



Transforming Energy Challenges into Competitive Advantage

WHITEPAPER

Introduction

Never has the question of energy efficiency been so valuable to so many people in so many different ways.

The responsible consumption of energy protects not only the environment but financial stability, too. Commercial businesses understand this well, particularly supermarkets. For every square foot of space in their stores, these businesses spend more than \$4. As a result, an average-sized food retailer may spend upwards of \$200,000 every year in cumulative energy costs.¹

Grocery stores, however, aren't the only businesses that struggle with energy costs. Any food-related enterprise with perishable goods that require extensive refrigeration runs the risk of overspending on its energy. All industries have their pain points, but why are high energy costs particularly burdensome to food providers and retailers?



“AN AVERAGE-SIZED FOOD RETAILER MAY SPEND UPWARDS OF \$200,000 EVERY YEAR IN CUMULATIVE ENERGY COSTS.”

TIGHT MARGINS

While profit margins for grocery stores and food wholesalers have trended upward in the past few years, the industry they operate in is still considered one of the least profitable out there.

One study conducted between 2015 and 2016 found grocery stores struggle with net margins as low as 2.5 percent, while grocery and product merchant wholesalers contend with a 1.9 percent net margin. Compare those figures to the cross-industry average of 7.7 percent over the same period.² With margins that narrow, every penny counts. Could energy efficiency put dollars back into the pockets of retailers everywhere?

FOOD WASTE

Fresh produce doesn't stay that way forever. American grocery stores and supermarkets are responsible for more than 13 billion pounds of food waste every year, about 10 percent of what the entire country contributes to the food waste trash heap.³

Smarter supply chain management and sustainability initiatives have taken the edge off of revenue losses from unbalanced inventory. However, so long as food retailers stock perishable goods, this issue will dog them in perpetuity. Effective energy management strategies could act as a counterweight to these inextricable costs.

COMPETITION IN NEW MARKETS

In recent years, commercial food retailers and specialty shops have moved onto turf once exclusively owned by restaurants. On-the-go prepared offerings will continue to pilfer market share from conventional eateries, provided commercial vendors deliver equal or better quality, selection and price.

But those qualities don't come cheap. Savings from smarter energy management can help soften the blow from equipment investment and related ventures.



“SAVINGS FROM SMARTER ENERGY MANAGEMENT CAN HELP SOFTEN THE BLOW FROM EQUIPMENT INVESTMENT AND RELATED VENTURES.”

What equipment should new energy management initiatives target?

With so many new energy-saving products on the market and so many opportunities for businesses to augment their consumption, the possibility of investing in areas with low return on investment looms large.

To prevent energy management from becoming another costly thorn in the side of food retailers everywhere, where should these companies focus their attention?

HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

The architectural layout of a standard grocery store or supermarket is a perfect storm of energy inefficiency. Wide open spaces push thermostats into constant operation. Heavy traffic flowing in and out of stores at all hours of the day makes equilibrium elusive. Ambient heat and cold from commercial cooking and refrigeration equipment also affect this balance.

Upgrading HVAC hardware that accounts for and leverages all these factors can mitigate energy consumption greatly. According to Energy Star, three-quarters of supermarket natural gas

expenditures go toward space heating and about one-fifth of electricity toward cooling and ventilation.⁴

REFRIGERATION

Far and away the most troublesome energy-related cost food retailers deal with, refrigeration accounts for about half of average supermarket electricity spend. Its efficiency issues are threefold: First, many businesses rely on outdated, dilapidated equipment. Second, certain models not only lack automated controls but also sensible features that trap and utilize chilled air. Third, companies with either appliance have no means to determine consumption trends over time—at least, not until the energy bill arrives in the mail.

Apart from buying equipment with greater energy efficiency built in, the Department of Energy recommends keeping an eye out for the following features on modern display cases and other refrigerated assets. Each can assist investors in their efforts to reduce energy usage even further⁵.

- Adaptive monitoring.
- Timers for in-case lighting.
- Speed controls for evaporator/condenser fans.
- Wireless communication.
- Refrigerant leak detection.



“REFRIGERATION ACCOUNTS FOR ABOUT HALF OF AVERAGE SUPERMARKET ELECTRICITY SPEND.”

Moreover, intelligent retrofits to older equipment can achieve drops in consumption between 50 and 80 percent.

LIGHTING

Whether for safety or merchandising, supermarkets must be well-lit. Bright lighting makes food labels more noticeable, produce more vivid and meat more colorful, all while exposing any messes so staff can clean every square inch thoroughly and prevent slip-and-fall injuries to shoppers.

However, a switch from traditional halogen or incandescent lighting to light-emitting diodes, or LEDs, can have a wide-reaching impact on energy management as well as sales. As the Department of Energy explained, LEDs use significantly less electricity, waste none of their energy through heat and last much longer than the competition.⁶

Better still, many LED models today come with smart connectivity so investors can enjoy wider application potential and more granular consumption data perfect for analytics. Cleaner, whiter luminosity produced by LEDs also brings out the rich hues of food instead of distorting them like traditional light bulbs would. The result? Visually appetizing food simply sells better.

Furthermore, if food retailers decide to burn the midnight oil, so to speak, and offer late-night hours or 24-hour service, LEDs in lighting fixtures, refrigerated cases and even lamp posts in the parking lot can lessen the operational costs tied to staying open.

FINAL ENERGY MANAGEMENT TIP FROM HORIZON BRADCO

Greater control over natural gas and electricity consumption gives food retailers and commercial businesses a competitive advantage, financial agility and the respect of eco-conscious customers.

To support those benefits even further, any investment into new equipment should include comprehensive scheduled maintenance packages and employee training sessions. Professional tune-ups and lessons on how to utilize the latest technology ensure businesses always get the most out of the equipment they bring into their operations.

For more information on energy management, smart equipment from [5 Star Refrigeration](#) or Horizon Bradco's cutting-edge training facility or on-site visits, visit www.horizonbradco.com and reach out to a representative today.



“MOREOVER, INTELLIGENT RETROFITS TO OLDER EQUIPMENT CAN ACHIEVE DROPS IN CONSUMPTION BETWEEN 50 AND 80 PERCENT.”

Our Approach, Our Presence

Horizon Bradco is a leading service and equipment solutions provider to the retail food industry. With headquarters in Schenectady, NY, Horizon Bradco is the premier partner for delivering an exceptional food shopping experience to major supermarkets, convenience stores and food commissaries throughout much of the East Coast. Its three divisions, six locations and over 300 team members lead the industry in food equipment, refrigeration and HVAC maintenance, repair, sales and installation.

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SOURCES:

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