



Energy Solutions Center Orientation



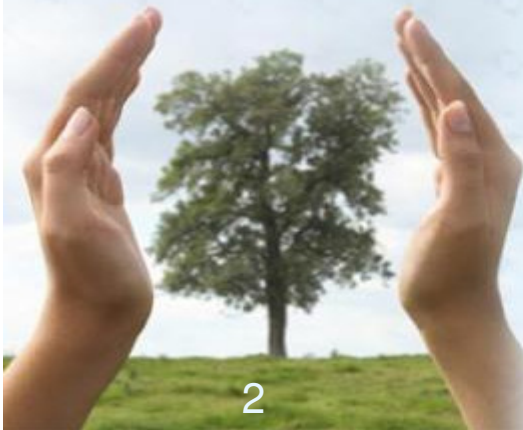
What is ESC ?

The Energy Solutions Center is a technology commercialization & market development organization of 54 North American gas utilities and 60 equipment manufacturers that work together to bring improved, energy efficient natural gas solutions to residential, commercial, and industrial energy users



The Value of ESC

ESC *leverages* the limited amount of funds, personnel and resources that utilities can dedicate to marketing, sales, and customer outreach and communication





ESC Goals

- Equip utility marketing and customer support staff with the knowledge, skills, and abilities to be more successful in delivering energy efficient gas solutions to customers
- Identify and promote new gas solutions that increase competitiveness, productivity, and reliability of our member's customers
- Develop more effective partnerships between utilities, equipment manufacturers, architects and engineers, and customers



Where ESC Fits In

- Gas Technology Institute – research and development; **product development**;
- American Gas Association – **lobbying and policy**; operations and engineering; communications and public relations
- Energy Solutions Center – **market development**; **technology deployment**; education and training of utility reps and customers; marketing and sales materials
- Regional Gas Association – **regional policy issues**, codes and standards, **annual marketing meeting**, **operations**; education and training



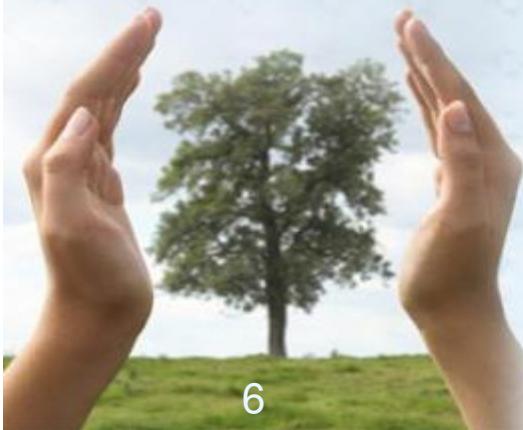
Primary Features of ESC

- Technology & Market Assessment Forums
- Resources & Tools
- Consortia



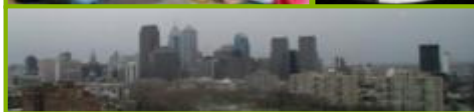
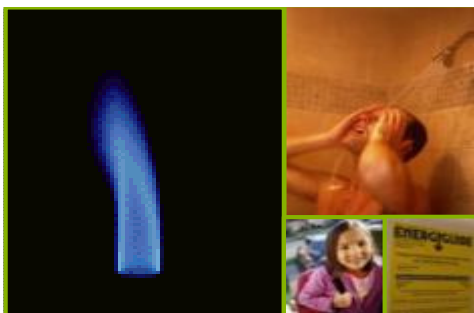
Technology and Market Assessment Forum (TMAF)

- Premier education & training venue
- Unique 2.5 day event – 3/year
- Free to all members
- 300 gas marketing & sales professionals
- Professional networking opportunities with colleagues from 50 local distribution companies and dozens of equipment manufacturers



Technology and Market Assessment Forum (TMAF)

- Robust Focus
 - New Gas Solutions
 - Strategic Marketing & Sales
 - Conservation & Efficiency
 - Specialty Tracks (Foodservice / NGV)
 - Gas Equipment Exhibits



