



# **SWEEP/WCEC**

## **Modern Evaporative Cooling Technologies Workshop**

### **Overcoming Market Barriers – An Implementation Perspective**

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# General Classifications of Barriers

## ■ Policy/Regulatory Barriers

- Utility disincentives
- Cost recover mechanisms

## ■ Technology Barriers

- Home security
- Water quality
- Effective distribution

## ■ Market Barriers

# Recap of Key Market Barriers (residential focus)

- Lack of measure information
  - Available technologies
  - Savings potential
  - Capital and lifecycle costs
  - Proper operation
- Incomplete pricing information
- Water usage concerns
- Performance uncertainties
- Maintenance requirements

# Recap of Key Market Barriers, continued....

- Home resale values
- Capital equipment costs
- Split incentives
- Existing market infrastructure
  - Equipment availability
  - Contractor availability
    - Central AC contractors dominate the residential and small commercial cooling market
    - Margins
    - Liabilities

# Possible Solutions to Market Barriers

- Increased customer educational and outreach campaigns
  - Policy/Regulatory barrier of cost recovery must first be addressed
  - Leverage current market awareness of energy efficiency
  - Integrate carbon and GHG emissions in messaging
  - Demonstration sites
  - Target key receptive markets
    - Coordination with state and federal Weatherization efforts
    - Outreach efforts and installation services must be available in other languages

# Possible Solutions, continued...

- Establish/support dedicated contractor and installer network
  - Manufacturer or independent affiliation
  - Create education or certification opportunities (e.g. NATE for central AC)
  - Endorsement by utilities and public interest groups
- Direct coordination with water utilities
  - Joint messaging about net water consumption
  - Explore innovative water rate structures and tariffs

# Possible Solutions, continued...

## ■ Incentives

- Downstream incentives help address incremental cost of higher end evaporative systems
- Mid-stream and upstream incentives support market delivery channel
- Financing options level playing field with central AC

## ■ Establish an existing evaporative cooler maintenance program

- Seasonal startup/shutdown support, media replacement, etc...
- Direct replacement candidates towards new evaporative technologies
- Subsidized at nominal level
- Promotion and coordination of services more important

# Recap of Market Barriers and Implementation Options

Market Barriers	Outreach	Coordination with water utilities	Dealer network	Incentives	Maintenance support
Lack of measure information	✓	■	✓		■
Incomplete pricing information	■	■			
Water usage concerns	✓	✓			■
Performance uncertainties	✓	■	■		✓
Maintenance requirements	■		✓		✓
Home resale value	■				
Incremental capital costs	■			✓	
Split incentives	■			✓	■
Existing market infrastructure			✓	✓	■

✓ Primary method to address barrier

■ Secondary method to address barrier

# Contact Information



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