

CATALOGUE No.

45-201

ANNUAL



PRODUCTS OF PETROLEUM AND COAL

General Review

1959

DOMINION BUREAU
OF STATISTICS
MAY 10 1965
PROPERTY OF THE
LIBRARY

Published by Authority of
The Honourable George Hees, Minister of Trade and Commerce

DOMINION BUREAU OF STATISTICS

Industry and Merchandising Division

April, 1962
6523-559

Price 50 cents

PUBLICATIONS

The results of the annual Census of Industry are published by the Dominion Bureau of Statistics in a series of industry reports which are released each year as the compilations are completed. Reports for industries in the **Products Made from Petroleum and Coal Major Group** are listed below, along with current and annual publications of related interest. Similar reports are issued for other industries. A complete catalogue of publications of the Bureau is available on request from the Information Services Division, Dominion Bureau of Statistics, Ottawa, or from the Queen's Printer, Ottawa.

A — Annual
S.A. — Semi-Annual

M — Monthly
O — Occasional

S.C. — Special
Compilation

Catalogue number	Title	Price
45-201	Products of Petroleum and Coal — General Review (A) .....	.50
45-203	Coke and Gas Industry (A).....	.50
45-205	Petroleum Products Industry (A).....	.50
45-207	Miscellaneous Products of Petroleum and Coal Industry (A) .....	.25
<hr/>		
26-003	Preliminary Report on Coal Production (M)..... per year	1.00
26-206	Coal Mining Industry (A)	1.00
45-202	Preliminary Report on Coal and Coke Statistics (A) .....	.50
26-006	Crude Petroleum and Natural Gas (M)	1.00
26-213	Crude Petroleum and Natural Gas Industry (A).....	.50
45-004	Refined Petroleum Products (M)..... per year	3.00
45-204	Refined Petroleum Products (A)	1.50
45-206	Consumption of Petroleum Fuels (A) .....	.25
13-505	Energy Consumption in Manufacturing and Mining Industries 1926-1953 (O)	1.00
13-507	Energy Sources in Canada, Commodity Accounts, 1926, 1929, 1933 and 1939 (O) ..	1.00
13-506	Energy Sources in Canada, Commodity Accounts, 1948 and 1952 (O).....	1.00
55-001	Pipe Line (Oil) Statistics (M)	2.00
55-201	Pipe Line (Oil) Statistics (A) .....	.50
31-201	General Review of the Manufacturing Industries (A)	2.00
31-001	Inventories, Shipments and Orders in Manufacturing Industries (M)	4.00
65-004	Trade of Canada — Exports (M)..... per year	7.50
65-007	Trade of Canada — Imports (M)	7.50
(S.C.)	Sales of Lubricating Oils and Greases and Motor Gasoline (A).....	.25
(S.C.)	Retail Outlets for Motor Gasoline (S.A.) .....	.25

Remittances should be in the form of cheque or money order, made payable to the Receiver General of Canada and forwarded to the Information Services Division, Dominion Bureau of Statistics, or to the Queen's Printer, Ottawa, Canada.

SYMBOLS

The interpretation of the symbols used in the tables throughout this publication is as follows:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.

EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1959 Census of Manufactures. Most reports in this series refer to specific industries, but there are summary reports for Canada and the provinces and for major industry groups. An annual Census of Manufactures has been carried out by the Dominion Bureau of Statistics since 1916.

Industry statistics given in these reports refer to number of establishments, employees, salaries and wages, cost of materials, supplies, fuel and electricity, gross value of shipments, inventories and value added by manufacturing. Details of materials used and products shipped are also given. Descriptions of the principal industry statistics, with special reference to 1959 are as follows:

Period Covered

Firms are asked to submit figures for the calendar year, if at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where the firms find it impossible to supply calendar year data from accounting records. However the data on employees, salaries and wages are requested on a calendar year basis in all cases.

Establishment

Data for the annual census is collected on an establishment basis. A firm with more than one plant is required to file a report for each plant. In most cases an establishment is a complete factory. Sometimes, however, a plant is divided into two or more establishments when it carries out operations classifiable to different industries and when separate accounting records are available. Usually the statistics for an establishment relate only to the manufacturing activities. Other activities such as construction at the plant by its own employees, wholesale or retail activities carried on at the plant location, etc., are not included. Plants engaged solely in repair work (except in the case of furniture, shipbuilding, boat building, aircraft and railway rolling stock industries) are not included but plants occupied in assembling parts into complete units are included.

Employees

Administrative and office employees include all executives and supervisory officials such as presidents, vice-presidents, secretaries, treasurers, etc., together with managers, professional and technical employees, superintendents and factory supervisors above the working foremen level and clerical employees. Working owners and partners are also included in this category.

Production and related workers include all other factory workmen whether paid on a monthly, weekly, hourly or piece-work basis. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, warehousing and delivery staffs. Employees on new construction work, in retail or wholesale operations, on outside piece work etc., are not included.