Future TMAFs

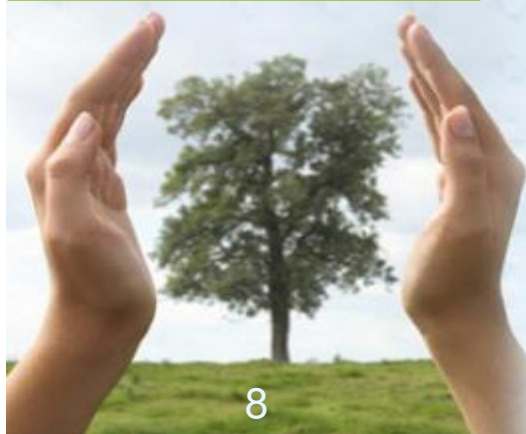
October 23-25, 2013, Philadelphia, PA

February 11-13, 2014 Atlanta, GA

June 2014, Kansas City, KS

October 2014, Los Angeles, CA

**Past TMAF Presentations are posted on
the ESC web site**



General Resources & Tools

[SEARCH](#)[MEMBER LOGIN](#)[LOG-IN](#)[ABOUT US](#)[EVENTS](#)[CONSORTIA /
WORKGROUPS](#)[GUIDE TO GAS
SOLUTIONS](#)[EQUIPMENT
MANUFACTURERS
DIRECTORY](#)[CONSERVATION &
EFFICIENCY](#)[STRATEGIC
MARKETING](#)[MAGAZINES & CASE
STUDIES](#)

Latest News

[View All](#)

New Report Finds Natural Gas Critical to a Smart Energy Future


Abundant Natural Gas Supply Hits Home for Consumers

Frymaster wins 2011 Product of the Year Award from the Gas Foodservice Equipment Network (GFEN)

Welcome

Energy Solutions Center, Inc. (ESC) is a non-profit organization of energy utilities and equipment

The Energy Industry – How are We Doing?
An interview with Joe Rende



ESC Monthly Webinar Series

10



2013 Webinar Series

The Energy Solutions Center, in conjunction with The American Gas Association hosts a series of end-use application webinars designed for utility marketing and sales representatives. Topics include:

Date	Time	
January 1 st	2:00 p.m. EST	Commercial & Industrial Heating
February 7 th	2:00 p.m. EST	Engine Driven Gas Cooling
March 7 th	2:00 p.m. EST	Homebuilder Decision-making Process—Study Results
April 4 th	2:00 p.m. EDT	Catalytic Heating
May 2 nd	2:00 p.m. EDT	Residential and Commercial Water Heating
June 6 th	2:00 p.m. EDT	Multi-Family Best Practices
July 11 th	2:00 p.m. EDT	New CHP Strategies
August 1 st	2:00 p.m. EDT	CNG Forklifts
September 5 th	2:00 p.m. EDT	Condensing Economizers for Boiler Systems
October 3 rd	2:00 p.m. EDT	Industrial Niche Markets
November 7 th	2:00 p.m. EDT	Thermal Cameras: Minimizing Energy Loss
December 5 th	2:00 p.m. EST	Low NOx Options

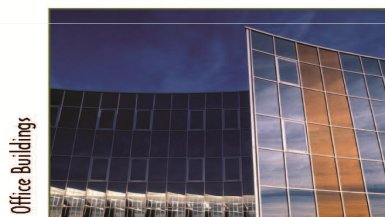
ESC conducts
workshops
for utility staff
or their customers
in their service
territories

Workshops and Webinars

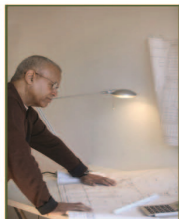
A program designed for



Food Service
Facilities



Office Buildings



Architects &
Engineers

Workshop at a Glance:

9:30 am Opening Remarks
9:45 am Heating, Efficiency and Other
Technologies for Commercial
Buildings
10:45 am Break
11:00 am Understanding Life Cycle Costs
11:30 am Understanding Carbon Footprints
12:00 pm Lunch provided
12:45 pm LEED Certification – USGBC
1:30 pm Break
1:45 pm MGE Processes and Contacts
2:15 pm Q&A
2:30 pm Adjourn

To register for this exciting program:

**Registration is Required
by Monday November 16th**

Please RSVP to Amy Reardon
Phone: (816) 360-5586
Email: amy.reardon@sug.com

Professional Development Hours Available

Attendees will earn 4 Professional
Development Hours (PDH) for this program.



