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CONSUMPTION OF COKE IN CANADA - 1942

The apparent consumption of coke in Canada during 1942 amounted to 4,406,123 tons compared with 4,092,027 tons in 1941.

Production of coke (including petroleum coke and pitch coke) during 1942 totalled 3,356,194 tons and imports entered for consumption amounted to 1,038,312 tons, making a total supply of 4,444,506 tons. However, exports and re-exports totalled 97,346 tons and producers' stocks decreased 59,463 tons, leaving 4,406,123 tons as the quantity made available for use in Canada during the year. The distribution of this tonnage, by areas, was as follows: Maritimes, 641,873 tons; Quebec, 701,505 tons; Ontario, 2,771,644 tons, and the Western Provinces, 291,096 tons. This calculation does not take into consideration any interprovincial shipments of coke or any changes in stocks held by users as complete records are not available concerning such movements.

Actual consumption records, as compiled from the Census of Industry reports for 1942, show that 2,417,001 tons of coke were used in blast furnaces and cupolas, 634,240 tons were used as raw materials in manufacturing, and 397,332 tons were used as fuel in manufacturing, mining and smelting industries. Thus a total of 3,449,073 tons has been accounted for and the difference of 957,050 tons must represent the quantity available for use as domestic fuel or in commercial establishments, such as retail stores, repair shops, warehouses, etc., which are not covered by the Industrial Census. The distribution by areas of the latter figure (mostly domestic consumption) was as follows: Maritimes, 94,712 tons; Quebec, 300,022 tons; Ontario, 449,373 tons, and the Western Provinces, 112,943 tons. Here, again, no allowance has been made for interprovincial shipments.

Coke charged to smelting furnaces and cupolas during 1942 amounted to 2,417,001 tons, of which 1,795,375 tons were used in iron blast furnaces, 6,819 tons in steel furnaces, 74,021 tons in ferro-alloy furnaces, 372,737 tons in furnaces used for smelting of non-ferrous ores, 3,503 tons in brass foundries, and 164,041 tons in foundry cupolas. The consumption, by districts, was as follows: Maritimes, 510,725 tons; Quebec, 49,312 tons; Ontario, 1,763,242 tons, and the Western Provinces, 93,722 tons.

Coke used as a raw material in manufacturing in 1942 totalled 634,240 tons of which 256,446 tons were used in the manufacture of calcium carbide, 6,027 tons in making carbon dioxide, 133,133 tons in making illuminating and fuel gas, 59,933 tons in making artificial abrasives, 165,419 tons in the manufacture of carbon electrodes, and 8,232 tons in the manufacture of rock wool. Plants in Ontario used 273,354 tons; in Quebec, 298,191 tons, and in the Western Provinces, 62,695 tons.

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Table 1 - PRODUCTION OF COKE IN CANADA, 1942

	P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Coke and gas industry ton	639,698	488,099	1,339,593	298,159	3,265,549
\$	4,542,247	4,715,737	16,328,365	2,125,274	27,711,673
Petroleum refining ton	195	...	71,486	1,730	73,411
industry ..... \$	491	...	517,386	9,360	527,737
Coal tar refining ton	5,975	807	3,543	904	17,254
industry ..... \$	44,427	5,373	30,117	6,767	137,139
TOTAL ..... ton	645,868	488,906	1,920,627	300,793	3,356,194
\$	4,587,165	4,721,665	16,925,368	2,141,901	28,376,599

Table 2 - APPARENT CONSUMPTION OF COKE IN CANADA, BY PROVINCES, 1942 (Short tons)

	P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Production .....	645,868	488,906	1,920,627	300,793	3,356,194
Add declines or deduct increases in producers' stocks .....	-1,713	+10,022	+46,573	+4,581	+59,463
	644,155	498,928	1,967,200	305,374	3,415,657
Add imports entered for consumption .....	111	204,053	356,637	27,511	1,068,312
	644,266	702,981	2,323,837	332,885	4,503,969
Deduct exports and re-exports.	2,388	1,476	52,193	41,739	97,846
APPARENT CONSUMPTION .....	641,878	701,505	2,771,644	291,096	4,406,123

NOTE: The imports "entered for consumption" represent tonnages cleared from customs ports. The tonnages entered under this heading differ slightly from actual imports.

