



The Pulse and Direction of the Efficiency Program Industry

ACEEE-CEE Market Transformation Symposium

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Consortium for Energy Efficiency

- ▶ Nonprofit founded and funded by utilities to increase their efficiency program effectiveness wherever working together is needed and CEE can add value
- ▶ CEE brings together over 100 gas and electric efficiency program administrators serving all or part of 40 U.S. states and 8 Canadian provinces
- ▶ Develop and sponsor 12 CEE Initiatives
- ▶ Support 18 Program Committees
- ▶ \$3.5 million primarily member-funded budget
- ▶ Staff of 24



*Pacific Gas and
Electric Company™*

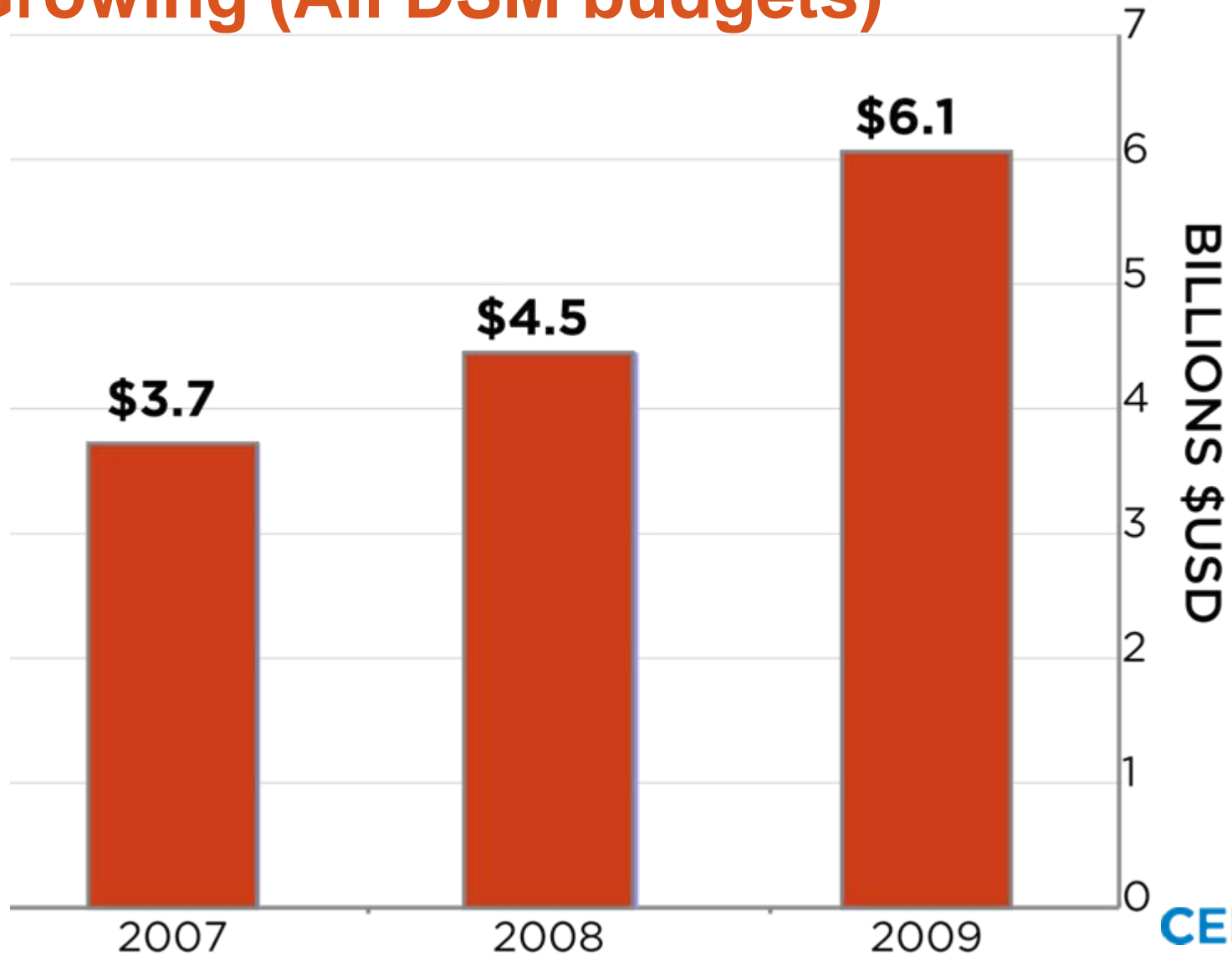


nationalgrid



CEE  2

Record \$6.1 Billion Industry and Growing (All DSM budgets)



