Annual Sustainability Report

The Victoria Conference Centre

2020

Completed By	Kayli Anderson & Christian Muñoz Mejia
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Completed	28/4/2021

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Executive Summary

The Victoria Conference Centre (VCC) is a 56,295 square foot landmark building offering flexible meeting space in the heart of Victoria, BC. The VCC is committed to eco-friendly best practices and has been recognized as a BOMA BEST Platinum Building in 2016. A kitchen, shared with an adjacent hotel, services the needs of a wide range of conferences and events throughout the year.

Total emissions in 2020 come to 17.3 tCO_2e, a 62% decrease over 2019. This is attributable to an 84% decrease in operational days and an 87% decrease in delegate days due to the effects of COVID-19. The scope of this report has been revised to include propane, incremental work from home energy use, and changes to water measurements from the new cafe meter. Missing propane data for FY 2014 - 2019 was identified and deemed material. Previous reports have been restated to include propane to ensure proper annual comparisons. Incremental work from home energy use by six full-time employees have also been measured and accounted for. These emissions are minimal and are not material to include in future reports.

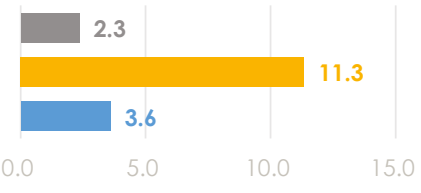
2020 marks the eleventh year that the VCC has measured and reported its carbon footprint. In 2012, more accurate reporting was available for water and electricity, and serves as the new baseline for comparisons. The VCC has since made significant efforts to reduce their carbon footprint by implementing real-time energy management systems, installing LED lighting, purchasing renewable natural gas, improving water consumption and waste diversion efforts, and purchasing paper products with high post-consumer recycled (PCR) content. The VCC has committed to going carbon neutral, starting with the purchase of offsets for the 2019 year.

Company Information

Company Name	The Victoria Conference Centre		
Contact Information	Nathan Gauld	ngauld@victoriaconference.com	250.415.0560
Company Description	Conference Centre, 720 Douglas Street - including shared Kitchen		
Reporting Period	January 1st, 2020 - December 31st, 2020		
Inventory Boundary	**Scope 1 (Direct Emissions)** - Natural Gas, Diesel (back-up generator), Propane		
	Scope 2 (Indirect Emissions from Purchased Electricity) - Purchased Electricity (BC Hydro)		
	Scope 3 (Indirect Emissions from Other Sources) - Water, Waste, Stationery, Paper Products, Work From Home		
Consolidation Approach	Operational Control: Accounting for 100% of emissions from operations over which the company has operational control.		
Primary Measurement	Carbon Dioxide Equivalent (CO_2e)		
Reporting Guidelines	Aligned with those defined in *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition (The GHG Protocol, www.ghgprotocol.org)* . Emissions factors reviewed & approved by Offsetters.		

Inventory Results

	tCO_2e	
Scope 1 (Direct)	**2.3**	13.6% of annual total.
Scope 2 (Indirect)	**11.3**	65.6% of annual total.
Scope 3 (Indirect)	**3.6**	20.8% of annual total.
TOTAL EMISSIONS	**17.3**	



Carbon Footprint (Summary)

The Victoria Conference Centre

2020 Report

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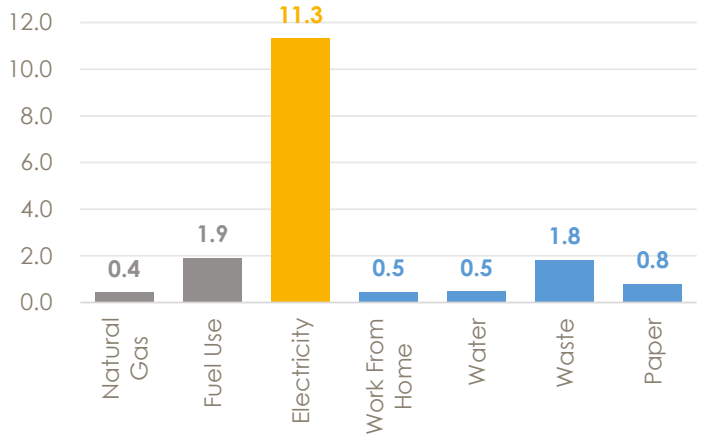
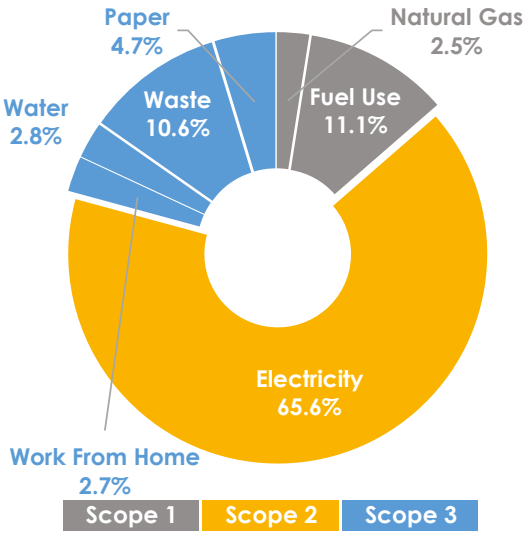
Total emissions: **17.3** tCO_2e	Offset cost: **$425**

