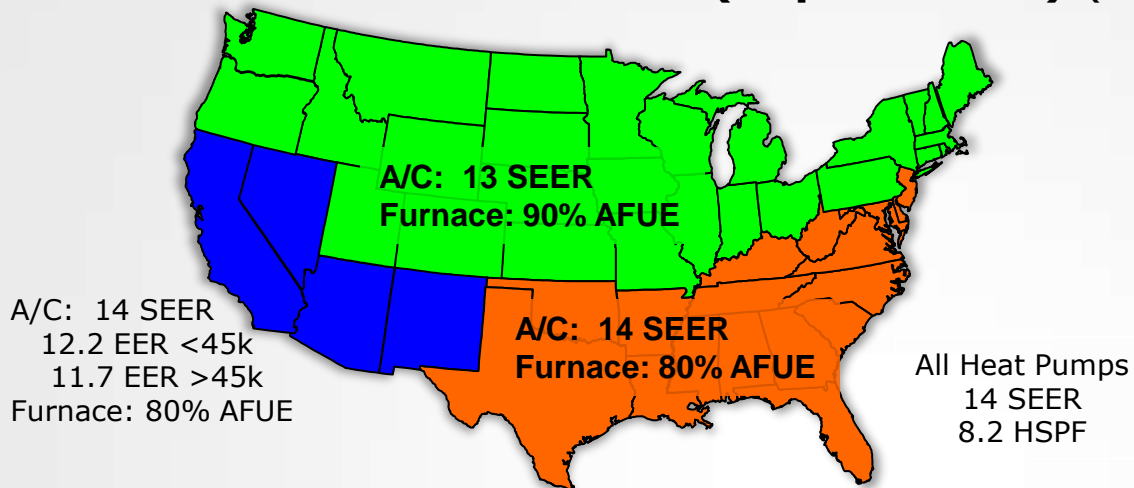


**Better Communications *for*
Better Customer Value**

ClimateTalk™

A L L I A N C E

Federal Minimum Standards (Replacement) (Effective Jan 1, 2015)

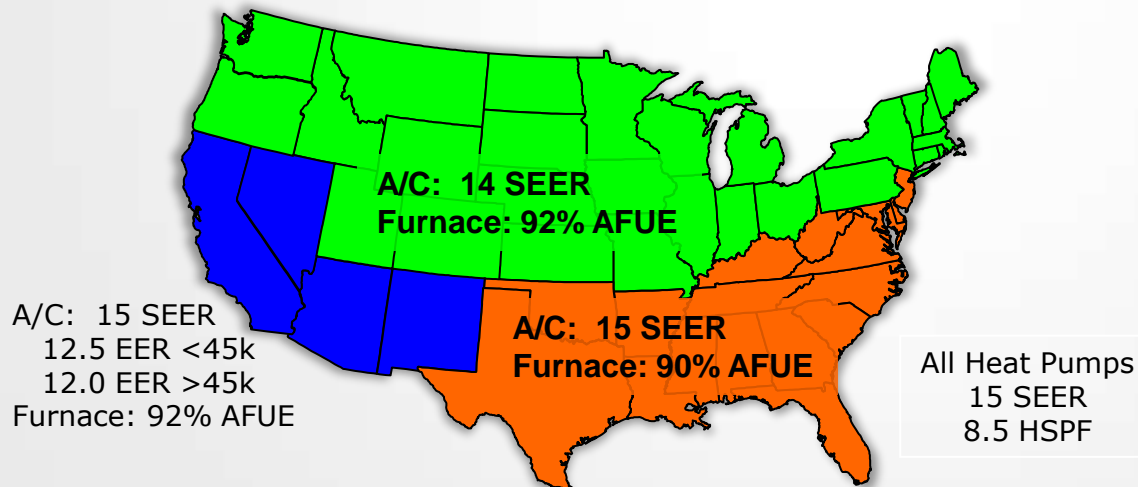


✓ Will drive the use of multi-staged, variable-speed equipment

✓ Projected to save homeowners \$13 billion

✓ Will save the US 3.7 quadrillion Btu of energy by 2030

New Building Codes (Effective Jan 1, 2013)



**AHRI and ACEEE
Have Reached
Consensus**

HVACR Workforce...

