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DOMINION BUREAU OF STATISTICS
CENSUS OF INDUSTRY
MINING, METALLURGICAL AND CHEMICAL BRANCH
OTTAWA - CANADA

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CONSUMPTION OF COKE IN CANADA - 1943

The apparent consumption of coke in Canada during 1943 amounted to 4,702,837 tons compared with 4,406,123 tons in 1942.

Production of coke (including petroleum coke and pitch coke) during 1943 totalled 3,655,080 tons and imports entered for consumption amounted to 1,255,785 tons, making a total supply of 4,982,926 tons. However, exports and re-exports totalled 104,927 tons and producers' and dealers' stocks increased 103,101 tons, leaving 4,702,837 tons as the quantity made available for use in Canada during the year. The distribution of this tonnage, by areas, was as follows: Maritimes, 557,956 tons; Quebec 813,429 tons; Ontario 3,028,986 tons, and the Western Provinces 297,466 tons. This calculation does not take into consideration any inter-provincial 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 1943, show that 2,245,062 tons of coke were used in blast furnaces and cupolas; 821,639 tons were used as raw materials in manufacturing, and 403,282 tons were used as fuel in manufacturing, mining and smelting industries. Thus a total of 3,469,983 tons has been accounted for and the difference of 1,232,854 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 126,225 tons; Quebec 286,984 tons; Ontario 705,147 tons, and the Western Provinces 114,528 tons. Here, again, no allowance has been made for interprovincial shipments.

Coke charged to smelting furnaces and cupolas during 1943 amounted to 2,245,062 tons, of which 1,646,191 tons were used in iron blast furnaces, 5,158 tons in steel furnaces, 69,563 tons in ferro-alloy furnaces, 372,105 tons in furnaces used for smelting of non-ferrous ores, 5,238 tons in brass foundries, and 146,807 tons in foundry cupolas. The consumption, by districts, was as follows: Maritimes, 395,883 tons; Quebec 47,895 tons; Ontario 1,710,724 tons, and the Western Provinces 90,560 tons.

Coke used as a raw material in manufacturing in 1943 totalled 821,639 tons, of which 327,446 tons were used in the manufacture of calcium carbide; 8,120 tons in making carbon dioxide; 130,755 tons in making illuminating and fuel gas; 72,589 tons in making artificial abrasives; 222,907 tons in the manufacture of carbon electrodes, and 9,822 tons in the manufacture of rock wool. Plants in Ontario used 328,128 tons; in Quebec 423,107 tons, and in the Western Provinces 70,404 tons.

Table 1 - PRODUCTION OF COKE IN CANADA, 1943

		P.E.I., N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Coke and gas industry	ton	557,696	510,983	2,178,743	304,351	3,551,773
	\$	3,971,707	5,066,466	20,044,820	2,256,985	31,339,978
Petroleum refining	ton	273	1,122	82,411	1,506	85,312
industry	\$	696	8,938	598,726	8,477	616,837
Coal tar refining	ton	5,054	638	11,781	522	17,995
industry	\$	46,689	6,076	88,497	6,673	147,935
TOTAL	ton	563,023	512,743	2,272,935	306,379	3,655,080
	\$	4,019,092	5,081,480	20,732,043	2,272,135	32,104,750

Table 2 - APPARENT CONSUMPTION OF COKE IN CANADA, BY PROVINCES, 1943 (Short tons)

	P.E.I., N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Production	563,023	512,743	2,272,935	306,379	3,655,080
Add declines or deduct increases in producers' stocks	+1,565	+1,585	-28,850	-2,512	-27,939
	564,588	514,601	2,244,085	303,867	3,627,141
Add declines or deduct increases in dealers' stocks	-867	-2,993	-71,190	-112	-75,162
	563,721	511,608	2,172,895	303,755	3,551,979
Add imports entered for consumption	72	308,121	909,228	38,364	1,255,785
	563,793	819,729	3,082,123	342,119	4,807,764
Deduct exports and re-exports..	5,337	1,300	53,137	44,653	104,927
APPARENT CONSUMPTION ...	557,956	818,429	3,028,986	297,466	4,702,837

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, 1943

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	ton \$	339,202 2,623,359	8,542 80,870	1,321,696 11,903,772	1,472 19,576	1,720,912 14,627,577
Iron castings	ton \$	1,516 24,267	13,155 207,592	42,168 653,347	5,645 102,639	62,484 987,845
Heating and cooking apparatus	ton \$	1,558 29,256	1,773 28,216	6,323 100,744	917 13,092	10,571 171,308
Boilers, tanks and platework	ton \$	292 5,504	5,600 100,404	6,099 96,728	... ...	11,991 202,636
Farm implements and machinery	ton \$	... ...	250 2,732	6,437 110,184	135 3,100	6,822 116,016
Machinery	ton \$	600 6,713	5,846 122,521	8,577 133,239	2,058 40,139	17,081 302,612

