



## Case study | CAT Transport



“By installing Bramal LED, we have helped our team be more efficient by enhancing their work environment. Our new lighting solution also helped us save a considerable amount of energy making it a valuable short term investment” — Daniel Goyette, CEO of CAT Transport.



**20%**

average increase in LUX  
(area illumination level)

**1,118\$**

per year

**2.38**

year payback period  
(on overall project costs)

### Project objectives

The project’s goal was to provide better lighting to CAT Transport’s garage and storage areas in order to comply with Canadian Occupational Health and Safety regulations regarding minimal illumination levels in a storage area. The company also wanted to lower its high energy consumption in order to offset the high energy requirements of its vehicles and lower its operating costs.

### What we did

In order to provide CAT Transport employees with stable and efficient lighting while helping the company save considerably on energy costs, we replaced the 15 HID lamps in CAT Transport’s garage and storage areas with 18 fixtures each containing 6 Bramal LED tubes. The entire project, including professional fees, new fixtures, LED tubes, and wires costed under \$10,000.

### Results

- 20% increase in light levels
- Evenly distributed and stable lighting level
- 27,944 kWh saved yearly
- 2.38 years payback period
- \$782 saved in yearly maintenance
- \$3,161 savings in the first year

### Conclusion

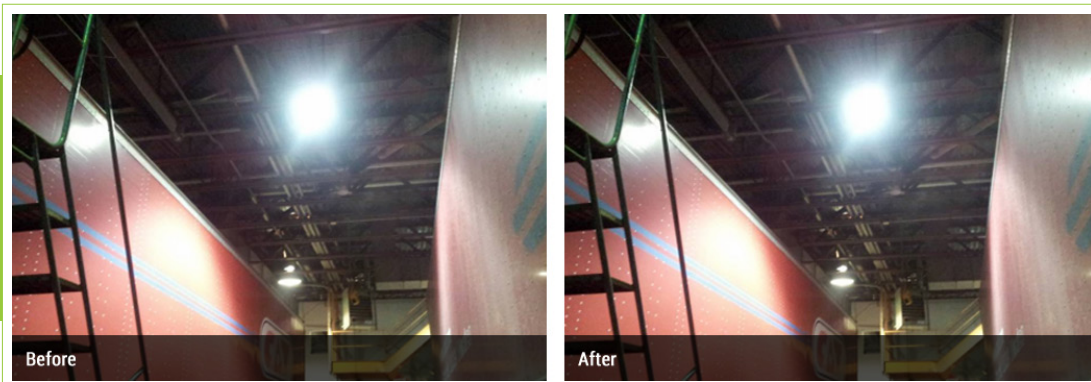
With the installation of Bramal’s LED, CAT Transport has reduced energy consumption by 27,944 kWh per year. This represents \$1,255 in energy savings (based on Quebec’s average energy costs). It will take CAT Transport less than 2.5 years to recover the installation costs through the savings generated by the LED lights.

CAT Transport will reduce their lighting energy consumption by 70% by switching from HID lights to LEDs. Additionally, the LED lights generate 20% more light output (Lux) providing employees with an environment in which it is easier and safer to work.

Switching to Bramal’s LED therefore proves to be an efficient, eco-friendly alternative to HID lights and a worthy investment (ROI of 2.38 years).



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### LIGHT SAVINGS COMPARISON & PAYBACK PROJECT

	BEFORE (HID)	AFTER (LED)
Total kW	4,54 kW	1,35 kW
Operating Hours	8760 Hours per Year	
kWh (Per Year)	39,770	11,826
kWh Savings when switching to LEDs	27,944	

### SAVINGS INCURRED FROM CHANGING 15 HID FIXTURES TO 15 LED FIXTURES

TYPE OF SAVINGS	SAVINGS OF 15 HID FIXTURES CHANGED TO 15 LED FIXTURES	SAVINGS DURING LIFE SPAN OF LED TUBES + 80,000 HRS
Light Energy Savings	\$1,255	\$11,553
Product Savings (lamps)	\$300	\$2,400
Maintenance Savings (installation)	\$782	\$7,200
Hydro Quebec Energy Wise Rebate (estimate)	\$780	\$780
Demand Charge Savings	\$44	\$44
<b>TOTAL SAVINGS IN FIRST YEAR</b>	<b>\$3,161</b>	<b>\$22,458</b>

### PAYBACK FOR 15 FIXTURES

Investment for 15 fixtures	\$6,392
Savings For First Year	\$3,161
Subsequent Year Savings (throughout LED lifespan)	\$2,337
<b>ROI (years)</b>	<b>2,38</b>

### CONTACT US

Phone: (450) 763-1443  
 Email: info@bramal.com  
[bramal.com](http://bramal.com)

4, rue du Transport  
 Coteau-du-Lac  
 Quebec, Canada J0P 1B0