

WORKING WITH BUILDING OWNERS AND TENANTS TO CREATE A SUSTAINABLE FUTURE

A LIGHTING RETROFIT OF TORONTO'S ICONIC WEATHER BEACON SEES A 90% DROP IN ENERGY CONSUMPTION.



Canada Life Building , Toronto, ON

The Canada Life Building is a historic office building in Toronto. The fifteen-floor building opened its doors in 1931. Located at University and Queen Street in the city's downtown, the building is the headquarters of the Canada Life Assurance Company.

More than 60 years after it first lit up the Toronto skyline, the Canada Life weather beacon underwent an environmentally positive upgrade in August 2013.

The upgrade involved converting the lights to light emitting diode (LED) lights. Before this upgrade, the weather beacon was lit by incandescent light bulbs.

Canada Life initiated the change because the incandescent bulbs were inefficient and required frequent replacement. With LED bulbs' performance, cost and reliability having improved, the decision was made to convert the weather beacon last Summer. However, the focus on energy conservation began several years ago, with the decision to turn the weather beacon – which ran 24 hours a day, 7 days a week for many years – off at midnight.

INTERESTING FACTS ABOUT THE CANADA LIFE WEATHER BEACON

- The weather beacon began operating atop Canada Life's flagship building in August 1951.
- A beacon light at the top of the tower forecasts approaching weather systems, lights that are affixed to the support tower indicate variations in temperature.
- The information is updated four times daily, seven days a week, with information provided by Environment Canada's Weather Centre at Pearson International Airport.

Canada Life Building 330 University Avenue Weather Beacon Retrofit

WORKING WITH BUILDING OWNERS AND TENANTS TO CREATE A SUSTAINABLE FUTURE

Before the conversion, more than 1,000 less-efficient incandescent bulbs lit up the beacon, using on average 10,000 kWhs of energy per month and requiring frequent replacement. GWL Realty Advisors measured the energy consumption of the new LED lights over a six month period and compared it with the historical energy usage of the old incandescent lights. Based on these measurements, the annual energy savings from converting to LEDs are projected to be 110,000 kWh in annual electricity savings. This represents approximately 90% annual electricity savings and an estimated 51% annual cost savings, factoring in replacement and maintenance costs per lamp.



The beacon being retrofitted with LEDs

WHAT DO THE LIGHTS MEAN?

Tower

- ▲ warmer - up
- ▼ cooler - down
- steady - no change

Beacon

- clear
- cloudy
- ★ rain (flashing red)
- ☆ snow (flashing white)

ANNUAL SAVINGS

\$16,000 In avoided electricity costs



110,000 kWh electricity savings

EQUIVALENT TO...



11 Tonnes of eCO2 emissions



The amount of carbon sequestered by 276 tree seedlings grown over 10 years*



Taking 2.3 cars off the road for a year*