# Upstream Commercial Food Service Pilot

SAG Update February 25, 2019











# Agenda

- Overview
- Phase I Learnings
- Phase II Pilot Plans and Beyond (Phase III)







# Pilot Team – Food Service Experts

# gti. FRONTIER energy

#### Gas Technology Institute (GTI)

- Extensive in-house laboratory and field R&D experience developing, testing, and demonstrating emerging food service technologies
- Deep partnerships with equipment manufacturers and national accounts

#### Frontier Energy (formerly Fisher Nickel)

- Commercial food service energy efficiency focus, operator of the Food Service Technology Center (FSTC, founded by PG&E- 1st of its kind)
- Nationally recognized for pioneering work supporting food service energy efficiency serving extensive network of equipment, supply chain, national account, and utility partners

#### Smith Energy Engineers

- Industry insider with 25 year history of hands-on food service experience
- Invaluable connections to numerous market channel players



ISO Certified Appliance Testing Lab



Workforce Education & Training









### Foundation for Success

- Science: Based on un-biased, third-party, lab-derived data
- Accessibility: Easy to find and use. Food service operators at all levels are very busy and will NOT dig for information
- Incentives: Rebates are a good way to move the market provided they are:
  - Easy to find and use
  - Generous
  - Legitimate
- Persistence: Engage experienced food service champions for a longer amount of time and give them the tools for success (education, incentives, promotion)







# Understanding the Market and Trends

- Consistent growth market
  - > \$800 Billion in sales in 2017





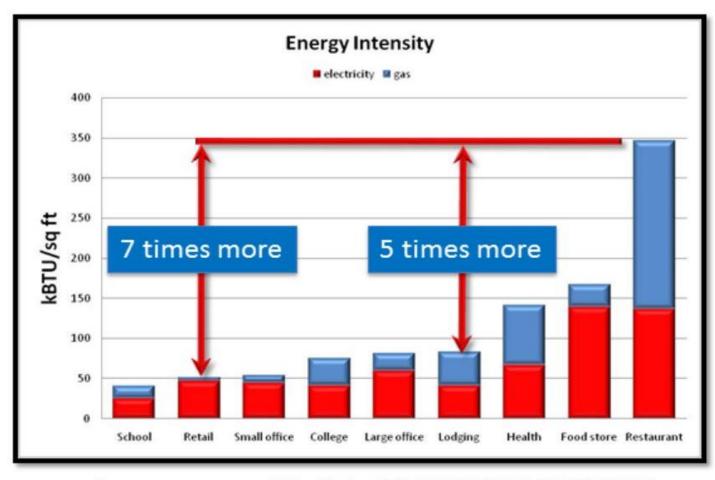








# Food Service Energy Intensity



Source: www.energy.ca.gov/2006publications/CEC-400-2006-005/CEC-400-2006-005.PDF









### Phase I Questions

- How is the CFS equipment supply channel organized?
- What equipment moves through the channel?
- How much equipment moves through the channel?
- What is the market share of high efficiency equipment?
- What is the energy savings potential (therms and kWh)?

