

Rhode Island Stretch Codes

Becca Trietch

Rhode Island Office of Energy Resources

2/15/2018



STATE OF RHODE ISLAND

**OFFICE OF
ENERGY RESOURCES**

Why RI Developed Stretch Codes



Signed in Dec 2015 Executive Order [15-17](#) requires OER, EERMC, National Grid, and Green Buildings Advisory Committee (GBAC) to:

- “...establish a voluntary aspirational or stretch building code based on the IGCC or equivalent by 2017.”
- “...code shall be available for use in all State construction and renovation projects as well as those in the private sector.”

In August of 2016 the Energy Efficiency & Resource Management Council (EERMC) in conjunction with National Grid approved a work plan and provided funding for Energy & Resource Solutions (ERS) to work with the OER and an advisory committee to develop draft stretch codes

Goals for Rhode Island's Stretch Codes

- Create a clear path for complying with the RI's Green Building Act ([§ 37-24](#))
- Support RI's Greenhouse Gas (GHG) emission reduction goals ([§ 42-6.2](#))
 - Below 1990 Levels:
 - 10% reduction by 2020
 - 45% reduction by 2035
 - 80% reduction by 2050
- Improve compliance with base code



How will Stretch Codes help?

Spurring & Directing the Market

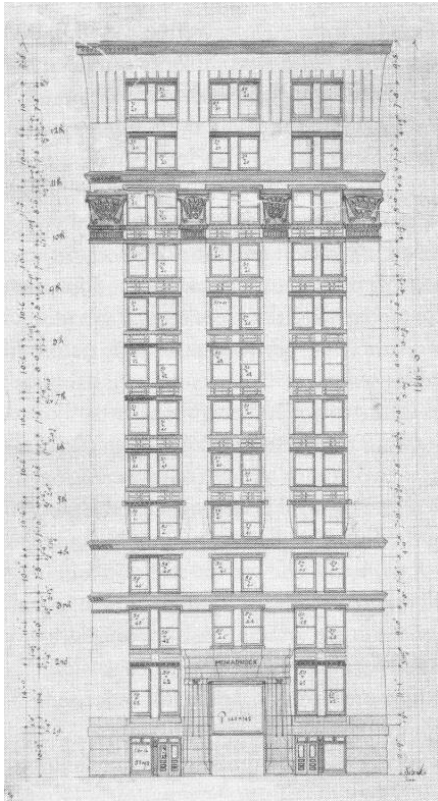
- Training the building and development communities in advanced building practices before such techniques are required by base code
- Accelerating market acceptance and adoption of more stringent energy efficiency codes
- Working in tandem with utility incentive programs



AND...

- **Stretch codes can directly supporting GHG emission reduction goals by:**
 - Increasing energy savings
 - Encouraging strategic electrification & Zero-Net Energy Buildings
 - Promoting renewable energy & electric vehicles
- **Other State Policies can also be supported, such as**
 - Resiliency initiatives
 - Health initiatives
- **Plus Stretch Codes provide clear compliance paths for builders, architects, engineers, etc. (prescriptive and model-based performance pathways)**

RI's Stretch Code Development Process



- Held monthly meetings with OER, EERMC, National Grid, GBAC, RI Building Code Commission, NEEP & other key stakeholders
- Goal to produce stretch codes that:
 - Can be used by state agencies or any other public or private entity
 - Will reduce energy usage below RI's energy conservation code
 - Help entities qualify for utility incentive programs
 - Will spur advanced green building techniques

Stretch Code Development Process

1. Engage stakeholders
2. Review model stretch codes, applicable high performance building programs, Rhode Island's amended 2012 Green Construction Code & RI's Green Buildings Act requirements
3. Researched near future base code development
4. Selected a model code/high performance building program and modify it with input from stakeholder group
5. Establish methodology for working with RI efficiency and renewable energy programs
6. Staff and stakeholder review of draft documents
7. Public comment period with public hearings
8. Produce final drafts

EE Program Support for Stretch Codes

- **Technical expertise in development of stretch code**
- **Existing “code compliance initiative” to add stretch code compliance trainings and technical support**
- **New Construction (above code) incentive programs to support portion of ‘incremental’ costs of stretch code and additional tech support**
- **Evaluation program can support a ‘process and impact’ evaluation study of the stretch code once its available.**

