



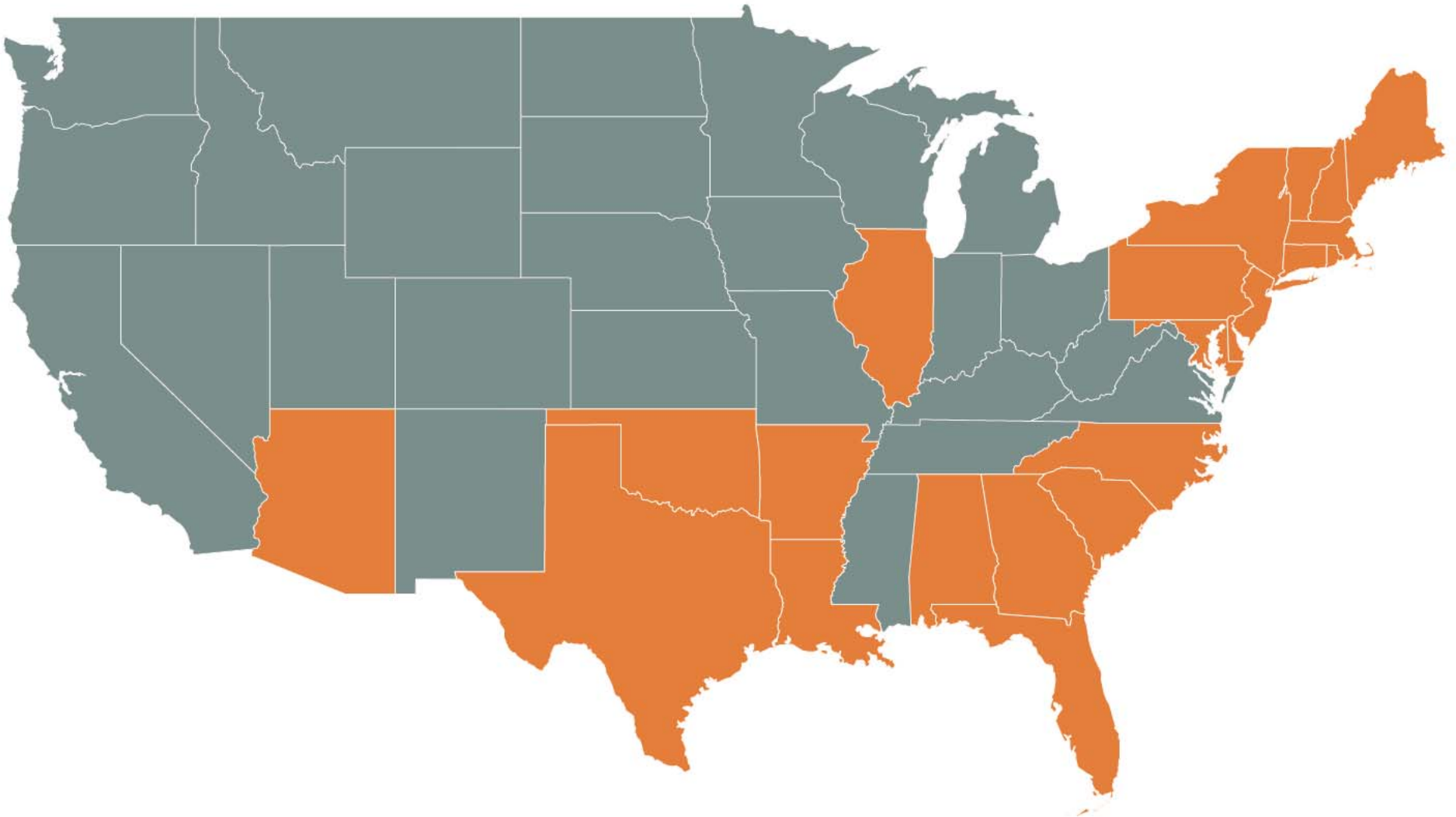
Residential Energy Code Support from Utilities in the Southeast

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Advanced Energy -Energy Codes Background

- *Success* with Energy Codes manuals, web resources and training development
- Providing DOE Compliance measurement in AR/GA and compliance training and support in Arkansas.

