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CONSUMPTION OF COKE IN CANADA, 1935.

The apparent consumption of coke in Canada during 1935 amounted to 2,997,991 tons compared with 3,061,305 tons in 1934.

Production of coke (including petroleum coke) during 1935 was reported at 2,329,795 tons and imports totalled 714,568 tons, making an available supply of 3,044,363 tons. But exports amounted to 37,590 tons and producers' stocks increased 8,782 tons, leaving 2,997,991 tons as the quantity available for use in Canada during the year. The distribution of this tonnage by areas was as follows:— Maritimes, 332,577 tons; Quebec, 424,329 tons; Ontario, 2,040,636 tons; and the Western Provinces, 200,449 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.

An analysis of consumption figures for 1935 based on returns to the annual Census of Industry, shows that in 1935 a total of 922,679 tons of coke were used as blast furnace or cupola charges, 216,538 tons were used as raw material in manufacturing and 386,756 tons were used as fuel in manufacturing and mining plants. Thus a total of 1,525,973 tons can be accounted for in the available records of industrial uses and the difference of 1,472,018 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 of the domestic consumption of 1,472,018 tons by areas was as follows:— Maritimes, 59,527 tons; Quebec, 274,714 tons; Ontario, 1,065,648 tons; and the Western provinces, 72,129 tons. But here again, any interprovincial shipments have not been taken into consideration. In 1932 a special survey by the Mines Branch showed that about 34,790 tons of Quebec coke were used in Ontario and about 10,585 tons of Ontario coke were used in Manitoba; in addition, about 40,000 tons of the imported coke used in Manitoba were brought in at Ontario ports and in the above calculation would, of course, be credited to Ontario.

Furnace charges of coke during 1935 totalled 922,679 tons of which 577,355 tons were charged to iron blast furnaces, 2,746 tons to steel furnaces, 13,367 tons to ferro-alloy plants, 73,295 tons to foundry cupolas and 255,916 tons to non-ferrous metal furnaces. By districts, the consumption for these purposes was as follows:— Maritimes, 240,785 tons; Quebec, 16,563 tons; Ontario, 577,200 tons; and the Western provinces, 88,131 tons.

Consumption of coke as a raw material in manufacturing in 1935 amounted to 216,538 tons of which 87,815 tons were used in the manufacture of calcium carbide, 2,810 tons in the manufacture of carbon dioxide, 77,205 tons in the manufacture of gas, 21,985 tons in making artificial abrasives, and 22,723 tons in making carbon electrodes and 4,000 in making miscellaneous products. Plants in Ontario used 132,455 tons; in Quebec, 79,419 tons; in the Maritimes, 229 tons, and in the Western provinces, 4,435 tons.

Coke used for fuel purposes in manufacturing and mining plants totalled 386,756 tons in 1935. Works in the Maritimes used 32,036 tons for this purpose; in Ontario, 265,333 tons; in Quebec, 53,533 tons; and in the West, 35,754 tons.

Table 1 -

Production of Coke in Canada, 1935.

		P.E.I., N.S. and N.B.	Quebec	Ontario	Manitoba Sask., Alta., & B.C.	Canada
Coke and Gas Industry	Tons	332,409	398,060	1,334,081	193,054	2,257,604
	\$	1,803,487	2,934,704	9,868,953	1,254,015	15,861,159
Petroleum Refining Industry	Tons	530	2,690	53,845	15,126	72,191
	\$	1,962	14,978	320,004	57,035	393,979
Total	Tons	332,939	400,750	1,387,926	208,180	2,329,795
	\$	1,805,449	2,949,682	10,188,957	1,311,050	16,255,138

Table 2 -

Apparent Consumption of Coke in Canada, by Provinces, 1935.

(short tons)

Production	332,939	400,750	1,387,926	208,180	2,329,795
Add declines in producers' stocks	...	...	11,012	...	...
	332,939	400,750	1,398,938	208,180	2,329,795
Deduct increases in producers' stocks	6,615	10,564	...	2,615	8,782
	326,324	390,186	1,398,938	205,565	2,321,013
Add imports (entered for consumption)	6,549	35,922	657,168	14,929	714,568
	332,873	426,108	2,056,106	220,494	3,035,581
Deduct exports	296	1,779	15,470	20,045	37,590
Apparent consumption	332,577	424,329	2,040,636	200,449	2,997,991

Notes:- 1. The imports "entered for consumption" represent tonnages cleared from customs' ports. The tonnages under this heading differ slightly from actual imports.

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



Table 3 - Consumption of Coke in Canada as Furnace Charges, by Industries, 1935.

