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# THE COKE AND GAS INDUSTRY

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## NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: **Volume I** — The Primary Industries, including mining, forestry and fisheries; **Volume II** — Manufacturing; **Volume III** — Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries or provinces which they comprise.

Volume II consists of the following parts, the first two of which deal with manufacturing as a whole and the balance with the major manufacturing groups.

- I — General Review of the Manufacturing Industries, \$1.50
- II — The Manufacturing Industries of Canada, (7 sections, as follows:)
  - Section A. Summary for Canada, 25¢
  - Section B. Atlantic Provinces, 50¢
  - Section C. Quebec, 25¢
  - Section D. Ontario, 25¢
  - Section E. Prairie Provinces, 40¢
  - Section F. British Columbia, 25¢
  - Section G. The Manufacturing Industries of Canada, Regional Distribution, 75¢
- III — Foods and Beverages
- IV — Tobacco and Tobacco Products
- V — Rubber Products
- VI — Leather Products
- VII — Textile Mills
- VIII — Knitting Mills
- IX — Clothing
- X — Wood and Paper Products
- XI — Printing Trades
- XII — Iron and Steel Products
- XIII — Transportation Equipment
- XIV — Non-ferrous Metal Products
- XV — Electrical Apparatus and Supplies
- XVI — Non-metallic Mineral Products
- XVII — Products of Petroleum and Coal
- XVIII — Chemicals and Allied Products
- XIX — Miscellaneous Manufactures

The present report belongs in Part XVII, Products of Petroleum and Coal. It is punched to permit of filing in a ring binder along with others of the group. The reports in this group are:

- A — General Review, 25¢
- B — The Coke and Gas Industry, 25¢
- C — The Petroleum Products Industry, 25¢
- D — The Miscellaneous Products of the Petroleum and Coal Industry, 25¢

# THE COKE AND GAS INDUSTRY

1956

Production from coke and gas plants in Canada was valued at \$113,684,395 in 1956, an increase of 9 per cent over the \$103,891,182 reported for 1955. Output included 4,331,216 tons of coke valued at \$65,377,694 at the works, 78,499,961 M cubic feet of gas valued at \$34,381,265 and by-products valued at \$13,925,436.

Twenty-three coke and gas works operated in 1956, including 9 by-product plants, 7 retort coal and water gas plants and 7 plants which distributed propane through the regular gas mains. Twelve of these works were located in Ontario, 5 in Quebec, 4 in British Columbia, 1 in Nova Scotia and 1 in Manitoba. In addition to these producers, 1 company in Quebec and 1 in Ontario purchased gas to be distributed for domestic or commercial use. Data covering their operations have been included to round out the figures for the industry. Figures on the distribution of propane in cylinders are not included.

Output of coke from gas retorts and by-product ovens totalled 4,331,216 tons in 1956 compared with 4,004,623 tons in 1955 and 3,424,218 tons in 1954. By-product ovens produced 4,270,700 in 1956 and gas retorts made 60,516 tons. In addition 270,905 tons of petroleum coke were recovered in petroleum refineries and 8,089 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 40,497 tons were sold direct to domestic consumers; 760,590 tons were sold direct to consumers for

foundry and other uses (other than domestic) 165,497 tons were sold to dealers for resale and 115,649 tons were sold for export. Consumption included 75,328 tons in makers' own plants; 199,448 tons used in making gas; 2,835,251 tons used in makers' own blast furnaces and 190,601 tons used in associated works operated by the producing company. Total stocks of coke in the hands of the producers amounted to 177,931 tons at the end of 1956.

Imports into Canada of coke made from coal increased to 500,489 tons in 1956 and exports (including re-exports of imported coke) increased to 124,534 tons from 113,079 tons.

Manufactured gas, sold and used, amounted to 78,499,961 M. cubic feet in 1956, including 67,298,168 M. cubic feet from by-product ovens and 11,201,793 M. cubic feet from gas plants. Sales of gas by the producers totalled 19,547,628 M. cubic feet of which 17,420,287 M. cubic feet were from by-product ovens and 2,126,741 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 work. These figures do not include 26,545 M. cubic feet of (Pintsch) oil gas for lighting railway cars, 27,957,159 M. cubic feet of still gas recovered at petroleum refineries, nor iron blast furnace gas and producer gas which was recovered and used by the producers but for which no records are available.

The number of customers served with manufactured gas as of December 31, 1956 was 388,604 and the length of distributing main was 3,132 miles.

**TABLE 1. Distribution of Coke and Gas Manufacturing Plants, by Provinces, 1956**

Province	Coke plants		Gas plants			Total
	By-product ovens	Retort coal gas only	Water gas only	Retort coal gas and water gas	Propane gas <sup>2</sup>	
number						
Nova Scotia .....	1	—	—	—	—	1
Quebec .....	1	1	1	—	2	5
Ontario .....	4	1	2	1 <sup>1</sup>	4	12
Manitoba .....	1	—	—	—	—	1
British Columbia .....	2	—	1	—	1	4
Canada .....	9	2	4	1	7	23

<sup>1</sup> Also distributed L.P. gas.

<sup>2</sup> Distributed through regular town or city gas mains; distribution in cylinders not included.

## PRODUCTS OF PETROLEUM AND COAL

TABLE 2. Principal Statistics of the Coke and Gas Industry, Significant years 1929-1956, and by Provinces, 1955 and 1956

Year and province	Establishments <sup>1</sup>	Employees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture	Gross selling value of products
	No.	No.	\$	\$	\$	\$	\$
1929 .....	43	3,902	5,938,614	2,628,714	18,517,214	18,764,515	39,910,443
1932 .....	42	3,639	4,897,746	2,223,414	12,241,698	15,347,538	29,812,650
1937 .....	33	4,027	5,709,569	2,906,092	17,217,957	21,578,880	41,702,929
1939 .....	33	4,043	5,851,614	3,430,393	16,726,445	18,872,732	39,029,570
1944 .....	34	4,747	8,940,613	6,478,811	37,809,253	25,287,651	69,575,715
1946 .....	34	4,961	9,348,213	6,274,170	34,709,159	21,589,146	62,582,475
1949 .....	30	5,139	13,641,224	8,023,441	54,063,072	34,847,993	96,934,506
1952 .....	29	4,920	16,375,336	6,963,070	63,107,093	43,919,907	113,990,070
1953 .....	28	4,955	16,946,845	6,926,499	66,576,949	49,217,597	122,721,045
1954 .....	26	4,759	16,296,781	6,036,155	54,020,106	44,870,308	104,926,569
1955							
Quebec .....	6	1,331	3,764,587	1,806,745	9,083,517	7,727,335	18,617,597
Ontario .....	13	1,615	6,339,065	2,629,197	38,562,823	24,317,734	65,509,754
British Columbia, Manitoba and Nova Scotia .....	6	790	3,077,731	1,770,101	10,197,791	7,795,939	19,763,831
Canada .....	25	3,736	13,181,383	6,206,043	57,844,131	39,841,008	103,891,182
1956							
Quebec .....	6	773	2,733,972	2,052,681	9,730,683	8,377,024	20,160,388
Ontario .....	13	1,710	7,514,067	3,104,563	45,267,452	24,522,523	72,894,538
British Columbia, Manitoba and Nova Scotia .....	6	851	3,524,259	1,843,340	11,711,400	7,074,729	20,629,469
Canada .....	25	3,334	13,772,298	7,000,384	66,709,535	39,974,276	113,684,395

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.

