Appliance Standards and Building Codes

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Appliance Standards and Building Codes Program Goals

Appliance Standards Program Goals

Provide cost-effective energy savings through national appliance and equipment standards:

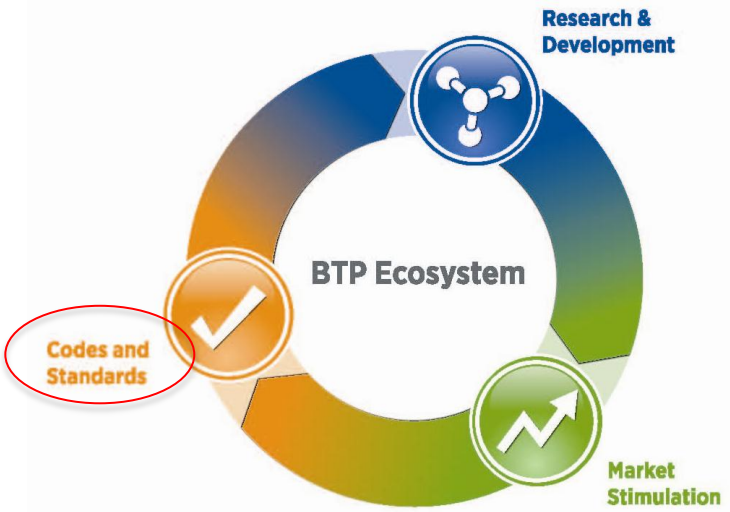
Issue 23 final rules by end of FY2015

Deliver at least 1 qBtu of savings annually by 2030

Building Codes Program Goals

Support the development, adoption, and compliance of cost-effective building energy codes:

Support increased adoption (up to 70%) of the most recent energy code throughout the Nation and support improved compliance to these codes by 2020



Appliance Standards Program Strategy: Expand, Accelerate, Enforce

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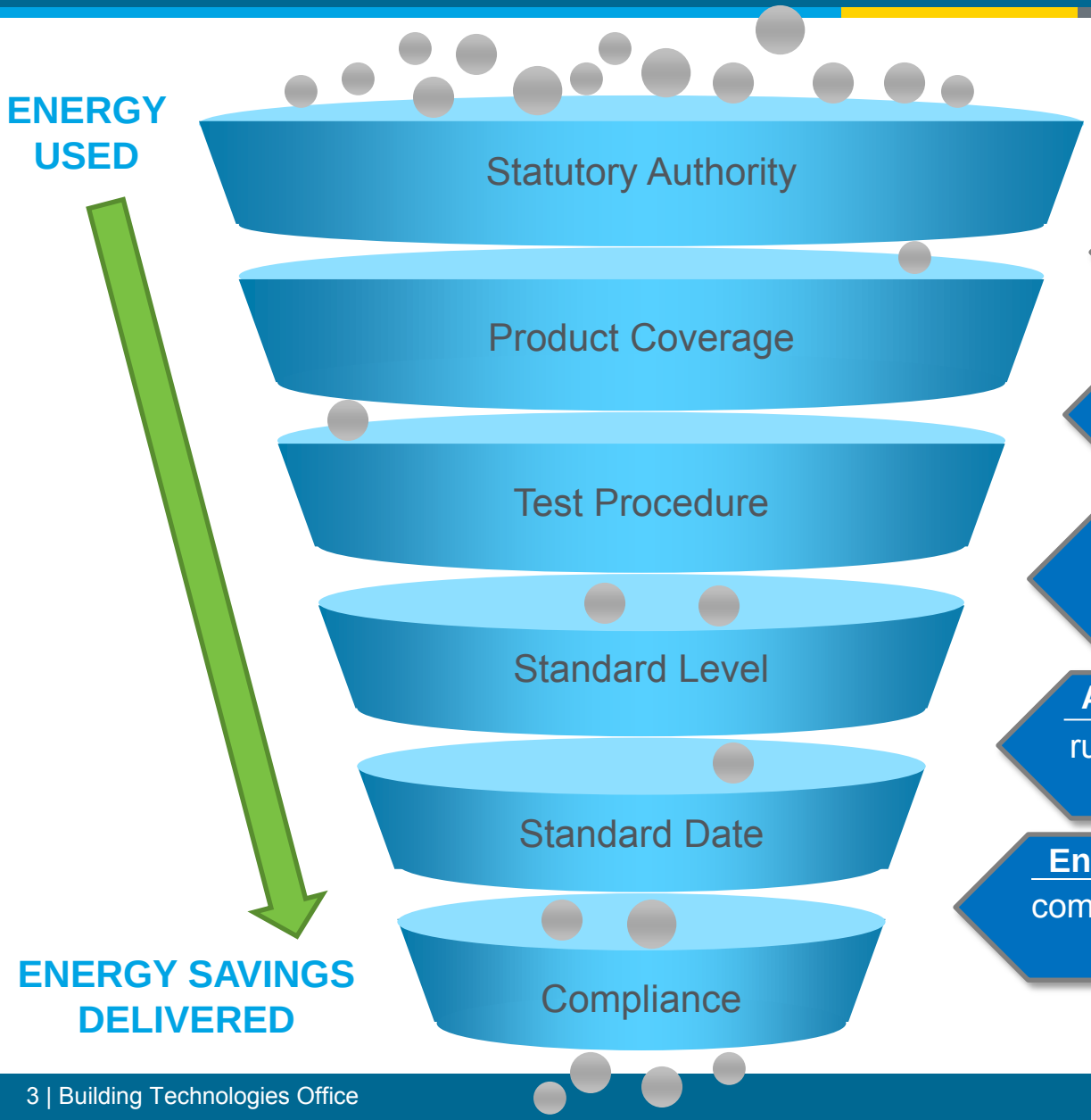

