

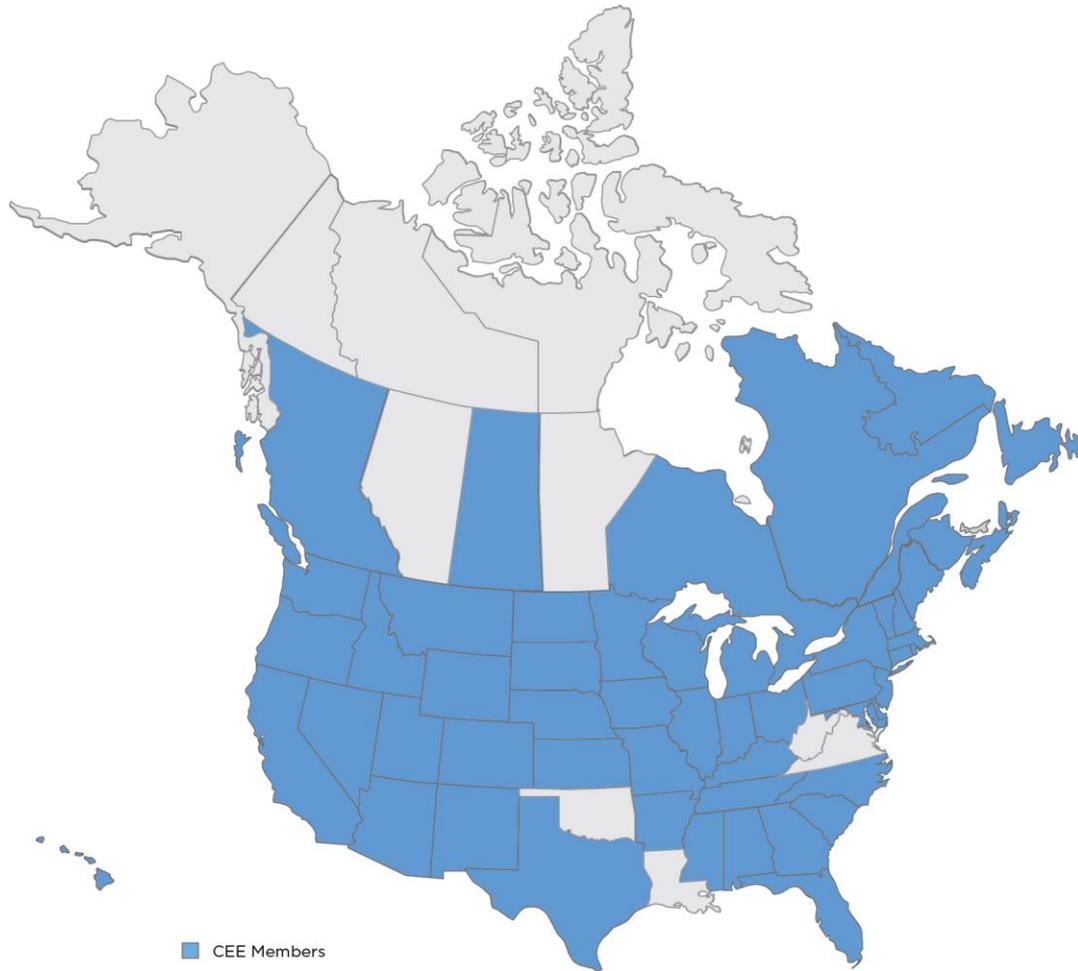


Consortium for Energy Efficiency

Program Collaboration to Drive Market Transformation

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ACEEE Hot Water Forum

CEE Today



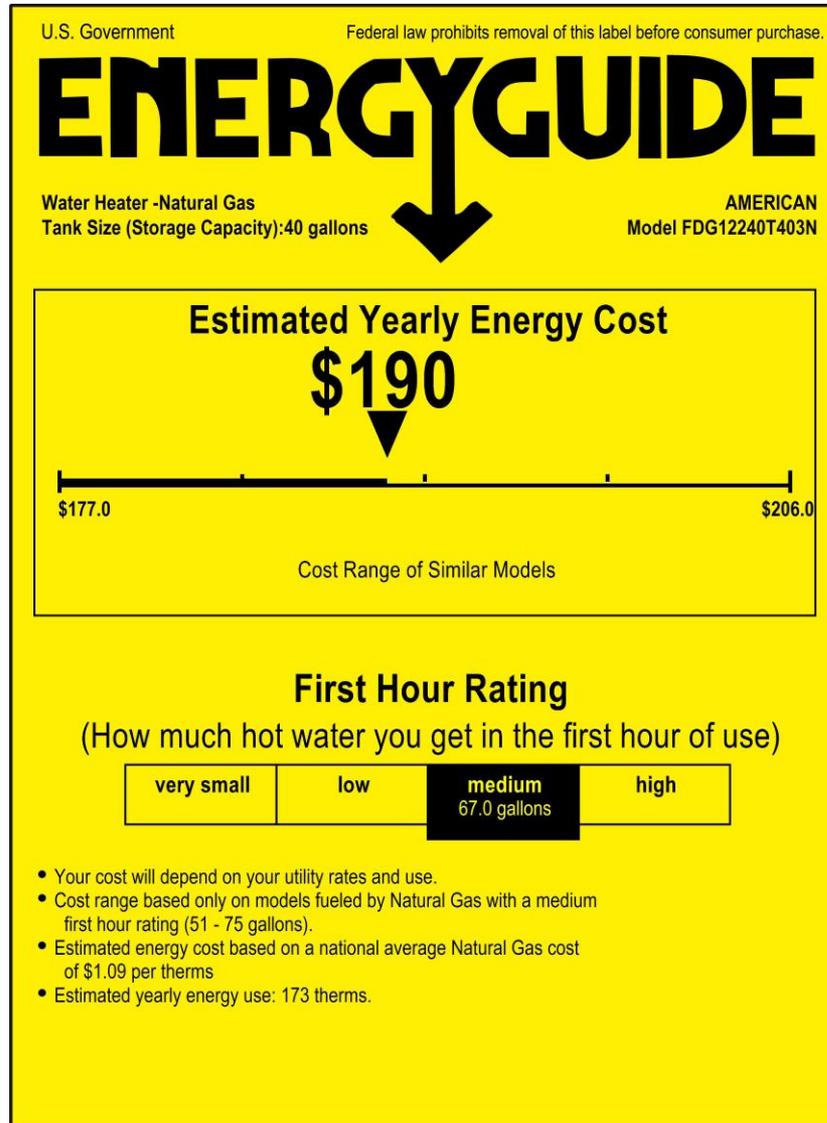
- ▼ CEE brings together 100 program administrators serving all or part of 45 states and 7 provinces
- ▼ CEE program model was recognized by the EPA with the 2009 Climate Protection Award 
- ▼ CEE is a member-driven nonprofit, governed by a Board of Directors from member organizations

Cost Effective Energy Efficiency

$$\frac{B}{C} > 1 \rightarrow$$



A Benefits Challenge



**CEE finalizes Gas
Water Heating
Initiative**

2008

2010

**DOE finalizes new
federal minimum
standards**

**DOE standards
take effect,
crosswalk from EF
to UEF begins**

2015

**Crosswalk finalized,
CEE works to
finalize revised
Initiative**

2017

What's A CEE Initiative?

What's a CEE initiative?

CEE initiatives reflect the collective wisdom of CEE members and are designed to assist program administrators in meeting their savings targets by influencing binational markets. Initially, members follow the [CEE process](#) to scrutinize an opportunity. Opportunities that survive to become initiatives take the form of a program template that can be voluntarily adopted by efficiency program administrators for use in local programming. In support of an initiative, CEE may develop other resources. While each initiative description is particular to an opportunity, in general it lays out goals, scope, and market conditions.

How does CEE support initiatives?

As an organization, CEE supports initiatives that members adopt in ways that match their own conditions. Through member adoption, the market for more efficient products and services grows. Initiatives are supported in three likely ways.

How Does CEE Support Initiatives?

SPECIFICATION

How does CEE generally support initiatives?

Specification

Within the context of an initiative, CEE specifications set tiers, or definitions of energy performance, for a product or service. The initiative scopes other aspects, for example, variation in performance related to weather. The tier strategy becomes the basis for market transformation. An initiative may require more than one specification, for example, the Residential HVAC Initiative has specifications for both equipment and Quality Installation.

If products are important to the initiative, how can efficiency program administrators quickly see a list of the efficient ones?

Qualifying Product List

While CEE does not certify products, manufacturers respond to CEE specifications by submitting lists of products they claim meet CEE tiers. CEE compiles manufacturer submissions into qualifying product lists that CEE members may reference when implementing and administering programs.

