



# 2015 ENVIRONMENTAL PERFORMANCE AND FOOTPRINT REPORT

## Canadian Tire Corporation, Limited

### Our Approach to Environmental Sustainability

Our environmental sustainability strategy engages each of the retail banners and the financial services division of Canadian Tire Corporation, Limited. The strategy focuses on innovation and aims to achieve productivity gains and economic benefits from enhanced environmental and social outcomes by integrating sustainability into business operations.

Our sustainability strategy has four imperatives:

- **Optimize Productivity:** drive product and operations value chain improvements;
- **Develop Innovation:** create and reinvent better processes, products and services;
- **Enhance the Brand:** protect and enhance banner brands and corporate reputation; and
- **Drive Company Engagement:** engage employees through integration of sustainability practices into everyday business operations.

### Reading Our Report

In this report, we often refer to Canadian Tire Corporation, Limited as “CTC” or the “Company”. When we use the words “we” and “our”, we are similarly referring to Canadian Tire Corporation, Limited. Acronyms or other terms that are capitalized in this document are defined the first time they are used or in the Glossary of Terms found in Appendix 5.

### Our Report for 2015

This report outlines:

- **Our 2015 Sustainability Performance:** realized benefits from the implementation of business sustainability projects that aim to reduce the Company’s environmental footprint; and
- **Our 2014 Environmental Footprint:** progress made in tracking the Company’s environmental footprint, which provides a view of the environmental performance of the Company and its extended value-chain, and our current footprint.

DNV GL Business Assurance USA, Inc. has carried out an independent verification of CTC’s environmental footprint claims and assertions. Their limited assurance statement is available [here](#).

Additionally, an independent review of selected environmental sustainability projects and the environmental footprint of the Company was conducted by the Delphi Group and Corporate Knights. Their letter of review is available [here](#). The purpose of this review was to provide stakeholders with assurance that appropriate due diligence is in place to ensure accurate public disclosures, and also to benchmark the Company’s greenhouse gas (GHG) and energy use against that of industry peers.

### Highlights of Our Report

Since 2013, lighting upgrade projects across CTC’s businesses have saved the Company \$2.8 million and enough electricity to power 69 Canadian homes for a year.

Changes in the way we package and handle our products have saved the Company \$2.4 million since 2013 and have avoided sending over 1,600 tonnes of waste to landfills.

CTC’s energy and carbon footprint increased in 2014, primarily due to increases in our product footprint resulting from increased consumer demand for energy-intensive products. However, emissions increased only 3.6% relative to business growth of 5.7%, demonstrating that our success in achieving business growth has outpaced our environmental impact.

We expanded the scope of our waste footprint in 2014 and continue to realize benefits from our centralized waste program. The Company’s diversion rate increased in 2014.

## 2015 Sustainability Performance

Over the past couple of years, CTC has transitioned from reporting the annual benefits that were forecast to be realized from its sustainability projects to reporting the actual benefits realized in the 12-month period following the projects' completion. We measure the benefits realized in the 12-month period following a project's completion date, and continue to measure benefits from that project in the subsequent year. For a complete description of projects, disclosure of measurement gaps and glossary of terms refer to Appendices 4 and 5 respectively.

This report discloses realized benefits of over \$9.5 million in cost avoidance, 53% of which were realized in 2015 from net new projects completed in 2014. Cumulatively, these practices resulted in the reduction of 1,700 tonnes (t) of waste and 12,000 tonnes of greenhouse gas emissions in 2015.

### Sustainability Projects

Cost avoidance and environmental benefits realized in 2015 (reflects the benefits realized in 2015 of projects completed in 2013 & 2014)

Retail Banner	Project	Cost avoidance (\$ 000)	Energy use avoidance (GJ)	GHG emissions avoidance (tCO <sub>2</sub> e)	Waste avoidance (t)	Water avoidance (m <sup>3</sup> )	% cost avoidance from net new 2014 projects
<b>Product and Packaging</b>							
Reductions in energy use from transportation of optimized product and packaging as well as waste reductions		1,142	9,635	699	1,582	-	46%
Canadian Tire	Product and Packaging Right-Sizing	1,142	9,635	699	1,582	-	46%
<b>Product Transport</b>							
Reductions in energy and resource use from increased fuel efficiency in transportation modes, vehicles and distribution centres (DCs)		2,245	24,188	631	27	3,437	69%
Canadian Tire	Damage Reduction	1,275	-	-	27	-	87%
Canadian Tire	Long Combination Vehicles (LCV)	118	1,664	117	-	-	0%
Canadian Tire	DC Lighting Retrofits	845	22,524	515	-	-	52%
Canadian Tire	DC Exterior Irrigation System Retrofit	7	-	-	-	3,437	0%
<b>Business and Retail Operations</b>							
Reductions in energy and resource use in buildings and their operations through efficiency projects		6,193	225,592	10,746	133	-	24%
Canadian Tire	Net New Builds	73	3,873	193	-	-	82%
Canadian Tire	Replacement Builds	515	21,651	503	-	-	58%
Canadian Tire	Demand Control Ventilation (DCV) Retrofits	1,354	106,454	5,172	-	-	0%
Canadian Tire	Relamping Project	940	28,765	1,574	-	-	49%
Canadian Tire	Store Heating, Ventilation and Air Conditioning (HVAC) Upgrades	175	5,438	330	-	-	57%
Canadian Tire	Roofing Retrofits	127	9,714	499	-	-	58%
Mark's	Lighting Retrofits	641	19,254	1,159	-	-	73%
FGL Sports	Light-Emitting Diode (LED) Lighting New Builds & Renovations	42	1,205	102	69	-	100%
Petroleum	Cooler Retrofits	114	3,353	154	-	-	2%
Petroleum	Lighting Retrofits	298	8,695	460	-	-	60%
Canadian Tire	In-Store Decor Right-Sizing	234	43	3.0	3.4	-	100%
Canadian Tire	Point of Purchase (POP) Signage Ship Direct	7	2.0	0.1	-	-	100%
Canadian Tire	Discontinued POP Signage	27	-	-	3.4	-	100%
Financial Services	Electronic Statement (e-Statement) Conversion	1,086	3,416	119	48	-	50%
Financial Services	Balance Transfer Program	562	13,729	477	9.3	-	100%
<b>TOTAL</b>		<b>9,580</b>	<b>259,415</b>	<b>12,076</b>	<b>1,742</b>	<b>3,437</b>	<b>53%</b>

## Revenue generated and environmental benefits realized in 2015

	Revenue Generated (\$ 000)	Low-Carbon Energy Generated (GJ)	GHG emissions avoidance (tCO <sub>2</sub> e)
Rooftop Solar Installations - On Grid	1,472	39,489	1,172

This low-carbon energy generation is equivalent to the annual electricity use from nearly 1,000 Canadian homes.

