

Developing a Successful Commercial Food Service (CFS) Energy Efficiency Program

Una Song, U.S. EPA, ENERGY STAR Program Manager

Illinois Stakeholder Advisory Group Meeting September 27, 2011



Overview



- ENERGY STAR program overview
- Overview of the commercial kitchen efficiency opportunity
- ENERGY STAR CFS equipment
- Program design
 - Market barriers and program strategies
- Marketing tools and resources from ENERGY STAR
- Plan for Illinois Statewide Collaboration
- Questions



What Is ENERGY STAR?





- Voluntary climate protection partnership with the U.S. Environmental Protection Agency (EPA)
- Strategic approach to energy management, promoting energy efficient products and practices
- Tools and resources to help save money and protect the environment
- Influential brand recognized by over 80 percent of Americans



The ENERGY STAR Product Label





- The ENERGY STAR label was established to:
 - Reduce greenhouse gas emissions and other pollutants caused by the inefficient use of energy

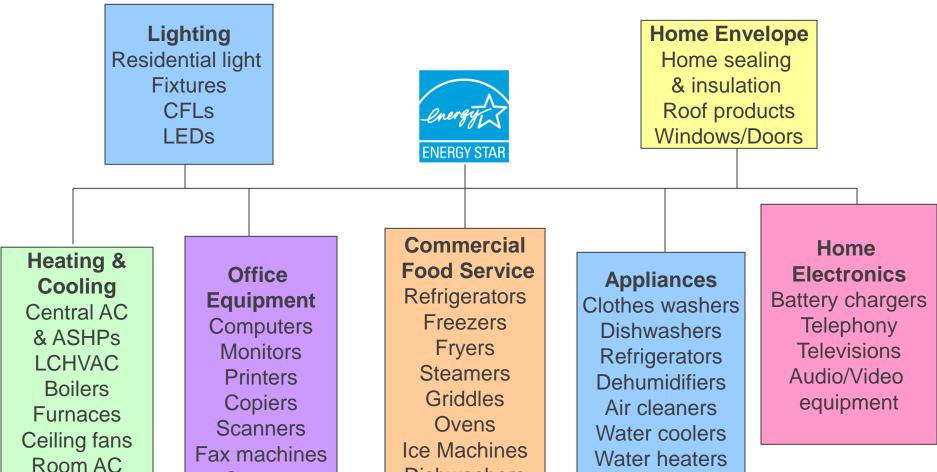
AND

 Make it easy to identify energyefficient products that offer savings on energy bills without sacrificing performance, features, and comfort.



60+ Product Categories Are Covered by ENERGY STAR in the US, such as:





Dishwashers

HFHCs

Servers



Ventilating fans

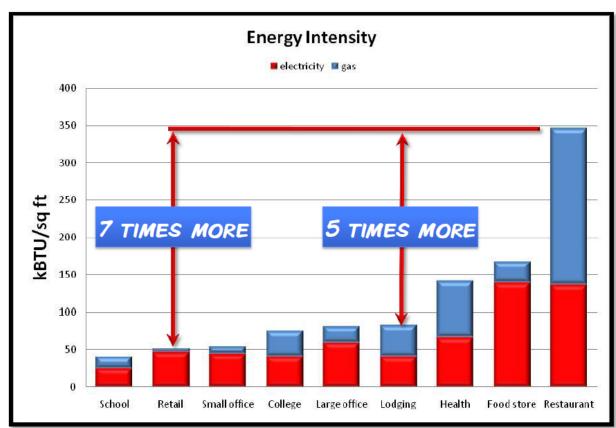
Restaurants are Energy Intensive!





Shaping Restaurants to Be Models of Efficiency

By LAURA NOVAK May 17, 2006



Source of graph: PG&E Food Service Technology Center

"If restaurants were automobiles, they would be Hummers."