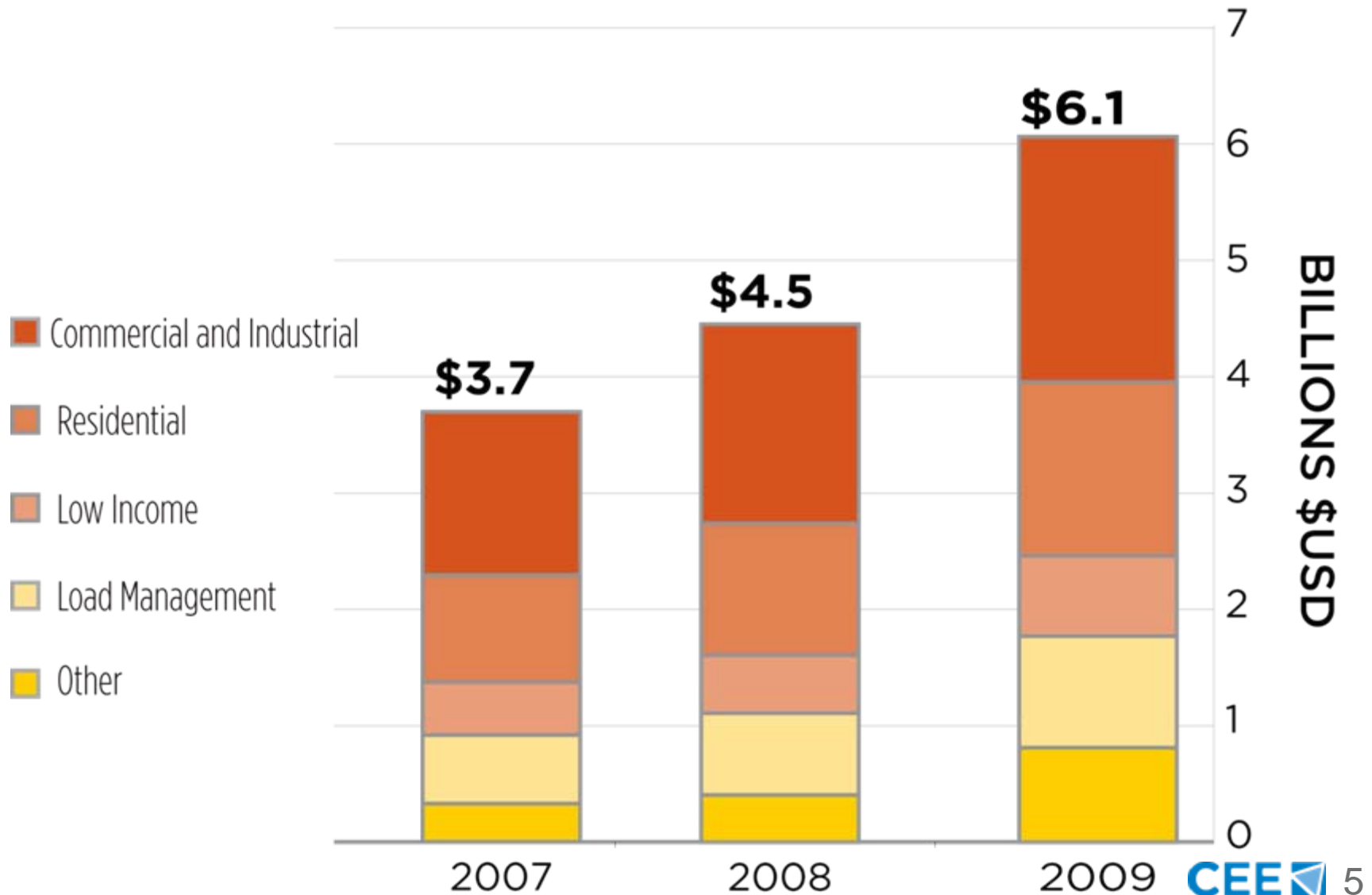
Successful 2009 Joint Data Collection

CEE worked with IEE and AGA to reduce duplication and reporting burden by using a common instrument and sharing data

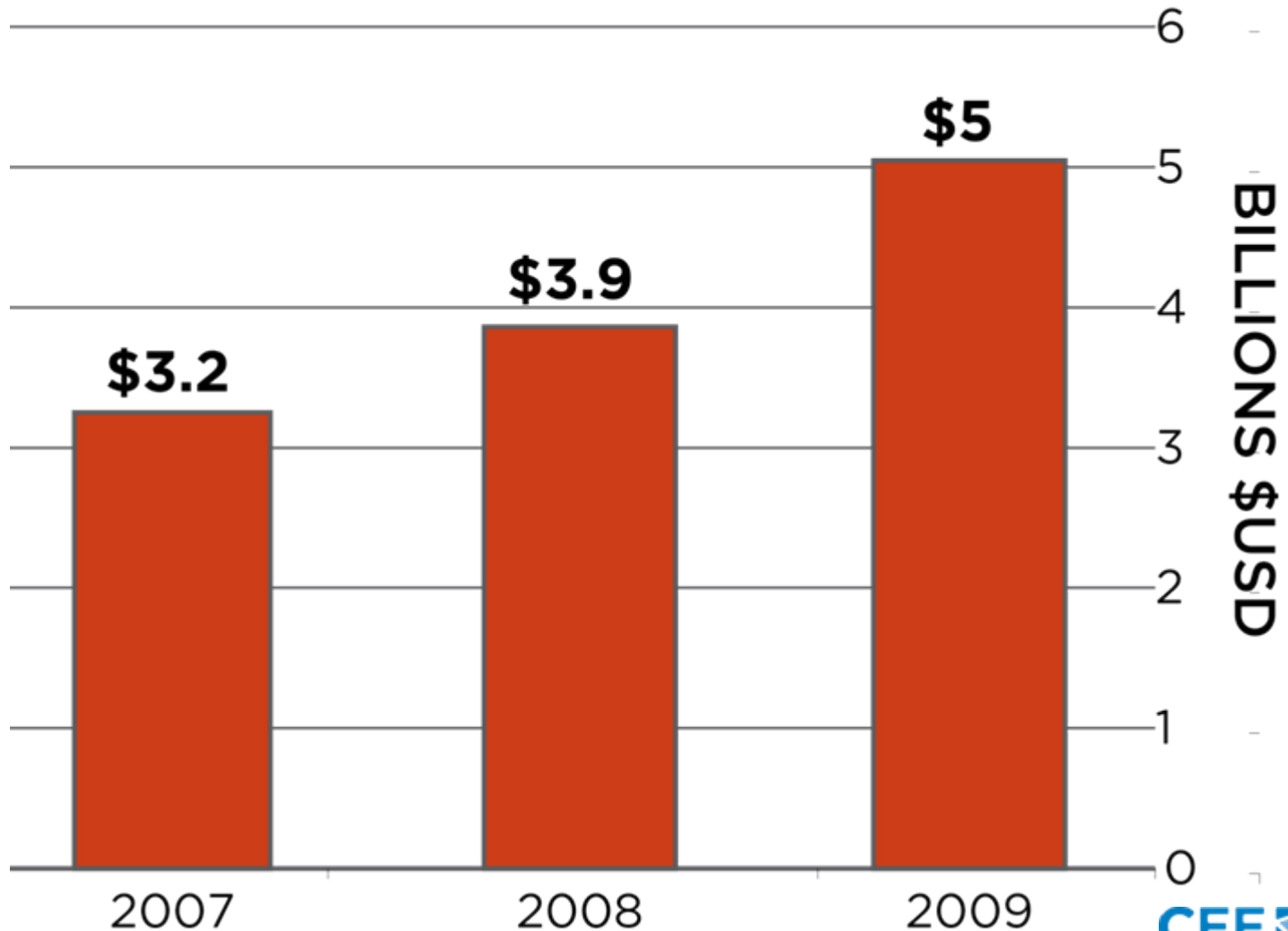
- ▶ Collected more data, more consistently and more easily for our joint members
- ▶ <http://www.cee1.org/ee-pe/AIRindex.php3>
- ▶ Paving the way to a National Efficiency Program Information Center



