RESNET CONFERENCE

ATTRIBUTING BUILDING ENERGY CODE SAVINGS TO ENERGY EFFICIENCY PROGRAMS

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ENERGY FUTURES GROUP

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Energy Futures Group Consulting

Areas of Expertise

- Policy Development
- Program Design
- Building Codes
- Evaluation
- Cost-Effectiveness

Range of Clients

- Government Agencies
- Advocates
- Regulators
- Utilities

Clients in 15 states/provinces plus regional, national and international organizations.

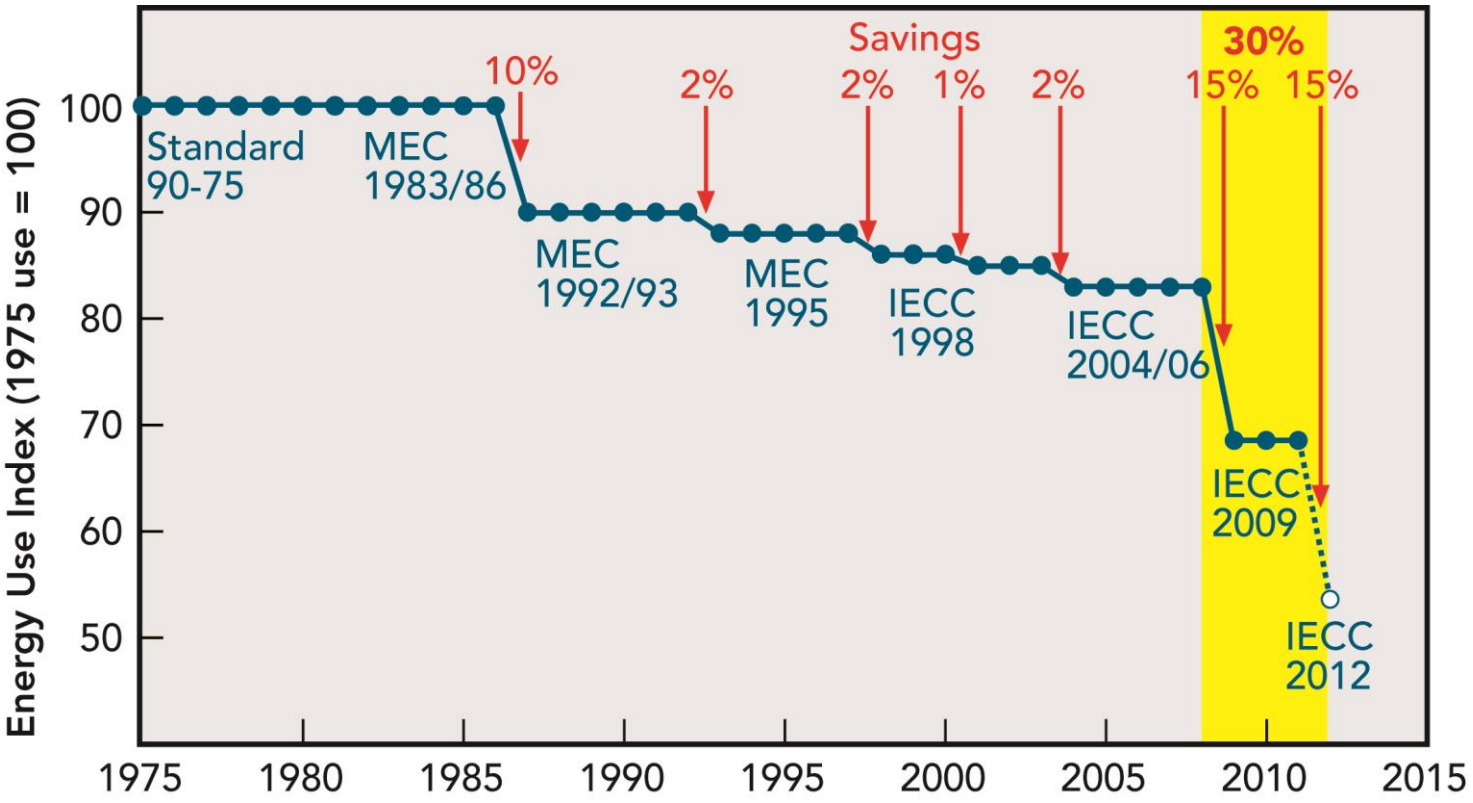
Presentation Overview

1. The relationship between utilities and energy codes
2. The concept of code savings attribution
3. State examples
4. Opportunities for advocacy
5. Q&A