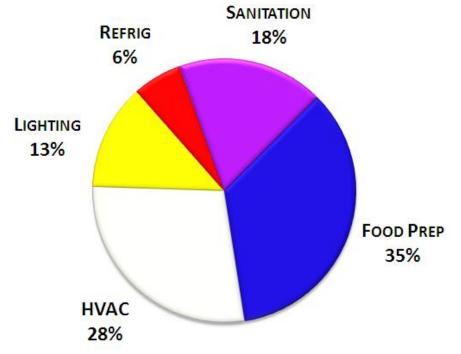


Restaurant Energy Consumption



Energy use in restaurants is dominated by food

preparation



An example of how energy (BTU) is consumed in a typical full service restaurant



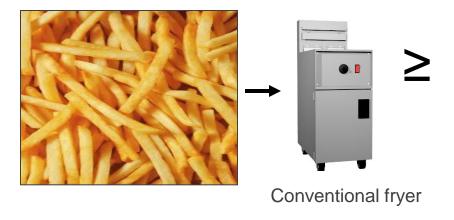
Source: PG&E Food Service Technology Center

French Fries Have a Huge Energy Cost



 A single appliance can consume more than a home!

A typical electric deep fat fryer uses more than **18,000 kWh** annually



The average U.S. household electricity use is approximately **13,000 kWh** annually





Restaurant Growth in Illinois



Illinois is:

 Listed in the top 5 states for projected restaurant-sales volumes in 2011



- Has a projected restaurant-sales volume for 2011 of nearly \$20 million
- Is listed in the top 15 states for restaurant industry employment growth
- Is within the top 10 states for highest restaurant workforce figures (just over 500,000 restaurant jobs in 2011)



Source: National Restaurant Association 2011 Restaurant Industry Forecast

Illinois Restaurants at a Glance



Illinois Restaurants by the Numbers ...

Sales

In 2011, Illinois's restaurants are projected to register \$19.9 billion in sales.

Jobs

Restaurants employ 501,000 people in Illinois.

Locations

In 2009, there were 23,942 eating and drinking places in Illinois.

2011 Employment*

2021 Employment*

The Power of \$1

Every \$1 spent in Illinois's restaurants generates an additional \$1.38 in sales for the state economy.

Restaurant jobs represent

7.3%

The Power of \$1 Million Every extra \$1 million spent in Illinois's eating and drinking places generates an additional 28.1 jobs in the state.

of employment in Illinois.

9%

job growth expected by 2021, or

36,500 new jobs

Source: National Restaurant Association * Projections | Get the full 2011 Restaurant Industry Forecast at www.restaurant.org/forecast

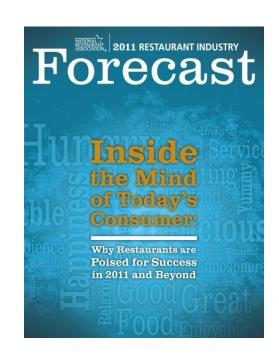


Source: National Restaurant Association

Restaurant Industry Trends



- Restaurant operators across all segments plan to devote more resources to green initiatives in 2011
- Roughly 40% of operators (from quick-service to fine dining) plan to purchase energy-saving kitchen equipment in 2011





What ENERGY STAR Offers

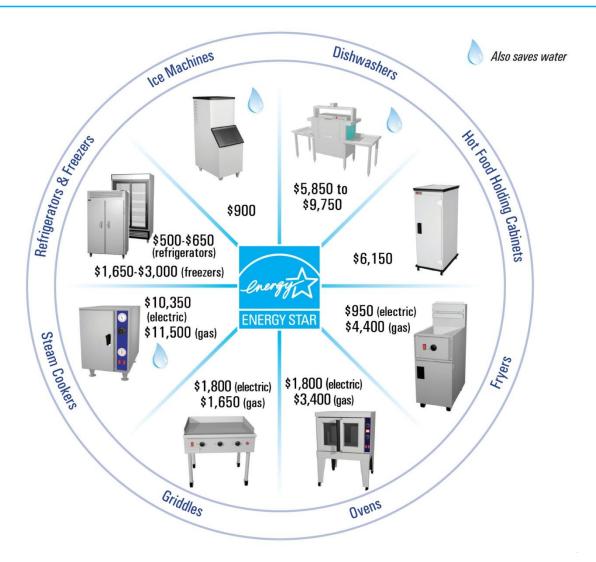


- Widely accepted performance specifications (designating premium efficiency) for eight CFS equipment types
- Market/program design intelligence
- Marketing resources and recognition
- Account managers to support program development and participation



ENERGY STAR Labeled Equipment







Lifetime savings

Making the Case for ENERGY STAR



- ENERGY STAR qualified CFS equipment can save significant amounts of money
- Performance is maintained with higher efficiency
- High utility costs cut into restaurants' bottom line
 - Utility costs: 3 to 5% of sales*
 - Average profit ~5%*
 - Restaurateurs are taking notice of high energy costs
- Benchmarking restaurant energy use helps keep track of savings