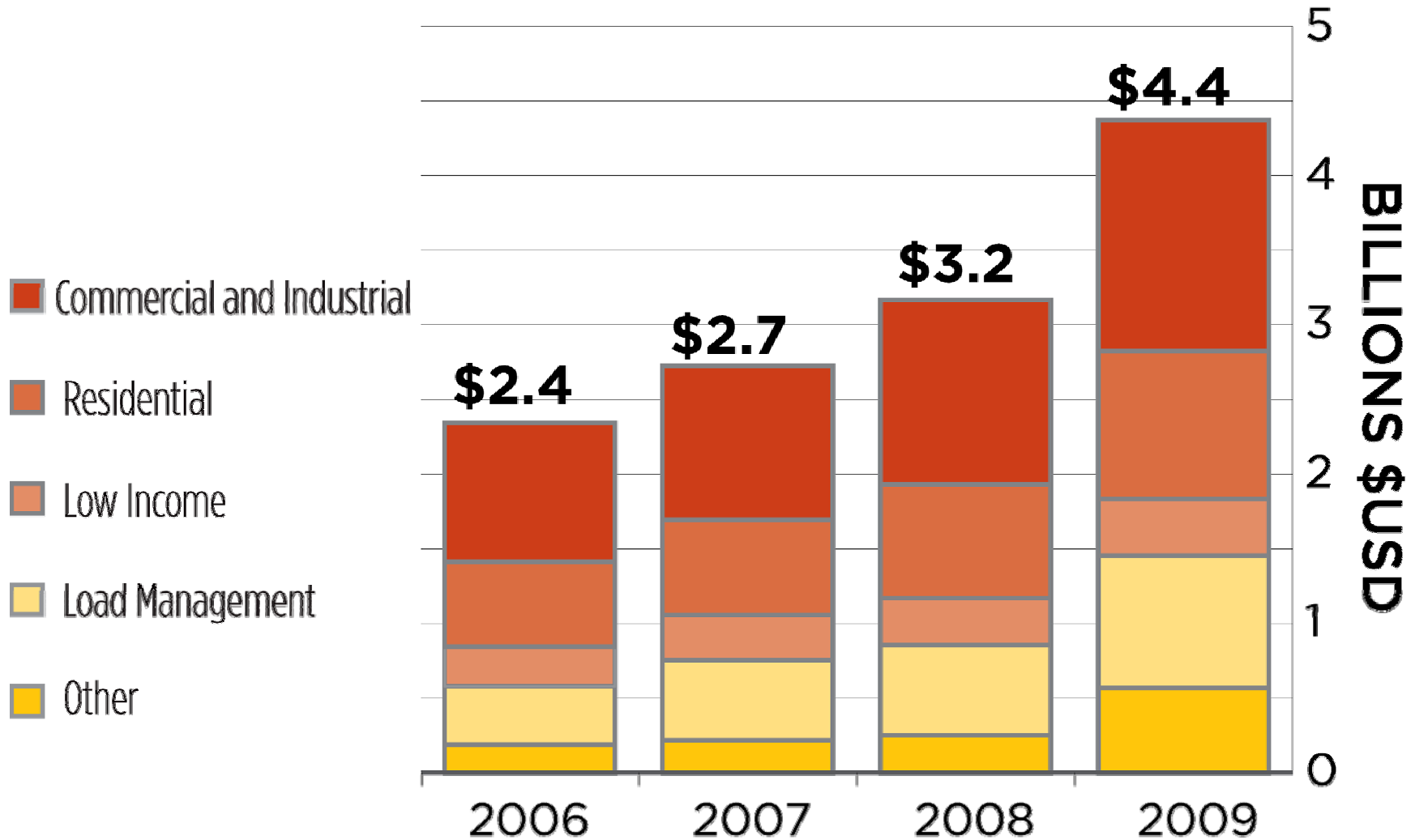
All Programs Growing



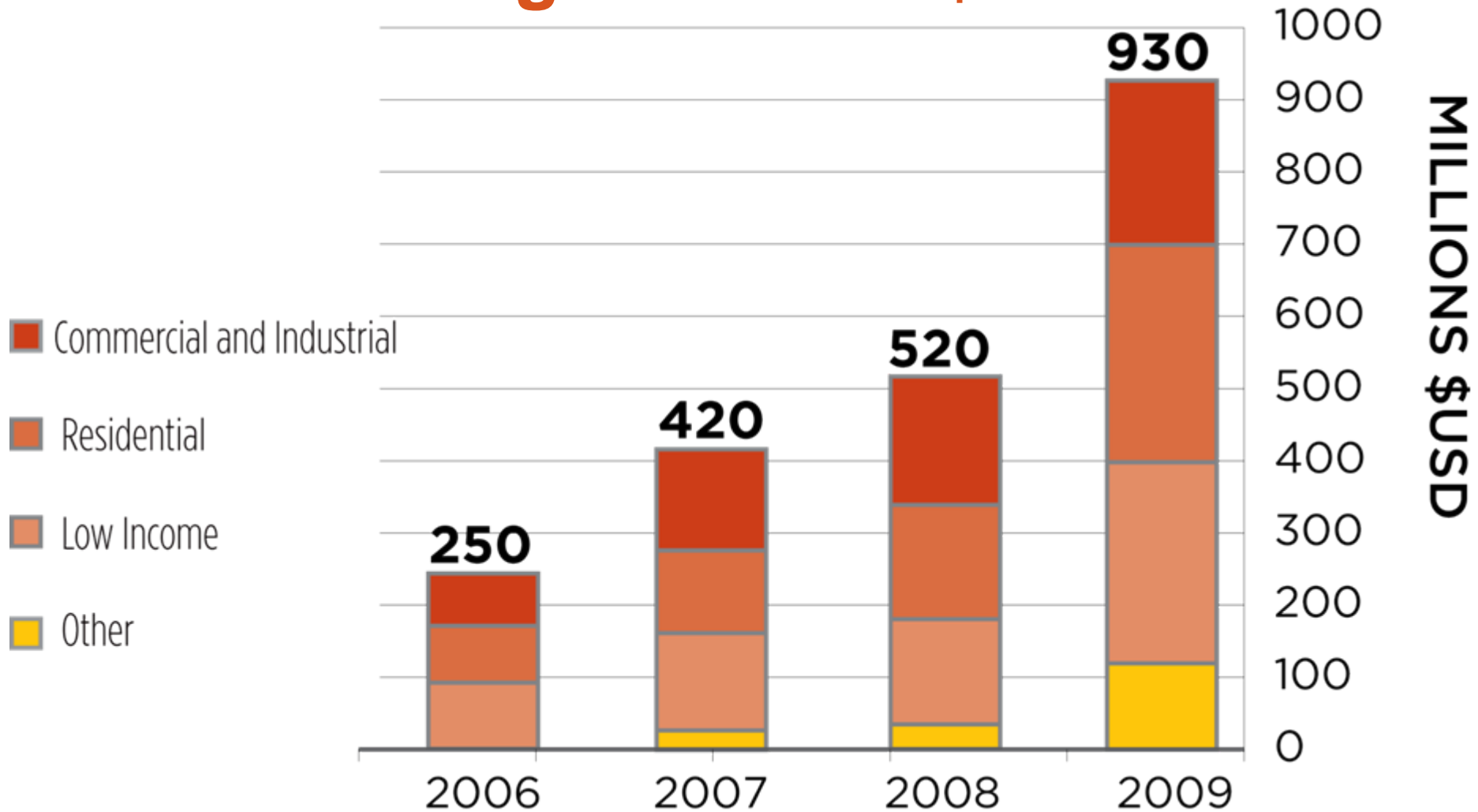
Electric Budgets Reach \$5 Billion



U.S. Electric Budgets—\$4.4 Billion



US Gas Budgets Reach \$1 B



2008 IMPACTS—CO₂ ABATED

Electric 60 MILLION TONS

62 MILLION TONS

Gas 2 MILLION TONS