Table 3 - CONSUMPTION OF COKE IN CANADA IN SMELTING FURNACES AND CUPOLAS, BY INDUSTRIES, 1942

Industry	P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Pig iron, ferro-alloys, steel ingots and steel castings .....	505,708	9,017	1,373,036	1,327	1,889,088
\$	3,000,024	86,811	11,209,600	17,028	14,313,463
Iron castings .....	1,013	13,257	47,617	6,366	67,653
\$	18,054	210,001	720,613	107,861	1,056,529
Heating and cooking apparatus .....	1,830	1,651	6,370	807	10,458
\$	31,250	18,145	113,042	13,446	175,883
Boilers, tanks and platework .....	233	5,050	6,249	1	11,533
\$	4,392	78,305	37,944	15	131,156
Farm implements and machinery .....	...	140	7,742	50	7,932
\$	...	1,888	126,365	350	129,123
Machinery .....	140	5,268	7,959	1,821	15,138
\$	1,676	79,059	122,004	26,346	229,035
Railway rolling stock.. ton	1,996	8,693	11,384	4,712	26,791
\$	37,967	116,676	172,773	35,693	427,309
Automobile parts .....	...	5	11,002	...	11,007
\$	...	65	184,142	...	184,207
Other iron and steel .. ton	...	...	642	459	1,101
\$	...	...	9,232	9,751	13,935



Table 3 - CONSUMPTION OF COKE IN CANADA IN SMELTING FURNACES AND CUPOLAS, BY INDUSTRIES, 1942 (Concluded)

Industry		P.E.I.		Quebec	Ontario	Man., Sask.,		CANADA
		N.S.	and N.B.			Alberta	and B.C.	
Non-ferrous metallurgical works .....	ton	...	...	4,465	290,461	77,811	...	372,737
	\$	...	...	58,331	3,313,101	727,545	...	4,099,027
Brass foundries .....	ton	...	...	1,760	1,380	368	...	3,508
	\$	...	...	21,310	18,128	3,216	...	43,432
TOTAL .....	ton	510,725	...	49,312	1,763,342	93,722	...	2,417,001
	\$	3,093,363	...	671,159	16,093,024	1,000,651	...	20,853,197

Table 4 - CONSUMPTION OF COKE IN CANADA AS MANUFACTURING MATERIAL(x), BY INDUSTRIES, 1942

Industry		P.E.I.		Quebec	Ontario	Man., Sask.,		CANADA
		N.S.	and N.B.			Alberta	and B.C.	
Acids, alkalies and salts .....	ton	...	...	62,189	170,833	23,419	...	256,446
	\$	...	...	670,100	1,301,662	252,976	...	2,701,738
Compressed gases .....	ton	...	...	2,752	1,925	1,350	...	6,027
	\$	...	...	37,330	22,301	19,373	...	79,004
Artificial abrasives .....	ton	...	...	21,700	38,283	...	...	59,983
	\$	...	...	310,595	430,054	...	...	740,649
Coke and gas .....	ton	...	...	43,524	56,883	37,926	...	138,333
	\$	...	...	428,649	503,093	239,609	...	1,201,356
Miscellaneous non-metallic mineral products (carbon electrodes and foundry facings) .....	ton	...	...	165,546	73	...	...	165,619
	\$	...	...	4,015,303	305	...	...	4,015,613
Stone products (rock wool) .....	ton	...	...	2,680	5,552	...	...	8,232
	\$	...	...	26,803	71,625	...	...	98,428
TOTAL .....	ton	...	...	298,191	273,354	62,695	...	634,240
	\$	...	...	5,489,285	2,829,045	518,958	...	8,837,288

(x) For making calcium carbide, carbon dioxide, artificial abrasives, water gas, carbon electrodes, foundry facings, rock wool, etc.