<sup>1</sup> The number shown includes companies which did not produce gas but which purchased gas from the manufacturers and distributed it to customers. Data for employees, 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. Included also are firms which distributed propane gas through regular gas mains.

TABLE 3. Principal Statistics of the Coke and Gas Industry, 1952-1956

Year	Number of companies <sup>1</sup>	Number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross value of products at works
			\$	\$	\$	\$
<b>Coke (By-product and beehive)</b>						
1952 .....	12	3,289	11,384,577	6,102,363	55,097,383	94,082,311
1953 .....	12	3,526	12,331,791	6,144,222	58,925,754	102,257,082
1954 .....	12	3,274	11,433,315	5,321,520	46,726,038	84,860,880
1955 .....	12	3,424	12,188,155	6,085,520	54,838,962	98,803,491
1956 .....	12	3,030	12,688,650	6,844,224	63,615,449	108,599,912
<b>Gas (Retort and water gas)</b>						
1952 .....	17	1,631	4,990,759	860,707	8,009,710	19,907,759
1953 .....	16	1,429	4,615,054	782,277	7,651,195	20,463,963
1954 .....	14	1,485	4,863,466	714,635	7,294,068	20,065,689
1955 .....	13	312	993,228	120,523	3,005,169	5,087,691
1956 .....	13	304	1,083,648	156,360	3,094,086	5,084,483

<sup>1</sup> See footnote to Table 2.

TABLE 4. Inventories<sup>1</sup>, 1956

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	\$	\$	\$	\$
Opening:				
Quebec .....	3,643,905	4,216	323,861	3,971,982
Ontario .....	14,748,631	25,398	765,151	15,539,180
British Columbia, Manitoba and Nova Scotia .....	513,206	40,095	1,260,988	1,814,289
Canada .....	18,905,742	69,709	2,350,000	21,325,451
Closing:				
Quebec .....	4,301,082	6,284	273,797	4,581,163
Ontario .....	16,813,580	522,321	691,130	18,027,031
British Columbia, Manitoba and Nova Scotia .....	593,055	97,574	1,168,168	1,858,797
Canada .....	21,707,717	626,179	2,133,095	24,466,991

<sup>1</sup> (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.

(b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Coke and Gas Industry for the year under review are shown in the above table.

(c) The Opening inventory for the current year may not necessarily agree with the closing inventory published the previous year because of changes in the composition of the industry such as the addition of new establishments, the disappearance of old ones, or the transfer of establishments to other industries for statistical purposes.

TABLE 5. Products Made in Coke and Gas Plants, 1955 and 1956

Product		1955		1956	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
		\$		\$	
Gas made:					
Retort coal gas	M cu. ft.	10,060,209	—	8,975,328	—
Coke oven gas	"	55,963,493	—	60,517,611	—
Producer gas	"	784,924	—	817,157	—
Water gas	"	5,964,861	—	6,334,101	—
Propane, butane and oil gas	"	1,727,972	—	1,927,081	—
Total gas made	"	74,509,459	—	78,571,278	—
Gas sold or used:					
Gas sold	"	18,984,203	19,846,419	19,547,628	20,122,843
Gas used in own coke or gas plants	"	13,206,671	3,284,615	14,903,934	3,774,171
Gas used in associated works	"	38,127,145	8,422,256	40,864,734	9,341,127
Gas otherwise accounted for but not sold	"	746,489	279,804	1,317,314	498,866
Gas not accounted for	"	3,053,004	520,821	1,866,953	644,258
Total gas sold or used	"	74,117,512	32,353,915	78,499,961	34,381,265
Coke made:					
Coke from by-product or beehive ovens (including breeze)	ton	3,937,404	7,132,193	4,270,700	64,304,421
Coke from gas retorts (including breeze)	"	67,220	1,109,162	60,516	1,073,273
Total coke	"	4,004,624	58,241,355	4,331,216	65,377,694
Other products:					
Tar	Imp. gal.	43,133,514	5,523,953	45,199,338	5,881,184
Ammonium sulphate	lb.	83,248,672	1,630,763	77,965,055	1,320,452
Benzol	Imp. gal.	8,317,427	3,431,004	9,324,411	3,935,000
Toluol, xylool and naphthalene	"	2,573,545	982,705	2,711,414	1,092,721
All other products	—	—	1,727,387	—	1,696,079
Grand total	—	—	103,891,082	—	113,684,395

TABLE 6. Products Made in Coke and Gas Plants, by Areas, 1956

Product		Eastern provinces		Ontario		Western provinces	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works	Quantity	Gross selling value at works
		\$		\$		\$	
Gas made:							
Retort coal gas	M cu. ft.	8,820,210	—	155,118	—	—	—
Coke oven gas	"	12,105,510	—	44,438,970	—	3,973,131	—
Producer gas	"	817,157	—	—	—	—	—
Water gas	"	3,084,410	—	416,294	—	2,833,397	—
Propane, butane and oil gas	"	405,382	—	575,877	—	945,822	—
Total gas made	"	25,232,669	—	45,586,259	—	7,752,350	—
Gas sold or used:							
Gas sold	"	9,260,265	9,702,308	5,090,692	4,740,647	5,196,071	5,679,888
Gas used in own plants	"	2,807,627	707,628	10,208,228	2,492,892	1,888,081	573,851
Gas used in associated works	"	12,701,566	1,422,000	27,869,887	7,904,104	293,279	15,023
Gas otherwise accounted for but not sold	"	50,343	35,881	1,266,642	462,722	329	283
Gas not accounted for	"	422,331	269,883	1,068,598	207,971	378,024	166,404
Total gas sold or used	"	25,242,132	12,137,700	45,502,045	15,808,336	7,755,784	6,435,229
Coke made:							
Coke from by-product or beehive ovens (including breeze)	ton	877,113	14,188,705	3,088,268	46,350,143	305,319	3,767,573
Coke from gas retorts (including breeze)	"	54,000	969,017	8,516	104,256	—	—
Total coke made	ton	931,113	15,155,722	3,094,784	46,454,399	305,319	3,767,573
Other products:							
Tar	Imp. gal.	11,767,026	1,486,784	30,453,350	4,046,523	2,978,962	347,877
Other products	—	—	1,438,011	—	6,565,280	—	20,961
Grand total	—	—	30,218,217	—	72,894,538	—	10,571,640