	Revenue Generated (\$ 000)	Waste Diversion Rate (% of total waste)	Waste diverted (t)
Waste Diversion Program - Greater Toronto Distribution Centres	108	92.2%	7,245

This waste diversion is equivalent to the annual waste generation from over 10,800 Canadian homes.

## Environmental Stewardship Compliance

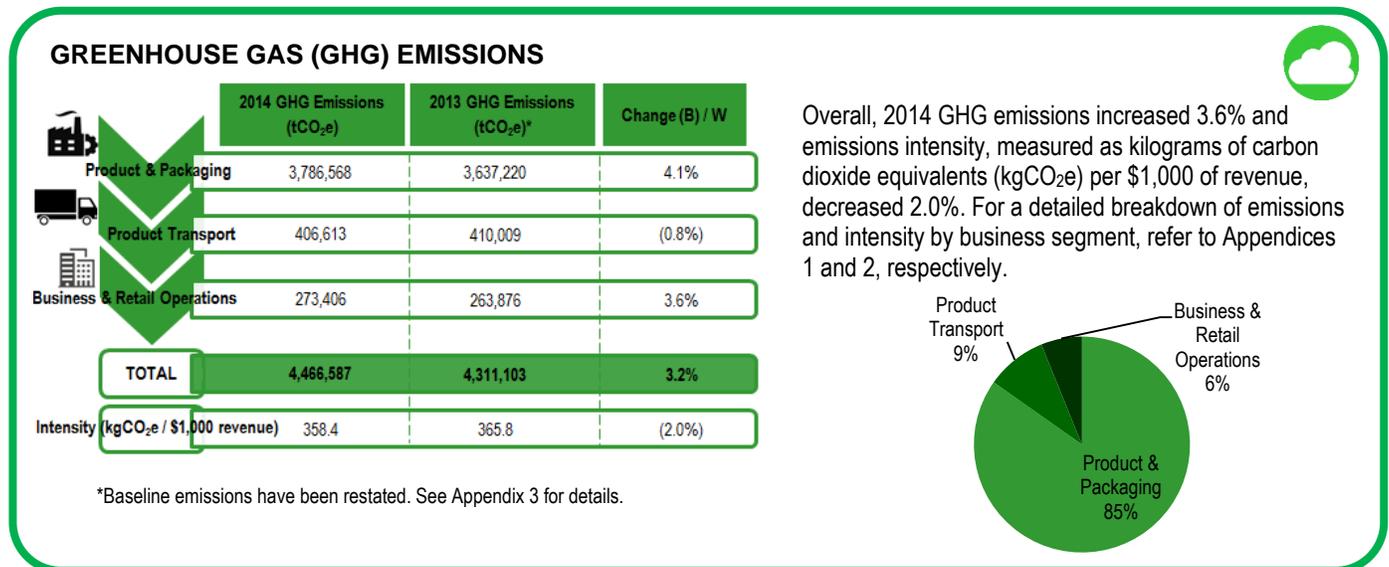
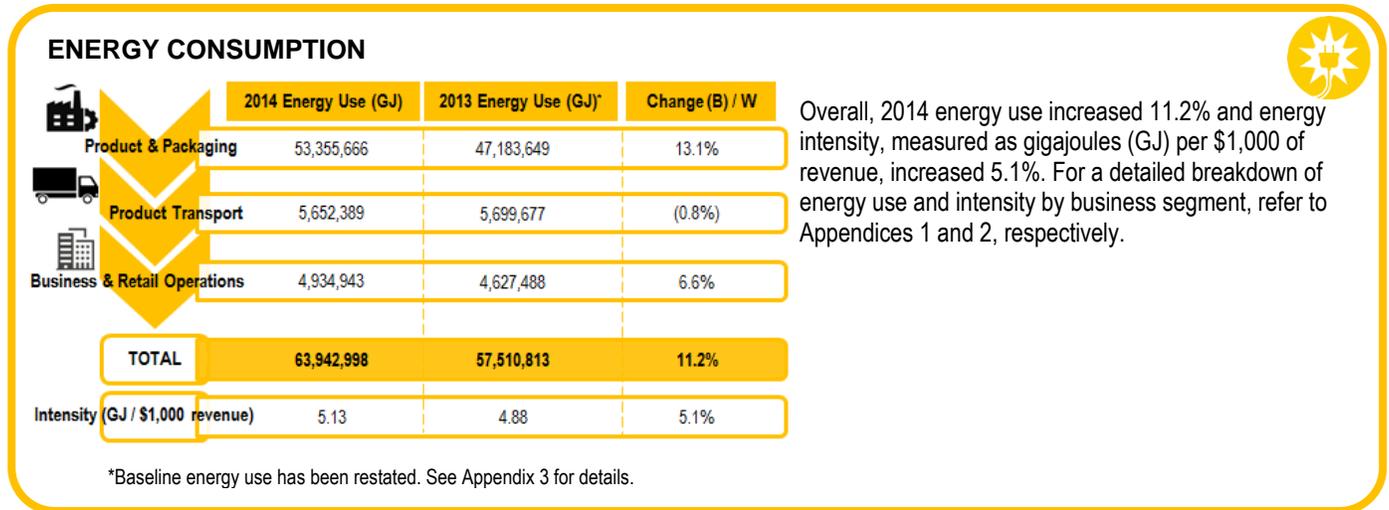
As an active product steward, CTC participates in over 60 provincial product stewardship programs that fund the safe disposal or recycling of CTC products and packaging at end of life. For 2015, CTC has remitted \$25.9 million to provincial product stewardship programs.

## 2014 Environmental Footprint

Each year, CTC measures its energy, carbon, water and waste footprint across its own buildings, operations and certain components of its extended value chain. The data collection and subsequent review exercise for determining the Company's environmental footprint is a rigorous one that is completed after the close of the previous calendar year. Accordingly, the results reflected in this report portray CTC's environmental footprint for the 2014 calendar year.

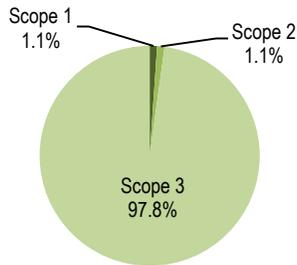
### 2014 Summary Results

The following tables summarize the Company's 2014 environmental footprint as compared to a 2013 baseline. Additional detail on the energy and GHG portion of the footprint can be found in Appendices 1 through 3. For a complete list of measurement gaps and glossary of terms refer to Appendices 4 and 5, respectively.