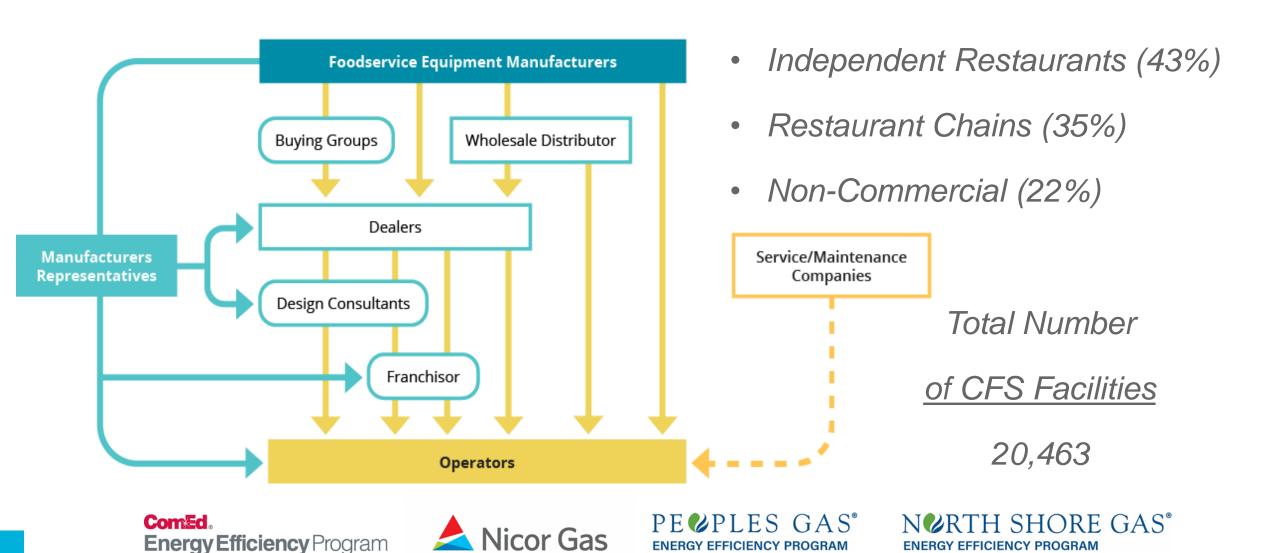








## Supply Channel Market Structure



# Eligible CFS Equipment Stock and Potential Savings

| Category                           | Eligible Appliances or Systems | Potential Electric Savings (kWh/yr) | Potential Gas Savings (Therms/yr) |
|------------------------------------|--------------------------------|-------------------------------------|-----------------------------------|
| <b>Electric Cooking Appliances</b> | 45,748                         | 193,498,037                         |                                   |
| Gas Cooking Appliances             | 96,676                         |                                     | 21,562,162                        |
| Reach-in Refrigeration             | 76,972                         | 76,085,112                          |                                   |
| Ice Machines                       | 27,169                         | 62,108,334                          |                                   |
| Handwrap Machines                  | 4,200                          | 6,489,000                           |                                   |
| Dishwashers                        | 9,837                          | 33,182,613                          | 4,062,183                         |
| Pre-Rinse Spray Valves             | 27,775                         | 7,852,993                           | 1,299,911                         |
| Kitchen Ventilation                | 10,804                         | 126,603,999                         | 31,533,729                        |
| <b>Total Potential Savings</b>     | 299,181                        | 505,820,088                         | 58,457,985                        |

Com**Ed**.
Energy Efficiency Program







### Phase I – Market Barriers

- Role of Used Equipment
- Higher First Cost Perception
- Independent Restaurant Owner Attention Span
- High Efficiency Equipment Performance Concerns
- Customers with a Primary Language other than English
- Split Incentive for Larger Enterprises
- Higher Overhead to Reaching Restaurants in Low Population Areas









# Phase II – Upstream Food Service

- The Upstream Food Service Pilot Program is designed to increase the sale of energy efficient food service equipment by targeting upstream market actors with direct-to-customer sales channels:
  - Equipment dealers
  - Equipment manufacturers with direct-to-customer sales channels
  - Kitchen Equipment Suppliers (KES) that manage direct-to-franchise sales on behalf of large chains
- Short-term outcomes will include:
  - Increased availability of energy efficient models stocked by participants
  - Streamlined process reducing barriers to utility customers for submitting rebate applications
  - Increased end user participation in food service energy efficiency programs
  - Greater overall program impact and quantifiable energy savings
- Long term outcomes will include:
  - Increased market adoption and availability of energy efficient food service measures
  - Increased the use of energy efficiency in the food service sector
  - Lead to a successful Upstream Joint Utility CFS Program in the next plan cycle









# Phase II – Pilot Development

- Phase II:
  - Launch Spring 2019
  - Outreach booth at National Restaurant Association show in May 2019
  - Designing & Demoing P3 Dealer Interface Portal
  - Currently working with Navigant on an evaluation approach











### Phase II – Pilot Measures and KPIs

- Expected high volume measures include:
  - Combination ovens
  - Convection ovens
  - Fryers
  - Griddles
  - Steam cookers
  - Holding cabinets
  - Ice machines
  - Self-contained reach-in refrigerators freezers

#### KPIs:

- Working with GTI and Frontier on measuring success
  - Midpoint and end targets
- Evaluator input related to tracking data and additional KPIs









# Phase II – Pilot Savings and Budget

Estimated Purchases, Resulting Energy Savings & Pilot Budget

| Utility   | Number of Rebates | Savings       | Incentives \$ | Non Incentive \$ |
|-----------|-------------------|---------------|---------------|------------------|
| Nicor Gas | 149               | 53,548 Therms | \$101,340     | ¢640,642         |
| PGL/NSG   | 76                | 27,932 Therms | \$54,420      | \$648,612        |
| ComEd     | 260               | 632,761 kWh   | \$101,980     |                  |

Joint Utility Cost Allocation Methodology is applied to the Non-Incentive \$

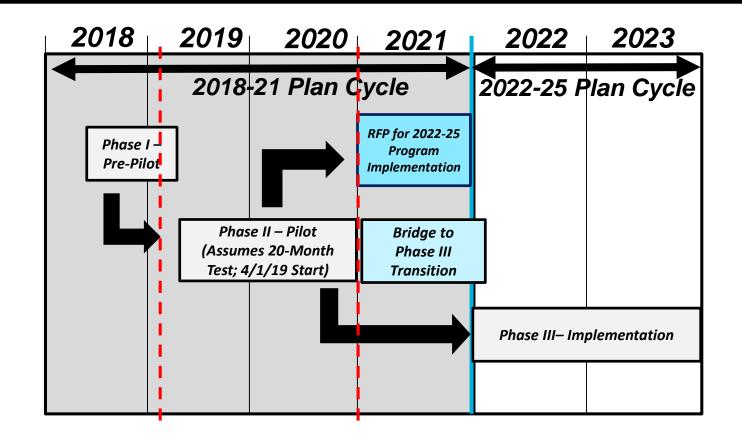








# Long-Term CFS Joint Program Planning Timeline











# Thank You

Any Questions?







