



NEWS RELEASE

CONSORTIUM FOR ENERGY EFFICIENCY

One State Street, Suite 1400 Boston, MA 02109-3529

Phone: 617-589-3949 Fax: 617-5893948

E-mail: cee@cee1.org Web: www.cee1.org

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FOR IMMEDIATE RELEASE

Contact: Howard Newman, Communications Director, 617-589-3949, ext. 209

Efficient commercial refrigeration options save energy, money Refrigerators and ice-makers pay for themselves in two years or less

The Consortium for Energy Efficiency (CEE) recently launched the first national initiative for energy-efficient commercial refrigeration. Through this program, CEE is promoting commercial solid-door, reach-in refrigerators (and freezers) and commercial ice-makers that can save 15-50 percent of energy costs. **Because commercial refrigeration equipment operates 24 hours a day, 365 days a year, these energy savings can make a significant impact on overall electricity consumption and help reduce the risk of major power outages.**

Working through CEE, local utilities and energy organizations are beginning to show interest in advancing equipment sales through rebates and educational programs.

"Commercial refrigeration has many untapped opportunities," said CEE Commercial Program Manager **Rachael Shwom**. "The incremental costs are low and the energy savings are substantial."

Fifteen members participated in the development of CEE's commercial refrigeration initiatives. **Tacoma Power** and the **New York State Energy Research and Development Authority** (NYSERDA) are currently running a rebate programs (see page 3). **Efficiency Vermont** has also shown strong interest, with several other CEE members likely to implement programs in the future.

CEE has established two tiers of specifications for qualifying equipment. These are available on the CEE Web site: www.cee1.org/com/com-ref/com-ref-specs.pdf

COMMERCIAL REACH-IN REFRIGERATOR AND FREEZER INITIATIVE

Attainable energy savings of up to 50 percent are currently available. There is an ample selection of products at Tier 1. Availability of Tier 2 products is somewhat less but cost-effective technologies currently exist that would enable production of reach-ins at this performance level.

CEE's Tier 1 specifications for refrigerators and freezers are set at the ENERGY STAR® levels. CEE's Tier 2 is 40 percent more efficient than ENERGY STAR for solid-door, reach-in refrigerators and 30 percent more efficient than ENERGY STAR for solid-door, reach-in freezers.

Qualifying refrigerators list: www.cee1.org/com/com-ref/frig-prod.pdf

Qualifying freezers list: www.cee1.org/com/com-ref/freezer-prod.pdf

COMMERCIAL ICE-MAKER INITIATIVE

Energy savings of 15-20 percent are currently available for commercial ice-makers. CEE's ice-maker specification, based on performance levels set by the Federal Energy Management Program (FEMP), includes 10 different product categories, sorted by size, model type and technology. Technologies are currently available that would enable commercial ice-makers to surpass CEE's Tier 1 levels by 20 percent.

Qualifying ice-makers list: www.cee1.org/com/com-ref/im-prod.pdf

ABOUT CEE

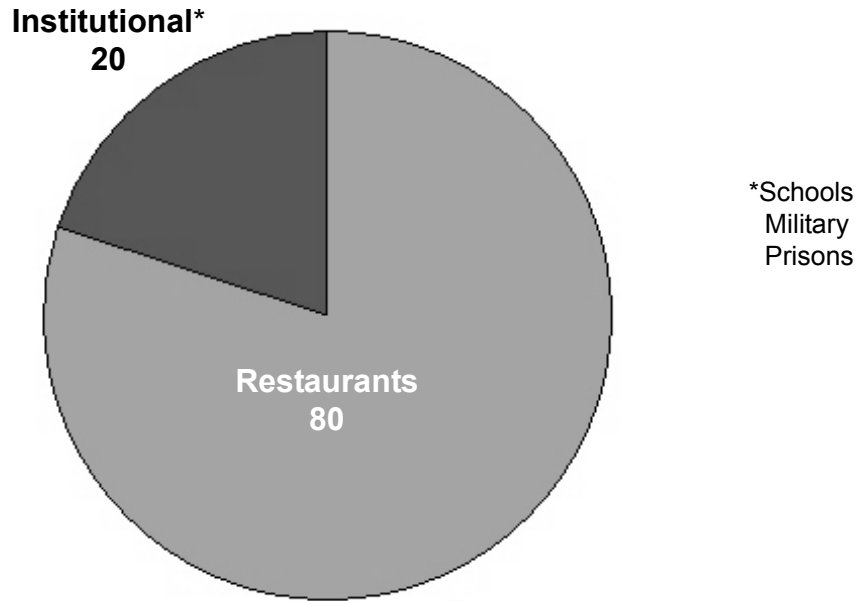
CEE is a national, nonprofit, public benefits corporation that promotes energy-efficient technologies and products. There are 70 CEE members in 21 U.S. states and Canada. Members include utilities, energy-efficiency organizations, state energy offices, environmental groups and research organizations.

ASSESSING THE MARKET

Who uses commercial refrigerators and freezers?

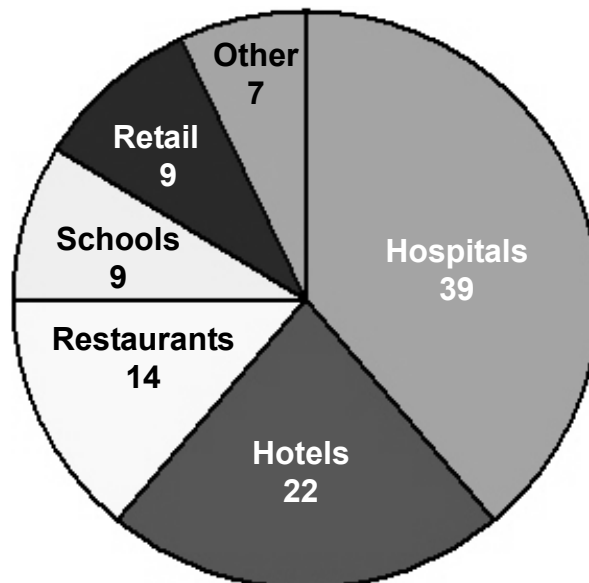
(solid-door, reach-in models)

Percentage of end-user market



Who uses commercial ice-makers?