## GREENHOUSE GAS (GHG) EMISSIONS (cont'd)

CTC's greenhouse gas footprint is prepared in accordance with the GHG Protocol Corporate and Scope 3 Standards. CTC follows the operational control organizational boundary approach, defined as 'having the full authority to introduce and implement operating policies at the operation'. As shown in the figure below, the vast majority of emissions are from activities outside of the Company's operational control. For a complete breakdown of emissions by GHG Protocol category, refer to Appendix 2.



	2014 GHG Emissions (tCO <sub>2</sub> e)	% contribution
Scope 1	48,041	1.1%
Scope 2	48,667	1.1%
Scope 3	4,369,879	97.8%

## WATER CONSUMPTION

	2014 Water Use (m <sup>3</sup> )	2013 Water Use (m <sup>3</sup> )	Change (B) / W
Product & Packaging	63,554,456	64,629,040	(1.7%)
Intensity (m <sup>3</sup> / \$1,000 revenue)	6.8	7.5	(8.7%)

In 2014, CTC measured the water consumption embedded in its products and packaging. In that period, water use decreased 1.7% and water intensity, measured as cubic metres (m<sup>3</sup>) of water per \$1,000 of revenue, decreased 8.7%.

## WASTE GENERATION

	2014 Waste Generated (t)	2013 Waste Generated (t)	Change (B) / W
Corporate Locations & Greater Toronto DCs	26,330	25,398	n/a*
Intensity (t / site)	36.1	38.5	(6.0%)
# locations measured	730	659	10.8%
Diversion Rate	61%	58%	5.7%

In 2014, CTC built on a waste recycling program launched for corporate locations in 2013. In 2014, the scope of the program expanded from 659 corporate locations to 730. Positive results of the program are beginning to materialize, with the average waste generated per site decreasing 6% in 2014, and the diversion rate improving 6%. Total waste generated at the Greater Toronto Distribution Centres (DCs) decreased a notable 10% from 9,200 tonnes (t) to 8,300 tonnes.

\*Year-on-year performance cannot be compared due to expanded scope and data coverage.

## Appendix 1

### CTC's Corporate and Supply Chain Energy Use and GHG Emissions Footprint by Business Segment

		2014 Energy Use (GJ)	Baseline Year (2013) Energy Use (GJ)	Change (B) / W		2014 GHG Emissions (tCO <sub>2</sub> e)	Baseline Year (2013) GHG Emissions (tCO <sub>2</sub> e)	Change (B) / W		Comments
				(GJ)	%			(tCO <sub>2</sub> e)	%	
PRODUCT & PACKAGING	Sub-Total (Canadian Tire, PartSource, Mark's, FGL Sports, Petroleum)	53,355,666	47,183,649	6,172,017	13.1%	3,786,568	3,637,220	149,348	4.1%	Energy use and GHG emissions increased mainly due to increased spend on intensive products (e.g. synthetic oil, barbecues, batteries, apparel, sporting goods).
PRODUCT TRANSPORT	Corporate - CTC Fleet and PartSource Commercial Deliveries	189,576	203,639	(14,064)	(6.9%)	13,330	14,282	(952)	(6.7%)	Corporate transport energy use and GHG emissions decreased primarily due to decreased fuel usage in CTC's fleet, and decreased PartSource deliveries.
	Third Party Road, Rail, Ocean and Air (Canadian Tire and Petroleum)	5,462,813	5,496,037	(33,224)	(0.6%)	393,283	395,727	(2,443)	(0.6%)	Energy use and GHG emissions decreased mainly due to decreased distance shipped by third party road, and decreased international petroleum shipments.
	Sub-Total	5,652,389	5,699,677	(47,288)	(0.8%)	406,613	410,009	(3,395)	(0.8%)	Overall energy use and GHG emissions decreased mainly due to decreased distance for Canadian Tire and Petroleum shipments.
BUSINESS & RETAIL OPERATIONS	Offices and Distribution Centres (DCs) (Canadian Tire, PartSource, Mark's, FGL Sports, Petroleum)	792,007	753,067	38,940	5.2%	41,308	39,324	1,983	5.0%	Overall energy use and GHG emissions increased in offices and DCs resulting from increases in corporate locations.
	Corporate	598,774	554,620	44,154	8.0%	28,742	26,029	2,712	10.4%	Increased energy use and GHG emissions due to increased square footage and increased Heating Degree Days (HDD).
	Third Party Operated Offices and DCs	193,233	198,447	(5,214)	(2.6%)	12,566	13,295	(729)	(5.5%)	Decreased GHG emissions primarily due to decreased electricity consumption in Alberta.
	Stores (Canadian Tire, PartSource, Mark's, FGL Sports, Petroleum)	4,037,335	3,800,842	236,493	6.2%	213,086	206,454	6,632	3.2%	Overall energy use and GHG emissions in stores decreased slightly due to upgrades and consolidation of banners.
	Corporate	840,806	824,660	16,146	2.0%	54,636	54,477	159	0.3%	Energy use and GHG emissions increased slightly due to increased HDD.
	Dealers, Franchises and Agents	3,196,529	2,976,182	220,347	7.4%	158,449	151,977	6,472	4.3%	Energy use and GHG emissions increased primarily due to increased HDD.
	CTREL and Petroleum investment properties	41,058	38,123	2,934	7.7%	1,782	1,361	421	31.0%	Energy use and GHG emissions increased primarily due to increased HDD.
	Emissions related to electricity transmission and distribution (T&D) loss	N/A	N/A	N/A	N/A	12,846	14,328	(1,483)	(10.3%)	Emissions decreased due to infrastructure improvements.
	Emissions related to business air travel	64,543	35,455	29,088	82.0%	4,385	2,409	1,976	82.0%	Energy use and GHG emissions increased due to increased travel to Calgary.
	Sub-Total	4,934,943	4,627,488	307,456	6.6%	273,406	263,876	9,530	3.6%	Overall, energy use and GHG emissions increased due to increased HDD in most provinces.
<b>TOTAL</b>	<b>Corporate and Supply Chain</b>	<b>63,942,998</b>	<b>57,510,813</b>	<b>6,432,185</b>	<b>11.2%</b>	<b>4,466,587</b>	<b>4,311,105</b>	<b>155,482</b>	<b>3.6%</b>	<b>Overall GHG and energy use increased mainly due to increased spend in intensive product categories.</b>

