

Halocarbons

Halocarbons in Canada



Halocarbons are chemical compounds (such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs) and halons) that, when released into the atmosphere, contribute to global warming. Some halocarbons are ozone-depleting substances that destroy the stratospheric ozone layer, hindering the Earth's ability to protect itself from damaging ultraviolet rays.

Canadian federal and provincial regulations aim to progressively eliminate halocarbons (CFCs, HCFCs, HFCs and halons). They also regulate the control of halocarbon release and disposal and the use of qualified labour to manage them.

Halocarbons at Bell and use implications

Halocarbons are used as refrigerants in Bell's air conditioning/cooling systems and as fire suppressants in our fire extinguishing systems. At Bell, halons were phased out by mid-2010. Halon fire extinguisher systems were mainly replaced by Early Smoke Detector systems or less environmentally harmful agents. CFCs were phased out at Bell in early 2007 and were replaced by HCFCs and HFCs, which are less harmful to the environment.

HCFCs, however, were only developed to serve as transition cooling agents. They are now targeted internationally and are being progressively phased out in Canada. For example, the production of HCFC-22, intended to serve as a refrigerant, was banned in Canada in 2020. All Bell business units that own and operate air conditioning and cooling systems are currently reviewing their HCFC usage phase-out plans in order to account for this ban in production.

Our halocarbon program has clear and consistent objectives

Protect the ozone layer

Minimize the use of halocarbons

Maintain systems using halocarbons in compliance with applicable regulations

Decommission equipment using HCFCs as soon as possible, in accordance with government regulators' expectations.

GRI 305

SDG 11

Furthermore, under the Kigali amendment to the Montreal Protocol (2016), HFCs are now also targeted for eventual elimination. All of Bell's business units that own and operate air conditioning and cooling systems are currently reviewing their phase-out plans in order to also consider HFCs.

Bell's long-standing commitment to managing halocarbons has resulted in many advances over the last decade, including:

Helping develop an air conditioning system that uses compressed CO₂ as a refrigerant rather than HCFCs

- Creating guidelines for the decommissioning of air conditioning and cooling systems
- Developing usage phase-out plan aligned with government and industry recommendations, for equipment using HCFCs and HFCs in all business units
- Implementing a reporting process in the event of a halocarbon leak

Even with the preventive and routine maintenance we conduct on our equipment, the release of halocarbons is inevitable due to mechanical defects and breakdowns. In 2021, the number of halocarbon leaks at Bell increased by 5% compared to 2020. Total leaks from air conditioning and fire extinguishing systems represented 4,825 kg of halocarbons, which is a 26% decrease from the volume leaked in 2020. This represents just 1% of the 680 tons of halocarbons we use across the country. To further reduce leaks and control any future impacts, we perform root-cause analyses of incidents and equipment life cycles.

Did you know?

Bell uses approximately 584 tons of refrigerant in over 14,900 air conditioning systems and chillers across the country

These systems average 15 years of service

Of these, approximately 67% still use HCFC-22 as a refrigerant

Bell also uses approximately 50 tons of FM-200 (a heat-removing agent) in over 950 fire-extinguishing systems

	TREND	2021	2020	VARIATION
Total weight in use (tons)	↑	680 ¹	246	+176%
Number of leaks	↑	353	335	+5%
Amount leaked (kg)	↓	4,825	6,690	-27%
Proportion of total weight leaked	↓	1%	2%	-50%

Other Emissions

Bell's operational reach stretches from coast to coast across Canada, with business activities taking place in over 5000 sites. Although we don't track our air emissions at all of these locations, we do make sure to track carbon monoxide (CO), nitrogen oxides (NOX), sulfur oxides (SOX), volatile organic compounds (VOC), particulate matter (PM), and total particulate matter (TPM) emissions at our largest sites. We measure air emissions at these facilities whenever a change in operations occurs that could affect emission levels. YoY results demonstrate that our emissions are all under the National Pollutant Release Inventory's thresholds. Should we exceed the thresholds we will ensure reporting to the Federal Government.

To the extent this information sheet contains forward-looking statements including, without limitation, outlooks, plans, objectives, strategic priorities, commitments, undertakings and other statements that do not refer to historical facts, these statements are not guarantees of future performance or events, and we caution you against relying on any of these forward-looking statements. Forward-looking statements are subject to inherent risks and uncertainties and are based on assumptions that give rise to the possibility that actual results or events could differ materially from our expectations expressed in, or implied by, such forward-looking statements. Refer to BCE Inc.'s most recent annual management's discussion and analysis (MD&A), as updated in BCE Inc.'s subsequent quarterly MD&As, for further information on such risks, uncertainties and assumptions. BCE Inc.'s MD&As are available on its website at bce.ca, on SEDAR at sedar.com and on EDGAR at sec.gov.

¹ The rise in halocarbon use from 246 tons in 2020 to 680 tons in 2021 is primarily due to the expansion of Bell's operations, as well as the addition of business units in the halocarbon monitoring program, allowing for better and more accurate visibility of refrigerant use.