

**Greenhouse Gas Emissions in British Columbia**

Unit: ktCO <sub>2</sub> e	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	2007→2018	2017→2018	3-Year Trend				
<b>TOTAL<sup>1</sup></b>	<b>55,853</b>	<b>54,621</b>	<b>53,636</b>	<b>56,339</b>	<b>58,889</b>	<b>62,621</b>	<b>64,447</b>	<b>63,246</b>	<b>64,278</b>	<b>65,834</b>	<b>66,705</b>	<b>67,989</b>	<b>64,717</b>	<b>64,695</b>	<b>66,642</b>	<b>64,682</b>	<b>62,892</b>	<b>63,401</b>	<b>63,776</b>	<b>60,276</b>	<b>59,892</b>	<b>61,149</b>	<b>61,898</b>	<b>63,133</b>	<b>62,833</b>	<b>61,770</b>	<b>65,757</b>	<b>67,924</b>	<b>+4,523</b>	<b>+17%</b>	<b>+2,167</b>	<b>+3%</b>	<b>+6,155</b>	<b>+10%</b>		
<b>ENERGY</b>	<b>42,043</b>	<b>40,917</b>	<b>39,902</b>	<b>42,609</b>	<b>45,078</b>	<b>48,664</b>	<b>50,267</b>	<b>48,962</b>	<b>49,921</b>	<b>51,290</b>	<b>52,075</b>	<b>54,121</b>	<b>50,883</b>	<b>50,411</b>	<b>51,900</b>	<b>50,512</b>	<b>49,461</b>	<b>49,705</b>	<b>50,460</b>	<b>47,362</b>	<b>47,181</b>	<b>48,365</b>	<b>49,192</b>	<b>50,358</b>	<b>50,457</b>	<b>49,637</b>	<b>51,775</b>	<b>53,445</b>	<b>55,381</b>	<b>+5,675</b>	<b>+11%</b>	<b>+1,936</b>	<b>+4%</b>	<b>+5,744</b>	<b>+12%</b>	
<b>STATIONARY COMBUSTION SOURCES</b>	<b>19,462</b>	<b>18,241</b>	<b>17,027</b>	<b>19,253</b>	<b>19,337</b>	<b>21,623</b>	<b>21,937</b>	<b>19,641</b>	<b>20,155</b>	<b>22,018</b>	<b>22,762</b>	<b>24,877</b>	<b>22,605</b>	<b>22,142</b>	<b>22,613</b>	<b>21,851</b>	<b>21,546</b>	<b>21,304</b>	<b>21,167</b>	<b>20,792</b>	<b>20,265</b>	<b>21,709</b>	<b>21,813</b>	<b>21,429</b>	<b>21,530</b>	<b>19,888</b>	<b>21,057</b>	<b>21,943</b>	<b>22,353</b>	<b>+1,049</b>	<b>+5%</b>	<b>+410</b>	<b>+2%</b>	<b>+2,466</b>	<b>+12%</b>	
Public Electricity and Heat Production	804	471	938	1,960	1,804	2,246	379	749	1,490	850	1,937	2,483	950	1,023	1,257	1,340	1,524	1,146	1,486	1,335	1,235	782	511	596	578	503	677	574	689	<b>-456</b>	<b>-40%</b>	<b>+115</b>	<b>+20%</b>	<b>+186</b>	<b>+37%</b>	
Petroleum Refining Industries	1,235	1,232	1,042	717	711	574	736	441	414	470	417	441	515	491	859	498	632	638	486	582	658	571	608	523	572	587	688	552	408	<b>-230</b>	<b>-36%</b>	<b>-144</b>	<b>-26%</b>	<b>-179</b>	<b>-30%</b>	
