



Landscape of Energy Efficiency New Homes Programs

CEE 2017 New Homes Program Summary Results and Findings

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October 23, 2017
Chicago, IL

2017 ENERGY STAR Certified Homes Stakeholder Meeting

CEE MISSION

As the Consortium for Energy Efficiency, United States and Canadian efficiency program administrators develop cutting-edge strategies to accelerate commercialization of energy efficient solutions to benefit gas and electric customers, utility systems, and the environment.

- ▶ CEE brings together 100 program administrators serving all or part of 45 states and 7 provinces
- ▶ CEE is a member-driven nonprofit, governed by a Board of Directors from member organizations
- ▶ Program administrators formed CEE to reach binational markets and accelerate market uptake of efficient products and services, which achieves lasting public benefit of energy efficiency

Agenda

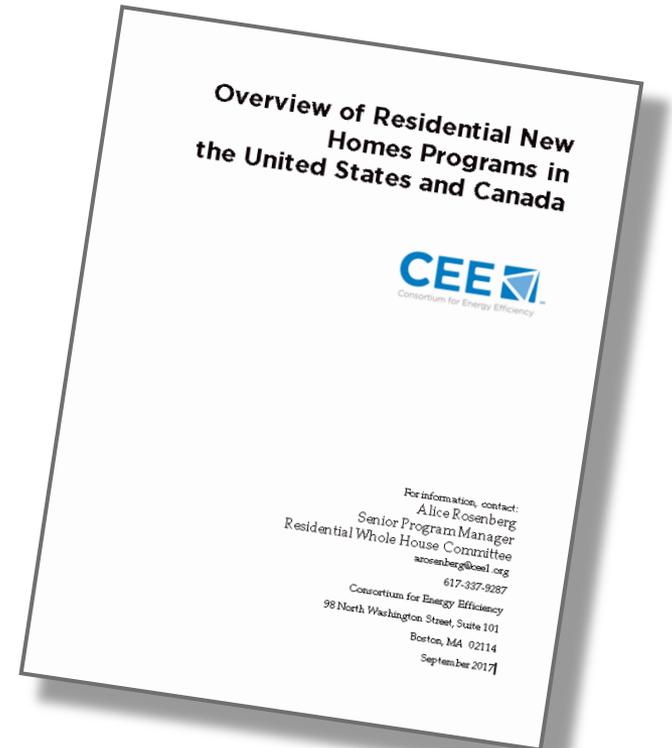
▶ CEE Program Summaries

- Objectives and purpose
- Data collection process and methodology

▶ Initial 2017 New Homes Results

- Organizational breakdown information
- 2017 program details and statistics
- Changes over the past several years
- Themes and emerging trends
- Other insights and commentary!

▶ Questions and Group Discussion



CEE Program Summaries

- ▶ Characterize the current landscape of CEE member offerings across the US and Canada
- ▶ Includes both detailed individual program information as well as aggregate data about the landscape of efficiency activity
- ▶ Abridged versions of these publications are available online to all stakeholders at:

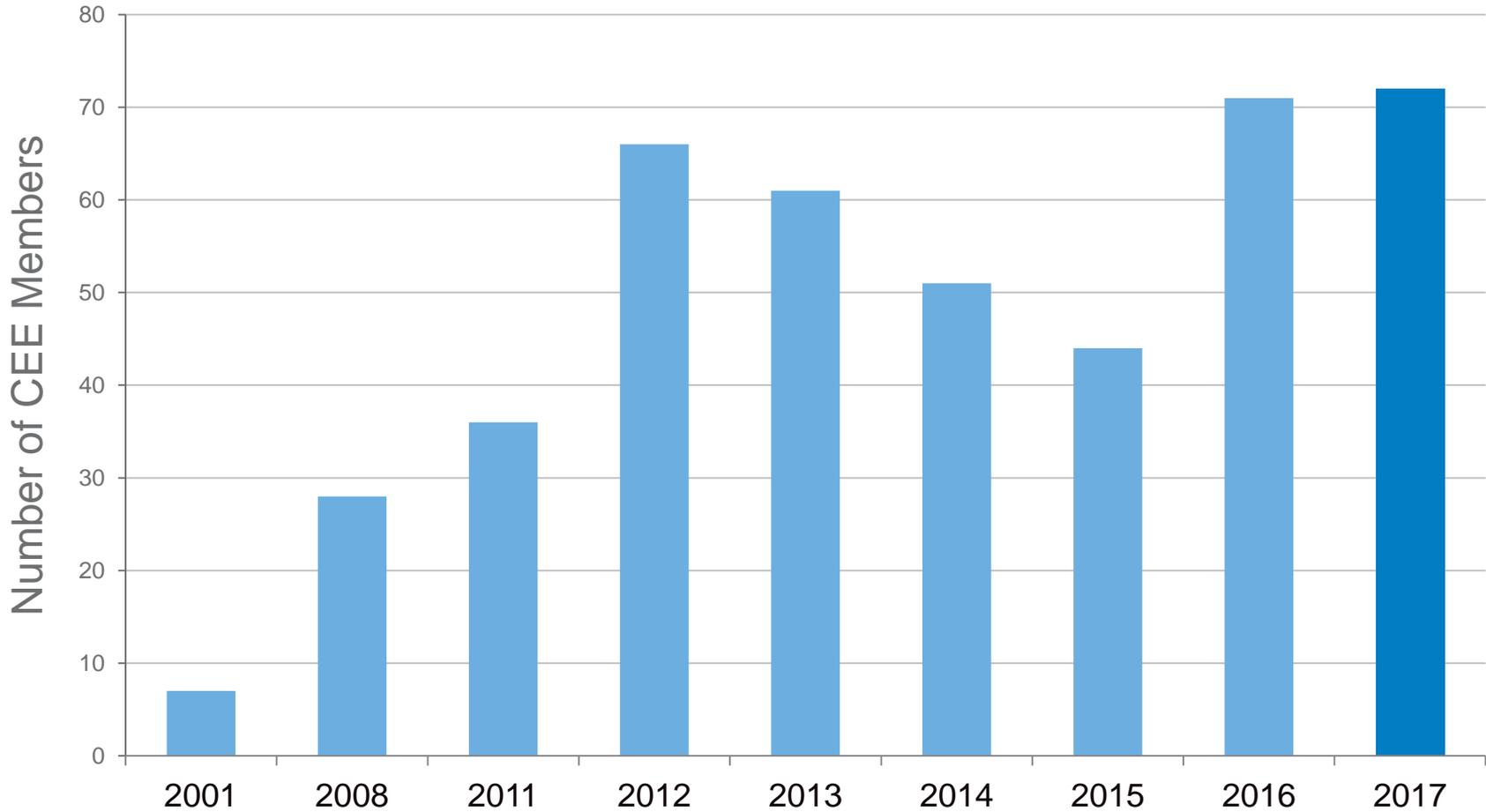
www.cee1.org/content/cee-program-resources