© 2009 Copyright Missouri Gas Energy
A Division of Southern Union Inc.

Commercial Buildings Workshop

December 3, 2009
9:30 am – 2:30 pm

Missouri Gas Energy
3420 Broadway
Kansas City, MO 64111

Sponsored by



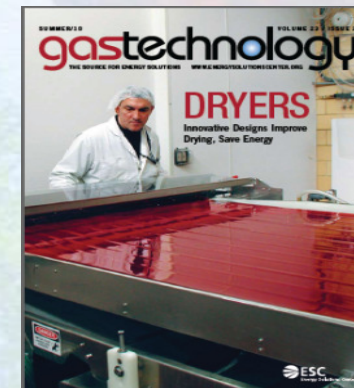
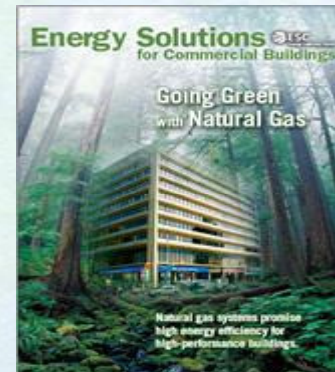
and



Builder/Realtor Kits



Customer Magazines





Consortia

- Critical mass of utilities pursuing customer niche more aggressively
- *Investment Prospectus* outlines goals, deliverables, and costs
- Member utilities join based on corporate and departmental sales/marketing goals
- Only join and pay for those consortia that interest you
- Leveraging resources to give members the skills, tools, abilities to pursue niche markets

Typical Consortium Deliverables

- Sales Training Modules
- Sales & Marketing Materials / Templates
- Electronic Tools
- Technology Demonstrations
- Market Research Studies
- Trade Show Exhibits
- Electronic Newsletters or Magazines
- Prepared Powerpoint Presentations for Customers



ESC Consortia

- Builder Liaison
- Commercial Buildings
- CHP
- Gas Air Conditioning
- Gas Foodservice Equipment Network
- Industrial Energy Efficiency
- Multifamily
- National Accounts
- Oil Conversions
- Residential



Commercial Buildings Consortium

- Customizable marketing literature
- Electronic tools and information
- Utility rep training



Commercial Buildings Consortium Marketing Handouts

- Healthcare
- K-12 Schools
- Universities
- Lodging
- Office Building
- Retail
- Food Service
- Elderly Care
- Multi-Family
- Niche Markets
 - Churches
 - Laundries
 - Fitness Centers
 - Public Assembly



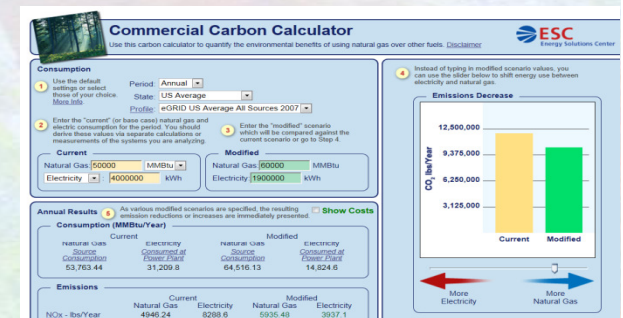
(Over 600 pages in total)
Customizable



Commercial Buildings Consortium

Tools to Expedite Customer Decision-making

- Booster Water Heater Calculator
- Water heater Payback Tool
- Oil vs. Gas Emissions Calc.
- CO2 Calculator
- Micro-CHP



Combined Heat & Power (CHP) Simple Payback Analysis

Use this tool to review various CHP equipment simple payback options. [FOR MORE INFORMATION VISIT OUR WEBSITE](#)

