

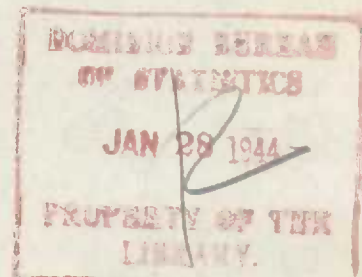
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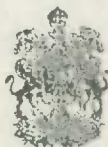
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CANADA
DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
CENSUS OF INDUSTRY
MINING, METALLURGICAL & CHEMICAL BRANCH



THE COKE AND GAS INDUSTRY
IN
CANADA
1942



OTTAWA
1944

Price 25 cents

CANADA
DEPARTMENT OF TRADE AND COMMERCE
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THE CORP AND ITS INDUSTRIES
IN
CANADA
1942



Dominion Statistician:
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THE COKE AND GAS INDUSTRY, 1942

Production from coke plants and from illuminating and fuel gas plants in Canada during 1942 was valued at \$55,788,491. This output was 9.7 per cent above the \$50,818,720 of the previous year and set a new record for the industry. Output for the year under review included 3,265,549 tons of coke valued at \$27,711,673 at the works, 68,839,292 M cubic feet of gas of which 67,755,949 M cubic feet valued at \$23,466,041 were sold or used, and by-products valued at \$4,610,777.

Twenty-eight coke and gas works operated in 1942, including 10 by-product 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 3,265,549 tons in 1942 compared with 3,145,715 tons in 1941 and 3,015,394 tons in 1940. By-product and bee-hive ovens produced 2,966,983 tons of coke in 1942 and gas retorts made 298,566 tons. In addition, 75,411 tons of petroleum coke were recovered in petroleum refineries and 17,234 tons of pitch coke in coal tar distillation plants.

Data on the distribution of coke (except petroleum and pitch coke) by the producers show that 176,865 tons were sold direct to domestic consumers; 1,744,106 tons were used in metallurgical works operated by the producing companies; 275,790 tons were used by coke plants as fuel or to make water gas; 77,508 tons were sold direct to consumers for foundry and other uses (other than domestic); 387,749 tons were sold to dealers for resale, and 42,374 tons were sold for export. The total distribution was 3,549,078 tons, including about 132,000 tons withdrawn from producers' stocks during the year, and imports by the producers of 168,000 tons. Total stocks of coke in the hands of producers amounted to 83,469 tons at the end of 1942.

Imports into Canada of coke made from coal increased to 719,910 tons in 1942 from 614,417 tons in 1941, and exports increased to 44,764 tons from 40,167 tons. Imports of petroleum coke during this period rose to 312,917 tons from 255,852 tons and exports (including re-exports of imported coke) declined to 53,080 tons from 67,738 tons.

Manufactured gas, sold and used, amounted to 67,775,949 M cubic feet in 1942, including 51,145,019 M cubic feet from by-product ovens and 16,612,930 M cubic feet from gas plants. Sales of gas by the producers totalled 18,913,230 M cubic feet, of which 11,041,002 M cubic feet were from by-product ovens and 7,872,228 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 49,962 M cubic feet of (Pintsch) oil gas for lighting railway cars, 7,843,715 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 1942 was 497,903; the number of active meters was 521,793; the length of distributing mains was 3,870 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, 1942

Province	Coke Plants	Gas Plants			T O T A L
	By-product and bee-hive ovens	Retort coal gas only	Water gas only	Retort coal gas and water gas	
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 (x)	7	6	5	28

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

Table 2 - SIZE OF ESTABLISHMENTS, ACCORDING TO QUANTITY OF COAL AND COKE USED FOR GAS-MAKING, 1942

Coal or coke used	Number of plants	Total coal or coke for gas making
Less than 1,000 tons	3	2,229
1,001 - 5,000	8	17,035
5,001 - 15,000	5	54,193
15,001 - 100,000	3	185,523
100,001 - 500,000	5	1,042,570
Over 500,000	4	3,179,688
TOTAL	28	4,481,238

