

## CANADIAN TIRE REDUCE ENERGY SPEND BY 14% WITH ENISTIC TECHNOLOGY

### Background

Canadian Tire wanted to be able to determine energy savings and opportunities, and be able to prioritise projects with high levels of return; all through the use of the Enistic System. They had a previous energy spend of \$2.20 per sq ft.

Based in Georgetown Ontario, the large site has roughly 51,000 sq ft retail space with traditional rooftop cooling and heating units, ranging in age and size, as well as:

- 6 rooftops for retail space
- 1 Rooftop for Offices and Staff area
- 3 bay garage with no mechanical cooling or gas fired heating.

This case study was prepared in conjunction with Enistic Canada - Our master partner based in Toronto.



CANADIAN TIRE, ONTARIO

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We are a proud Canadian company and one of the nation's most trusted brands. Our stores touch communities coast to coast offering products in automotive, living, fixing, playing, apparel and financial services.

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### How we did it?

Enistic Canada installed a system which comprised of 30 wireless metering points that were designed to monitor:

- HVAC
- Lighting
- Point of Sale
- Computer Room.

To gain a better understanding of the facility, Enistic Canada also undertook to:

- Perform a current state site assessment,
- Assessed cooling environment for the on-site data centre
- Assessed roof condition for leaks, age and state
- Assessed outdoor lighting needs
- Evaluated current lamp states and light quality.

## Outcome

The Enistic System identified opportunities immediately. The comprehensive reporting system allowed our coaches to recognise:

- An irregular use of the HVAC systems, the building was not optimised
- Pronounced HVAC base load at night
- Lighting for cleaning staff was all on during the entire cleaning time
- Point of sale remained on all night
- Data centre Btu/ kWh did not require a secondary cooling system
- Vestibules were contributing significant heat load to the building
- HVAC unit 4 appeared to be failing

Based on Enistic Canada's prioritised recommendations the Canadian Tire franchisee achieved the savings identified through the implementation of:

- Thorough maintenance and cleaning of HVAC systems (14% savings)
- Implementation of window film on south side of building (3% expected)
- Change in air handling for data centre (2% expected)
- Roof repairs and upgrade (10% to 15% expected)
- Shut off ceiling fans for 6 months of the year (\$1000/per year)

In addition, Enistic Canada's approach resulted in capital cost avoidance for the following:

- Not implementing an dedicated air conditioning system for the Data Centre
- Replacement costs for HVAC number 4
- Building Management System not required

## Graphical Results

<b>ENISTIC RESULTS</b>	<b>RESULT</b>
Energy reductions realised	14%
Cost savings per year	\$17,500
Enistic payback period	8 months
Additional savings opportunities identified	15% - 20%
Capital cost avoidance	\$75,000