Total emissions for FY 2020 decreased to 17.3 tCO_2e, a 62% reduction over 2019. This is attributable to an 84% decrease in operational days and an 87% decrease in delegate days due to the effects of COVID-19.

Carbon Footprint (By Activity)

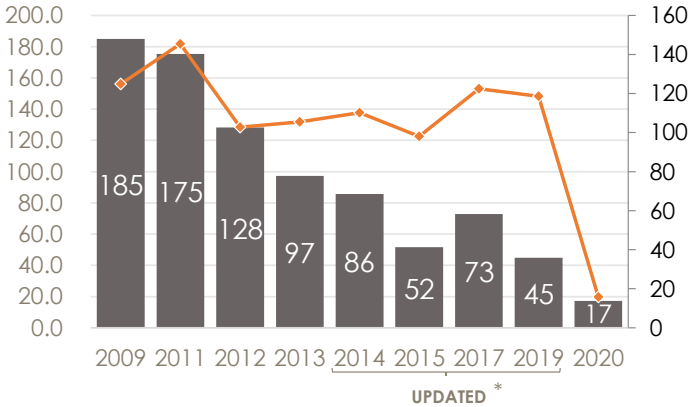
Emissions by Activity (tCO_2e)





Carbon Footprint (Historical)

Annual Emissions (tCO_2e)



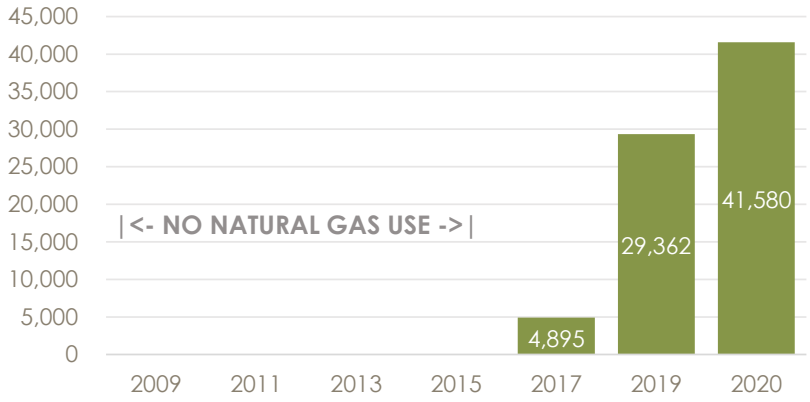
	tCO_2e Per Year	Change since Baseline	
		tCO_2e	Percent
2009	**184.9**		
2010	**178.9**		
2011	**175.4**		
2012	**128.2**		
2013	**97.3**	-31.0	-24.1%
2014	**85.7**	-42.5	-33.2%
2015	**51.6**	-76.6	-59.8%
2016	**54.0**	-74.2	-57.9%
2017	**72.8**	-55.4	-43.2%
2018	**52.2**	-76.0	-59.3%
2019	**44.9**	-83.3	-65.0%
2020	**17.3**	-111.0	-86.5%

* Note: FY 2014 - 2019 emissions have been restated to account for propane consumption at the Lower Pavilion

54.5 Barrels of Oil	4.6 Cars per Year	1.1 $kgCO_2e$/ DD	tCO_2e (Total) 17.3

Natural Gas

Natural Gas (m^3)