Energy Codes in a Utility Program Environment

- Many utilities (PAs) have supported energy codes as part of Residential New Construction programs
- Most have not claimed savings for supporting energy codes
- Natural disincentive to support increased compliance or adoption of more stringent codes
- As baselines rise (through compliance & new codes):
  - Less savings available
  - More expensive to capture
  - Programs become less "cost-effective"
- So, why should utilities support better energy codes?

Energy Code Trends



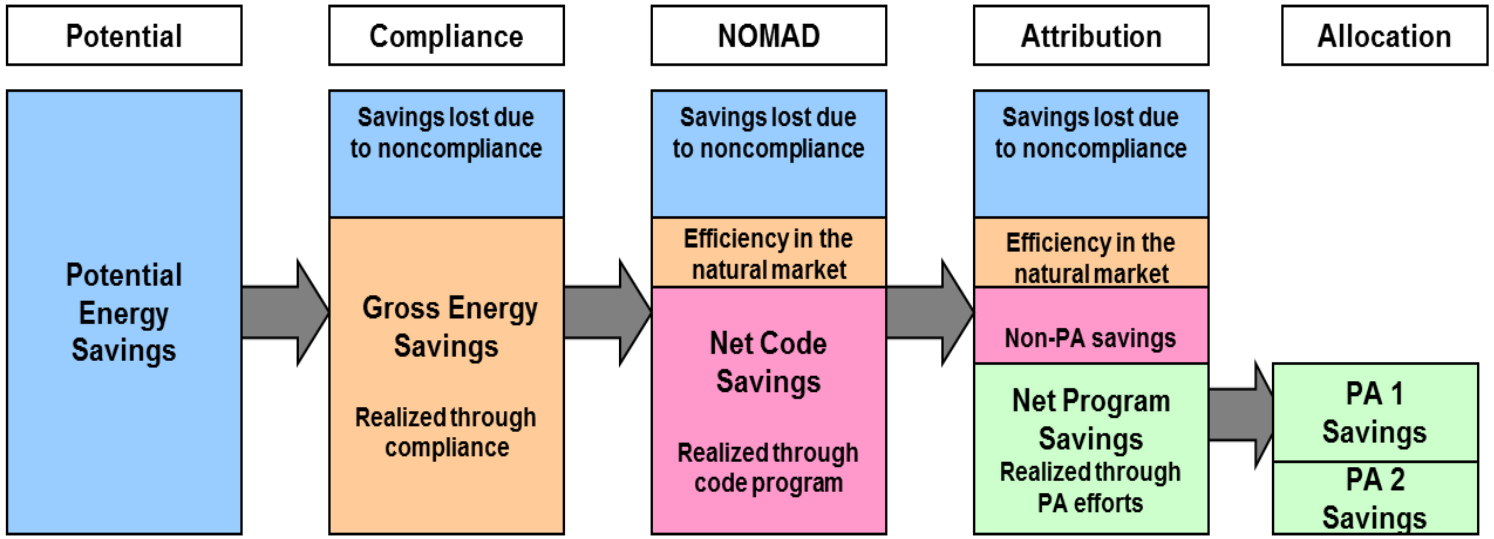
Source: PNNL

New Utility Savings Paradigm

- If utilities can *claim* savings from supporting codes, they will want to support (and not resist) more stringent energy codes and code compliance
- Savings options:
  - Changes in compliance rates
  - Adoption of energy codes that are:
    - More stringent
    - Adopted sooner than would have occurred otherwise
  - Implementation of "stretch codes"
  - Building energy codes *and* appliance standards