Table 3 - PRINCIPAL STATISTICS OF THE COKE AND GAS INDUSTRY, 1938-1942

Year	Number of companies (x)	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 \$
COKE (By-product and Bee-hive)							
1938	13	56,952,033	2,227	3,351,614	2,181,609	14,068,917	29,583,633
1939	13	58,691,213	2,327	3,392,900	2,364,768	14,102,330	29,239,336
1940	13	58,666,525	2,421	3,829,937	2,974,347	18,143,915	36,310,384
1941	13	59,445,268	2,488	4,073,482	3,611,421	20,505,807	39,999,164
1942	13	59,860,146	2,536	4,462,503	3,839,802	23,083,413	43,858,560
GAS (Retort and Water Gas)							
1938	20	36,385,539	1,703	2,447,388	660,711	2,534,726	10,137,897
1939	20	36,234,551	1,716	2,453,814	1,065,625	2,624,115	9,870,884
1940	18	38,081,758	1,674	2,543,528	994,587	2,893,414	10,363,276
1941	18	38,449,081	1,802	2,453,621	950,169	3,402,071	10,819,556
1942	18	38,021,944	1,865	2,819,400	1,063,414	4,211,087	11,929,931
TOTAL - Coke and Gas							
1938	33	93,337,572	3,930	5,799,502	2,842,320	16,603,643	39,721,530
1939	33	94,925,764	4,043	5,851,614	3,430,393	16,726,445	39,029,570
1940	31	96,748,283	4,095	6,376,465	3,968,934	21,037,329	46,673,660
1941	31	97,894,349	4,290	6,532,103	4,561,590	23,907,878	50,819,720
1942	31	97,882,090	4,401	7,281,903	4,873,216	27,294,505	55,738,491

(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, 1941 and 1942

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 \$
1941							
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	873,819	2,885,975
CANADA	31	97,894,349	4,290	6,532,103	4,561,590	23,907,878	50,819,720

Table 4 - PRINCIPAL STATISTICS, BY PROVINCES, 1941 and 1942 (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>1942</u>							
Nova Scotia and New Brunswick	3	10,958,786	451	722,979	631,859	4,147,954	7,177,270
Quebec	5	11,559,154	695	1,310,575	1,179,702	5,179,517	12,424,234
Ontario	16	55,075,741	2,641	4,204,798	2,661,532	15,847,543	31,073,807
Manitoba and Alberta	3	6,189,403	218	323,926	110,668	938,530	1,734,165
British Columbia ...	4	14,099,006	396	719,625	289,455	1,180,961	3,379,015
CANADA	31	97,882,090	4,401	7,281,903	4,873,216	27,294,505	55,788,491

Table 5 - CAPITAL EMPLOYED, BY CLASSES AND BY PROVINCES, 1941 and 1942

Province	Present value of land, buildings, fixtures, and machinery	Value of Inventories		Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.)	TOTAL CAPITAL EMPLOYED
		Raw materials and other supplies on hand and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
<u>1941</u>					
Nova Scotia and New Brunswick	6,855,017	2,075,685	500,624	1,146,164	10,577,490
Quebec	8,719,973	1,719,858	152,585	854,171	11,446,587
Ontario	43,259,845	7,196,729	507,263	4,454,533	55,418,370
Manitoba and Alberta	6,206,560	79,138	17,452	361,891	6,665,041
British Columbia ...	13,136,698	210,478	125,419	314,266	13,786,861
CANADA	78,178,093	11,281,888	1,303,343	7,131,025	97,894,349
<u>1942</u>					
Nova Scotia and New Brunswick	6,930,467	2,575,332	300,101	1,152,886	10,958,786
Quebec	8,521,006	2,095,293	124,953	817,902	11,559,154
Ontario	43,627,823	7,737,528	525,700	3,184,690	55,075,741
Manitoba and Alberta	5,712,275	93,359	14,003	369,766	6,189,403
British Columbia ...	13,576,670	196,001	44,511	281,824	14,099,006
CANADA	78,368,241	12,697,513	1,009,268	5,807,068	97,882,090

Table 6 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1941 and 1942

Province	Average number of employees					Salaries	Wages	TOTAL SALARIES and WAGES
	On Salaries		On Wages		TOTAL			
	Male	Female	Male	Female				
						\$	\$	\$
<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
<u>1942</u>								
Nova Scotia and New Brunswick	44	12	395	...	451	75,314	647,665	722,979
Quebec	206	54	435	...	695	601,561	709,014	1,310,575
Ontario	679	243	1,719	...	2,641	1,492,423	2,712,375	4,204,798
Manitoba and Alberta	57	27	134	...	218	119,020	204,906	323,926
British Columbia ...	64	7	325	...	396	156,803	562,822	719,625
CANADA	1,050	343	3,008	...	4,401	2,445,121	4,836,782	7,281,903