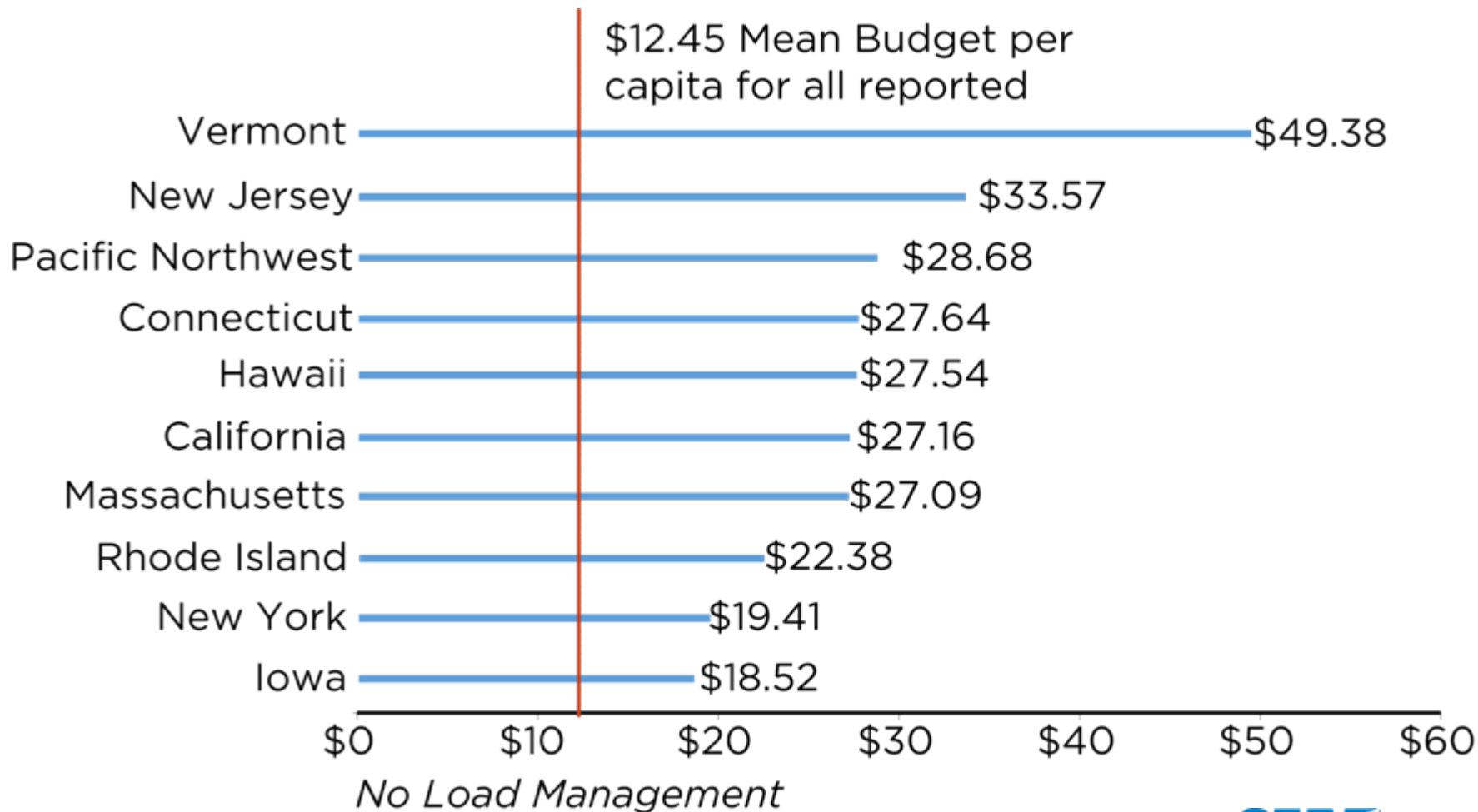
2008 IMPACTS—Energy Savings

Electric 105,000 GWH \$9.3 BILLION

\$9.7 BILLION SAVED

Gas 367 MILLION THERMS \$.4 BILLION

Top 13 States in Per Capita Energy Efficiency Budgets



46 States Per Capita Spending

▶ >\$20

VT, NJ, Pacific NW,