TABLE 7. Materials Used in Coke and Gas Plants, 1955 and 1956

Material	1955			1956	
	Quantity	Cost at works	Quantity	Cost at works	\$
Bituminous coal carbonized in ovens or retorts:		\$			\$
(a) Canadian .....	ton	984,856	9,199,021	1,026,905	9,785,940
(b) Imported .....	"	4,401,177	42,700,385	4,784,981	49,660,338
Bituminous coal for making water gas:					
(a) Canadian .....	ton	—	—	—	—
(b) Imported .....	ton	2,171	24,810	2,092	25,092
Coke for making water gas:					
(a) Purchased .....	"	6,927	137,150	7,476	153,195
(b) Companies' own make .....	"	81,988	1,083,909	81,090	1,123,220
Coke for making producer gas (Companies' own make) .....	"	— <sup>1</sup>	— <sup>1</sup>	5,773	114,457
Oil used for enriching water gas .....	Imp. gal.	13,087,683	1,105,614	13,518,249	1,330,735
Absorbing and wash oil .....	"	422,024	87,571	458,613	95,552
Caustic soda .....	lb.	2,105,719	64,424	2,079,491	66,830
Lime .....	ton	443	5,805	557	6,866
Water .....	—	—	75,983	—	89,961
Iron oxide .....	ton	6,835	70,675	8,745	89,107
Sulphuric acid, 100% .....	lb.	75,717,468	1,057,488	71,147,989	1,010,788
Propane and butane .....	Imp. gal.	11,223,663	1,335,896	12,330,986	1,519,670
All other materials .....	—	—	895,400	—	1,637,784
Total cost .....	—	—	57,844,131	—	66,709,535

<sup>1</sup> Not available separately in 1955.

TABLE 8. Materials Used in Coke and Gas Plants, by Areas, 1956

Material	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	661,294	7,061,363	—	—	365,611
(b) Imported .....	"	574,076	6,694,181	4,186,039	42,625,364	24,866
Bituminous coal for making water gas:						
(a) Canadian .....	ton	—	—	—	—	—
(b) Imported .....	ton	—	—	2,092	25,092	—
Coke for making water gas:						
(a) Purchased .....	"	4,340	88,215	3,136	64,980	—
(b) Companies' own make .....	"	34,034	674,792	521	8,336	46,535
Coke for making producer gas (Companies' own make) .....	"	5,773	114,457	—	—	—
Oil used for enriching water gas .....	Imp. gal.	7,112,484	715,764	1,105,954	119,573	5,299,811
Absorbing and wash oil .....	"	124,140	25,243	246,202	62,887	38,271
Caustic soda .....	lb.	820,810	31,091	1,258,681	35,739	—
Lime .....	ton	557	6,866	—	—	—
Water .....	—	—	6,682	—	72,219	—
Iron oxide .....	ton	7,519	68,813	866	12,082	360
Sulphuric acid, 100% .....	lb.	17,561,290	303,869	53,586,699	707,119	—
All other materials .....	—	—	942,505	—	1,534,061	—
Total cost .....	—	—	16,733,841	—	45,267,452	—
					4,708,442	

TABLE 9. Principal Statistics of the Coke and Gas Industry in Canada, Grouped According to Selling Value of Factory Shipments<sup>1</sup> 1955 and 1956

Establishments reporting production		Establishments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
		No.	No.	\$	\$	\$
1955						
\$25,000 to \$49,999	.....	2	51	144,114	284,240	457,616
\$100,000 to \$199,999	.....	1				
\$200,000 to \$499,999	.....	8	270	875,708	1,312,319	3,444,188
\$500,000 to \$999,999	.....	2				
\$1,000,000 to \$4,999,999	.....	5	697	2,484,831	6,039,991	13,212,507
\$5,000,000 and over	.....	8	2,718	9,676,730	50,207,581	86,776,871
<b>Totals</b>	.....	<b>26</b>	<b>3,736</b>	<b>13,181,383</b>	<b>57,844,131</b>	<b>103,891,182</b>
1956						
\$25,000 to \$49,999	.....	1				
\$50,000 to \$99,999	.....	1	42	148,695	328,173	473,863
\$100,000 to \$199,999	.....	2				
\$200,000 to \$499,999	.....	7	268	948,858	1,444,918	3,516,520
\$500,000 to \$999,999	.....	2				
\$1,000,000 to \$4,999,999	.....	6	993	3,630,474	8,436,806	18,491,830
\$5,000,000 and over	.....	6	2,031	9,044,071	56,499,638	91,202,182
<b>Totals</b>	.....	<b>25</b>	<b>3,334</b>	<b>13,772,298</b>	<b>66,709,535</b>	<b>113,684,395</b>

<sup>1</sup> All incorporated companies.