Strategies

Expand
scope by covering new products

Enhance
test procedures to capture all energy and enable innovation

Leverage
DOE R&D and international best practices

Accelerate
rulemaking schedules

Enforce
compliance to standards

Appliance Standards Program Strategy:
Statutory Requirements and Recent Expansion

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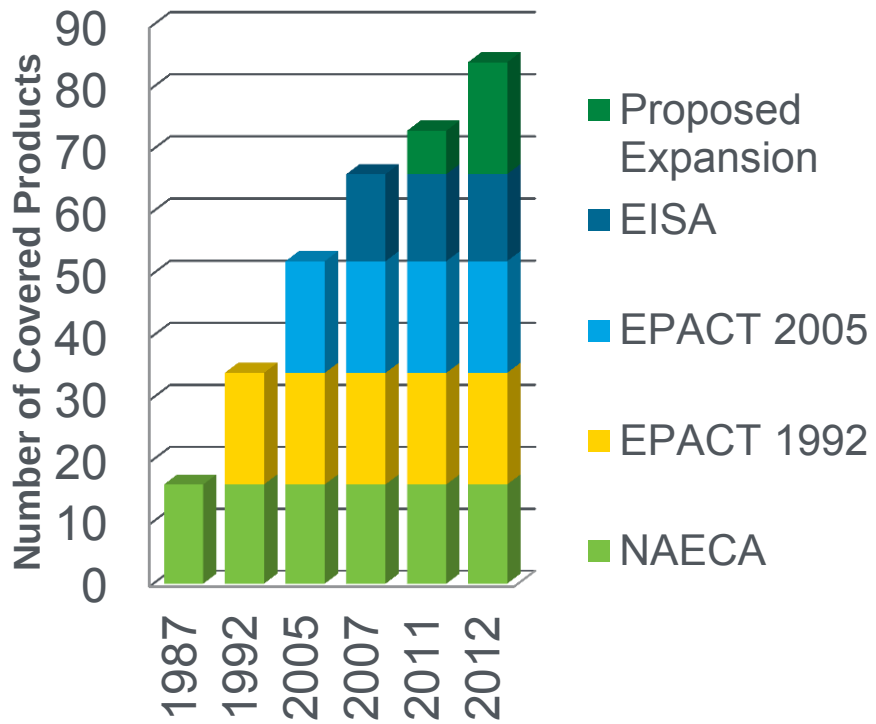
Expand Coverage:

