

Today's Gas DSM Programs

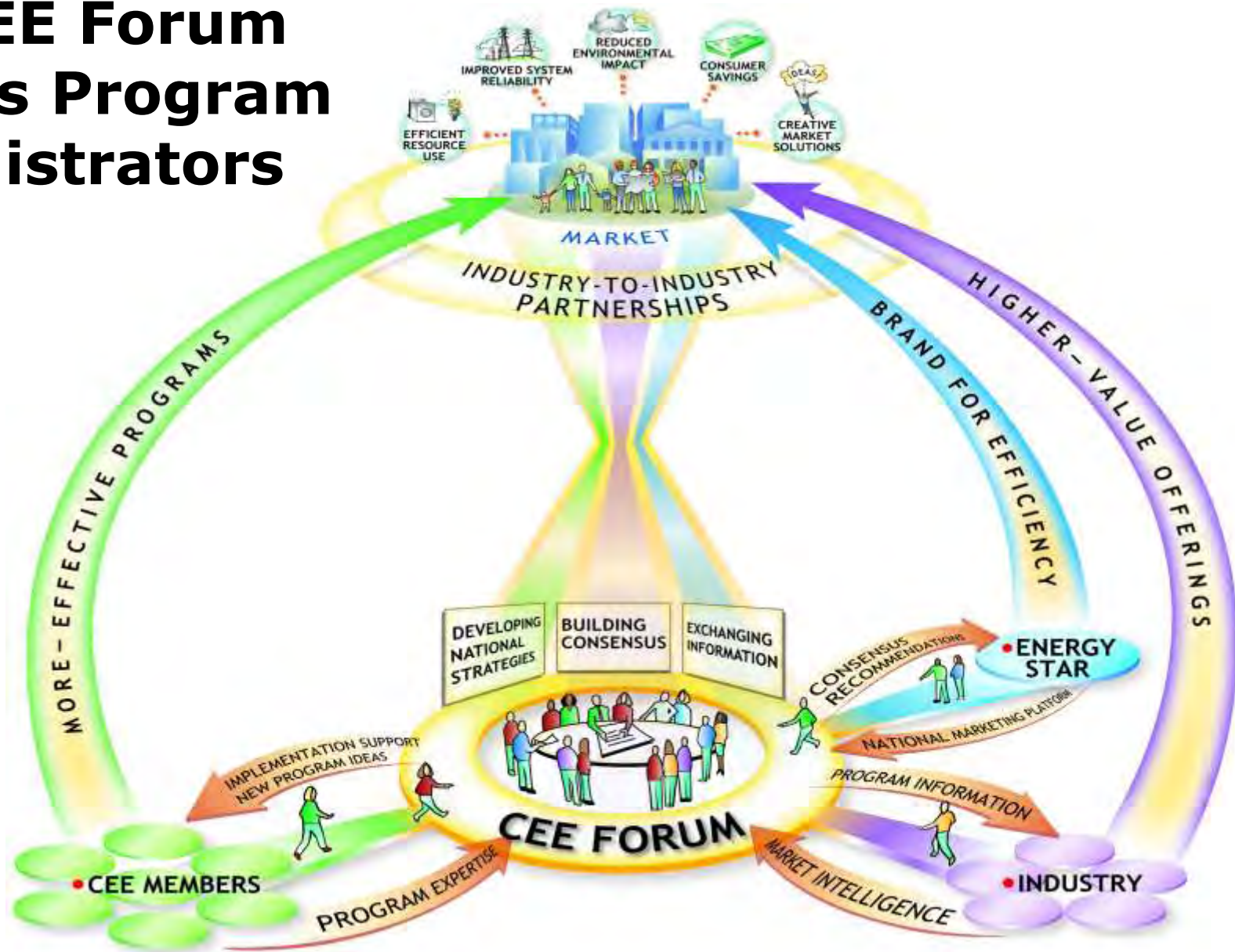
Driving Higher Efficiency, Energy and Carbon Savings for North America

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Working Together, Advancing Efficiency

The CEE Forum for Gas Program Administrators



Gas DSM Programs are pervasive and significant

1. Spreading across the US and Canada
2. Significant funding
3. Critical mass to influence high efficiency in North American markets

Result: Gas program administrators view themselves as an industry able to work together and leverage other industries to meet the need for more and greater efficiency

North American Gas DSM Programs: A Half \$ Billion Industry

- Total 2007 program budgets **\$480 million**
 - US **\$411million**
 - Canada **\$69 million**
- CEE Members **\$438 million**
- **US Growth** from 2006 and 2007: **66%**

Influential and Visionary

- Residential Furnace Success
 - 90% AFUE now common in states with programs
 - 90+% available and promoted successfully
 - Added high efficiency fan motors
 - Combined with ES programmable thermostats
- 2006 CEE Gas DSM Summit – Vision Statement

“Lead a robust and expanding natural gas-efficiency marketplace to achieve a sustainable energy future for North America.”