Code Savings Attribution to Utilities/PAs

PA efforts can affect::
- Potential savings through measures and stringency of adopted code
- Gross savings through level of code compliance



Potential savings based on
- Construction activity
- Baseline energy consumption
- Required level of energy consumption

Gross savings take into account
- Savings not achieved by buildings that do not fully comply

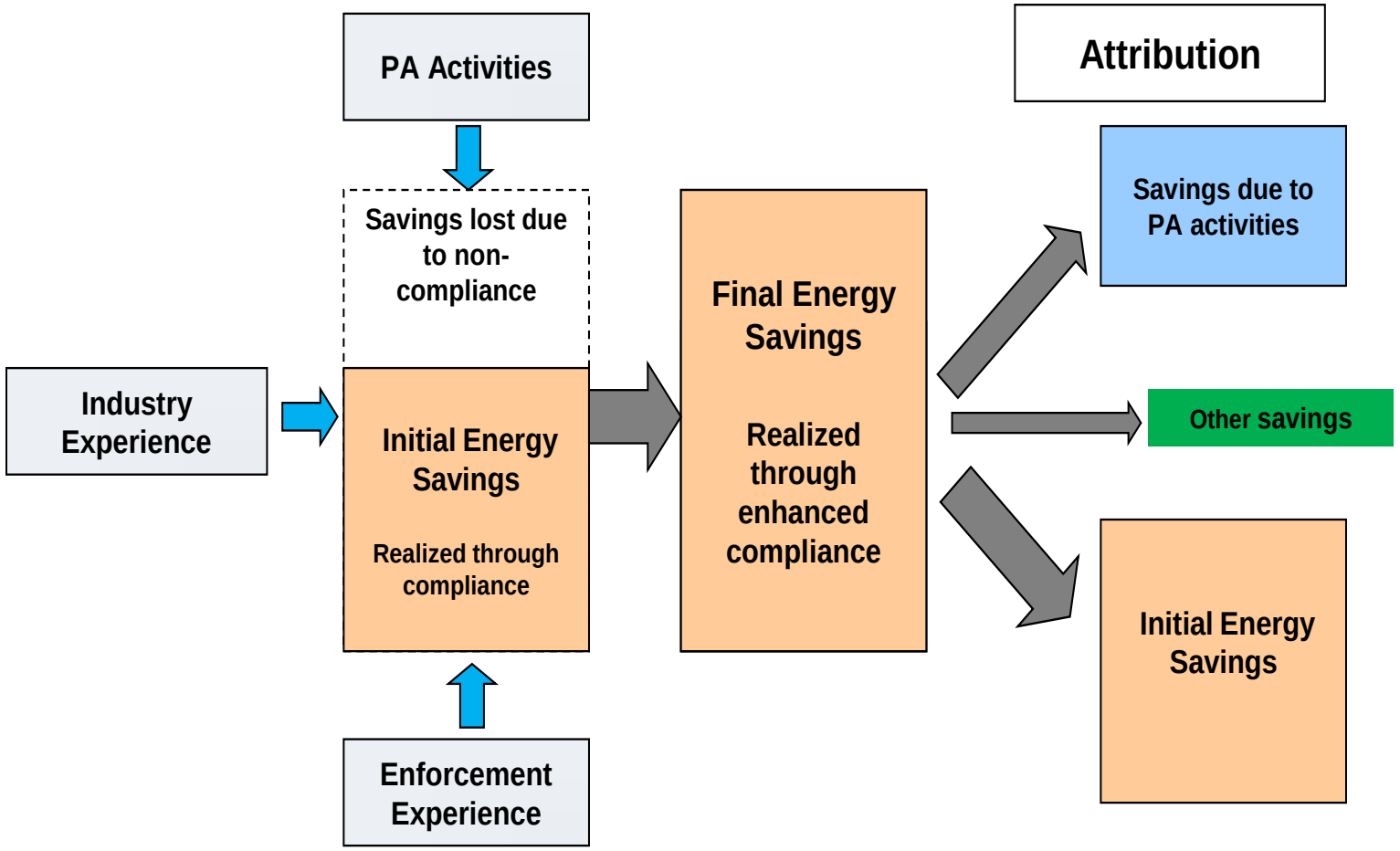
The natural market can include:
- Early adopters of new technologies
- Code officials that encourage beyond-code construction
- Builders that choose efficiency