Final Stretch Codes Available in Mid-Late Feb 2018

Dec 22, 2017

Public
Comments were
due for the
Residential
Stretch Code

Dec 27, 2017

Public
Comments were
due for the
Commercial
Stretch Code

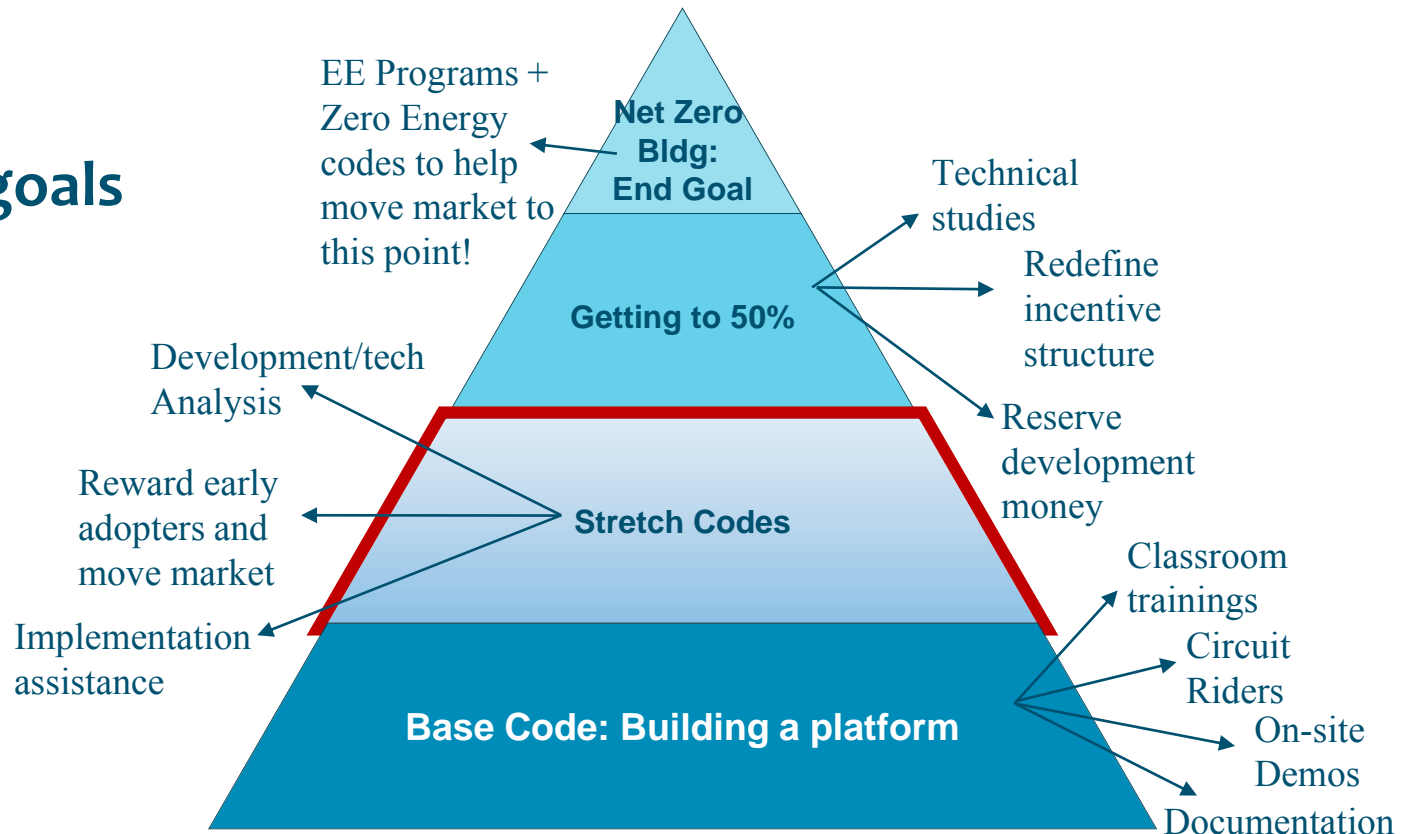
More Information & Documents:

<http://www.energy.ri.gov/policies-programs/lead-by-example/case-studies/stretch-code-development.php>

Rhode Island: Moving Forward

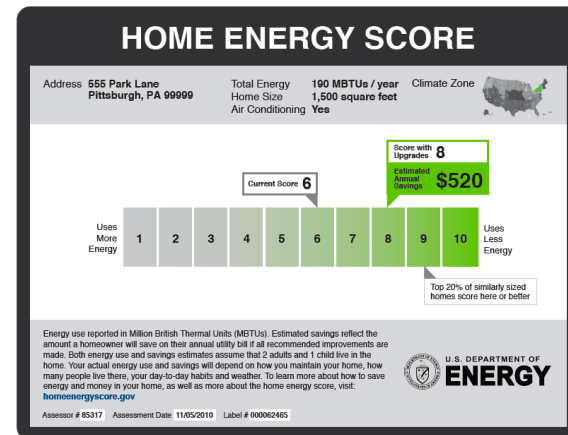
National Grid's Code Pyramid

- **GHG & ZEB goals**



Rhode Island: Moving Forward

- Stretch Code Upkeep
- Building Energy Labeling
- Better Integration with Renewables & Strategic Electrification Goals



Questions?



Contact Information:

Becca.Trietch@energy.ri.gov

401-574-9106

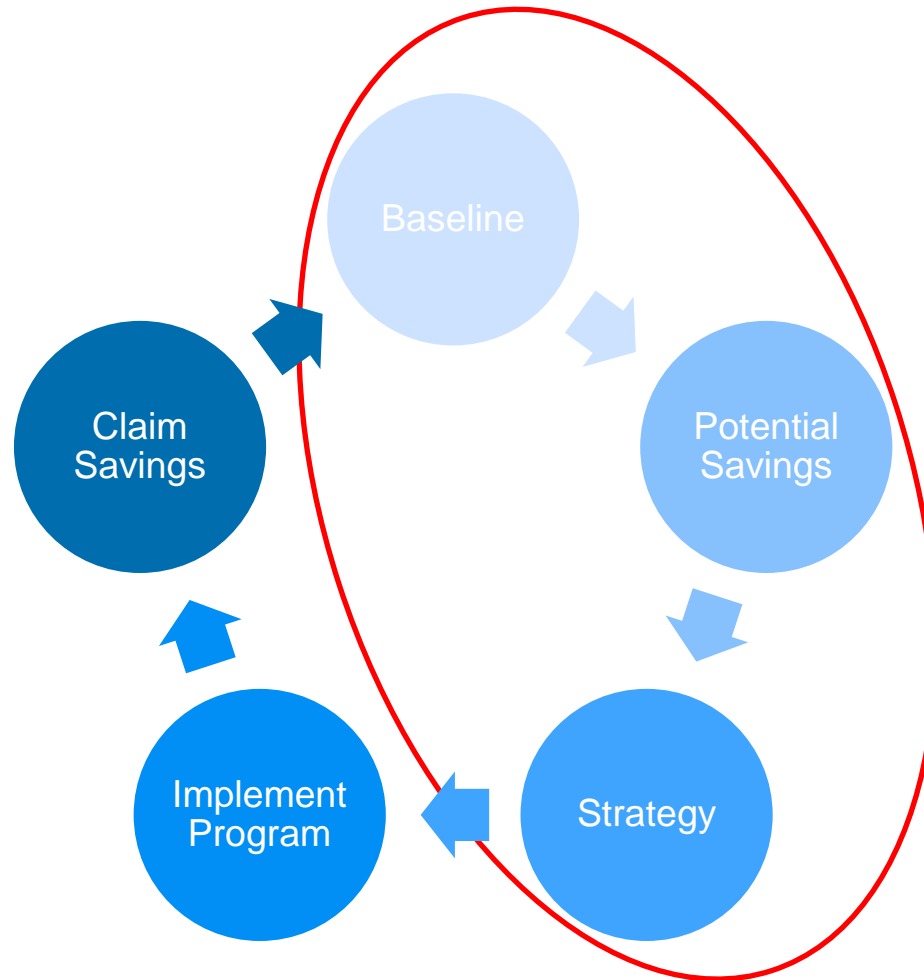
nationalgrid

HERE WITH YOU. HERE FOR YOU.

