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CONSUMPTION OF COKE IN CANADA - 1939

The apparent consumption of coke in Canada during 1939 amounted to 3,118,382 tons compared with 2,700,176 tons in 1938.

Production of coke (including petroleum coke) during 1939 totalled 2,476,427 tons and imports entered for consumption amounted to 659,783 tons, making an available supply of 3,136,210 tons. However, exports and re-exports totalled 84,323 tons and producers' stocks decreased 66,495 tons, leaving 3,118,382 tons as the quantity available for use in Canada during the year. The distribution of this tonnage, by areas, was as follows: Maritimes, 398,790 tons; Quebec, 500,502 tons; Ontario, 2,011,859 tons, and the Western Provinces, 207,231 tons. This calculation, of course, does not take into consideration any interprovincial shipments of coke or any changes in stocks held by dealers or users as no records are available concerning such movements.

Actual consumption records, as compiled from the Census of Industry reports for 1939, show that 1,181,966 tons of coke were used in blast furnaces and cupolas, 311,337 tons were used as raw materials in manufacturing, and 309,167 tons were used as fuel in manufacturing, mining and smelting industries. Thus a total of 1,802,970 tons has been accounted for and the difference of 1,315,412 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 domestic consumption of 1,315,412 tons was as follows: Maritimes, 53,543 tons; Quebec, 304,361 tons; Ontario, 890,239 tons, and the Western Provinces, 67,219 tons. Here, again, no allowance has been made for interprovincial shipments.

Coke charged to smelting furnaces and cupolas during 1939 amounted to 1,181,966 tons, of which 775,869 tons were used in iron blast furnaces, 4,510 tons in steel furnaces, 31,353 tons in ferro-alloy furnaces, 286,258 tons in furnaces used for smelting non-ferrous ores, and 83,276 tons in foundry cupolas. The consumption, by districts, was as follows: Maritimes, 313,050 tons; Quebec, 25,270 tons; Ontario, 769,683 tons, and the Western Provinces, 73,953 tons.

Coke used as a raw material in manufacturing in 1939 totalled 311,337 tons of which 148,591 tons were used in the manufacture of calcium carbide, 4,752 tons in making carbon dioxide, 86,292 tons in making illuminating and fuel gas, 21,933 tons in making artificial abrasives, 46,540 tons in the manufacture of carbon electrodes and 3,674 tons in the manufacture of rock wool. Plants in Ontario used 133,579 tons; in Quebec, 123,420 tons; in the Maritimes, 368 tons, and in the Western Provinces, 54,470 tons.

Table 1 - PRODUCTION OF COKE IN CANADA, 1939

		P.E.I., N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Coke and Gas Industry Tons		390,692	411,380	1,379,942	228,081	2,410,095
	\$	2,607,367	2,975,950	9,712,164	1,463,030	16,763,517
Petroleum Refining Industry	Tons	783	3,660	53,762	3,127	66,332
	\$	2,162	15,592	362,965	3,470	339,189
TOTAL	Tons	391,475	415,040	1,438,704	231,208	2,476,427
	\$	2,609,529	2,991,542	10,075,129	1,476,506	17,152,706

Table 2 - APPARENT CONSUMPTION OF COKE IN CANADA, BY PROVINCES, 1939 (Short tons)

	P.E.I., N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Production	391,475	415,040	1,438,704	231,208	2,476,427
Add - Declines in producers' stocks	4,468	11,019	61,737	...	77,224
	395,943	426,059	1,500,441	231,208	2,553,651
Deduct - Increase in producers' stocks .....	...	...	...	10,729	10,729
	395,943	426,059	1,500,441	220,479	2,542,922
Add - Imports entered for consumption	3,932	77,164	565,949	12,738	659,783
	399,875	503,223	2,066,390	233,217	3,202,705
Deduct - Exports and re-exports	1,085	2,721	54,531	25,986	84,323
APPARENT CONSUMPTION	398,790	500,502	2,011,859	207,231	3,118,382

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, 1939

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	Tons	308,920	3,099	420,289	424	311,732
	\$	1,755,111	22,532	2,920,093	5,337	4,707,073
Castings and forgings..	Tons	1,268	6,358	19,391	2,723	30,760
	\$	16,325	86,739	230,315	42,527	375,976
Heating and cooking apparatus	Tons	1,252	1,387	4,955	455	8,049
	\$	18,230	15,848	62,350	7,412	104,540
Boilers, tanks and engines	Tons	80	3,190	4,734	52	8,056
	\$	983	40,773	55,765	330	98,351
Farm implements and machinery	Tons	...	155	4,295	...	4,450
	\$	...	1,695	49,667	...	51,362
Machinery	Tons	51	2,430	3,082	739	6,302
	\$	736	29,340	37,015	9,858	76,949
Railway rolling stock..	Tons	1,459	4,698	10,359	2,904	19,410
	\$	23,025	49,221	120,525	46,194	238,965

Table 3 - CONSUMPTION OF COKE IN CANADA IN SMELTING FURNACES AND CUPOLAS, BY INDUSTRIES, 1939 (Concluded)

Industry		P.E.I.		Quebec	Ontario	Man., Sask.,		CANADA
		N.S.	and N.B.			Alberta	and B. C.	
Automobile parts	Tons	...	...	4	5,144	...	...	5,148
	\$	...	...	46	61,342	...	...	61,388
Other iron and steel	Tons	...	...	...	803	223	...	1,101
	\$	...	...	...	7,023	5,205	...	12,228
Non-ferrous metallurgical	Tons	...	...	3,459	217,136	66,363	...	286,958
works .....	\$	...	...	35,774	2,056,566	595,749	...	2,688,089
TOTAL	Tons	313,050	25,270	769,683	73,958	...	...	1,181,966
	\$	1,813,180	281,268	5,606,661	713,112	...	...	8,414,221

