2015 Bell Canada Greenhouse Gas Emissions Report

INTRODUCTION

This Greenhouse Gas (GHG) emissions report was prepared in accordance with the principles and requirements of ISO 14064-1 and the GHG Protocol – A Corporate Accounting and Reporting Standard (Revised Edition) and has been used to report Bell's GHG emissions to the Carbon Disclosure Project and other corporate disclosures. Bell reported a total of 363,749 tonnes of carbon dioxide equivalent (CO_2e), which includes Scope 1, 2 and 3 emissions, for the time period from January 1st to December 31st 2015.

ORGANIZATIONAL BOUNDARIES

Bell applies the operational control approach to determine the scope of reporting for its subsidiaries and divisions. The following list identifies the businesses included in the organizational boundaries:

- BCE Nexxia
- Bell Aliant
- Bell Canada
- Bell Media
- Bell Mobility
- Bell Mobility Channels
- Bell Technical Solutions
- Expertech
- Northwestel
- The Source

The table below reports Bell's scope 1, 2, and 3 emissions for the years ending December 31st, 2014 and December 31st, 2015.

Emissions in tonnes of CO_2e*	Operational Boundary	2014	2015	Increase (decrease)
Scope 1	Direct emissions controlled by Bell includes accidental release of ozone depleting substances from cooling equipment, burning of fuel oil and natural gas in buildings, combustion of diesel for its telecommunication towers and transmission equipment, combustion of propane for its maintenance equipment and combustion of diesel and gasoline for its vehicle fleet and generators.	140,162	133,566	(5%)
Scope 2	Indirect emissions associated with energy corresponding to the production and transmission of electricity required by Bell's activities, in its buildings and other facilities.	262,298	221,662	(15%)
Scope 3	Other indirect emissions include business travel for Bell employees, including travel by air, rail, rented vehicles and personal vehicles.	9,525	8,522	(11%)
Total		411,984	363,749	(12%)

** Rounding of numbers may affect total figures presented*

Compared with 2014, Bell's carbon footprint decreased 48.2 kilotonnes (12%). The largest portion of the decrease is attributable to Scope 2 emissions, which were down 40.6 kilotonnes. Even though Bell's electricity consumption has gone up compared with 2014, this increase has been fully offset by the significant decrease in emission factors due to cleaner energy sources.

METHODOLOGY AND ASSUMPTIONS

Scope 1

Fossil fuels:

Sources with information on volume of fossil fuels consumed:

Information provided from the company's energy data aggregator systems and energy providers' reports includes the volumes of diesel, fuel oil, gasoline, natural gas and propane consumed per province for the time period covering January 1st to December 31st 2015.

Sources with no information on volume of fossil fuels consumed:

The volumes of diesel, fuel oil, gasoline, natural gas and propane consumed are established by compiling the Canadian dollars spent ($) from the company's energy finance reports that are converted into volume using average costs per unit of energy per substance and province. Average costs per unit are determined by using best estimates for the time period covering January 1st to December 31st 2015.

Emissions were calculated by multiplying these fossil fuel volumes by the Canadian emission factors taken from the *National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada* (Part 2).

The total GHG emissions, in tonnes of CO_2e, were calculated by multiplying the mass of each gas (CO_2, CH_4 and N_2O) by its global warming potential (GWP) and adding up the totals. GWPs used are from the IPCC Fifth Assessment Report, 2014 (GWP of CO_2 = 1, GWP of CH_4 = 28 and GWP of N_2O = 265).

Biomass emissions were calculated by applying the following assumptions on the volume of diesel and gasoline consumed: 2% biodiesel content in diesel and 5% ethanol content in gasoline.

Ozone depleting substances (ODS):

Volume of ODS accidently released is acquired by compiling volumes reported within our incident response management system. Emissions were calculated by applying the appropriate Global Warming Potential for each substance using the IPCC Fifth Assessment Report, 2014.

Scope 2

Facilities with electricity consumption information:

Information provided from the company's energy data aggregator systems and energy providers' reports includes electricity volume in kilowatt hours (kWh) per province for the time period covering January 1st to December 31st 2015.

Facilities with no electricity consumption information:

Facilities with electricity financial information:

Electricity volume in kilowatt hours (kWh) is established by compiling the Canadian dollars spent ($) from the company's energy finance reports and converting them into volumes using the best estimated average cost per unit of energy ($/kWh) per province for the time period covering January 1st to December 31st 2015.

Facilities with no electricity financial information:

The volume is established by using an averaged kilowatt hour (kWh) consumption per square foot (sq. ft.). This average is calculated from direct energy consumption information that was extrapolated from a representative sample of buildings.

Electricity emission factors were then applied to the total 2015 kWh consumed by location to calculate tonnes of CO_2e. Canadian emission factors were sourced from the *National Inventory Report 1990-2014: Greenhouse Gas Sources and Sinks in Canada* (Part 3, Annex 13).

Scope 3

Air/Rail travel:

Information originated from travel agency reports and includes flight segments and mileage for flight and rail travel. Flight segments are then sorted as domestic, short and long haul as per *GHG emissions from transport or mobile sources* Excel file (sheet *Activity Data*) published on the Greenhouse Gas Protocol website in May 2015. Flight segments and rail mileage are then converted to tonnes of CO_2e using *Emission Factors from Cross-Sector Tools* Excel file (sheet *Reference - EF Public*) published on the Greenhouse Gas Protocol website in April 2014.

Rented vehicles:

Volume of gasoline in litres is established by compiling the Canadian dollars spent ($) for gasoline with the car rental companies and converting it to volume using average cost ($/L) from current best estimates for the time period from January 1st to December 31st 2015.

Emissions are then calculated following the same methodology as described for fossil fuels (please see above). For this calculation, Bell assumed that all rented vehicles run on gasoline.

Employee personal vehicle use for business travel:

Mileage is established by converting employee mileage expenses ($) into kilometres, which are then converted to fuel consumption (L) using a consumption average.

Emissions are then calculated following the same methodology as described for fossil fuels (please see above). For this calculation, Bell assumed that all personal vehicles run on gasoline.