Oil and Gas Extraction	2,144	1,414	700	776	1,609	2,719	3,428	2,109	3,011	4,330	3,201	4,542	4,853	5,196	5,588	5,391	6,035	6,403	6,634	6,838	6,970	7,771	8,205	8,163	8,234	7,072	7,443	7,607	8,266	<b>+1,862</b>	<b>+23%</b>	<b>+659</b>	<b>+9%</b>	<b>+1,194</b>	<b>+17%</b>	
Mining	616	629	436	520	450	549	671	645	542	590	616	864	650	728	714	386	595	600	625	527	600	560	612	588	561	456	400	486	521	<b>-80</b>	<b>-13%</b>	<b>+34</b>	<b>+7%</b>	<b>+65</b>	<b>+14%</b>	
Manufacturing Industries	6,489	6,158	5,535	5,984	6,171	6,987	7,576	7,094	6,607	7,293	7,802	7,792	6,731	6,826	6,491	6,188	4,697	4,525	3,866	3,873	3,878	4,014	4,098	4,098	4,396	4,416	4,667	4,846	4,902	<b>+377</b>	<b>+8%</b>	<b>+56</b>	<b>+1%</b>	<b>+486</b>	<b>+11%</b>	
Construction	307	271	321	344	286	201	209	127	102	87	77	72	76	84	104	114	119	127	106	64	84	103	100	68	66	71	95	95	104	<b>-23</b>	<b>-18%</b>	<b>+9</b>	<b>+9%</b>	<b>+36</b>	<b>+46%</b>	
Commercial and Institutional	2,956	3,218	3,327	3,720	3,447	3,525	3,563	3,446	3,051	3,147	3,566	3,561	4,172	3,416	3,303	3,183	3,113	3,071	3,266	2,909	2,671	2,987	2,971	2,737	2,655	2,416	2,446	2,816	2,718	<b>-354</b>	<b>-12%</b>	<b>-99</b>	<b>-4%</b>	<b>+302</b>	<b>+12%</b>	
Residential	4,587	4,472	4,355	4,857	4,657	4,668	5,186	4,760	4,686	4,988	4,828	4,758	4,526	4,293	4,224	4,677	4,756	4,720	4,634	4,614	4,614	3,859	4,641	4,320	4,271	4,086	3,954	3,986	4,407	<b>-575</b>	<b>-12%</b>	<b>-262</b>	<b>-6%</b>	<b>+190</b>	<b>+5%</b>	
Agriculture and Forestry	323	375	373	375	203	154	189	270	252	263	319	364	131	85	73	75	75	74	64	50	310	281	388	385	382	413	563	560	602	<b>+528</b>	<b>+712%</b>	<b>+42</b>	<b>+7%</b>	<b>+189</b>	<b>+46%</b>	
<b>TRANSPORT<sup>2</sup></b>	<b>18,453</b>	<b>18,664</b>	<b>18,901</b>	<b>19,453</b>	<b>20,590</b>	<b>21,638</b>	<b>22,355</b>	<b>23,103</b>	<b>23,669</b>	<b>23,472</b>	<b>23,582</b>	<b>23,291</b>	<b>22,767</b>	<b>23,069</b>	<b>24,207</b>	<b>23,309</b>	<b>22,797</b>	<b>23,210</b>	<b>23,661</b>	<b>21,564</b>	<b>22,019</b>	<b>21,237</b>	<b>22,234</b>	<b>23,598</b>	<b>23,788</b>	<b>24,925</b>	<b>26,293</b>	<b>27,224</b>	<b>28,698</b>	<b>+5,488</b>	<b>+24%</b>	<b>+1,474</b>	<b>+5%</b>	<b>+3,773</b>	<b>+15%</b>	
Domestic Aviation	1,339	1,202	1,188	1,134	1,191	1,298	1,464	1,490	1,591	1,639	1,593	1,433	1,398	1,398	1,528	1,580	1,562	1,515	1,424	1,245	1,192	1,142	1,300	1,336	1,302	1,309	1,334	1,435	1,546	<b>+31</b>	<b>+2%</b>	<b>+111</b>	<b>+8%</b>	<b>+237</b>	<b>+18%</b>	