Table 7 - WAGE-EARNERS, BY MONTHS, 1941 and 1942 (Number on pay-roll on the last day of each month)

Month	1 9 4 1			1 9 4 2		
	Male	Female	TOTAL	Male	Female	TOTAL
January	3,022	...	3,022	2,945	...	2,945
February	2,995	...	2,995	2,933	...	2,933
March	2,996	...	2,996	2,953	...	2,953
April	3,041	...	3,061	2,985	...	2,985
May	3,095	...	3,095	3,033	...	3,033
June	3,092	...	3,092	3,060	...	3,060
July	3,211	...	3,211	3,077	...	3,077
August	3,238	...	3,238	3,052	...	3,052
September	3,225	...	3,225	3,031	...	3,031
October	3,191	...	3,191	2,994	...	2,994
November	3,103	...	3,103	3,005	...	3,005
December	3,087	...	3,087	3,018	...	3,018
AVERAGE	3,102	...	3,102	3,008	...	3,008

Table 8 - HOURS WORKED PER WEEK BY WAGE-EARNERS, 1941 and 1942 (In one week of highest employment; overtime included)

Hours worked per week	Number of Wage-earners		Hours worked per week	Number of Wage-earners	
	1941	1942		1941	1942
30 hours or less	54	121	51-54 hours	273	293
31-43 hours	172	287	55 hours	51	27
44 hours	315	286	56-64 hours	591	442
45-47 hours	57	124	65 hours and over	193	65
48 hours	1,218	1,433	Total	3,121	3,215
49-50 hours	197	137	Total wages paid during selected week.. \$	92,457	98,355

Table 9 - FUEL AND ELECTRICITY USED, 1941 and 1942

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 1		1 9 4 2	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal - Canadian	ton	7,339	35,102	14,513	68,089
Imported	ton	15,500	92,429	16,169	105,618
Lignite coal - Canadian	ton	102	306	157	494
Coke	ton	152,811	1,013,442	156,112	1,137,247
Gasoline	Imp. gal.	23,188	4,678	47,704	12,119
Fuel oil	Imp. gal.	200,655	10,949	269,641	11,419
Wood	cord	121	802	...	...
Gas—Manufactured (all made in users' works) ..	M cu.ft.	22,935,971	3,121,480	25,197,167	3,147,426
Natural	M cu.ft.	3,118	1,007	...	...
Other fuel .....	...	...	28,821	...	121,565
Electricity purchased	K.W.H.	38,305,888	252,474	50,936,869	268,301
TOTAL .....	...	...	4,561,590	...	4,873,216

Table 10 - POWER EQUIPMENT, 1941 and 1942

	Ordinarily in Use		In Reserve or Idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
<u>1 9 4 1</u>				
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 primary units shown above	235	6,207	...	...
Stationary boilers	78	16,973	42	15,161
<u>1 9 4 2</u>				
Steam engines and turbines	181	9,813	104	6,086
Diesel engines .....	...	...	1	40
Gasoline, gas and oil engines (except diesel) ..	8	149	8	272
Hydraulic turbines or water wheels .....	...	...	1	6
Total Primary	189	9,962	114	6,404
Electric motors run by purchased power (except motor generator sets)	741	14,260	135	3,772
TOTAL	930	24,222	249	10,176
Electric motors run by primary units shown above	238	6,296	...	...
Stationary boilers	82	18,279	42	15,161
Motor generator sets	1	15	...	...

Table 11 - MATERIALS USED IN COKE AND GAS PLANTS, 1941 and 1942

Materials	1 9 4 1		1 9 4 2	
	Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal carbonized in ovens or retorts -				
(a) Canadian	1,434,215	6,237,332	1,487,994	6,835,656
(b) Imported	2,884,107	15,905,353	2,979,867	17,617,276
Bituminous coal for making water gas -				
Imported	3,522	34,463	4,030	35,985
Coke for gas-making -				
(a) Purchased	7,447	75,197	9,356	97,281
(b) Companies' own make	84,331	630,176	128,777	1,104,075
Oil used for enriching water gas	5,204,117	329,936	7,772,275	593,015
Absorbing and wash oil	255,563	30,926	276,019	36,317
Caustic soda	1,592,879	33,462	2,014,986	39,042
Lime	2,613	27,935	2,517	27,427
Water .....	...	18,836	...	24,325
Iron oxide	8,574	36,480	4,600	33,790
Sulphuric acid, 66° Be	47,693,474	473,238	64,114,915	493,332
All other materials .....	...	173,994	...	356,984
TOTAL COST .....	...	23,907,378	...	27,294,505

