

# Canadian Emission Factors for Grid Electricity

	Canada	Alberta	British Columbia	Manitoba	New Brunswick	Newfoundland and Labrador	Northwest Territories	Nova Scotia	Nunavut	Ontario	Prince Edward Island	Quebec	Saskatchewan	Yukon
<b>Total Greenhouse Gas Emissions (kt CO<sub>2</sub>e)</b>	84,500	48,100	656	70	4,920	1,523	71	6,580	129	5,500	15	237	16,700	20
<b>Total Electricity Generation (GWh)</b>	588,000	63,200	59,000	36,500	14,600	40,600	351	9,700	173	153,000	575	185,000	24,300	447
<b>Greenhouse Gas Intensity (g GHG/kWh electricity generated)</b>														
CO <sub>2</sub> intensity (g CO <sub>2</sub> /kWh)	140.0	760.0	10.8	1.9	330.0	37.0	190.0	670.0	710.0	35.0	25.0	1.2	650.0	43.0
CH <sub>4</sub> intensity (g CH <sub>4</sub> /kWh)	0.0100	0.0400	0.0030	0.0001	0.0200	0.0006	0.0100	0.0200	-	0.0100	0.0005	-	0.0500	0.0030
N <sub>2</sub> O intensity (g N <sub>2</sub> O/kWh)	0.0030	0.0100	0.0008	0.0001	0.0050	0.0010	0.0300	0.0100	-	0.0010	0.0005	0.0001	0.0200	0.0100
<b>Generation intensity (g CO<sub>2</sub>e/kWh)</b>	140.0	760.0	11.1	1.9	340.0	37.0	200.0	680.0	750.0	36.0	25.0	1.3	660.0	45.0
Unallocated Energy (GWh)	8	9,900	1,300	4,000	432	2,400	27	200	3	9,000	9	4,000	2,400	48
SF <sub>6</sub> Emissions (kt CO <sub>2</sub> e)	190	3	20	1	1	3	-	33	-	56	-	74	1	-
<b>Consumption intensity (g CO<sub>2</sub>e/kWh)</b>	<b>150</b>	<b>900</b>	<b>12</b>	<b>2</b>	<b>350</b>	<b>40</b>	<b>220</b>	<b>690</b>	<b>760</b>	<b>40</b>	<b>*</b>	<b>2</b>	<b>730</b>	<b>50</b>

As per National Inventory Report 1990-2016 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  
 CH<sub>4</sub> = methane; CH<sub>4</sub> to CO<sub>2</sub>e: 1 tonne = 25 tonnes  
 N<sub>2</sub>O = Nitrous Oxide; N<sub>2</sub>O to CO<sub>2</sub>e: 1 tonne = 298 tonnes  
 SF<sub>6</sub> = Sulfur Hexafluoride; SF<sub>6</sub> to CO<sub>2</sub>e: 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