



Emerging Gas Technologies

Update on Related GTI Research Efforts

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June 3, 2009
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CEE and GTI Recognize Complementary Roles

- ▶ Research helps inform good program design
- ▶ Program interests identify research opportunities
- ▶ Relevance to external players is enhanced
- ▶ GTI working to provide updates to the Gas, Commercial Kitchens, and Industrial Committees as relevant information emerges

High Efficiency Gas Heating Rooftop Packaged Air Conditioner

- ▶ Identified at the 2006 Summit as an area of interest
- ▶ Proposing working together to identify attractive markets
- ▶ GTI is working on a research project to overcome technical challenges



GTI's Utilization Technology Development Gas PAC Research Project

- ▶ Task 1: Specification
 - Refining problems to facilitate solution development
 - Anticipated completion: Q1 2010
- ▶ Task 2: Section Breadboard Tests
 - Lab testing of a gas PAC
 - Development of test procedures
 - Anticipated completion: Q3 2010
- ▶ Task 3: Prototype Field Test
 - Anticipated completion: Q3 2011
- ▶ CEE and GTI are discussing how to share information

Hybrid Optimized Tankless Water Heater

- ▶ CEE is interested in the in-field performance of water heaters
- ▶ GTI is leading several other organizations on a CEC project to evaluate the performance of hybrid storage-tankless water heaters



GTI's Residential Water Heating Program for the CEC

- ▶ Creation of a analytical tool and design guide
 - Anticipated completion: Q4 2010
- ▶ Development of a water heater test and work on building codes
 - Anticipated completion: Q4 2010
- ▶ Lab Tests
 - Anticipated completion: Q2 2010
- ▶ Field Tests
 - Anticipated Completion: Q3 2010
- ▶ Outreach to plumbers
 - Anticipated Completion: Q4: 2011
- ▶ CEE and GTI are discussing how to share information

Commercial Kitchen Equipment

- ▶ Convection Ovens
- ▶ Deep Fat Fryers
- ▶ Bakery Ovens
- ▶ Conveyor Ovens
- ▶ Steamers
- ▶ Warewashing Equipment
- ▶ Broilers
- ▶ Woks



Industrial Applications

- ▶ Program implications of SuperBoiler demonstrations
- ▶ Application of Advanced Heat Recovery Systems
 - Especially in food processing industry



Regular updates from GTI to help advance our work areas

- ▶ Technical information can help specification development
 - Commercial kitchens
 - Gas PAC rooftop units
- ▶ Field test results can assure efficiency programs they'll achieve savings
 - Hybrid optimized tankless water heaters
 - Gas PAC rooftop units

Communication with CEE helps add value to GTI's research efforts

- ▶ Our work helps GTI identify the most fruitful avenues of research
- ▶ Initiatives and specifications create market pull
- ▶ CEE brings manufacturers and other stakeholders to the table

CEE committees identify gaps in the market that are important to mutual stakeholders

Contact

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