Production workers are reported by months, an average for the year being obtained by summing the monthly figures and dividing by twelve. This procedure is followed even though the plant did not operate in all months. Figures on employment refer to calendar years whether or not some establishments reported other data on a financial year basis.

Salaries and Wages

Salaries and wages refer to gross earnings of the employees described above, including salaries, wages, commissions, bonuses, the value of room and board where provided, deductions for income tax and social services such as sickness and unemployment insurance, pensions, etc., as well as any other allowances forming part of the employees' wages. Payments for overtime are included.

Salaries refer to amounts paid to administrative and office employees. Withdrawals by working owners or partners for normal living expenses for self and family are included but not their withdrawals for income tax. Wages refer to the amounts paid to production and related workers as defined above. Data on earnings refer to the calendar year whether or not some establishments reported other data on a financial year basis.

Cost of Fuel and Electricity

Figures for fuel refer to amounts actually used, (including fuel used in cars and trucks), not to purchases unless the quantities are the same. Values refer to the laid-down cost at the works, including freight, duty, etc.

Materials and Supplies Used

Figures represent quantities and laid-down cost values, at the works, of materials and supplies actually used during the year whether purchased from others or received as transfers from other plants of the reporting company. Amounts paid to other manufacturers for work done on materials owned by the reporting company are included. Returnable containers or any other items charged to capital account are not included. Fuels are not included. Goods bought from others or received as transfers from other plants of reporting companies for resale without further processing are not included. Maintenance and repair supplies not chargeable to capital account are included.

Factory Shipments

Factory shipments refer to shipments of goods made from own materials either in the reporting plant or by other manufacturers on the basis of a charge to the reporting plant for work done. All products and by-products shipped from the establishment are included whether for domestic use, export, or for government departments. Transfer shipments to sales outlets, distributing warehouses or to other manufacturing units of the reporting firm are included. Goods bought or received as transfers and resold without further processing are not included. Values are computed on f.o.b. plant or

plant warehouse basis, and do not include sales tax or excise duties. Values of containers not returnable are included. Amounts received in payment for work done on materials owned by others are included.

In a few industries such as shipbuilding, aircraft, etc., where work on principal products extend over a relatively long period, the value of production is recorded rather than the value of shipments. For those industries production is computed from the value of deliveries of complete units during the year plus the value of work done during the year on unfinished units less the value of work done in previous years on finished units delivered in the year under review.

Inventories

Values represent the book values of manufacturing inventories owned and held at the reporting plant. Figures include inventories held in warehouses or selling outlets which have been included with plant operations for purposes of reporting shipments.

Value Added by Manufacturing

Figures are computed from value of shipments plus or minus changes in inventories of finished goods and goods in process less cost of materials, fuel and electricity. This figure is sometimes referred to as net production.¹

Standard Industrial Classification

The Standard Industrial Classification Manual, prepared by the Dominion Bureau of Statistics, provides for 135 three-digit industries in the manufacturing sector, arranged in 17 major groups. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Short Forms

Between 1949 and 1957, in an effort to ease the reporting burden for smaller firms, a short form was used asking for the total value of shipments only or, in a few cases where losses of detail were significant, for quantities and values of principal products. For purposes of publication, missing data were estimated on the basis of appropriate ratios. In general the cut-off point for these short forms was set at \$50,000 value of shipments. About 40% of the total number of establishments reported on the short form and accounted for less than 3 per cent of the total value of shipments.

In 1958, in order to establish a new base year, the small firms were asked to report all items of principal statistics together with some detail on materials and products.

¹ To arrive at the National Accounts concept of "gross domestic product at factor cost", it would be necessary to subtract also the cost of office supplies used, advertising, insurance and other goods and services obtained from other businesses. Data on these inputs are not collected on the annual Census of Manufactures. Value added figures for "The primary industries and construction" are published in D.B.S. publication 61-202, *Survey of Production*.

For the 1959 Census, the short form was used again, but further steps were taken to ease the respondents' burden. First, the general limit for short forms was raised to \$100,000 value of shipments. In addition, a new intermediate form was developed. This form is a shortened version of the long form in that most of the general questions were pared down and the detailed lists of materials and products were limited to the more important items. The general limits for firms in this category were set at between \$100,000-\$500,000 value of shipments, but in the case of both the short and intermediate forms there were lower cut-offs for a number of industries in which the smaller firms accounted for a larger share of total shipments. On the other hand, limits were raised where this could be done without a significant loss of coverage. On most of the short forms for 1959, in addition to total value of shipments, data on principal products were requested. In a few industries, where loss of employment and earnings data were considered too large because of higher cut-offs, a question on total payroll was placed on the short form.

The intermediate and long forms provide complete data for the compilation of all elements of principal industry statistics and the details of materials and products. The one-page short form, although containing data on principal products and total value of shipments, does not request information on other elements of principal statistics such as value of inventories, materials, fuel and electricity and, in most cases, employment and salaries and wages, nor does it contain detailed data on volume and value of materials used. For purposes of compiling aggregates of principal statistics by industry and by geographic location, the missing data for each establishment were estimated for 1959 by using, in general, ratios based on the change in the value of shipments between 1958 and 1959. The proportion of the estimated data was generally less than 5 per cent of the total in each category of principal statistics.