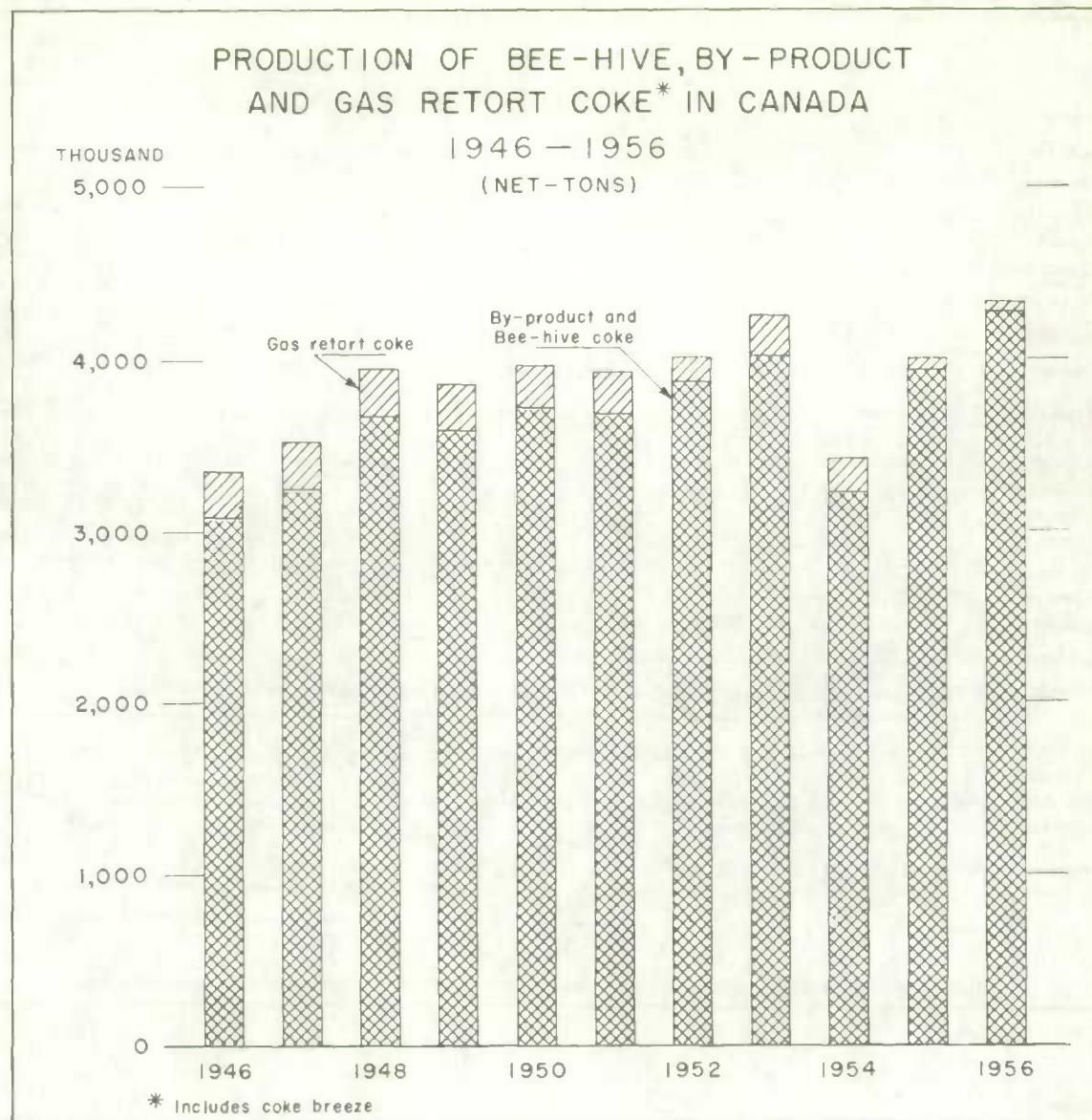
TABLE 10. Capital and Repair Expenditures in the Coke and Gas Industry, 1952-1956

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures			
	Construction	Machinery and equipment		Construction	Machinery and equipment					
				\$'000						
1952 .....	10,495	8,229	18,729	1,897	3,822	5,719	24,443			
1953 .....	3,194	12,885	16,079	844	4,299	5,143	21,222			
1954 .....	263	508	771	829	4,136	4,965	5,736			
1955 .....	129	4,330	4,459	660	4,776	5,436	9,895			
1956 <sup>1</sup> .....	134	2,719	2,853	870	5,576	6,446	9,299			

<sup>1</sup> Preliminary.TABLE 11. Production of Beehive, By-product and Gas Retort Coke<sup>1</sup>, 1947-1956

Year	By-product and beehive coke		Gas retort coke		Total	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
	short tons	\$	short tons	\$	short tons	\$
1947 .....	3,250,221	36,360,756	263,930	2,979,135	3,514,151	39,339,891
1948 .....	3,678,818	51,298,584	266,958	3,364,867	3,945,776	54,663,451
1949 .....	3,599,121	50,303,356	265,482	3,063,609	3,864,603	53,366,965
1950 .....	3,719,964	53,749,197	244,712	3,234,824	3,964,676	56,984,021
1951 .....	3,691,482	56,475,028	240,144	3,373,804	3,931,628	59,848,832
1952 .....	3,883,694	56,260,686	172,961	2,440,424	4,056,655	58,701,110
1953 .....	4,070,500	61,426,117	182,333	2,745,632	4,252,833	64,171,749
1954 .....	3,232,082	48,250,499	192,136	2,287,389	3,424,218	50,537,888
1955 .....	3,937,404	57,132,193	67,220	1,109,162	4,004,624	58,241,355
1956 .....	4,270,700	64,304,421	60,516	1,073,273	4,331,218	65,377,694

<sup>1</sup> Includes coke breeze.

**TABLE 12. Production of Beehive, By-product and Gas Retort Coke, by Provinces, 1947-1956**

Year	Newfoundland, 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
1947 .....	932,025	\$ 10,817,667	2,273,644	\$ 25,748,633	308,482	\$ 2,773,591	3,514,151	\$ 39,339,891
1948 .....	1,058,361	\$ 14,640,521	2,621,405	\$ 36,959,687	266,020	\$ 3,063,243	3,945,776	\$ 54,663,451
1949 .....	1,060,007	\$ 15,332,632	2,467,081	\$ 34,228,730	337,515	\$ 3,805,603	3,864,603	\$ 53,366,965
1950 .....	1,108,634	\$ 16,726,922	2,536,975	\$ 36,746,944	319,067	\$ 3,510,155	3,964,676	\$ 56,984,021
1951 .....	1,160,208	\$ 19,004,760	2,466,842	\$ 37,251,442	304,576	\$ 3,592,630	3,931,626	\$ 59,848,832
1952 .....	1,073,806	\$ 18,109,639	2,686,544	\$ 36,935,991	296,305	\$ 3,655,480	4,056,655	\$ 58,701,110
1953 .....	1,032,762	\$ 17,675,957	2,932,928	\$ 42,954,291	287,143	\$ 3,541,501	4,252,833	\$ 64,171,749
1954 .....	856,887	\$ 13,302,036	2,286,934	\$ 33,932,193	280,397	\$ 3,303,659	3,424,218	\$ 50,537,883
1955 .....	869,495	\$ 13,390,416	2,838,651	\$ 41,286,225	296,478	\$ 3,564,714	4,004,623	\$ 58,241,355
1956 .....	931,113	\$ 15,155,722	3,094,784	\$ 46,454,399	305,319	\$ 3,767,573	4,331,216	\$ 65,377,694

Note: Newfoundland not included prior to 1949.

