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THE GLASS AND GLASS PRODUCTS INDUSTRY 1959



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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 **Non-Metallic Mineral Products** 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

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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.
- " preliminary figures."

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

Firns 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 eatnings 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 tc 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.

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.

 $^{^1}$ 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.

1959

Factory subments from the Glass and Glass Products Industry in Canada amounted in value to \$107,737,430 during 1959, an increase of about 15 per cent over the \$93,818,849 reported in 1958. Imports of glass and glassware amounted to \$60,436,797 compared with \$53,358,178 in 1953 and exports totalled \$1,934,512 compared with the 1958 total of \$1,328,103.

One hundred and one factories were occupied in the production of glass and glass products in 1959. These establishments gave employment to a total of 8,842 persons who were paid \$34,967,391 in salaries and wages. Fuel and electricity cost \$4,948,320 and expenditures for materials to be used in manufacturing processes amounted to \$42,896,582.

Pressed, blown and drawn glass was produced by 11 plants, including 4 in Quebec, 5 in Ontario and 2 in Alberta. This branch of the industry had an output worth \$62,393,205 in 1959 as against \$56,049,756 in 1958. Production consisted of bottles and jars, ovenware, sheet and window glass; no plate glass being made in Canada.

The cutting, bevelling and ornamental section of this industry included all plants which were occupied in bevelling, cutting or working glass to produce mirrors, bevelled or polished edge plate glass, laminated and other safety glass cut glassware, chemical glassware, glass signs, show cases, prismatic glassware, etc. The number of plants operating in this group was 90 distributed across Canada as follows: 44 in Ontario, 34 in Quebec, 5 in Manitoba 5 in British Columbia, 1 in Nova Scotia and 1 in Alberta. Factory shipments from these works were valued at \$45,344,225 compared with \$37,769,093 in 1958.

Note: Due to lack of inventory data, figures for value added by manufacture prior to 1954 were obtained by subtracting the cost of materials used, including fuel and electricity from the total value of factory shipments. 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 of	the	Glass	and G	lass	Products	Industry,	Significant	Years
		1929 - 59,	and	by Pr	ovinc	es, 19	958 and 1	959		

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost at plant of materials used	Value added by manufacture'	Gross selling value of products ¹
	num	ber			dollars		
1929 1933 1937 1937 1939 1945 1946 1949 1955 1956 1957	60 66 77 73 103 114 102 108 112 115	3, 948 2, 597 3, 799 3, 372 5, 830 5, 921 5, 854 7, 870 8, 173 7, 946	$\begin{array}{c} 4,740,676\\ 2,586,370\\ 4,289,031\\ 3,948,603\\ 9,043,864\\ 9,278,360\\ 13,126,027\\ 26,291,404\\ 28,331,205\\ 28,317,234 \end{array}$	$\begin{array}{c} 1,323,150\\717,701\\1,030,993\\888,316\\1,866,561\\2,858,765\\4,173,712\\4,853,921\\4,973,762\end{array}$	5,355,156 2,950,309 5,768,738 4,559,732 10,467,286 10,583,240 16,607,403 31,000,677 35,480,541 34,881,568	$\begin{array}{c} 8,829,136\\ 4,162,785\\ 7,637,519\\ 7,081,002\\ 15,947,871\\ 15,158,454\\ 22,932,161\\ 45,139,201\\ 47,333,842\\ 51,191,256\end{array}$	$\begin{array}{c} 15, 507, 442\\ 7, 830, 795\\ 14, 437, 250\\ 12, 529, 050\\ 28, 281, 397\\ 27, 605, 255\\ 42, 398, 329\\ 80, 830, 622\\ 87, 168, 541\\ 90, 823, 646 \end{array}$
1958 Quebec Ontario British Columbia Other provinces	38 51 5 8	2, 939 4, 254 35 651	10, 956, 406 17, 132, 073 127, 237 2, 112, 639	2,071,092 2,498,332 3,608 63,835	10, 754, 146 22, 105, 832 248, 530 2, 976, 558	16,651,067 32,058,296 208,004 4,247,644	29, 558, 643 56, 456, 209 459, 052 7, 344, 945
Canada	102	7, 879	30, 328, 355	4, 636, 867	36, 085, 066	53, 165, 011	93, 818, 849
1959					1.10.80.04		
Quebec Ontario British Columbia Other provinces	38 49 5 9	3, 267 4, 809 31 735	12,507,867 19,850,861 98,548 2,510,115	2,046,770 2,833,954 5,717 61,879	$11,505,302 \\ 27,450,131 \\ 270,570 \\ 3,670,579$	17.638,618 38,711.228 181.730 5,139,029	30,014,691 68,574,441 459,082 8,689,216
Canada	101	8, 842	34, 967, 391	4, 948, 320	42, 896, 582	61, 670, 605	107, 737, 430

¹ See note to text.