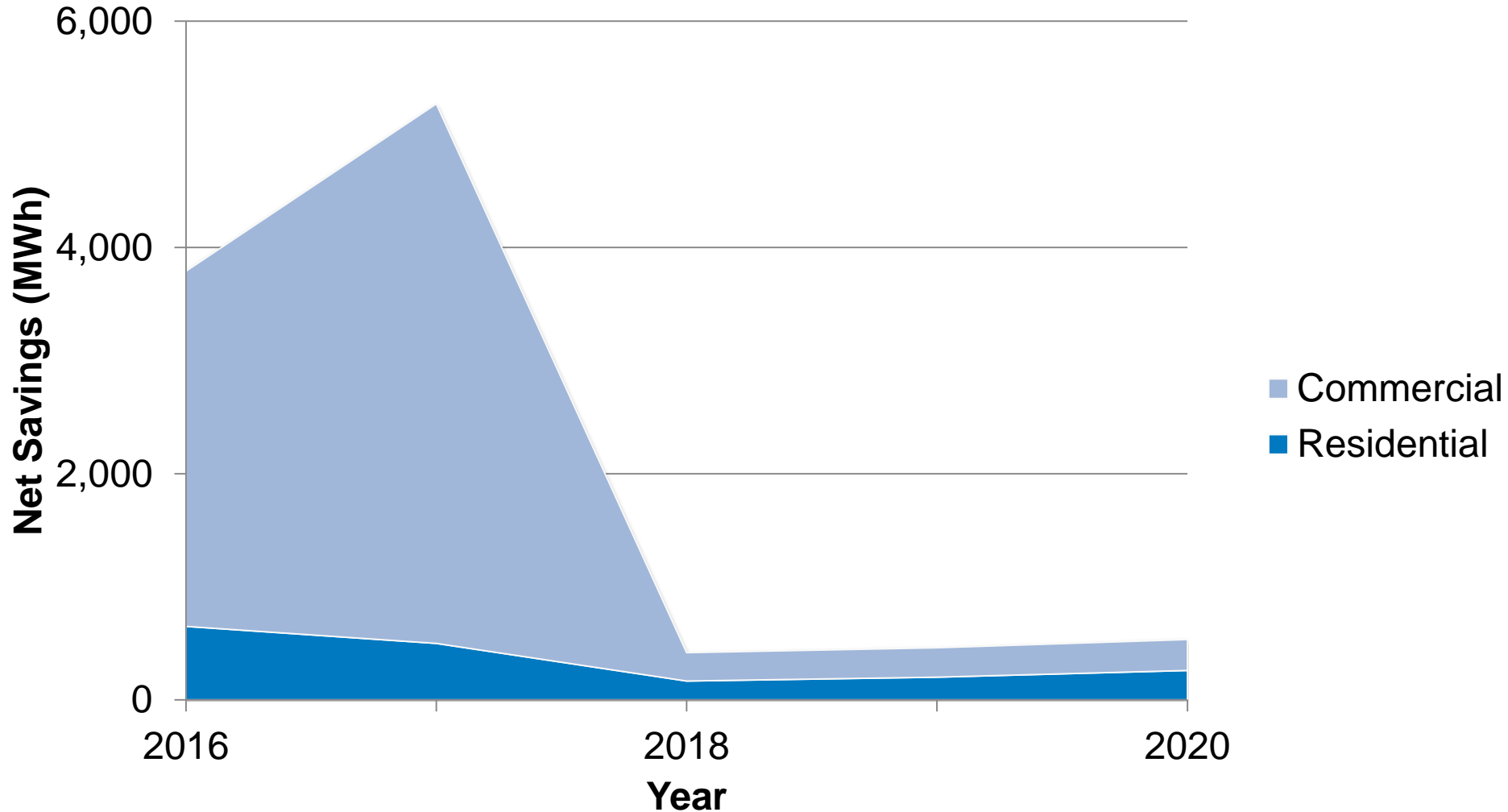
Code Compliance Enhancement Initiative (CCEI)