Current North American Gas Initiatives

- Residential Furnaces
 - Driving 94% and higher AFUE
- Commercial Kitchens
 - Suite of gas, electric and water efficient equipment
 - CEE and ENERGY STAR common specifications:
 - Fryers
 - Steam Cookers
 - Hot Food Holding Cabinets
 - Dishwashers (in process)
 - Combi Ovens (Jan)
- Hot Water Appliances
 - Clothes Washers and Dishwashers

For 2008 – Residential Water Heaters

- Programs coming together to align efforts to influence manufacturers and ENERGY STAR
- Proposed CEE Initiative (Dec)
- Developing partnership with manufacturers
 - Create awareness of high efficiency option
 - Change the emergency replacement mindset
 - Incentivize Distributors
 - Educate and motivate installers
- Leverage the proposed new ENERGY STAR

In Development

- Commercial Condensing Boilers
 - Opportunity: Members have achieved 23% savings with system upgrades
 - Approach: Accelerate the market acceptance of this commercialized product that has become more economical as gas prices have risen
- High Efficiency Gas Packs
 - Opportunity: Get condensing furnaces in packaged rooftop units
 - Status: There's a technical challenge, we're working to determine how best to support commercialization

Under Consideration

- Combined Space and Water Heating
- Quality Installation from a heating perspective
- Commercial Water Heating
 - technology commercialized, needs market acceptance
- Industrial Process Measures
- Programmable Thermostats

Lessons Learned

Observations Across the
North American Gas DSM
Program Industry

1. Aligning Efforts on Water Heating

- Proposed CEE Initiative Tier Levels

	Storage	Storage >75,000 Btuh
Tier 0	0.62 EF	
Tier 1	0.67 EF	
Tier 2	0.80 EF	90% TE

	Tankless
Tier 1	0.82 EF

- Marketing Challenge needs Partnership
 - Consumer Education, Incentivize Distribution and Educate and Motivate Installers

2. Leveraging new ENERGY STAR Proposal

- Non-condensing Storage: 0.65 EF
- Condensing Storage: 0.80 EF
- Tankless: 0.82 EF
- Electric: Heat Pump at 2.0 EF
- Solar: 0.50 Solar Fraction, OG-300 certification
- CEE Debate on storage (As we speak)
 - CEE: Use ES for best currently available cost-effective—begin at .62, then move to .67
 - DOE: Gamble that manufacturers bring .65 to market at a cost-effective price point

3. CEE Member Tankless Field Study

- CEE is developing a Field Test Protocol to compare storage and tankless water heaters on
 - Performance
 - Efficiencies
 - Water usage behavior
- This test will help determine the relative cost effectiveness of these water heating technologies
- CEE will serve as a clearing house for data collected by members

4. Harmonizing Promotion of Commercialized Technologies

- Accelerating market acceptance through:
 - Consensus on what constitutes high efficiency
 - Harmonizing program criteria
 - Sharing best program practices
 - Partnering with manufacturers to address:
 - **Consumer awareness**
 - **Distribution channel**
 - **Specifiers and installers**
 - Promoting program opportunities to manufacturers
 - Publicizing qualifying products

5. Collective Approaches to Commercialize Emerging Technologies

- Joint Research
- Golden Carrots
- Bulk Procurements
- Design Charrettes
- Design Competitions
- Credible Endorsements
- Leveraging ENERGY STAR
- CEE Initiatives

6. Achieved Critical Mass to Work as an Industry

- 2006 CEE Gas DSM Summit
 - 21 program administrators came together and recognized they could pursue overcoming market and technology barriers for the needed greater gas savings by working together
- CEE committed and delivered expanded Gas DSM program support
- Planning in 2008 to bring the gas program industry together, perhaps in conjunction with a CEE Program Meeting, to share progress and assess next steps

Gas DSM Program Industry at CEE

- Southern California Gas
- Pacific Gas & Electric
- San Diego Gas & Electric
- Oregon Energy Trust
- NW Natural
- Puget Sound Energy
- Cascade Gas
- Avista
- Terasen (BC)
- Questar Gas
- MidAmerican (IA)
- Alliant (IA and MN)
- Xcel Energy (MN)
- Focus on Energy (WI)
- Vectren (IN)
- Aquila
- CenterPoint Minnegasco
- Enbridge Gas (ON)
- Union Gas (ON)
- Natural Resources Canada
- NJ Clean Energy Program
- South Jersey Gas
- Public Service Electric and Gas
- National Grid (including KeySpan)
- NYSERDA
- NSTAR Gas
- Bay State Gas
- Northern Gas
- Berkshire Gas
- Vermont Gas
- Gaz Metropolitain (QB)
- New England Gas
- Unitil
- Northeast Utilities