CT, HI, CA, MA, RI

▶ \$9-\$19

NY, IA, WI, NV, ME,
NH, TN, UT, MN, CO

▶ \$7

AZ, NM, FL, NC

▶ \$4-\$5

MI, WY, IL, MD, TX

▶ \$2-\$3

MO, KY, NB, SC,
AR, IN, GA, OH

▶ \$1 or Less

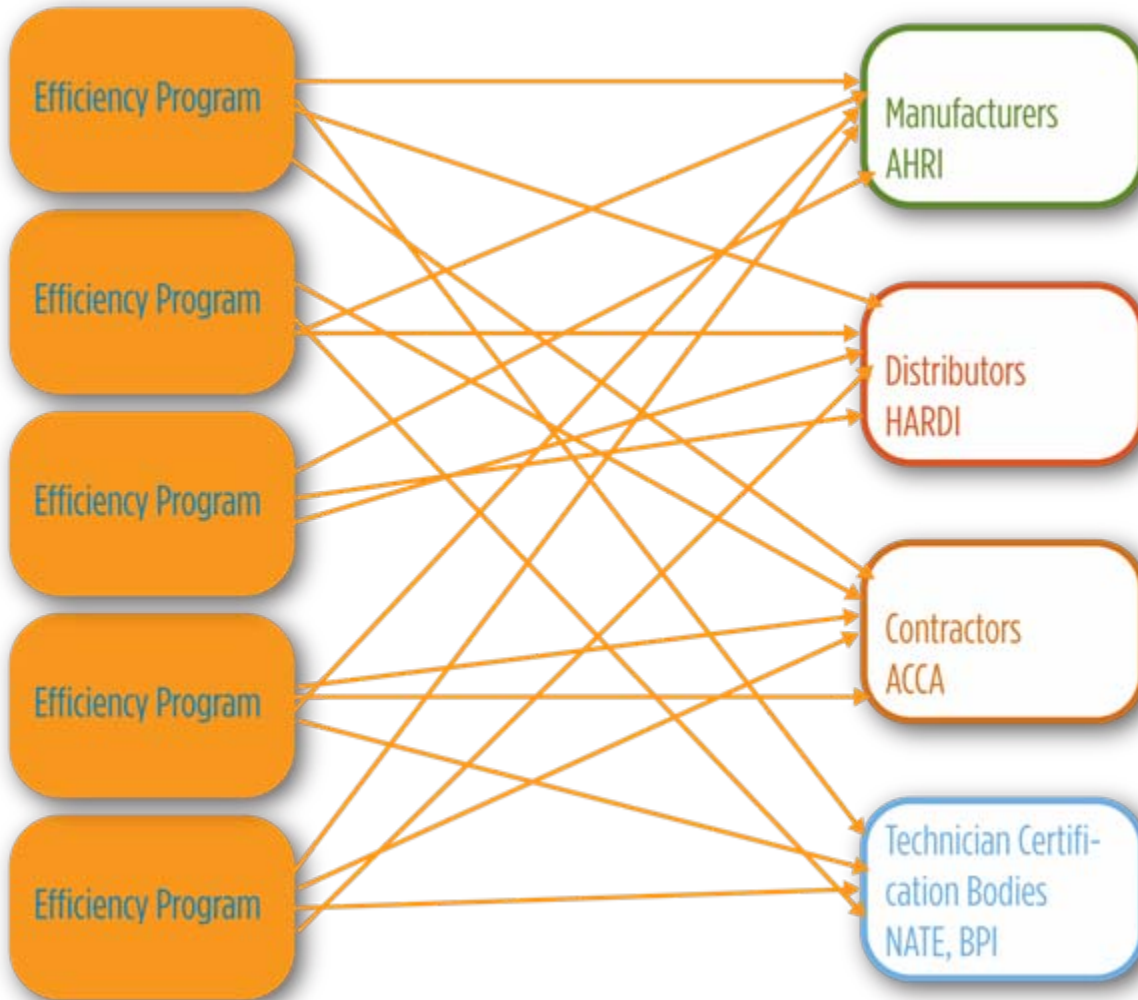
OK, MS, AL, LA, KS,
SD, ND

How will we continue to deliver results?

