The Role of Utilities in Stretch Codes

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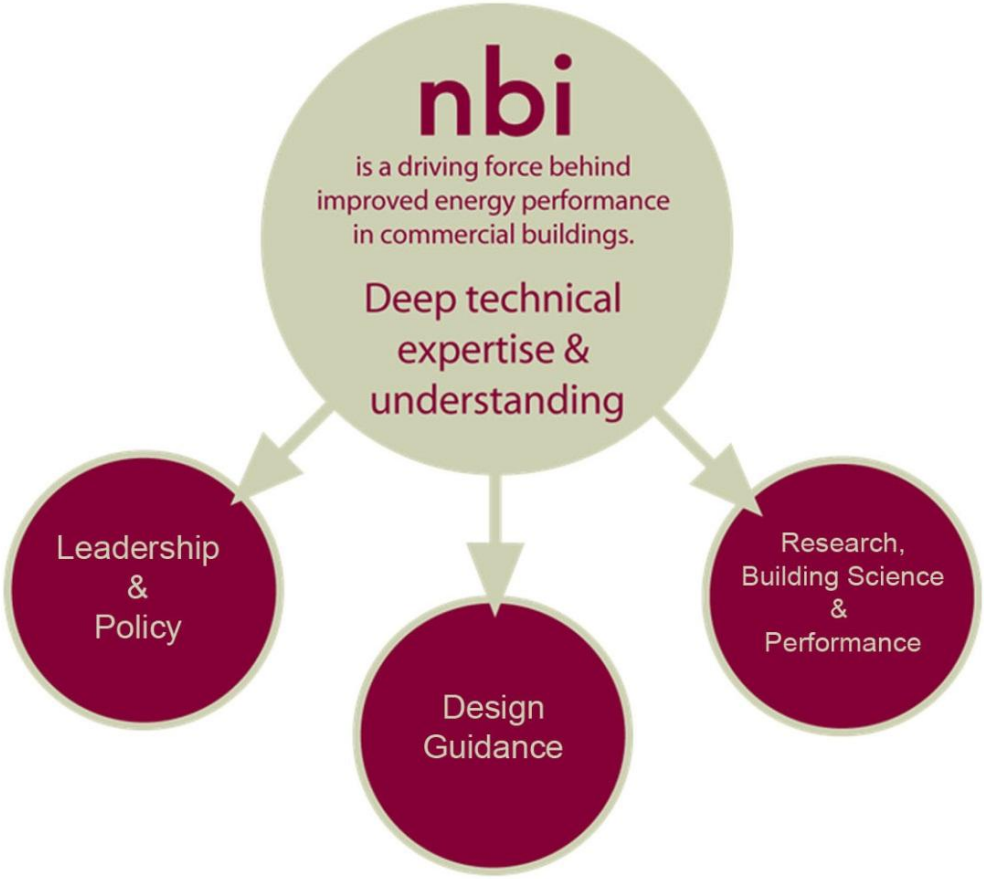

