Energy consumption and carbon emission inventory

ENERGY CONSUMPTION (GJ)

	2016	2015	2014	2013	2012	2011	2010
Gasoline[1]	**21,725**	24,434	29,062	33,082	35,252	38,783	41,800
Natural gas[1]	**36,870**	44,351	53,533	50,995	47,322	50,316	54,049
Electricity[1]	**65,811**	74,359	77,095	82,195	86,074	90,845	93,315
Steam[2]	**1,293**	1,409	1,402	1,445	1,183	1,367	1,431
Diesel[1]	**5,705**						
Total energy	**131,404**	144,553	161,092	167,718	169,831	181,311	190,595

1. Conversion factor source: National Energy Board, Energy Conversion Tables, https://www.neb-one.gc.ca/nrg/tl/cnvrsntbl/cnvrsntbl-eng.html,
2. Conversion factor source: Natural Resources Canada, Gigajoule and Energy Intensity Calculator, http://www.nrcan.gc.ca/energy/publications/efficiency/buildings/6561.

CARBON EMISSIONS (TONNES OF CO2 EQUIVALENT)

	2016 Location-Based	**2016 Market-Based**	2015 Location-Based	2015 Market-Based	2014 Location-Based	2014 Market-Based	2013	2012	2011	2010
Scope 1 (Energy)										
Fleet	**1,438**	**1,438**	1,623	1,623	2,010	2,010	2,288	2,504	2,753	2,970
Natural gas	**1,874**	**1,874**	2,192	2,192	2,630	2,630	2,506	2,330	2,479	2,658
Diesel[1]	**415**	**415**								
Total Scope 1	**3,727**	**3,727**	3,815	3,815	4,640	4,640	4,794	4,834	5,232	5,628
Scope 2 (Energy Indirect)										
Electricity	**6,188**	**473[2]**	7,460	515[2]	8,015	524[2]	8,545	9,453	9,993	11,566
Steam	**86**	**86**	94	94	93	93	96	78	90	95
Total Scope 2	**6,274**	**559**	7,554	609	8,108	617	8,641	9,531	10,083	11,661
Scope 3 (Other Indirect)										
Air Travel	**4,989**	**4,989**	4,735	4,735	4,742	4,742	4,153	4,393	4,844	4,554
Employee vehicle travel	**853**	**853**	998	998	1,051	1,051	1,255	1,407	1,529	1,510
Total Scope 3	**5,842**	**5,842**	5,733	5,733	5,793	5,793	5,408	5,800	6,373	6,064
Total emissions	**15,843**	**10,128**	17,102	10,157	18,541	11,050	18,843	20,165	21,688	23,353
Carbon offset[3]		**3,590**								
Net equivalent Carbon emissions		**6,538**								

1. A diesel generator supplied power at our head office location during an extended power outage.
2. Reduction associated with Renewable Energy Certificates purchased from Bullfrog Power.
3. Reduction associated with the financial advisor Carbon Neutrality Program.

METHODOLOGY

The inventory is calculated using the operational control approach, as outlined by the World Resources Institute and World Business Council for Sustainable Development's Greenhouse Gas Protocol. Carbon dioxide, methane and nitrous oxide are included in all emission totals (and are reflected in the emission intensity figures on page 35 of our Integrated Annual Report); the intensity figures include emissions from scope 1, 2 and 3. We use 2010 as our current base year; although it was not the first year that emissions data was collected, it contains a more complete data set than prior years. It is also the basis for our current emission reduction goal (75 per cent reduction from 2010 emission levels by end of 2018). Prior year emission totals have been recalculated to reflect current electricity emission factors as they become available.

In 2016 we introduced the financial advisor Carbon Neutrality Program. Through this voluntary, corporate-funded program, we've enabled our financial advisors (who are independent business owners and not part of our corporate carbon footprint) to make their offices carbon neutral through the use of Bullfrog Power and the purchase of carbon offsets. Five hundred and twenty-six financial advisor locations across Canada are now contributing to the transition to a low-carbon economy. It is our intention to reduce carbon emissions through this program in an amount equivalent to the amount that would be needed to reach a 75 per cent reduction in our corporate footprint; as of 2016 we have achieved a 72 per cent reduction. This non-traditional approach offers the same environmental impact, in terms of the amount of carbon that is offset, as purchasing offsets for our own operations. We've applied this reduction to our corporate carbon reduction goal, and the result is our net equivalent carbon emissions. Additionally, it offers the added benefits of engaging our financial advisors and, through them many of our clients, in conversations about climate change and the risks it presents.