Input Steps

STEP 1: Please select State or Province from dropdown list: **US Average**

STEP 2: Size CHP Electric Generator (kW): **300**

STEP 3: Hours of Cogeneration (per Year): **8500**

STEP 4: Number of months generating power: **12**

STEP 5: # Years CHP Plant will be Financed (Years): **10**

STEP 6: Interest Rate on Loan for Installed Cost: **6%**

STEP 7: Avg. Electric Usage Rate (\$/kWh): **0.13**

STEP 8: Electric Demand Charge (\$/kW): **10.00**

STEP 9: Avg. Natural Gas Rate (\$/MMBTU): **6.00**

STEP 10: Gas Rate for CHP (\$/MMBTU): **6.00**

STEP 11: CHP Incentive: **0.00**

* Rules and qualifications can be found at: www.epa.gov/chp/incentives

Federal CHP Investment Tax Credit *

\$58,200.00	\$73,200.00	\$0.00	\$450,000.00
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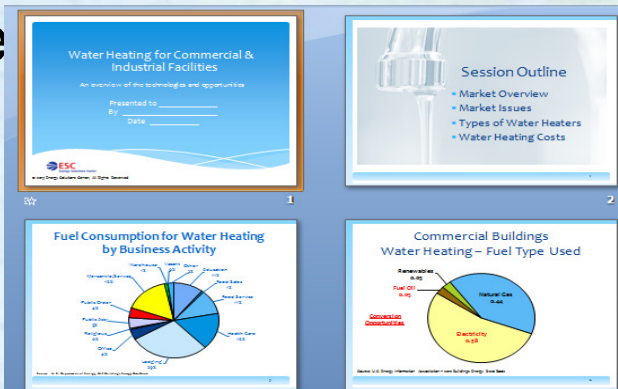
Simple Payback (Years)

2.8	3.2	Out of range	7.4
Reciprocating Engine	Micro Turbine	Gas Turbine	Fuel Cell

ESC
Energy Solutions Center

Commercial Buildings Consortium PowerPoint Presentations for Customers and A&E's

- Heating
- Water heating
- Gas Air Conditioning
- Cogeneration
- Humidity Control
- Be



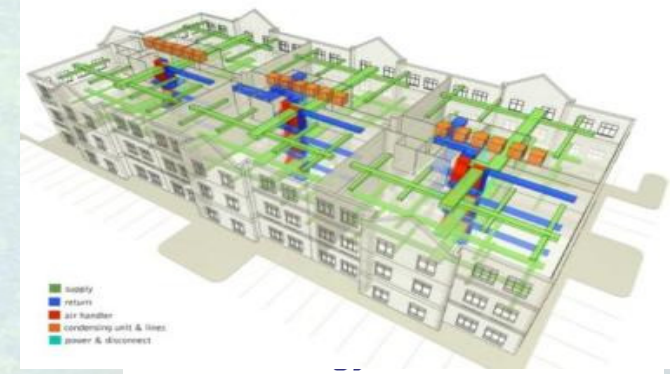
Commercial Buildings Consortium Sales Rep Training

Presentations to train new commercial sales
reps in the markets, equipment, and
business solutions

Colleges & Universities	Multi-Family	CHP	Water Heating
Elderly care	Retail	Foodservice Technologies	LEED & Green Globes
Healthcare	Office Buildings	Gas Cooling	Energy 101
Foodservice Facilities	Schools K-12	Heating	Financial
Lodging	Boilers	Humidity Control	Benefits of Gas Use

Multifamily Consortium

- Focus on issues & challenges to bringing natural gas to apartments and high rises
- Tools & Resources
 - Customizable Vertical Subdivision Design Guide
 - Appliance cost study for various multi-family



CHP Consortium

The objective is to accelerate the acceptance of onsite power generation for all markets and sizes of equipment.



www.understandingchp.com



CHP Consortium

- **Videos**

- What is CHP
- Benefits of CHP
- Using the Waste Heat of CHP
- Engine Driven CHP
- Turbine Driven CHP
- Microturbine CHP



- **Video Case Studies**

- Reading Housing Authority
- University Square Apartments



CHP Consortium

Special initiative to accelerate deployment of
Micro CHP technologies



- Market and Technology Presentation
- Payback Calculator
- Micro-CHP Guide



Gas Foodservice Equipment Network Consortium

GFEN's mission is to help increase the use of natural gas in the commercial and institutional foodservice markets by serving as the preferred resource for information, education, testing and

