

(k_t CO₂ equivalent)

National Inventory Report (NIR) Greenhouse Gas Categories		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NIR TOTAL EMISSIONS ²		9,470	8,415	8,335	8,482	7,552	8,517	8,626	9,186	10,741	9,624	9,138	9,814	11,873	11,623	10,890	10,276	9,895	10,881	10,475	9,890	9,799	10,020	9,621	9,716	10,706	10,816	10,954	10,870	10,616	11,102	8,880	8,433	8,606
ENERGY		8,721	7,672	7,571	7,697	6,750	7,686	7,794	8,342	9,890	8,774	8,282	8,976	11,047	10,701	9,866	9,427	9,059	10,039	9,621	9,084	8,937	9,104	8,700	8,822	9,827	9,947	10,055	9,944	9,677	10,186	7,939	7,520	7,702
a. Stationary Combustion Sources		5,451	4,560	4,509	4,511	3,569	4,558	4,572	4,931	4,286	4,303	4,392	5,048	5,678	5,621	5,198	4,946	4,042	4,957	4,612	4,540	4,369	4,235	3,924	4,339	4,911	4,955	4,996	4,850	4,657	4,884	3,694	3,202	3,260
Public Electricity and Heat Production		1,640	1,300	1,503	1,364	726	1,275	1,185	1,242	1,050	827	821	1,710	1,897	1,587	1,288	822	644	1,044	924	824	738	790	768	867	1,205	1,339	1,522	1,528	1,126	1,139	951	646	685
Petroleum Refining Industries		1,032	1,019	860	1,034	464	948	1,090	1,129	891	1,016	1,023	981	1,142	1,088	1,119	900	935	996	752	1,056	992	807	936	876	841	952	1,096	889	848	931	162	37	27
Mining and Upstream Oil and Gas Production		1,160	771	719	655	1,006	990	1,030	1,181	1,191	1,320	1,465	1,206	1,348	1,641	1,571	1,845	1,596	1,853	1,910	1,897	1,857	1,766	1,520	1,648	1,794	1,692	1,397	1,399	1,730	1,970	1,785	1,847	
Manufacturing Industries		506	393	316	336	305	319	288	301	233	256	245	260	292	299	310	276	193	181	140	77	72	75	79	72	40	35	39	82	81	50	81	73	92
Construction		33	23	27	22	17	17	14	15	13	12	11	20	31	31	32	24	18	17	22	9	11	15	9	6	7	18	5	6	7	6	6	5	9
Commercial and Institutional		320	311	301	325	339	318	308	361	301	313	311	355	387	432	386	358	289	335	291	205	259	262	203	544	630	598	571	487	316	352	312	282	340
Residential		736	701	723	720	659	634	600	629	533	491	469	507	573	532	481	363	361	522	564	464	429	503	397	318	382	308	355	450	445	427	388	306	278
Agriculture and Forestry		24	41	59	54	53	56	57	74	74	68	47	9	9	11	10	8	6	8	9	8	11	18	11	8	11	12	10	9	7	9	9	6	10
b. Transport ³		3,228	3,089	3,047	3,163	3,171	3,108	3,182	3,253	3,289	3,402	3,556	3,602	3,747	4,050	3,804	3,950	3,788	4,055	4,194	3,930	3,998	4,403	4,260	3,927	4,276	4,440	4,509	4,450	4,331	4,600	3,772	3,979	4,184
Aviation		238	233	231	209	217	217	246	257	269	287	297	264	290	372	363	339	303	313	315	287	289	287	310	303	311	307	303	280	289	281	153	175	247
Road Transportation		1,497	1,485	1,511	1,609	1,569	1,499	1,500	1,469	1,482	1,518	1,567	1,609	1,643	1,890	1,726	1,759	1,710	1,978	2,199	1,977	2,060	2,524	2,419	2,266	2,578	2,570	2,552	2,546	2,394	2,327	2,054	2,052	2,081
Light-Duty Gasoline Vehicles		620	632	659	679	681	666	656	625	613	607	609	599	611	604	555	577	554	640	679	631	620	691	740	638	692	696	654	647	559	508	451	437	414
Light-Duty Gasoline Trucks		546	540	548	554	547	540	540	535	545	566	574	577	595	615	593	638	632	762	838	814	849	980	1,008	1,001	1,151	1,219	1,216	1,278	1,156	1,112	1,064	1,134	1,190
Heavy-Duty Gasoline Vehicles		167	147	133	118	103	91	82	74	71	69	68	68	68	69	65	69	67	78	83	79	81	94	108	93	100	102	99	100	89	84	83	76	78
Motorcycles		3	3	3	3	3	3	3	3	3	4	4	4	4	4	5	6	6	9	11	12	13	20	23	21	24	25	25	25	22	21	17	15	15
Light-Duty Diesel Vehicles		1	1	1	2	1	1	1	1	1	1	1	2	2	3	3	3	4	5	4	5	4	5	3	4	5	4	4	4	4	3	2	2	1