CEE Program Summaries

- ▼ Data collection was from a combination of online research and subsequent CEE member review
- ▼ 2017 CEE Residential Program Summaries:
 - Existing Homes
 - **New Homes**
 - Low-Income
 - Res HVAC
 - Res Water Heating
 - Res Lighting
 - Appliances
 - Electronics
 - Swimming Pools

CEE Members Included to Date

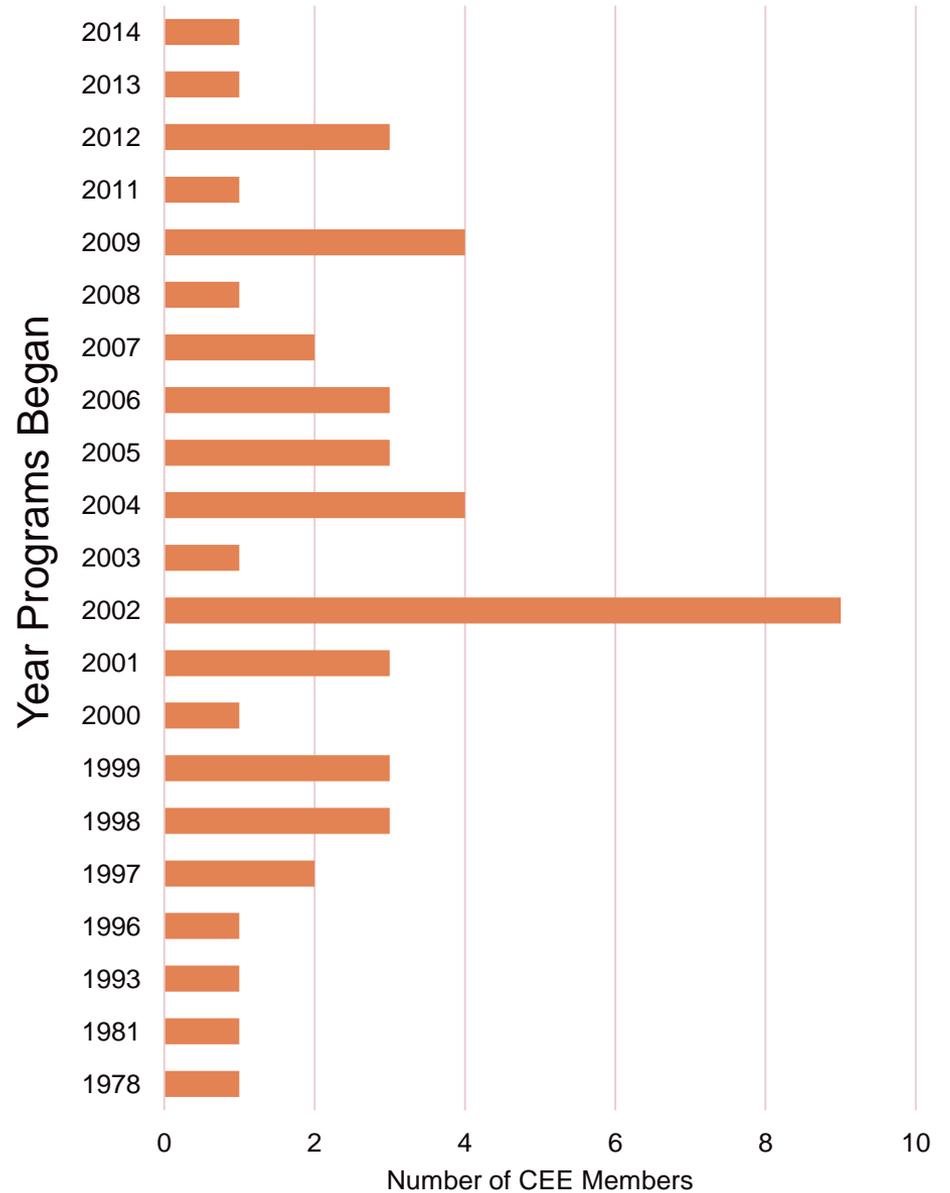


CEE New Homes Program Summary

2017 CEE Members Included

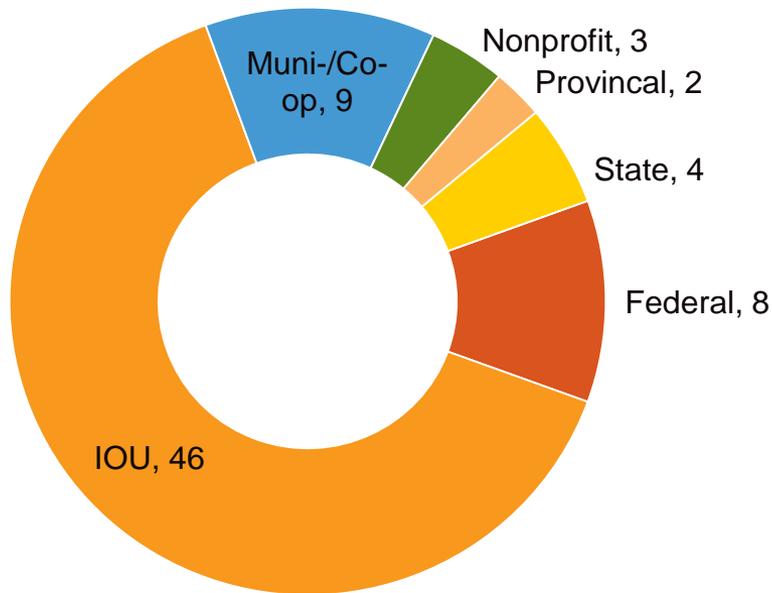
- ▶ Alabama Power
- ▶ Alliant Energy
- ▶ Ameren Missouri
- ▶ Arizona Public Service
- ▶ Avista Utilities
- ▶ Baltimore Gas and Electric
- ▶ BC Hydro Berkshire Gas
- ▶ Bonneville Power Admin
- ▶ Cape Light Compact
- ▶ City Utilities of Springfield MO
- ▶ Columbia Gas of MA
- ▶ Columbia Gas of Ohio
- ▶ Connecticut Natural Gas
- ▶ Consumers Energy
- ▶ Duke Energy Progress
- ▶ Efficiency Vermont
- ▶ Energy Trust of Oregon
- ▶ Eugene Water & Electric Board
- ▶ Eversource
- ▶ Focus on Energy—Wisconsin
- ▶ FortisBC
- ▶ Georgia Power
- ▶ Gulf Power
- ▶ Hydro One
- ▶ Hydro-Québec
- ▶ Idaho Power
- ▶ Liberty Utilities
- ▶ LA Dept of Water & Power
- ▶ MidAmerican Energy—Iowa
- ▶ National Grid
- ▶ New Hampshire Electric Co-Op
- ▶ New Jersey Natural Gas
- ▶ New Jersey's Clean Energy Program
- ▶ NYSERDA
- ▶ Northwest Energy Efficiency Alliance
- ▶ Pacific Gas and Electric Company
- ▶ PECO
- ▶ Platte River Power Authority
- ▶ Potomac Electric Power Company
- ▶ Salt River Project
- ▶ San Diego Gas & Electric Company
- ▶ Snohomish County PUD
- ▶ SoCalGas
- ▶ South Jersey Gas
- ▶ Southern California Edison
- ▶ Southern Connecticut Gas
- ▶ Southwest Gas
- ▶ Tennessee Valley Authority
- ▶ Union Gas
- ▶ United Illuminating Company
- ▶ Unitil—New Hampshire
- ▶ Vectren Corporation
- ▶ Xcel Energy