Road Transportation	9,601	9,642	9,675	9,979	10,650	11,018	11,519	12,498	13,400	13,563	13,765	14,119	14,331	14,940	15,825	15,492	15,472	15,747	16,027	14,900	15,075	14,596	15,339	16,321	16,320	16,789	17,958	18,207	19,154	<b>+3,408</b>	<b>+22%</b>	<b>+947</b>	<b>+5%</b>	<b>+2,365</b>	<b>+14%</b>	
Light-Duty Gasoline Vehicles	3,898	3,924	3,983	4,122	4,262	4,282	4,300	4,461	4,595	4,513	4,485	4,480	4,481	4,523	4,735	4,454	4,331	4,236	4,120	4,120	3,883	3,584	3,616	3,687	3,677	3,801	4,109	4,027	3,971	<b>-265</b>	<b>-6%</b>	<b>-56</b>	<b>-1%</b>	<b>+170</b>	<b>+4%</b>	
Light-Duty Gasoline Trucks	2,114	2,186	2,281	2,430	2,654	2,816	2,973	3,234	3,483	3,574	3,647	3,720	3,750	3,843	4,086	3,907	3,921	3,976	3,962	4,088	4,047	3,894	4,041	4,205	4,382	4,477	5,261	5,366	5,542	<b>+1,567</b>	<b>+39%</b>	<b>+177</b>	<b>+3%</b>	<b>+866</b>	<b>+19%</b>	
Heavy-Duty Gasoline Vehicles	950	1,005	1,089	1,221	1,297	1,322	1,423	1,572	1,717	1,709	1,730	1,786	1,791	1,820	1,948	1,864	1,817	1,854	1,885	1,879	1,813	1,709	1,759	1,797	1,752	1,739	1,956	1,995	2,050	<b>+195</b>	<b>+11%</b>	<b>+55</b>	<b>+3%</b>	<b>+310</b>	<b>+18%</b>	
Motorcycles	15	14	14	14	14	14	14	14	14	14	14	14	20	22	23	21	21	21	22	23	23	22	23	24	25	27	29	29	30	<b>+9</b>	<b>+11%</b>	<b>+1</b>	<b>+2%</b>	<b>+3</b>	<b>+12%</b>	
Light-Duty Diesel Vehicles	44	41	40	38	40	44	48	54	58	61	67	72	80	89	98	91	108	105	101	81	93	101	114	128	121	131	128	127	131	<b>+26</b>	<b>+24%</b>	<b>+4</b>	<b>+3%</b>	<b>-1</b>	<b>-1%</b>	
Light-Duty Diesel Trucks	177	16	16	15	17	18	22	27	31	34	34	33	35	38	41	46	45	44	44	51	44	51	55	60	76	86	107	119	135	157	<b>+113</b>	<b>+259%</b>	<b>+22</b>	<b>+16%</b>	<b>+50</b>	<b>+46%</b>
Heavy-Duty Diesel Vehicles	1,939	1,850	1,806	1,767	1,887	2,078	2,425	2,827	3,124	3,410	3,523	3,727	3,918	4,373	4,659	4,895	5,082	5,367	5,778	4,612	5,132	5,198	5,703	6,390	6,269	6,301	6,350	6,521	7,267	<b>+1,900</b>	<b>+35%</b>	<b>+746</b>	<b>+11%</b>	<b>+966</b>	<b>+15%</b>	
Propane and Natural Gas Vehicles	624	604	446	371	479	444	314	308	380	245	262	273	250	227	225	214	148	144	108	52	33	32	23	14	7	6	7	7	7	<b>-137</b>	<b>-95%</b>	<b>+0</b>	<b>+2%</b>	<b>+1</b>	<b>+0%</b>	