The general request for the principal items of products on the short form for 1959 permitted a fairly complete compilation of the detailed quantities and values of commodity shipments. In the case of the detailed quantities and values of materials, fuel and electricity, however, and the monthly distribution of production workers, only the totals of data actually reported on the intermediate and long forms are contained in published reports and no attempt was made as in past years to estimate the generally small proportion of individual totals represented by detailed items omitted from the short forms.

The new approach has relieved an additional 12,000 establishments from filling out the regular long form. Establishments now receiving the short form number in excess of 20,000 and account for more than 54 per cent of the total number of establishments and a little more than 3 per cent of the total value of shipments.

PRODUCTS OF PETROLEUM AND COAL

General Review

1959

The Standard Industrial Classification which has been used by the Dominion Bureau of Statistics in its compilations since 1949 provides for a separate "Products of Petroleum and Coal" group. This major division includes the petroleum products industry, the coke and gas industry and a miscellaneous industry which was classified, in earlier years, to the manufacturers of the Non-Metallic Mineral Products Group.

The gross value of production by the industries in this group was \$1,268,007,449 in 1959; representing a decrease of 13.5 per cent from the \$1,466,409,361 reported in 1958. (However, it should be noted that the major contributing factor to this decline was a change in the basis of valuation in the Petroleum Refining Industry rather than an actual decrease in production. For a more detailed explanation see footnote to Table 1.) Employment decreased to 16,775 in 1959 from the 17,427 reported in 1958. Payments in salaries and wages advanced to \$93.9 millions. Materials for manufacturing cost \$936.2 millions in 1959, and fuel and electricity cost \$57.9 millions; in 1958 the corresponding amounts were \$894.5 millions and \$56.4.

Note: In 1952 the gross value of production was replaced by value of factory shipments f.o.b. plant for all the industries classified to this group except for Petroleum Refining and Coke and Gas. As no information on inventory change is available for 1953, value added figures for this year were obtained by subtracting from the value of factory shipments (Production in the case of Petroleum Refining and Coke and Gas) the cost of materials, fuel and electricity. In 1954 and subsequent years information on the value of year-end inventory holdings at plant and plant warehouses was collected as part of the annual Census of Industry and except for Petroleum Refining and Coke and Gas, the information thus made available was taken into account in calculating the value added figures. In 1954 and 1955 the "Value added" adjustment incorporated the increase or decrease to shipments values resulting from changes in the value of inventories over the period. For these two years, the adjustments that were made used only the change in finished product inventory owned by manufacturers. Beginning with 1956 the calculation of the "Value added" figure was further adjusted to take into account the "Goods in process" as well as the finished goods held at plant or plant warehouse.

TABLE 1. Principal Statistics for the Products of Petroleum and Coal Group, by Industries and by Provinces, 1958 and 1959

Industry and province	Estab-lish-ments	Employees	Salaries and wages for year	Cost of fuel and electricity at plant	Cost at plant of materials used	Gross selling value of products at plant	Value added by manufacture ¹
	number				dollars		
1958							
By industries:							
Coke and gas	16	2,455	10,871,876	5,001,223	56,272,204	82,788,690	21,515,263
Petroleum products	71	14,490	76,643,818	51,052,196	829,920,509	1,368,649,087	487,676,362
Miscellaneous products of petroleum and coal	28	482	1,974,812	347,391	8,264,800	14,971,584	6,281,788
Totals	115	17,427	89,490,506	56,400,810	894,457,513	1,466,409,361	515,473,433
1959							
Coke and gas	13	2,171	10,340,973	5,604,543	64,460,331	96,410,654	26,894,464
Petroleum products	69	14,142	81,554,767	51,967,235	863,895,812	1,156,912,043	244,973,628
Miscellaneous products of petroleum and coal	30	462	2,000,636	327,083	7,832,195	14,684,752	6,676,320
Totals	112	16,775	93,896,376	57,898,861	936,188,338	1,268,007,449	278,544,412
1958							
By provinces:							
Newfoundland	1	784	4,142,407	4,301,359	57,004,614	92,996,590	31,699,374
Nova Scotia	2						
New Brunswick	1						
Quebec	19	3,581	18,248,651	17,119,969	288,376,128	483,720,411	178,238,838
Ontario	32	7,154	37,487,663	20,228,858	299,907,424	457,314,090	137,162,049
Manitoba	6	726	3,035,237	2,128,148	34,520,797	57,632,093	20,983,206
Saskatchewan	13	1,218	6,019,155	2,940,903	50,631,451	83,164,169	29,505,893
Alberta	27	2,251	11,676,035	4,287,581	82,540,811	151,438,143	64,610,488
British Columbia	13	1,713	8,881,358	5,393,992	81,476,288	140,143,865	53,273,585
Northwest Territories	1						
Canada	115	17,427	89,490,506	56,400,810	894,457,513	1,466,409,361	515,473,433
1959							
Newfoundland	1	690	3,965,686	4,199,085	55,002,583	77,708,786	15,838,475
Nova Scotia	2						
New Brunswick	1						
Quebec	18	3,356	18,428,739	15,775,551	290,858,306	383,680,026	76,917,253
Ontario	31	7,077	41,083,676	22,411,033	336,791,069	440,573,876	82,803,451
Manitoba	6	714	3,274,643	2,239,151	34,305,743	50,401,224	14,863,628
Saskatchewan	11	1,137	6,042,058	3,355,117	54,100,848	80,618,207	24,306,382
Alberta	29	2,192	12,152,474	4,459,311	85,417,064	125,564,035	38,406,117
British Columbia	12	1,609	8,951,100	5,459,613	79,714,725	109,481,295	25,409,106
Northwest Territories	1						
Canada	112	16,775	93,896,376	57,898,861	936,188,338	1,268,007,449	278,544,412