Over 27,000 skilled workers are projected to retire annually

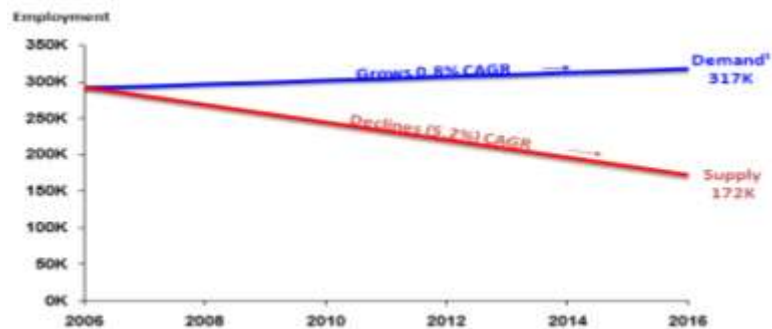
The Air Conditioning, Heating and Refrigeration NEWS and PHCC



Only 15,000 trained technicians are entering the workforce annually.

United States Department of Labor – Bureau of Labor Statistics

HVACR Labor Shortage...

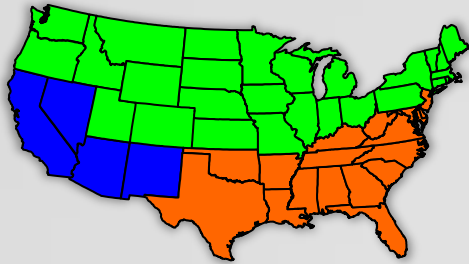


- 2010 market size for smart thermostats is forecasted at approximately 130,000 units and is expected to increase significantly in the next 5-10 years
 - On World Inc.'s Energy Smart Home report
- Cost conscious consumers are joining peak demand shedding programs offered by utilities



President Obama Announces \$3.4 Billion in Funding to Spur Smart Electric Grid

Nov 6, 2009



Regional Standards



Qualified Technicians



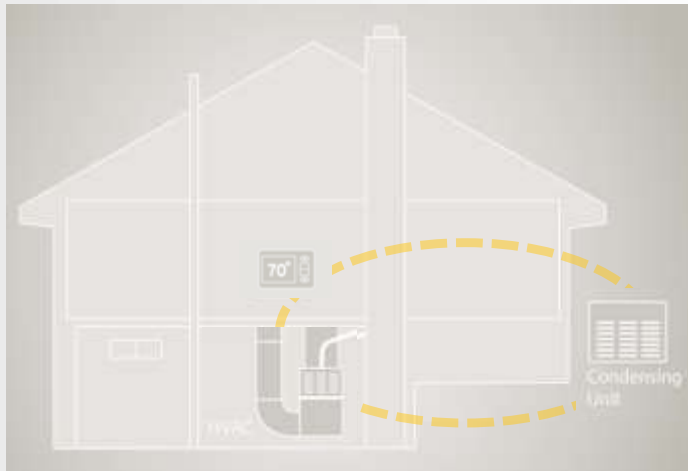
Smart Energy



The HVAC Industry is Moving to Serial Communications

- ✓ Enables higher efficiency systems
- ✓ Reduces burden on contractors
- ✓ Improves overall comfort
- ✓ Enables Better Smart Energy Decisions

Multiple Wired Protocols Being Developed
 - Not interoperable with Each Other and No Path Defined for Common Wireless Platform or Smart Energy Interface



Fragmentation
 Slowed Adoption
 Customer Frustration

HVAC Systems	Wired Protocol
OEM 1	A
OEM 2	B
OEM 3	C
OEM 4	CT485
OEM 5	CT485
OEM 6	TBD
OEM 7	TBD