Railways	1,432	1,389	1,595	1,623	1,639	1,640	1,577	1,429	1,364	1,385	1,263	1,046	860	568	399	430	420	421	654	440	513	671	685	534	664	665	789	1,099	1,005	<b>+583</b>	<b>+138%</b>	<b>-94</b>	<b>-9%</b>	<b>+340</b>	<b>+51%</b>	
Domestic Aviation	838	862	885	909	932	956	970	984	998	1,011	1,025	1,040	1,055	1,069	1,084	1,099	1,089	1,080	1,070	1,060	1,052	1,174	1,295	1,416	1,537	1,658	1,672	1,685	1,698	<b>+619</b>	<b>+57%</b>	<b>+13</b>	<b>+1%</b>	<b>+40</b>	<b>+2%</b>	
Other Navigation	5,242	5,569	5,557	5,808	6,177	6,725	6,825	6,702	6,317	5,873	5,935	5,654	5,123	5,069	5,071	4,708	4,254	4,447	4,487	3,919	4,187	3,654	3,616	3,991	3,964	4,504	4,540	4,799	5,295	<b>+848</b>	<b>+19%</b>	<b>+466</b>	<b>+10%</b>	<b>+791</b>	<b>+18%</b>	
Off-Road Agriculture and Forestry	707	732	760	801	873	1,002	1,020	1,029	971	878	838	892	795	897	966	873	816	812	813	635	720	579	568	618	588	656	576	660	791	<b>-20</b>	<b>-3%</b>	<b>+131</b>	<b>+20%</b>	<b>+35</b>	<b>+21%</b>	
Off-Road Commercial and Institutional	243	248	248	254	279	299	302	314	301	285	290	291	281	317	341	330	315	323	321	291	325	326	331	361	356	359	301	284	316	<b>-7</b>	<b>-2%</b>	<b>+32</b>	<b>+1%</b>	<b>-43</b>	<b>-12%</b>	
Off-Road Manufacturing, Mining, and Construction	1,346	1,409	1,424	1,470	1,622	1,841	1,858	1,853	1,518	1,450	1,512	1,359	1,464	1,631	1,641	1,457	1,361	1,419	1,548	1,245	1,405	1,284	1,249	1,326	1,257	1,414	1,439	1,655	2,041	<b>+621</b>	<b>+44%</b>	<b>+386</b>	<b>+23%</b>	<b>+627</b>	<b>+44%</b>	
Off-Road Residential	35	37	38	42	47	56	68	79	90	101	110	129	146	164	185	183	172	167	155	149	150	157	157	154	165	169	145	140	147	<b>+20</b>	<b>+12%</b>	<b>+7</b>	<b>+5%</b>	<b>-22</b>	<b>-13%</b>	
Off-Road Other Transportation	2,049	2,028	2,029	2,105	2,094	2,131	2,055	1,968	1,846	1,740	1,517	1,101	1,064	1,013	1,097	867	809	785	748	724	745	495	505	514	561	608	634	647	682	<b>-103</b>	<b>-13%</b>	<b>+35</b>	<b>+5%</b>	<b>+74</b>	<b>+12%</b>	
Pipeline Transport	862	1,115	1,058	1,137	1,262	1,397	1,522	1,458	1,591	1,419	1,669	1,881	1,371	1,071	1,141	998	781	941	902	875	843	813	806	1,018	1,037	1,297	1,445	1,413	1,318	<b>+376</b>	<b>+40%</b>	<b>-95</b>	<b>-7%</b>	<b>+21</b>	<b>+2%</b>	
<b>FUGITIVE SOURCES</b>	<b>4,128</b>	<b>4,012</b>	<b>3,974</b>	<b>3,903</b>	<b>5,151</b>	<b>5,404</b>	<b>5,976</b>	<b>6,218</b>	<b>6,096</b>	<b>5,800</b>	<b></b>																									

