



# CEE Commercial Kitchens Workshop

To be followed by Gas Water Heating  
Workshop

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San Ramon, CA

# Agenda

- ▶ Workshop Overview and Introductions
- ▶ Kitchens Workshop
  - Kitchens Initiative Overview
  - Tour of FSTC and Overview of Equipment Testing
  - Ventilation Discussion
- ▶ Lunch
- ▶ Water Heating Workshop
  - FSTC Hot Water System Design Guide Overview
  - CEE Specification Discussion
  - Update from Jim Lutz of Berkeley Lab on FEMP procurement process

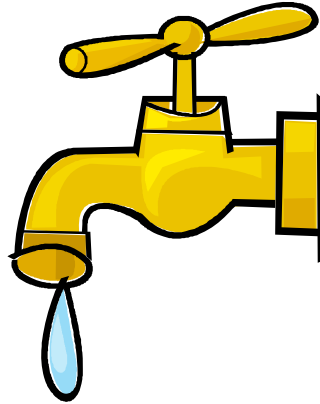
# Introductions

- ▶ Name
- ▶ Title
- ▶ Organization
- ▶ State
- ▶ How long working in energy efficiency
- ▶ Experience in commercial kitchens / water heating

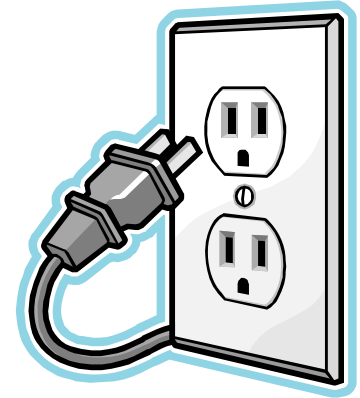
# CEE Commercial Kitchens Initiative



Save 10-30%



Save 10-40%



Save 10-30%

- ▶ Launched December 2005
- ▶ Define energy and water efficient kitchen equipment
- ▶ Develop targeted market strategies to streamline product selection

# Equipment Categories

CEE or ENERGY STAR  
Specifications



Advanced Member  
Specifications



# Kitchens Workshop Objectives

- ▶ Gain an understanding of commercial kitchen equipment testing
- ▶ Learn about commercial kitchen ventilation savings opportunities
- ▶ Develop pathways to leverage CEE in prescriptive program efforts to improve kitchen ventilation efficiency

# FSTC Tour

# Kitchen Ventilation Objectives

- ▶ Learn about commercial kitchen ventilation savings opportunities
- ▶ Develop pathways to leverage CEE in prescriptive program efforts to improve kitchen ventilation efficiency

# Kitchen Ventilation Agenda

- ▶ Ventilation Opportunity – Don Fisher
- ▶ Committee activities to date
- ▶ Break / Get lunch
- ▶ Small Group Discussion
- ▶ Group Reports
- ▶ Wrap Up

# Don's Presentation

# Kitchen Ventilation Working Group

- ▼ BC Hydro
- ▼ Cascade Gas
- ▼ Centerpoint Energy
- ▼ Con Edison
- ▼ Efficiency VT
- ▼ Energy Trust of Oregon
- ▼ EWEB
- ▼ MN Dept. of Commerce
- ▼ National Grid
- ▼ Natural Resources Canada
- ▼ NJ Office of Clean Energy
- ▼ NV Energy
- ▼ NYSERDA
- ▼ PG&E
- ▼ Snohomish County PUD
- ▼ SoCal Edison
- ▼ SoCalGas
- ▼ Union Gas
- ▼ Vermont Gas
- ▼ WI Focus

# Working Group Goal and Approach

- ▶ Support programs develop kitchen ventilation programs
- ▶ Comprehensive approach
  - Consider all savings options
  - Consider fan energy and HVAC savings

# Steps

## ▼ Step 1: Identify challenges

- Program Development and Implementation
  - Understanding technology options, installation considerations
  - Quantifying savings, cost, etc.
  - Inconsistency in product qualification req's across programs
- Market
  - Lack of awareness
  - Upfront cost
- Quality Installation Concerns

## ▼ Step 2: Learn from manufacturers

## ▼ TODAY: Determine next steps

# Scope

- ▶ Full hood systems vs. One piece of puzzle
  - Hood design
  - Equipment lineup
  - Demand control
  - Ductwork
  - Fans
  - Motors
  - Installation and commissioning
- ▶ Recommendation: start with demand control only
  - Program experience building
  - Lower complexity – prescriptive program potential

# Potential Pathways

- ◀ Specifications and qualified products lists desired – but how?
  - Program Guidance
  - Test Procedure Development
  - Data Collection / Pilot Program

# Contact

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