Closed, proprietary protocols

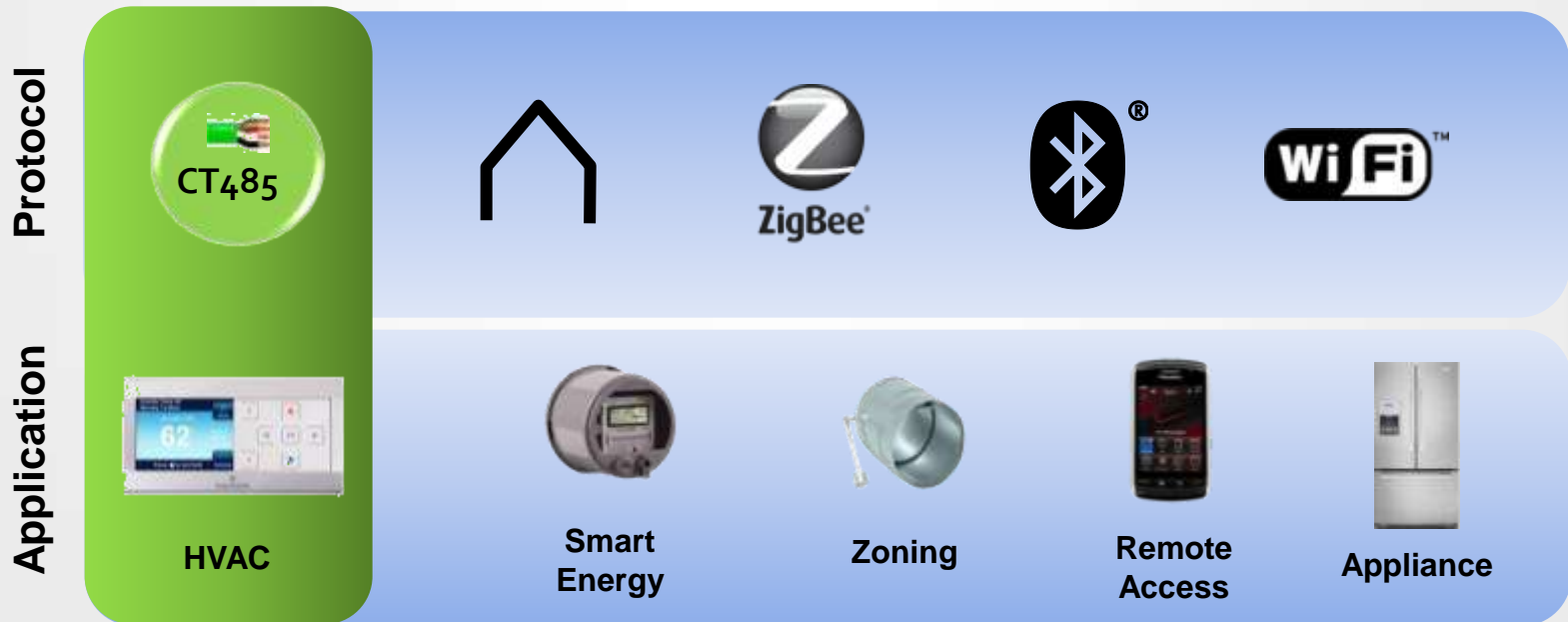
Open Protocol

- **NEED**

- Eco-system of interoperable controls to address growing demand for energy efficiency and comfort

- **BARRIERS**

- Lack of open solution
- Industry fragmentation

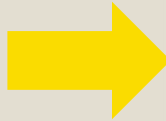


1. Set Goals

- Offer product differentiation
- Feature diagnostics
- Provide easier installation and setup
- Realize SYSTEM benefits

2. Evaluated Protocols

- Closed / Proprietary Designs
- EnviraCom
- ModBus
- LonWorks
- BACnet
- ClimateTalk



3. Results include

- Excellent field experience
- Customer acceptance
- Exceeding product sales targets



- Interoperability
 - The free exchange of information between components from different manufacturers
- Interchangeability
 - No change in form, fit, or function
- Compliance Testing
 - To ensure expected operation
- Save in Development Costs/Time
 - Standards Completed
 - Hardware Conformance Completed
 - Faster Time to Market
- Customers Want Choices
 - More likely to choose a system with that is interoperable with other systems
- Sharing Best Practices
 - Will make the open system the best it can be