¹ See note to text.

Note: The apparent decline shown in "Value added" and "Gross selling value of products" in 1959 from 1958 by the Petroleum Refining Industry primarily was due to a change in the basis of valuation used by the refining companies in calculating the value of products made. Since 1954 most of the major refiners have reported value of products in the annual Census of Industry at a valuation nearer the marketing (wholesale) level than the manufacturing (refining) selling value. In order to bring the level of valuation more in line with the manufacturing level as reported by other industries in the annual Census of Industry all firms classified to the Petroleum Refining Industry were asked in 1959 to report the value of their products at a level which would approximate as closely as possible a manufacturing (refining) selling value. For further data on Comparison of "Factory shipments" and "Value added", "new" basis versus "old" basis, see 1959 report for "The Petroleum Products Industry".

TABLE 2. Employees and their Earnings in the Products of Petroleum and Coal Group, 1958 and 1959

Industry and province	Employees					Earnings		
	Supervisory and office		Production and related workers		Total	Supervisory and office	Production and related workers	Total
	Male	Female	Male	Female				
	number					dollars		
1958								
By industries:								
Coke and gas	378	145	1,932	—	2,455	2,152,368	8,719,508	10,871,876
Petroleum products	4,744	1,483	8,203	60	14,490	35,786,891	40,856,927	78,643,818
Miscellaneous products of petroleum and coal	135	53	294	—	482	850,045	1,124,767	1,974,812
Totals	5,257	1,681	10,429	60	17,427	38,789,304	50,701,202	89,490,506
By provinces:								
Newfoundland	126	23	633	2	784	909,159	3,233,248	4,142,407
Nova Scotia								
New Brunswick								
Quebec	994	177	2,402	8	3,581	6,645,890	11,602,761	18,248,651
Ontario	2,492	980	3,653	29	7,154	19,378,937	18,108,726	37,487,663
Manitoba	191	165	367	3	726	1,556,341	1,478,896	3,035,237
Saskatchewan	308	58	850	2	1,218	2,063,642	3,955,513	6,019,155
Alberta	615	159	1,472	5	2,251	4,596,290	7,079,745	11,676,035
British Columbia	531	119	1,052	11	1,713	3,639,045	5,242,313	8,881,358
Northwest Territories								
Canada	5,257	1,681	10,429	60	17,427	38,789,304	50,701,202	89,490,506
1959								
By industries:								
Coke and gas	321	85	1,785	—	2,171	1,900,383	8,440,590	10,340,973
Petroleum products	4,860	1,450	7,775	57	14,142	39,903,640	41,651,127	81,554,767
Miscellaneous products of petroleum and coal	132	52	278	—	462	891,649	1,108,987	2,000,636
Totals	5,313	1,587	9,818	57	16,775	42,695,672	51,200,704	93,896,376
By provinces:								
Newfoundland	113	22	553	2	690	957,801	3,007,885	3,965,686
Nova Scotia								
New Brunswick								
Quebec	960	164	2,224	8	3,356	6,850,711	11,576,028	18,426,739
Ontario	2,634	924	3,494	25	7,077	22,533,964	18,549,712	41,083,676
Manitoba	201	165	348	—	714	1,582,655	1,691,988	3,274,643
Saskatchewan	286	59	790	2	1,137	2,110,682	3,931,376	6,042,058
Alberta	610	143	1,429	10	2,192	4,788,774	7,363,700	12,152,474
British Columbia	509	110	980	10	1,609	3,871,085	5,080,015	8,951,100
Northwest Territories								
Canada	5,313	1,587	9,818	57	16,775	42,695,672	51,200,704	93,896,376

TABLE 3. Production and Related Workers¹ (Wage-earners) in the Products of Petroleum and Coal Group, 1958 and 1959