TABLE 13. Coke Balance and Distribution of Coke by Manufacturers, 1956

	Short tons
Coke balance:	
Stocks of coke on hand, December 31, 1955 .....	157,076
Coke produced in 1956 .....	4,331,216
Purchased by manufacturers:	
(a) Canadian coke .....	60,477
(b) Imported from U.S.A. ....	25,124
Less coke sold to other makers .....	8,383
Less coke wasted or scrapped .....	4,718
Less stocks of coke on hand, December 31, 1956 .....	177,931
Total available for sale or use .....	4,382,861
Distribution of coke by manufacturers:	
Used as fuel:	
(a) Own make .....	74,131
(b) Purchased .....	1,197
Used in making gas:	
(a) Own make .....	191,892
(b) Purchased .....	7,556
Used in makers' own blast furnaces .....	2,835,251
Used in associated works .....	190,601
Sales:	
(a) For domestic use .....	40,497
(b) For other uses .....	760,590
(c) To dealers for resale .....	165,497
(d) For export .....	115,649
Total used and sold .....	4,382,861

TABLE 14. Coal Carbonized, Coke Produced and Distribution of Coke by Manufacturers, 1956

	Short tons
Coal carbonized:	
Canadian .....	1,026,905
Imported .....	4,784,981
Total .....	5,811,886
Coke made .....	4,331,216
Coke yield .....	% 74.5
Coke used as fuel in makers' own plants .....	75,328
Coke used in making gas:	
(a) Own make .....	191,892
(b) Purchased .....	7,556
Coke used in makers' own blast furnaces .....	2,835,251
Coke used in associated works .....	190,601
Coke sold:	
(a) For domestic use .....	40,497
(b) For other uses .....	760,590
(c) To dealers for resale .....	165,497
(d) For export .....	115,649
Total coke sold and used .....	4,382,861
Stocks on December 31, 1956 .....	177,931

TABLE 15. Production of Beehive, By-product and Gas Retort Coke, by Months, 1952-1956

Month	1952	1953	1954	1955	1956
000's of short tons					
January	342	359	324	300	355
February	323	331	283	301	336
March	341	348	293	335	355
April	314	343	275	330	354
May	323	357	271	339	363
June	316	360	266	330	359
July	336	377	275	340	370
August	353	377	272	346	370
September	342	346	268	344	359
October	355	366	296	362	378
November	345	359	301	345	362
December	367	330	288	333	370
Total	4,057	4,253	3,412	4,005	4,331
Monthly average	338	354	284	334	361

Note: Above breakdown developed from a special monthly report on coke and includes revisions necessary to effect reconciliation with annual totals shown in relevant tables of this report.

TABLE 16. Bituminous Coal Charged to Coke Ovens and Gas Retorts, 1947-1956

Year	Beehive and by-product ovens		Gas retorts		Total <sup>1</sup>
	Canadian	Imported	Canadian	Imported	
tons					
1947	1,030,659	3,183,285	37,174	356,728	4,567,846
1948	1,121,980	3,706,469	37,492	381,564	5,247,505
1949	1,260,833	3,507,758	32,106	384,643	5,185,340
1950	1,266,305	3,647,907	31,608	340,103	5,285,923
1951	1,246,399	3,649,826	44,346	317,255	5,257,826
1952	1,146,741	4,030,780	20,891	260,942	5,459,354
1953	1,077,259	4,367,386	1,808	288,930	5,735,383
1954	860,645	3,446,379	20,798	280,394	4,608,216
1955	902,495	4,359,088	82,361	44,260	5,388,204
1956	981,297	4,718,784	45,608	66,197	5,813,978

<sup>1</sup> Includes 7,194 tons used in making water gas in 1947; 11,579 tons in 1948; 11,194 tons in 1949; 3,576 tons in 1950; 3,510 tons in 1951; 3,309 tons in 1952; 3,081 tons in 1953; 3,941 tons in 1954; 2,171 tons in 1955; and 2,092 tons in 1956

TABLE 17. Bituminous Coal Charged to Coke Ovens and Gas Retorts, by Provinces, 1947-1956

Year	Newfoundland, Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba Alberta and British Columbia		Total <sup>1</sup>
	Canadian	Imported	Canadian	Imported	Canadian	Imported	
tons							
1947	623,141	583,595	5,554	2,954,346	439,138	2,072	4,607,846
1948	776,953	621,807	—	3,455,973	382,519	10,253	5,247,505
1949	801,960	613,395	—	3,275,205	490,979	3,801	5,185,340
1950	867,423	604,818	—	3,378,232	430,490	4,960	5,285,923
1951	881,739	664,398	—	3,298,162	409,006	4,521	5,257,826
1952	778,591	649,533	—	3,639,066	389,041	3,123	5,459,354
1953	719,060	644,697	—	3,998,136	360,007	13,483	5,735,383
1954	541,791	618,707	—	3,087,668	339,652	20,182	4,608,216
1955	630,549	541,614	—	3,837,052	354,307	24,682	5,388,204
1956	661,294	574,076	—	4,188,131	365,611	24,866	5,813,978

<sup>1</sup> See footnote to Table 16.

Note: Newfoundland not included prior to 1949.

TABLE 18. Production of Petroleum Coke, 1947-1956

	Made for own use		Made for sale		Total	
	Tons	Selling value at works	Tons	Selling value at works	Tons	Selling value at works
		\$		\$		\$
1947 .....	1,089	7,075	77,036	591,140	78,125	598,215
1948 .....	8,225	83,357	79,213	1,018,475	87,438	1,101,832
1949 .....	33,461	239,138	83,908	879,096	117,369	1,118,234
1950 .....	34,104	240,082	88,087	900,521	122,191	1,140,603
1951 .....	44,085	450,212	120,604	1,223,962	164,689	1,674,174
1952 .....	52,638	506,920	150,750	1,650,342	203,388	2,157,262
1953 .....	91,869	686,331	146,794	1,248,755	238,663	1,935,086
1954 .....	80,378	659,009	156,509	1,480,213	236,887	2,139,222
1955 .....	115,887	916,175	154,012	1,457,915	269,899	2,374,090
1956 .....	155,997	1,887,778	114,908	1,211,899	270,905	3,099,677

Note: Petroleum coke is not included in coke production figures given for the Coke and Gas Industry.

TABLE 19. Total Production of Coke (including Petroleum and Pitch Coke) in Canada, 1953-1956

	Newfoundland, Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan, Alberta and British Columbia	Canada
1953					
Coke and gas industry .....	ton \$	554,973 9,166,944	477,789 8,509,013	2,932,928 42,954,291	287,143 3,541,501
Petroleum refining industry .....	ton \$	1,005 4,020	42,305 391,922	90,102 848,761	105,251 690,383
Pitch coke .....	ton \$	2,751 63,457	1,702 44,926	3,745 77,842	16 462
Total .....	ton \$	558,729 9,234,421	521,796 8,945,861	3,026,775 43,880,894	392,410 4,232,346
1954					
Coke and gas industry .....	ton \$	300,386 5,414,887	466,501 7,887,149	2,286,934 33,932,193	280,397 3,303,659
Petroleum refining industry .....	ton \$	957 9,570	34,060 340,600	97,847 978,470	104,023 810,582
Pitch coke .....	ton \$	1,948 53,073	868 23,736	4,743 67,647	62 1,856
Total .....	ton \$	393,291 5,477,530	501,429 8,251,485	2,389,524 34,978,310	384,482 4,116,097
1955					
Coke and gas industry .....	ton \$	414,550 5,930,129	454,945 7,460,287	2,838,651 41,286,225	296,478 3,564,714
Petroleum refining industry .....	ton \$	1,058 10,580	44,476 415,039	81,004 810,021	143,361 1,138,450
Pitch coke .....	ton \$	1,714 38,295	777 22,075	453 11,433	85 2,306
Total .....	ton \$	417,322 5,979,004	500,198 7,897,401	2,920,108 42,107,679	439,924 4,705,470
1956					
Coke and gas industry .....	ton \$	475,808 6,675,779	455,305 8,479,943	3,094,784 45,454,399	305,319 3,767,573
Petroleum refining industry .....	ton \$	425 6,588	42,767 594,219	85,066 1,318,524	142,647 1,180,346
Pitch coke .....	ton \$	4,622 109,577	370 11,700	3,035 80,022	62 1,779
Total .....	ton \$	480,855 6,791,944	498,442 9,085,862	3,182,885 47,852,945	448,028 4,949,698