Scope of proposed program expansion comparable to previous legislations

Total DOE Covered Products by Year



New Products Underway

- Set Top Boxes
- Compressors
- Commercial and Industrial Fans, Blowers, and Fume Hoods
- Commercial and Industrial Pumps
- Definite Purpose and Special Purpose Electric Motors
- Luminaires
- Miscellaneous Residential Refrigerators

Building Codes Program: Strategies for Energy Savings

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Building Energy Codes: Energy Savings through Development, Adoption and Compliance

Development:

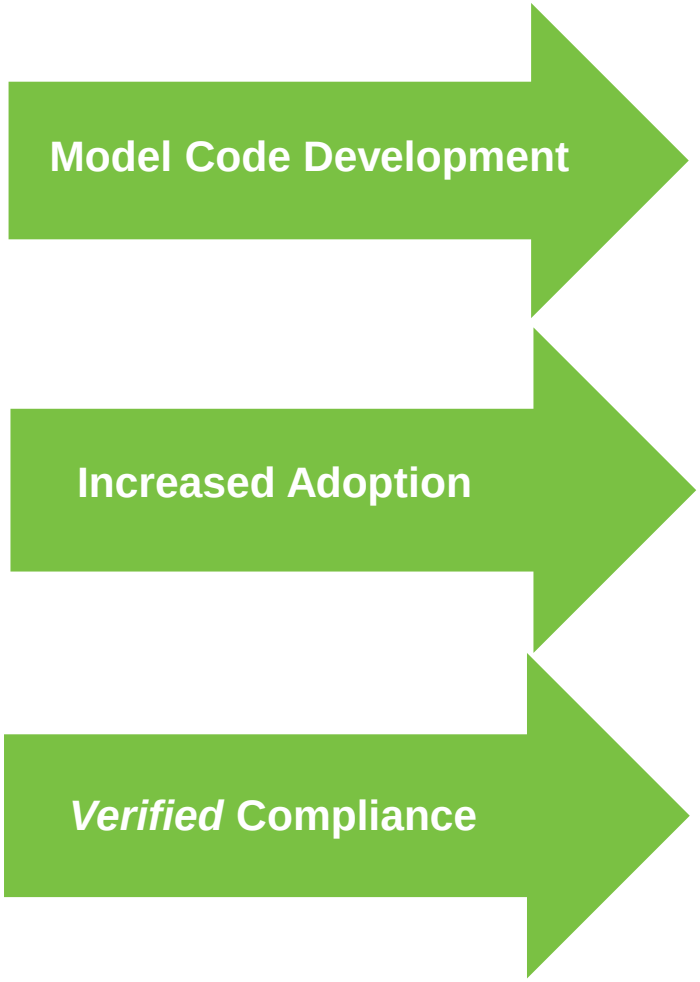
- *Easier to adopt. Easier to comply.*
- Cost-effective energy savings.

Adoption:

- Support state adoption of ARRA target codes, updated model codes (IECC and Standard 90.1), and stretch codes.

Compliance:

- Prioritizing compliance with building energy codes.
- Develop tool to assist utilities in quantifying potential energy savings through code compliance.
- Publish guidance, tools, resources, and provide ongoing technical assistance to states.



Building Codes Program:
Challenges to Guaranteeing Energy Savings

- **Code Development**
  - Reaching consensus on the details.
- **Code Adoption**
  - Avoiding attempts to weaken or rollback code.
  - Encouraging automatic update provisions for states.
- **Code Compliance**
  - Learning to design using new standards and techniques.
  - Implementing new requirements at the jobsite.
  - Providing staff and resources to plan, review, and inspect.