## Appendix 2

### CTC's Corporate and Supply Chain Energy and GHG Contribution and Intensity by Business Segment

	Energy Contribution & Intensity	2014	Baseline Year (2013)	Change (B) / W	GHG Contribution & Intensity	2014	Baseline Year (2013)	Change (B) / W
PRODUCT & PACKAGING	Energy use as % Total Corporate & Supply Chain Energy use	83.4%	82.0%	1.7%	GHG emissions as a % of Total Corporate & Supply Chain Footprint	84.8%	84.4%	0.5%
	Energy use per \$1,000 banner revenue <sup>1</sup> (GJ / \$1,000 revenue)	4.7	4.4	6.5%	GHG emissions per \$1,000 banner revenue <sup>1</sup> (kgCO <sub>2e</sub> / \$1,000 revenue)	332.9	339.7	(2.0%)
PRODUCT TRANSPORT	Energy use as % Total Corporate & Supply Chain Energy use	8.8%	9.9%	(10.8%)	GHG emissions as a % of Total Corporate & Supply Chain Footprint	9.1%	9.5%	(4.3%)
	Energy use per cubic metre shipped (GJ / m <sup>3</sup> )	0.87	0.90	(3.3%)	GHG emissions per cubic metre shipped (kgCO <sub>2e</sub> / m <sup>3</sup> )	62.5	64.6	(3.3%)
	Energy use per tonne-kilometre (GJ / tkm)	0.000508	0.000512	(0.7%)	GHG emissions per tonne-kilometre (kgCO <sub>2e</sub> / tkm)	0.0366	0.0368	(0.7%)
BUSINESS & RETAIL OPERATIONS	Energy use as % Total Corporate & Supply Chain Energy usage	7.7%	8.0%	(4.1%)	GHG emissions as a % of Total Corporate & Supply Chain Footprint	6.1%	6.1%	0.0%
	Energy use per square metre (GJ / m <sup>2</sup> )	0.855	0.826	3.6%	GHG emissions per square metre (kgCO <sub>2e</sub> / m <sup>2</sup> )	47.4	47.1	0.6%
<b>TOTAL</b>	<b>Energy use per \$1,000 CTC consolidated revenue (GJ / \$1,000 revenue)</b>	<b>5.13</b>	<b>4.88</b>	<b>5.1%</b>	<b>GHG emissions per \$1,000 CTC consolidated revenue (kgCO<sub>2e</sub> / \$1,000 revenue)</b>	<b>358.4</b>	<b>365.8</b>	<b>(2.0%)</b>

### CTC's Corporate and Supply Chain GHG Footprint by Greenhouse Gas

Scope 1 & 2 Emissions by Gas:

	2014	Baseline Year (2013)	Change (B) / W
Carbon Dioxide (tCO <sub>2</sub> )	95,654	93,699	2.1%
Methane (tCH <sub>4</sub> )	4.57	5.83	(21.6%)
Nitrous Oxide (tN <sub>2</sub> O)	3.03	3.00	0.9%
Carbon Dioxide Equivalent (tCO <sub>2e</sub> )	96,711	94,792	2.0%

### CTC's Corporate and Supply Chain GHG Footprint by GHG Protocol Category

Total Emissions by Scope:

	2014	Baseline Year (2013)	Change (B) / W
Scope 1 Emissions (tCO <sub>2e</sub> )	48,041	45,358	5.9%
Scope 2 Emissions (tCO <sub>2e</sub> )	48,667	49,430	(1.5%)
Scope 3 Emissions (tCO <sub>2e</sub> )	4,369,879	4,216,317	3.6%

<sup>1</sup> Only revenue from banners included in the Product & Packaging Energy Use and GHG Emissions Footprint is included (Canadian Tire, FGL Sports, Mark's and Petroleum).

Breakdown of Emissions by Scope:

		Description	Methodologies and factors used	Percentage of primary data used	2014 GHG Emissions (tCO <sub>2</sub> e)	Justification of measurement gaps
CORPORATE EMISSIONS	Scope 1	Emissions from fuel used by 70 fleet trucks and 300 PartSource commercial delivery vehicles. Emissions from on-site fuel used by 691 corporate stores, 30 offices and 17 DCs, depot or storage facilities.	Business & Retail Operations calculations are derived from a sampling strategy. A statistically representative sample of energy data was collected by business unit, type of building and regional area to estimate the overall Business & Retail Operations energy usage. Where no actual data is readily available, energy usage is estimated based on building size and type. Canadian Tire fleet and PartSource commercial delivery vehicle calculations are derived from a fuel volume based methodology.	82%	48,041	Hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) from refrigeration units; deemed immaterial.
	Scope 2	Emissions from electricity used by 691 corporate stores, 30 offices and 17 DCs, depot or storage facilities.	Emission factors from the Environment Canada National Inventory 1990-2013 Report were used. Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report, 100 years, Global Warming Potentials (GWP) were used.	80%	48,667	No known measurement gaps.
UPSTREAM EMISSIONS (Scope 3)	Purchased Goods and Services	Emissions associated with the extraction, production and transportation (cradle-to-gate) of products sold at Canadian Tire, FGL Sports, Mark's, Petroleum and PartSource stores.	Canadian Tire, PartSource, FGL Sports and Mark's calculations are derived from the Economic Input-Output Life Cycle Analysis (EIO-LCA) Model developed by Trucost. Petroleum calculations are derived from the US Department of Energy Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) 2014 Model ( <a href="http://greet.es.anl.gov">http://greet.es.anl.gov</a> ) and the GHGenius 4.03 Model ( <a href="http://www.ghgenius.ca">http://www.ghgenius.ca</a> ). IPCC 5th Assessment Report, 100 years, Global Warming Potentials (GWP) were used.	0%	3,786,568	Financial Services, Gas+ kiosk and Canadian Tire non-corporate products; deemed immaterial.
	Capital Goods	Emissions associated with the extraction, production and transportation (cradle-to-gate) of capital goods purchased.	n/a	n/a	n/a	Capital goods are not included due to data unavailability and immateriality.
	Fuel and Energy related activities (not included in scope 1 & 2)	Emissions associated with the extraction, production and transportation of a) fuels consumed b) electricity consumed c) electricity transmission and distribution loss	Electricity transmission and distribution loss is calculated based on electricity consumption and emission factors from the Environment Canada National Inventory 1990-2013 Report. IPCC 5th Assessment Report, 100 years, Global Warming Potentials (GWP) were used.	64%	12,846	Items a) and b) are not included due to data unavailability.
	Upstream Transportation and Distribution	Emissions associated with third party transportation of products from tier 1 suppliers to distribution centres and from DCs to stores. This category also includes emissions from third party operated DCs.	Canadian Tire and Petroleum third party transportation calculations are derived from a distance-weight methodology. Emission factors from (i) the US Environmental Protection Agency Climate Leaders, Optional Emissions from Commuting, Business Travel and Product Transport, May 2008, (ii) the International Marine Organization (IMO), Second GHG Study 2009, and (iii) Environment Canada National Inventory 1990-2011 Report. Energy conversion factors were also used for pipeline transportation from the National Energy Technology Laboratory; Development of Baseline Data and Analysis of Life Cycle Greenhouse Gas Emissions of Petroleum-Based Fuels. Third party operated DCs fall under the Business & Retail Operations segment and therefore follow the same methodology when energy use data is unavailable. See methodology on Scope 1 & 2 emissions for further detail. IPCC 5th Assessment Report, 100 years, Global Warming Potentials (GWP) were used.	3%	405,788	Emissions from FGL Sports, Mark's, Gas+ kiosk, less than 10% of Canadian Tire activity, Canadian Tire non-corporate products, some Canadian Tire packaging weight, HFCs and PFCs from pipeline leakages and refrigerated trucks are not included due to data unavailability.
	Waste Generated in Operations	Emissions from third party disposal and treatment of waste generated through business operations.	n/a	n/a	n/a	Emissions from waste generated in operations are not included due to data unavailability.