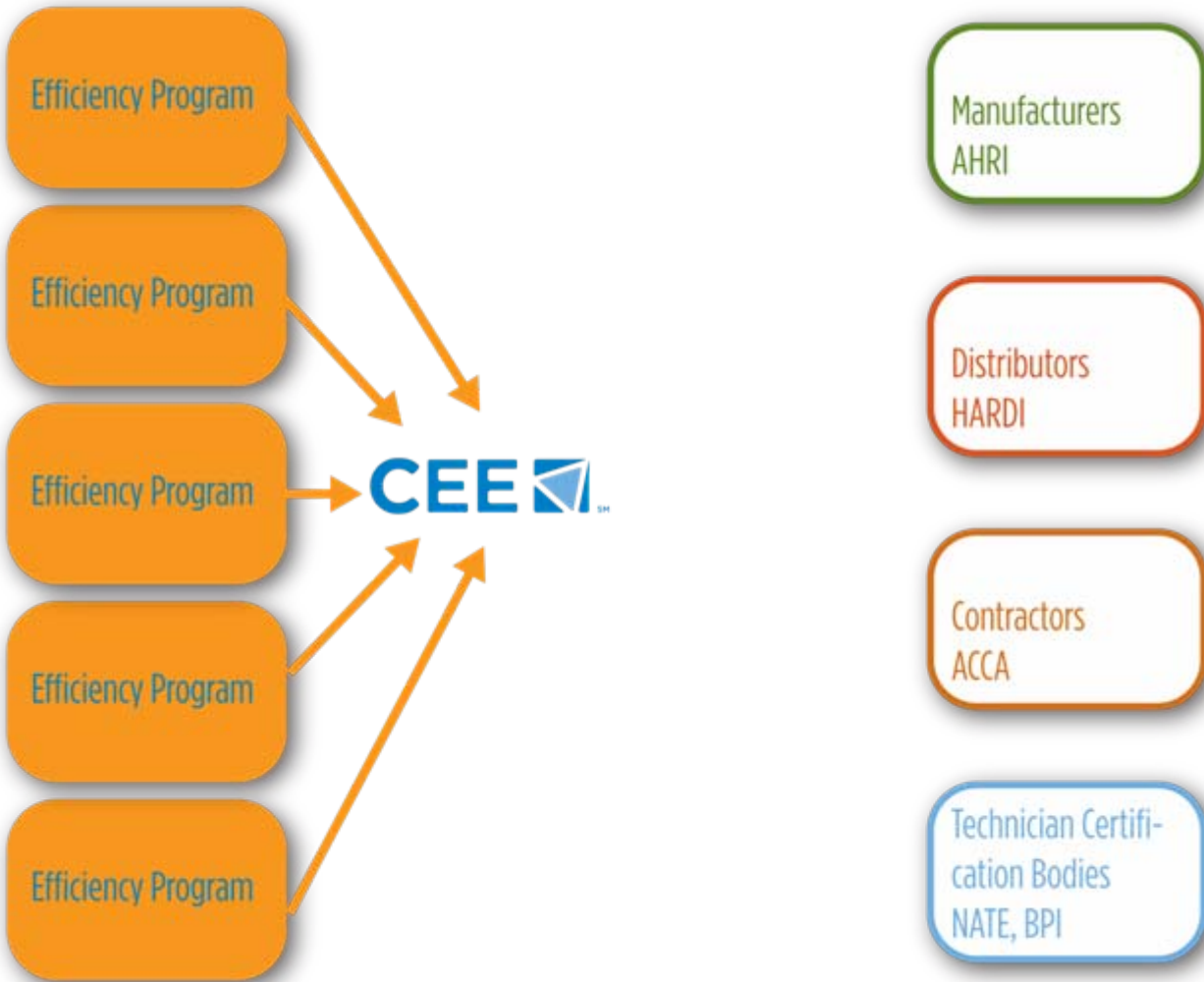
ANS: Accelerate emerging technologies from R&D to efficiency programs

- ▶ CEE Residential HVAC Committee
- ▶ CEE Commercial HVAC Committee
- ▶ CEE Commercial Lighting Committee
- ▶ CEE Data Centers Committee
- ▶ CEE Gas Committee
- ▶ CEE Motors and Motor Systems Committee
- ▶ CEE Consumer Electronics Committee
- ▶ CEE Behavior Committee
- ▶ CEE Appliance Committee