Industry and province	January	February	March	April	May	June	July	August	September	October	November	December
	number											
1958												
By industries:												
Coke and gas	2,045	2,015	1,984	2,009	1,967	1,969	2,015	1,704	1,746	1,760	2,056	1,922
Petroleum products	8,295	8,234	8,270	8,375	8,456	8,531	8,495	8,355	8,122	8,046	7,984	7,964
Miscellaneous products of petroleum and coal	216	206	229	281	311	327	326	351	360	372	306	268
Totals	10,556	10,455	10,483	10,665	10,734	10,827	10,836	10,410	10,228	10,178	10,346	10,154
By provinces:												
Newfoundland	627	626	608	612	621	639	649	670	684	675	621	586
Nova Scotia												
New Brunswick												
Quebec	2,473	2,433	2,403	2,428	2,412	2,438	2,422	2,419	2,371	2,385	2,386	2,353
Ontario	3,795	3,728	3,776	3,837	3,799	3,799	3,823	3,494	3,442	3,441	3,660	3,585
Manitoba	348	350	348	352	377	429	412	376	369	361	357	355
Saskatchewan	822	826	825	862	907	902	901	860	830	840	833	820
Alberta	1,482	1,484	1,486	1,497	1,518	1,509	1,515	1,504	1,487	1,453	1,417	1,387
British Columbia	1,009	1,008	1,035	1,077	1,100	1,111	1,114	1,089	1,044	1,023	1,072	1,068
Northwest Territories												
Canada	10,556	10,455	10,483	10,665	10,734	10,827	10,836	10,410	10,228	10,178	10,346	10,154
1959												
By industries:												
Coke and gas	1,614	1,650	1,684	1,725	1,840	1,822	1,835	1,814	1,814	1,802	1,798	1,778
Petroleum products	7,718	7,734	7,794	7,784	7,964	8,071	8,061	8,002	7,841	7,613	7,580	7,603
Miscellaneous products of petroleum and coal	210	201	217	228	267	277	278	301	307	272	234	217
Totals	9,542	9,585	9,695	9,737	10,071	10,170	10,174	10,117	9,962	9,687	9,612	9,598
By provinces:												
Newfoundland	536	543	540	555	572	567	567	572	560	562	553	544
Nova Scotia												
New Brunswick												
Quebec	2,224	2,244	2,236	2,226	2,247	2,266	2,271	2,247	2,200	2,188	2,157	2,137
Ontario	3,305	3,334	3,414	3,403	3,643	3,656	3,638	3,603	3,583	3,470	3,478	3,501
Manitoba	323	321	326	328	342	359	391	378	379	338	319	313
Saskatchewan	770	768	773	781	828	821	832	817	805	764	753	755
Alberta	1,385	1,377	1,406	1,438	1,431	1,488	1,465	1,497	1,453	1,409	1,398	1,396
British Columbia	999	998	1,000	1,006	1,008	1,013	1,010	1,003	982	956	954	952
Northwest Territories												
Canada	9,542	9,585	9,695	9,737	10,071	10,170	10,174	10,117	9,962	9,687	9,612	9,598

¹ Small establishments were not asked to report details of employment.

Note: Data for 1958 are not strictly comparable with those for previous years since they relate only to establishments generally reporting value of factory shipments of \$100,000 and over. For the total average number of production workers (including estimate for small firms) see Table 2.

TABLE 4, Inventories¹ in the Products of Petroleum and Coal Group, 1959

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	dollars			
(a) By sub-groups				
Opening:				
Petroleum refining	38,764,221	17,757,312	100,846,028	157,367,561
Lubricating oils and greases	705,369	1,675,759	776,540	3,157,668
Absorption gasoline	8,723	2,518	1,480,369	1,491,610
Coke and gas	18,220,894	149,101	1,651,213	20,021,208
Miscellaneous products of petroleum and coal	960,845	10,507	651,170	1,622,522
Totals	58,660,052	19,595,197	105,405,320	183,660,569
Closing:				
Petroleum refining	36,180,111	16,091,434	106,499,369	158,770,914
Lubricating oils and greases	636,425	1,517,369	792,784	2,946,578
Absorption gasoline	13,121	1,720	1,560,482	1,575,323
Coke and gas	20,620,473	289,861	2,059,137	22,969,471
Miscellaneous products of petroleum and coal	1,185,634	4,223	808,300	1,998,157
Totals	58,635,764	17,904,607	111,720,072	188,260,443
(b) By provinces				
Opening:				
Newfoundland	2,895,196	803,110	8,799,857	10,498,163
Nova Scotia				
New Brunswick				
Quebec	18,163,504	4,389,224	31,890,259	54,442,987
Ontario	30,128,718	9,518,048	29,529,217	69,175,983
Manitoba	944,121	384,242	5,838,857	7,167,220
Saskatchewan	1,741,742	1,263,068	8,227,443	11,232,252
Alberta	1,960,580	1,372,715	11,233,933	14,567,228
British Columbia	2,826,191	1,864,790	11,885,754	16,576,735
Northwest Territories				
Totals	58,660,052	19,595,197	105,405,320	183,660,569
Closing:				
Newfoundland	2,241,325	850,981	4,083,343	7,175,649
Nova Scotia				
New Brunswick				
Quebec	17,686,788	3,238,613	32,909,954	53,835,355
Ontario	31,081,616	8,924,478	31,554,464	71,560,558
Manitoba	939,502	530,901	6,699,496	8,169,899
Saskatchewan	1,875,727	828,894	9,805,757	12,510,378
Alberta	2,383,830	1,694,552	13,630,553	17,708,935
British Columbia	2,426,976	1,836,188	13,036,505	17,299,689
Northwest Territories				
Totals	58,635,764	17,904,607	111,720,072	188,260,443

¹ (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 Products of Petroleum and Coal Group 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. The figure for value added by manufacture for the previous year does not need to be altered because of such changes in the composition of the industry.

