



# 2013 Bell Canada Greenhouse Gas Emissions Report

## INTRODUCTION

This Greenhouse Gas (GHG) emission 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 275,051 tonnes of carbon dioxide equivalent (“CO<sub>2</sub>e”), which includes Scope 1, 2 and 3 emissions, for the time period from January 1<sup>st</sup> to December 31<sup>st</sup> 2013.

## 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 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 year ending December 31st, 2013.

| Scope   | Operational Boundary                                                                                                                                                                                                                                                                                                                                                                      | Total Emissions in tonnes of CO <sub>2</sub> e |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| 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. | 106,426.0                                      |
| 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.                                                                                                                                                                                                           | 162,293.5                                      |
| Scope 3 | Other indirect emissions include business travel for Bell employees, including travel by air, rail, rented vehicles and personal vehicles.                                                                                                                                                                                                                                                | 6,331.7                                        |
|         | TOTAL                                                                                                                                                                                                                                                                                                                                                                                     | 275,051.2                                      |

## METHODOLOGY AND ASSUMPTIONS

### Scope 1

#### Fossil fuels:

The volumes of diesel, fuel, 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 cost per unit of energy per substance and province. Average cost per unit is determined by using best estimates for the time period covering January 1<sup>st</sup> to December 31<sup>st</sup> 2013

Emissions were calculated by multiplying these fossils fuel volumes by the emission factors taken from the Canada National Inventory Report (National Inventory Report 1990-2012: Greenhouse Gas Sources and Sinks in Canada Part 2).

The total GHG emissions, in tonnes of CO<sub>2</sub>e, were calculated by multiplying the mass of each gas (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) by its global warming potential (GWP) and adding up the totals. GWPs used are from the IPCC Fourth Assessment Report: Climate Change 2007. (GWP of CO<sub>2</sub> = 1, GWP of CH<sub>4</sub> = 25 and GWP of N<sub>2</sub>O = 298).

Biomass emissions were calculated by applying the following assumption 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 accidentally 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 Fourth Assessment Report: Climate Change 2007.

### Scope 2:

#### 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 1<sup>st</sup> to December 31<sup>st</sup> 2013.

#### Facilities with no financial information:

The volume is established by using an average 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 2013 kWh consumed by location to calculate tonnes of CO<sub>2</sub>e. Canadian emission factors were sourced from the National Inventory Report - (1990-2012) - part 3, Annex 13.

#### Scope 3:

##### Air/Rail travel:

Information originated from travel agency reports and includes flight segment and mileage for flight and rail travel. Flight segments are then sorted as domestic, short and long haul as per EPA'S , *Optimal Emissions from Commuting, Business Travel and Product Transport (EPA, 2008, p. 7)*. Flight segment and rail mileage are then converted to tonnes of CO<sub>2</sub>e using *Emission-Factors-from-Cross-Sector-Tools-(August-2012).xlsx Sheet Reference - EF Public* published on the Greenhouse Gas Protocol web-site.

##### Rented vehicles:

Volume of gasoline in litres is established by compiling the Canadian dollars spent (\$) for gasoline in litres from the car rental companies that are converted into volume using average cost (\$/L) from current best estimates for the time period from January 1<sup>st</sup> to December 31<sup>st</sup> 2013.

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. They 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)