Which CEE members have adopted initiatives?

Program Summary

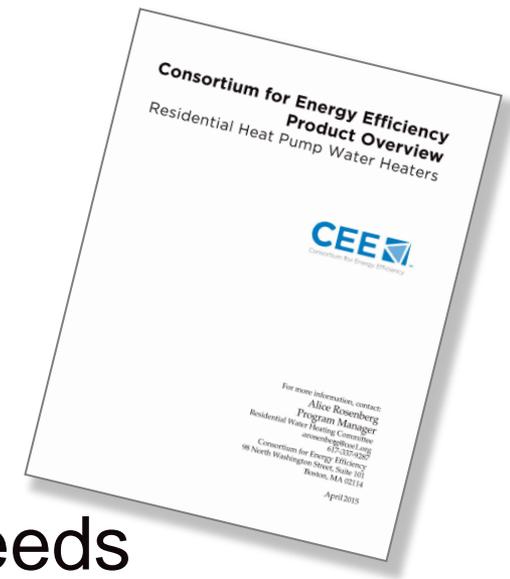
Periodically, CEE queries members to gather data about their particular program and how they've adopted the initiative to work within their local goals and conditions. Along with other details, program summaries may include information about incentives, or products are supported in which jurisdictions.

PROGRAM SUMMARY

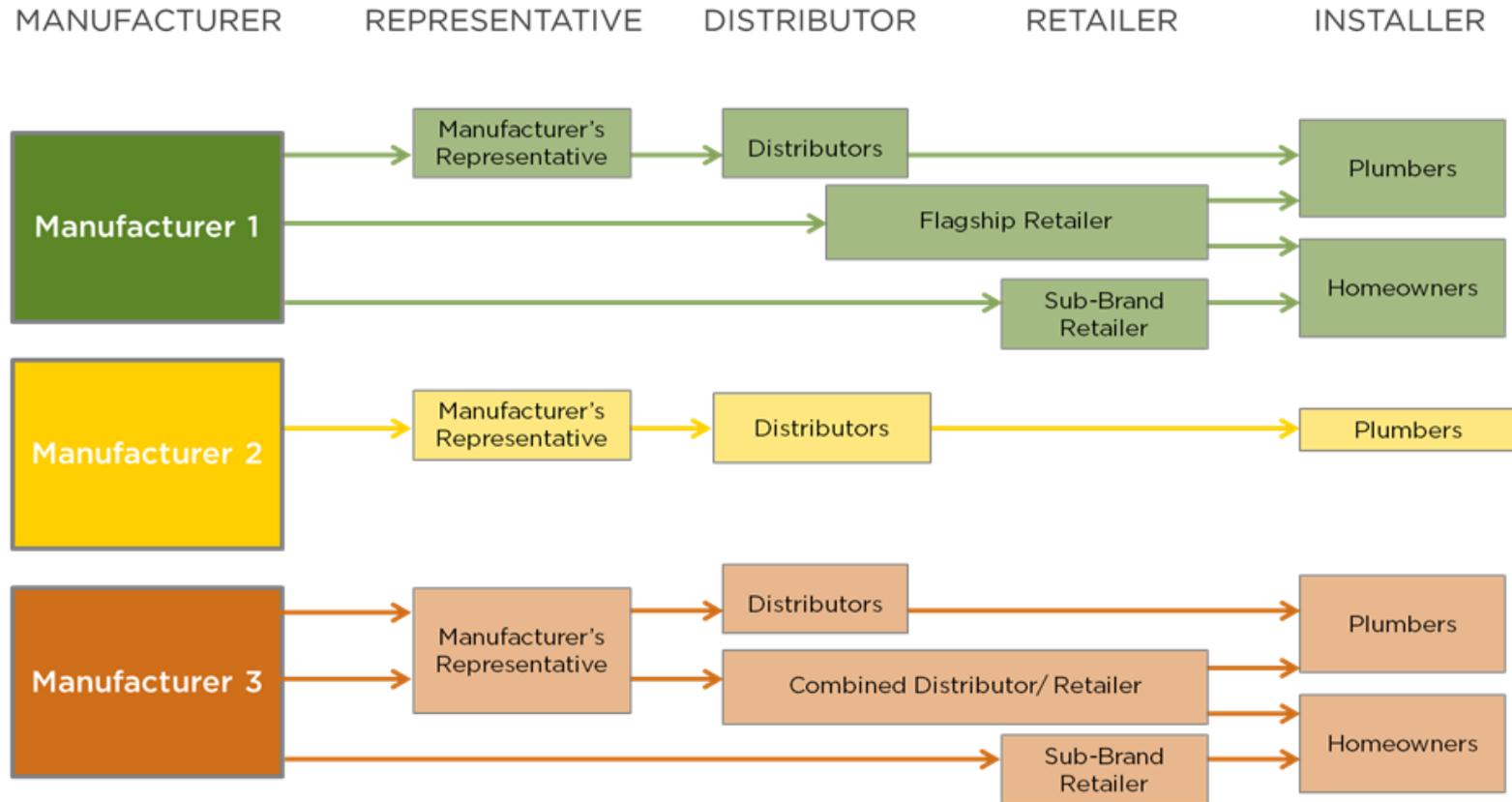
QUALIFIED PRODUCT LIST (QPL)