TABLE 5. Materials Used in the Industries in the Products of Petroleum and Coal Group, 1958 and 1959

Material		1958		1959	
		Quantity	Cost at plant \$	Quantity	Cost at plant \$
Petroleum products industry:					
Crude oil (under 60° A.P.I.) in its natural state, from Canadian wells.....	bbl.	132,237,015	409,239,469	150,045,555	438,596,142
Absorption gasoline, etc., from Canadian wells (run to stills)	"	1,310,153	3,625,097	2,097,474	5,898,446
Crude oil, in its natural state, imported, (run to stills):					
From United States	"	1,177,216	4,533,852	—	—
From South America	"	72,124,350	226,603,914	73,329,222	204,529,049
From other countries	"	32,461,651	93,792,992	41,645,750	115,123,260
Crude oil not in its natural state, imported	"	695,742	3,813,817	624,520	3,062,130
Blending stocks for gasoline:					
Alkylate and cumene	"	124,132	1,011,792	194,539	1,373,371
Benzol	"	70,584	935,438	113,415	1,423,573
Phenol	lb.	744,494	149,088	846,096	150,743
Sulphuric acid, 100%	"	32,562,099	540,406	37,740,292	645,969
Sulphur	"	450,186	20,059	438,770	20,235
Caustic soda	"	16,835,315	676,964	17,153,146	697,774
Soda ash	"	1,593,533	55,829	1,405,053	49,430
Litharge	"	360,197	50,503	228,495	35,383
Fuller's earth, bentonite and other clays	ton	2,356	145,940	1,178	70,299
Compounding materials:					
Used in refineries		—	4,796,545	—	4,892,622
Used in compounding plants	Imp. gal.	20,622,266	7,171,531	20,238,695	6,020,697
Tetraethyl fluid	lb.	37,816,363	14,154,586	41,181,044	15,347,249
Dyes for gasoline .....		..	112,615	..	99,423
Inhibitor .....		..	637,644	..	694,187
Natural gas, wet	M cu. ft.	150,991,372	8,023,122	117,339,869	5,880,355
Other materials .....		...	36,740,489	...	45,805,328
Shipping containers .....		...	13,088,617	...	13,460,147
Totals, petroleum products industry .....		...	829,920,509	...	863,895,812
Coke and gas industry:					
Bituminous coal carbonized in ovens or retorts:					
(a) Canadian	ton	795,021	8,415,402	812,168	8,870,954
(b) Imported	"	3,984,994	42,665,692	4,824,928	51,105,124
Bituminous coal for making water gas:					
(a) Canadian		—	—	—	—
(b) Imported	ton	879	11,268	—	—
Coke for gas-making:					
(a) Purchased	"	4,087	89,153	—	—
(b) Companies' own make	"	29,596	621,516	—	—
Oil used for enriching water gas	Imp. gal.	2,226,529	253,021	806,916	70,517
Absorbing and wash oil	"	286,978	72,414	216,423	53,559
Caustic soda	lb.	2,198,246	67,648	3,057,501	115,817
Lime	ton	363	4,730	223	3,954
Water .....		..	70,946	..	94,225
Iron oxide	ton	237	2,446	100	1,211
Sulphuric acid, 100%	lb.	54,217,967	719,793	52,206,883	693,985
Propane and butane	Imp. gal.	6,099,452	760,725	5,138,348	597,173
All other materials .....		...	2,517,450	...	2,853,812
Totals, coke and gas industry .....		...	56,272,204	...	64,460,331
Miscellaneous products of petroleum and coal industry:					
Asphalt	gal.	20,690,455	3,091,971	17,742,699	2,516,320
Coal, bituminous	ton	151,331	1,014,289	111,085	719,844
Coal, lignite	"	84,694	169,366	83,070	179,733
Pitch	lb.	..	..	..	..
Resin .....		...	6,307	...	259,683
All other materials .....		...	3,574,811	...	3,757,296
Shipping containers .....		...	406,034	...	399,319
Totals, miscellaneous industry .....		...	8,264,800	...	7,832,195
Total for group .....		...	894,457,513	...	936,188,338

TABLE 6. Products Made in the Industries in the Products of Petroleum and Coal Group, 1958 and 1959