Description		Methodologies and factors used		Percentage of primary data used	2014 GHG Emissions (tCO <sub>2</sub> e)	Justification of measurement gaps
UPSTREAM EMISSIONS (Scope 3) (Cont'd)	Business Travel	Emissions from business air travel.	CTC business air travel emissions are derived from a distance-passenger (passenger-kilometre) methodology. Emission factors from the World Resources Institute GHG Protocol tool for mobile combustion, version 2.6 (2015) were used. IPCC 5th Assessment Report, 100 years, Global Warming Potentials (GWP) were used.	100%	4,385	Emissions from business travel using modes other than air.
	Employee Commuting	Emissions from employee commuting.	n/a	n/a	n/a	Emissions from employee commuting are not included due to data unavailability.
	Upstream Leased Assets	Emissions associated with the operation of three leased offices which do not fall under the Company's operational control.	Upstream leased assets fall under the Business & Retail Operations segment and therefore follow the sampling strategy methodology. See methodology on Scope 1 & 2 emissions for further detail.	6%	61	HFCs and PFCs from refrigeration units; deemed immaterial.
DOWNSTREAM EMISSIONS (Scope 3)	Downstream Transportation and Distribution	Emissions associated with the transportation of sold products from retail stores to customers' homes.	n/a	n/a	n/a	Emissions from downstream transportation and distribution are not included due to data unavailability.
	Processing of Sold Products	Emissions associated with the processing of sold products.	n/a	n/a	n/a	Not applicable.
	Use of Sold Products	Emissions associated with the usage of sold products that directly consume energy.	n/a	n/a	n/a	Emissions from downstream use of sold products are not included due to data unavailability.
	End-of-Life Treatment of Sold Products	Emissions associated with the disposal of consumer products sold at all business units.	n/a	n/a	n/a	Emissions from downstream end-of-life treatment of sold products are not included due to data unavailability.
	Downstream Leased Assets	Emissions associated with 67 investment properties (buildings owned but not operated by CTC).	Downstream leased assets fall under the Business & Retail Operations segment and therefore follow the sampling strategy methodology. See methodology on Scope 1 & 2 emissions for further detail.	0%	1,782	HFCs and PFCs from refrigeration units; deemed immaterial.
	Franchises	Emissions associated with the operations of 1,046 non-Corporate stores including Canadian Tire, Mark's, FGL Sports and Petroleum agent sites.	Franchises fall under the Business & Retail Operations segment and therefore follow the sampling strategy methodology. See methodology on Scope 1 & 2 emissions for further detail.	37%	158,449	HFCs and PFCs from refrigeration units; deemed immaterial.
	Investments	Emissions associated with equity and debt investments and project finance.	n/a	n/a	n/a	Emissions from investments are not included due to data unavailability and immateriality.

## Appendix 3

### CTC's Corporate and Supply Chain Energy Use and GHG Emissions Footprint Baseline Recalculation and Restatement

CTC's recalculation and restatement policy is as follows:

- "The recalculation of base year environmental impacts is triggered if one or the cumulative effect of the following causes for recalculation modifies the business segment (Product & Packaging, Product Transport and Business & Retail Operations) by +/- 10%.
- Causes of recalculation: structural changes, changes in methodology, measurement gap closings and corrections.
- Timing of recalculation: at the release of the new Environmental Footprint."

Although the restatement outlined in the below table does not result in a material change (+/- 10%), they are reflected in the baseline energy and emissions data reported above to ensure accuracy and transparency.

	Published Feb. 2016 Energy Use (GJ)	Published Feb. 2015 Energy Use (GJ)	Change (B) / W	Published Feb. 2016 GHG Emissions (tCO <sub>2</sub> e)	Published Feb. 2015 GHG Emissions (tCO <sub>2</sub> e)	Change (B) / W	Justification of recalculation
PRODUCT & PACKAGING	47,183,649	47,183,649	0.0%	3,637,220	3,637,220	0.0%	No restatement
PRODUCT TRANSPORT	5,699,677	5,699,634	0.0%	410,009	410,010	0.0%	No restatement
BUSINESS & RETAIL OPERATIONS	4,627,488	4,565,333	1.4%	263,876	260,976	1.1%	Restatement due to (1) corrected energy use figures for some locations, and (2) removal of corporate vehicles due to immateriality.
<b>TOTAL</b>	<b>57,510,813</b>	<b>57,448,616</b>	<b>0.1%</b>	<b>4,311,105</b>	<b>4,308,206</b>	<b>0.1%</b>	