Table 3 - CONSUMPTION OF COKE IN CANADA IN SMELTING FURNACES AND CUPOLAS, BY INDUSTRIES, 1943 - Concluded

Industry		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Railway rolling stock..	ton	2,152	9,300	11,275	4,971	27,698
	\$	41,278	134,596	180,555	102,999	459,428
Automobile parts	ton	...	...	9,239	...	9,239
	\$	...	...	154,776	...	154,776
Other iron and steel ..	ton	312	25	145	439	921
	\$	2,657	250	1,831	9,618	14,356
Non-ferrous metallurgi-	ton	...	2,478	295,187	74,440	372,105
cal works .....	\$	...	35,839	3,585,575	692,884	4,312,298
Brass foundries	ton	251	926	3,578	483	5,238
	\$	4,512	11,697	48,099	10,700	75,008
TOTAL	ton	395,883	47,895	1,710,724	90,560	2,245,062
	\$	2,737,546	722,717	16,968,850	994,747	21,423,860

Table 4 - CONSUMPTION OF COKE IN CANADA AS MANUFACTURING MATERIAL(x), BY INDUSTRIES, 1943

Industry		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Acids, alkalies and salts	ton	...	137,063	167,511	22,872	327,446
	\$	...	1,622,146	1,852,512	224,786	3,699,444
Compressed gases	ton	...	3,637	2,763	1,720	8,120
	\$	...	54,466	37,656	23,729	115,851
Artificial abrasives	ton	...	26,639	45,950	...	72,589
	\$	...	470,924	523,178	...	994,102
Coke and gas	ton	...	65,608	69,335	45,812	180,755
	\$	...	662,297	581,275	347,345	1,590,917
Miscellaneous non-metal- lic mineral products						
(carbon electrodes and	ton	...	187,907	35,000	...	222,907
foundry facings) .....	\$	...	4,529,432	330,000	...	4,859,432
Stone products (rock	ton	...	2,253	7,569	...	9,822
wool) .....	\$	...	33,303	101,286	...	134,589
TOTAL	ton	...	423,107	328,128	70,404	821,639
	\$	...	7,372,568	3,425,907	595,860	11,394,335

(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, 1943

Industry		P.E.I., N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
<u>Manufacturing</u>						
Chemicals and allied products	ton	47	4,869	2,118	521	7,555
	\$	507	44,376	24,875	5,813	75,571
Iron and steel and their products	ton	17,989	18,922	56,452	7,586	100,949
	\$	59,425	221,844	325,123	119,559	725,951
Non-ferrous metal products (excluding smelters)	ton	...	1,639	17,543	93	19,230
	\$	...	21,740	223,601	1,369	246,710
Non-metallic mineral products (excluding cement, lime, clay and salt)	ton	5,730	23,899	136,653	7,932	174,214
	\$	40,461	126,109	830,102	49,113	1,045,785
Animal products	ton	100	398	9,412	119	10,029
	\$	1,316	4,763	52,325	940	59,344
Textile products	ton	73	526	386	5	990
	\$	705	7,321	4,360	63	12,449
Vegetable products	ton	8,910	8,966	21,008	4,040	42,924
	\$	95,308	112,173	267,674	52,820	527,980
Wood and paper products ..	ton	87	531	1,469	146	2,235
	\$	1,175	6,289	14,874	1,775	24,113
Miscellaneous products ...	ton	...	256	120	33	409
	\$	...	3,049	1,557	508	5,114
Total Manufacturing Industries	ton	32,936	60,006	245,166	20,475	358,583
	\$	198,897	547,669	1,744,491	231,960	2,723,017
<u>Mining Industries</u>	ton	2,942	437	39,821	1,499	44,699
	\$	19,614	5,143	300,153	17,020	341,935
TOTAL	ton	35,878	60,443	284,987	21,974	403,282
	\$	218,511	552,812	2,044,649	248,980	3,064,952

Table 6 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL USES, 1943, WITH COMPARATIVE DATA FOR 1941 and 1942 (Short tons)

		P.E.I., N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
<u>1943</u>						
Furnace charges		395,893	47,895	1,710,724	90,560	2,245,062
Manufacturing material..		...	423,107	328,123	70,404	821,633
Industrial fuel		35,878	60,443	284,987	21,974	403,282
Available for other uses (mostly domestic)		126,225	286,984	705,147	114,523	1,232,854
APPARENT CONSUMPTION ..		557,986	818,423	3,028,986	297,466	4,702,857
<u>1942</u>						
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	300,022	449,373	112,943	957,050
APPARENT CONSUMPTION..		641,878	701,505	2,771,644	291,096	4,406,123

Table 6 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL USES, 1943, WITH COMPARATIVE DATA FOR 1941 and 1942 - (Short tons)

	Concluded				
	P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
<u>1 9 4 1</u>					
Furnace charges	450,126	44,190	1,358,509	91,326	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	269,235	806,179	98,227	1,292,235
APPARENT CONSUMPTION ..	597,817	612,146	2,609,137	272,927	4,092,027

- 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 984,000 tons in 1943, and in that year the coke producers sold 156,000 tons of coke direct to consumers for domestic use, making total sales of 1,140,000 tons for this purpose in 1943.
 2. No allowance has been made for changes during the year in stocks of coke held by users.
 3. No allowance has been made for interprovincial shipments of coke.

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