Net program savings take into account
- Contribution of other market actors to code savings

Program savings get allocated to PAs based on
- Relative contribution to savings

NEEP Attributing Building Energy Code Savings to EE Programs – Feb. 2013. Cadmus

Savings to Utilities/PAs



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States Where Code Savings Count

- ***California***
- ***Arizona***
- ***Rhode Island***
- ***New York***
- ***Oregon***
- ***Washington***

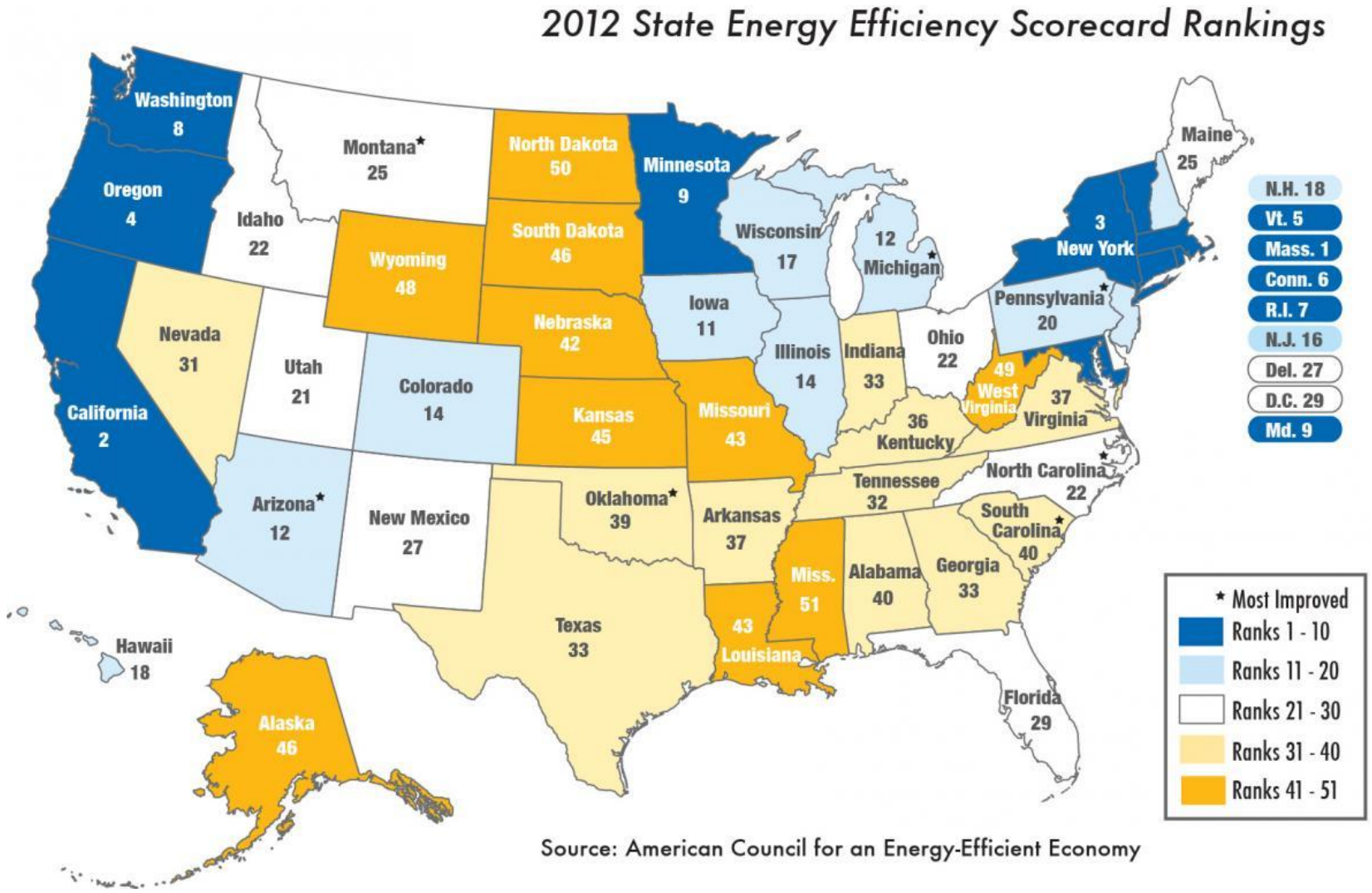
Rhode Island

1. Code compliance support
   - Trainings
   - Technical assistance energy code circuit riders