Product		1958		1959	
		Quantity	Gross selling value at plant \$	Quantity	Gross selling value at plant \$
Made for sale:					
Gasoline (excluding imported casinghead blended):					
Aviation gasoline	bbl.	675,867	9,006,451	677,959	5,994,493
Motor gasoline	"	89,310,044	619,266,830	95,499,076	498,706,016
Natural gasoline	"	1,321,153	3,810,619	1,814,579	4,868,257
Naphtha specialties	"	924,424	7,667,758	707,208	4,261,568
Aviation turbine fuel	"	4,302,097	26,883,696	4,277,429	17,028,245
Kerosene, stove oil (No. 1 fuel oil) and tractor fuel	"	12,058,840	71,948,232	13,904,661	60,668,246
Diesel fuel	"	23,264,089	117,699,331	27,482,962	111,697,948
Light fuel oils (Nos. 2 and 3)	"	41,619,213	211,642,223	48,318,017	200,095,285
Heavy fuel oils (Nos. 4, 5 and 6)	"	34,374,486	93,707,646	36,786,243	83,609,892
Lubricating oil and grease: ¹					
Made in refineries	"	1,887,969	48,762,845	2,024,847	26,213,332
Made in blending plants	"	563,577	17,546,259	443,125	17,776,054
Asphalt	"	9,161,825	43,410,446	9,098,825	29,687,350
Petroleum coke	ton	176,860	2,121,668	196,258	1,775,275
Liquefied petroleum gases	bbl.	5,164,805	15,814,055	2,998,104	9,228,174
Other products		...	38,174,207	...	43,515,851
Totals, made for sale		...	1,327,462,266	...	1,115,125,986
Made for own use:					
Gasoline	bbl.	19,060	138,033	19,930	123,309
Naphtha specialties	"	2,014	17,159	2,204	16,329
Kerosene and stove oil (No. 1 fuel oil)	"	542	3,345	2,630	11,504
Diesel fuel	"	13,367	76,586	150,443	503,364
Light fuel oils (Nos. 2 and 3)	"	21,189	83,268	15,298	77,899
Heavy fuel oils (Nos. 4, 5 and 6)	"	7,504,317	19,445,938	9,013,518	19,166,959
Lubricating oil and grease ¹	"	3,403	14,992	3,545	44,713
Asphalt	"	8,013	40,121	5,228	17,753
Petroleum coke	ton	285,937	3,516,356	333,322	3,235,851
Still gas	M cu. ft.	39,397,753	17,070,303	38,199,166	16,683,233
Other products		...	780,720	...	1,905,143
Totals, made for own use		...	41,186,821	...	41,786,057
Totals, petroleum products industry		...	1,368,649,087	...	1,156,912,043
Coke and gas industry:					
Gas sold or used:					
Gas sold	M cu. ft.	4,674,187	6,548,904	2,485,402	2,601,099
Gas used in own coke or gas plants	"	12,607,586	3,935,892	17,210,689	5,536,036
Gas used in associated works	"	28,913,734	7,420,216	37,129,087	9,687,086
Gas otherwise accounted for but not sold	"	2,734,841	1,746,867	2,988,727	1,148,025
Gas not accounted for	"	2,166,867	619,793	2,330,180	680,855
Totals, gas sold or used		"	51,097,215	62,144,085	19,653,101
Coke made:					
Coke from by-product or bee-hive ovens	ton	3,429,473 ²	51,590,069	4,035,033	64,027,455
Coke from gas retorts	"	53,632 ²	1,051,890	54,800	1,121,100
Totals, coke		"	3,483,105	4,089,833	65,148,555
Other products:					
Tar	Imp. gal.	35,869,842	4,761,263	41,181,423	5,452,933
Ammonium sulphate	lb.	58,765,127	937,608	56,053,941	927,993
Benzol	Imp. gal.	6,916,172	2,739,956	8,819,676	3,172,786
Toluol, xylol and naphthalene	"	2,430,467	808,365	2,735,477	840,629
All other products		...	627,867	...	1,214,657
Totals, coke and gas industry		...	82,788,690	...	96,410,654
Miscellaneous products of petroleum and coal industry:					
Asphalt road emulsions	Imp. gal.	21,182,714	4,472,482	18,920,800	3,595,525
Protective coatings	"	4,928,887	2,270,362	3,376,814	1,421,101
Paving materials	ton	384,603	2,395,302	389,891	2,392,931
All other products		...	5,833,438	...	7,275,195
Totals, miscellaneous industry		...	14,971,584	...	14,684,752
Total for group		...	1,466,409,361	...	1,268,007,449

¹ Grease at 10 lbs. to a gallon.

² Includes breeze.

Note: See footnote to Table 1 for explanation of change in basis of valuation.