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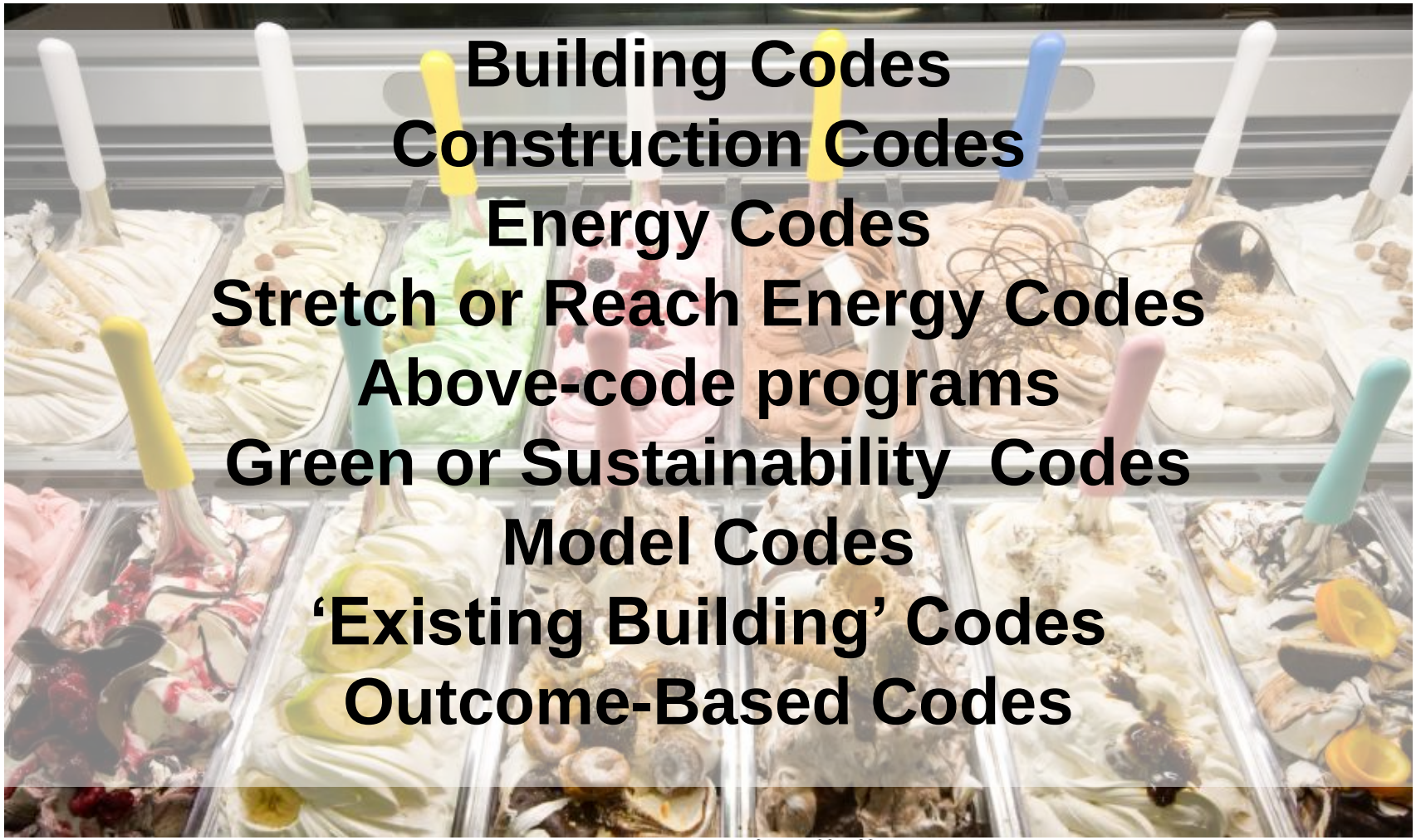
“31” Flavors of Codes ?



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The New 2012 International Energy Conservation Code

…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.

Needs to be adopted by states or cities.

Can be difficult to today's economy.

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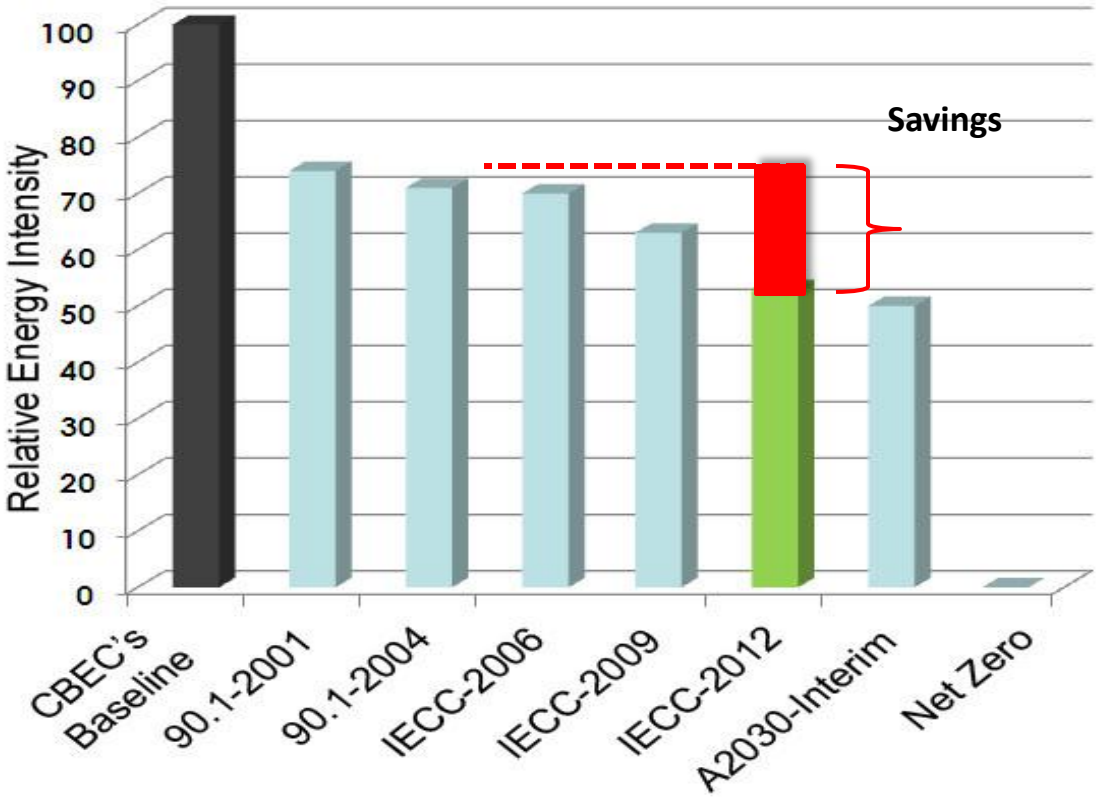
Model Codes and Energy Savings



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Stretch (or Reach) Energy Codes

- Results in more energy savings than a base energy code
- Multiple “enforcement” mechanisms
  - Adopted by cities
  - Used for public buildings
  - Tax or other incentive programs
- Signals where future codes are going
- Can work in tandem with utility programs
  - regulatory, timing, and savings

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Mandatory or Voluntary?