CEE Res Water Heating Initiative

- ▶ Characterize the current water heating market
- ▶ Identify key efficiency program considerations
- ▶ Develop specifications for:
 - Gas Storage Water Heaters
 - Gas Tankless Water Heaters
 - Heat Pump Water Heaters (NEW)
- ▶ Address education and guidance needs
- ▶ Focus on strategies for upstream approaches



Market Actors and Influencers





The Charismatic Frontman: Specifications



Specifications: Gas Products

Gas-Fired Residential and Residential-Duty Commercial Storage Water Heater Specification

Level	UEF		Other Mandatory Requirements
	Medium Draw Pattern	High Draw Pattern	
CEE Tier 1	≥ 0.64 UEF	≥ 0.68 UEF	ENERGY STAR Version 3.2 Compliance
CEE Tier 2	≥ 0.78 UEF		

Gas-Fired Residential Tankless Water Heater Specification

Level	UEF	Other Mandatory Requirements
CEE Tier 1	≥ 0.87 UEF	ENERGY STAR Version 3.2 Compliance
CEE Tier 2	≥ 0.92 UEF	

Specifications: Heat Pump Products

Heat Pump Water Heater Specification

Level	Tank Volume	UEF	Other Mandatory Requirements
CEE Tier 1*	≤ 55 gal	≥ 2.00 UEF	
	> 55 gal	≥ 2.20 UEF	ENERGY STAR Version 3.2 Compliance
CEE Tier 2	Any	≥ 3.10 UEF	
CEE Advanced Tier	Any	≥ 3.75 UEF	

▶ Compressor Shutdown Notification

▶ Default Settings:

- Minimal Use of Electric Resistance Element
- Shipment Mode

Specifications: Optional Connected Criteria for HPWHs

▼ Connectivity

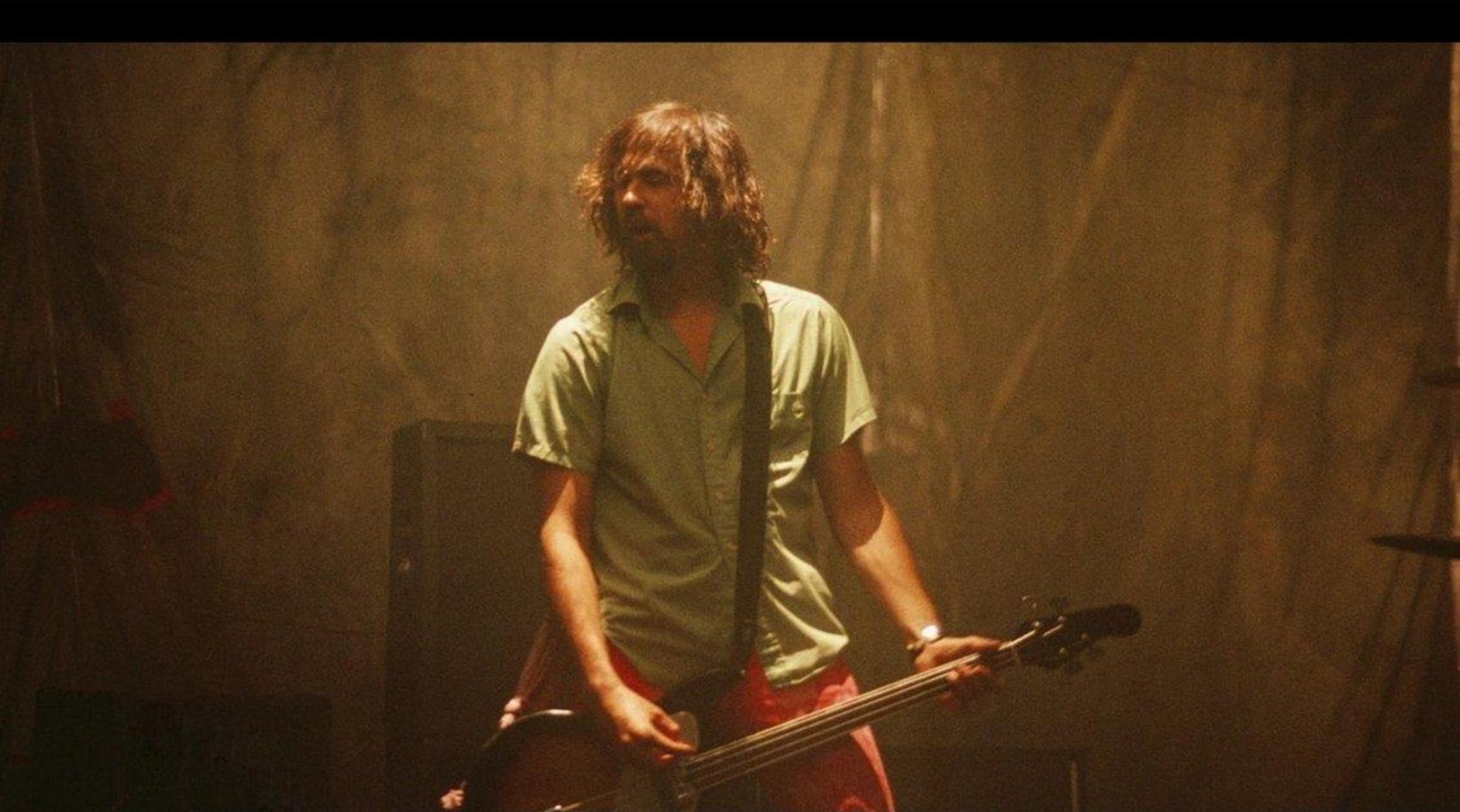
- On-Premise, Open Standards Connectivity
- Open Access

▼ Load Management Capabilities

- Common Set of Load Control and Monitoring Messages

▼ Consumer Override

The Bass Line: Education and Training



Targeting Both Consumers and Contractors

▼ Consumer Awareness and Education

- Benefits of choosing efficient equipment
- Targeting both planned and emergency replacement

▼ Contractor Awareness and Education

- Support contractors in explaining the consumer benefits of installing efficient equipment
- Provided through the distribution chain