<b>Forest Management</b>	<b>-48,500</b>	<b>-52,912</b>	<b>-42,407</b>	<b>-42,270</b>	<b>-38,970</b>	<b>-31,455</b>	<b>-38,020</b>	<b>-43,342</b>	<b>-32,814</b>	<b>-40,113</b>	<b>-37,238</b>	<b>-40,540</b>	<b>-33,645</b>	<b>16,538</b>	<b>26,295</b>	<b>11,679</b>	<b>34,916</b>	<b>24,363</b>	<b>20,705</b>	<b>52,338</b>	<b>82,490</b>	<b>90,751</b>	<b>43,292</b>	<b>31,584</b>	<b>84,581</b>	<b>62,210</b>	<b>35,166</b>	<b>192,960</b>	<b>237,348</b>	<b>+212,984.4</b>	<b>+874%</b>	<b>+44,388.2</b>	<b>+23%</b>	<b>+175,138.1</b>	<b>+282%</b>	
Forest Growth Minus Decay	-89,806	-90,210	-89,799	-89,837	-89,830	-89,673	-90,008	-90,162	-89,846	-88,523	-87,361	-85,260	-79,624	-69,292	-59,060	-43,576	-31,534	-24,240	-24,893	-24,404	-20,434	-20,472	-20,968	-21,874	-21,165	-21,004	-22,414	-15,207	-7,041	+17,198.6	-71%	+8,165.5	-54%	+13,963.1	-66%	
Slash Pile Burning	3,854	3,067	6,256	8,057	7,145	8,864	8,458	7,406	7,256	7,096	7,576	6,069	5,729	5,895	5,943	6,537	5,176	5,128	4,320	3,568	4,337	4,284	4,458	4,575	3,692	4,123	3,757	3,300	3,305	-1,823.4	-36%	+4.6	+0%	-818.6	-20%	
Wildfires	12,179	4,296	4,739	729	4,363	8,167	3,712	351	14,125	2,218	763	2,047	628	45,276	35,288	5,098	21,033	3,985	1,972	35,704	57,266	3,036	16,771	4,315	58,898	36,395	11,576	163,300	199,696	+195,711.3	+4,911%	+36,396.3	+22%	+163,301.3	+449%	
Decomposition of Harvested Wood Products	25,273	29,935	36,397	38,782	39,352	41,187	39,819	39,064	35,651	39,096	41,784	36,603	39,623	34,658	44,124	43,620	40,241	39,490	39,306	37,470	41,321	43,903	43,031	44,569	43,156	42,696	42,247	41,566	41,388	+1,898.0	+5%	-178.1	-0%	-1,307.7	-3%	
<b>Cropland Management</b>	<b>-9</b>	<b>-16</b>	<b>-6</b>	<b>2</b>	<b>16</b>	<b>23</b>	<b>18</b>	<b>49</b>	<b>59</b>	<b>67</b>	<b>68</b>	<b>76</b>	<b>72</b>	<b>67</b>	<b>63</b>	<b>63</b>	<b>62</b>	<b>62</b>	<b>83</b>	<b>104</b>	<b>113</b>	<b>127</b>	<b>127</b>	<b>130</b>	<b>133</b>	<b>137</b>	<b>138</b>	<b>136</b>	<b>137</b>	<b>+75.3</b>	<b>+122%</b>	<b>+1.2</b>	<b>+1%</b>	<b>-0.1</b>	<b>-0%</b>	
<b>Wetland Management</b>	<b>119</b>	<b>120</b>	<b>119</b>	<b>124</b>	<b>128</b>	<b>121</b>	<b>115</b>	<b>109</b>	<b>104</b>	<b>99</b>	<b>95</b>	<b>91</b>	<b>87</b>	<b>83</b>	<b>80</b>	<b>77</b>	<b>74</b>	<b>72</b>	<b>69</b>	<b>67</b>	<b>65</b>	<b>63</b>	<b>61</b>	<b>59</b>	<b>57</b>	<b>56</b>	<b>54</b>	<b>54</b>	<b>53</b>	<b>-18.8</b>	<b>-26%</b>	<b>-1.3</b>	<b>-2%</b>	<b>-3.2</b>	<b>-6%</b>	
<b>Grassland Management</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>+0.1</b>	<b>+42,382%</b>	<b>0.0</b>	<b>0%</b>	<b>-0.1</b>	<b>-59%</b>	
<b>Settlement Management</b>	<b>-1,551</b>	<b>-1,549</b>	<b>-1,547</b>	<b>-1,544</b>	<b>-1,542</b>	<b>-1,540</b>	<b>-1,537</b>	<b>-1,535</b>	<b>-1,533</b>	<b>-1,530</b>	<b>-1,528</b>	<b>-1,526</b>	<b>-1,523</b>	<b>-1,521</b>	<b>-1,519</b>	<b>-1,516</b>	<b>-1,514</b>	<b>-1,512</b>	<b>-1,509</b>	<b>-1,507</b>	<b>-1,505</b>	<b>-1,502</b>	<b>-1,500</b>	<b>-1,500</b>	<b>-1,500</b>	<b>-1,500</b>	<b>-1,500</b>	<b>-1,500</b>	<b>-1,500</b>	<b>-1,500</b>	<b>+11.7</b>	<b>-1%</b>	<b>0.0</b>	<b>0%</b>	<b>0.0</b>	<b>0%</b>

**Notes:**

For definitions of the scope of each line item, see the Provincial Inventory Methodology Book

Estimates for the latest year 2018 are based on preliminary energy data; these data, though the best available information at the time of publication, are subject to revision in the next submission year.

1. This is the gross total. BC's progress to its GHG emissions reduction targets is calculated using the net total, which also includes emissions reduction offsets from forest management projects.
2. Emissions from ethanol and biodiesel are included in the Transport categories using gasoline and diesel respectively.
3. Emissions from ammonia production, nitric acid production, petrochemical production, and carbon black are included in Non-Energy Products from Fuels and Solvent Use.
3. 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 CF<sub>4</sub> emissions from the use of NF<sub>3</sub>.

- Indicates no emissions

0 Indicates emissions truncated due to rounding