Analysis

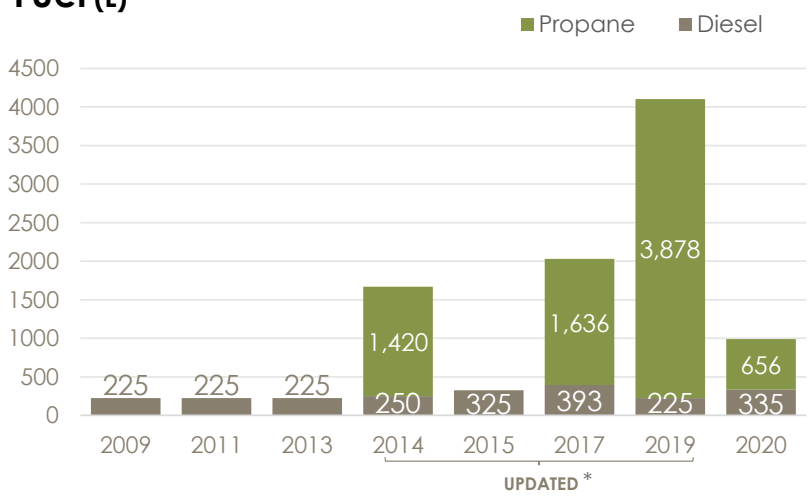
The VCC uses a natural gas boiler fueled by Renewable Natural Gas (RNG) which was installed in 2017. The VCC saved 80 tCO_2e by purchasing RNG instead of standard natural gas.
In 2020, the VCC consumed 41,580 m^3 of natural gas, a 42% increase over 2019. Due to system issues, natural gas use increased at the end of the reporting period and will be seen in early 2021.

Note: Natural gas was converted from GJ to m^3 to apply the appropriate RNG emissions factor.

m^3/ Month	3,465.0	tCO_2e	0.43	% of Total	2.5%	452.0 Houses

Other Fuel

Fuel (L)



Analysis

The VCC has a back-up diesel generator that is tested an average of nine times per year. In 2020, the VCC was required to run more regular tests, running the generator for 13.4 hours and burning 335 litres of diesel.

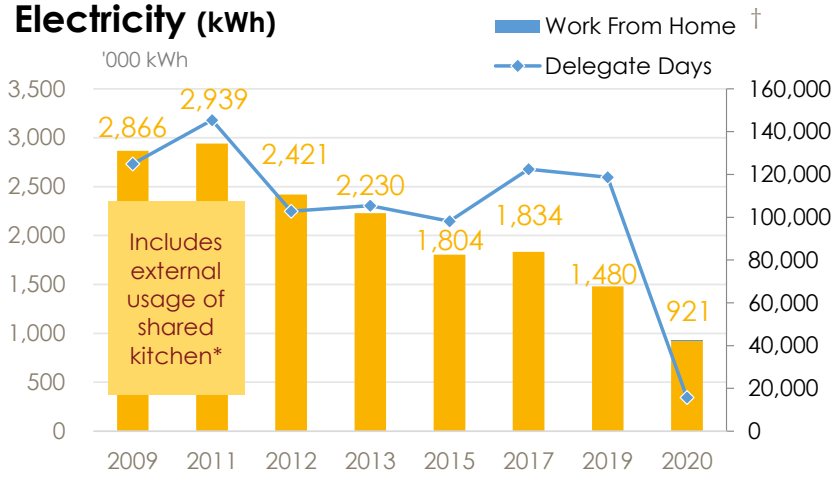
The scope has been revised to include propane. Due to reduced operations, total emissions from propane use decreased by 83%.

** Note: FY 2014 - 2019 have been restated to account for propane consumption at the Lower Pavilion. No propane was used in 2015.*

Litres/ Month	82.6	tCO_2e	1.9	% of Total	11.1%	0.5 Cars / Year

Electricity

Electricity (kWh)



Analysis

Electricity use came to 921,271 kWh, a 38% reduction over 2019. Total electricity emissions decreased by 18% as a result of further lighting upgrades, reduced operations, and a 61% increase in the number of dark days.

