Bell Canada 2018 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 Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard (Revised Edition) and has been used to report Bell's GHG emissions to the CDP (previously known as the Carbon Disclosure Project) and other corporate disclosures. Bell reported a corporate carbon footprint summing up to 345,724 tonnes of carbon dioxide equivalent (CO_2e), which includes Scope 1, 2 and 3 (business travel only) emissions, for the time period from October 1st, 2017 to September 30th, 2018.

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 corporate carbon footprint for the 12-month periods ending December 31st, 2017 and September 30th, 2018.

Emissions in tonnes of CO_2e [(1)]	Operational Boundary	2017	2018	Increase (decrease)
Scope 1	Direct emissions controlled by Bell include 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.	134,756	137,027	+1.7%
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.	221,470	199,394	-10.0%
Scope 3	Other indirect emissions include business travel for Bell employees, including travel by air, rail, rented vehicles and personal vehicles.	9,297	9,303	+0.1%
Total		**365,524**	**345,724**	**-5.4%**

[(1)] Rounding of numbers may affect total figures presented

Compared with 2017, Bell's corporate carbon footprint decreased 19.8 kilotonnes (-5.4%). The decrease is mainly attributable to Scope 2 emissions, which were down 22.1 kilotonnes (-10.0%). This decrease is the combination of a 3.0% decrease in Bell's electricity consumption, a 2.7% decrease due to lower emission factors (thanks to cleaner energy sources), and a 4.5% decrease due to a shift in the consumption allocation per province.

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 October 1st, 2017 to September 30th, 2018.

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 October 1st, 2017 to September 30th, 2018.

Emissions were calculated by multiplying these fossil fuel volumes by the Canadian emission factors taken from the *National Inventory Report 1990-2017: 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 Intergovernmental Panel on Climate Change (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 GWP 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 October 1st, 2017 to September 30th, 2018.

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 October 1st, 2017 to September 30th, 2018.

Facilities with no electricity financial information:

The volume is established by using an averaged kilowatt-hour (kWh) consumption per square foot. 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 kWh consumed by province to calculate tonnes of CO_2e. Canadian emission factors were sourced from the *National Inventory Report 1990-2017: 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 booked between October 1st, 2017 and September 30th, 2018. 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 March 2017.

Rented vehicles:

Fuel consumption (L) is established by compiling the Canadian dollars spent ($) for gasoline with the car rental companies and converting it using average cost ($/L) from current best estimates for the time period from October 1st, 2017 to September 30th, 2018.

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 (km) is established by converting employee mileage expenses ($) using applicable reimbursement rates ($/km) provided in business units' discretionary expense policies. Fuel consumption (L) is then established by converting mileage (km) using average consumption (L/km) from current best estimates for the time period from October 1st, 2017 to September 30th, 2018.

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.