**TABLE 7. Fuel and Electricity Used¹ in the Manufacture of Products of Petroleum and Coal in Canada,
by Industries and by Provinces, 1959**

No.		Bituminous coal		Sub-bituminous from Alberta mines	Lignite coal	Coke (for fuel only)	Gasoline (including gasoline used in cars and trucks)
		From Canadian mines	Imported				
		tons					Imp. gal.
	(a) By industries						
	Petroleum refining:						
1	Quantity	5	—	—	—	360,121	860,601
2	Cost	\$ 122	—	—	—	3,476,652	170,578
	Lubricating oils and greases:						
3	Quantity	—	—	—	—	—	10,820
4	Cost	\$ —	—	—	—	—	4,045
	Absorption gasoline:						
5	Quantity	—	—	—	—	—	4,259
6	Cost	\$ —	—	—	—	—	1,642
	Coke and gas:						
7	Quantity	11,470	1,474	—	—	5,468	338,920
8	Cost	\$ 125,692	12,516	—	—	41,598	105,629
	Miscellaneous:						
9	Quantity	13	215	1,295	—	—	31,149
10	Cost	\$ 555	3,003	9,065	—	—	11,541
	(b) By provinces						
	Newfoundland, Nova Scotia and New Brunswick:						
11	Quantity	11,410	—	—	—	59,882	31,986
12	Cost	\$ 125,308	—	—	—	643,294	6,479
	Quebec:						
13	Quantity	78	215	—	—	48,918	568,415
14	Cost	\$ 1,061	3,003	—	—	509,837	145,601
	Ontario:						
15	Quantity	—	1,474	—	—	138,548	292,254
16	Cost	\$ —	12,516	—	—	1,565,195	63,307
	Manitoba:						
17	Quantity	—	—	—	—	26,797	137,460
18	Cost	\$ —	—	—	—	240,000	28,478
	Saskatchewan:						
19	Quantity	—	—	—	—	25,086	41,473
20	Cost	\$ —	—	—	—	161,399	12,210
	Alberta:						
21	Quantity	—	—	1,295	—	46,426	59,051
22	Cost	\$ —	—	9,065	—	195,837	10,641
	British Columbia and Northwest Territories:						
23	Quantity	—	—	—	—	19,932	115,110
24	Cost	\$ —	—	—	—	202,688	26,719

¹ Data in this table relate only to establishments generally reporting value of factory shipments of \$100,000 and over. For total value of fuel and electricity used (including estimates for small firms) see Table 1.

TABLE 7. Fuel and Electricity Used¹ in the Manufacture of Products of Petroleum and Coal in Canada, by Industries and by Provinces, 1959

Fuel oil (not including lubricating oil)	Gas			Other fuel	Electricity		No.
	Liquefied petroleum gases (pro- pane, etc.)	Other manufactured gas	Natural gas		Purchased	Steam purchased	
Imp. gal.			M cu. ft.		kwh.	\$	
322,426,129	46,874,636	39,359,363	10,706,583	—	1,022,482,136	..	1
19,664,240	3,531,927	15,226,687	1,665,577	—	7,133,181	29,970	2
1,113,818	—	1,431	69	—	3,120,976	..	3
94,527	—	1,793	128	—	34,727	785	4
3,405	1,863,159	—	3,789,316	...	25,775,622	..	5
835	128,579	—	363,868	493	362,079	61,112	6
1,339,113	—	16,398,028	145,450	...	63,647,651	—	7
118,556	—	4,639,134	75,634	16,043	469,741	—	8
655,695	2,472	—	102,077	...	6,138,192	..	9
86,861	587	—	56,302	105	77,740	14,929	10
10,670,682	429,002	7,146,715	720	—	41,344,556	—	11
487,352	28,111	2,532,960	720	—	374,861	—	12
130,078,505	31,966,725	10,600,908	145,519	...	331,908,749	..	13
7,777,190	1,998,990	3,622,475	75,762	16,148	1,583,868	785	14
115,366,400	6,548,222	21,713,060	138,820	—	374,908,204	—	15
8,253,027	1,310,098	8,590,079	82,406	—	2,508,580	—	16
18,426,164	—	1,478,455	—	—	59,741,544	—	17
896,055	—	688,528	—	—	401,873	—	18
19,547,408	3,707,300	3,425,448	1,551,927	—	73,642,685	..	19
879,285	103,654	996,326	161,478	—	993,567	44,899	20
11,053,752	3,482,258	5,166,087	12,280,664	...	100,404,174	..	21
378,382	158,157	1,031,125	1,656,775	493	950,813	61,112	22
20,395,249	2,606,760	6,228,149	625,845	—	139,214,665	—	23
1,293,728	62,083	2,426,121	184,368	—	1,263,906	—	24

**TABLE 8. Capital and Repair Expenditures in the Products of Petroleum and Coal Group
by Industries, 1959**

Industry	Capital expenditures		Sub-total	Repair expenditures		Sub-total	Total capital and repair expenditures
	Construction	Machinery		Construction	Machinery		
	thousands of dollars						
Coke and gas	203	428	631	684	2,008	2,692	3,323
Petroleum products	108,214	11,394	119,608	25,902	3,910	29,812	149,420
Miscellaneous products of petroleum and coal	918	735	1,653	1	1	385	2,038
Totals	109,335	12,557	121,892	26,665	6,224	32,889	154,781

¹ Included under sub-total.

Note: The above are final figures and may differ slightly from the preliminary figures shown in the individual industry reports.

STATISTICS CANADA LIBRARY
BIBLIOTHÈQUE STATISTIQUE CANADA



1010693101