Industries		P.E.I., N.S. and N.B.	Quebec	Ontario	Manitoba, Sask., Alta., and B.C.	Canada
Pig iron, ferro-alloys and steel ingots and castings	Tons	238,079	196	354,732	461	593,468
	\$	1,341,990	2,012	1,894,159	5,897	3,244,058
Castings and forgings	Tons	1,016	6,547	24,687	2,288	34,538
	\$	13,618	67,358	253,830	33,109	367,915
Heating and cooking	Tons	843	1,074	4,819	176	6,912
	\$	9,973	12,299	58,531	2,603	83,406
Boilers, tanks and engines	Tons	81	1,852	4,464	40	6,437
	\$	1,171	21,546	48,289	568	71,574
Agricultural implements	Tons	...	75	5,426	...	5,501
	\$	...	842	58,640	...	59,482
Machinery	Tons	...	2,003	2,344	274	4,621
	\$	...	20,631	24,966	3,487	49,084
Railway rolling stock	Tons	766	4,656	7,599	1,900	14,921
	\$	9,584	46,295	82,491	26,737	165,107
Automobile parts	Tons	...	...	22	...	22
	\$	...	...	303	...	303
Other iron and steel	Tons	...	...	140	203	343
	\$	...	...	1,465	3,241	4,706
Non-ferrous metallurgi- cal works	Tons	...	160	172,967	82,789	255,916
	\$	...	2,029	1,733,482	729,422	2,464,933
Total	Tons	240,785	16,563	577,200	88,131	922,679
	\$	1,376,336	173,012	4,156,156	805,064	6,510,568

Table 4 - Consumption of Coke in Canada as Manufacturing Material, by Industries, 1935.

Industries		P.E.I., N.S. and N.B.	Quebec	Ontario	Manitoba, Sask., Alta., and B.C.	Canada
Acids, alkalies and salts	Tons	...	24,400	63,415	...	87,815
	\$	...	178,817	450,874	...	629,691
Compressed gases	Tons	229	946	1,208	427	2,810
	\$	3,370	8,632	12,408	5,394	29,796
Artificial abrasives	Tons	...	7,712	14,273	...	21,985
	\$	...	96,440	174,316	...	270,756
Artificial graphite and carbon electrodes	Tons	...	12,063	10,660	...	22,723
	\$	...	146,867	61,696	...	208,563
Coke and Gas	Tons	...	34,298	38,899	4,008	77,205
	\$	...	233,480	275,477	41,020	549,977
Miscellaneous non- metallic mineral products	Tons	...	...	4,000	...	4,000
	\$	...	...	21,800	...	21,800
Total	Tons	229	79,419	132,455	4,435	216,538
	\$	3,370	664,236	996,563	46,414	1,710,583

Table 5 - Consumption of Coke in Canada as Industrial Fuel, in the Manufacturing and Mining Industries, 1935.

Industries		P.E.I., N.S., and N.B.	Quebec	Ontario	Manitoba, Sask., Alta., and B.C.	Canada
<u>Manufacturing -</u>						
Chemicals and allied products	Tons	56	3,490	7,391	264	11,201
	\$	588	17,704	37,976	2,238	58,506
Iron and steel, and products	Tons	20,914	7,029	64,111	760	92,814
	\$	50,050	55,199	246,195	10,338	361,782
Non-ferrous metal products (excluding smelters)	Tons	169	3,038	4,886	349	8,442
	\$	2,234	24,514	44,071	4,104	74,923
Non-metallic mineral products (excluding cement, clay & lime)	Tons	3,657	26,667	139,738	30,074	200,136
	\$	26,420	76,448	647,034	112,128	862,030
Animal products	Tons	16	280	593	875	1,764
	\$	142	3,145	4,259	3,831	11,377
Textile products	Tons	6	4,277	9,804	31	14,118
	\$	80	19,522	43,369	364	63,335
Vegetable products	Tons	4,266	6,792	27,308	2,527	40,893
	\$	40,471	66,479	264,512	27,416	398,878
Wood & paper products	Tons	28	398	2,657	100	3,183
	\$	283	4,074	19,250	1,003	24,610
Miscellaneous products	Tons	77	179	381	99	736
	\$	664	1,780	3,687	1,483	7,614
Total Manufacturing industries	Tons	29,189	52,150	256,869	35,079	373,287
	\$	120,932	268,865	1,310,353	162,905	1,863,055
Mining industries	Tons	2,847	1,483	8,464	675	13,469
	\$	16,114	14,710	68,531	9,047	108,402
Total	Tons	32,036	53,633	265,333	35,754	386,756
	\$	137,046	283,575	1,378,884	171,952	1,971,457

Table 6 - Analysis of Coke Consumption in Canada, by principal uses, 1935.

	P.E.I., N.S., and N.B.	Quebec	Ontario	Manitoba, Sask., Alta., and B.C.	Canada
<u>Short tons</u>					
Furnace charges	240,785	16,563	577,200	88,131	922,679
Manufacturing material	229	79,419	132,455	4,435	216,538
Industrial fuel	32,036	53,633	265,333	35,754	386,756
Available for domestic use (by difference)	59,527	274,714	1,065,648	72,129	1,472,018
Apparent consumption	332,577	424,329	2,040,636	200,449	2,997,991

See explanatory notes which follow table No. 7.



Table 7 - Analysis of Coke Consumption in Canada by Principal Uses, 1925 - 1934.