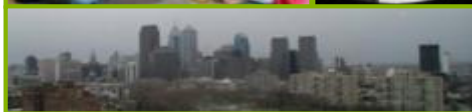
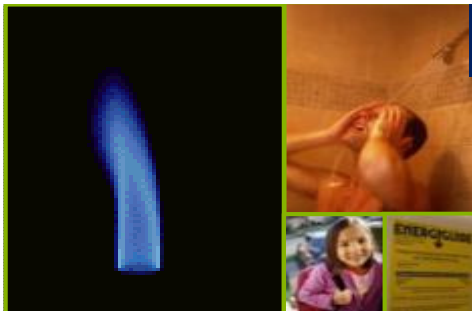


www.gfen.com



Gas Foodservice Equipment Network

Case Studies / Newsletters



Denny's Beer Barrel Pub



Equipment Conversion Yields 123-Pound Cheeseburger...

Kitchen Equipment Line Up...

- 1 – six burner range
- 1 – two burner cooktop
- 7 – fryers
- 2 – charbroilers
- 1 – grill
- 1 – griddle
- 1 – pizza oven

What is Electric Demand?

Fees levied by the electric utility for the privilege of having ample electricity available to operate all of your lights, refrigerators, HVAC, cooking appliances and other equipment simultaneously "ON DEMAND". These fees are in addition to the electricity that each piece of equipment uses while operating.

Denny's Beer Barrel Pub is now 100% gas cooking. When Denny Leigry decided to expand his operation he reasoned that one energy source for cooking was the "order of the day", so he called PPL Gas Utilities for advice and expertise. Lou Stubbs, PPL's Energy Sales Representative took the call and met with Denny to discuss his future plans.

Prior to the kitchen renovation his cooking process was all electric. But with the need to purchase additional equipment, it just made sense to go ALL GAS due to the superior performance and economics that only gas appliances can provide. And the energy saved will amount to a nice tidy sum over the equipment life cycle. Denny's original kitchen was staffed with only four pieces of equipment but now, through this renovation project, has expanded to full-line with fourteen appliances that feature natural gas technology!

Electric Demand Reduced...

By eliminating the two 22kw electric fryers from the cooking battery, Denny's is expected to save nearly \$200/month in demand charges alone (44kw x current PEC demand rate of \$4.59/kW = \$199.72). Couple that with additional electric savings of around \$3500 annually (44kw x current PEC electric rate of \$0.11/kWh = \$4.84/hour x 2 hrs/day = \$8.68/day x 365 days = \$3148.80) and the savings quickly becomes enough to pay for a couple of the new gas fryers. But since the gas isn't free, we can factor in that cost at roughly \$2071 annually (two fryers at 118,800btu/hour each = 2.2 therms/hour x 2 hours/day = 4.4 therms/day x 365 days = 1594 therms/year x current PPL Gas rate of \$1.388/therm = \$2071.87).

Cooking Up Greener Solutions

4th Quarter 2009

a quarterly newsletter from the Gas Foodservice Equipment Network

In this issue ...

- [Stretching Your Energy Dollars](#)
- [Energy Providers Provide Help](#)
- [Appliances for Today's Kitchens](#)
- [Automatic Standby Power](#)
- [Going Green in the Workplace](#)

Welcome to the inaugural launch of the Gas Foodservice Equipment Network (GFEN) quarterly newsletter. You will find informative information relevant to foodservice professionals offering the latest tips, tricks and technologies available in the marketplace today.

We hope you enjoy this newsletter and will forward it to others within your organization. For more information on efficient natural gas technology for foodservice facilities be sure to visit our website at www.GFEN.com.

Sincerely,

The GFEN Consortium
Energy Solutions Center Inc.

McDonald's S-t-r-e-t-c-h-e-s Energy \$\$\$\$

Tips from the experts

Restaurants continually research better and more cost-effective ways to operate their restaurants, maximize profit margins and at the same time, become better environmental stewards. In a recent conversation with Steve DePalo, USA Energy Manager for McDonald's Corporation, we discussed some of the simple, low-cost or no-cost best practices McDonald's has adopted that other foodservice operators could easily adopt. [more ...](#)



Going Green - How Utilities Help Real world examples

The greening and sustainability movement is building momentum in the foodservice industry. Natural gas utilities are going the extra mile to help operators go green by providing equipment evaluation centers, educational programs and, in some states, offering incentive programs. Learn how partnerships were developed between some GFEN utility members and their customers. [more ...](#)



National Accounts Consortium is here to help.