TABLE 20. Apparent Consumption of Coke (including Petroleum and Pitch Coke) in Canada, by Provinces, 1947-1956

	Atlantic provinces	Quebec	Ontario	Manitoba, Saskatchewan, Alberta and British Columbia	Canada
tons					
<b>Apparent consumption:</b>					
1947 .....	498,922	675,932	2,939,625	283,335	4,397,814
1948 .....	586,233	710,424	3,133,343	272,109	4,702,109
1949 .....	585,382	683,879	2,807,488	280,785	4,357,534
1950 .....	672,765	759,995	2,796,566	258,730	4,488,056
1951 .....	650,700	801,770	3,164,213	258,062	4,674,745
1952 .....	559,791	737,117	3,138,364	241,764	4,677,036
1953 .....	583,027	770,086	4,212,909	330,720	4,896,722
1954 .....	381,658	743,612	2,534,183	322,508	3,981,961
<b>1955</b>					
Production .....	417,322	500,198	2,920,108	439,924	4,277,552
Add decline or deduct increase in producers' stocks .....	+ 22,485	+ 59,904 <sup>1</sup>	+ 103,769	- 2,921	+ 183,237 <sup>1</sup>
	439,807	560,102	3,023,877	437,003	4,460,789 <sup>1</sup>
Add - Imports entered for consumption .....	111	325,284	375,277	59,942	760,614
	439,916	885,386	3,399,154	496,945	5,221,403 <sup>1</sup>
Deduct - Exports and re-exports .....	3,718	2,674	62,163	105,948	174,503
<b>Apparent consumption</b> .....	<b>436,200</b>	<b>882,712<sup>1</sup></b>	<b>3,336,991</b>	<b>390,997</b>	<b>5,046,900<sup>1</sup></b>
<b>1956</b>					
Production .....	480,855	498,442	3,182,885	448,028	4,610,210
Add decline or deduct increase in producers' stocks .....	- 1,619	+ 16,792	- 40,849	+ 2,041	- 23,635
	479,236	515,234	3,142,036	450,069	4,586,575
Add - Imports entered for consumption .....	84	374,204	504,789	64,262	943,339
	479,320	889,438	3,646,625	514,331	5,529,914
Deduct - Exports and re-exports .....	5,228	5,317	63,218	88,676	162,639
<b>Apparent consumption</b> .....	<b>474,092</b>	<b>884,121</b>	<b>3,583,607</b>	<b>425,453</b>	<b>5,367,275</b>

<sup>1</sup> Revised.

Note: (a) The imports "Entered for consumption" represent tonnages cleared from customs' ports. The tonnages under this heading differ slightly from actual imports.  
 (b) Newfoundland not included prior to 1949.

TABLE 21. Quantity of Coke in the Hands of the Producers at the End of 1955 and 1956

Province	1955			1956			Difference, 1956 from 1955
	Petroleum refineries	Coke and gas plants	Total	Petroleum refineries	Coke and gas plants	Total	
tons							
Nova Scotia .....	-	4,959	4,959	-	6,578	6,578	+ 1,619
Quebec .....	-	43,588 <sup>1</sup>	43,588 <sup>1</sup>	1,800	24,996	26,798	-16,792
Ontario .....	1,323	54,519	55,842	1,470	95,221	96,691	+40,849
Manitoba .....	-	31,360	31,360	-	41,273	41,273	+ 9,913
Saskatchewan .....	2,677	-	2,677	2,156	-	2,156	- 521
Alberta .....	374	-	374	1,728	-	1,728	+ 1,354
British Columbia .....	-	22,650	22,650	-	9,863	9,863	-12,787
<b>Total</b> .....	<b>4,374</b>	<b>157,076<sup>1</sup></b>	<b>161,450<sup>1</sup></b>	<b>7,154</b>	<b>177,931</b>	<b>185,085</b>	<b>+23,635</b>

<sup>1</sup> Revised.

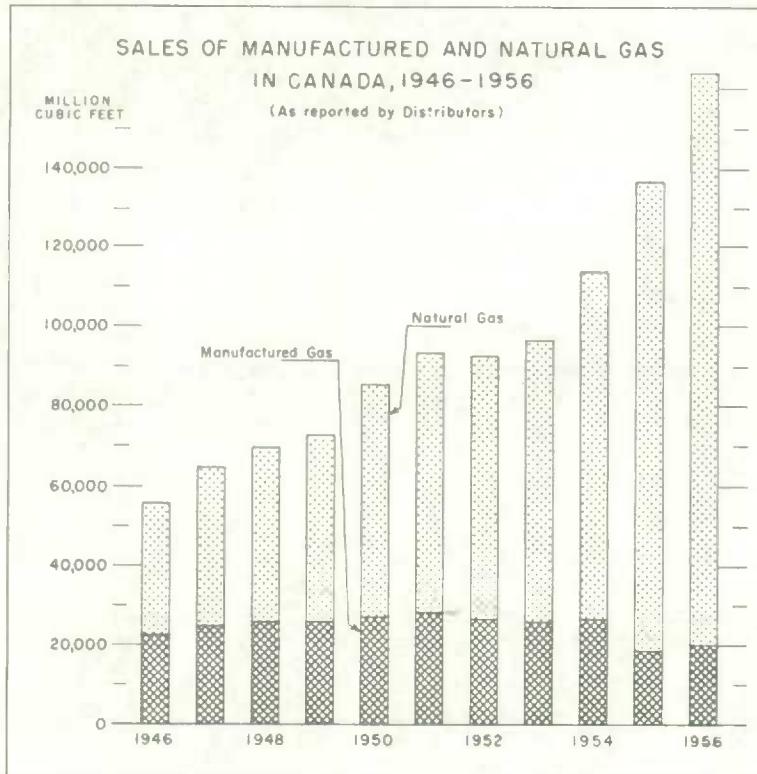
Note: No data available on producers' stocks of pitch coke.