Collaboration
Drives Adoption

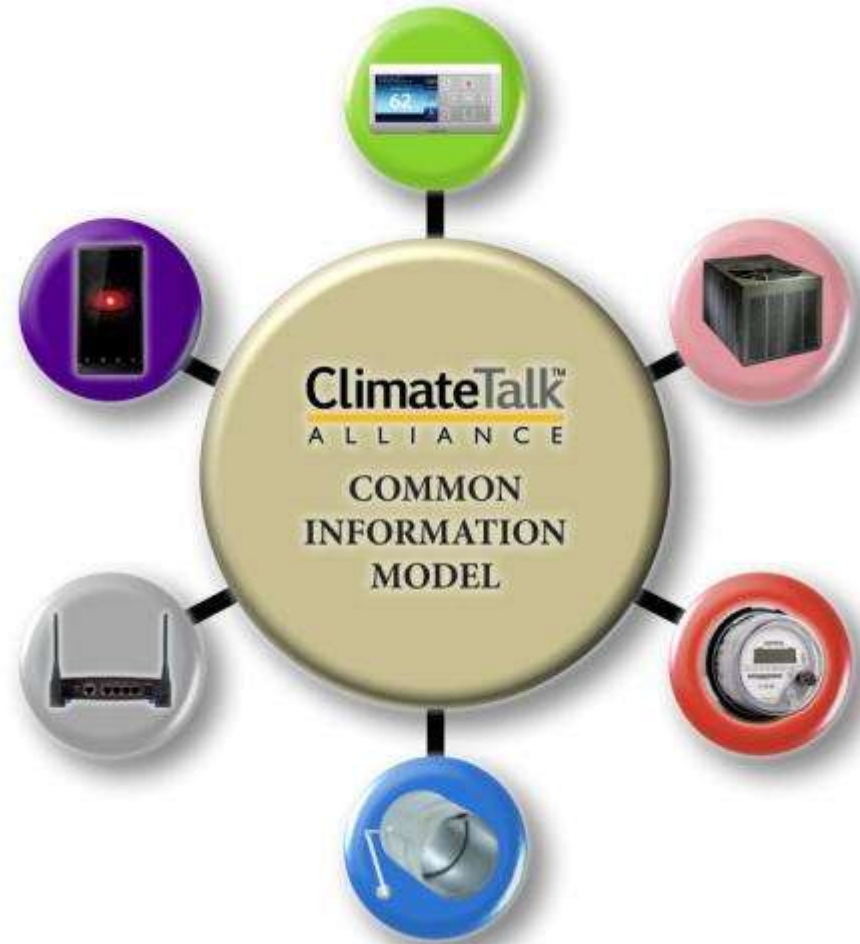


Open
Standards
Support
New
Technology

- Accelerate Adoption
 - Communications will be expedited and far more profitable for all parties if the industry can set forth a standard by which all members play.
- Create Value
 - In order to be successful a standard must have input from all the stakeholders to create something that is useful to everyone, not just a few groups.
- Collaborate
 - The ClimateTalk Alliance is being formed to provide a platform for industry leaders to collaborate in the development of these standards to prevent industry fragmentation and accelerate adoption.

ClimateTalk Alliance Mission

*An organization
committed to
developing a
common
communication
infrastructure for
HVAC and Smart
Energy devices,
enabling the
interoperability of
diverse systems*



- Industry

- Enable OEMs to meet regional efficiency requirements
- Reduced time to market
- Lower development costs
- Longevity and stability of standards



Increase Sales Of High Efficiency Products

- Homeowner

- Protects investment in high end equipment
- Optimizes system performance
- Provides diagnostic and operation information
- Foundation for remote access

