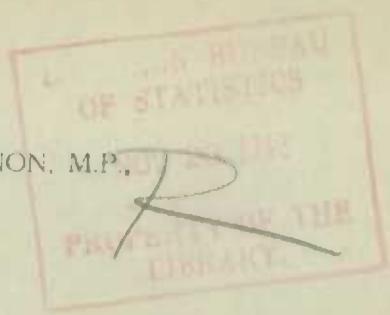


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CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

MINING, METALLURGICAL & CHEMICAL BRANCH

THE COKE AND GAS INDUSTRY

IN

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THE COKE AND GAS INDUSTRY, 1941.

Production from coke plants and from illuminating and fuel gas plants in Canada during 1941 was valued at \$50,818,720. This output was 8.8 per cent above the \$46,673,660 of the previous year and set a new record for the industry. Output for the year under review included 3,145,715 tons of coke valued at \$24,888,023 at the works, 57,728,803 M cubic feet of gas of which 57,477,104 M cubic feet valued at \$21,557,128 were sold or used, and by-products valued at \$4,373,569.

Twenty-eight coke and gas works operated in 1941, including 10 by-products and bee-hive plants and 18 retort coal and water gas plants. Fourteen of these works were located in Ontario, 4 in British Columbia, 4 in Quebec, 2 in Manitoba, 2 in Nova Scotia, and 1 in each of New Brunswick and Alberta. In addition to these producers, 1 company in Quebec and 2 in Ontario purchased coke-oven gas and distributed it for domestic or commercial use and data covering their operations have been included to round out the figures for the industry.

Output of coke from gas retorts, by-products and bee-hive ovens totalled 3,145,715 tons in 1941 compared with 3,015,394 tons in 1940 and 2,410,095 tons in 1939. By-product and bee-hive ovens produced 2,847,624 tons of coke in 1941 and gas retorts made 298,091 tons. In addition, 70,840 tons of petroleum coke were recovered in petroleum refineries.

Data on the distribution of coke (except petroleum coke) by the producers show that 195,880 tons were sold direct to domestic consumers, 1,382,051 tons were used in metallurgical works operated by the producing companies, 231,464 tons were used by coke plants as fuel or to make water gas, 645,529 tons were sold direct to consumers for foundry and other uses (other than domestic), 730,902 tons were sold to dealers for resale, and 44,574 tons were sold for export. The total distribution was 3,230,406 tons, including about 75,000 tons withdrawn from producers' stocks during the year. Total stocks of coke in the hands of producers amounted to 215,481 tons at the end of 1941.

Imports of coke made from coal declined to 614,417 tons in 1941 from 719,338 tons in 1940, but exports increased to 40,167 tons from 37,523 tons. Imports of petroleum coke during this period rose to 235,852 tons from 185,334 tons and exports (including re-exports of imported coke) advanced to 67,738 tons from 40,433 tons.

Manufactured gas, sold and used, amounted to 57,477,104 M cubic feet in 1941, including 46,818,325 M cubic feet from by-product ovens and 10,658,779 M cubic feet from gas plants. Sales of gas by the producers totalled 16,931,434 M cubic feet, of which 9,896,061 M cubic feet were from by-product ovens and 7,035,373 M cubic feet were from gas works. Most of the remaining gas was used as fuel in the producing plants or in their associated metallurgical works. These figures do not include 45,205 M cubic feet of (Pintech) oil gas for lighting railway cars, 9,971,268 M cubic feet of still gas recovered at petroleum refineries, nor iron blast furnace gas and some producer gas which was recovered and used by the producers but for which no records are available.

The number of customers served with manufactured illuminating and fuel gas in 1941 was 493,933, the number of active meters was 513,489, the length of distributing mains was 3,906 miles, and the average calorific value of the gas sold ranged from 450 to 570 B.T.U. per cubic foot.

Table 1 - DISTRIBUTION OF COKE AND GAS MANUFACTURING PLANTS, BY PROVINCES, 1941

Province	COKE PLANTS		GAS		PLANTS Retort coal gas and water gas	TOTAL
	By-product and bee-hive ovens	Retort coal gas only	Water gas only			
Nova Scotia	1	1	-	-	-	2
New Brunswick	-	1	-	-	-	1
Quebec	1	1	1	-	1	4
Ontario	4	2	5	3	-	14
Manitoba	1	1	-	-	-	2
Alberta	1	-	-	-	-	1
British Columbia	2	1	-	-	1	4
CANADA	10	7	6	5	-	28

(x) 8 By-product only, 1 Bee-hive only and 1 both By-product and Bee-hive.

Coke and Gas

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Table 2 - SIZE OF ESTABLISHMENTS, ACCORDING TO QUANTITY OF COAL AND COKE USED FOR GAS-MAKING, 1941

Coal or coke used	Number of plants	Total coal or coke for gas-making
Less than 1,000 tons	3	2,174
1,001 - 5,000	8	17,215
5,001 - 15,000	5	56,901
15,001 - 100,000	3	161,014
100,001 - 500,000	5	1,097,817
Over 500,000	4	3,078,501
TOTAL	28	4,413,622

