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CONSUMPTION OF COKE IN CANADA - 1941

The apparent consumption of coke in Canada during 1941 amounted to 4,092,027 tons compared with 3,384,544 tons in 1940.

Production of coke (including petroleum coke and pitch coke) during 1941 totalled 3,235,944 tons and imports entered for consumption amounted to 895,459 tons, making an available supply of 4,121,403 tons. However, exports and re-exports totalled 87,952 tons and producers' stocks decreased 48,576 tons, leaving 4,092,027 tons as the quantity made available for use in Canada during the year. The distribution of this tonnage, by areas, was as follows: Maritimes, 597,317 tons; Quebec, 612,146 tons; Ontario, 2,609,137 tons, and the Western Provinces, 272,927 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 1941, show that 1,944,151 tons of coke were used in blast furnaces and cupolas, 509,875 tons were used as raw materials in manufacturing, and 392,734 tons were used as fuel in manufacturing, mining and smelting industries. Thus a total of 2,792,792 tons has been accounted for and the difference of 1,292,235 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, 118,594 tons; Quebec, 269,235 tons; Ontario, 806,179 tons, and the Western Provinces, 93,227 tons. Here, again, no allowance has been made for interprovincial shipments.

Coke charged to smelting furnaces and cupolas during 1941 amounted to 1,944,151 tons, of which 1,362,530 tons were used in iron blast furnaces, 5,596 tons in steel furnaces, 68,731 tons in ferro-alloy furnaces, 361,475 tons in furnaces used for smelting of non-ferrous ores, and 145,819 tons in foundry cupolas. The consumption, by districts, was as follows: Maritimes, 450,123 tons; Quebec, 44,190 tons; Ontario, 1,353,509 tons, and the Western Provinces, 91,328 tons.

Coke used as a raw material in manufacturing in 1941 totalled 509,875 tons, of which 262,354 tons were used in the manufacture of calcium carbide, 5,118 tons in making carbon dioxide, 91,778 tons in making illuminating and fuel gas, 41,618 tons in making artificial abrasives, 102,935 tons in the manufacture of carbon electrodes, and 6,022 tons in the manufacture of rock wool. Plants in Ontario used 192,177 tons; in Quebec, 249,793 tons, and in the Western Provinces, 67,905 tons.

Table 1 - PRODUCTION OF COKE IN CANADA, 1941

		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Coke and gas industry	tons	567,535	461,493	1,832,109	284,573	3,145,715
	\$	3,970,372	4,067,634	14,925,196	1,364,321	24,838,023
Petroleum refining	tons	467	3,673	65,208	1,492	70,840
industry	\$	1,333	17,385	464,632	9,938	493,338
Coal tar refining	tons	8,829	1,192	8,793	570	19,393
industry	\$	59,475	11,290	64,053	7,284	142,102
TOTAL	tons	576,831	466,358	1,906,115	286,640	3,235,944
	\$	4,031,830	4,096,309	15,513,931	1,381,593	25,523,463

Table 2 - APPARENT CONSUMPTION OF COKE IN CANADA, BY PROVINCES, 1941 (short tons)

		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Production		576,831	466,358	1,906,115	286,640	3,235,944
Add--Declines in producers'						
stocks		19,828	9,374	7,107	12,267	48,576
		596,659	475,732	1,913,222	298,907	3,284,520
Add--Imports entered for con-						
sumption		2,304	138,393	742,922	11,340	895,459
		598,963	614,625	2,656,144	310,247	4,179,979
Deduct--Exports and re-exports		1,146	2,479	47,007	37,320	67,952
APPARENT CONSUMPTION ...		597,817	612,146	2,609,137	272,927	4,032,027

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, 1941

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	445,027	8,333	982,458	1,039	1,436,857
	\$	2,571,028	74,647	7,148,022	14,023	9,807,726
Iron castings	Tons	1,121	11,142	44,529	5,302	62,094
	\$	18,700	164,747	688,838	39,367	962,152
Heating and cooking apparatus	Tons	1,732	1,562	6,531	729	10,554
	\$	31,721	22,511	32,773	11,495	158,500
Boilers, tanks and platework	Tons	147	8,179	6,683	200	13,209
	\$	2,662	93,092	106,462	2,235	204,451
Farm implements and machinery	Tons	...	152	8,129	6	8,387
	\$	...	1,784	117,323	107	119,817
Machinery	Tons	103	4,247	6,305	1,069	11,724
	\$	1,746	65,338	91,677	16,535	175,346
Railway rolling stock..	Tons	1,090	2,099	11,334	4,712	26,791
	\$	37,967	116,676	178,773	93,923	427,309
Automobile parts	Tons	...	5	12,395	...	12,400
	\$	...	50	190,838	...	190,328

Table 3 - CONSUMPTION OF COKE IN CANADA IN SMELTING FURNACES AND CUPOLAS, BY INDUSTRIES, 1941 (Concluded)