RI EERMC meeting
February 15, 2018

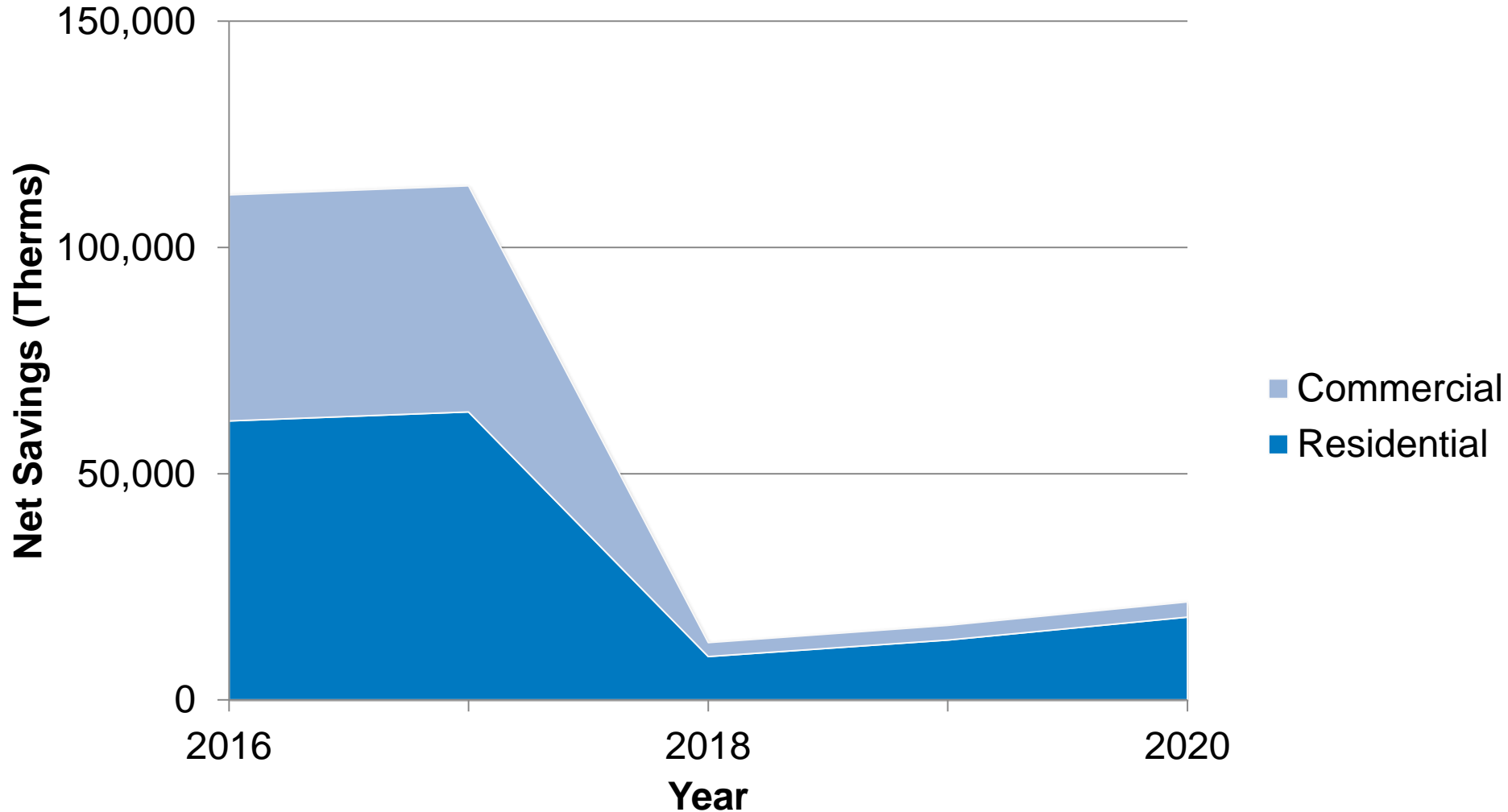




CCEI Electric Savings



CCEI Gas Savings



#3 - Baseline has improved!