2017 Results

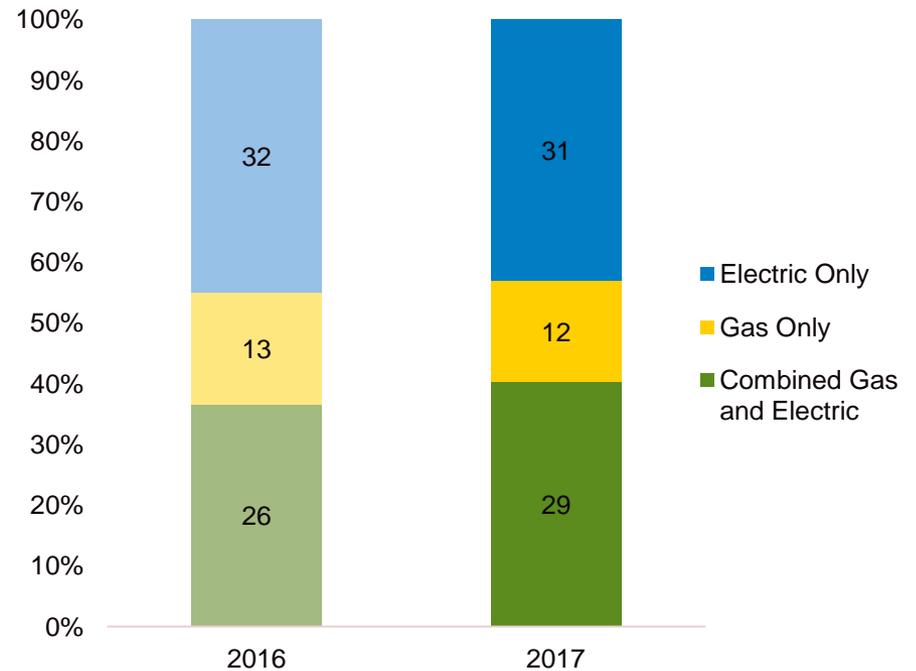


2017 Results

Organization Type

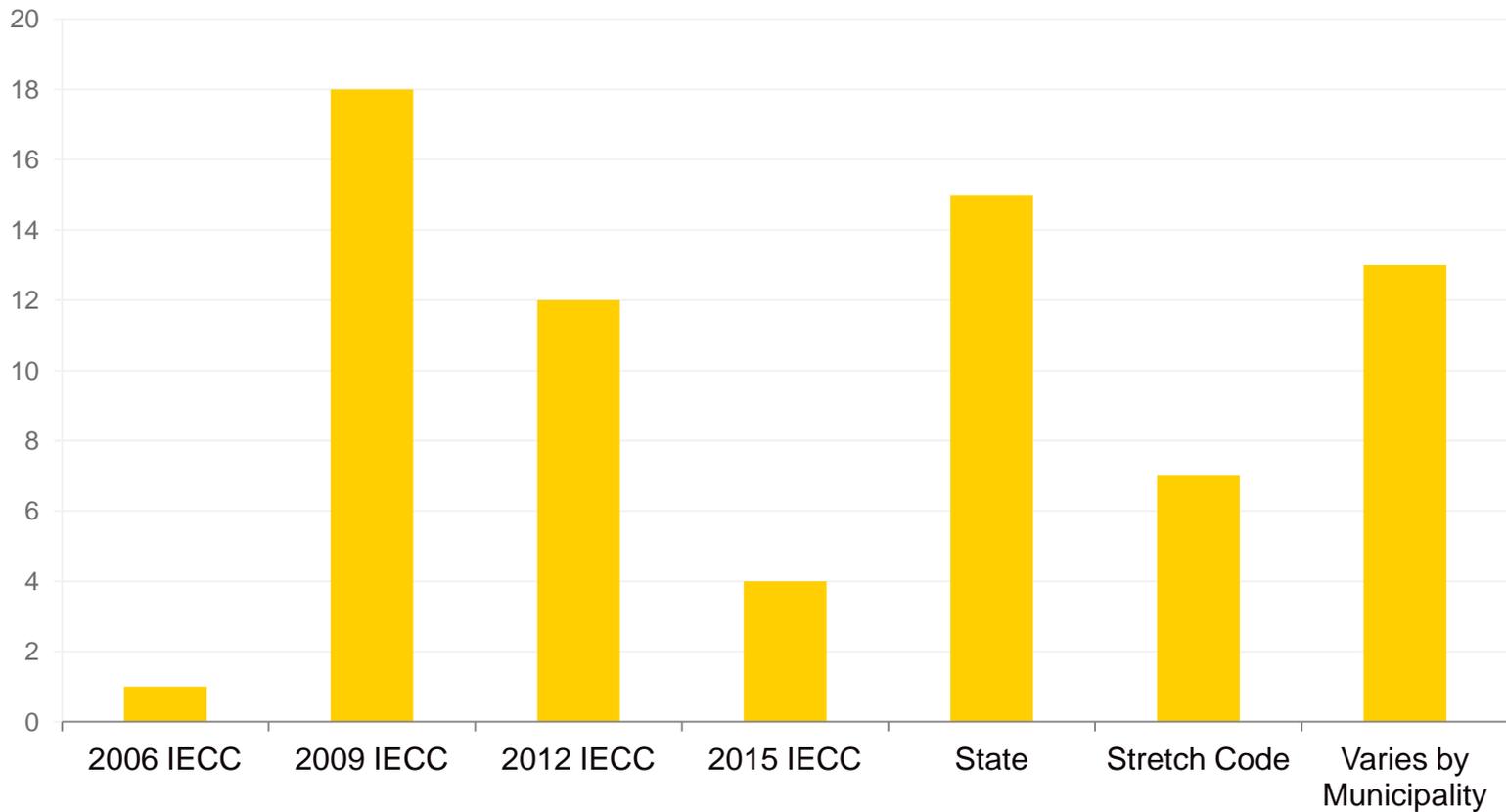


Fuel Type



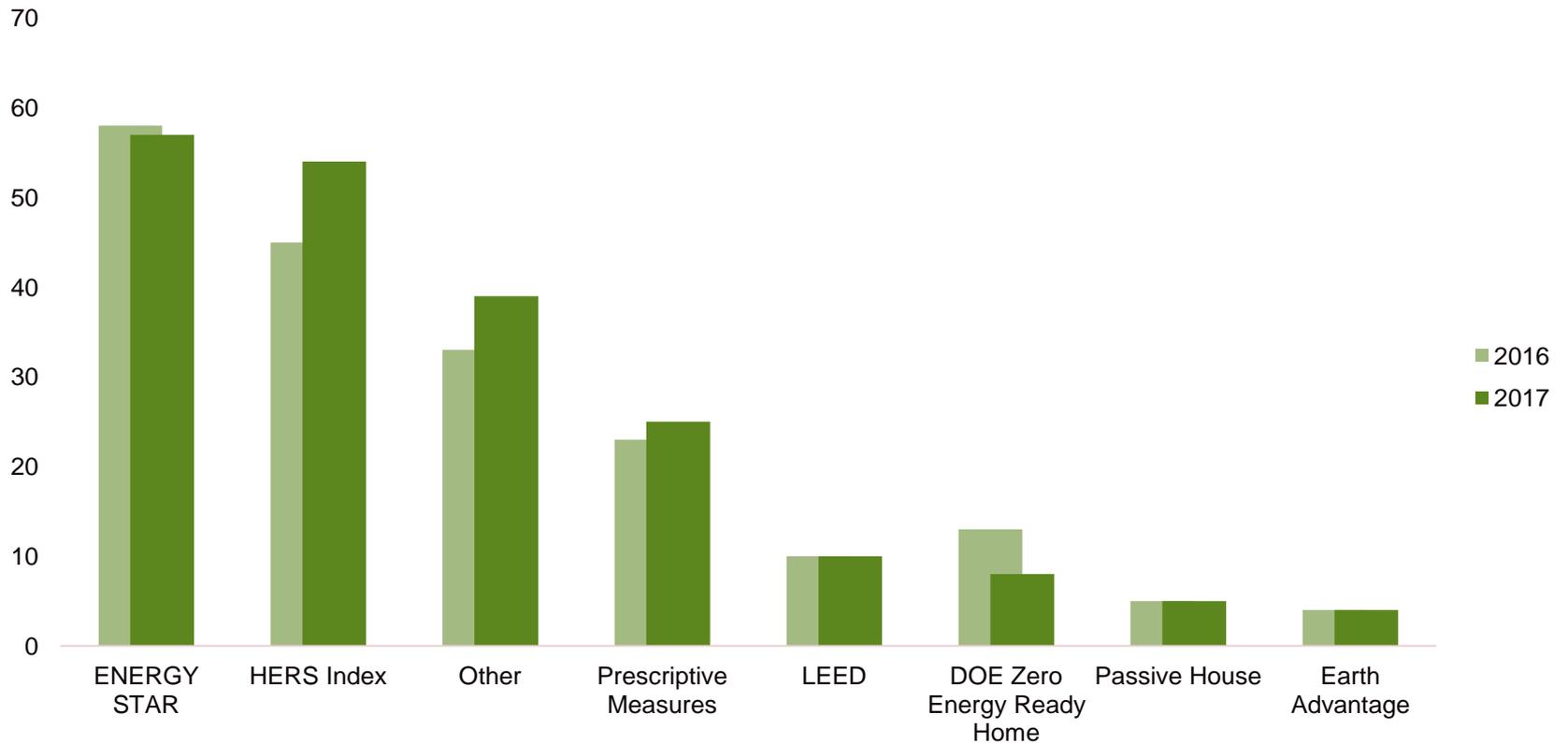
2017 Results

◀ Building Codes



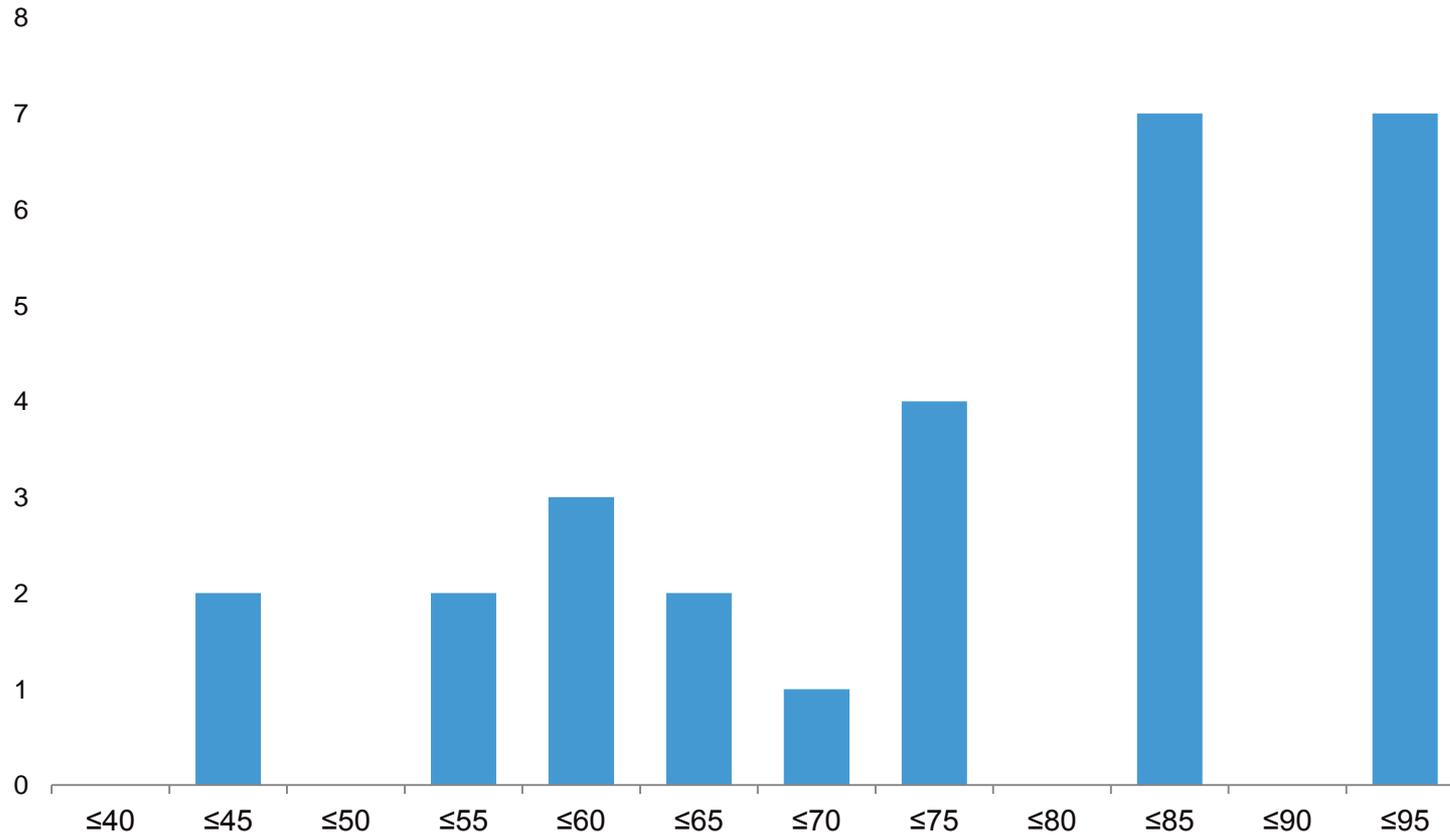
2017 Results

Specification or Platform Used



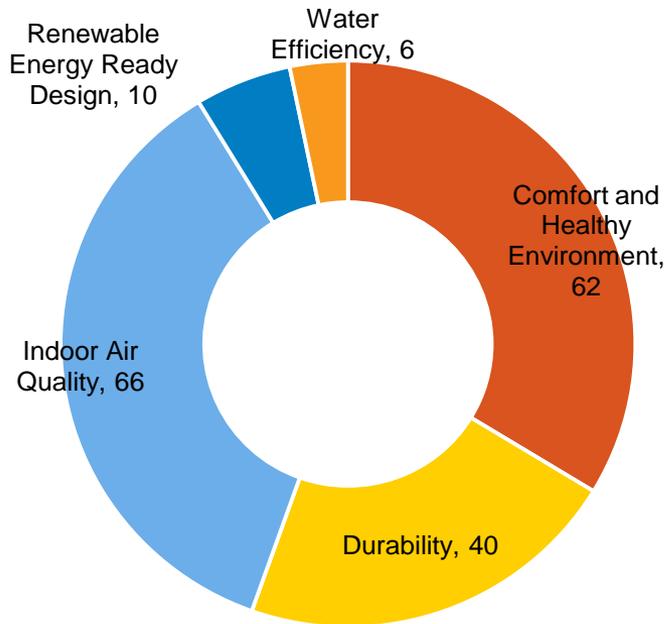
2017 Results

▼ HERS Index Scores Promoted by Programs

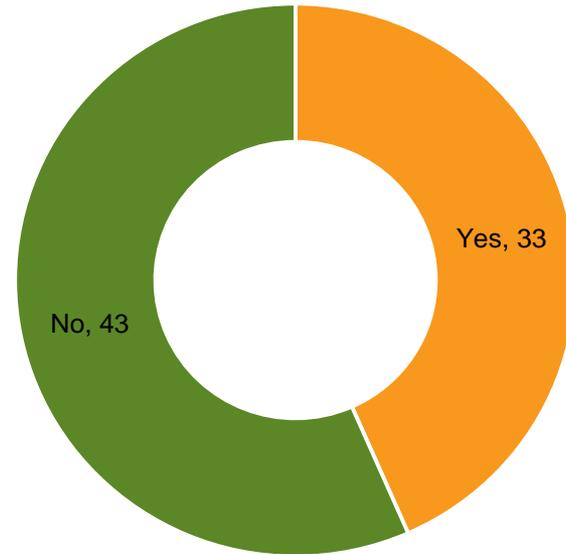