Industry		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Other iron and steel ..	Tons	...	...	257	503	760
	\$	...	...	3,053	10,716	13,769
Non-ferrous metallurgi- cal works	Tons	...	3,871	279,838	77,766	361,475
	\$	...	45,972	2,976,351	710,095	3,732,418
TOTAL	Tons	450,126	44,190	1,358,509	91,326	1,944,151
	\$	2,663,824	584,817	11,594,713	949,022	15,792,376

Table 4 - CONSUMPTION OF COKE IN CANADA AS MANUFACTURING MATERIAL(x), BY INDUSTRIES, 1941

Industry		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
Acids, alkalies and salts	Tons	...	99,559	126,508	36,287	262,354
	\$	...	1,067,980	1,193,797	342,484	2,604,261
Compressed gases	Tons	...	2,089	1,714	1,315	5,118
	\$	...	30,961	21,250	18,614	70,825
Artificial abrasives	Tons	...	14,141	27,477	...	41,618
	\$	...	179,101	289,239	...	468,340
Coke and gas	Tons	...	29,579	31,896	30,303	91,778
	\$	...	271,428	261,832	172,046	705,373
Miscellaneous non-metallic mineral products (carbon electrodes and foundry facings)	Tons	...	102,920	65	...	102,985
	\$	...	2,107,764	294	...	2,108,058
Stone products (rock wool)	Tons	...	1,505	4,517	...	6,022
	\$	...	20,706	59,678	...	80,384
TOTAL	Tons	...	249,793	192,177	67,905	509,875
	\$	...	3,677,940	1,826,157	533,144	6,037,241

(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, 1941

		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
MANUFACTURING						
Chemicals and allied products	Tons	41	4,297	3,035	237	7,610
	\$	430	32,484	23,564	2,996	59,474
Iron and steel and their products	Tons	16,900	9,169	79,008	5,151	110,228
	\$	58,216	110,391	332,137	73,999	574,743
Non-ferrous metal products (excluding smelters)	Tons	...	2,003	21,098	141	23,242
	\$	...	15,453	241,197	1,526	258,181
Non-metallic mineral products (excluding cement, lime, clay and salt)	Tons	6,182	23,371	121,944	7,049	152,546
	\$	36,741	108,614	890,430	35,664	1,061,449
Animal products	Tons	53	270	849	116	1,291
	\$	591	3,349	8,750	961	13,651
Textile products	Tons	45	440	378	286	1,149
	\$	452	3,655	4,225	1,754	10,086



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Table 5 - CONSUMPTION OF COKE IN CANADA AS INDUSTRIAL FUEL IN THE MANUFACTURING, MINING AND SMELTING INDUSTRIES, 1941 (Concluded)

		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
<u>MANUFACTURING (Concluded) -</u>						
Vegetable products	Tons	5,810	8,550	23,960	2,257	40,577
	\$	59,961	96,518	274,386	24,922	455,787
Wood and paper products	Tons	63	652	1,916	107	2,738
	\$	630	6,945	5,264	1,138	13,977
Miscellaneous products.	Tons	...	176	84	125	385
	\$	...	2,005	987	1,271	4,263
Total Manufacturing	Tons	29,097	48,928	252,272	15,469	345,766
Industries	\$	157,021	379,419	1,770,940	144,231	2,451,611
MINING INDUSTRIES	Tons	4,865	1,372	39,257	1,474	46,968
	\$	28,127	13,455	250,177	15,619	307,378
TOTAL	Tons	33,962	50,300	291,529	16,943	392,734
	\$	185,148	392,874	2,021,117	159,850	2,758,989

Table 6 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL USES, 1941, WITH COMPARATIVE DATA FOR 1939-1940 (Short tons)

		P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and B.C.	CANADA
<u>1941</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
<u>1940</u>						
Furnace charges		471,933	32,710	1,151,805	89,852	1,746,305
Manufacturing material		120	156,101	157,087	58,310	372,118
Industrial fuel		34,302	52,108	249,941	21,899	358,250
Available for other uses (mostly domestic)		78,606	367,361	896,279	65,625	1,407,871
APPARENT CONSUMPTION ...		584,966	603,280	2,455,112	236,186	3,884,544
<u>1939</u>						
Furnace charges		313,050	25,270	769,688	73,958	1,181,966
Manufacturing material		368	123,420	133,579	54,470	311,837
Industrial fuel		31,829	47,451	218,303	11,584	309,167
Available for other uses (mostly domestic)		53,543	304,361	890,289	67,219	1,315,412
APPARENT CONSUMPTION ...		398,790	500,502	2,011,859	207,231	3,119,382

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 947,053 tons in 1941, and in that year the coke producers sold 196,280 tons of coke direct to consumers for domestic use, making a total of 1,143,333 tons for this purpose in 1941. 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.