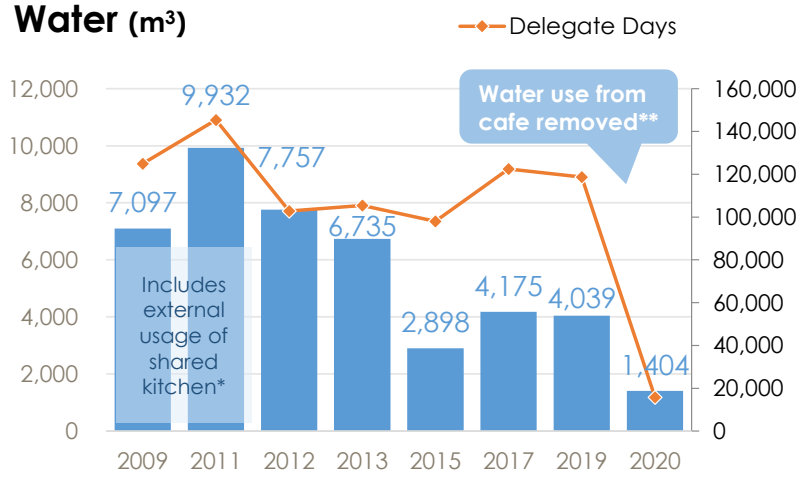
Basic operation requirements of the building when not in use results in 52,200 kWh.

** Note: In 2012 the Victoria Conference Centre installed a meter to accurately measure their portion of the shared kitchen's electricity usage. 2012 is considered the new baseline for electricity.*
† Incremental work from home energy use in 2020 resulted in 5,867.3 kWh (0.47 tCO_2e). While emissions from electricity are Scope 2, WFH emissions are included in Scope 3.

kWh / Delegate Day	58.5 (Up from 12.5)	tCO_2e	11.3	% of Total	65.6%	83.8 Houses

Water

Water (m^3)



Analysis

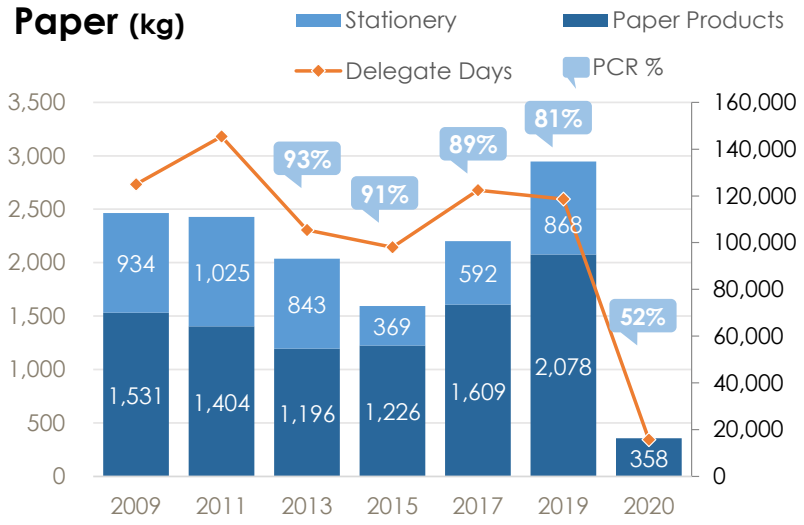
Water use came to 1,404 m^3 and resulted in 0.5 tCO_2e, a 65% reduction over 2019. Total L/Delegate Day increased from 34 m^3 to 89 m^3 as a result of an 87% decrease in delegate days.

Since the 2012 baseline, water use has decreased by 82%. Replacing two water-cooled units in 2014 played a significant role in this reduction.

** Note: In 2012 the Victoria Conference Centre started accurately measuring their portion of the shared kitchen's water usage. 2012 is considered the new baseline for water.*
*** 96 m^3 removed as per new meter in cafe.*

L / Delegate Day	89 (Up from 34)	tCO_2e	0.5	% of Total	2.8%	6,394 Baths (50gal)

Paper



Analysis

Paper emissions resulted in 0.81 tCO_2e, an 86% reduction over 2019. In 2020, the number of trees consumed decreased from 14.7 to 4.5 due to fewer paper purchases*.

The average recycled paper content decreased to 52%. Out of the 42 cases of paper products, 22 contained 0% PCR. Opting for paper products with minimum 88% PCR would save an additional 3 trees per year.

