



UBC Okanagan Campus - 2021 Greenhouse Gas Emissions Inventory

Scope	Component	Usage Data	GHG Emissions (tCO <sub>2</sub> e)
Scope 1 - Direct	Core Buildings [a]		
	Natural Gas for district energy	20,076.00 GJ	1,001.25
	Natural gas for direct use	17,101.78 GJ	852.92
	Renewable natural gas (RNG) [b]	4,072.86 GJ	203.13
	Diesel	151.47 GJ	11.12
	Propane	40.54 GJ	2.48
	Leased Buildings [c]		
	Natural Gas for district energy	N/A GJ	N/A
	Natural gas for direct use	1,256.68 GJ	62.67
	Renewable natural gas (RNG)	N/A GJ	N/A
	Diesel	1.81 GJ	0.13
	Fleet		
	Gasoline	11,182.34 L	27.32
	Diesel	3,909.42 L	10.66
	Biodiesel	N/A L	N/A
	Natural Gas	N/A L	N/A
	Propane	152.56 L	0.23
	Fugitive Emissions		
	HFC R-407c	2.04 KG	3.62
	HFC R-410a	10.89 KG	22.73
HFC R-507	- KG	0	
Scope 2 - Indirect	Core Buildings - Electricity for district energy	992,002.40 kWh	9.62
	Core Buildings - Electricity	29,068,676.51 kWh	281.96
	Leased Buildings - Electricity	301,206.85 kWh	2.92
Scope 3 - In Scope	Paper	1,053.00 Packages	6.19
<b>Absolute Campus Emissions under Climate Change Accountability Act (Scope 1, 2, and Paper)</b>			<b>2499</b>
<b>Total Campus Emissions for Offset under Climate Change Accountability Act (Scope 1, 2, and Paper) [d]</b>			<b>2295</b>
Scope 3 - Not required to be offset [e]	Business flights (staff and faculty) [f]	**Covid-19 impact	459
	Solid Waste [g]		417
	Commuting [g]	**Covid-19 impact	5,713
	Buildings LLC [g]		1,374

[a] Core buildings are comprise of academic and administrative buildings.

[b] UBC is required to offset the non-biogenic (CH<sub>4</sub> and N<sub>2</sub>O) portions of renewable natural gas.

[c] Leased buildings include facilities leased by and leased out from UBC Okanagan.

[d] Values may not sum precisely due to rounding. This table shows only the Okanagan campus emissions that were offset in 2021.

[e] Scope 3 emission not required for offset.

[f] These emissions have been calculated using historical trends and emissions factors provided through Provincial guidelines. Improvements to methodologies and reporting processes will allow for more accurate Scope 3 reporting in future inventories.

[g] These emissions have been estimated from published conversion factors. Improvements to methodologies may allow for other Scope 3 components to be included in future inventories.

To read the full 2021 Carbon Neutral Action Report (CNAR), please visit:

<https://sustain.ok.ubc.ca/reports/#CCAR>