Light-Duty Diesel Trucks		3	4	4	6	6	5	6	6	6	7	8	7	8	7	11	9	7	7	6	6	5	4	6	4	6	6	6	8	8	10	12	9	10
Heavy-Duty Diesel Vehicles		155	158	162	247	228	193	212	224	243	265	303	351	354	583	495	459	441	479	576	433	488	728	443	506	600	518	547	484	553	587	429	379	371
Propane and Natural Gas Vehicles		1	1	0	1	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
Railways		53	47	46	45	50	46	44	43	43	39	48	41	36	41	30	41	45	41	50	41	42	54	51	51	42	41	39	45	43	57	52	53	53
Marine		758	757	757	757	756	756	767	777	786	797	806	830	855	879	904	929	912	894	875	858	840	765	688	612	536	460	529	580	563	888	811	939	1,043
Other Transportation		681	566	502	543	579	590	624	707	709	762	839	858	923	868	781	882	819	830	755	767	773	791	696	808	1,062	1,086	1,000	1,042	1,046	701	761	760	760
Off-Road Agriculture and Forestry		96	68	52	50	50	46	47	52	51	52	58	59	67	65	58	68	63	61	52	55	53	49	48	43	52	72	77	72	81	83	52	58	59
Off-Road Commercial and Institutional		50	41	38	39	41	39	38	41	40	43	44	45	47	44	41	45	41	40	36	35	41	45	45	39	44	61	66	66	68	70	47	57	55
Off-Road Manufacturing, Mining and Construction		451	383	340	371	396	404	432	500	500	516	576	586	635	583	515	593	548	547	483	518	516	516	526	461	543	737	750	662	711	718	449	498	500
Off-Road Residential		6	7	8	10	11	12	13	13	14	19	21	22	23	24	x	25	x	x	30	x	x	27	29	x	28	28	27	27	25	24	23	19	20
Off-Road Other Transportation		77	67	65	72	83	89	94	101	104	132	140	146	152	152	144	151	141	154	153	131	129	136	143	127	141	163	166	173	158	152	130	129	126
Pipeline Transport		-	-	-	-	-	-	-	-	-	-	-	-	-	-	x	x	x	x	x	x	x	x	x	x	-	-	-	-	-	-	-	-	-
c. Fugitive Sources		42	22	15	24	9	20	40	158	2,315	1,068	334	326	1,622	1,030	864	881	1,229	1,027	815	614	570	467	516	555	640	552	550	644	785	702	474	340	259
Coal Mining		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil and Natural Gas		42	22	15	24	9	20	40	158	2,315	1,068	334	326	1,622	1,030	864	881	1,229	1,027	815	614	570	467	516	555	640	552	550	644	785	702	474	340	259
d. CO ₂ Transport and Storage		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INDUSTRIAL PROCESSES AND PRODUCT USE		98	79	86	95	98	115	116	135	141	153	149	141	129	204	322	154	130	132	140	170	216	249	206	212	191	187	199	233	243	220	237	228	208
a. Mineral Products		65	51	59	61	70	73	69	83	79	75	2	1	1	1	2	2	3	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
Cement Production		61	47	54	57	66	71	66	80	81	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lime Production		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mineral Products Use		4	4	4	4	4	2	2	2	2	2	2	1	1	1	2	2	3	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
b. Chemical Industry ⁴		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Adipic Acid Production		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
c. Metal Production		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Iron and Steel Production		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aluminum Production		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SF ₆ Used in Magnesium Smelters and Casters		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
d. Production and Consumption of Halocarbons, SF ₆ and NF ₃		-	-	-	-	-	11	18	23	31	40	50	56	64	72	75	80	82	95	104	109	119	137	140	141	158	160	163	167	178	183	183	174	169
e. Non-Energy Products from Fuels and Solvent Use		29	24	23	31	25	27	25	25	23	31	89	75	57																				