Energy Providers offer help to foodservice facilities

The Energy Solutions Center (ESC) has formed a



Today's Energy Superstars

Fryers, Steam Cookers, Griddles and Convection Ovens

Gas Foodservice Equipment Network **GFEN Customer Care Workshop** Last workshop, July 26 & 27, San Diego



Comprehensive 2 Day Foodservice Workshop



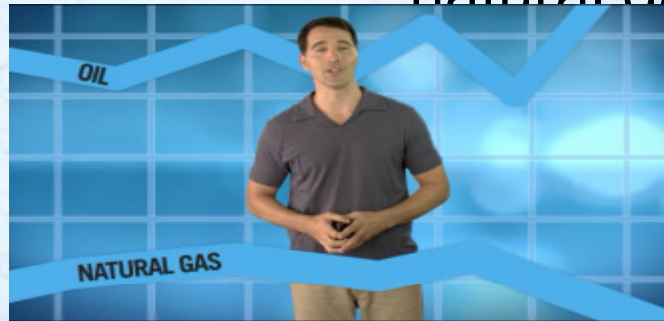
Oil Conversion Consortium

Turnkey strategies and materials to accelerate customer conversion from oil or propane to natural gas



Oil Conversions Videos

promote the features and benefits of
natural gas over oil



Customer testimonials

- Save Money
- Clean & Comfortable
- Why Switch



MAKING THE SWITCH
From Oil To Natural Gas

Oil Conversions Marketing Collateral



Make the switch

Convert from oil to natural gas heat

- Savings
- Comfort and convenience
- Efficiency
- Reduced carbon footprint

Act soon and get a \$XXX rebate!



Don't be left out in the cold!

Convert from oil to natural gas heat and reap the rewards ...

- Savings
- Comfort
- Convenience
- Efficiency
- Reduced carbon footprint

By converting to natural gas, you will save money now and into the future.

To learn more about the advantages of natural gas heating contact (insert company name here) or visit us at (insert web address here) to get more details.

PLACE COMPANY LOGO HERE



Home Heating Costs Driving You Mad?

Switch to Natural Gas and save an average of 80% compared to other heating sources.



Make the switch

Convert from oil to natural gas heat and reap the rewards

- Savings
- Comfort
- Convenience
- Efficiency
- Reduced carbon footprint

The cost of conversion pays for itself—and fast

Many homeowners who convert break even in a few years. After that, it's all savings to your pocket. If your oil system needs replacing, the payback is even faster.

Don't delay

Converting to natural gas will save you money now and into the future. Your oil tank will only degrade over time. Don't risk paying more to heat your home and for a costly cleanup later.

Get started now

To learn more about the advantages of natural gas heating, contact XXXXX Utility, XXX-XXX-XXXX, or visit www.XXXX.com.

from oil

himself:
g with natural gas has
percent less than heating
since 2005.

\$ 2011, heating oil prices
nt, while natural gas
4 percent.³

port of our natural gas
origins right here in North America.

* Gas furnaces are among the most energy
efficient sources of heating available.²



SPACE FOR UTILITY REBATE

Space for utility contact
address,
contact info,
logo



²Source: U.S. Energy Information Administration
³Source: American Council for an Energy-Efficient Economy



STILL TAKING CHANCES

With your oil storage tank?

National Accounts Consortium

- Partner with chains and franchises seeking to improve productivity and profitability
- Developing partnerships and projects between energy utilities and NA customers
- Sector Orientation
 - Restaurant Chains
 - Supermarkets with Food Prep
 - Big Box
 - Retail
 - Lodging
- Members are providing priorities and



National Accounts

Relationships: Restaurant Sector - Partial Listing

- Ale House
- Burger King
- Cheesecake Factory
- CKE: Hardee's/Carls' Jr
- Darden: Red Lobster, Olive Garden, Longhorn
- Dine Equity: Applebee's, IHOP
- McDonald's
- Blooming Brands: Outback, Carrabba's, Bonefish
- Pantry
- Sonic
- YUM Brands: KFC, Pizza Hut, Taco Bell,