Table 12 - MATERIALS USED IN COKE AND GAS PLANTS, BY AREAS, 1942

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	1,051,828	5,109,480	...	...	436,166	2,726,176
(b) Imported	ton	502,417	3,302,411	2,477,450	14,314,865	...	...
Bituminous coal for making water gas -							
Imported	ton	209	2,080	3,821	33,905	...	...
Coke for gas-making -							
(a) Purchased	ton	927	9,705	6,859	73,305	1,570	14,271
(b) Companies' own make ...	ton	42,597	418,944	49,824	429,793	36,356	255,338
Oil used for enriching water gas	Imp.gal.	448,313	43,532	6,408,965	477,033	914,997	72,450
Absorbing and wash oil	Imp.gal.	137,869	19,734	125,009	15,549	13,141	1,034
Caustic soda	pound	853,294	21,634	1,161,592	17,408	...	...
Lime	ton	2,166	24,167	351	3,260	...	...
Water .....	...	...	9,520	...	3,499	...	11,306
Iron oxide	ton	1,966	10,796	2,422	19,676	212	3,318
Sulphuric acid, 66° Bé	pound	29,851,541	218,142	34,263,274	275,190	...	...
All other materials .....	...	...	137,326	...	184,060	...	35,598
TOTAL COST .....	...	...	9,327,471	...	15,847,543	...	2,119,491

Table 13 - PRODUCTS MADE IN COKE AND GAS PLANTS, 1941 and 1942

		1 9 4 1		1 9 4 2	
Products	Unit of measure	Quantity	Gross selling value at works	Quantity	Gross selling value at works
			\$		\$
<u>Gas Made -</u>					
Retort coal gas	M cu.ft.	5,662,989	...	5,131,152	...
Coke oven gas	M cu.ft.	40,143,240	...	43,228,790	...
Producer gas	M cu.ft.	9,415,880	...	16,171,807	...
Water gas	M cu.ft.	2,498,003	...	4,248,453	...
Propane gas	M cu.ft.	8,691	...	59,090	...
TOTAL GAS MADE	M cu.ft.	57,728,803	...	68,839,292	...
<u>Gas Sold or Used -</u>					
Gas sold	M cu.ft.	16,931,434	15,888,723	18,913,230	17,316,135
Gas used in own coke or gas plants ...	M cu.ft.	23,499,119	3,052,823	25,212,211	3,405,110
Gas used in associated metallurgical works	M cu.ft.	13,352,389	1,636,603	21,840,825	1,837,253
Gas otherwise accounted for but not sold	M cu.ft.	2,335,672	122,761	340,132	81,409
Gas not accounted for	M cu.ft.	1,368,490	856,218	1,449,551	826,134
TOTAL GAS SOLD OR USED	M cu.ft.	57,477,104	21,557,128	67,755,949	23,466,041
<u>Coke Made -</u>					
Coke from by-product or bee-hive ovens	ton	2,680,771	21,808,129	2,795,658	24,284,665
Coke from gas retorts	ton	280,728	2,362,880	284,314	2,668,673
Coke breeze from by-product ovens	ton	166,853	676,466	171,325	719,400
Coke breeze from gas retorts	ton	17,363	40,548	14,252	38,935
TOTAL COKE	ton	3,145,715	24,888,023	3,265,549	27,711,673
<u>Other Products -</u>					
Tar	Imp.gal.	33,375,297	1,902,394	34,286,913	1,994,224
Ammonia liquor	lb. NH ₃	1,922,682	19,210	1,713,085	18,079
Ammonium sulphate	pound	70,786,432	1,036,095	72,398,424	1,055,868
Benzol	Imp.gal.	6,031,137	723,608	5,999,085	797,257
Tolmol, xylol and naphthalene	Imp.gal.	1,990,910	686,649	2,004,006	708,949
All other products .....	...	...	5,613	...	36,400
GRAND TOTAL .....	...	...	50,818,720	...	55,788,491