## Appendix 4

### CTC Environmental Performance Glossary

METRICS	DEFINITIONS	DATA SOURCES
Annual realized benefits from sustainability projects	Values express a 12-month measurement of the realized project benefits. Benefits are measured against the project baseline which is defined as 'what would most likely have occurred in the absence of the sustainability project'. Multi-year benefits beyond this 12-month measurement are also reported. Sustainability projects reported represent a sampling of key projects within various operational areas across CTC.	May include the business group(s) responsible for the implementation of the project, as well as those involved in the reporting of the sustainability project, such as Finance, Business Sustainability and third party consultants.
Costs avoided from sustainability projects	Realized annual costs saved for the Enterprise (the Corporation and the dealers, franchise and agents) in comparison to 'what would most likely have occurred in the absence of the sustainability project'. Examples of cost avoidance reported include freight and energy cost avoidance. Values are reported in Canadian Dollars (CAD).	May include the business group(s) responsible for the implementation of the project, as well as those involved in the reporting of the sustainability project, such as Finance, Business Sustainability and third party consultants.
Energy use avoided from sustainability projects	Realized annual energy saved by the Enterprise and/or in some cases its value-chain partners such as vendors, in comparison to 'what would most likely have occurred in the absence of the sustainability project'. Examples of energy avoidance are electricity and natural gas avoidance. Values are reported in gigajoules (GJ).	May include the business group(s) responsible for the implementation of the project, as well as those involved in the reporting of the sustainability project, such as Finance, Business Sustainability and third party consultants.
GHG emissions avoided from sustainability projects	Realized annual GHG emissions saved by the Enterprise and/or in some cases its value-chain partners such as vendors, in comparison to 'what would most likely have occurred in the absence of the sustainability project'. Values are reported in metric tonnes of carbon dioxide equivalents (tCO <sub>2</sub> e).	GHG emissions sources: Environment Canada's National Inventory Report 1990-2012, EPA Climate Leaders Optional Emissions from Commuting, Business Travel and Product Transport May 2008, and IPCC's global warming potentials.
Waste avoided from sustainability projects	Realized annual waste saved by the Enterprise and/or in some cases its value-chain partners such as customers and vendors, in comparison to 'what would most likely have occurred in the absence of the sustainability project'. Examples of waste avoidance include end-of-life waste from products, packaging and in-store decor. Values are reported in tonnes.	May include the business group(s) responsible for the implementation of the project, as well as those involved in the reporting of the sustainability project, such as Finance, Business Sustainability and third party consultants.
Water avoided from sustainability projects	Realized annual water usage savings by the Enterprise, in comparison to 'what would most likely have occurred in the absence of the sustainability project.' Values are reported in cubic metres.	May include the business group(s) responsible for the implementation of the project, as well as those involved in the reporting of the sustainability project, such as Finance, Business Sustainability and third party consultants.
Equivalent to powering this many homes annually	Calculates the number of average Canadian homes that could be powered for a year by the realized annual avoided energy use resulting from sustainability projects. Energy used by the average Canadian home includes natural gas, electricity, heating oil, propane and wood use.	Natural Resources Canada, Residential Secondary Energy Use by Energy Source and End-Use, 2011 Energy Intensity (GJ/household).
Equivalent annual household waste	Equates the realized annual avoided waste resulting from sustainability projects to the number of average Canadian households it would take to generate the equivalent amount of waste in a year.	Source of waste per capita: Statistics Canada, Waste Management Industry Survey: Business and Government Sectors (2010). Source of Household size: Statistics Canada (2011). The household average size for 2010 is not available, census are done every 5 years only.
Equivalent annual household water consumption	Equates the realized annual avoided water resulting from sustainability projects to the number of average Canadian households it would take to consume the equivalent amount of water in a year.	Source of water use per capita: Environment Canada - Residential water use Indicator data (2011). Source of Household size: Statistics Canada (2011).
Equivalent number of light vehicles annual fuel consumption	Equates the realized annual avoided energy resulting from sustainability projects to the number of average passenger automobiles it would take to consume an equivalent amount of fuel in a year.	Transport Canada, Table RO4 of Transportation in Canada Addendum

## CTC Current Sustainability Projects, including Measurement Gaps

PROJECTS	DEFINITIONS	BUSINESS GROUPS INVOLVED	MEASUREMENT GAPS
Product & Packaging Right-sizing	This sustainability project measures the reduction in size and/or weight of a product and/or a product's consumer packaging for each project. Cost avoidance is derived from reduced cube resulting in reduced freight cost. Energy and GHG emissions avoidance is derived from reduced weight and cube resulting in reduced energy use from transportation (assumption: reductions in product volume are always translated into container loading efficiency). Waste avoidance is derived from the reduced weight of product at end-of-life.	Product Quality, Transportation, Business Sustainability	GHG and energy avoidance from reduction in raw material and product manufacture.
Damage Reduction	This sustainability project measures the impact of transportation packaging and supply chain handling improvements on a product's damage rate (damage discovered in transport from vendor to store and concealed damage). Cost avoidance is derived from the damage cost avoidance. Energy use and GHG emissions avoidance are derived from avoided transportation to return the damaged products to the vendors. Waste avoidance is derived from avoided disposal of damaged products.	Logistics, Transportation, Business Sustainability	For changes in shipping/handling product packaging, the increase or decrease in materials used is not taken into consideration.
Long Combination Vehicles (LCV)	This sustainability project measures the reduction in energy use between the use of two single trucks vs. the use of one LCV truck. LCVs are two 53 foot trailers attached to a specialised equipped truck with a total vehicle length of 127 feet. The cost avoidance is derived from the reduced fuel consumption and labour cost. The energy and GHG emissions avoidance is derived from the reduction in fuel used by one LCV truck as compared to two standard trucks.	Transportation, Business Sustainability	No known measurement gaps.
Distribution Centre Irrigation System Retrofit	This sustainability project measures the reduction in water use and cost as a result of an irrigation system hardware upgrade and the installation of smart controllers.	Supply Chain, Business Sustainability	No known measurement gaps.
Net New Builds	This sustainability project measures the reduction in energy use, GHG emissions and costs from the construction of new buildings in areas where there was no existing Canadian Tire store. The baseline comparison is the most recent prototype used prior to the current prototype. Proto C size average per square foot energy consumption is assumed except for small market stores.	Real Estate Design & Construction, Third Party Consultant, Business Sustainability	No known measurement gaps.
Replacement Builds	This sustainability project measures the reduction in energy use, GHG emissions and costs from the replacement of an existing Canadian Tire store. The baseline comparison is the Prototype Store replaced. Proto C size average per square foot energy consumption is assumed except for small market stores.	Real Estate Design & Construction, Third Party Consultant, Business Sustainability	No known measurement gaps.
Demand Control Ventilation (DCV) Retrofits	This sustainability project measures the reduction in energy use, GHG emissions and costs from the installation of carbon dioxide sensors which allow the rooftop ventilation units to bring in additional fresh air based on carbon dioxide demand.	Real Estate Design & Construction, Business Sustainability	No known measurement gaps.
Relamping	This sustainability project measures the reduction in energy use, GHG emissions and costs from the upgrade to more energy efficient lighting equipment in Canadian Tire stores. The difference between the baseline and the post-implementation energy use is calculated based on the lamps' wattage consumption and number of hours used.	Real Estate Design & Construction, Business Sustainability	No known measurement gaps.
Store Heating, Ventilation and Air Conditioning (HVAC) Upgrades	This sustainability project measures the reduction in energy use, GHG emissions and costs from the installation of new energy efficient HVAC units in Canadian Tire stores and the resulting reductions in electricity and natural gas use.	Real Estate Design & Construction, Third Party Consultant, Supply Chain, Business Sustainability	No known measurement gaps.
Roofing Retrofits	This sustainability project measures the reduction in energy use, GHG emissions and costs from the installation of higher R-value roofing on Canadian Tire stores and the resulting reductions in electricity and natural gas use. R-value is a measure of thermal resistance used in construction industry.	Real Estate Design & Construction, Business Sustainability	No known measurement gaps.