Table 5 - CONSUMPTION OF COKE IN CANADA AS INDUSTRIAL FUEL IN THE MANUFACTURING, MINING AND SMELTING INDUSTRIES, 1942

		P.E.I.	Quebec	Ontario	Man., Sask.,	
		N.S.			Alberta	CANADA
		and N.B.			and B.C.	
<u>MANUFACTURING</u>						
Chemicals and allied products	ton	35	5,463	2,859	436	8,793
	\$	378	41,431	25,261	5,039	72,109
Iron and steel and their	ton	14,357	9,062	48,377	8,251	80,047
products .....	\$	40,636	107,136	289,854	136,103	575,729
Non-ferrous metal products	ton	...	2,932	15,939	391	19,262
(excluding smelters) .....	\$	...	35,526	190,547	4,204	230,277
Non-metallic mineral products	ton	10,447	25,462	145,727	7,204	188,840
(excluding cement, lime,	\$	64,930	125,396	1,181,083	54,524	1,425,933
clay and salt)						
Animal products .....	ton	50	325	9,556	143	10,079
	\$	423	4,016	73,542	1,207	79,188
Textile products .....	ton	25	1,130	351	...	1,506
	\$	300	8,162	4,039	...	12,501



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Table 5 - CONSUMPTION OF COKE IN CANADA AS INDUSTRIAL FUEL IN THE MANUFACTURING,  
MINING AND SMELTING INDUSTRIES, 1942 - (Concluded)

		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
<b>MANUFACTURING (Con.)</b>						
Vegetable products ....	ton	6,559	8,398	20,592	3,242	38,791
	\$	67,384	99,109	249,022	48,523	464,538
Wood and paper products	ton	17	691	1,661	134	2,503
	\$	191	7,838	15,812	1,595	25,436
Miscellaneous products.	ton	...	193	115	140	448
	\$	...	2,258	1,352	1,527	5,137
Total Manufacturing	ton	31,490	53,656	245,177	19,946	350,269
Industries .....	\$	174,742	430,872	2,030,512	254,722	2,890,848
MINING INDUSTRIES .....	ton	4,951	324	40,498	1,790	47,563
	\$	29,548	3,328	269,385	18,850	321,111
TOTAL .....	ton	36,441	53,980	285,675	21,736	397,832
	\$	204,290	434,200	2,299,897	273,572	3,211,959

Table 6 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL USES, 1942, WITH  
COMPARATIVE DATA FOR 1940-1941 (Short tons)

		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
<b>1942</b>						
Furnace charges .....		510,725	49,312	1,763,242	93,722	2,417,001
Manufacturing material..	...	...	298,191	273,354	62,695	634,240
Industrial fuel .....		36,441	53,980	285,675	21,736	397,832
Available for other uses (mostly domestic) ....		94,712	500,022	449,373	112,945	957,050
APPARENT CONSUMPTION..		641,878	701,505	2,771,644	291,098	4,406,123
<b>1941</b>						
Furnace charges .....		450,126	44,190	1,358,509	91,226	1,944,151
Manufacturing material..	...	...	249,793	192,177	67,905	509,875
Industrial fuel .....		29,097	48,928	252,272	15,469	345,766
Available for other uses (mostly domestic) ....		118,594	269,255	806,179	98,227	1,292,255
APPARENT CONSUMPTION..		597,817	612,146	2,509,157	272,927	4,092,027
<b>1940</b>						
Furnace charges .....		471,938	32,710	1,151,805	89,852	1,746,305
Manufacturing material..		120	156,101	157,087	58,810	372,118
Industrial fuel .....		34,302	52,108	249,941	21,899	358,250
Available for other uses (mostly domestic) ....		78,606	367,361	396,279	65,625	1,407,371
APPARENT CONSUMPTION..		584,966	608,280	2,455,112	236,186	3,884,544

NOTES: 1. Figures showing the tonnage of coke available for other uses are obtained by difference and include the coke used for purposes other than specified in these tables. Sales of coke for domestic use by retail coal dealers amounted to 702,217 tons in 1942, and in that year the coke producers sold 176,865 tons of coke direct to consumers for domestic use, making a total of 879,082 tons for this purpose in 1942. 2. No allowance has been made for changes during the year in stocks of coke held by dealers or users. It is known that dealers' stocks were increased by 74,982 tons during 1942. 3. No allowance has been made for interprovincial shipments of coke.