



Case Study: Art Van Furniture



It's all about presentation.

For those who have visited one of the 36 Art Van Furniture stores in Michigan, the first thing they see when they open the front door is a vast array of furnishings bathed in a flattering light — literally.

From living room to bedroom sets, from recliners to mattresses — overhead, directional and accent lighting work in tandem to add just the right ambiance to each setting and arrangement.

So with excellent lighting being central to its successful operations, it should be little surprise that Art Van put this expense at the top of its “to-do” list when it came to finding ways to save energy — and money.

And in a mere two years, that investment in lighting upgrades has earned the company more than \$200,000 in cash incentives from DTE Energy, through its Energy Efficiency Program for Business.

When the company was founded in 1959, its lighting options were slim to none: harsh incandescent and

Since 2011, Art Van Furniture has completed 20 energy-saving lighting projects that qualified for more than \$200,000 in cash incentives through DTE's Energy Efficiency Program for Business.

fluorescent lights and neon signage.

The neon signs may still be there, but in every other instance, the company has upgraded its overhead showroom lighting: replacing outmoded fluorescent and incandescent lighting with energy-saving LEDs — shorthand for Light Emitting Diode lamps.

How many LEDs has Art Van installed in two years in its furniture and Mattress World showrooms?

Nearly 22,000 — and counting.



Art Van has been pursuing excellence for 54 years

Since its founding in 1959, Art Van Furniture has become one of the best-known and most successful furniture chains in Michigan — as well as a booster of the state and of the city of Detroit.

Headed by founder and Chairman Art Van Elslander, the family-owned company was named “2009 Furniture Retailer of the Year” by Furniture/Today magazine.

The Michigan Retailer’s Association named the company 2000 Retailer of the Year. The company’s headquarters and warehouse are located in Warren. Today, Art Van Furniture operates 36 stores in Michigan, as well as seven freestanding PureSleep mattress stores.

Later this year, Art Van Furniture will open its first stores outside of Michigan in the Toledo and Chicago markets.

In choosing to upgrade its showroom lighting, the company settled on LEDs — which can save up to 75% in energy costs, according to the U.S. Department of Energy. For Art Van, that’s

translated into an estimated savings of 3.2 million kWh per year — or about \$300,000 annually.

But the benefits don’t end there: Because LED lights burn at 83°F, compared to the 250°F for the incandescent lights they replaced, the amount of air conditioning needed to keep the stores cool in summer has dropped appreciably.

Finally, from an aesthetic perspective, LED bulbs simply provide a fuller range of light, which allows for better viewing of merchandise.

In the end, Art Van officials say they’ll continue to look for ways to save money — but also to be environmentally friendly.



As part of its showroom lighting upgrades, Art Van replaced fluorescent and incandescent lighting with energy-efficient LEDs.



Incentive Program Summary

PROJECT	INCENTIVE	SAVINGS*
Incandescent/fluorescent to LED	\$200,815	3.2 million kWh
Boiler/Furnace Tune-ups	\$5,560	472.65 Mcf
	\$206,375	<i>*First-year savings as reported by the company</i>

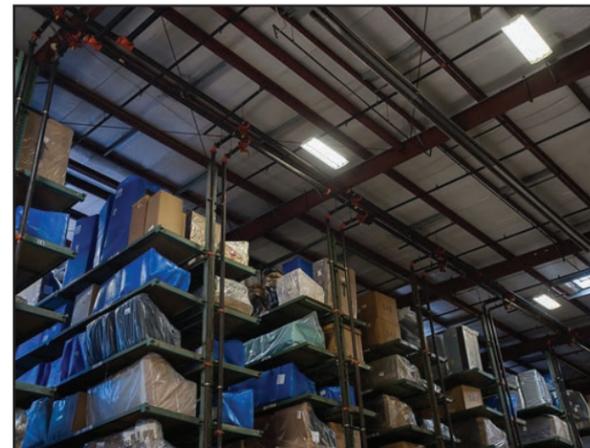
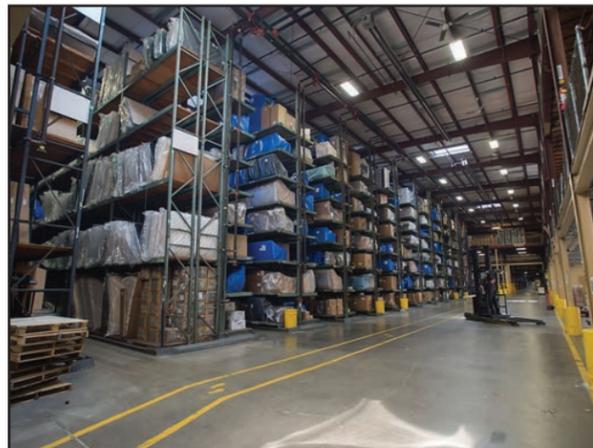
Company’s warehouse also uses the latest energy-efficient lighting, HVAC tech to control costs

Art Van Furniture’s energy-saving efforts don’t start and end with its showrooms.

In 2001, the company installed automated technology in its warehouse — and continues to monitor energy usage at the site.

Inside the 183,000 square-foot facility, the storage and retrieval system is completely automated, allowing Art Van to leave a smaller environmental footprint than a traditional warehouse.

Thanks to installing such improvements, the company says it’s using 75% less lighting, heating, and cooling at the facility.



Warehouse Upgrades

Building on its successes in showroom upgrades, Art Van focused the same attention on its central warehouse facility, installing these upgrades:

- 250 T-5 fluorescent lamps replaced less-efficient 1000W HID’s.
- Occupancy sensors were added to the warehouse aisle and dock areas so that when an area became unused for an extended period of time, the lights shut off. Previously, Art Van never shut off the lights

in these areas and would operate them 24 hours a day.

These occupancy sensors work in accordance with the lighting manufacturer specs, in order to comply with the warranty. This decreases their energy bill while also prolonging the life of the lights.

- As a result of both replacing old fluorescent lamps with more efficient lights, and installing occupancy sensors, Art Van says it saves approximately 4 million kWh each year.

In addition to lighting, Art Van took other energy-saving steps

Boiler/Furnace Tune-ups EMS Energy Management System

In 2011, Art Van Furniture took advantage of other incentive offers through DTE’s Energy Efficiency Program for Business. It had 140 boiler and/or furnace tune-ups performed at facilities in metro Detroit — as well as in other locations throughout Michigan.

In doing so, the company received another \$5,560 in cash incentives.

Under DTE’s Program, such maintenance work is eligible for incentives every two years.

Depending on the type of equipment (boiler vs. furnace, etc.), a tune-up can save a business 2% to 20% a year in energy usage and costs.

By having the work done in 2011, Art Van reduced its annual natural gas usage by more than 472 Mcf.

In order to ensure that energy was used as efficiently as possible, Art Van installed EMS (Energy Management Systems) at all of its properties.

The EMS provide centralized control of all lights, as well as HVAC systems.

This ensures that the appropriate equipment is operating as desired.

One of the major functions of EMS is to shut down all of the lights and HVAC units at the end of the night.

As a result of its energy management systems, the company reported a 20% reduction in its gas and electric bills from this upgrade alone.

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.