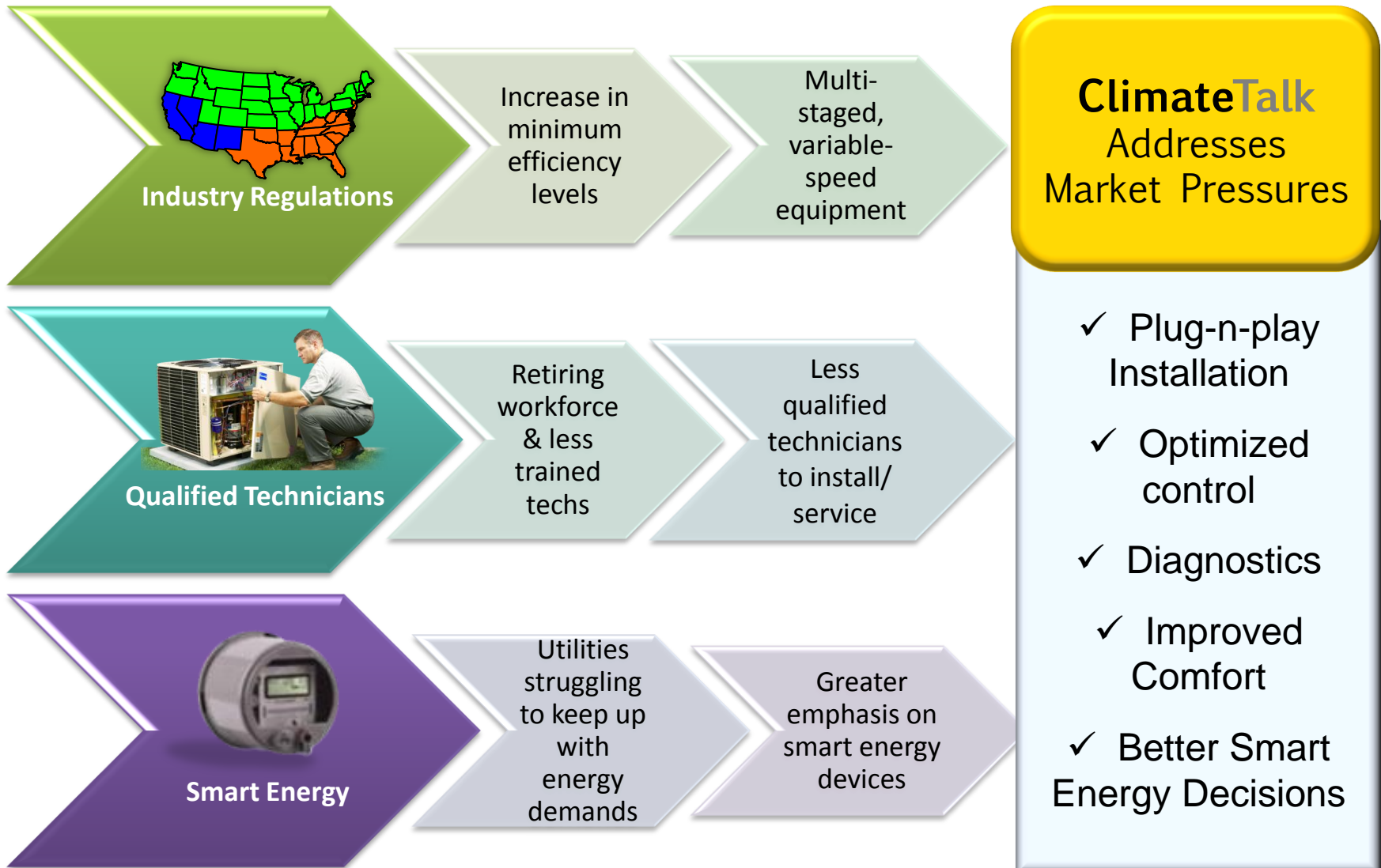


# How do we make all this stuff work together?

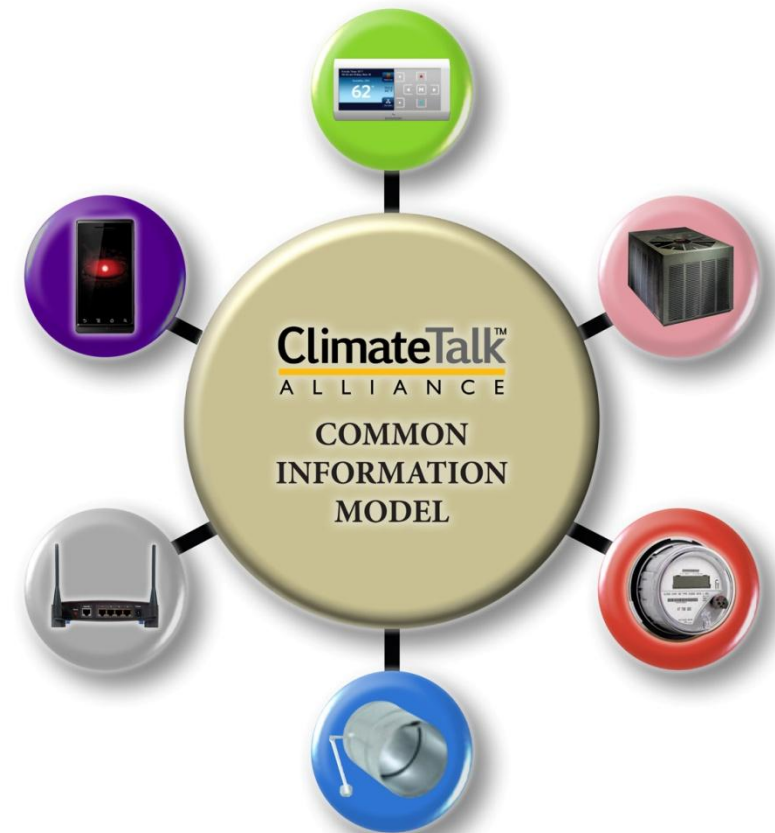
ClimateTalk Alliance

Presented by Joann Donelon  
Marketing Director, ClimateTalk Alliance

# HVAC Industry Mega Trends Converging



- **Comfort**
  - Balanced performance and energy savings
- **Control**
  - Simple, flexible and adaptable
  - Full range of capabilities in control, diagnostics and energy management
- **Choice**
  - Expandable for new applications on one network
  - Standard open for selection among multiple vendors
  - Connect over a choice of wired, wireless or power line communication methods



### Key Features

#### ★ Auto Configuration

- Recognize Devices On The Network
- No DIP Switch Settings
- Plug-n-Play Installation

#### ★ Shared Data

- Key System Data Saved In Multiple Locations
- Generic Replacement Boards Minimize SKUs
- Replacement controls are re-programmed automatically

#### ★ Smart Subsystems

- Controls Maintain Messages & Key Information To Display At the User Interface
- Allows For Upgrades & OEM Differentiation

- Optimized for Installation and Performance  
- Cost and Complexity Suitable for Residential Applications

