

Canadian Emission Factors for Grid Electricity

	Canada	Alberta	British Columbia	Manitoba	New Brunswick	Newfoundland and Labrador	Northwest Territories & Nunavut	Nova Scotia	Ontario	Prince Edward Island	Quebec	Saskatchewan	Yukon
Total Greenhouse Gas Emissions (kt CO₂ e)	88,300	46,900	1,216	115	4,220	866	140	7,310	11,200	4	371	16,000	18
Total Electricity Generation (GWh)	565,000	56,900	55,000	36,300	14,500	41,800	446	10,500	141,000	507	184,000	22,900	449
Greenhouse Gas Intensity (g GHG/kWh electricity generated)													
CO ₂ intensity (g CO ₂ /kWh)	150.0	820.0	14.8	3.2	290.0	21.0	300.0	690.0	76.0	8.0	2.0	690.0	38.0
CH ₄ intensity (g CH ₄ /kWh)	0.0100	0.0400	0.0030	0.0002	0.0200	0.0003	0.0200	0.0300	0.0100	0.0002	0.0002	0.0400	0.0020
N ₂ O intensity (g N ₂ O/kWh)	0.0030	0.0200	0.0009	0.0001	0.0040	-	0.0400	0.0100	0.0020	0.0001	0.0001	0.0200	0.0100
Generation intensity (g CO₂e/kWh)	150.0	820.0	15.1	3.2	290.0	21.0	310.0	690.0	77.0	8.0	2.0	700.0	39.0
Unallocated Energy (GWh)	29,000	-	2,400	3,800	443	1,400	30	600	9,000	20	8,000	2,100	55
SF ₆ Emissions (kt CO ₂ e)	210	4	41	1	1	1	-	36	62	-	66	1	-
Consumption intensity (g CO₂e/kWh)	160	820	17	4	300	21	340	740	80	*	3	770	45

As per National Inventory Report 1990-2013 Greenhouse Gas Sources and Sinks, Environment Canada at <http://www.ec.gc.ca/ges-ghg/>

Summary of Conversions and Equivalent Measurements

1 kt = 1,000 tonnes
 1 GWh = 1,000 MWh = 1,000,000 kWh
 CH₄ = methane; CH₄ to CO₂e: 1 tonne = 25 tonnes
 N₂O = Nitrous Oxide; N₂O to CO₂e: 1 tonne = 298 tonnes
 SF₆ = Sulfur Hexafluoride; SF₆ to CO₂e: 1 tonne = 22,800 tonnes

* - Due to the high level of imports from New Brunswick, values for new Brunswick are more indicative of GHG consumption intensity