Table 14 - PRODUCTS MADE IN COKE AND GAS PLANTS, BY AREAS, 1942

Table 14 - PRODUCTS MADE IN COKE AND GAS PLANTS, BY AREA, 1942							
Products	Unit of measure	Eastern Provinces		Ontario		Western Provinces	
		Quantity	Gross sell-	Quantity	Gross sell-	Quantity	Gross sell-
			ing value at works \$		ing value at works \$		ing value at works \$
GAS MADE -							
Retort coal gas	M cu.ft.	538,552	...	4,411,072	...	137,513	...
Coke oven gas	M cu.ft.	16,300,774	...	24,018,805	...	2,909,211	...
Producer gas	M cu.ft.	13,447,797	...	...	...	2,724,010	...
Water gas	M cu.ft.	247,488	...	3,777,073	...	228,892	...
Propane gas	M cu.ft.	...	...	59,090	...	...	...
Total Gas Made	M cu.ft.	30,523,611	...	32,268,040	...	6,049,631	...
GAS SOLD OR USED -							
Gas sold	M cu.ft.	5,683,707	6,096,712	10,722,202	8,764,113	2,507,321	2,455,310
Gas used in own plants.	M cu.ft.	10,858,455	1,514,971	11,250,604	1,609,590	3,103,152	280,559
Gas used in associated metallurgical works ..	M cu.ft.	13,440,265	733,797	8,253,960	1,091,156	146,000	7,300
Gas otherwise accounted for but not sold	M cu.ft.	4,363	3,477	335,696	77,859	73	73
Gas not accounted for..	M cu.ft.	509,623	189,287	643,693	536,446	290,235	99,801
Total Gas Sold or Used..	M cu.ft.	30,497,013	8,543,844	31,215,155	12,079,154	6,046,781	2,843,043
COKE MADE -							
Coke from by-product or bee-hive ovens	ton	960,437	8,069,757	1,549,996	14,176,474	285,223	2,038,434
Coke from gas retorts..	ton	72,055	731,920	204,546	1,369,934	7,713	66,919
Coke breeze from by-product ovens	ton	92,071	440,959	74,509	261,359	4,745	17,082
Coke breeze from gas retorts	ton	3,234	15,398	10,540	20,693	472	2,839
Total Coke Made	ton	1,127,797	9,258,034	1,839,593	16,528,365	298,159	2,125,274
OTHER PRODUCTS -							
Tar	Imp.gal.	12,630,650	605,447	19,713,889	1,265,942	1,942,364	122,835
Other products .....	...	...	1,194,179	...	1,400,346	...	22,028
GRAND TOTAL .....	...	...	19,601,504	...	31,073,807	...	5,113,180

Table 15 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, 1932-1942

Year	By-product and bee-hive coke		Gas retort coke		T O T A L	
	Quantity	Selling value at works \$	Quantity	Selling value at works \$	Quantity	Selling value at works \$
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	1,962,844	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
1942	2,966,983	25,004,065	298,566	2,707,608	3,265,549	27,711,673

Table 16 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, BY PROVINCES, 1932-1942

Year	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta and British Columbia		C A N A D A	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$		\$		\$
1932	403,330	3,115,737	1,087,122	7,876,241	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	195,054	1,254,015	2,257,604	15,861,159
1936	775,275	4,655,468	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
1942	1,127,797	9,258,034	1,839,593	16,328,365	298,159	2,125,274	3,265,549	27,711,673

Table 17 - BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE SOLD AND USED BY PRODUCERS DURING 1941 and 1942 and STOCKS ON HAND AT END OF YEAR

	Coke	Breeze	TOTAL
		(tons)	
<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
<u>1 9 4 2</u>			
Coke actually used by reporting companies -			
In coke or gas plant	244,457	31,333	275,790
In associated works	1,683,955	60,151	1,744,106
Coke sold -			
(a) Direct to consumers -			
For domestic use	159,588	17,277	176,865
For other uses	844,886	77,308	922,194
(b) To dealers for resale	387,644	105	387,749
(c) For export	38,147	4,227	42,374
TOTAL SOLD OR USED	3,358,677	190,401	3,549,078
Stocks on hand at end of year	74,099	9,370	83,469

NOTE: The above figures on consumption and sales in 1942 include 168,000 tons of coke which was imported by the Canadian producers.