Table 3 - PRINCIPAL STATISTICS OF THE COKE AND GAS INDUSTRY, 1937-1941

Year	Number of Capital companies (x)	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
COKE (By-product and Bee-hive)						
1937	13	56,416,667	2,314	3,325,958	2,243,977	14,614,177
1938	13	56,952,033	2,227	3,351,614	2,181,609	14,068,917
1939	13	58,691,213	2,327	3,392,800	2,364,768	14,102,330
1940	13	58,666,525	2,421	3,829,937	2,974,347	18,143,915
1941	13	59,445,268	2,488	4,073,482	3,611,421	20,505,807
GAS (Retort and Water Gas)						
1937	20	35,494,583	1,713	2,383,611	662,115	2,603,780
1938	20	36,385,539	1,703	2,447,888	660,711	2,534,726
1939	20	36,234,551	1,716	2,458,814	1,065,625	2,624,115
1940	18	38,081,758	1,674	2,546,528	994,587	2,893,414
1941	18	38,449,081	1,802	2,458,621	950,169	3,402,071
TOTAL - Coke and Gas						
1937	33	91,911,250	4,027	5,709,569	2,906,092	17,217,957
1938	33	93,337,572	3,930	5,799,502	2,842,320	16,603,643
1939	33	94,925,764	4,043	5,851,614	3,430,393	16,726,445
1940	31	96,748,283	4,095	6,376,465	3,968,934	21,037,329
1941	31	97,894,349	4,290	6,532,103	4,561,590	23,907,878

(x) The number shown for by-product and bee-hive ovens includes 3 companies which did not produce coke or gas but which purchased coke-oven gas from the manufacturers and distributed it to customers. Data for employees, capital, etc. for these distributing companies are included in the industry totals but duplication in gas purchases and sales as between producers and distributors has been eliminated.

NOTE: Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as, interest, rent, depreciation, taxes, insurance, advertising, etc.

Table 4 - PRINCIPAL STATISTICS, BY PROVINCES, 1940 and 1941

Province	Number of companies	Capital Employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
1940							
Nova Scotia and							
New Brunswick	3	11,017,097	428	659,836	512,560	3,609,526	6,341,424
Quebec	5	11,527,351	680	1,144,212	986,912	3,740,689	10,805,209
Ontario	16	54,065,968	2,422	3,748,502	2,235,544	12,132,878	25,516,288
Manitoba and Alberta	3	6,790,306	208	298,557	71,648	797,453	1,454,286
British Columbia ...	4	13,347,561	357	525,358	162,270	756,783	2,556,453
CANADA	31	96,748,283	4,095	6,376,465	3,968,934	21,037,329	46,673,660

Table 4 - PRINCIPAL STATISTICS, BY PROVINCES, 1940 and 1941 (Concluded)

Province	Number of companies	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
<u>1941</u>							
Nova Scotia and New Brunswick	3	10,577,490	435	641,628	515,383	3,504,586	6,251,344
Quebec	5	11,446,587	697	1,175,043	1,081,380	4,275,338	11,300,468
Ontario	16	55,418,370	2,552	3,790,781	2,679,379	14,353,519	28,712,757
Manitoba and Alberta	3	6,665,041	213	313,444	105,509	894,616	1,668,176
British Columbia ...	4	13,786,861	393	611,207	179,939	879,819	2,885,975
CANADA	31	97,894,349	4,290	6,532,103	4,561,590	23,907,878	50,818,720

Table 5 - CAPITAL EMPLOYED, BY CLASSES AND BY PROVINCES, 1940 and 1941

Province	Present value of land, buildings, fixtures, and machinery	Inventory value of materials on hand, stocks in process and finished products	Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.)	TOTAL CAPITAL EMPLOYED
<u>1940</u>				
Nova Scotia and New Brunswick	6,805,029	3,049,459	1,162,609	11,017,097
Quebec	8,871,931	1,923,138	732,282	11,527,351
Ontario	43,029,299	7,141,137	3,895,532	54,065,968
Manitoba and Alberta	6,207,004	219,484	363,818	6,790,306
British Columbia	12,856,541	299,689	191,331	13,347,561
CANADA	77,769,804	12,632,907	6,345,572	96,748,283
<u>1941</u>				
Nova Scotia and New Brunswick	6,855,017	2,576,309	1,146,164	10,577,490
Quebec	8,719,973	1,872,443	854,171	11,446,587
Ontario	43,259,845	7,703,992	4,454,533	55,418,370
Manitoba and Alberta	6,206,560	96,590	361,891	6,665,041
British Columbia	13,136,698	335,897	314,266	13,786,861
CANADA	78,178,093	12,585,231	7,131,025	97,894,349

Table 6 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1940 and 1941

Province	Average number of employees				TOTAL SALARIES AND WAGES			
	On Salaries		On Wages					
	Male	Female	Male	Female				
<u>1940</u>								
Nova Scotia and New Brunswick	36	11	381	...	428	64,148	595,688	659,836
Quebec	192	43	445	...	680	478,340	665,872	1,144,212
Ontario	524	216	1,580	2	2,422	1,039,887	2,708,615	3,748,502
Manitoba and Alberta	44	26	138	...	208	100,240	198,317	298,557
British Columbia	59	3	295	...	357	129,741	395,617	525,358
CANADA	855	299	2,939	2	4,095	1,812,356	4,564,109	6,376,465
<u>1941</u>								
Nova Scotia and New Brunswick	39	10	386	...	435	69,595	572,033	641,628
Quebec	223	50	424	...	697	546,865	628,178	1,175,043
Ontario	524	202	1,826	...	2,552	1,015,637	2,775,144	3,790,781
Manitoba and Alberta	46	25	142	...	213	100,275	213,169	313,444
British Columbia	65	4	324	...	393	140,807	470,400	611,207
CANADA	897	291	3,102	...	4,290	1,873,179	4,658,924	6,532,103

Table 7 - WAGE-EARNERS, BY MONTHS, 1940 and 1941 (Number on pay-roll on the last day of each month)

Month	1 9 4 0			1 9 4 1		
	Male	Female	TOTAL	Male	Female	TOTAL
January	2,909	2	2,911	3,022	...	3,022
February	2,891	2	2,893	2,995	...	2,995
March	2,838	2	2,840	2,996	...	2,996
April	2,891	2	2,893	3,041	...	3,041
May	3,020	2	3,022	3,095	...	3,095
June	2,995	2	2,997	3,092	...	3,092
July	2,964	2	2,966	3,211	...	3,211
August	2,999	2	3,001	3,238	...	3,238
September	2,978	2	2,980	3,225	...	3,225
October	2,942	2	2,944	3,191	...	3,191
November	2,924	2	2,926	3,103	...	3,103
December	2,931	2	2,933	3,087	...	3,087
AVERAGE	2,939	2	2,941	3,102	...	3,102