Percentage of end-user market



Source: 1996 DOE report, *Energy Saving Potential for Commercial Refrigeration Equipment*

Commercial refrigeration programs by CEE members

Tacoma Power

Cool Rebates



This incentive program, launched in June 2003, promotes high-efficiency commercial refrigerators and freezers through customer and dealer incentives. The incentive structure for customers is based upon size and energy efficiency of the units.

Two levels of incentives are provided: ENERGY STAR® (CEE Tier 1) and SuperSaver (CEE Tier 2). The customer incentives range from \$125-200 for the SuperSaver machines and \$30-50 for ENERGY STAR units. The dealer incentive is \$15 per door for the SuperSaver units only. The Cool Rebates program is being promoted through local retailers and distributors, business organizations, newsletters, and trade publications. It is also being marketed locally to end-users – such as schools, hospitals, restaurants and hotels – through brochures, posters and door stickers.

N.Y. State Energy Research and Development Authority (NYSERDA)

Smart Equipment Choices

Cool It

In the summer of 2002, NYSERDA's *Smart Equipment Choices* program began providing incentives for Commercial Packaged Refrigeration Equipment (including reach-in solid door commercial refrigerators and freezers) for ENERGY STAR-qualified equipment. NYSERDA launched the *Cool It* program in April 2003 to further evaluate these technologies and their markets, and offer education and outreach to the commercial refrigerator manufacturers, distributors, and end-users.



Southern California Edison San Diego Gas & Electric Pacific Gas & Electric

Express Refrigeration

As part of the statewide *Express Efficiency* program, California's three investor-owned electric utilities have launched *Express Refrigeration*, which provides rebates for energy-efficiency retrofits applicable to commercial refrigerators and freezers. This program also offers vendors an opportunity to sign on as trade allies. Currently, this program does not provide rebates for the purchase of commercial refrigeration units.

Efficiency Vermont

(Coming in fall 2003)

Efficiency Vermont plans to promote the installation of energy-efficient refrigeration equipment using prescriptive incentives that offset a portion of their cost. This initiative will rely on refrigeration contractors to encourage the appropriate installation of economizers, door heater controls, compressors, fans and solid door commercial refrigerators and freezers (that qualify for the ENERGY STAR label).

Commercial Refrigeration Specifications

Solid-door Reach-in Refrigerators and Freezers

Equipment	Tier	Corresponding Base Specification	Maximum Energy Use/Day (kWh/day)
Refrigerator	1	ENERGY STAR	0.10V + 2.04
	2	ENERGY STAR + 40%	.06V + 1.22
Freezer	1	ENERGY STAR	0.40V + 1.38
	2	ENERGY STAR + 30%	0.28V + 0.97

V = Internal Volume ASHRAE Standard 117-2002 / 38 deg. F

Ice-makers

Equipment Type	Harvest Rate (100 lbs. ice/ 24 hrs)	Tier	Corresponding Base Specification	Maximum Daily Energy Consumption (kWh per 100 lbs. Ice)	Maximum Daily Condenser Water Use (gallons per 100 lbs. ice)
Ice-Making Head	<500 lbs./day	1	Approximately FEMP*	7.80 - .0055H	200 - .022H
		2	20% below Tier 1	6.24 - .0044H	200 - .022H
Water Cooled	≥500 lbs./day	1	Approximately FEMP*	5.58 - .0011H	200 - .022H
		2	20% below Tier 1	4.46 - .0009H	200 - .022H
Ice-Making Head	<450 lbs./day	1	Approximately FEMP*	10.26 - .0086H	Not Applicable
		2	20% below Tier 1	8.21 - .0069H	Not Applicable
Air Cooled	≥450 lbs./day	1	Approximately FEMP*	6.89 - .0011H	Not Applicable
		2	20% below Tier 1	5.51 - .0009H	Not Applicable
Remote-Condensing	<1000 lbs./day	1	Approximately FEMP*	8.85 - .0038H	Not Applicable
		2	20% below Tier 1	7.08 - .0030H	Not Applicable
Air Cooled	≥1000 lbs./day	1	Approximately FEMP*	5.10	Not Applicable
		2	20% below Tier 1	4.08	Not Applicable
Self-Contained	<200 lbs./day	1	Approximately FEMP*	11.40 - .0190H	191 - .0315H
		2	20% below Tier 1	9.12 - .0152H	191 - .0315H
Water Cooled	≥200 lbs./day	1	Approximately FEMP*	7.60	191 - .0315H
		2	20% below Tier 1	6.08	191 - .0315H
Self-Contained	<175 lbs./day	1	Approximately FEMP*	18.0 - .0469H	Not Applicable
		2	20% below Tier 1	14.4 - .0375H	Not Applicable
Air Cooled	≥175 lbs./day	1	Approximately FEMP*	9.80	Not Applicable
		2	20% below Tier 1	7.84	Not Applicable

*Federal Energy Management Program specification

H = Ice Harvest Rate (lbs./ 24 hours)
ASHRAE Standard 29-1988 (RA 99)