Program Design: Overcoming Barriers



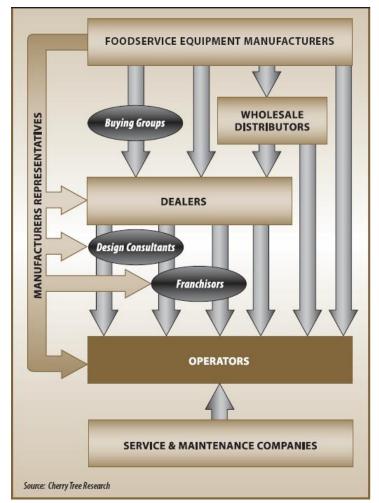
Barrier	Strategy
 Hard-to-reach market 	Communication & outreachInvolve in program design
 Lack of distribution 	Sales trainingSalesperson incentivesEquipment incentives
 High incremental cost / quick ROI mindset 	• Equipment incentives
 Lack of knowledge 	Equipment demosCooperative marketingOutreach to market actors



Hard-to-Reach Market



- Complex; fragmented
- Energy efficiency is new concept
- Knowing key market actors in your service territory is key





Source: Foodservice Equipment, Cherry Tree Research Report, 2003

Hard-to-Reach Market (continued)



Dealers:

- Key link between manufacturer and operator
- Maintain showrooms
- Front-line relationship with operator
- Often have in-house design consultants

• Buying Groups:

 Dealers banding together to increase purchasing power



Hard-to-Reach Market (continued)



• Manufacturers' Reps:

- Independent sales force
- Promote equipment for manufacturers or lines to both dealers and operators

Design Consultants:

- Work directly with operators mostly institutional
- Involved in major renovations/new construction
- Specify or advise on equipment choices



Lack of Distribution



- Equipment suppliers compete via low prices
 - Energy-efficient products are usually more expensive
- Issue is compounded by customers' short-term purchasing decisions
- Lack of demand and understanding of energyefficient products



High Incremental Cost



- Restaurants have low profit margins
 - Require fast return on investment
- ENERGY STAR & energy-efficient equipment are generally:
 - Better made with better components
 - Often possess shorter cooking times
 - Higher batch rates
 - Higher price tag



Lack of Knowledge



- Energy and water efficiency is a new concept in restaurant industry
 - Restaurant sustainability movement is only a few years old
- Commercial kitchens/restaurants focus on
 - Food
 - Service
 - Initial equipment cost



Strategy to Overcome Barriers



- Take a holistic approach to program development
- Understand your local market
- Engage key supply-side players
- Conduct supply-side outreach during program design, ramp-up, and implementation:
 - Highlight benefits of ENERGY STAR
 - Tell them how the program works and keep it simple
 - Show them how their business will benefit by participating.



Make the Business Case



- Take the end user's perspective
- Promote ENERGY STAR as good a business decision
- Emphasize lifecycle cost savings
 - Describe as a revenue stream rather than the initial payback period
 - Reduced utility bills go directly to the bottom line
 - Saving \$200 = \$4,000 in sales (5% profit margin)
 - Use ENERGY STAR Lifecycle Cost Calculators to calculate average savings
- Highlight additional benefits: water savings, reduced noise, shorter cooking times
- Make direct equipment comparisons when appropriate



Key Tactics – Program Design



- Reduce incremental cost with incentives
 - Incentive programs should meet needs of market actors
 - Must have high enough incentives to offset costs
 - Include audits & custom incentives for large chains and remodels
- Consider offering "spiffs"
 - Puget Sound Energy: \$30
 - San Diego Gas & Electric Company: \$25
 - Minimize paperwork burden
- On Bill Financing



Range of CFS Incentives Offered by Utilities



Product	Incentive Range
Dishwashers	\$50 — \$2,000
Fryers	\$66 — \$2,500
Griddles	\$125 — \$2,100
Hot food holding cabinets	\$110— \$650
Ice machines	\$18 — \$700
Ovens	\$115 — \$3,000
Refrigerators and freezers	\$25 — \$1,000
Steam cookers	\$40—\$2,000

Please note that utility programs can change. Please contact your utility to ensure the program is still in effect before purchasing your equipment.