Table 8 - HOURS WORKED PER WEEK BY WAGE-EARNERS, 1940 and 1941 (In one week of highest employment; overtime included)

Hours worked per week	No. of Wage-earners		Hours worked per week	No. of Wage-earners	
	1940	1941		1940	1941
30 hours or less	79	54	51 - 54 hours	212	273
31 - 43 hours	157	172	55 hours	26	51
44 hours	377	315	56 - 64 hours	563	591
45 - 47 hours	183	57	65 hours and over	39	193
48 hours	1,324	1,218	Total	3,168	3,121
49 - 50 hours	208	197	Total wages paid during selected week	\$ 84,534	\$ 92,457

Table 9 - FUEL AND ELECTRICITY USED, 1940 and 1941

NOTE: Includes fuel for boilers, benches, retorts, etc., but does not include coal, coke, etc., charged to ovens, retorts or water gas sets.

Kind	Unit of Measure	1 9 4 0		1 9 4 1	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal - Canadian	Ton	4,675	\$ 24,684	7,939	\$ 35,102
Imported	Ton	12,044	67,618	15,500	92,429
Lignite coal - Canadian	Ton	42	126	102	306
Coke (all made in users' works)	Ton	148,898	1,092,973	152,811	1,013,442
Gasoline	Imp. gal.	23,372	3,434	23,188	4,678
Fuel oil	Imp. gal.	89,899	2,891	200,655	10,949
Wood	Cord	245	1,203	121	802
Gas - Manufactured (all made in users' works)	M cu.ft.	22,098,597	2,538,352	22,935,971	3,121,480
Natural	M cu.ft.	...	...	3,118	1,007
Other fuel .....	\$	...	22,660	...	28,821
Electricity purchased	K. W. H.	39,862,662	214,993	38,305,888	252,474
TOTAL .....	\$	...	3,968,934	...	4,561,590

Table 10 - POWER EQUIPMENT, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1 9 4 0				
Steam engines and turbines	185	9,132	103	5,945
Diesel engines .....	...	...	1	40
Gasoline, gas and oil engines (except diesel)	7	119	7	224
Hydraulic turbines or water wheels .....	...	...	1	6
Total Primary	192	9,251	112	6,215
Electric motors run by purchased power	736	15,531	149	2,845
TOTAL	928	24,782	261	9,060
Electric motors run by primary units shown above ..	229	6,265	...	...
Stationary boilers	76	16,745	41	15,106
1 9 4 1				
Steam engines and turbines	184	9,703	101	5,919
Diesel engines	10	50	7	90
Gasoline, gas and oil engines (except diesel)	11	185	7	228
Hydraulic turbines or water wheels .....	...	...	1	6
Total Primary	205	9,938	116	6,243
Electric motors run by purchased power	727	15,494	149	2,873
TOTAL	932	25,432	265	9,116
Electric motors run by power from primary units shown above	235	6,207	...	...
Stationary boilers	78	16,973	42	15,161

Table 11 - MATERIALS USED IN COKE AND GAS PLANTS, 1940 and 1941

Materials	Unit of Measure	1 9 4 0		1 9 4 1	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal carbonized in ovens or retorts -			\$		\$
(a) Canadian	Ton	1,418,671	6,048,615	1,434,215	6,237,832
(b) Imported	Ton	2,699,579	13,295,700	2,884,107	15,805,353
Bituminous coal for making water gas -					
Imported	Ton	2,699	20,691	3,522	34,463
Coke for gas-making -					
(a) Purchased	Ton	7,334	71,921	7,447	75,197
(b) Companies' own make	Ton	77,984	532,257	84,331	630,176
Oil used for enriching water gas	Imp.gal.	4,229,239	282,041	5,204,117	329,986
Absorbing and wash oil	Imp.gal.	220,038	27,743	255,563	30,926
Caustic soda	Pound	1,500,655	31,184	1,592,879	33,462
Lime	Ton	2,608	27,339	2,613	27,935
Water .....	...	...	20,917	...	18,836
Iron oxide	Ton	5,417	42,491	8,574	36,480
Sulphuric acid, 66° Be	Pound	61,483,735	432,618	47,693,474	473,238
All other materials .....	...	...	203,812	...	173,994
TOTAL COST .....	...	...	21,037,329	...	23,907,878

Table 12 - MATERIALS USED IN COKE AND GAS PLANTS, BY AREAS, 1941

Materials	Unit of Measure	EASTERN PROVINCES		ONTARIO		WESTERN PROVINCES	
		Quantity	Cost at works	Quantity	Cost at works	Quantity	Cost at works
Bituminous coal carbonized in ovens and retorts -			\$		\$		\$
(a) Canadian	Ton	1,020,956	4,696,526	..	..	413,259	1,541,306
(b) Imported	Ton	397,579	2,386,026	2,486,397	13,418,206	131	1,121
Bituminous coal for making water gas -							
Imported	Ton	235	2,115	3,287	32,348	...	...
Coke for gas-making -							
(a) Purchased	Ton	876	8,847	6,571	66,350	...	...
(b) Companies' own make	Ton	28,703	262,581	25,325	195,549	30,303	172,046
Oil used for enriching water gas	Imp.gal.	350,307	27,610	4,538,951	279,364	314,859	23,012
Absorbing and wash oil	Imp.gal.	141,044	17,482	101,492	12,531	13,027	913
Caustic soda	Pound	783,277	20,261	809,602	12,201	...	...
Lime	Ton	2,250	24,588	363	3,347	...	...
Water .....		...	8,285	...	3,979	...	6,572
Iron oxide	Ton	2,302	13,092	5,958	18,918	314	4,470
Sulphuric acid, 66° Be	Pound	27,742,656	202,514	19,950,818	270,724	...	...
All other materials .....		...	109,997	...	39,002	...	24,995
TOTAL COST .....		...	7,779,924	...	14,353,519	...	1,774,435