** Note: No stationery paper was purchased in 2020 due to a surplus of paper from 2019.*

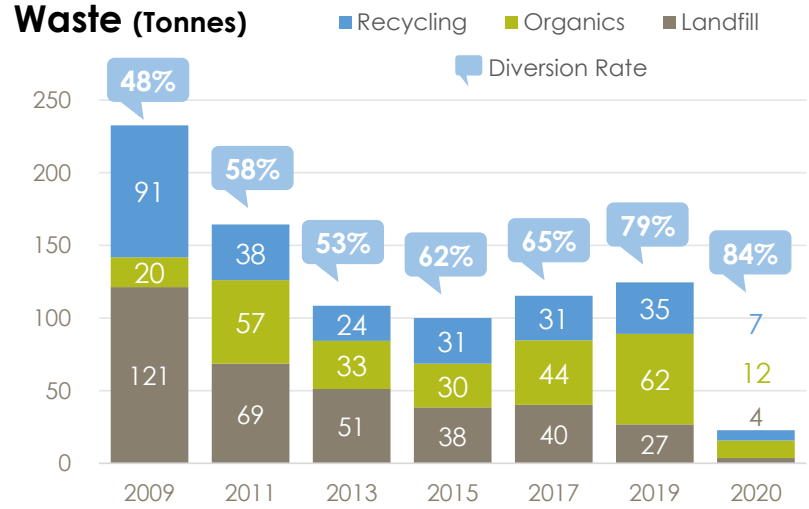
Treeless Content	52%

tCO_2e	0.8

% of Total	4.7%

4.5 Trees / Year

Waste



Analysis

Waste emissions resulted in 1.8 tCO_2e, a 90% reduction over 2019. This is attributable to a number of factors, including: (i) an 84% decrease in operational days, (ii) an 87% decrease in the number of delegate days, and (iii) a 35% reduction in ReFuse waste volumes.*

This is the highest diversion rate at the VCC since reporting began.

** Note: Shared waste in 2020 was calculated by looking at 2019's waste per delegate day to extrapolate total landfill, compost and recycling weights based on the number of delegate days in 2020*

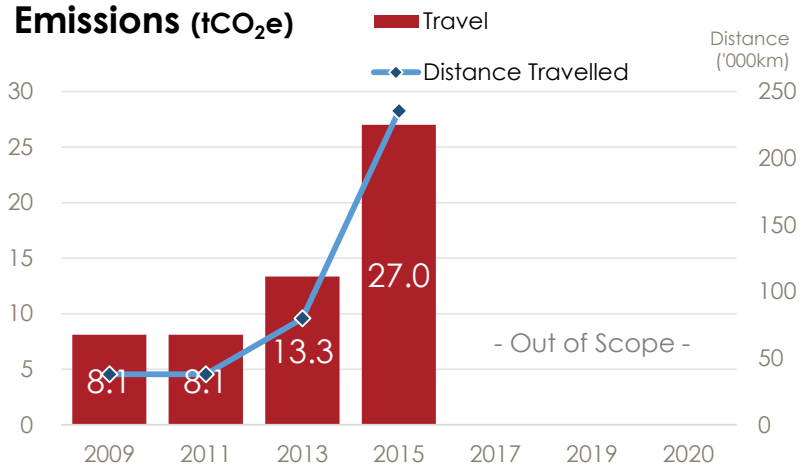
kg/ Delegate Day	1.44 (Up from 1.05)

tCO_2e	1.8

% of Total	10.6%

84% Diversion Rate

Travel



Analysis

Sales and associated travel for the VCC have been taken over by an outside organization and are no longer under VCC's control. The reporting scope has been updated to reflect this change and will no longer include travel.

Travel emissions have been removed from VCC's historical emissions for accurate comparisons.

** Note: All emissions from flights are now the responsibility of Destination Greater Victoria (DGV). DGV has also committed to carbon neutrality.*

VCC Highlights - 2019 vs 2020

Carbon Footprint decreased by 62%

27.7 tCO_2e

7 fewer cars on the road for one year

2020 Emissions per Delegate Day: 1.1 $kgCO_2e$

Increased by 190%

Due to fewer events

Electricity decreased by 38%

921,271 kWh

Equivalent to 84 houses

2020 Diversion Rate: 84%

Increased by 5%

Highest since reporting began!

Water decreased by 65%

89L per Delegate Day

Due to reduced operations and events

Natural Gas emissions averted:

80 tCO_2e

By opting for Renewable Natural Gas

VCC Reduction Summary

Year	Reduction in tCO_2e	Total Emissions % reduction	Electricity % reduction	Water % reduction	Landfill % reduction	$kgCO_2e$/ Del. Day
2009	--	--	--	--	--	1.48
2010	6.0	3%	2%	-13%	4%	1.73
2011	3.5	2%	-5%	-24%	41%	1.21
2012	47.2	27%	18%	22%	-16%	1.25
2013	31.0	24%	8%	13%	36%	0.92
2014	11.6	12%	11%	48%	6%	0.78
2015	34.1	40%	10%	17%	20%	0.53
2016	-2.4	-5%	-2%	-19%	-2%	0.41
2017	-18.8	-35%	0.1%	-21%	-6%	0.59
2018	20.6	28%	27%	0.2%	19%	0.43
2019	7.3	14%	-10%	3%	9%	0.38
2020	27.6	62%	38%	65%	82%	1.10
Total Reduction Since Baseline	111.0	87%	62%	82%	86%	**12%**