Key Tactics – Outreach



- Engage state restaurant association
 - Write articles
 - Attend trade shows
- Dealer/Designer training:
 - Offer training in person or via webinar
 - Clearly communicate incentives and environmental benefits to market actors
 - Highlight benefits of ENERGY STAR
 - Make the business case
 - Keep it simple
 - Develop point of purchase advertisements
- Promote ENERGY STAR Challenges/Pledge

http://conserve.restaurant.org
www.energystar.gov/changetheworld



Point of Purchase Marketing





CALIFORNIA STATE UTILITIES FOOD SERVICE EQUIPMENT

Available in Gas or Electric:

. Commercial Combination Ovens 1750 -1000 . Commercial Convection Ovens 1350 - 1500 . Commercial Steam Cookers 1750

 Commercial Fryers 1200 - 1500 . Commercial Griddles 1125 - 1300

Available in Electric Only:

CALIFORNIA INVESTOR-OWNED UTILITIES

AVAILABLE IN GAS OR ELECTRIC:

\$750 - \$1000 Commercial Combination Ovens Commercial Convection Ovens \$350 - \$500 . Commercial Steam Cookers \$750 \$200 - \$500 Commercial Fryers Commercial Griddles \$125 - \$300 Large Vat Fryers \$200 - \$500

AVAILABLE IN GAS ONLY:

 Commercial Rack Ovens \$1000 - \$2000

AVAILABLE IN ELECTRIC ONLY:

 Glass Door (Reach-in) Refrigerators Solid Door Freezers & Refrigerators

• Ice Machines - Air Cooled • Insulated Holding Cabinets

Rebate amounts may vary from those stated above for SDG&E customer

HOW TO APPLY FOR FOODSERVICE EQUIPMENT REBATES:

1. Visit your local utilities' website for rebate information, and to download application. 2. Visit www.fishnick.com for lists of qualified equipment.

3. Purchase qualifying equipment, and submit completed rebate application









up to \$300/unit up to \$500/unit

up to \$500/unit

up to \$300/unit



up to 300/unit up to 500/unit up to \$500/unit

up to 300/unit

Mying suspens in 19685 torony

e Equipment Rebates:

engtion, and download application. disquipment.

replaced references in the feddings.



ETO Handbook

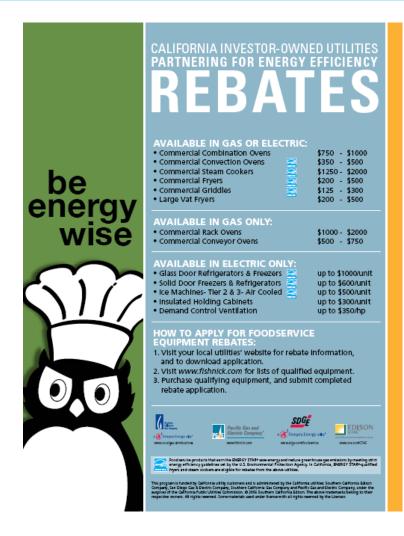


- Energy Trust of Oregon (ETO) handbooks include
 - What is energy efficiency & ENERGY STAR
 - List of incentives available in Oregon
 - Incentive application forms
 - A territory map showing where incentives are available
 - Qualified product lists with energy, water, and dollar savings
 - Additional benefits of ENERGY STAR equipment



California Investor-Owned Utilities







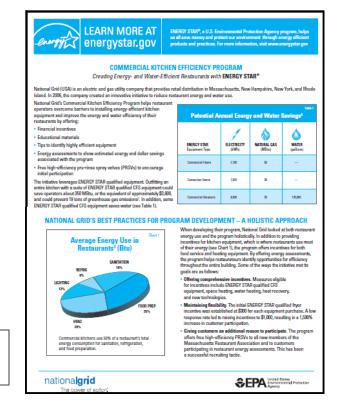




National Grid's Commercial Kitchen Efficiency Program



- Started incentive program in 2006 to improve the energy and water efficiency of restaurants
- Partnered with Massachusetts Restaurant Association (MRA) to promote energy audits and incentives
- Took a holistic approach to program design
- Offers energy assessments, educational materials, and webinars to restaurants