Table 13 - PRODUCTS MADE IN COKE AND GAS PLANTS, 1940 and 1941

Products	Unit of Measure	1 9 4 0		1 9 4 1	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
		\$	\$	\$	\$
<u>GAS MADE -</u>					
Retort coal gas	M cu.ft.	5,453,621	...	5,662,989	...
Coke oven gas	M cu.ft.	38,496,043	...	40,143,240	...
Producer gas	M cu.ft.	9,292,731	...	9,415,880	...
Water gas	M cu.ft.	1,870,126	...	2,498,003	...
Butane air gas	M cu.ft.	...	...	8,691	...
TOTAL GAS MADE	M cu.ft.	55,112,521	...	57,728,803	...
<u>GAS SOLD OR USED -</u>					
Gas sold	M cu.ft.	15,392,723	14,803,049	16,931,434	15,888,723
Gas used in own plants	M cu.ft.	22,877,703	2,865,974	23,489,119	3,052,823
Gas used in associated metallurgical works	M cu.ft.	13,185,237	1,629,944	13,352,389	1,636,603
Gas otherwise accounted for but not sold	M cu.ft.	2,128,931	101,301	2,335,672	122,761
Gas not accounted for	M cu.ft.	1,520,578	1,250,201	1,368,490	856,218
TOTAL GAS SOLD OR USED	M cu.ft.	55,105,172	20,650,469	57,477,104	21,557,128
<u>COKE MADE -</u>					
Coke from by-product or bee-hive ovens	Ton	2,559,332	18,974,117	2,680,771	21,808,129
Coke from gas retorts	Ton	268,509	2,323,609	280,728	2,362,880
Coke breeze from by-product ovens	Ton	166,541	600,534	166,853	676,466
Coke breeze from gas retorts	Ton	21,012	39,601	17,363	40,548
TOTAL COKE	Ton	3,015,394	21,937,861	3,145,715	24,888,023
<u>OTHER PRODUCTS -</u>					
Tar	Imp.gal.	32,817,895	1,762,324	33,375,297	1,902,394
Ammonia liquor .....	...	...	20,380	1,922,682	19,210
Ammonium sulphate	Pound	70,986,981	952,014	70,786,432	1,036,095
Benzol	Imp.gal.	5,614,458	715,931	6,031,137	723,608
Other light oils, including toluol, xylol, naphthalene, etc.	Imp.gal.	2,301,370	631,535	1,990,910	686,649
All other products .....	...	...	3,095	...	5,613
GRAND TOTAL .....	...	...	46,673,660	...	50,818,720

Table 14 - PRODUCTS MADE IN COKE AND GAS PLANTS, BY AREAS, 1941

Products	Unit of Measure	EASTERN PROVINCES		ONTARIO		WESTERN PROVINCES	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works	Quantity	Gross selling value at works
			\$		\$		\$
<u>GAS MADE -</u>							
Retort coal gas	M cu.ft.	542,222	...	4,890,020	...	230,747	...
Coke oven gas	M cu.ft.	15,254,544	...	22,505,385	...	2,383,311	...
Producer gas	M cu.ft.	6,850,138	...	...	...	2,565,742	...
Water gas	M cu.ft.	175,563	...	2,278,286	...	44,154	...
Butane air gas	M cu.ft.	...	8,691	...	...	...	...
Total Gas Made	M cu.ft.	22,822,467	...	29,682,382	...	5,223,954	...
<u>GAS SOLD OR USED -</u>							
Gas sold	M cu.ft.	5,278,970	5,737,406	9,472,855	7,951,774	2,179,609	2,199,543
Gas used in own plants	M cu.ft.	10,197,650	1,374,002	10,423,340	1,469,140	2,868,129	209,681
Gas used in associated metallurgical works	M cu.ft.	4,763,587	488,820	8,588,802	1,147,783	...	...
Gas otherwise accounted for but not sold	M cu.ft.	2,004,249	44,046	331,351	78,650	72	65
Gas not accounted for	M cu.ft.	557,623	205,923	621,946	470,314	188,921	179,981
Total Gas Sold or Used	M cu.ft.	22,802,079	7,850,197	29,438,294	11,117,661	5,236,731	2,589,270
<u>COKE MADE -</u>							
Coke from by-product or bee-hive ovens	Ton	881,735	7,162,307	1,528,248	12,856,851	270,788	1,788,971
Coke from gas retorts	Ton	54,659	445,341	217,276	1,862,136	8,793	55,403
Coke breeze from by-product ovens	Ton	89,084	416,788	73,555	244,508	4,214	15,170
Coke breeze from gas retorts	Ton	3,560	14,070	13,030	21,701	783	4,777
Total Coke Made	Ton	1,029,028	8,038,506	1,832,109	14,985,196	284,578	1,864,321
<u>OTHER PRODUCTS -</u>							
Tar	Imp.gal.	12,042,534	558,058	19,732,520	1,245,492	1,600,243	98,844
Other products .....	\$	...	1,105,051	...	1,364,408	...	1,716
GRAND TOTAL .....	\$	...	17,551,812	...	28,712,757	...	4,554,151