TABLE 22. Sales of Manufactured and Natural Gas in Canada, 1955 and 1956 (As Reported by Distributors)

	1955			1956		
	Number of customers <sup>1</sup>	Quantity sold	Revenue from sales	Number of customers <sup>1</sup>	Quantity sold	Revenue from sales
Manufactured gas:						
Domestic .....	371,784	9,827,609	11,649,179	359,750	11,613,163	12,816,281
House heating .....	3,697	1,173,476	970,124			
Industrial .....	4,496	3,157,645	2,678,803	5,390	3,560,939	3,072,949
Commercial .....	26,424	4,741,882	4,868,019	23,456	4,779,473	4,755,795
Miscellaneous .....	120	36,995	92,651	8	64,768	38,306
Total.....	406,521	18,937,587	20,258,776	388,604	20,038,343	20,683,331
Natural gas:						
Domestic .....	447,311	45,266,229	34,109,275	474,279	52,039,471	39,492,230
Industrial .....	3,561	48,698,773	10,814,233	3,498	65,631,233	13,615,357
Commercial .....	32,950	23,325,131	10,125,709	35,879	25,897,786	11,445,054
Miscellaneous <sup>2</sup> .....	484	510,176	132,262	506	157,159	99,817
Total.....	484,306	117,800,311	55,181,479	514,162	143,725,649	64,652,458
Total - all gas .....	890,827	136,737,898	75,440,255	902,766	163,763,992	85,335,789

<sup>1</sup> As of December 31.<sup>2</sup> Includes some free customers.

Note: The sales figures for manufactured gas, as recorded in this table, differ slightly from those given in Table 25 because they represent sales by distributing companies to consumers. Some petroleum refinery gas was treated and distributed by the natural gas companies.

TABLE 23. Sales<sup>1</sup> of Manufactured and Natural Gas in Canada, 1947-56 (As Reported by Distributors)

Year	Manufactured gas		Natural gas		Total - all gas	
	Quantity sold	Revenue from sales	Quantity sold	Revenue from sales	Quantity sold	Revenue from sales
	M cu. ft.	\$	M cu. ft.	\$	M cu. ft.	\$
1947 .....	24,666,532	23,649,051	39,843,411	13,327,573	64,500,943	36,976,624
1948 .....	25,611,699	27,092,779	43,804,674	15,361,093	69,416,373	42,453,872
1949 .....	25,913,268	28,674,995	46,757,549	17,466,250	72,670,817	46,141,245
1950 .....	27,030,401	29,467,444	58,098,290	21,638,411	85,128,691	51,105,855
1951 .....	28,140,356	30,265,982	65,056,253	24,219,528	93,196,609	54,485,510
1952 .....	26,304,679	31,742,360	66,005,785	27,102,380	92,310,464	58,844,740
1953 .....	25,878,673	32,220,770	70,674,487	30,167,246	96,553,160	62,388,016
1954 .....	26,314,648	33,118,641	87,466,838	36,140,718	113,781,480	69,259,359
1955 .....	18,937,587	20,258,776	117,800,311	55,181,479	136,737,898	75,440,255
1956 .....	20,038,343	20,683,331	143,725,649	64,652,458	163,763,992	85,335,789

<sup>1</sup> See footnote to Table 22.

TABLE 24. Sales of Coke of All Kinds by Retail Fuel Dealers, Calendar Years, 1955 and 1956

	1955	1956
tons		
(a) By areas		
Newfoundland .....	—	—
Prince Edward Island .....	1,948	1,808
Nova Scotia .....	10,464	11,525
New Brunswick .....	7,359	6,009
Total Atlantic provinces .....	19,771	19,342
Montreal area .....	82,845	84,911
Quebec area .....	5,374	7,724
Kingston area .....	1,727	1,770
Northern area (northern Quebec and northeastern Ontario) .....	4,042	3,146
Ottawa area .....	23,309	16,812
Toronto area .....	43,519	34,021
Western area .....	2,139	750
Windsor area .....	16,862	11,121
Total Quebec and Ontario .....	179,817	160,255
Manitoba .....	25,198	21,084
Saskatchewan .....	—	—
Alberta .....	—	—
British Columbia .....	—	—
Total Western provinces .....	25,198	21,084
Canada .....	224,786	200,681
(b) By selected cities		
Halifax .....	3,313	3,069
Saint John .....	446	437
Montreal .....	72,993	75,950
Quebec .....	1,850	1,917
Toronto .....	10,015	7,436
Hamilton .....	18,571	13,033
Ottawa (including Hull) .....	18,574	12,145
Windsor .....	2,997	2,293
Winnipeg .....	24,755	20,760

Note: The above amounts were used chiefly for heating homes and other buildings.

TABLE 25. Production and Sales of Manufactured Gas, 1947-1956

Year	From by-product and gas plants			Production of still gas from petroleum refineries	
	Production <sup>1</sup>	Sales			
		Quantity	Income from sales		
	M cu. ft.	M cu. ft.	\$	M cu. ft.	
1947 .....	65,010,676	22,947,000	22,435,440	11,400,531	
1948 .....	74,267,658	24,606,638	25,581,734	12,020,328	
1949 .....	71,188,140	24,687,925	27,205,696	12,982,436	
1950 .....	74,912,985	25,574,110	28,044,761	15,112,661	
1951 .....	77,486,822	25,959,987	29,087,074	17,642,679	
1952 .....	78,651,418	26,277,503	30,911,194	19,602,387	
1953 .....	82,516,083	25,917,492	32,340,134	20,762,933	
1954 .....	70,228,890	26,459,368	32,920,031	20,368,575	
1955 .....	74,509,459	18,984,203	19,846,419	22,606,560	
1956 .....	78,571,278	19,547,028	20,122,843	27,957,159	

<sup>1</sup> Does not include blast furnace gas and producer gas which were recovered and used by the producers but for which no records are available.