ENERGY STAR's case study: www.energystar.gov/cfs

ENERGY STAR Tools and Resources



- ENERGY STAR can assist you
 - Partner matchmaking
 - Training resources
 - Cooperative Marketing Assistance
 - Additional online resources:
 - Savings calculators
 - Manufacturer partner lists and qualified product lists
 - Online incentive finder
 - Case studies
 - CFS Newsletter
 - ENERGY STAR Guide for Restaurants
 - Program Administrator Guide for Utilities & other documents



Partner Matchmaking



- ENERGY STAR can assist you with reaching out to organizations in your service territory
- ENERGY STAR currently works with:
 - National Restaurant Association
 - Consortium for Energy Efficiency
 - Pride Marketing and Procurement, Inc. (buying group)
 - Supply Equipment Foodservice Alliance (buying group)
 - Edison Electric Institute
 - National quick-service restaurant chains
 - PG&E Food Service Technology Center



Cooperative Marketing Assistance





Products that earn the ENERGY STAR

prevent greenhouse

emissions by meeting

strict energy efficiency

guidelines set by the

Protection Agency and

the U.S. Department

of Energy. Learn more

at www.energystar.gov

To learn more about

Focus on Energy.14 call

800.762.7077 or visit

focusonenergy.com

U.S. Environmental

ENERGY STAR* Commercial Food Service Equipment: Hot Food Holding Cabinets

A shot food holding cabinets are frequently used 24 hours a day, 365 days a year, models that earn the ENERGY STAR offer businesses significant opportunities for saving energy and money. In addition, the insulation contained in ENERGY STAR qualified models keeps heat from radiating into the kitchen, ensuring a more comfortable work environment.

ENERGY SAVINGS BENEFITS

- Hot food holding cabinets that earn the ENERGY STAR are up to 60 percent more efficient than standard models.
- Each ENERGY STAR qualified hot food holding cabinet can save over 4,000 kWh annually, or an average of \$280 per year on utility bills.

QUALITY BENEFITS

- ENERGY STAR qualified models reduce heat loss through better insulation, offering superior temperature uniformity from top to bottom.
- Many ENERGY STAR qualified models offer additional features that protect food quality and save energy, such as temperature and humidity controls, auto-door closers, magnetic door gaskets, and Dutch doors.

LIFE CYCLE SAVINGS

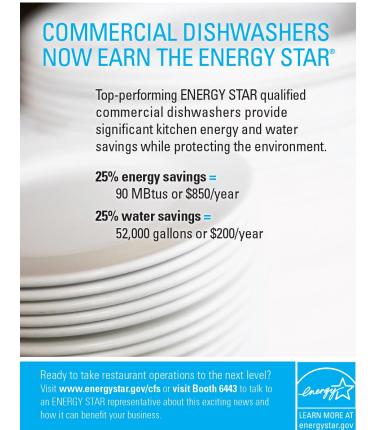
 An ENERGY STAR qualified hot food holding cabinet can save around \$4,400 over the equipment's lifetime.

LEARN MORE

To learn more about energy efficiency incentives for the food service industry, call Focus on Energy at 800.762.7077, or visit our Web site at focusonenergy.com/foodserviceincentives.









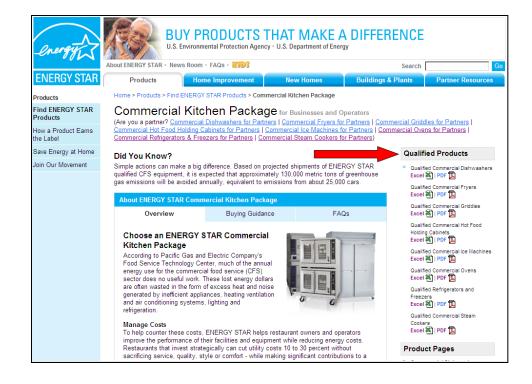
Equipment Highlights



Qualified Product Lists



- ENERGY STAR offers easy-to-access qualified product lists
 - Available on <u>www.energystar.gov/cfs</u>