## Alliance Members

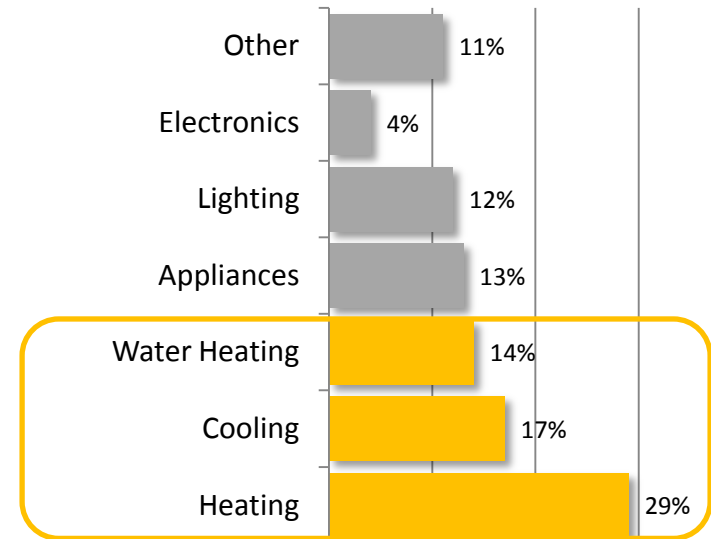


## Control Over Half of the Energy Used in the Home



~40% of HVAC  
80% of Zoning  
90% of Water Heaters

### Residential Energy Consumption



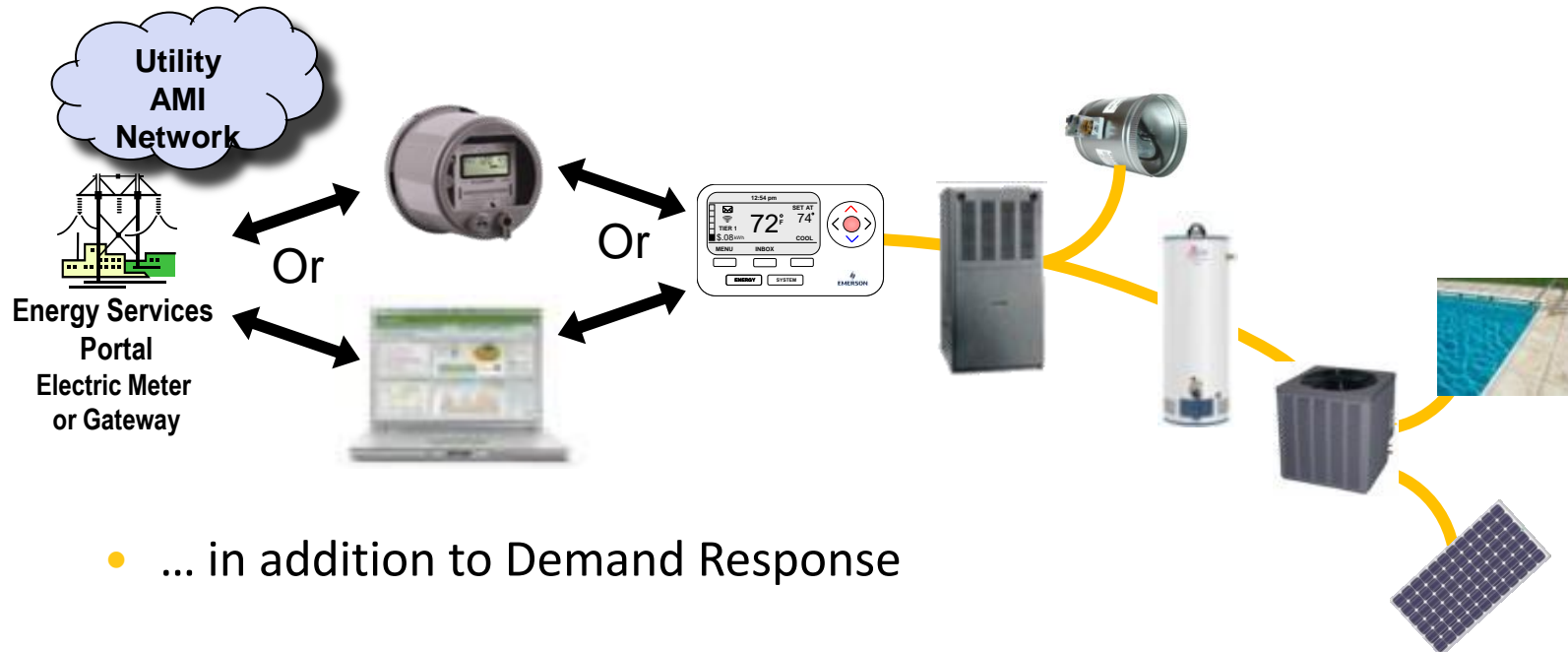
Source: EPA, 2010

# ClimateTalk

Built for Interoperability

- ClimateTalk Integrated Application Layer Provides
  - Advanced Control
  - User Interface
  - Two way communications
  - Diagnostics...