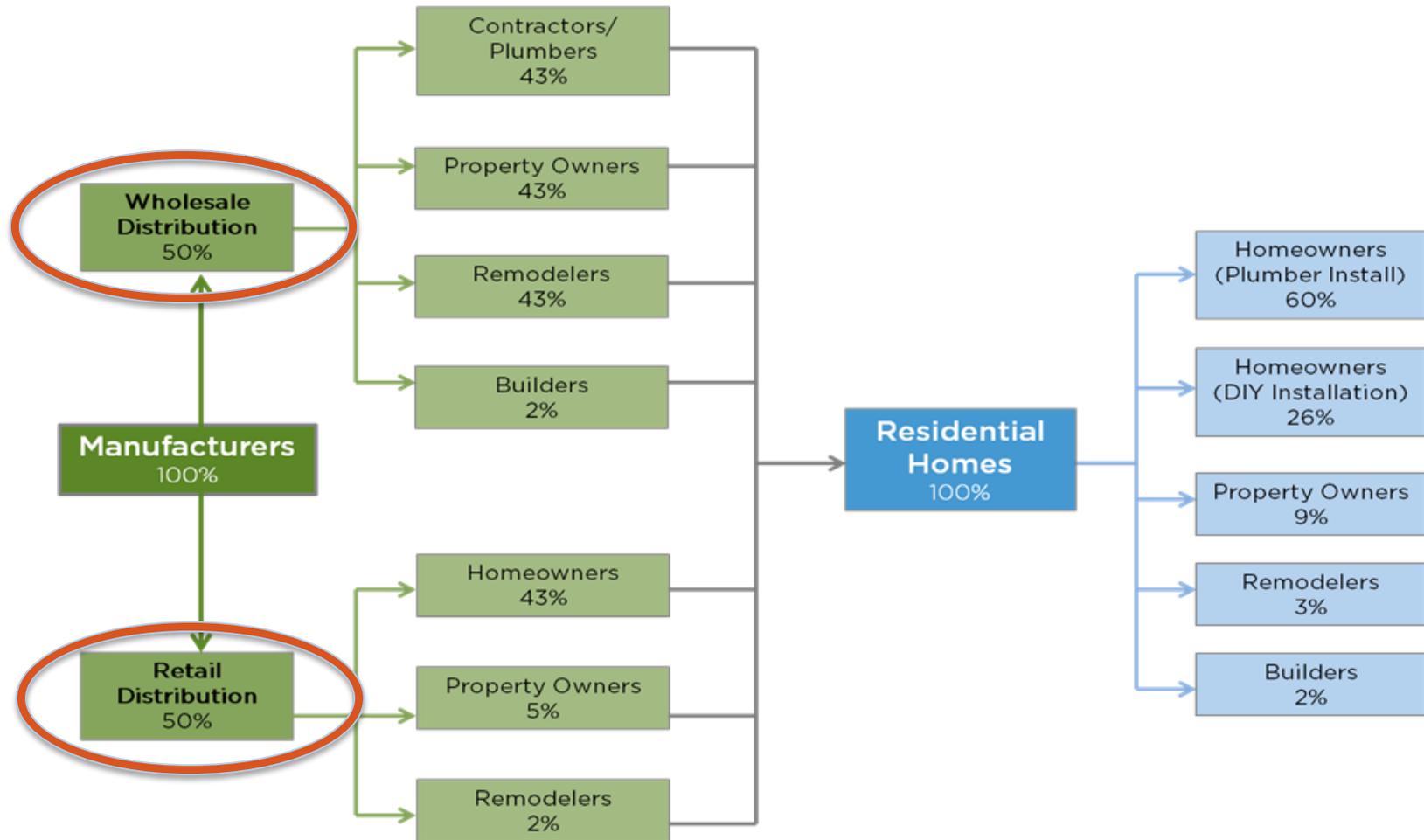
▼ Contractor Training, Support and Guidance

- Installation best practices and considerations
- Leveraging distribution chain resources and expertise

The Backbone: Midstream Engagement



The Distribution Chain



Working Directly with Distributors and Retailers

▼ Efforts to Impact Local Availability of Efficient Equipment

- Addressing both wholesale and retail stocking practices and support for efficient equipment
- Engaging these actors to promote the sale and proper installation of efficient products

▼ Midstream Program Design Models

- Offers or incentives offered directly to parties in the distribution chain
- Through a variety of strategies that encourage these trade allies to buy and sell efficient products

How Does CEE Support the Residential Water Heating Initiative?

YES!

- Gas Storage Specification
- Gas Tankless Specification
- HPWH Specification

SPECIFICATION

YES!

- 2017 Residential Water Heating Program Summary

PROGRAM SUMMARY

YES!

- Education and Guidance
- Program Strategies

ENGAGEMENT AND OUTREACH REQUIREMENTS

YES!

- AHRI/CEE Directory data to create periodic CEE QPLs

QUALIFIED PRODUCT LIST (QPL)

Initiative Participation Proposal

6 Initiative Participation

Initiative participation is an opportunity for individual efficiency organizations to amplify the impact of their local efficiency program. By participating in this Initiative (see requirements below), individual organizations are counted as part of a collective, harmonized effort to advance efficiency. As with all CEE initiatives, participation in the *CEESM Residential Water Heating Initiative* is voluntary. The following are the minimum requirements to be considered an Initiative participant:

1. Promote at least one of the water heater tiers outlined in Sections 5.1 and 5.2 through an incentive-based or educational program;
2. Participate in the Engagement and Outreach Strategies outlined in Section 5.3, by:
 - a. Promoting ALL three types of Education and Guidance mechanisms described in Section 5.3.1
 - b. Promoting at least one of the Program Approaches aimed at Midstream/Upstream Barriers described in Section 5.3.2
3. Communicate to CEE that you elect to participate in the Initiative. CEE typically publishes publicly available program information furnished by Initiative participants in an annual program summary and in other communications that serve to advance the goals of the Initiative by informing key market players of Initiative impacts.

SPECIFICATIONS



ENGAGEMENT AND OUTREACH



PROGRAM SUMMARY



This Initiative is offered for use to any CEE member who agrees to the terms of use.