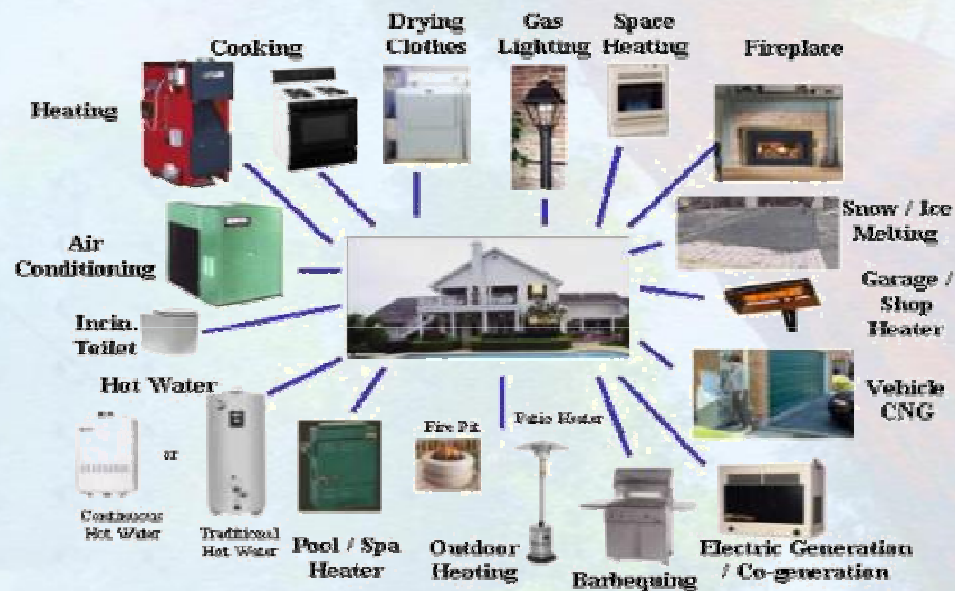
National Account Consortium

Some Current Initiatives

- Working with CKE and Panda on propane to gas conversions
- Promoting low-volume gas fryers: McDonalds, Burger King, and Sheetz. Frymaster OCF to be tested in three Florida Burger King Restaurants
- Working with Blooming Brands on patio heater installations. Tests at Colorado restaurant are a “hit”
- IntelliChoice/Aisin Gas Heat Pump evaluations for



Residential Consortium



- Marketing Collateral
- Marketing support
- Studies & tools
- Electronic media



Residential Consortium

**Videos for websites, tradeshows,
cable TV**

Heating – Furnace

Heating - Boiler

Water Heating

Cooking

Dryers

Fireplace

Outdoor Living

EE for Home

EE for Remodeling

Environmental

Residential Consortium

www.outdoorroomdesign.com

**OUTDOOR
ROOM DESIGN**



Outdoor Cooking

Staying Warm

Adding Ambiance

Pool/Spa Heaters

Getting Started

Media

About Us

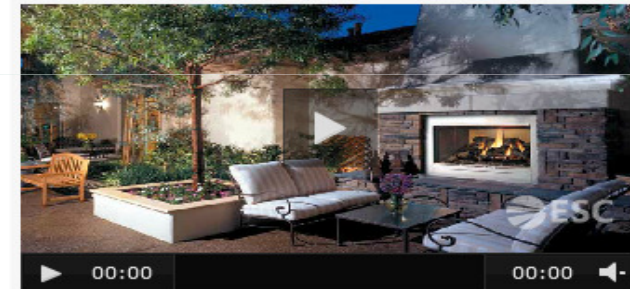


Staying Warm

Nothing beats having an outdoor room or outdoor kitchen as part of the home. It's a place for family and friends to gather and enjoy ...



FEATURED VIDEO



Article1

Article2

Article3

Article4



naturalLiving download article
topic: Pool Heating

LATEST



37

FEATURED




Builder Liaison Consortium

- Meet with national & regional builders to convey advantages of natural gas homes
- Marketing material & messages
- Realtor outreach
- Provide information for builders



Questions

- Darrell Wilson
- ESC Chairman of the Board
- Director, Marketing and Communications
-  dwilson@chpk.com