PROJECTS	DEFINITIONS	BUSINESS GROUPS INVOLVED	MEASUREMENT GAPS
Lighting Retrofits	This sustainability project measures the reduction in energy use, GHG emissions and costs from the installation of energy efficient lighting. This includes lighting retrofits for Mark's stores, Petroleum canopy and stores and Distribution Centres.	Mark's Store Design, Petroleum, Supply Chain, Business Sustainability	No known measurement gaps.
Light-Emitting Diode (LED) Lighting New Builds & Renovations	This sustainability project measures the reduction in energy use, GHG emissions and costs from the installation of LED lighting in new builds and store renovations.	FGL Sports, Business Sustainability	No known measurement gaps.
Cooler Retrofits	This sustainability project measures the reduction in energy use, GHG emissions and costs from the installation of eTemp® product temperature sensors in Petroleum coolers. eTemp® technology simulates the thermal qualities of food and beverage and automatically relays this information to the existing thermostat or telemetry. Cooling cycles are reduced which reduces electricity consumption.	Petroleum, Business Sustainability	No known measurement gaps.
In-Store Decor Right-Sizing	This sustainability project measures the reduction in size and weight of in-store decor signage. Cost avoidance is derived from reduced labour time to install signage at store level, reduced product cost and reduced freight cost. Energy and GHG emissions avoidance is derived from reduced weight and cube resulting in reduced energy use to transport to stores. Waste avoidance is derived from the reduced weight of product at end-of-life.	Store Design, Transportation, Business Sustainability	GHG and energy avoidance from reduction in raw material and product manufacture.
Point of Purchase (POP) Signage Ship Direct	This sustainability project measures the reduction in energy use and GHG emissions from transporting signage from Canadian Tire's POP print vendor to Canadian Tire's Retail City location; a result of a process change whereby all POP is shipped directly to stores. Cost avoidance is derived from reduced labour time at Retail City.	Store Design, Business Sustainability	No known measurement gaps.
Discontinued POP Signage	This sustainability project measures the reduction in cost and waste from discontinuing POP and reducing printing quantities. Cost avoidance is derived from reduced product cost. Waste avoidance is derived from the reduced weight of product at end-of-life.	Store Design, Business Sustainability	GHG and energy avoidance from reduction in raw material, product manufacture and product transport.
Electronic Statement (e-Statement) Conversion	This sustainability project measures the reduction in paper use, embedded energy, GHG emissions and costs as a result of Financial Services credit cardholders' conversion to an e-statement from traditional paper statements.	Financial Services Marketing, Business Sustainability	No known measurement gaps.
Balance Transfer Program	This sustainability project measures the reduction in paper use, embedded energy, GHG emissions and costs as a result of Financial Services credit cardholders receiving an enhanced statement with Balance Transfer marketing materials vs. a separate Balance Transfer marketing mailing.	Financial Services Marketing, Business Sustainability	No known measurement gaps.
Rooftop Solar Installation - On Grid	This sustainability project measures the low carbon energy generated from on-site solar installations. To be considered "low carbon", the GHG emissions associated with the energy generated must be lower impact than the traditional means of power generation. GHG emissions avoided refer to the emissions avoided in the local economy (low carbon energy generated is sent to the grid). Revenue generated refers to rent revenue collected by CTC.	Real Estate Design & Construction, Finance, Third Party Consultant, Business Sustainability	No known measurement gaps.
Waste Diversion Program - Greater Toronto Distribution Centres	This sustainability project measures the amount of industrial solid waste diverted and the recovery dollars from the recycling of several waste streams (e.g. cardboard, metal, wood, plastic) and the salvaging of damaged products.	Supply Chain, Business Sustainability	No known measurement gaps.
Provincial Product Stewardship Programs	Select retail products have regulatory obligations under product stewardship and recycling programs such as blue box, tires, batteries, oil, paint, fertilizers and electronics. In Canada, this includes over 60 stewardship programs across all provinces. CTC reports annual product stewardship payments by CTC based on net Point of Sale (POS) sales or shipments.	Finance, Business Sustainability	No known measurement gaps.

CTC Environmental Footprint Glossary, including Measurement Gaps

AREA OF MEASUREMENT	DEFINITIONS	MEASUREMENT GAPS
Corporate and Supply Chain Environmental Footprint	Environmental impacts and resources used throughout CTC's extended value-chain from raw material acquisition, product manufacturing, product transportation, buildings operations, business travel, product use and product end-of-life disposal. Metrics currently measured are energy, carbon and water from raw material acquisition to buildings operations.	Emissions related to non-retail products and waste; Employee commuting; Product use and product end-of-life.
Energy used and GHG emissions from Products	Energy used and GHG emissions from raw material acquisition and processing, transport to manufacturing site and manufacture of retail products. This includes all consumer units of Canadian Tire, PartSource, Mark's and FGL Sports retail products received in a given year by a store, distribution centre or third party warehouse on the Company's behalf. Includes energy used and GHG emissions from crude oil extraction, transport to refining sites and refining of fuels sold at Petroleum sites in a given year.	Gas+ kiosk products, Canadian Tire non-corporate products (products ordered directly from vendors by stores), Financial Services products, FGL Sports Corporate product shipped direct to stores, baseline year Pro Hockey Life purchases since data prior to the acquisition date is unavailable.
Water used from Products	Water consumed from raw material acquisition and processing, transport to manufacturing site and manufacture of retail products. This includes all consumer units of Canadian Tire, PartSource, Mark's and FGL Sports retail products received in a given year by a store, distribution centre or third party warehouse on the Company's behalf.	Petroleum, Gas+ kiosk products, Canadian Tire non-corporate products (products ordered directly from vendors by stores), Financial Services products, FGL Sports Corporate product shipped direct to stores, baseline year Pro Hockey Life purchases since data prior to the acquisition date is unavailable.
Energy used and GHG emissions from Product Transport	Energy used and GHG emissions from Canadian Tire fleet trucks and vehicles for the transport of Canadian Tire and PartSource products. Energy used and GHG emissions from third party vendors to transport Canadian Tire and PartSource retail products from the manufacturing vendor (Freight-on-Board (FOB) Point) to the store. Energy used and GHG emissions from third party vendors to transport Petroleum fuels from refining sites to stations.	FGL Sports, Mark's and Gas+ kiosk product transport. Less than 10% of Canadian Tire transport activity. Canadian Tire shipping packaging weights. Canadian Tire non-Corporate product transport. Hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) from pipeline leakages and refrigerated trucks.
Energy used and GHG emissions from Business & Retail Operations	Energy used and GHG emissions from the operation of CTC's buildings, equipment, and owned & leased vehicles such as yard trucks, company cars and service vans (excluding product transport captured separately). This includes all operations across Canada including offices, distribution centres (DCs), Corporate/Franchise/Dealer/Agent stores within Canadian Tire, PartSource, Financial Services, Mark's, FGL Sports and Gas+ sites.	HFCs and PFCs from refrigeration at Corporate and non-corporate locations. Canadian Tire and Petroleum fuel leakages.
Waste Generated at Corporate Locations & Greater Toronto DCs	Waste generated from the operation of Corporate locations and Greater Toronto Distribution Centres for which waste data was available. This includes offices, Petroleum, PartSource, Mark's, FGL Sports stores and Greater Toronto DCs.	Canadian Tire stores, Sport Expert and Mark's franchise locations, retail locations found in shopping malls where waste is consolidated, some Petroleum locations. Hazardous waste at the DCs, waste at non-Greater Toronto DCs.
Diversion Rate	Percentage of total waste disposed of in a manner excluding landfill. This includes recycling, incineration and organic waste composting.	No known measurement gaps.
Scope 1 emissions	Direct emissions from the combustion of on-site and mobile fuels that occur at, or are associated with, facilities and operations under the Company's operational control.	HFCs and PFCs from refrigeration units.
Scope 2 emissions	Indirect emissions that occur off-site from the production of energy, such as electricity, which is then purchased for use at facilities and operations under the Company's operational control.	No known measurement gaps.
Scope 3 emissions	Other indirect emissions from the Company's supply chain, such as emissions from non-corporate locations (Dealer/Franchise/Agent stores), product transport by third party and product manufacture by third party.	See Energy used and GHG emissions from Product, Product Transport and Business & Retail Operations comments in rows 3, 5 and 6 of this table.