MANDATORY

Local /State Base Codes – **CA Title 24, IECC**

A VARIATION OF MANDATORY

Stretch or Reach Codes – **Mass. BBRS 120aa, OR Reach Code**

Green or Sustainability Codes - **CalGreen, IgCC, ASHRAE 189.1**

VOLUNTARY

Voluntary Rating Systems – **LEED NC**

Above-code utility programs

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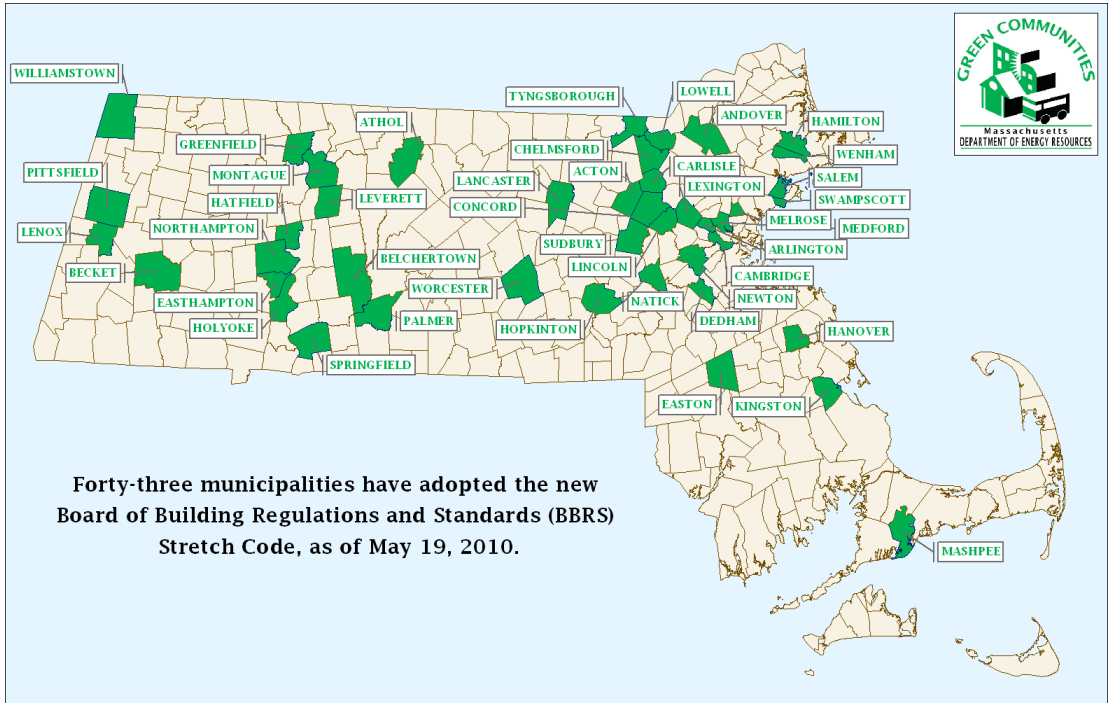
Mandatory by Jurisdiction

Mass. BBRS 120aa (based on Core Performance and 2012 IECC)



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Linking EE Programs to Stretch Codes

