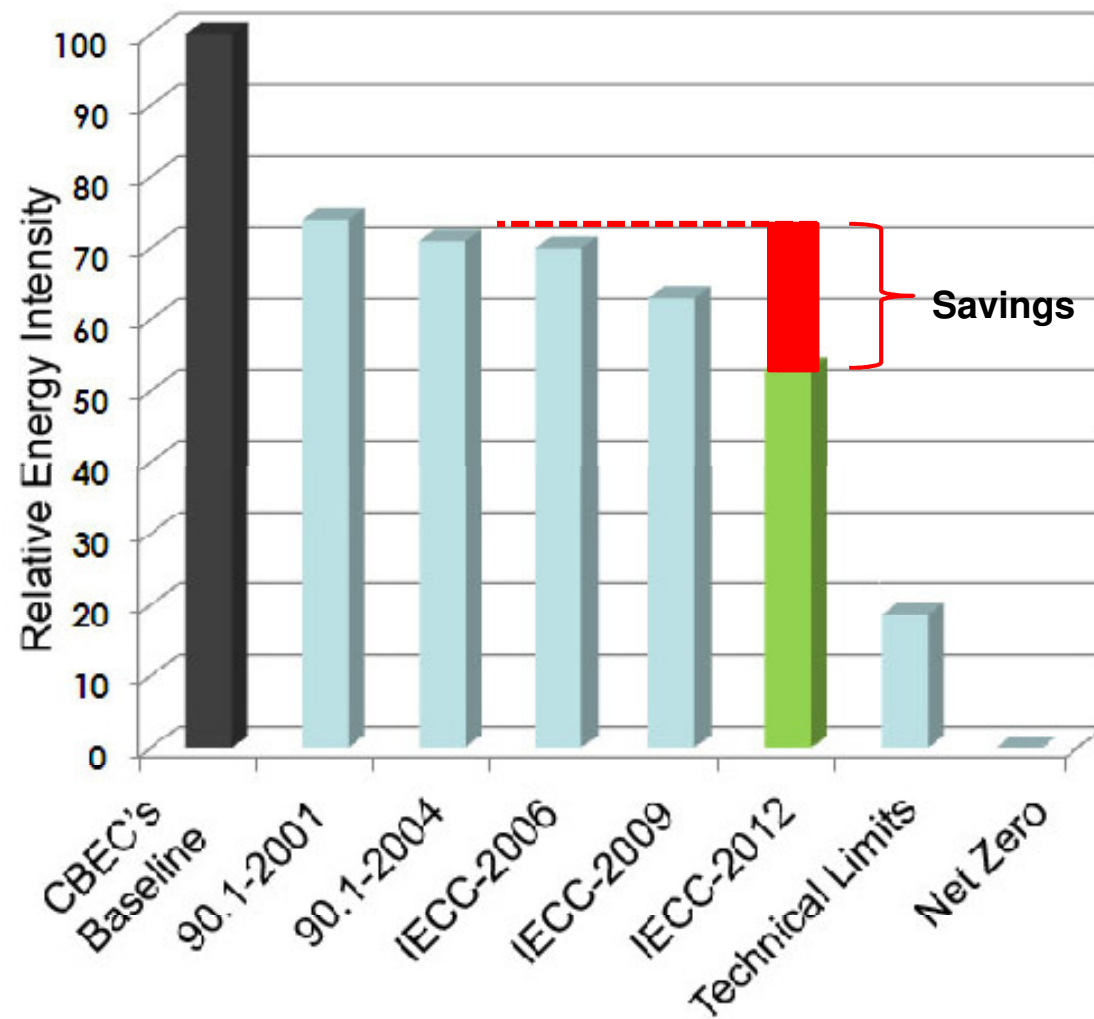
EC 157 – Updated Envelope Tables

- Tables incorporate extensive input from all stakeholders
- Values reflect currently available materials, products, standards and practices
- Passed unanimously at the Baltimore code development hearings

EC 165 – Fenestration and Daylighting

- New strategies for increased window to wall ratios and skylight areas
- Table values designed to maximize thermal savings plus visible light transmittance
- Incorporates the use of automatic daylighting controls to take advantage of natural lighting

2012 IECC Leverages Large Savings



Efficiency Gains

66 % =
or more of
vote total

approx.
40%

51 % =
or more of
vote total

up to
30%

50 % =
or fewer of
vote total

**12%-
22%**

residential

Efficiency Gains

66 % =
or more of
vote total

up to
30%

51 % =
or more of
vote total

**20%-
25%**

50 % =
or fewer of
vote total

10%

commercial
(EC 147, 157, 165)

New Buildings Institute

**[newbuildings.org/comprehensive-
iecc-proposal](http://newbuildings.org/comprehensive-iecc-proposal)**

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aia.org