



Case Study: **Save-a-Lot**



Saving energy — and money — can definitely make an impact on a business' bottom line.

Just ask Randy Rabban, who installed energy saving measures that helped save him thousands of dollars in energy costs.

Rabban is a small business owner who operated six grocery stores, several of which were within Detroit's city limits. He purchased his first Save-A-Lot in 1992 on Houston-Whittier in Detroit.

Originally constructed in the 1960s, the store was eventually expanded to 15,300 square feet, which offered tremendous opportunities for improvements in energy efficiency.

As a group, grocery stores have the highest electrical consumption of all commercial buildings, averaging more than \$5 of electricity and \$.38 of natural gas per square foot a year. Refrigeration alone accounts for more than 50% of electrical consumption in grocery stores, whereas it represents just 4% of consumption in the average commercial property. As a result, in an industry in which

One of Randy Rabban's Detroit stores saw more than \$7,000 in annual energy savings thanks to DTE Energy's incentive program.

the average profit is 1%, controlling energy costs is critical to success.

Recognizing the value of increased energy efficiency, Rabban installed several measures, including programmable thermostats, infrared gas heaters, anti-sweat heater controls, ECM motors and 84 feet of vertical night covers.

For his project, Rabban took advantage of DTE Energy's Independent Grocer's Special Incentive Program, which paid him more than \$5,300 in incentives, and resulted in more than \$7,000 in annual cost savings.

Save a lot

Saving energy and money was a good idea for this owner

Randy Rabban was pleased with his decision to participate in DTE Energy's special program.

"I love the idea of saving money while I am doing what is environmentally right," he said.

"I also really like the feel of the store."

He wasn't alone: "Both our customers and employees are very positive about the store's comfort and product freshness."

The grocery business isn't easy.

Tough competition and low margins are the norm; however, there are many opportunities to increase efficiency while protecting your bottom line.

With support from DTE Energy's Independent Grocer's Store Incentive Program, Rabban's Save-A-Lot stores became well-positioned to continue delivering value to their customers for years to come.



Randy Rabban took advantage of DTE Energy's special Independent Grocer's Store Incentive Program to install energy-efficiency measures that saved him more than \$7,300 in the first year — and continues to save him money today.

Every measure installed in his grocery store saved both energy and money for the owner

Programmable Thermostats

Keeping grocery stores comfortable for customers and employees, while keeping refrigerated items cold is costly.

In fact, space heating accounts for 75% of natural gas consumption in grocery stores.

Randy Rabban installed three programmable thermostats in one of his Save-a-Lot stores, allowing store operators to adjust temperatures to accommodate customers and employees during operating hours — and saving money when the store was closed.

This simple, cost-effective step was expected to reduce Rabban's natural gas bills by nearly \$600 each year and his electric bill by \$200 a year.

Infrared Gas Heaters

Most of Rabban's stores do not have enclosed entrances, so when customers enter and exit during frigid Detroit winters, cold air creates a draft, allowing the heated air from the roof top units to escape the store.

In an effort to keep customers and employees comfortable, Rabban installed two natural gas infrared heaters. These units are more effective at heating people, not the ambient surroundings — thereby reducing or eliminating the load on the roof top gas units.

He expected to save about \$360 a year in his heating costs because of the new infrared units.

Anti-sweat Heaters

One of the easiest ways to reduce energy costs in grocery facilities is to install controls for the "anti-sweat heaters" on refrigerated display cases.

Anti-sweat heaters prevent the formation of condensation on refrigerator doors when open, and controls allow the heaters to operate only when needed.

Easy to install and maintain, the controls are relatively inexpensive and typically pay for themselves in a year or less.

Rabban installed 22 controllers in his store, resulting in anticipated savings of nearly \$2,700 year.

ECM Motors

Rabban also replaced 22 existing motors with Electronically Commutated Motors (ECMs).



These included 11 shaded pole motors in display cases and 11 in walk-in coolers.

Shaded pole motors are very inefficient, operating at approximately 20% efficiency. ECMs typically operate between 65-72% efficiency, providing big savings. For Rabban's store, that translated into saving more than \$2,350 a year.

Vertical Night Covers

Finally, vertical night covers are a great tool to increase energy efficiency. The covers, which are easy to install, keep cool air confined in display cases, reducing the amount of energy required to keep the cases cool. An added benefit is that night covers extend the shelf life of perishable goods.

Rabban added 84 feet of vertical night covers to his store's coolers, saving an estimated \$1,100 a year in electricity costs.



Incentive Program Summary

Measure	SAVINGS (Mcf)	SAVINGS (kWh)	SAVINGS (\$)
Programmable thermostats	59.7	2,415	\$800
Infrared gas heaters	36.0		\$360
Anti-sweat heater controls		32,758	\$2,700
ECM motors		28,391	\$2,350
Vertical night covers		13,440	\$1,100
Total Incentives: \$5,300	95.7	77,004	\$7,310

*All savings are first-year estimates

ENERGY EFFICIENCY PROGRAM FOR BUSINESS

About the Program

Through DTE's **Energy Efficiency Program for Business**, companies like yours — big and small, manufacturing and service, sole proprietorships and corporations — can apply for cash incentives to help offset the cost of energy-saving equipment and technologies.

The **Energy Efficiency Program for Business** offers a comprehensive set of incentives for both electric and natural gas users, helping you invest in energy efficient technologies, saving you energy and money — today and into the future.

Our online Catalog provides specifications about each incentive offered, and our online Application provides step-by-step instructions on how to apply for those incentives.

The incentives fall into three categories:

Prescriptive Incentives

Prescriptive Incentives provide customers with predetermined incentive rebates for the installation of specific energy-efficient equipment — including, but not limited to: lighting, controls, HVAC, refrigeration and food service equipment. Incentives are provided for qualified improvements and equipment commonly installed in a retrofit or equipment replacement situation. Prescriptive incentives are paid based on quantity, size and efficiency of the equipment.

Custom Incentives

When customers cannot find a prescriptive measure that fits their projects, they can apply for **Custom Incentives**. This program provides cash rebates for measures installed in qualified projects that are less common or more complex than prescriptive measures. Custom incentives are paid based on the first year of energy savings (kWh and/or Mcf).

New Construction and Major Renovation Incentives

If a customer is building a new facility, changing the usage of space or adding load, **New Construction and Major Renovation Incentives** are available to assist them with off-setting the cost of energy-efficient upgrades, allowing them to save on operating costs long term. There are three categories of new construction incentives:

- **Systems Approach** incentives are predetermined to optimize the energy efficiency of individual systems.
- **LEED Whole Building Approach** incentives are based on energy savings validated by LEED.
- **LEED Design Review Assistance** is a flat rate incentive designed to encourage LEED certification.

Contact Us

We are available to help you understand the incentive requirements and available resources for this and other energy-efficiency projects. Call to check your eligibility and learn how to make DTE's **Energy Efficiency Program for Business** work for you.

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NOTE: Programs based on availability of funding and may end at any time.