Table 15 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, 1930-1941

Year	By-product and bee-hive coke		Gas retort coke		TOTAL	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
1930	2,062,764	13,592,418	323,230	2,259,829	2,385,994	15,852,247
1931	1,512,381	10,157,011	320,319	2,262,730	1,832,700	12,419,741
1932	1,331,170	9,085,716	306,531	3,008,789	1,637,701	12,094,505
1933	1,500,448	9,847,600	271,716	2,618,595	1,772,164	12,466,195
1934	1,948,294	13,481,930	295,126	2,379,827	2,243,420	15,861,757
1935	1,382,844	13,121,614	294,760	2,739,545	2,257,604	15,861,159
1936	2,147,810	14,343,959	256,983	2,366,049	2,404,793	16,710,008
1937	2,334,556	16,283,370	235,829	2,182,698	2,570,385	18,466,068
1938	2,120,588	14,599,384	231,415	2,295,683	2,352,003	16,895,067
1939	2,147,210	14,517,186	262,885	2,246,331	2,410,095	16,763,517
1940	2,725,873	19,574,651	289,521	2,363,210	3,015,394	21,937,861
1941	2,847,624	22,484,595	298,091	2,403,428	3,145,715	24,888,023

Table 16 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, BY PROVINCES, 1930-1941

Year	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta and British Columbia		CANADA	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
	tons	\$	tons	\$	tons	\$	tons	\$
1930	680,911	4,361,204	1,516,080	10,021,292	189,003	1,469,751	2,385,994	15,852,247
1931	538,126	3,887,746	1,113,509	7,163,526	181,065	1,368,469	1,832,700	12,419,741
1932	403,330	3,115,737	1,087,122	7,876,941	147,249	1,101,827	1,637,701	12,094,505
1933	445,755	2,840,433	1,153,509	8,429,660	172,900	1,196,102	1,772,164	12,466,195
1934	654,305	4,369,150	1,388,709	10,200,363	200,406	1,292,244	2,243,420	15,861,757
1935	730,469	4,738,191	1,334,081	9,868,953	193,054	1,254,015	2,257,604	15,861,159
1936	775,275	4,665,468	1,441,833	10,807,611	187,690	1,246,929	2,404,793	16,710,008
1937	853,122	5,548,042	1,504,334	11,522,965	212,929	1,395,061	2,570,385	18,466,068
1938	754,975	5,040,400	1,365,571	10,339,065	231,457	1,515,602	2,352,003	16,895,067
1939	802,072	5,583,317	1,379,942	9,712,164	228,081	1,468,036	2,410,095	16,763,517
1940	1,040,999	7,582,337	1,732,303	12,842,138	242,092	1,413,386	3,015,394	21,937,861
1941	1,029,028	8,038,506	1,832,109	14,985,196	284,578	1,864,321	3,145,715	24,888,023

Table 17 - BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE SOLD AND USED BY PRODUCERS DURING 1940 and 1941, AND STOCKS ON HAND AT END OF YEAR

	Coke	Breeze	TOTAL
	(tons)		
<u>1 9 4 0</u>			
Coke actually used by reporting companies -			
In coke or gas plant	183,752	39,125	222,877
In associated works	1,173,230	65,480	1,238,710
Coke sold -			
(a) Direct to consumers -			
For domestic use	220,925	25,891	246,816
For other uses	471,351	36,276	507,627
(b) To dealers for resale	781,544	19,272	800,816
(c) For export	36,556	...	36,556
TOTAL SOLD OR USED	2,867,358	186,044	3,053,402
Stocks on hand at end of year	237,632	51,784	289,416
<u>1 9 4 1</u>			
Coke actually used by reporting companies -			
In coke or gas plant	199,587	31,877	231,464
In associated works	1,295,712	86,339	1,382,051
Coke sold -			
(a) Direct to consumers -			
For domestic use	177,430	18,450	195,880
For other uses	562,768	82,761	645,529
(b) To dealers for resale	724,998	5,910	730,908
(c) For export	44,574	...	44,574
TOTAL SOLD OR USED	3,005,069	225,337	3,230,406
Stocks on hand at end of year	194,114	21,367	215,481

Table 18 - COAL CARBONIZED, COKE PRODUCED, AND DISTRIBUTION OF COKE BY MANUFACTURERS, 1941

	Bee-hive and by-product plants tons	Gas retort plants tons	Total for coke producing plants tons
Coal carbonized -			
Canadian	1,352,112	82,103	1,434,215
Imported	2,506,770	377,337	2,884,107
TOTAL	3,858,882	459,440	4,318,322
Coke made -			
Coke	2,680,771	280,728	2,961,499
Breeze	166,853	17,363	184,216
TOTAL	2,847,624	298,091	3,145,715
Coke yield	73.8	64.9	72.8
Coke used in coke or gas plants -			
Coke	65,597	133,990	199,587
Breeze	29,634	2,243	31,877
TOTAL	95,231	136,233	231,464
Coke used in associated metallurgical works -			
Coke	1,295,657	55	1,295,712
Breeze	86,339	...	86,339
TOTAL	1,381,996	55	1,382,051
Coke sold direct to consumers for domestic use -			
Coke	116,120	61,310	177,430
Breeze	4,195	14,255	18,450
TOTAL	120,315	75,565	195,880
Coke sold direct to consumers for other uses -			
Coke	527,663	35,105	562,768
Breeze	82,761	...	82,761
TOTAL	610,424	35,105	645,529
Coke sold to dealers for resale -			
Coke	640,613	84,385	724,998
Breeze	4,900	1,010	5,910
TOTAL	645,513	85,395	730,908
Coke sold for export	44,574	...	44,574
TOTAL COKE SOLD AND USED -			
Coke	2,690,224	314,845	3,005,069
Breeze	207,829	17,508	225,337
TOTAL	2,898,053	332,353	3,230,406
Stocks on December 31st, 1941 -			
Coke	152,896	41,218	194,114
Breeze	20,191	1,176	21,367
TOTAL	173,087	42,394	215,481

Table 19 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, BY MONTHS, 1933-1941 (In 000's of short tons)