One Standard,  
One Interface,  
Multiple  
Protocols

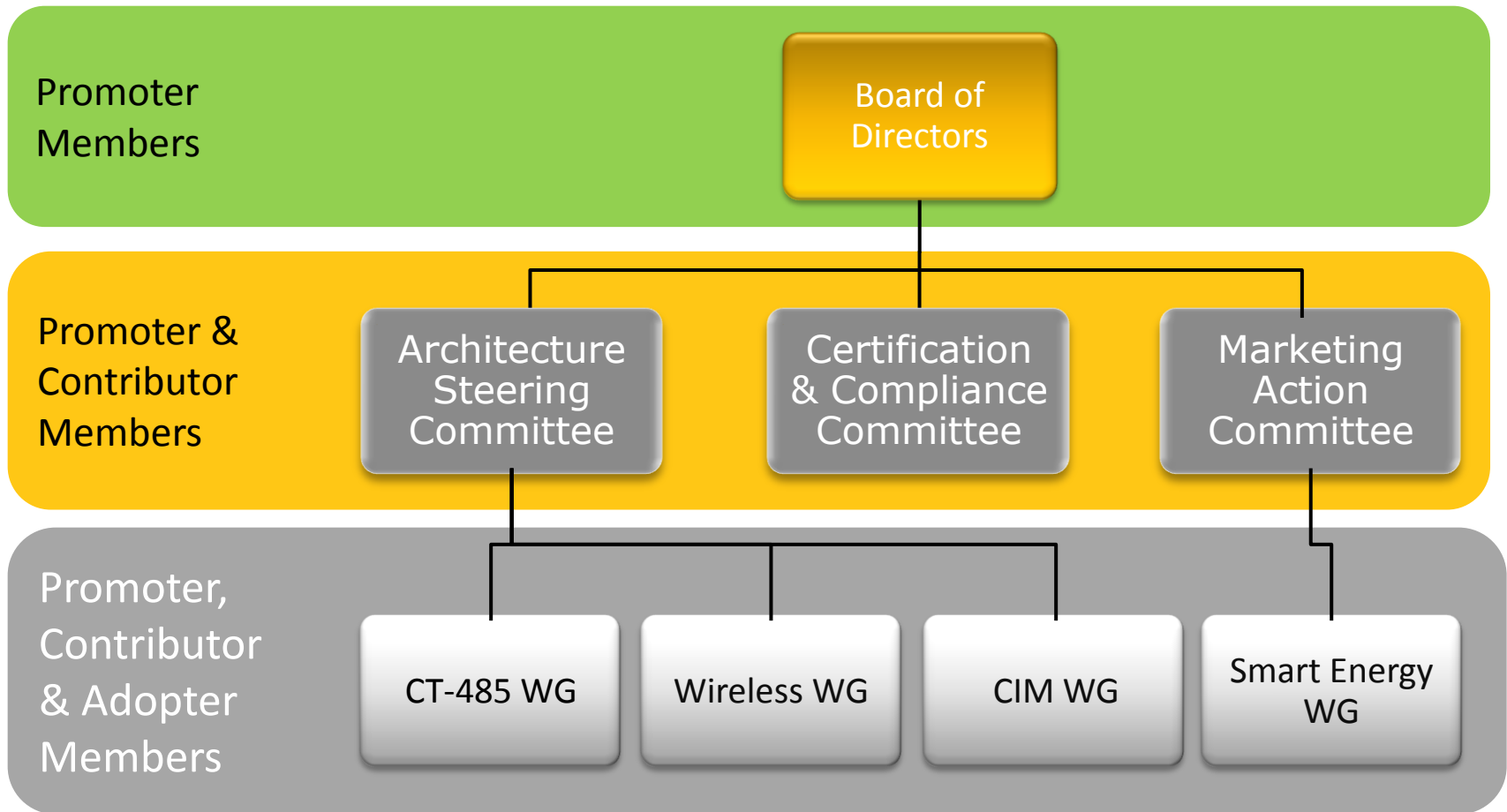


- ... in addition to Demand Response

- ClimateTalk Standard Developed to Manage Packaging and Delivery Method



# ClimateTalk Alliance

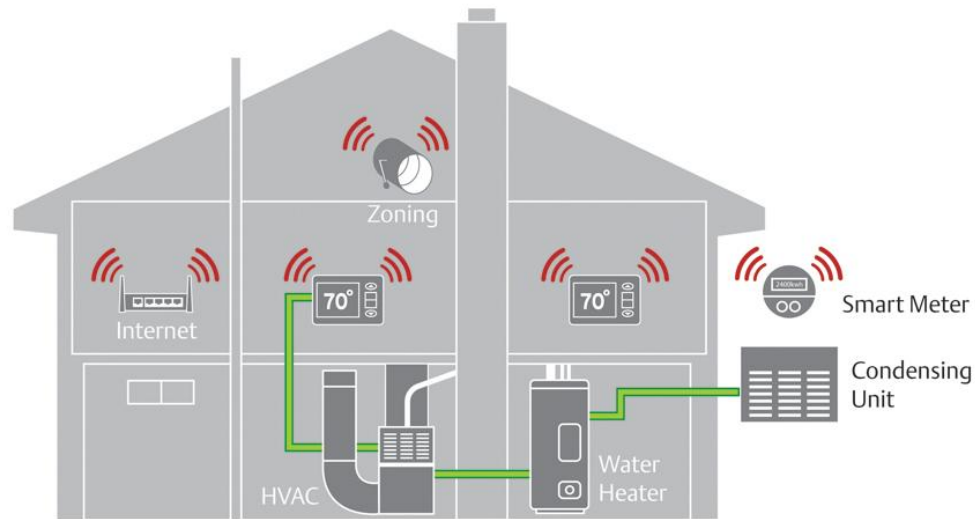


Alliance Provides Stability & Neutrality,  
Membership Drives Interoperability

How do we make all this stuff work together?

# STANDARDS



ClimateTalk™  
ALLIANCE



Communication Infrastructure

For more information, visit [www.ClimateTalk.org](http://www.ClimateTalk.org)

# Additional Information

ClimateTalk Common Information Model				
PROFILES	Hydronic Heating			COMMENTS
DEVICES		T-stat	<ul style="list-style-type: none"> <li>✓ PCT</li> <li>✓ IHD</li> <li>✓ EMS</li> </ul>	Integrate Smart Energy Data Payloads into CT CIM
		Furnace		
		Air Handler		
		A/C		
		Heat Pump		
		Zoning Controls		
	Water Heater		<ul style="list-style-type: none"> <li>✓ Load Control</li> <li>✓ Smart Appliance</li> </ul>	Add User Interface & Diagnostics to Load Control Profile
	Pool Heater			
FCN	Plug-n-Play Installation, Control, Diagnostics, Monitoring		Pricing & Load Shed Commands	Emphasis on DR&LC, Time and Price Clusters

<b>LEGEND</b>	Initial ClimateTalk Launch	In Development	Adopt Industry Standard
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