Table 18 - COAL CARBONIZED, COKE PRODUCED, AND DISTRIBUTION OF COKE BY MANUFACTURERS, 1942

	Bee-hive and by-product plants tons	Gas retort plants tons	Total for coke producing plants tons
Coal carbonized -			
Canadian	1,383,171	104,823	1,487,994
Imported	2,624,343	355,524	2,979,867
TOTAL	4,007,514	460,347	4,467,861
Coke made -			
Coke	2,795,658	284,314	3,079,972
Breeze	171,325	14,252	185,577
TOTAL	2,966,983	298,566	3,265,549
Coke yield	74.3	64.8	73.1
Coke used in coke or gas plants -			
Coke	85,327	159,130	244,457
Breeze	29,067	2,266	31,333
TOTAL	114,394	161,396	275,790
Coke used in associated metallurgical works -			
Coke	1,683,783	172	1,683,955
Breeze	60,151	...	60,151
TOTAL	1,743,934	172	1,744,106
Coke sold direct to consumers for domestic use -			
Coke	118,277	41,311	159,588
Breeze	5,030	12,247	17,277
TOTAL	123,307	53,558	176,865
Coke sold direct to consumers for other uses -			
Coke	790,891	53,995	844,886
Breeze	76,714	594	77,308
TOTAL	867,605	54,589	922,194
Coke sold to dealers for resale -			
Coke	337,823	49,821	387,644
Breeze	105	...	105
TOTAL	337,928	49,821	387,749
Coke sold for export	41,604	770	42,374
TOTAL COKE SOLD AND USED -			
Coke	3,053,478	305,199	3,358,677
Breeze	175,294	15,107	190,401
TOTAL	3,228,772	320,306	3,549,078
Stocks on December 31, 1942 -			
Coke	34,131	39,368	74,099
Breeze	9,142	228	9,370
TOTAL	43,273	40,196	83,469

NOTE: The above figures on consumption and sales include 168,000 tons of imported coke.

Table 19 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, BY MONTHS, 1933-1942 (In 000's of short tons)

Month	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942
January	150	195	200	212	218	224	203	257	268	278
February	128	169	181	198	198	199	177	225	240	253
March	139	192	198	202	221	218	191	239	266	287
April	122	185	180	190	214	203	184	237	253	270
May	134	185	185	200	218	208	196	252	260	277
June	136	179	180	199	210	192	189	249	248	270
July	145	183	176	193	212	183	190	259	259	275
August	150	189	175	191	214	182	193	257	266	274
September	156	188	180	189	208	184	188	252	263	269
October	173	204	205	212	218	184	226	263	276	278
November	174	199	206	208	217	180	229	258	270	269
December	166	175	192	211	222	190	244	267	277	265
TOTAL	1,772	2,243	2,258	2,405	2,570	2,352	2,410	3,015	3,146	3,265
Monthly average	148	187	188	200	214	196	201	251	262	272

Table 20 - BITUMINOUS COAL CHARGED TO COKE OVENS AND GAS RETORTS, 1932-1942

Year	Bee-hive and by-product ovens		Gas retorts		T O T A L
	Canadian	Imported	Canadian	Imported	
	(tons)				
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	344,736(x)	4,120,949
1941	1,352,112	2,506,770	82,103	380,859(x)	4,321,844
1942	1,383,171	2,624,343	104,823	359,554(x)	4,471,891

(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; 3,522 tons in 1941 and 4,030 tons in 1942.

Table 21 - BITUMINOUS COAL CHARGED TO COKE OVENS AND GAS RETORTS, BY PROVINCES, 1932-1942

Year	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta and British Columbia		T O T A L
	Canadian	Imported	Canadian	Imported	Canadian	Imported	
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	1,973,133	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	5,200	1,858,798	335,270	11,802	3,228,014
1939	753,972	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
1942	1,051,828	502,626	...	2,481,271	436,166	...	4,471,891

Table 22 - PRODUCTION OF PETROLEUM COKE, 1932-1942

Year	Made for Own Use		Made for Sale		T O T A L	
	Tons	Selling value at works \$	Tons	Selling value at works \$	Tons	Selling value at works \$
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
1942	8,950	63,411	64,461	464,326	73,411	527,737

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 and Pitch Coke) IN CANADA, 1939-1942