Improved Efficiency And User Experience

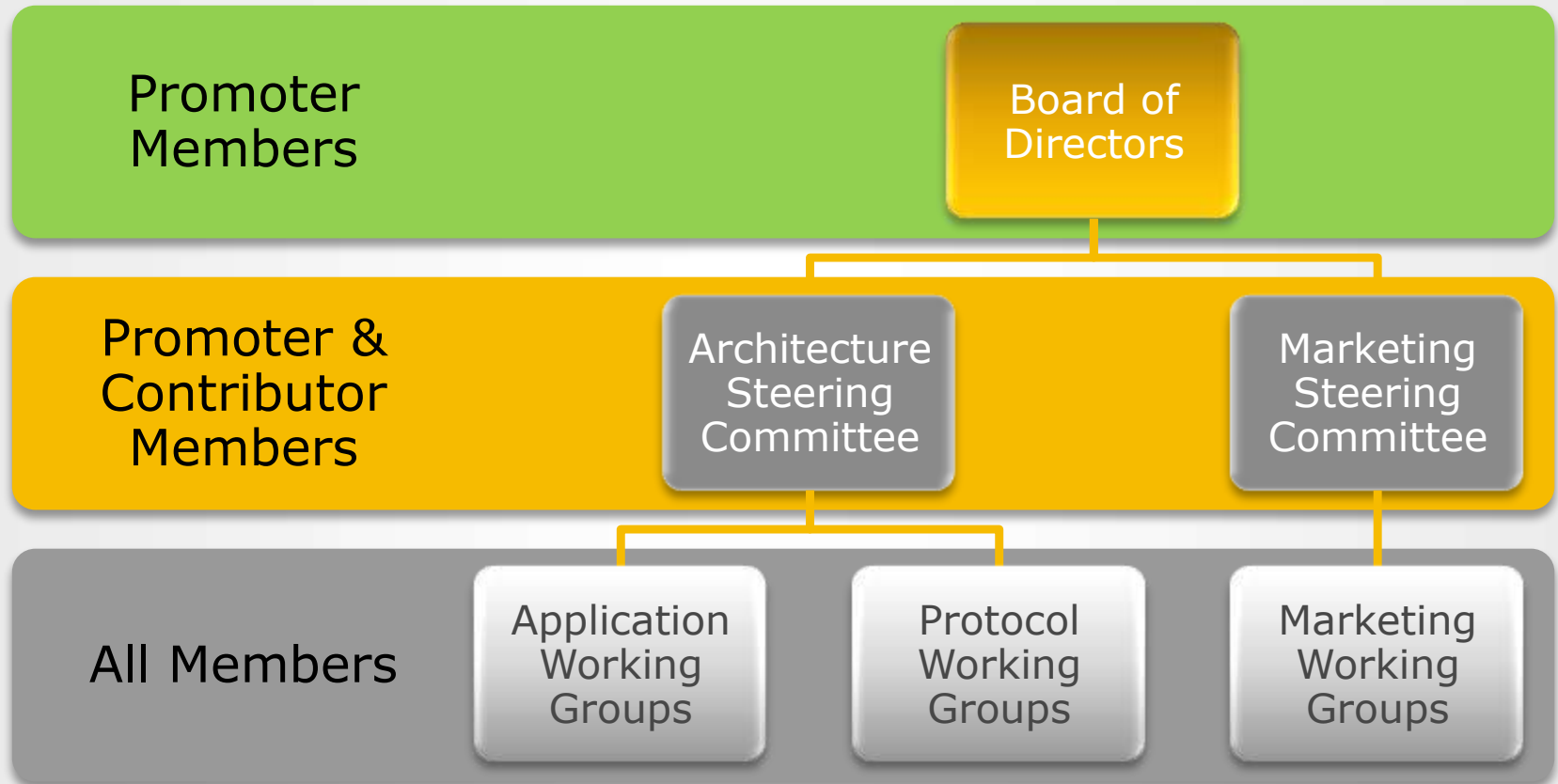


Member Benefits

- Common Membership Privileges
 - Rights to Use ClimateTalk Brand
 - Solutions Promotion / Visibility / Leverage
 - Certification Test Program
- Benefits That Vary By Tier
 - Promoter Member
 - Board Seat
 - Approval Required For All Changes to Specs or Bylaws
 - Contributor
 - Eligible for Participation / Chair in Committees
 - No Voting Privileges on Final Changes to Specs or Bylaws
 - Adopter
 - Protocol Licensee
 - Able to Sell Product Under ClimateTalk Brand

Member Benefits	Promoter	Contributor	Adopter
Seat on Board of Directors	√		
Candidate for Officer Position, Exec. Committee	√		
Approve Committees/Work Groups	√		
Approve New Board Members	√		
Vote in Officer Elections	√		
Final Approval of Alliance Specifications	√		
Pre-release access to documents	√	√	
Chair Work Groups	√	√	
Vote in Work Groups	√	√	
Approve Working Group Draft Specifications to 0.X	√	√	
Attend Annual Meetings, workshops, events	√	√	By Invitation
Participate in Work Groups	√	√	By Invitation
Propose Work Group Items	√	√	√
Access to "Members Only" web	√	√	√
Marketing Events and Press Releases	√	√	√
Receive Newsletter	√	√	√
Obtain Final Documents	√	√	√
Use Alliance Brand	√	√	√

ClimateTalk Alliance Organization



Architecture Steering Committee

Develop System Roadmap

Marketing Steering Committee

Recruit Members & Promote Alliance

Application

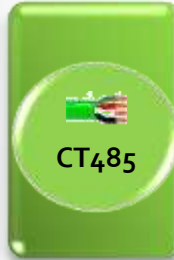
Define Use Cases

Protocol

Ensure Interoperability

Conformance

Develop Certification & Compliance Program





watsco



Current Members

- Legally Incorporated
 - Jan 2009
- Website Active
 - Sep 2009
- Formal Launch
 - Nov 2009
- Establish Working Groups
 - Dec 2009
- Initiate Certification Program
 - Feb 2010
- All Members Meeting
 - Mar 2010



Together
We Can Shape The Future

Better Communications *for* Better Customer Value

Building An Ecosystem Of Interoperable HVAC /Smart Energy Devices Sharing A Common Communications Infrastructure

As technology continues to change almost daily, bringing new innovation and product improvement, system communication becomes an even more critical component for higher performance and customer satisfaction.

Username:

Password:

MEMBER LOGIN

GET MORE INFO

ABOUT CLIMATETALK™

Defines the application layer-level messages and the performance bounds to enable HVAC and SE applications to run seamlessly in the residential and light commercial environments.

- [Architectural Overview](#)
- [Members](#)
- [Products](#)

BENEFITS *of* JOINING THE ALLIANCE

Joining the Alliance provides stakeholders the ability to drive the future capabilities, ensures stability and drives competitive solutions

- [Access to specification](#)
- [Benefits Matrix](#)

ALLIANCE NEWS & EVENTS

Upcoming Events:

CLIMATETALK LAUNCH EVENT

November 12, 2009

Phoenix, AZ

CLIMATETALK MEMBERSHIP DRIVE

January 25-27, 2010

Orlando, FL