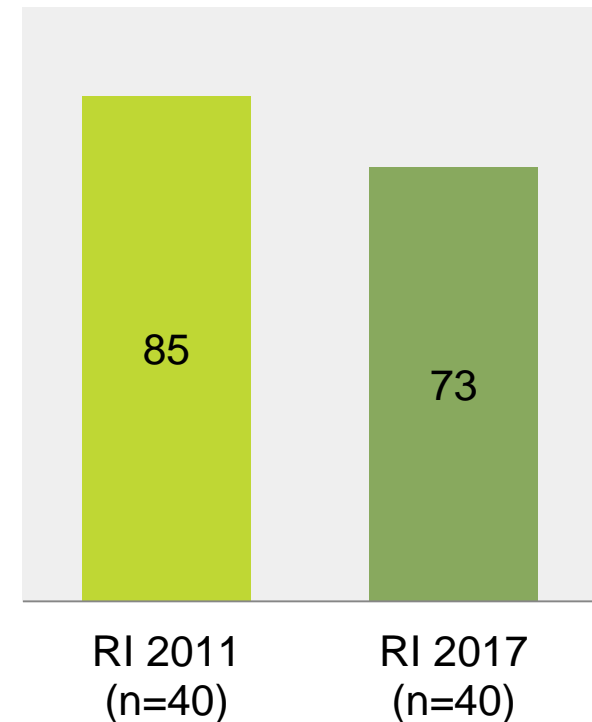
#2 – Code update in state of flux

#1 - No longer claiming renovation/rehab savings



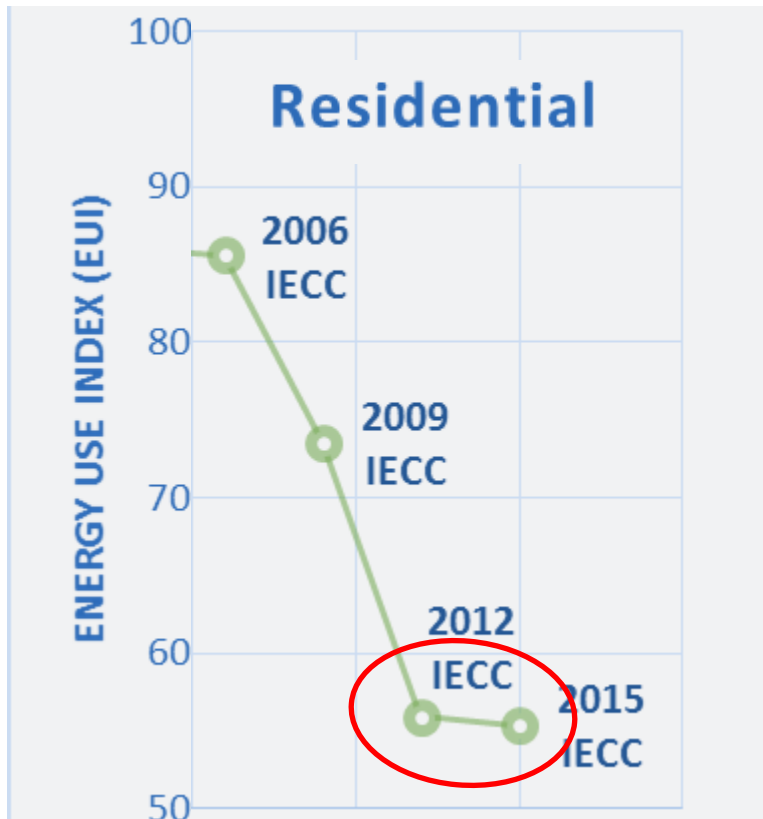
- Residential compliance rate
 - 58% in 2011 (2009 IECC)
 - 70*% in 2017 (“2012” IECC)
- Commercial
 - 78% in 2012 (2009 IECC)
 - 86% in 2016 (‘2012’ IECC)

**HERS Index Scores:
Non-program**



#2 - Delayed Code Update

- ETA: late 2018/early 2019
- Updating to “2015” IECC (not 2018)



- We need better data on construction volume and technical potential in order to...



- Code update, Reno/rehab recapture
- Stretch code (new)
 - Compliance support, municipal support
- Product standards and code enhancement (next up?)



- The Good News: code compliance is improving, thanks (in part) to CCEI!
- The Bad News: shrinking savings through traditional channels
- Pursuing new savings opportunities in this new cycle of CCEI

Questions?

Kevin Rose

Sr. Program Manager, Mass./R.I. Codes & Standards

National Grid

Kevin.Rose@nationalgrid.com