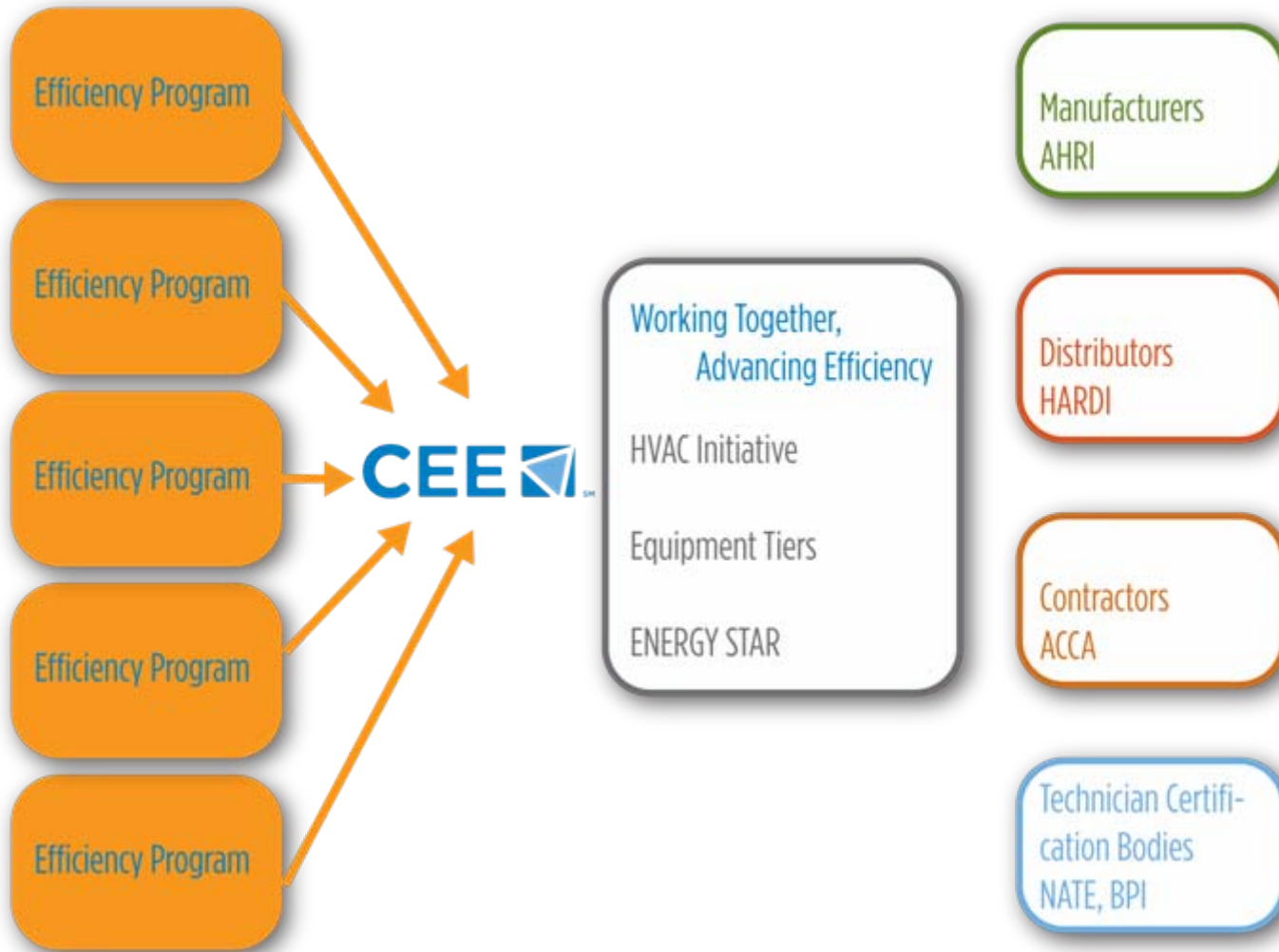
The HVAC Story



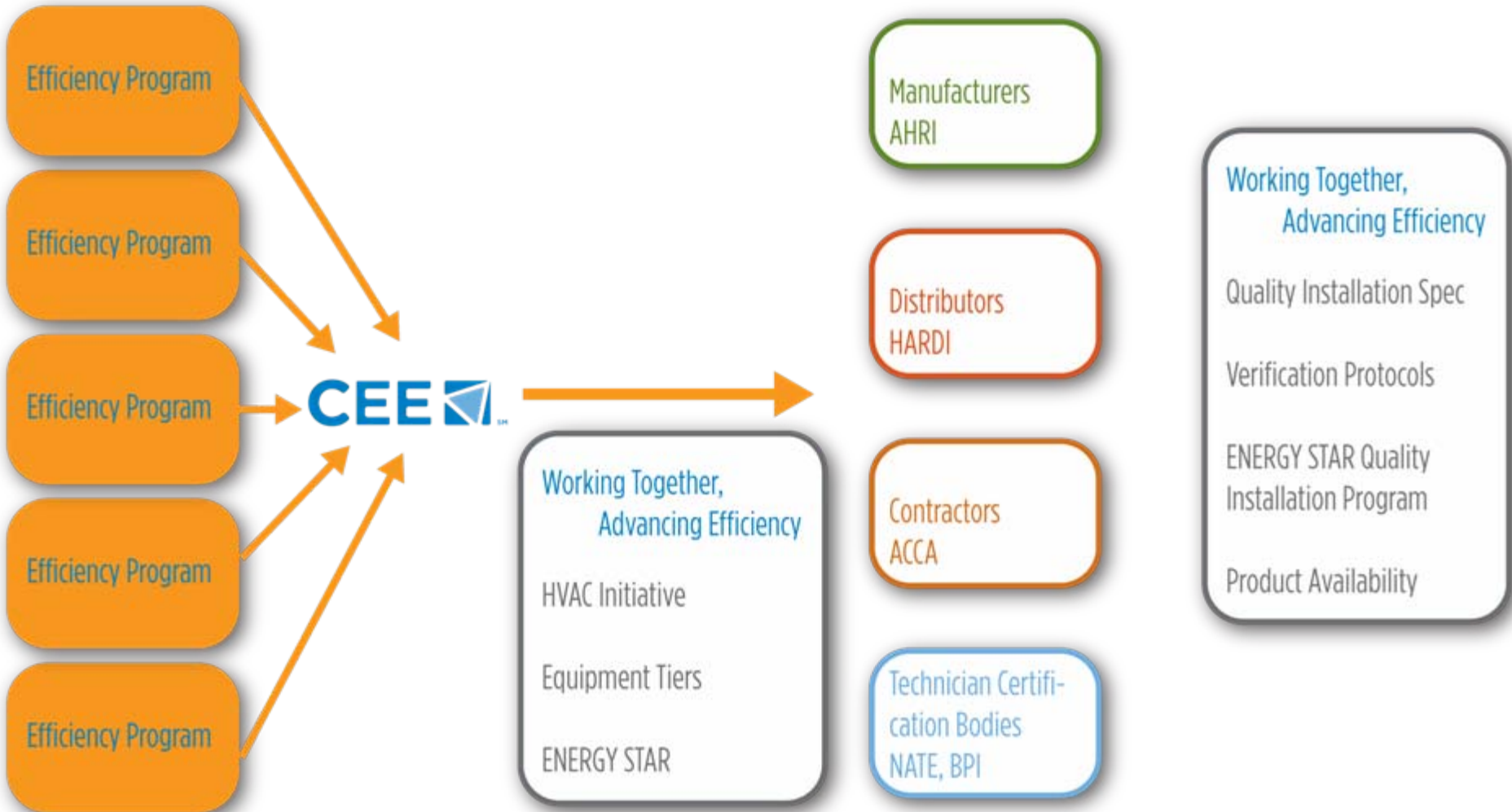
The HVAC Story



The HVAC Story



The HVAC Story



CEE Residential HVAC Committee

- ▶ Who: 57 Efficiency Programs
- ▶ 2010 Goal: National program strategies for regionally optimized new technologies
- ▶ What: Verification of savings/performance of:
 - Low temperature and variable speed heat pumps, ductless mini-splits, advanced dehumidification
- ▶ How: Demonstration efforts
- ▶ Future: Smart grid integration, better metrics

CEE Commercial HVAC

- ▶ Who: 50 Efficiency Programs
- ▶ 2010 Goal: Qualify new technologies for inclusion in programs
- ▶ What: Verified performance and better understanding of variable refrigerant flow technologies
- ▶ How: Demonstration project results
- ▶ Future: Installation & maintenance issues, industry test standards

CEE Commercial Lighting Committee

- ▶ Who: 67 Efficiency Programs
- ▶ 2010 Goal: Program guidance tools for more comprehensive approaches—systems, controls, inclusion of emerging technologies, e.g., SSL
- ▶ What: Better understanding of the market potential, energy and demand impact, performance and quality of light from advanced control systems
- ▶ How: Studies on Building Lighting Control Systems and SSL demonstrations
- ▶ Future: More technologies and integration with smart grid specifications

CEE Data Centers Committee

- ▶ Who: 49 Efficiency Programs
- ▶ 2010 Goal: Pursue various program approaches by information sharing; Explore measure specification; Tackle M&E issues
- ▶ What: Credible information on efficiency measures for data centers
- ▶ How: Sharing pilot program results, technical expertise, and research on energy performance of data center components
- ▶ Future: Assess industry developed performance metric proposals

CEE Gas Committee Priorities for 2010

▶ Residential gas water heater initiative

- Establish an ENERGY STAR presence for best existing technology
- Joint marketing campaign with manufacturers
- Work to create trade education programs for members' use

▶ Rooftop gas pack exploration

- Shed light on the efficiency of gas furnaces in unitary systems
- Seek to overcome technical and market barriers to efficiency

▶ Commercial boiler system exploration

- Working to create a guidance specification that helps facility owners capture the highest efficiency possible with their existing and new systems