Carbon Reduction Strategy

The Victoria Conference Centre (VCC) has been monitoring and reducing their carbon footprint since 2009. Improvements over the years include adding waste streams and providing education around sorting waste, installing meters to accurately track water and electricity usage, changing HVAC operations from constant to variable systems for real-time energy management, lighting upgrades, efficient scheduling, and installing a natural gas boiler fueled by RNG.

Total emissions in 2020 resulted in 17.3 tCO_2e, a 62% decrease over 2019 and 87% lower than 2012 baseline emissions. This is attributable to a number of factors, including further lighting and equipment upgrades, fewer paper purchases, and reduced operations due to the effects of COVID-19. Waste diversion rate increased from 59% in 2012 to 84% in 2020 as a result of ongoing waste management improvements.

It is recommended that the VCC share these results with management and staff and ensure that employees are continuously being engaged to monitor potential areas of further carbon reductions.

Achievements

- 87% reduction in carbon emissions since 2012
- 62% reduction in electricity use since 2012
- 82% reduction in water consumption since 2012
- Highest diversion rate (84%) since reporting began!
- Averted 80 tCO_2e by purchasing Renewable Natural Gas
- Significant reductions in energy use through upgrades to HVAC, lighting and equipment
- Installed screen in the atrium to give clients information on their event's energy and water usage
- Installed on-site water bottle refilling stations
- Began purchasing 100% recyclable carpets
- Installed sub-meters in four different departments
- Replace all remaining T8 lighting in the parkade for LED tubes
- Further upgrades to HVAC and building automation systems through the BOMA BC Building Tune-Up program
- Committed to reducing energy and GHG emissions by 50% by the year 2030 through the Greater Victoria 2030 District program
- Committed to carbon neutrality in 2020 and will purchase offsets for FY 2019 emissions

Moving Forward

- Ensure all paper products are at least 80% - 100% PCR
- Install LED lighting in the Carson Hall and meeting rooms
- Install rain sensors to irrigation controllers
- Re-certify for BOMA Platinum building certification
- Review accomplishments with staff and educate them on the purpose of the initiatives taken by the VCC

Emissions References

1. 2018 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions
https://www2.gov.bc.ca/assets/gov/environment/climate-change/cng/methodology/2018-pso-methodology.pdf

2. Environment Canada's National Inventory Report (1990-2018); Part 2 & 3.
http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/can-2017-nir-13apr17.zip

3. Department for Environment, Food & Rural Affairs (UK) Carbon Factors 2020
https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

4. Intergovernmental Panel on Climate Change (Global Warming Potentials)
http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html

All emissions factors are reviewed and approved by Offsetters (www.offsetters.ca) on an annual basis.

Policy for Base Year Recalculation:
Base year emissions, and other previous emissions, shall be retroactively recalculated if a change in organisational structure or data quality is expected to exceed a significance threshold of 10% of base year emissions. These changes may arise from structural changes such as mergers, acquisitions, divestments, outsourcing or insourcing, changes in calculation methodology and improvements in accuracy, or discovery of significant errors.

Glossary of Terms

Term	Description
CFL	**Compact Fluorescent Light**
GHG	Greenhouse Gas (emissions): Atmospheric gasses contributing to the greenhouse effect, including Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), etc.
GJ	**Gigajoule**: Unit of natural gas equal to 26.137 m^3 or 0.947 MMBtu
HVAC	**Heating, Ventilation & Air Conditioning**
kWh	**Kilowatt-Hour**: Common unit for measuring electrical consumption
LED	**Light Emitting Diode**: A form of highly efficient lighting technology
m^3	**Cubic Meter**: Unit of measurement equal to 1,000 Litres
PCR%	**Post-Consumer Recycled Content** (as a percentage)
psg-km	**Passenger-Kilometer**: Unit separating total emissions between passengers per km
Ream	Standard unit of paper measurement equal to 500 sheets (with 10 reams in one box)
tCO_2e	**Tonnes of Carbon Dioxide Equivalent**: GHGs have different warming potentials, measured collectively as CO_2 equivalent (hence "e")
t-km	**Tonne-kilometer**: A unit of measurement used in shipping

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