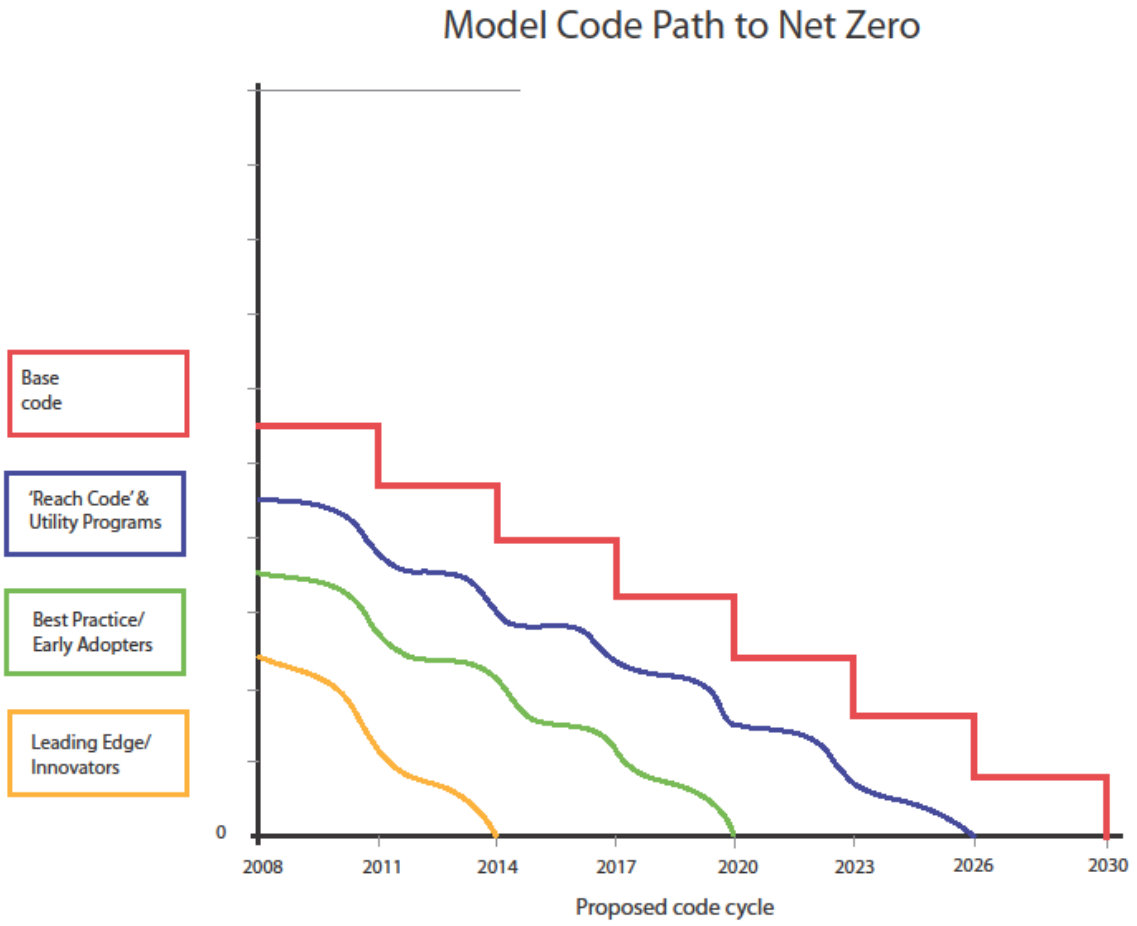
- NBI Core Performance program in six states as utility/program administrator beyond code program.
  - Prescriptive approach with some design guidance and option packages
- NBI Core Performance program formed the basis of the IECC 2012 national model code.
  - But, action is at state and local level
- EE programs can promote and train on both new technologies and integrated approaches.

Linking EE programs to stretch codes

- Link current utility programs to future codes (plow the ground)
- Provides method for EE programs to promote new technologies and high performance buildings
  - Training and education
  - Incentives to ease the cost of transitions
  - Scale lowers costs of newer technologies

Multi-tiered Approach

- Increasingly efficient base codes over time
- Reach Code anticipates base code
- Pilots can be test bed for emerging technologies



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What Happens to Programs When State Energy Code Increases?

- Program administrator should receive credit for some energy savings from code
- Program administrator in an excellent position to support with education
- NBI committed to developing the next generation approach – e.g. beyond IECC 2012 – so program continues

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Drivers for Stretch Code

- Utility interest: Claim energy savings
  - Program savings beyond base code
  - Development/adoption of code
  - Training and code implementation support
- Policy interest: Proof of concept for next base energy code; overcome obstacles
  - Costs and complexity of construction
  - Training and experience aid compliance
  - Supply chain development
  - Provide uniform next set of measures
  - Possible tax incentives or other support

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Sources of Stretch Energy Codes

- Model Energy Codes
  - IECC Chapter 5
  - IgCC Chapter 6
  - ASHRAE 189.1 Chapter 6
- Existing (or coming) state codes
  - Oregon (code based on IgCC and 2012 IECC)
  - Massachusetts (early version of 2012 IECC)
  - CA Reach Code (parallel to 2013 Title 24)

Summary: Features of a Stretch Energy Code

- Variation of Mandatory
- Energy rather than “Green”
- Results in more energy savings than a jurisdiction’s base code
- Can work in tandem with utility programs
- Provides guidance for next base energy code
- Informs market – eases next cycle adoption
- Can accelerate path to net-zero

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Conclusions

- Energy codes are advancing rapidly - IECC 2012 is a big step up in efficiency
- There is a likely need for voluntary and/or incentive programs to help make the transition to more aggressive codes
- Stretch codes are the critical intermediary step to support adoption of IECC 2012

Thanks!

Questions?

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