Month	1933	1934	1935	1936	1937	1938	1939	1940	1941
January	150	195	200	212	218	224	203	257	268
February	128	169	181	198	198	199	177	225	240
March	139	192	198	202	221	218	191	239	266
April	122	185	180	190	214	208	184	237	253
May	134	185	185	200	218	208	196	252	260
June	136	179	180	199	210	192	189	249	248
July	145	183	176	193	212	183	190	259	259
August	150	189	175	191	214	182	193	257	266
September	156	188	180	189	208	184	188	252	263
October	173	204	205	212	218	184	226	263	276
November	174	199	206	208	217	180	229	258	270
December	166	175	192	211	222	190	244	267	277
TOTAL	1,772	2,243	2,258	2,405	2,570	2,352	2,410	3,015	3,146
Monthly Average	148	187	188	200	214	196	201	251	262

Table 20 - BITUMINOUS COAL CHARGED TO COKE OVENS AND GAS RETORTS, 1930-1941

Year	Bee-hive and by-product ovens		Gas Retorts		TOTAL
	Canadian	Imported	Canadian	Imported	
(tons)					
1930	640,167	2,097,921	96,299	356,656	3,191,043
1931	468,838	1,576,881	96,044	390,773	2,532,536
1932	351,960	1,413,328	97,304	354,420	2,217,012
1933	557,249	1,488,492	46,768	373,452	2,465,961
1934	803,321	1,836,668	40,982	435,133	3,116,104
1935	943,240	1,734,650	45,914	412,539(x)	3,136,343
1936	1,008,841	1,951,515	48,258	349,884(x)	3,358,498
1937	1,106,706	2,106,960	48,109	318,175(x)	3,579,950
1938	960,492	1,917,995	48,403	301,124(x)	3,228,014
1939	1,020,585	1,871,975	56,393	325,255(x)	3,274,208
1940	1,336,172	2,357,492	82,499	344,786(x)	4,120,949
1941	1,352,112	2,506,770	82,103	380,859(x)	4,321,844

(x) Includes 3,261 tons used in making water gas in 1935, 3,159 tons in 1936, 2,392 tons in 1937, 3,650 tons in 1938, 2,882 tons in 1939, 2,699 tons in 1940, and 3,522 tons in 1941.

Table 21 - BITUMINOUS COAL CHARGED TO COKE OVENS AND GAS RETORTS, BY PROVINCES, 1930-1941

Year	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta and British Columbia		TOTAL
	Canadian	Imported	Canadian	Imported	Canadian	Imported	
(tons)							
1930	515,793	433,414	...	1,963,195	220,673	57,968	3,191,043
1931	338,072	414,179	...	1,516,819	226,810	36,656	2,532,536
1932	271,496	295,114	105	1,435,964	177,663	36,670	2,217,012
1933	384,175	256,086	5,700	1,584,052	214,142	21,806	2,465,961
1934	556,628	359,210	700	1,911,920	286,975	671	3,116,104
1935	708,873	326,342	600	1,820,847	279,681	...	3,136,343
1936	765,743	328,216	15,684	1,973,183	275,672	...	3,358,498
1937	853,949	338,861	6,028	2,060,077	294,838	26,197	3,579,950
1938	673,625	345,319	3,200	1,858,798	335,270	11,802	3,228,014
1939	733,972	352,236	9,260	1,843,570	333,746	1,424	3,274,208
1940	1,071,156	355,024	...	2,344,726	347,515	2,528	4,120,949
1941	1,020,956	397,814	...	2,489,684	413,259	131	4,321,844

Table 22 - PRODUCTION OF PETROLEUM COKE, 1930-1941

Year	Made for Own Use		Made for Sale		TOTAL	
	Tons	Selling value at works	Tons	Selling value at works	Tons	Selling value at works
		\$		\$		\$
1930	23,538	124,363	68,549	392,945	92,087	517,308
1931	20,029	96,676	52,310	280,660	72,339	377,336
1932	19,278	104,181	53,787	293,755	73,065	397,936
1933	20,079	115,400	54,646	322,379	74,725	437,779
1934	9,293	57,961	52,467	200,512	61,760	258,473
1935	8,348	21,256	63,843	372,723	72,191	393,979
1936	2,629	11,687	62,077	381,473	64,706	393,160
1937	2,381	8,942	59,634	371,198	62,015	380,140
1938	634	1,547	63,375	388,753	64,009	390,300
1939	4,238	18,253	62,094	370,936	66,332	389,189
1940	4,876	25,328	63,458	416,262	68,334	441,590
1941	3,138	21,774	67,702	471,564	70,840	493,338

NOTE: Petroleum coke is not included in coke production figures given for the coke and gas industry.

Table 23 - TOTAL PRODUCTION OF COKE (including Petroleum Coke) IN CANADA, 1938-1941

		Nova Scotia and New Brunswick	Quebec	Ontario	Man., Sask., Alberta and Br. Columbia	CANADA
(tons)						
<u>1 9 3 8</u>						
Coke and gas industry	Tons	350,234	404,741	1,365,571	231,457	2,352,003
	\$	2,126,335	2,914,065	10,339,065	1,515,602	16,895,067
Petroleum refining industry ..	Tons	377	3,530	59,010	1,092	64,009
	\$	1,225	16,535	369,184	3,356	390,300
TOTAL	Tons	350,611	408,271	1,424,581	232,549	2,416,012
	\$	2,127,560	2,930,600	10,708,249	1,518,958	17,285,367
<u>1 9 3 9</u>						
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	1,468,036	16,763,517
Petroleum refining industry ..	Tons	783	3,660	58,762	3,127	66,332
	\$	2,162	15,592	362,965	8,470	389,189
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
<u>1 9 4 0</u>						
Coke and gas industry	Tons	605,917	435,082	1,732,303	242,092	3,015,394
	\$	4,106,917	3,475,420	12,842,138	1,513,386	21,937,861
Petroleum refining industry ..	Tons	541	2,758	61,936	3,099	68,334
	\$	1,498	12,688	414,671	12,733	441,590
TOTAL	Tons	606,458	437,840	1,794,239	245,191	3,083,728
	\$	4,108,415	3,488,108	13,256,809	1,526,119	22,379,451
<u>1 9 4 1</u>						
Coke and gas industry	Tons	567,535	461,493	1,832,109	284,578	3,145,715
	\$	3,970,872	4,067,634	14,985,196	1,864,321	24,888,023
Petroleum refining industry ..	Tons	467	3,673	65,208	1,492	70,840
	\$	1,283	17,385	464,682	9,988	493,338
TOTAL	Tons	568,002	465,166	1,897,317	286,070	3,216,555
	\$	3,972,155	4,085,019	15,449,878	1,874,309	25,381,361