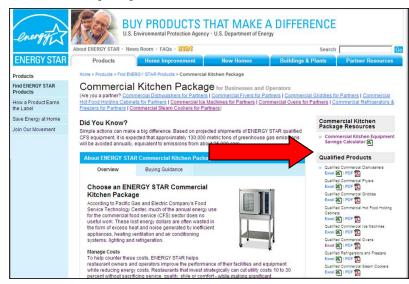
Energy Cost Savings Calculator



- ENERGY STAR calculator features all eight CFS equipment types
 - Calculate average energy, water, and dollar savings over lifetime of equipment
 - Easy to use, relevant to specific equipment details
 - Justified savings benefits for restaurateurs

Go to: www.energystar.gov/cfs

Click on "Commercial Kitchen Equipment Savings Calculator"

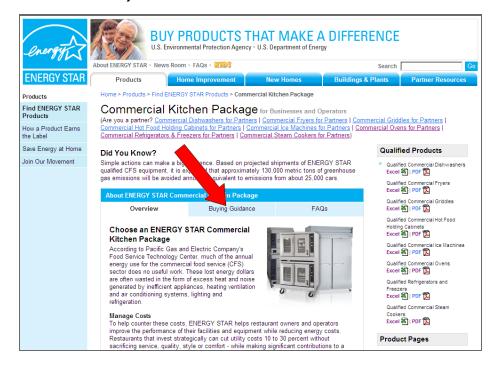




"Where to Buy" List



- Highlights ENERGY STAR retailer/dealer partners that sell qualified CFS equipment
 - Available on <u>www.energystar.gov/cfs</u> (Under "Buying Guidance" tab)





ENERGY STAR Incentive Finder Guide



Online Incentive Finder and Incentive Guide

Register program incentives with ENERGY STAR:

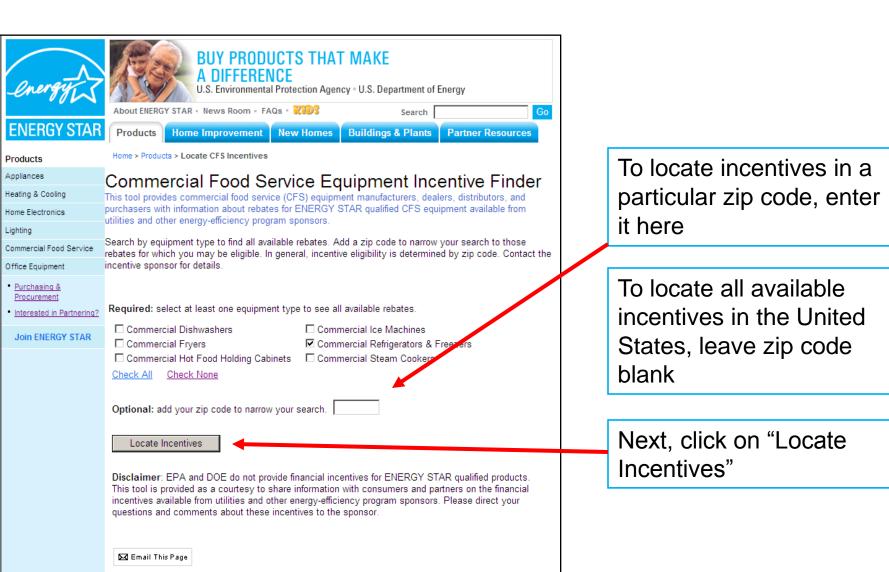
commercialfoodservice@energystar.gov





ENERGY STAR Incentive Finder

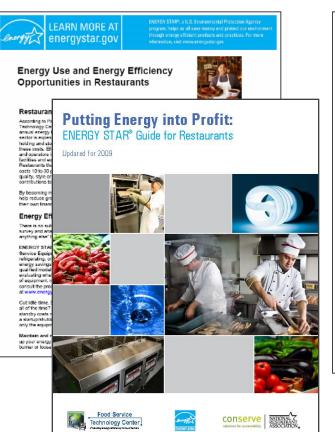




Additional ENERGY STAR Resources



Restaurant Guide and Fact Sheets



Case Studies



Quarterly Newsletter





Illinois Statewide Communications



- It is critical to make life easier for CFS trade allies (e.g., equipment dealers) in this complicated market
 - Operators need energy solutions and are looking to improve their total bottom line
 - Operators select both gas and electric equipment
- Program sponsor cooperation will meet both trade ally and customer needs
- Proposed baby step for Illinois: single statewide incentive fact sheet



Draft Illinois Statewide Incentive Fact Sheet













Energy Efficient Commercial Food Service Equipment Incentives Available in Illinois

The following document is provided to you by the electric and natural gas utilities in Illinois. It is designed to help commercial kitchen operators, equipment distributors, and manufacturers find incentives for energy efficient and ENERGY STAR® qualified products across the state. Use the table below to determine which incentives are available to you or your customers. Offers are only available to customers of that utility. See the complete incentives listings from the participating utilities on the following page. The utilities may offer additional equipment incentives, so please visit their websites for more information. Offers are valid between June 1, 2011 and May 31, 2012.