Advanced Energy –Success with Energy Code



Building Codes Process

- **Codes Development**
 - National Model Energy Codes
 - Residential = International Energy Conservation Code (IECC)
 - Commercial = ASHRAE 90.1 'Energy Standards for Buildings'
- **Codes Adoption**
 - At State, County, or City level
 - Often amended to some extent
- **Codes Implementation and Enforcement**
 - Enforced at local level by building inspectors and code officials
 - Level of compliance can vary greatly

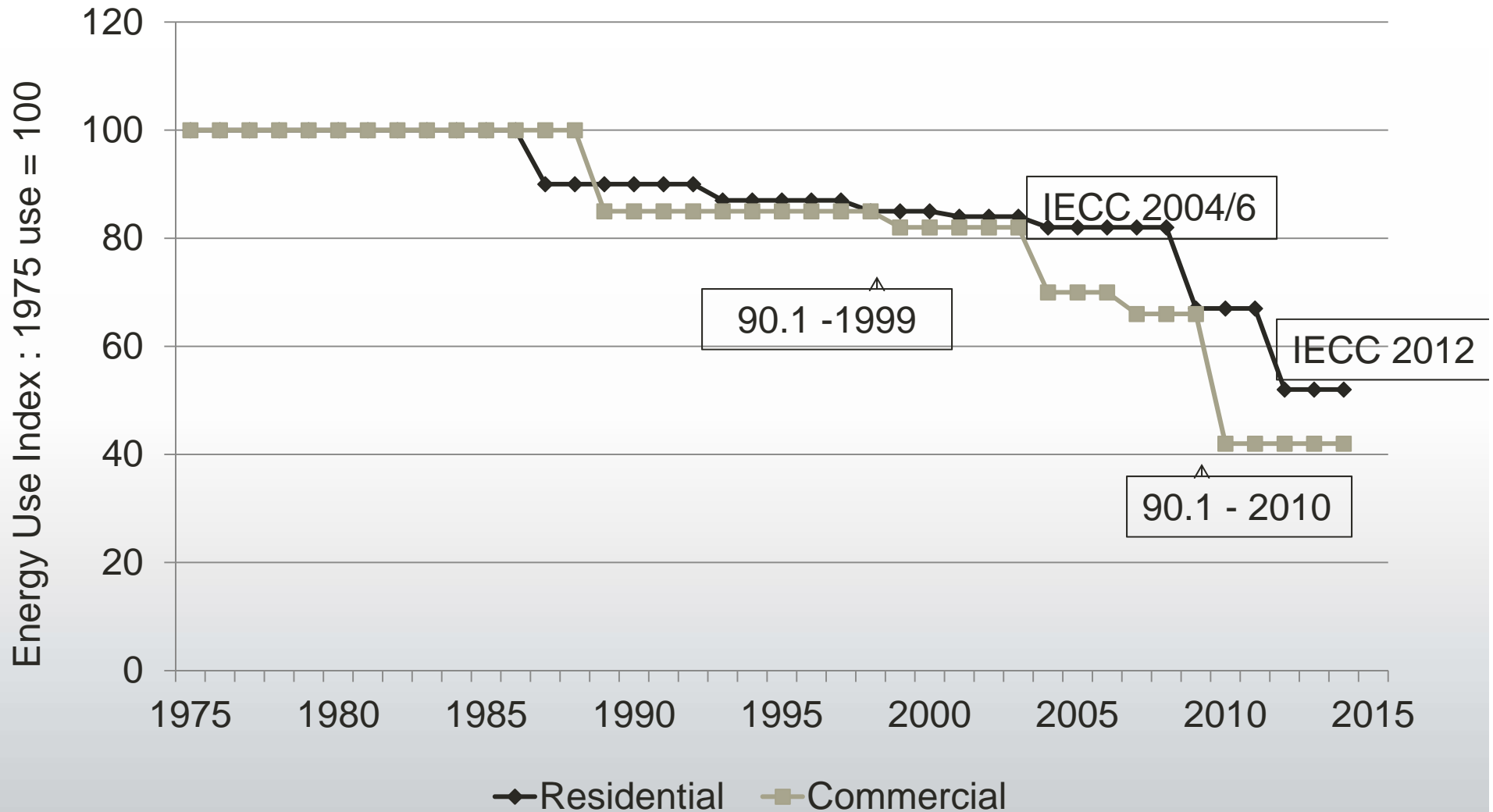
Why the interest in supporting Codes and Standards?