2017 Results

◀ Nonenergy Features

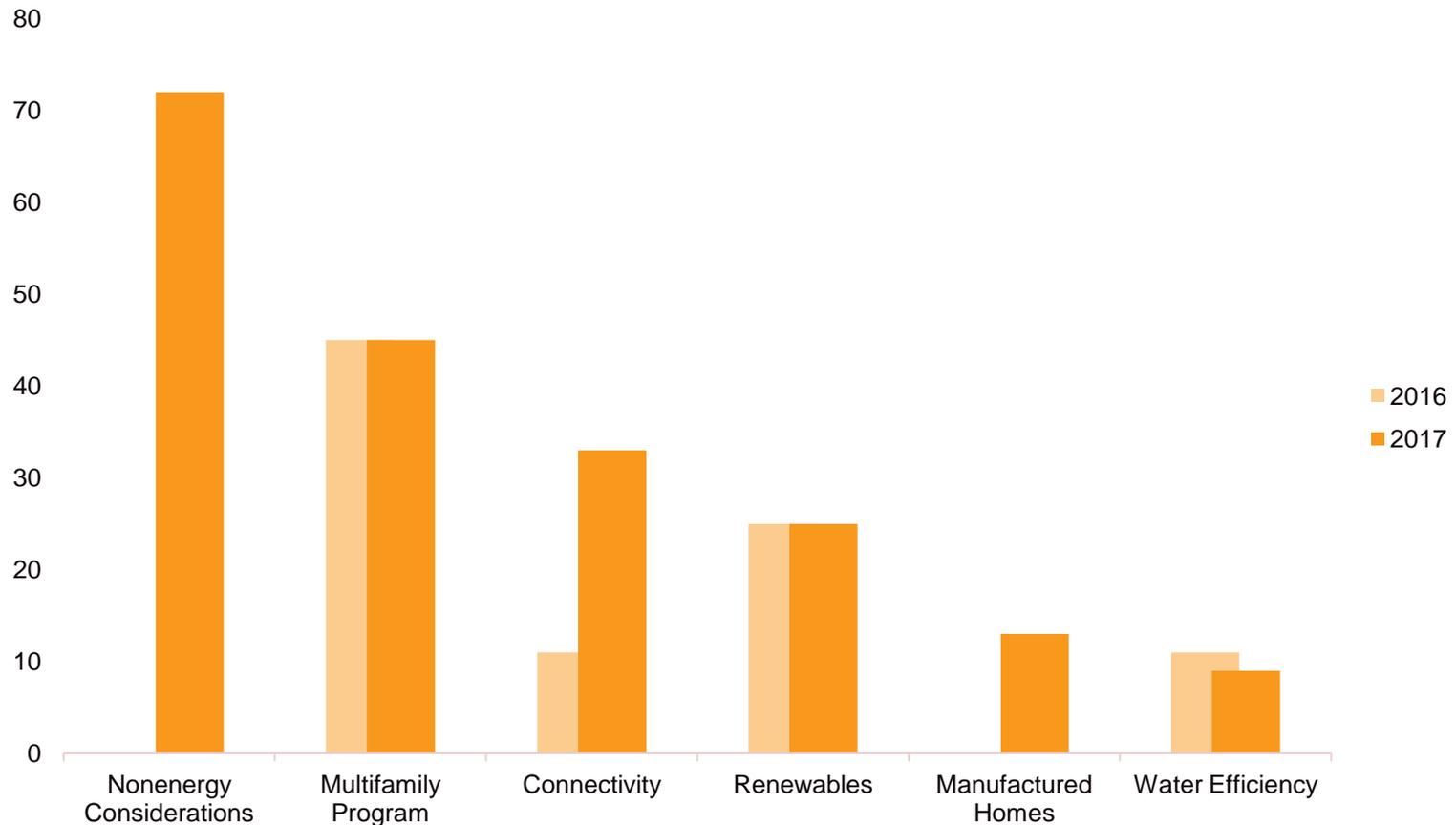


◀ Financing



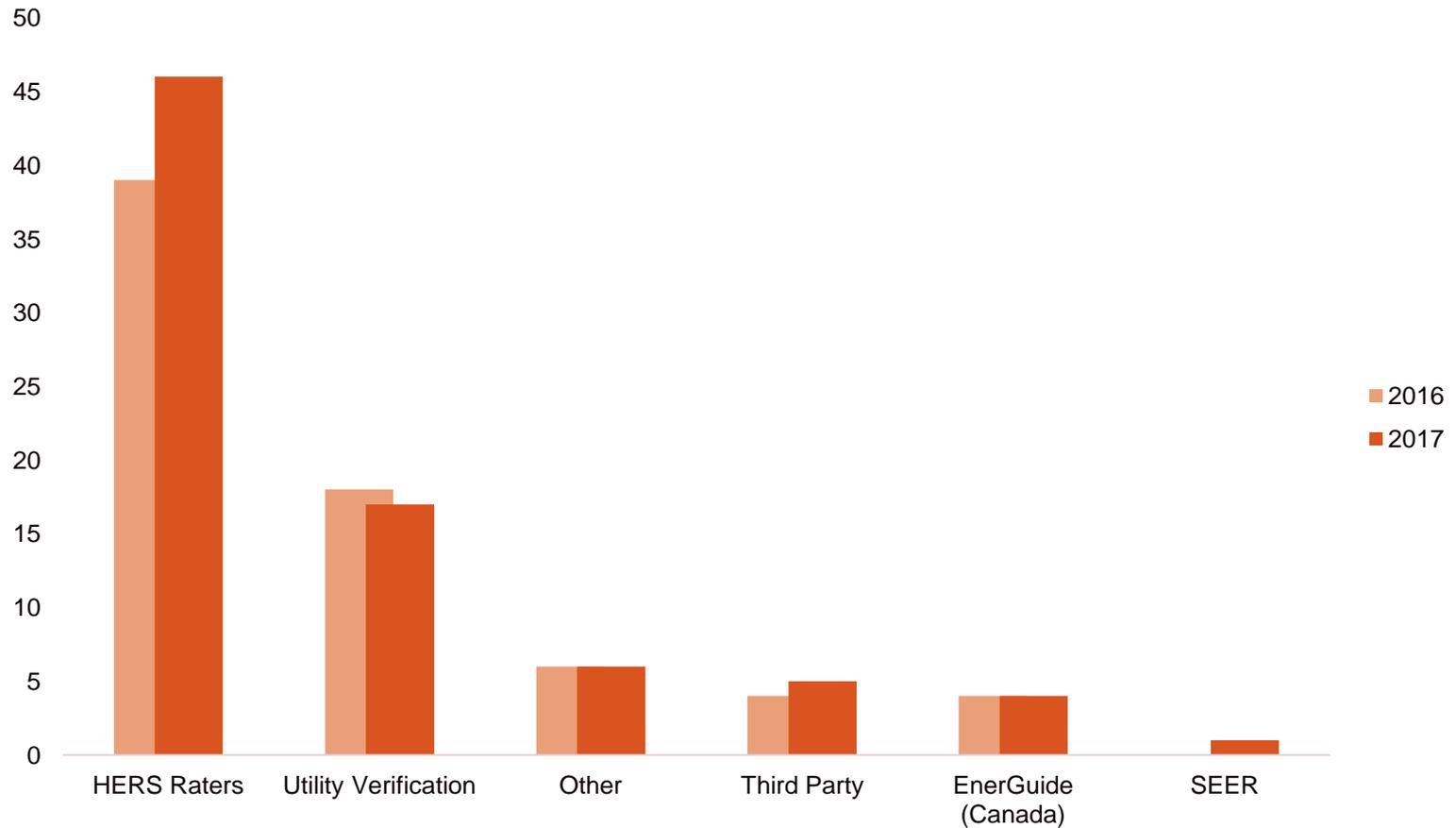
2017 Results

Additional Components of Programs



2017 Results

Program Verification Methods



Common Themes

▶ Rising Codes, Baselines, and Savings Goals

▶ Move Towards Zero Net Energy

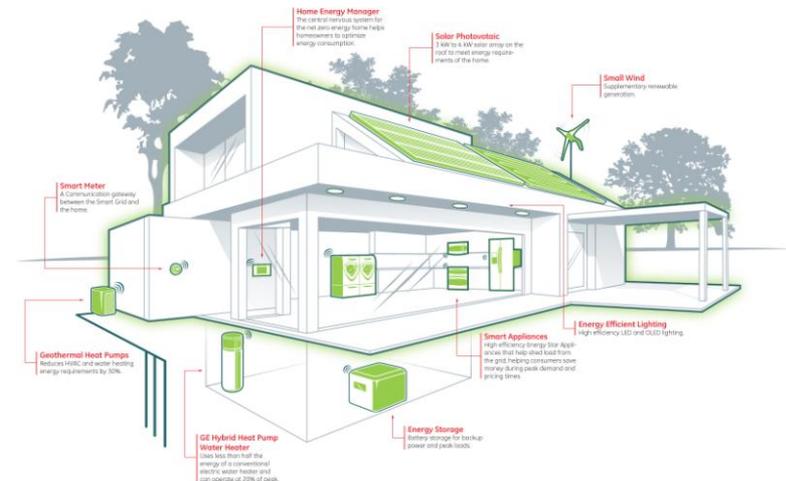
- Definitions vary, gas vs. electric
- Efficiency, then renewables