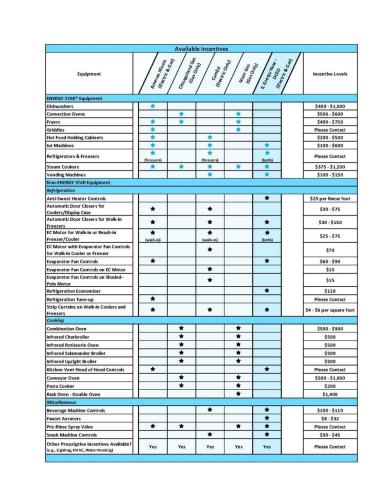
You Are/ Your Customer Is:	Available Electric Equipment Incentives:	Available Natural Gas Equipment Incentives:
Restaurant Operator Privately owned or operated k-12 school community college, college, or university health care facility other facility	Choose your local electric utility: Ameren Illinois Commonwealth Edison (ComEd)	Choose your local natural gas utility: Ameren Illinois Nicor Gas Peoples & North Shore Gas
State or local government office or agency Publicly owned or operated:	Available incentives* are offered to you	ı/your customer through the Departmer
o k-12 school	of Commerce and Economic Opportunity.	
 community college, college, or university 	* Pre-approval is required to receive incentives.	
 health care facility 		
 o other facility 		

For More Information:

Utility	Program Website	Contact Information Phone: (866) 800-0747 ActOnEnergyBusiness@ameren.com	
Ameren Illinois	www.actonenergy.com		
Chicagoland Gas (Peoples & North Shore)	www.peoplesgasdelivery.com www.northshoregasdelivery.com	NEED TO FILL IN	
ComEd	www.comed.com/smartideas	Phone: (888) 806-2273 ComEdSmartIdeas@kema.com	
Nicor Gas	www.nicorgasrebates.com	NEED TO FILL IN	
Department of Commerce and Economic Opportunity www.illinoisenergy.org		Phone: (800) 785-6055 illinois.energy@illinois.gov	



energy S	LEARN MORE AT energystar.gov	ENERGY STAR®, a.U.S. Environmental Protection Agency program, helps us all save money and protect our environment through energy efficient products and practices. For more information, visit www.energystar.gov.



Proposed Next Steps



- Finalize the fact sheet with input from all Illinois program sponsors
- Determine trade allies and ENERGY STAR partners and stakeholders to contact ("partner matchmaking")
- Share fact sheet with them and/or hold a trade ally meeting as part of the next Stakeholder Advisory Group meeting to introduce the fact sheet and brainstorm outreach strategies



Final Thoughts



- Reducing energy and water consumption in CFS can have big impacts
- Developing a CFS program:
 - Bring stakeholders into the process early
 - Education and face time is important
 - Design a collaborative program to simplify and increase participation
- Use ENERGY STAR as a resource



Useful Web Links



- ENERGY STAR Qualified Products & Resources
 - www.energystar.gov/cfs
- ENERGY STAR Rebates
 - www.energystar.gov/cfs/incentives
- ENERGY STAR Training Center
 - www.energystar.gov/training
 (look under "Products" for Commercial Food Service)
- ENERGY STAR Small Business partnership program
 - www.energystar.gov/restaurants



Additional Useful Web Links



- ENERGY STAR Commercial Buildings partnership program & Portfolio Manager
 - www.energystar.gov/benchmark
- PG&E Food Service Technology Center
 - www.fishnick.com
- National Restaurant Association's Conserve Initiative
 - http://conserve.restaurant.org/





Questions?

Una Song

CFS Program Manager, EPA

(202) 343-9024

Song.Una@epa.gov

Nora Buehler

Midwest Account Manager, ICF

(202) 862-1589

nbuehler@icfi.com

Or e-mail

commercialfoodservice@energystar.gov