Table 4 - CONSUMPTION OF COKE IN CANADA AS MANUFACTURING MATERIAL(x), BY INDUSTRIES, 1939

Industry		P.E.I.		Quebec	Ontario	Man., Sask.,		CANADA
		N.S.	and N.B.			Alberta	and B.C.	
Acids, alkalies and salts	Tons	...	...	40,020	82,267	26,304	...	148,591
	\$	...	...	275,298	633,886	253,336	...	1,162,520
Compressed gases	Tons	368	...	1,734	1,631	969	...	4,752
	\$	6,154	...	20,734	16,375	12,821	...	56,154
Artificial abrasives	Tons	...	...	8,217	13,771	...	...	21,988
	\$	...	...	97,746	141,184	...	...	238,930
Coke and gas	Tons	...	...	26,399	32,696	27,197	...	86,292
	\$	...	...	196,561	206,800	180,292	...	583,653
Miscellaneous non-metallic								
mineral products	Tons	...	...	46,540	...	...	...	46,540
	\$	...	...	680,452	...	...	...	680,452
Stone products	Tons	...	...	510	3,164	...	...	3,674
	\$	...	...	6,122	37,973	...	...	44,095
TOTAL	Tons	368	123,420	132,572	54,470	...	...	311,337
	\$	6,154	1,279,913	1,036,227	446,519	...	...	2,768,813

(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, 1939

		P.E.I.	N.S.	Quebec	Ontario	Man., Sask.,	
		and N.B.				Alberta	CANADA
						and B.C.	
<u>MANUFACTURING</u>							
Chemicals and allied products	Tons	496	5,559	2,818	362	9,235	
	\$	2,759	30,536	19,177	3,893	56,360	
Iron and steel, and products.	Tons	16,873	7,523	33,123	1,034	53,613	
	\$	52,243	71,017	172,206	13,715	309,187	
Non-ferrous metal products	Tons	...	2,423	5,799	140	8,362	
(excluding smelters) .....	\$	...	18,783	52,608	2,191	73,583
Non-metallic mineral products	Tons	5,237	21,159	126,767	6,687	153,850	
(excluding cement, lime,	\$	32,333	83,454	1,019,112	30,655	1,166,034	
clay and salt)							
Animal products	Tons	14	202	6,360	154	6,737	
	\$	112	2,084	22,002	1,556	25,754	

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Table 5 - CONSUMPTION OF COKE IN CANADA AS INDUSTRIAL FUEL IN THE MANUFACTURING,
MINING AND SMELTING INDUSTRIES, 1932 (Concluded)

		P.E.I., N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B. C.	CANADA
<u>MANUFACTURING (Concluded) -</u>						
Tortile products.....	Tons	2	168	367	1	538
	\$	23	1,299	2,751	13	4,688
Vegetable products	Tons	5,230	9,279	22,778	2,126	47,113
	\$	49,196	86,053	253,306	24,176	413,516
Wood and paper products	Tons	49	592	2,151	27	2,889
	\$	511	5,174	13,621	231	20,307
Miscellaneous products.	Tons	2	165	122	114	473
	\$	27	1,681	1,839	297	4,444
Total Manufacturing Industries	Tons	23,603	47,032	207,360	10,765	223,810
	\$	137,712	300,652	1,557,222	73,022	2,073,678
MINING INDUSTRIES	Tons	3,226	362	10,943	312	15,357
	\$	19,543	3,889	79,800	7,401	109,623
TOTAL	Tons	31,329	47,451	218,303	11,584	309,167
	\$	156,255	304,541	1,637,022	85,423	2,183,311

Table 6 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL USES, 1932, WITH
COMPARATIVE DATA FOR 1937-1938 (Short tons)

		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B. C.	CANADA
<u>1 9 3 2</u>						
Furnace charges		313,050	25,270	769,638	73,953	1,181,966
Manufacturing material ...		363	123,420	153,579	54,470	311,837
Industrial fuel		31,829	47,451	218,303	11,584	309,167
Available for domestic use (by difference)		53,543	304,361	890,239	67,213	1,315,412
APPARENT CONSUMPTION ...		323,790	500,502	2,011,859	207,231	3,118,382
<u>1 9 3 8</u>						
Furnace charges		273,671	25,190	719,307	74,342	1,095,010
Manufacturing material ...		377	112,642	135,774	46,223	295,086
Industrial fuel		23,501	43,215	218,158	10,010	294,884
Available for domestic use (by difference)		62,608	267,657	618,600	68,331	1,017,196
APPARENT CONSUMPTION ...		360,157	443,704	1,691,839	199,476	2,700,176
<u>1 9 3 7</u>						
Furnace charges		353,425	33,087	876,234	63,529	1,383,345
Manufacturing material ...		337	112,959	178,306	36,059	333,661
Industrial fuel		33,900	50,585	226,753	11,145	327,333
Available for domestic use (by difference)		60,457	275,196	761,294	76,543	1,173,493
APPARENT CONSUMPTION ...		453,119	477,829	2,044,592	192,352	3,173,892

NOTES: 1. Figures showing the tonnage of coke available for domestic use are obtained by difference and include the coke used for purposes other than specified in these tables.

2. No allowance has been made for changes during the year in stocks of coke held by dealers or users.

3. No allowance has been made for interprovincial shipments of coke.