Building Codes Program:
Progress to Date

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Compliance and Adoption: Measuring Progress

Metrics	Baseline (~June 2011)	Intermediate (thru Sep 2014)	Progress to Date
# states that have adopted the 2009 IECC or equivalent	28 states	30 states	10 states (total of 35) + IN, FL, SC, NC, NV, CT, AL, OH, VT, KY - ME, HI
# states that have adopted ASHRAE 90.1-2007 or equivalent	34 states	30 states	9 states (total of 40) + AR, LA, SC, NC, NV, CT, AL, FL, VT - ME, HI
# states that have adopted 2012 IECC/90.1-2010	0 states	4 states	4 states +MD, CA, IL, WA (7 considering)
# states with 90% compliance plans	1 state	15 states	15 states + CO, KY, DE, MI, ID, IL, NH, NM, SC, TX, WV, NV, AL, IA, NV, UT
# states, or localities within states, have adopted “stretch” codes	1 state	10 states/ localities	1 state + MA

Building Codes: FY 13 Project for Promoting Code Compliance

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- What is It?
  - Standardized tool to help utilities and others estimate potential energy savings from increased compliance with energy codes
- Why is it needed?
  - Provides a standardized approach for utilities to quantify and receive "credit" from PUCs for programs that increase code compliance
- How will it work?
  - Utilities will provide basic data on projected residential and commercial sqft growth, energy mix (e.g., fuel source for heating), and target compliance rate
  - Calculation engine (peer reviewed, publicly available) will estimate the energy savings from increased compliance with *code*
    - *User interface, data inputs and outcome of the estimation will be presented in a simple concise format and in units relevant to utilities (e.g., therms and kWh)*
- *What is DOE's commitment?*
  - *Support thr*ough tool development, demonstrations, webinars, online tutorials and Help Desk
  - Provide the standardized tool by September 2013

Codes Projects in Review

Strategy: The multifaceted strategy works from the “top down” with and through key national and regional level organizations to reach to those individuals that can directly impact the deployment of building energy codes to achieve DOE’s adoption and compliance goals.

Team: The projects/organizations below provide technical assistance to support increase adoption and compliance.

- The Building Codes Assistance Project
- Midwest Energy Efficiency Alliance
- Southeast Energy Efficiency Alliance
- National Association of State Energy Officials
- Northeast Energy Efficiency Partnership
- Southwest Energy Efficiency Partnership
- Northwest Energy Efficiency Alliance
- Pacific Northwest National Laboratory

Appliance Standards and Building Codes Program: FY13 Budget

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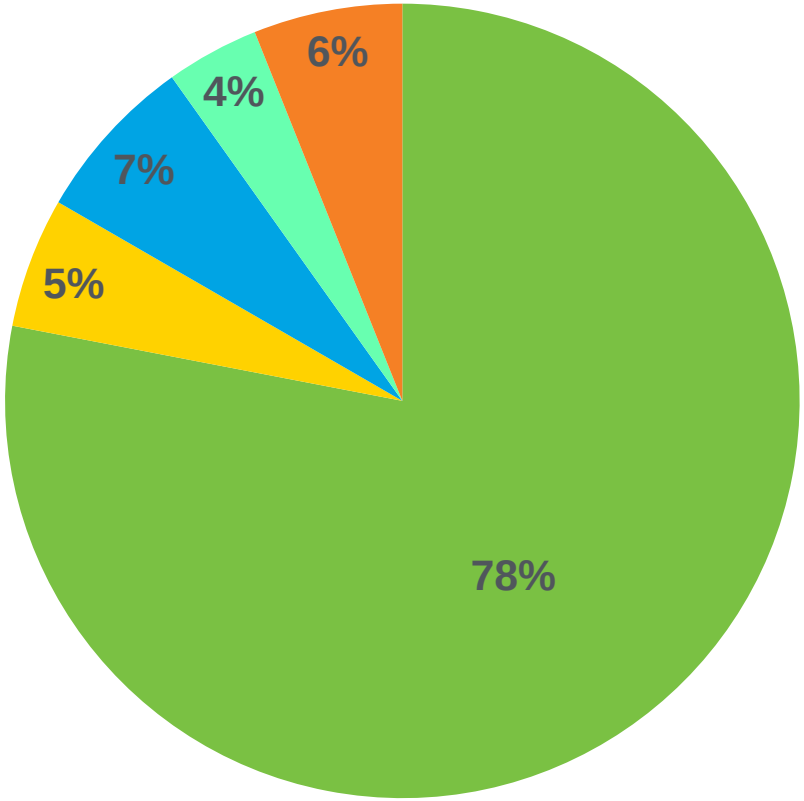
FY13 Budget by Sub-Program (Total $61.2M)



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