Coke and Gas

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Table 24 - APPARENT CONSUMPTION OF COKE (including Petroleum Coke) IN CANADA, BY PROVINCES, 1937-1941

	P.E.I.	N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and Br. Columbia	CANADA
(tons)						
Apparent consumption - 1937	458,119	477,829	2,044,592	192,352	3,172,892	
1938	360,157	448,704	1,691,839	199,476	2,700,176	
1939	398,790	500,502	2,011,859	207,231	3,118,382	
<u>1 9 4 0</u>						
Production	606,458	437,840	1,794,239	245,191	3,083,728	
Add - Decline in producers' stocks ....	... 32,406	7,048	8,163	47,617		
	606,458	470,246	1,801,287	253,354	3,131,345	
Deduct - Increase in producers' stocks	23,919					23,919
	582,539	470,246	1,801,287	253,354	3,107,426	
Add - Imports entered for consumption ..	3,482	140,348	701,705	9,551	855,086	
Deduct - Exports and re-exports	586,021	610,594	2,502,992	262,905	5,962,512	
	1,055	2,314	47,880	26,719	77,966	
Apparent consumption	584,966	608,280	2,455,112	236,186	3,884,544	
<u>1 9 4 1</u>						
Production	568,002	465,166	1,897,317	286,070	3,216,555	
Add - Decline in producers' stocks	19,828	14,785	28,433	12,006	75,052	
	587,830	479,951	1,925,750	298,076	3,291,607	
Add - Imports entered for consumption ..	2,304	138,893	743,005	11,340	895,542	
Deduct - Exports and re-exports	590,134	618,884	2,668,755	309,416	4,187,149	
	1,146	2,479	47,207	37,320	88,152	
Apparent consumption	588,988	616,365	2,621,548	272,096	4,098,997	

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

Table 25 - QUANTITY OF COKE IN THE HANDS OF THE PRODUCERS AT THE END OF 1940 and 1941

	1 9 4 0			:	1 9 4 1			Difference 1941 from 1940
	Petroleum refineries	Coke and gas plants	TOTAL	:	Petroleum refineries	Coke and gas plants	TOTAL	
(tons)								
Nova Scotia .....	...	29,273	29,273	...	9,639	9,639	- 19,634	
New Brunswick ...	...	247	247	...	53	53	- 194	
Quebec	100	40,840	40,940	56	26,099	26,155	- 14,785	
Ontario	1,396	184,934	186,330	696	157,201	157,897	- 28,433	
Manitoba .....	...	15,991	15,991	...	2,234	2,234	- 13,757	
Saskatchewan	98	...	98	110	...	110	+ 12	
Alberta .....	...	...	...	...	...	...	...
British Columbia	385	18,131	18,516	...	20,255	20,255	+ 1,739	
TOTAL	1,979	289,416	291,395	862	215,481	216,343	- 75,052	

Table 26 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL AREAS, 1937-1940

	P.E.I.	N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and Br. Columbia	CANADA
(tons)						
<u>1 9 3 7</u>						
Furnace charges	358,425	33,087	878,234	68,599	1,338,345	
Manufacturing material	337	118,959	178,306	36,059	333,661	
Industrial fuel	38,900	50,585	226,758	11,145	327,338	
Available for domestic use (by difference)	60,457	275,198	761,294	76,549	1,173,498	
APPARENT CONSUMPTION	458,119	477,829	2,044,592	192,352	3,172,892	

Table 26 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL AREAS, 1937-1940

	P.E.I., N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and Br. Columbia	CANADA
	(tons)				
<u>1 9 3 8</u>					
Furnace charges	273,671	25,190	719,307	74,842	1,093,010
Manufacturing material	377	112,642	135,774	46,293	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	448,704	1,691,839	199,476	2,700,176
<u>1 9 3 9</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 domestic use(by difference)	53,543	304,361	890,289	67,219	1,315,412
APPARENT CONSUMPTION	398,790	500,502	2,011,859	207,231	3,118,382
<u>1 9 4 0</u>					
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 domestic use(by difference)	78,606	367,361	896,279	65,625	1,407,871
APPARENT CONSUMPTION	584,966	608,280	2,455,112	236,186	3,884,544

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 shipment of coke.
 4. Consumption figures for 1941 are not yet available.

Table 27 - CONSUMPTION OF COKE AS INDUSTRIAL FUEL IN THE MANUFACTURING AND MINING INDUSTRIES, 1938-1940

Areas	1 9 3 8	1 9 3 9	1 9 4 0
	(tons)		
Maritime Provinces	23,501	31,829	34,302
Quebec	43,215	47,451	52,108
Ontario	218,158	218,303	249,941
Western provinces	10,010	11,584	21,899
CANADA	294,884	309,167	358,250

Table 28 - COKE CHARGED TO BLAST FURNACES AND FOUNDRY CUPOLAS, ETC., 1938-1940

Areas	1 9 3 8	1 9 3 9	1 9 4 0
	(tons)		
Maritime Provinces	273,671	313,050	471,938
Quebec	25,190	25,270	32,710
Ontario	719,307	769,688	1,151,805
Western provinces	74,842	73,958	89,852
CANADA	1,093,010	1,181,966	1,746,305

Table 29 - COKE USED AS A MATERIAL(X) IN MANUFACTURING(except charges to blast furnaces, etc.) 1938-1940

Areas	1 9 3 8	1 9 3 9	1 9 4 0
	(tons)		
Maritime Provinces	377	368	120
Quebec	112,642	123,420	156,101
Ontario	135,774	133,579	157,087
Western provinces	46,293	54,470	58,810
CANADA	295,086	311,837	372,118

(X) In making carbon electrodes, water gas, artificial abrasives, etc.