▶ Tiered Incentive Structures

- Multiple offerings and levels
- Pathways to Zero Net Energy
- Performance-based programs

▶ Statewide Coordination

- Connecticut, Massachusetts, California, New Jersey
- Gas and electric partnerships



Emerging Trends

▼ Connectivity and Smart

- Smart meters and smart thermostats
- Integrated demand side management



▼ Engagement with Real Estate Industry

- Relations with lenders, mortgagers, realtors, appraisers
- Trainings, education, tradeshow, meetings
- Green Addendum, MLS

▼ Emphasis on Nonenergy Features

- Air quality, health, durability, etc.
- Quantifiable and marketable



Contact

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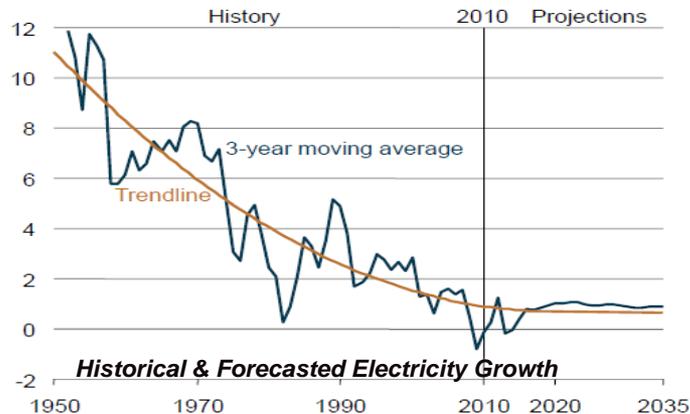
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Additional Slides

Some Dynamics Utilities Face

Declining Electric Load

- Energy efficiency and conservation have become a part of the general culture
- Growth of customer self-generation



Need for Increased Investment

- Customers desire greater reliability, resiliency after Superstorm Sandy, etc.
- Generally aging infrastructure
- Use control technologies, Smart Grid
- Cybersecurity

Disruptive Technologies

- Communicating products
- Dynamic products
- Energy storage and accessibility to renewable sources