		Nova Scotia and New Brunswick	Quebec	Ontario	Man., Sask., Alberta and Br. Columbia	CANADA
		(tons)				
1 9 3 9						
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
Pitch coke	Tons	5,508	3,005	6,035	692	15,238
	\$	34,660	28,502	36,084	8,123	107,369
TOTAL	Tons	396,983	418,045	1,444,737	231,900	2,491,665
	\$	2,644,189	3,020,044	10,111,213	1,484,629	17,260,075
1 9 4 0						
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
Pitch coke	Tons	6,482	1,891	6,349	472	15,194
	\$	45,374	17,927	42,248	5,664	111,213
TOTAL	Tons	612,940	439,731	1,800,588	245,663	3,098,922
	\$	4,153,789	3,506,035	13,299,057	1,531,783	22,490,664
1 9 4 1						
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
Pitch coke	Tons	8,829	1,192	8,798	570	19,389
	\$	59,475	11,290	64,053	7,284	142,102
TOTAL	Tons	576,831	466,358	1,906,115	286,640	3,235,944
	\$	4,031,630	4,096,309	15,513,931	1,881,593	25,523,463
1 9 4 2						
Coke and gas industry	Tons	639,698	488,099	1,839,593	298,159	3,265,549
	\$	4,542,247	4,715,787	16,328,365	2,125,274	27,711,673
Petroleum refining industry	Tons	195	...	71,486	1,730	73,411
	\$	491	...	517,386	9,860	527,737
Pitch coke	Tons	5,975	807	9,548	904	17,234
	\$	44,427	5,878	80,117	6,767	137,189
TOTAL	Tons	645,868	488,906	1,920,627	300,793	3,356,194
	\$	4,587,165	4,721,665	16,925,868	2,141,901	28,376,599

Table 24 - APPARENT CONSUMPTION OF COKE (including Petroleum and Pitch Coke) IN CANADA, BY PROVINCES, 1939-1942

	P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and Br. Columbia	CANADA
			(tons)		
Apparent consumption - 1939	396,933	418,045	1,444,737	251,900	2,491,665
1940	612,940	439,731	1,800,588	245,663	3,098,922
<u>1 9 4 1</u>					
Production	576,831	466,358	1,906,115	286,640	3,235,944
Add - Decline 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
Deduct - Increase in producers' stocks	...	...	...	...	...
Add - Imports entered for consumption.	2,304	138,893	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	87,952
Apparent consumption	597,817	612,146	2,609,137	272,927	4,092,027

<u>1 9 4 2</u>					
Production	645,868	488,906	1,920,627	300,793	3,356,194
Add decline or deduct increase in producers' stocks	-1,713	+10,022	+46,573	+4,581	+59,463
	644,155	498,928	1,967,200	305,374	3,415,657
Add - Imports entered for consumption.	111	204,053	856,637	27,511	1,088,312
	644,266	702,981	2,823,837	332,885	4,503,969
Deduct - Exports and re-exports	2,388	1,476	52,193	41,789	97,846
Apparent consumption	641,878	701,505	2,771,644	291,096	4,406,123

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 1941 and 1942

	<u>1 9 4 1</u>			<u>1 9 4 2</u>			Difference
	Petroleum refineries	Coke and gas plants	TOTAL	Petroleum refineries	Coke and gas plants	TOTAL	1942 from 1941
			(tons)				
Nova Scotia ....	...	9,639	9,639	195	11,210	11,405	+ 1,766
New Brunswick ..	...	53	53	...	...	...	- 53
Quebec	56	26,099	26,155	...	16,133	16,133	- 10,022
Ontario	696	157,201	157,897	71,486	39,838	111,324	- 46,573
Manitoba .....	...	2,234	2,234	...	1,445	1,445	- 789
Saskatchewan ...	110	...	110	1,707	...	1,707	+ 1,597
Alberta .....	...	...	...	23	...	23	+ 23
British Columbia	...	20,255	20,255	...	14,843	14,843	- 5,412
TOTAL	862	215,481	216,343	73,411	83,469	156,880	- 59,463

NOTE: No data for producers' stocks of pitch coke.

Table 26 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL AREAS, 1938-1941

	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 or other 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

Table 26 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL AREAS, 1933-1941 (Concluded)

	P.E.I. N.S. and N.B.	Quebec	Ontario	Man., Sask., Alberta and Br. Columbia	CANADA
			(tons)		
<u>1 9 3 3</u>					
Furnace charges	313,050	25,270	769,688	73,958	1,181,966
Manufacturing material	368	125,420	133,579	54,470	311,837
Industrial fuel	31,829	47,451	218,303	11,584	309,167
Available for domestic or other use (by difference)	53,543	304,361	890,239	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	39,852	1,746,305
Manufacturing material	120	156,101	157,037	58,810	372,118
Industrial fuel	34,302	52,108	249,941	21,899	358,250
Available for domestic or other use (by difference)	78,606	367,331	896,279	65,625	1,407,871
APPARENT CONSUMPTION	584,966	608,230	2,455,112	236,136	3,894,544
<u>1 9 4 1</u>					
Furnace charges	450,126	44,190	1,359,509	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 domestic or other use (by difference)	118,594	269,235	806,179	93,227	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 domestic or other 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 1942 are not yet available.