Table 30 - SALES(1) OF PETROLEUM COKE IN CANADA FOR FUEL PURPOSES, 1938-1941 (From "Petroleum Fuels in Canada" issued by the Bureau of Mines, Ottawa)

Areas and Year	Fuel for domestic and industrial heating(2)	(tons)	Inventory on December 31, including stocks at refineries
1938	52,351	94,040	
1939	36,949	147,836	
1940	44,392	183,579	
1941 - Maritimes	467	...	
Quebec	500	56	
Ontario	36,704	3,498	
Western provinces	1,479	431	
CANADIAN	37,846	...	
IMPORTED	1,304	...	
TOTAL FOR 1941	39,150	3,985	

(1) As reported by coal dealers, distributors and importers.

(2) Consisting mostly of amounts used as fuel by refineries.

Table 31 - PRODUCTION AND SALES OF MANUFACTURED GAS, 1930-1941

Year	From by-product and gas plants			Production of still gas from petroleum re- fineries	
	Production (xx)	SALES			
		Quantity	Income from sales		
	M cu. ft.	M cu. ft.	\$	M cu. ft.	
1930	35,927,532	17,713,477	13,471,629	3,529,319	
1931	30,542,961	17,111,432	13,010,733	5,161,905	
1932	27,264,587	17,083,631	12,895,039	3,836,413	
1933	29,125,295	15,893,248	11,839,345	3,505,405	
1934	40,125,201	15,409,927	15,766,750	3,772,746	
1935	39,721,010	15,398,952	15,358,572	5,154,885	
1936	44,345,358	15,321,832	15,163,664	6,083,549	
1937	46,009,633	15,289,839	14,732,531	6,199,110	
1938	42,932,721	15,198,068	15,001,142	6,486,618	
1939	41,632,773	14,936,102	14,562,246	7,802,666	
1940	55,112,521	15,392,723	14,803,049	8,706,834	
1931	57,728,803	16,931,434	15,888,723	9,971,268	

(xx) Does not include blast furnace gas and producer gas which are recovered and used by the producers but for which no records are available.

Table 32 - PRODUCTION OF NATURAL GAS, BY PROVINCES, 1940 and 1941 (x) (Preliminary)

Province	1 9 4 0		1 9 4 1	
	M cu. ft.	Value	M cu. ft.	Value
		\$		\$
New Brunswick	616,041	300,543	610,393	299,494
Ontario	13,053,403	7,745,834	12,131,895	7,279,137
Manitoba	600	180	...	...
Saskatchewan	100,773	30,232	105,328	31,598
Alberta	27,459,808	4,923,469	26,365,770	4,745,838
Northwest Territories	1,500	335	...	...
TOTAL	41,232,125	13,000,593	39,213,386	12,356,067

Table 33 - SALES OF MANUFACTURED GAS, NUMBER OF CUSTOMERS AND MILEAGE OF PIPE LINES, 1941

Areas	Number of customers	No. of active meters	GAS		Mileage of pipe lines	Approximate population served by mains
			M cu.ft.	\$		
Eastern provinces	205,141	232,269	5,276,970	5,737,406	1,000	1,633,000
Ontario	220,432	208,510	9,472,855	7,951,774	2,041	1,309,219
Western provinces	68,360	72,510	2,179,609	2,199,543	865	571,050
TOTAL	493,933	513,489	16,931,434	15,888,723	3,906	3,513,269

Table 34 - PRODUCTION OF CHUDE COAL TAR, BY PROVINCES, 1939-1941

Province	1939	1940	1941	(Imperial gallons)
Nova Scotia and New Brunswick	5,781,879	8,447,592	8,022,594	
Quebec	3,581,790	3,746,100	4,019,940	
Ontario	16,370,250	19,241,763	19,732,520	
Manitoba	483,315	400,764	473,305	
British Columbia	859,836	981,676	1,126,938	
CANADA	27,077,070	32,817,795	33,375,297	

Table 35 - PRODUCTION, IMPORTS AND EXPORTS OF AMMONIUM SULPHATE, 1930 - 1941

Year	PRODUCTION		IMPORTS		EXPORTS	
	Tons	\$	Tons	\$	Tons	\$
1930	23,893	936,417	3,423	137,607	12,010	386,710
1931	28,354	706,197	12,830	369,254	5,627	167,477
1932	57,770	983,077	13,811	280,026	38,741	701,707
1933	82,534	1,437,749	4,156	100,415	62,383	1,081,392
1934	76,292	1,398,251	11,046	245,372	57,704	1,144,184
1935	67,362	1,473,675	4,280	94,222	45,055	977,552
1936	98,483	1,883,086	5,729	148,956	83,835	1,802,818
1937	87,621	1,782,364	3,230	82,440	56,485	1,212,258
1938	119,520	2,590,994	5,911	156,540	77,191	1,697,204
1939	129,865	3,107,977	3,217	94,854	109,260	2,508,364
1940	115,679	3,217,268	355	13,506	72,485	2,172,049
1941	98,662	3,156,880	57	4,951	59,480	2,147,613

(x) Includes output of synthetic ammonium sulphate in the Fertilizer Industry.

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