Historical GHG Emissions Summary Newfoundland and Labrador, 1990-2022 ¹ (kt CO₂ equivalent)
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National Inventory Report (NIR) Greenhouse Gas Categories	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
NIR TOTAL EMISSIONS ²	9,470	8,415	8,335	8,482	7,552	8,517	8,626	9,186	10,741	9,624	9,138	9,814	11,873	11,623	10,890	10,276	9,895	10,881	10,475	9,890	9,799	10,020	9,621	9,716	10,706	10,816	10,954	10,870	10,616	11,102	8,880	8,433	8,606	
Cropland	17	17	19	19	20	21	21	23	23	24	24	24	25	25	27	28	28	29	29	29	30	30	29	29	28	28	27	27	27	28	27	26	26	
Wetlands	32	31	31	27	27	3	3	15	48	31	29	25	25	23	22	20	19	18	7	6	6	6	9	62	67	70	67	30	27	28	96	81	74	68
Settlements	85	71	69	67	67	65	72	68	67	69	66	67	76	69	68	65	65	63	70	69	64	64	67	85	185	357	425	386	255	242	229	217	212	203
Harvested Wood Products	1,467	1,483	1,603	1,743	1,632	1,817	1,730	1,783	1,563	1,560	1,653	1,407	1,404	1,188	1,366	1,401	1,287	1,352	1,370	1,401	1,274	1,172	1,062	1,075	1,177	1,104	1,153	1,198	1,276	1,180	1,200	1,139	1,131	
TOTAL EMISSIONS INCLUDING LAND USE, LAND USE CHANGE AND FORESTRY	13,716	11,661	10,880	11,225	9,512	10,223	9,843	10,074	11,749	10,280	9,756	9,978	11,903	11,892	10,990	10,298	9,588	10,432	10,598	9,984	9,534	9,349	8,654	9,377	10,634	10,722	10,793	10,491	10,915	11,280	9,094	8,527	8,594	

Source: Environment Canada

Emissions per capita and emissions intensity calculated using Statistics Canada population and GDP estimates.

Footnotes:

1. Data may be subject to further revisions in subsequent years

2. NIR total emissions exclude all GHGs from the Land Use, Land-use Change and Forestry sector.

3. Emissions from ethanol and biodiesel are included in the Transport categories using gasoline and diesel respectively.

4. Emissions from Ammonia Production, Nitric Acid Production and Petrochemical Production and Carbon Black categories are included in Non-Energy Products from Fuels and Solvent Use as CO₂ eq values within provincial/territorial tables.

5. Emission estimates from consumption of PFCs and NF3, as well as emissions of SF6 from semi-conductor manufacturing, are only available at the national level. HFC and PFC consumption began in 1995; HFC emissions occurring as a by-product of HCFC production (HCFC-22 exclusively) only occurred in Canada from 1990-1992 and PFC emissions prior to 1995 are the result of by-product CF4 emissions from the use of NF3

6. Based on chained 2017 dollars.

7. Land use, land use change and forestry estimated on an IPCC basis including forestry, croplands, wetlands, settlements and harvested wood products

Indicates no emissions.

x Indicates data has been suppressed to respect confidentiality