Table 27 - SALES(1) OF PETROLEUM COKE IN CANADA FOR FUEL PURPOSES, 1939-1942 (From "Petroleum Fuels in Canada" issued by the Bureau of Mines, Ottawa)

Areas and Year	Fuel for domestic and industrial heating (2)	Inventory on December 31, including stocks at refineries
	Tons	Tons
1939	36,949	147,836
1940	44,392	183,579
1941	39,150	3,985
1942 - Maritimes	362	...
Quebec	10	...
Ontario	26,614	1,658
Western provinces	1,916	328
CANADIAN	28,802	1,986
IMPORTED	678	...
TOTAL FOR 1942	29,480	1,936

- (1) As reported by coal dealers, distributors and importers.
 (2) Consisting mostly of amounts used as fuel by refineries.

Table 28 - PRODUCTION AND SALES OF MANUFACTURED GAS, 1932-1942

Year	From by-product and gas plants			Production of still gas from petroleum refineries
	Production (x)	S A L E S		
		Quantity	Income from sales	
M cu.ft.	M cu.ft.	\$	M cu.ft.	
1932	27,264,537	17,083,631	12,395,039	3,836,413
1933	29,125,295	15,993,248	11,839,345	3,505,405
1934	40,125,201	15,409,927	15,763,750	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	41,652,773	14,956,102	14,562,246	7,802,666
1940	55,112,521	15,392,723	14,803,049	8,706,834
1941	57,728,803	16,931,434	15,338,723	9,971,268
1942	68,839,292	18,913,230	17,318,135	7,643,715

(x) 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 29 - PRODUCTION OF NATURAL GAS, BY PROVINCES, 1941 and 1942

Province	1 9 4 1		1 9 4 2	
	M cu.ft.	Value	M cu.ft.	Value
		\$		\$
New Brunswick	653,542	317,437	619,380	299,688
Ontario	11,328,703	7,140,130	10,476,770	6,809,901
Manitoba .....	...	...	...	...
Saskatchewan	106,168	31,850	117,124	45,585
Alberta	30,905,440	5,175,364	34,482,585	6,146,146
Northwest Territories	1,500	335	1,500	335
TOTAL	43,495,353	12,665,116	45,697,359	13,301,655

Table 30 - SALES OF MANUFACTURED GAS, NUMBER OF CUSTOMERS AND MILEAGE OF PIPE LINES, 1942

Areas	Number of customers	No. of active meters	Gas Sales		Mileage of pipe lines	Approximate population served by mains
			M cu.ft.	\$		
Eastern provinces ...	212,562	232,126	5,685,707	6,096,712	1,004	1,698,000
Ontario	213,878	214,106	10,722,202	8,764,113	1,997	1,338,447
Western provinces ...	71,663	75,561	2,507,321	2,455,310	869	612,319
TOTAL	497,903	521,793	18,913,230	17,318,135	3,870	3,648,766

Table 31 - PRODUCTION OF CRUDE COAL TAR, BY PROVINCES, 1940-1942

Province	1 9 4 0		1 9 4 1		1 9 4 2	
			(Imperial gallons)			
Nova Scotia and New Brunswick	8,447,592		8,022,594		8,784,535	
Quebec	3,746,100		4,019,940		3,846,125	
Ontario	19,241,763		19,732,520		19,713,889	
Manitoba	400,764		473,305		492,323	
British Columbia	981,676		1,126,938		1,450,041	
CANADA	32,817,795		33,375,297		34,286,913	

Table 32 - PRODUCTION, IMPORTS AND EXPORTS OF AMMONIUM SULPHATE, 1932-1942

Year	Production(x)		Imports		Exports	
	Tons	\$	Tons	\$	Tons	\$
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	1,144,164
1935	67,562	1,473,675	4,280	94,222	45,055	977,552
1936	98,483	1,883,088	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
1942	118,796	3,776,372	5,044	185,608	79,236	2,908,266

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

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