TABLE 26. Production of Crude Coal Tar, by Provinces, 1954-1956

Province	1954	1955	1956
	Imperial gallons		
Newfoundland .....	5,869,429	6,480,284	6,788,609
Nova Scotia and New Brunswick .....	4,991,718	4,834,979	4,978,417
Quebec .....	26,814,804	28,646,239	30,453,350
Ontario .....	378,435	445,412	431,711
Manitoba .....	2,904,094	2,726,600	2,547,251
British Columbia .....			
Canada .....	40,958,480	43,133,514	45,199,338

TABLE 27. Production, Imports and Exports of Ammonium Sulphate, 1947-1956

Year	Production <sup>1</sup>		Imports		Exports	
	Tons	Value	Tons	Value	Tons	Value
	\$		\$		\$	\$
1947 .....	196,825	6,614,419	124	12,371	158,975	5,356,757
1948 .....	215,109	8,585,634	130	16,990	146,379	5,923,549
1949 .....	225,949	9,942,206	140	15,255	167,147	7,851,153
1950 .....	211,534	8,710,259	103	7,255	209,101	8,972,503
1951 .....	209,159	8,982,529	314	18,906	145,724	6,456,603
1952 .....	226,664	9,817,579	845	46,195	199,681	8,717,210
1953 .....	186,540	8,200,124	21,254	925,636	147,371	6,492,953
1954 .....	173,493	7,555,150	14,102	601,620	154,760	6,964,552
1955 .....	311,373	11,533,836	7,029	311,212	N.A.	10,978,475
1956 .....	339,510	10,395,934	3,144	142,789	N.A.	12,072,905

<sup>1</sup> Includes output of ammonium sulphate produced or recovered in other industries.

TABLE 28. Employees and Their Earnings in the Coke and Gas Industry, by Provinces, 1955 and 1956

Province	Number of employees				Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers
	Male	Female	Male	Female			
1955						\$	\$
Quebec .....	275	88	968	—	1,331	1,298,534	2,466,053
Ontario .....	293	102	1,220	—	1,615	1,709,139	4,629,926
British Columbia, Manitoba and Nova Scotia .....	94	38	658	—	790	560,455	2,517,276
Canada .....	662	228	2,846	—	3,738	3,368,128	9,613,253
1956						\$	\$
Quebec .....	104	18	651	—	773	554,021	2,179,951
Ontario .....	224	106	1,380	—	1,710	1,475,971	6,038,096
British Columbia, Manitoba and Nova Scotia .....	119	41	691	—	851	711,550	2,812,709
Canada .....	447	165	2,722	—	3,334	2,741,542	11,030,756

TABLE 29. Fuel and Electricity Used in the Coke and Gas Industry, 1956

	Kind	Quantity	Cost at
			works
			\$
Bituminous coal (a) From Canadian mines .....	ton	7,820	66,062
(b) Imported .....	"	17,592	129,985
Anthracite coal .....	"	1,119	10,318
Coke .....	"	150,033	2,215,617
Gasoline (Including gasoline used in cars and trucks) .....	Imp. gal.	71,802	24,519
Kerosene .....	"	563	145
Fuel oil .....	"	905,342	94,109
Gas (a) Liquefied petroleum gases .....	"	7,190	683
(b) Other manufactured gas .....	M cu. ft.	14,903,471	3,772,597
Other fuel .....	—	—	50,189
Electricity purchased .....	kwh.	92,311,859	636,360
Total .....	—	—	7,000,584



## Directory of Firms in the Coke and Gas Industry, 19

Name of firm and location of plant	Coke and gas-making equipment, including reserve equipment (Rated annual capacity, in tons of coal carbonized or in cubic feet of gas produced, given in brackets).
<b>1. COKE PLANTS</b>	
By-product ovens	
Dominion Iron & Steel Ltd. Sydney, Nova Scotia	In use - 114 Koppers Becker Underjet Fired (985,500 tons)
Montreal Coke & Manufacturing Co., (Quebec Hydro-Electric Commission) 435 St Patrick St. Ville LaSalle, Quebec	In use - 74 Koppers Becker type horizontal ovens (656,000 tons); 4 Koppers Kerpely ring type producers (12,700,000 M. cu. ft.); 5 water gas sets (8,800,000 M. cu. ft.)
Algoma Steel Corporation Ltd. (Great Northern Gas Co. Ltd.) Sault Ste. Marie, Ontario	In use - 53 Wilputte ovens (226,500 tons), and 197 Koppers ovens (1,113,500 tons)
Dominion Foundries and Steel Limited, Dewey St., Hamilton, Ontario	In reserve or idle - 55 Koppers (357,700 tons)
Hamilton By-product Coke Ovens, Ltd., (United Gas & Fuel Co. Ltd.) Hamilton, Ontario	In use - 60 Koppers ovens (610,000 Tons)
Steel Company of Canada, Limited, Hamilton, Ontario	In use - 25 Semet-Solvay ovens (175,000 tons), and 35 Wilputte ovens (240,000 tons); 1 oil gas set (900,000 M. cu. ft.); 1 propane vaporizer (300,000 M. cu. ft.)
Winnipeg & Central Gas Company Sutherland Ave. and Gladstone Ave., Winnipeg, Manitoba	In reserve or idle - 2 propane vaporizers (600,000 M. cu. ft.)
British Columbia Electric Co. Ltd., Keefer St., and Carroll St., Vancouver, British Columbia	In use - 191 Wilputte ovens (1,653,000 tons)
Crow's Nest Pass Coal Co. Ltd., Micel, British Columbia	In use - 17 Koppers Becker type horizontal ovens (75,000 tons); 5 propane-air injectors
<b>2. ILLUMINATING AND FUEL GAS PLANTS</b>	
Retort coal gas and carburetted water gas	
Shawinigan Chemicals Ltd., Shawinigan Falls, Quebec	8 chemical type coking stokers of own design (240,000 tons)
Quebec Power Company, Verdun, Quebec	In use - 1 Western Gas water gas set (657,000 M cu. ft.)
Board of Light & Heat Commission, Guelph, Ontario	In reserve or idle - 2 U.G. Co. water gas sets (1,095,000 M cu. ft.)
Interprovincial Utilities Ltd., Lees Ave., Ottawa, Ontario	In use - 6 Glover-West vertical continuous retorts (10,000 tons); 2 Shell Lowe carburetted water gas set (109,500 M cu. ft.); 1 Selas diluter for propane gas
Public Utilities Commission, Kitchener, Ontario	In reserve or idle - 2 Glover-West vertical ovens (3,600 tons), In use - 1 carburetted blue gas set (547,000 M cu. ft.)
Propane Gas <sup>1</sup>	
B.C. Electric Co. Ltd., Gas Division, Victoria, British Columbia	In use - 1 carburetted blue gas set (547,000 M cu. ft.)
City Gas and Electric Corporation, Ltd., Three Rivers, Quebec	In use - 1 Merrifield water gas set (361,350 M cu. ft.)
City of Sherbrooke Gas and Electricity Dept., Sherbrooke, Quebec	In reserve or idle - 1 Merrifield water gas set (361,350 M cu. ft.)
Brockville Public Utilities Commission, Brockville, Ontario	
Shorgas Limited Whitby, Ontario	
Peterborough Utilities Commission, Peterborough, Ontario	
Public Utilities Commission, Kingston, Ontario	
Corporation City of Nelson, Nelson, British Columbia	

<sup>1</sup> Includes only the concerns which distribute through city gas mains; distributors of propane in cylinders not included.

Note: Names of gas distributing companies in brackets.