## Appendix 5

### Glossary of Terms

#### Sustainability Terms

TERM	DEFINITIONS
Business Sustainability	An innovation strategy that aims to achieve productivity gains and economic benefits from enhanced environmental and social outcomes by integrating sustainability into business operations. Through its Business Sustainability strategy, the Company aims to serve its customers, communities, employees and shareholders, both now and in the future.
Carbon Dioxide Equivalents (CO <sub>2</sub> e)	Carbon dioxide equivalent expresses all greenhouse gases in the measurement of carbon dioxide by adjusting other types of greenhouse gases (methane, nitrous oxide, sulphur, hexafluoride, hydrofluorocarbons, and perfluorocarbons) to their carbon dioxide equivalent based on their relative Global Warming Potential (GWP). In this report, CO <sub>2</sub> e is measured in either tonnes (t, or tCO <sub>2</sub> e) or kilograms (kg, or kgCO <sub>2</sub> e).
Cradle-to-gate	The stages of a product's life cycle from raw material extraction (i.e. cradle) to the factory gate (i.e. before it is transported to CTC).
Emission Factors	Calculation factor used to measure greenhouse gases (GHG) released from the production/use of raw material/energy.
GHG Protocol	A multi-stakeholder collaboration facilitated by the World Business Council on Sustainable Development (WBCSD) and the World Resources Institute (WRI) to establish and promote business standards for GHG accounting and reporting. CTC's Sustainability Reporting follows the GHG Protocol Corporate, Project and Value-Chain (Scope 3) Accounting Standards.
Global Warming Potential (GWP)	Calculation factor used to measure CO <sub>2</sub> e from different greenhouse gases. A relative measure of how much heat a greenhouse gas traps in the atmosphere.
Greenhouse Gas (GHG)	Represents one or a combination of the following gases: carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), sulphur hexafluoride (SF <sub>6</sub> ), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).
Heating Degree Day (HDD)	The number of degrees that a day's average temperature is below 65° Fahrenheit (18° Celsius), the temperature below which buildings need to be heated.
Intergovernmental Panel on Climate Change (IPCC)	The leading international body for the assessment of climate change established to provide the world with a clear scientific view on the current state of knowledge on climate change and its potential environmental and socio-economic impacts.
Tier 1 Supplier	A manufacturer that provides products directly to CTC.
Transport GHG model	Created by Canadian Tire's Transportation team, the Transport GHG Emissions Model calculates tonnes of CO <sub>2</sub> e produced based on direct emissions from our own fleet of trucks and indirect mobile emissions produced from the transport of goods by third party carriers for all modes of transport (including water, rail, road and air). The methodology for the model follows a distance and weight approach for third party carriers and an actual fuel use approach for the internal fleet, and reflects guidelines created by Environment Canada and the WRI, known as the Greenhouse Gas Protocol.
World Business Council for Sustainable Development (WBCSD)	A CEO-led, global association of some 200 companies dealing exclusively with business and sustainable development, providing companies a platform to explore sustainable development, share knowledge, experiences and best practices.
World Resource Institute (WRI)	A global environmental think tank that works with governments, companies, and society to build solutions to urgent environmental challenges.

#### Other Terms

TERM	DEFINITIONS
"CTC", "Company", "Corporation", "Enterprise"	Canadian Tire Corporation Limited.
Canadian Tire	Refers to the Company's general merchandise retail business.
Canadian Tire Real Estate Limited (CTREL)	A wholly owned subsidiary of CTC that manages CTC's real estate portfolio.
Change (B) / W	A negative change indicates a reduction in energy use and/or GHG emissions which is an improvement and indicated as Better (B), versus a positive change which indicates an increase in energy use and/or GHG emissions and is indicated as Worse W.
DC	Distribution Centre.
FGL Sports	Refers to the Company's retail business carried on by FGL Sports Ltd.
Financial Services	Refers to the business carried on by the Company's financial services division.

TERM	DEFINITIONS
Gas+	Petroleum operates under the banner "Gas+".
Gigajoules (GJ)	A unit of measurement for energy use.
kg	Kilogram - the International System of Units base unit of mass.
m <sup>2</sup>	Square metres - the International System of Units measure for area.
m <sup>3</sup>	Cubic metres - the International System of Units measure for volume.
Mark's	Refers to the Company's retail business carried on by Mark's Work Wearhouse Ltd.
PartSource	Refers to the Company's specialty automotive retail business.
Passenger-kilometres	A measure of distance-passenger calculated as the distance travelled by passengers in kilometres multiplied by the number of passengers on the journey. Used in the calculation of the business travel carbon and energy footprint.
Petroleum	Refers to the Company's retail petroleum business.
POP	"Point of Purchase". Refers to the in aisle category specific signage designed to either inform the customer purchase decision, aid customer navigation or inspire the customer to purchase.
Square metres	Measurement of the buildings functional area. Canadian Tire retail store functional area includes ground coverage, mezzanine areas, other floors, and second level racking system. Garden Centres are excluded. For Canadian Tire Petroleum stations this includes convenience kiosks, gas bar canopies, car washes, and Pit-Stops. For Mark's, FGL Sports, PartSource and Financial Services locations, functional area is the equivalent of the gross leasable area.
t	Tonne (metric ton) - a unit of mass equal to 1,000 kilograms.
Tonne-kilometres	A measure of distance-weight calculated as the distance travelled from vendor to stores in kilometres multiplied by weight of products and related equipment in tonnes. Used in the calculation of the product transport carbon and energy footprint.