- Significant savings potential
- Can offer highly cost effective savings
- Unprecedented codes increases in recent years
- ARRA Requirements (states that accepted funds)
 - Commit to adopting national model codes
 - Implement a plan to reach 90% compliance by 2017
 - Create plans to measure code compliance w/i 8 years

Significant Cost Effective Savings

- **30% Savings in Recent Codes Cycles**
 - **Commercial Codes (ASHRAE 90.1)**
 - 2010 is 30% more efficient than 2004
 - **Residential Codes (IECC)**
 - 2012 is 30% more efficient than 2006

Dramatic Code Changes in Past Decade



Source: ACEEE 2012

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Concerns/Questions we've heard from Utilities

- Utilities do not want to be the enforcer of something that is supposed to be mandated
- Utilities do not want to or even be perceived as an advocate for code adoption
- What effect does energy code support have on above code programs?
- How do you prove savings?
- How are you going to prove you aren't double counting?

Separating out the savings

- **X kWh/yr: homes with the code and no utility training/codes support program (i.e. code only homes) = ____% energy savings**
- **X kWh/yr: homes with the code and with a utility training/codes support program (codes+training) = ____% energy savings**
- **X kWh/yr: homes in a utility above code program = ____% energy savings(as compared to code only)**

The Utility's Role

- Utility is positioned as a facilitator and help translate the code into specific construction details and process for builders and subs
- Message to builders
 - Get better work from your subcontractors
 - Understand what each detail should look like for compliance
 - Reduce callbacks
 - Meet the code more efficiently = reduced costs

The Utility's Role

- Work with code officials to increase understanding of building science and relationship to energy codes
 - Improve consistency in enforcement
 - Reduce conflicting guidance
- Work with communities on codes technical support
- Work with Home Energy Raters and other allies to ensure consistency

Benefits of a Codes and Standards Program

- Drive low cost energy savings
 - Reduce program rebate/implementation costs
- Capture a broader share of the market
 - Reach a higher % of total customer sites
 - Reduce lost opportunities from non-participants
- You can coordinate with your above-code programs to ensure market consistency
- Better understand code compliance rates to inform resource planning decisions
- Helps utilities support new codes instead of opposing codes due to impacts on programs
- Greatly expands program reach – greater equity for ratepayers

Considerations for Developing a Codes Initiative

- What are the savings goals?
- How are savings goals set?
 - Georgia = IRP Process
 - North Carolina=REPS (Renewable Energy and Energy Efficiency Portfolio Standard)
- How are savings from energy codes tracked and treated in setting and measuring goal achievement?
- What utility performance incentives are employed? Do they apply to codes programs?

Utility Support Examples

North Carolina : Recipient of Energy Code Compliance Study Funding



Duke Energy Progress:

- Designed RNC using stretch code and guarantees results
- Provides Energy Code technical training, focused on both basic code and stretch code
- Provides Realtor and Appraiser Education
- Participated in a Delphi Panel to get closer to real baseline

Utility Support Examples

Georgia: Recipient of Energy Code Compliance Study Funding

Georgia Power

- Funded Energy Code trainings and printed materials in 2013
- Provides above code training to builders
- Provides Realtor and Appraiser training
- Meetings with PSC and SEEA/AE team
- Involved in stakeholder meetings
- Moving forward with over-sampling



Utility Support Example Illinois

Illinois

- Illinois statewide energy code support program.
- Involves Ameron Illinois, ComEd, Peoples Gas, Nicor, IL Dept Commerce and Economic Activity
- Involves:
 - Code Collaborative, Training and Resources, Circuit Riders, 3rd Party Inspectors/Plan Review





Thank you

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