	(short tons)				
	Maritimes	Quebec	Ontario	West	Canada
<u>1925</u>					
Furnace charges .....	256,210	26,985	602,265	111,202	996,662
Manufacturing material ...	202	51,338	132,558	10,249	194,347
Industrial fuel .....	42,988	76,871	190,983	35,017	345,859
Available for domestic use (by difference) .....	10,859	90,207	644,113	91,541	836,720
TOTAL .....	310,259	245,401	1,569,919	248,009	2,373,588
<u>1926</u>					
Furnace charges .....	321,918	32,548	750,057	112,235	1,216,758
Manufacturing material ...	429	58,053	147,920	11,284	217,686
Industrial fuel .....	9,568	31,790	160,350	26,752	228,460
Available for domestic use (by difference) .....	159,491	132,350	944,560	74,088	1,310,489
TOTAL .....	491,406	254,741	2,002,887	224,359	2,973,393
<u>1927</u>					
Furnace charges .....	315,133	30,237	694,019	98,800	1,138,189
Manufacturing material ...	236	106,525	158,654	11,881	277,296
Industrial fuel .....	14,242	25,404	184,097	27,635	251,378
Available for domestic use (by difference) .....	93,814	79,161	826,172	58,554	1,057,701
TOTAL .....	423,425	241,327	1,862,942	196,870	2,724,564
<u>1928</u>					
Furnace charges .....	389,758	31,523	919,579	87,751	1,428,611
Manufacturing material ...	274	83,684	153,511	11,944	249,413
Industrial fuel .....	25,366	29,536	216,666	38,330	309,898
Available for domestic use (by difference) .....	61,140	209,626	1,060,373	30,037	1,361,176
TOTAL .....	476,558	354,369	2,350,129	168,062	3,349,098
<u>1929</u>					
Furnace charges .....	411,587	36,368	1,144,433	84,056	1,676,444
Manufacturing material ...	326	128,515	222,095	13,315	364,251
Industrial fuel .....	52,181	51,958	241,992	40,672	386,803
Available for domestic use (by difference) .....	68,168	190,921	1,169,603	104,630	1,533,322
TOTAL .....	532,262	407,762	2,778,123	242,673	3,960,820
<u>1930</u>					
Furnace charges .....	258,325	30,437	929,885	83,777	1,302,334
Manufacturing material ...	346	133,358	172,708	8,003	314,415
Industrial fuel .....	27,906	61,879	217,472	40,848	348,105
Available for domestic use (by difference) .....	46,430	179,687	1,222,281	71,890	1,520,288
TOTAL .....	332,917	405,361	2,542,346	204,518	3,485,142

Table 7 - Cont'd. Analysis of Coke Consumption in Canada by Principal Uses,

1925 - 1934.  
(short tons)

	Maritimes	Quebec	Ontario	West	Canada
<u>1931</u>					
Furnace charges .....	120,155	23,779	486,187	80,185	710,306
Manufacturing material .....	258	116,195	83,564	6,659	206,676
Industrial fuel .....	21,328	45,645	204,663	34,423	306,059
Available for domestic use (by difference) .....	71,697	173,494	1,014,389	70,317	1,329,897
TOTAL .....	213,438	359,113	1,788,803	191,584	2,552,938
<u>1932</u>					
Furnace charges .....	39,558	14,301	182,255	69,926	306,040
Manufacturing material .....	252	94,979	102,914	6,760	204,905
Industrial fuel .....	28,897	37,679	228,717	32,195	327,488
Available for domestic use (by difference) .....	40,039	219,214	1,159,635	34,276	1,453,164
TOTAL .....	108,746	366,173	1,673,521	143,157	2,291,597
<u>1933</u>					
Furnace charges .....	137,485	10,838	261,074	29,704	439,101
Manufacturing material .....	158	102,656	85,460	6,109	194,383
Industrial fuel .....	33,588	38,688	180,377	43,294	295,947
Available for domestic use (by difference) .....	58,326	211,154	1,286,844	112,133	1,668,457
TOTAL .....	229,557	363,336	1,813,755	191,240	2,597,888
<u>1934</u>					
Furnace charges .....	157,977	14,761	490,266	87,114	750,118
Manufacturing material .....	208	87,870	106,697	3,739	198,514
Industrial fuel .....	47,404	46,682	188,691	42,725	325,502
Available for domestic use (by difference) .....	47,468	272,336	1,385,577	81,790	1,787,171
TOTAL .....	253,057	421,649	2,171,231	215,368	3,061,305

- 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 in producers' stocks for 1931.
3. No allowance has been made for changes during the year in stocks of coke held by dealers or users.
4. No allowance has been made for interprovincial shipments of coke. A special survey made by the Mines Branch, Department of Mines, Ottawa, shows that in 1932 about 34,790 tons of Quebec coke were used in Ontario for domestic purposes and about 10,585 tons of Ontario coke were used in Manitoba. In addition, about 40,000 tons of the imported coke used in Manitoba were brought in at Ontario ports of entry and, of course, are credited to Ontario in the above calculation.