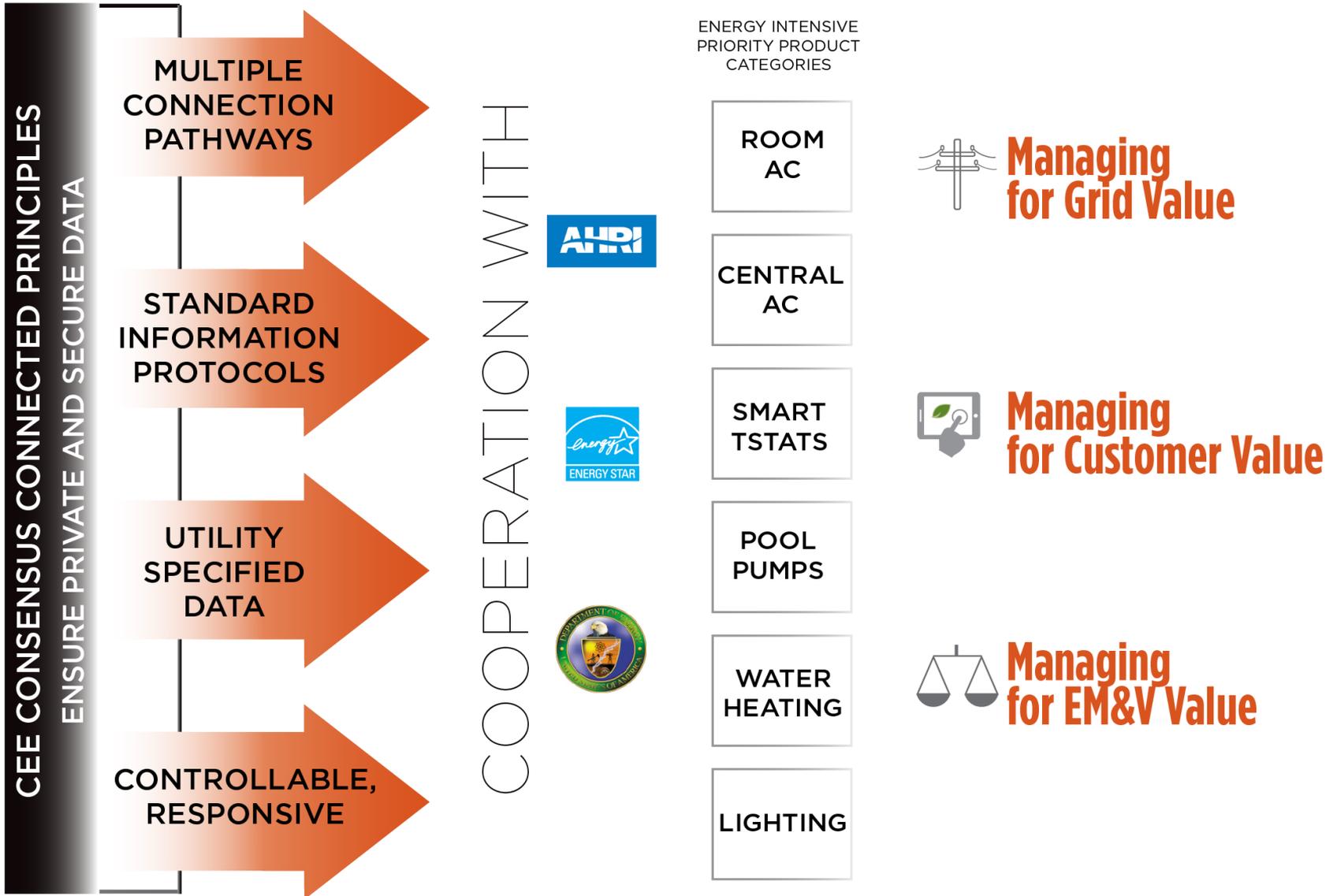
Grid Quality
Credit Quality

Integrated Demand Side Management

- ▶ Integration of technologies at end user homes and facilities
- ▶ Integration of programs, delivering customer solutions
- ▶ Integration of DSM for power planning, acquisition, transmission planning, and reliability

Demand-side management refers to, and encompasses, both **energy efficiency** and **demand response** programs

Creating the IDSM Platform

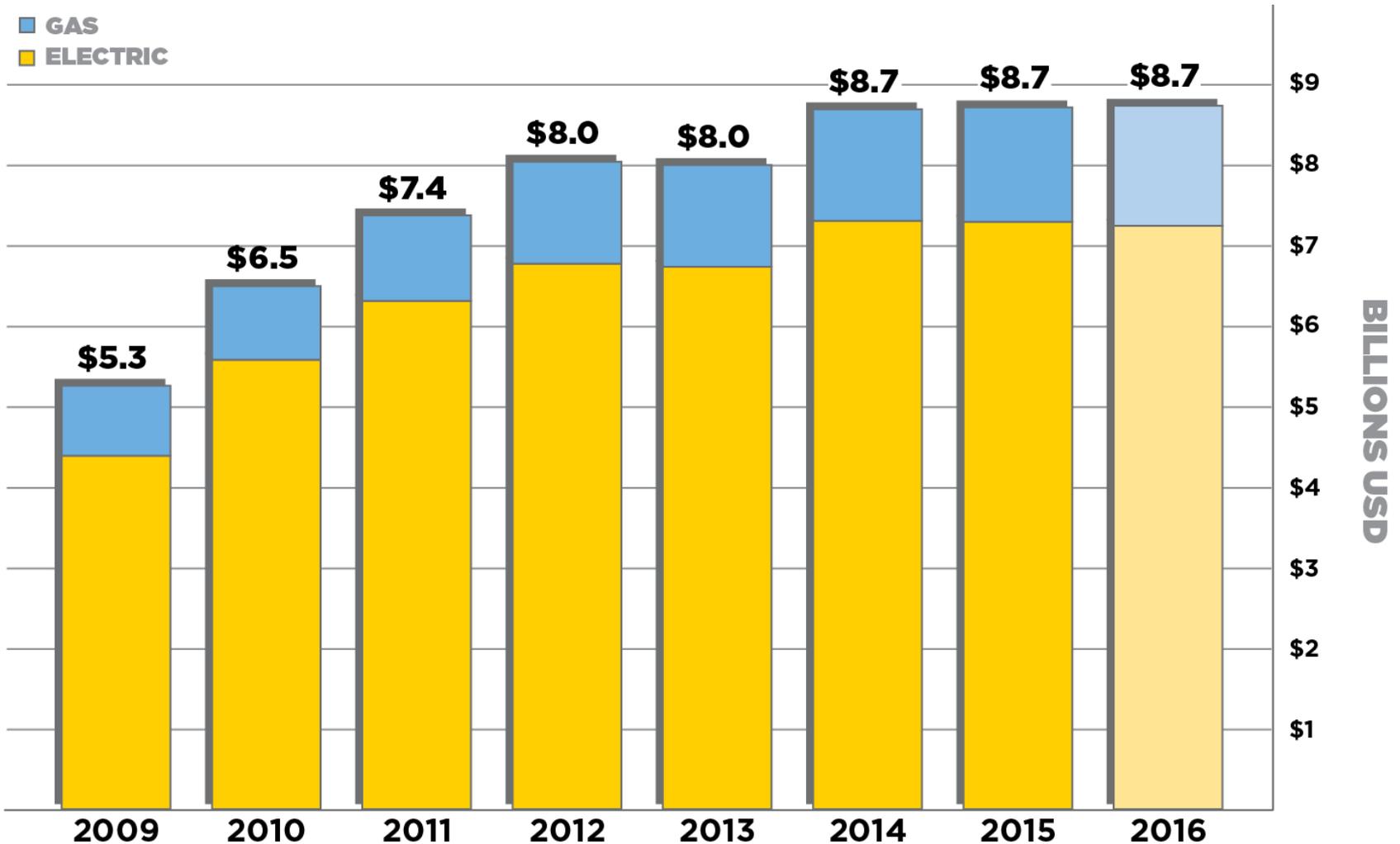


Local Regulatory Policy in Motion

▶ Key considerations:

- New utility business models
- Carbon valuation
- Inclusion of nonenergy benefits
- Increased grid resiliency and efficient use of grid capital

US and Canadian Expenditures



Preliminary data as of September 1, 2017