   - Support for third-party inspections
   - Documentation tools
2. Appliance standards development & advocacy
3. Development of voluntary “stretch” codes
4. Base (IECC) code advocacy

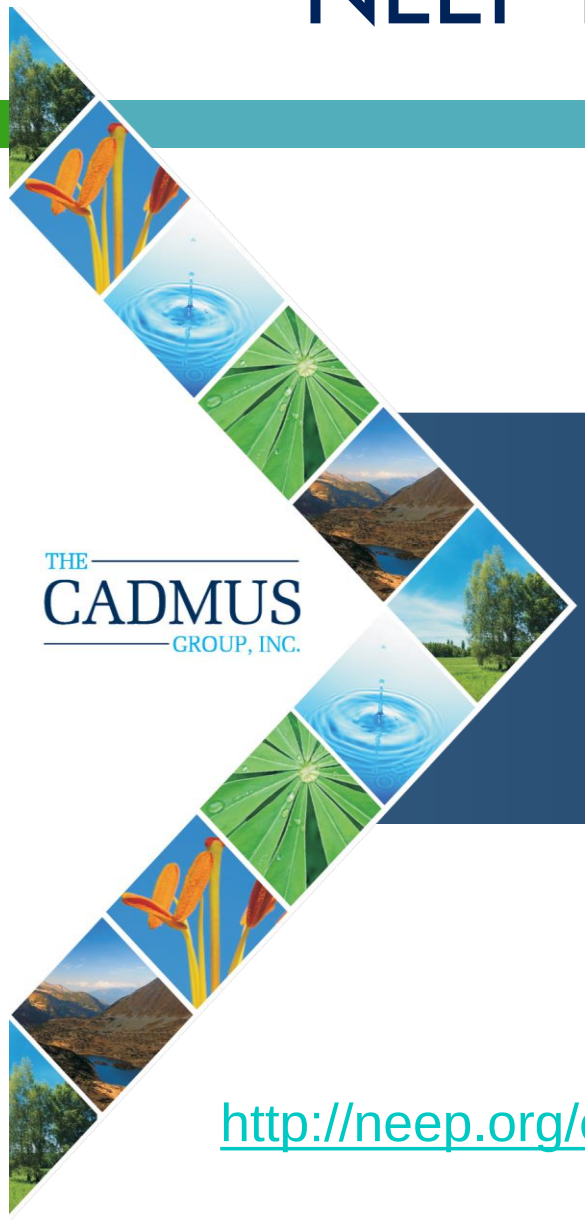
Advocate for Code Savings Attribution

- Utilities
- Regulators (PUC)
- Energy Office
- Local Energy Advocates
- Legislators

States More Likely to Consider Savings Attribution Policies



NEEP Report



THE CADMUS GROUP, INC.

Attributing Building Energy Code Savings to Energy Efficiency Programs

http://neep.org/emv-forum/forum-products-and-guidelines#codes

Q&A

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