▶ Commercial Water Heating Exploration

- Seek ways to promote higher efficiency water heaters and water heating systems.

▶ Residential Heating

- Exploring inclusion of direct heaters and integrated heating and water heating systems

CEE Motors and Motors Systems Committee

- ▶ Who: 55 Efficiency Programs
- ▶ 2010 Goals: Update Motor Selection and Application tool, Expand specs beyond general purpose to Type II and advanced technology motors; Address VSD
- ▶ What: Market and performance research on advanced motors, motor systems
- ▶ How: Enhance CEE members' program engineers and product developers with EPRI's technical expertise; Coordinate research with program needs
- ▶ Future: Mutually leverage members' programs and work of any Industrial Center of Excellence

CEE Consumer Electronics Committee

- ▶ Who: 52 Efficiency Programs
- ▶ 2010 Goal: Expand the level and depth of centrally provided program support functions as identified in the CEE Consumer Electronics Efficiency Program Center Plan in development
- ▶ What: Identifying opportunities, keeping up with changes in the technologies and markets, and overcoming M&E challenges-baseline assumptions
- ▶ How: Information exchange, advanced specifications
- ▶ Future: Identifying future technical potentials

CEE Behavior Committee

- ▶ Who: 54 Efficiency Programs
- ▶ 2010 Goal: Provide a forum and clearinghouse for behavior change programs
- ▶ What: Survey of current programs and ongoing information exchange on program results
- ▶ How: Coordinate with EPRI's research on feedback devices
- ▶ Future: Pool all results to support members to apply behavior change insights to improve programs

Future: CEE Appliance Committee

- ▶ Who: 68 Efficiency Programs
- ▶ 2010 Goal: Explore adding advanced technologies to portfolio of appliance programs
- ▶ What: Performance specifications for clothes dryers and heat pump water heaters
- ▶ How: Utilize results from EPRI's studies on Hyper Efficient Appliances and field demonstrations
- ▶ Future: Integrating smart grid w/ energy efficiency specifications, advanced refrigerator specifications, roadmaps for super efficiency

Thank you for your support of CEE members and the efficiency program industry working at CEE

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