

2016 TD's Ongoing Energy, GHG, and Water Reduction Initiatives

Initiative	Description	Estimated Annual Reduction	Estimated Annual GHG Reduction	Estimated Annual Cost Savings (\$CAD)	Total Estimated Cost to date (\$CAD)
LED Exterior Lighting Phase I	The LED Exterior Lighting Replacement Program's goal is to reduce ongoing maintenance expenses and energy consumption costs, and to develop a comprehensive lighting standard. Savings realized in 2016 were from the installation of LEDs across 322 US retail locations in 2015.	4,381,196 kWh	1,438 tCO ₂ e	\$1,349,106	\$7,220,573
LED Exterior Lighting Phase II	TD's Phase 2 of the LED Exterior Lighting Replacement Program was approved for an additional 298 US retail locations. Of this, a total of 241 locations were completed in 2016, with an additional 57 locations targeting completion in 2017.	3,742,173 kWh	1,228 tCO ₂ e	\$1,035,109	\$5,309,554
LED Interior Lighting Phase I	The Phase 1 LED Interior Lighting Replacement Program was implemented across 153 US retail locations in 2016.	2,846,250 kWh	934 tCO ₂ e	\$529,435	\$2,476,835
On-Site Solar Energy Production	TD continues to add on-site solar installations across its North American portfolio. In 2016, TD added 14 new on-site solar installations with 179 kW of additional solar capacity, reaching a total of 2.2 MW of solar capacity across 136 sites in North America.	25,737,000 kWh	8,489 tCO ₂ e	\$366,318	\$11,937,529
Retro-Commissioning and US Retail Store Improvements	As part of the US Retail Renovations Process, TD developed and implemented a retro-commissioning program in 2016 to target major energy consumption sources and to improve the overall performance across 90 US retail locations. The RCx's implementation process follows performance improvement recommendations identified through the individual RCx reports, which include programmable thermostats and occupancy sensors to target energy performance improvements.	3,006,783 kWh	987 tCO ₂ e	\$331,358	\$2,568,909
Flex Work Place	Since inception, TD's Flex Work Place program generated a total of 56M kWh in annual energy reductions and 560 tCO ₂ e in annual carbon savings, amounting to \$360K in annual cost savings. In 2016, no net new employees were added to the Flex Work Place program that generated added direct savings.	5,605,355 kWh	561 tCO ₂ e	\$420,252	Not Available
Data Centre Efficiency	We continue to optimize our data centre infrastructure to further reduce space occupied and energy usage.	42,768,893 kWh	6,030 tCO ₂ e	\$5,346,112	Not Available
Printer Reduction	TD's Printer reduction program continues to be rolled out throughout the enterprise. In 2016, we continued the initiative, removing 3270 printers. We are moving to multifunction devices and setting duplex printing capabilities as default, which will reduce energy use, and save on printing supplies like toner and paper.	1,167,688 kWh	181 tCO ₂ e	\$154,754	\$4,394,500
Video Conferencing	Telepresence implementation across our US and Canada operations continues. It creates value to our business by reducing travel among our mobile employee population. We have seen substantial cost savings and CO ₂ e emissions savings and a more personal collaboration experience for our employees. In 2016, we increased our meeting room Telepresence endpoints from 65 to 122.	11,100,000 Km	4,329 tCO ₂ e	\$6,993,000	\$3,430,736
Smart Irrigation	TD's ETwater's Smart Irrigation retrofit reduces the amount of water required by providing real-time updates based on rainfall forecasting and evapotranspiration. In 2016, the application of the ETwater Smart Irrigation technology helped TD reduce both operational costs and water consumption across a total of 298 sites in North America.	83,338 m ³	Not Applicable	\$245,968	\$406,063