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.

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
		dol	lars	
Cpening:				
Quebec	1, 544, 386	74,558	2,500,176	5,119,120
Cntario	5, 597, 021	456,969	3,630,867	9, 584, 857
British Columbia	63, 554	2,228	747	66,529
Cther provinces	1,608,901	1,322	489,017	1,099,240
Canada	8, 813, 862	535,077	6, 620, 807	15, 969, 746
Closing:				
Quebec	2,781,538	89,077	3,001,656	6,532,271
Cntario	7,039,937	568,492	3,940,215	11, 548, 545
British Columbia	66,793	1,110	800	68,703
Cther provinces	941,102	573	672,037	1,513,712
Canada	10, 829, 370	659, 232	8, 274, 709	19, 763, 331

TABLE 2. Inventories,¹ 1959

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 Glass and Glass Products Industry for the Year under review are shown in the above table.
 (c) The opening inventory for 1959 does not necessarily agree with the closing inventory for 1958 because of the addition of new plants, the transfer of plants to other industries and plants going out of business, etc. However, the value added figures for the previous year have not been recalculated to allow for the changes mentioned above.

	Value of fact	tory snipments
Product	1958	1959
	dol	llars
Cut and bevelled glass division:		
Mirrors:		
Plate glass	3, 679, 121	3,641,514
Sheet glass	955,456	854,874
Cther products of glass:		
Bevelled or polished edge plate	629,506	515,337
, Bevelled or polished edge sheet glass	401,155	565.342
Leaded glass, including memorial windows	248,679	248,088
Cut glass (tumblers, bowls, etc.)	985,489	870,964
Decorated glassware (including engraved, etched, sand-blasted, applied colour, etc.)	821,714	992.539
Druggists', physicians' and laboratory glassware	526.702	569,717
Cther glass products	28.815.129	36,643,220
All other products	705,142	442,630
Totals	37, 769, 093	45, 344, 225
Pressed, blown and drawn glass division:		
Pressed, blown and drawn glass (including bottles, sealers, ovenware, window glass, etc.)	56,049,756	62,393,205
Grand totals	93, 818, 849	107, 737, 430

TABLE 3. Factory Shipments by the Glass and Glass Products Industry, 1958 and 1959

		Cost at	works			
Muterial	19	1958 1959				
	-	dol	lars			
Cut and bevelled glass division:						
Bevelled or polished edge plates	96	31,344	99	9,138		
Bevelled or polished edge sheets	17	1,680	9	95, 999		
Figured and cathedral glass, leaded glass, etc	9	6,589	4	0,265		
Glass blanks for making cut glass articles	56	1,128	32	21,497		
Glass tubing	15	64,359	5	50,400		
Plate glass used for bevelling, silvering, laminating, etc	9,39	3.542	11,97	5,333		
Sheet glass used for bevelling, silvering, laminating, etc	2,26	9,582	2,46	88,428		
Grinding and polishing materials	8	35,446	15	52,063		
Silver nitrate		12,876		19,979		
Containers, boxes, packages, etc.	64	7,325	61	19,422		
All other materials ¹	3,64	9,556	4,818,860			
Totals	18, 06	63, 427	21, 621, 385			
	1958		1959			
	Quantity	Cost at	Quantity	Cost at		
		works \$		works \$		
Pressed, blown and drawa glass division:						
Arsenic	269,344	16,164	241,022	15,65		
Parytes	430,073	10,234	808,851	25,2		
Borax	3,598,106	188,809	1,396,770	76,24		
Cobalt oxide	5,721	8,747	5,518	8,2		
Cullet ton	22, 990	290, 489	25,820	322,5		
Chromite	101	8,026	127	9,36		
Feldspar	974	21,435	2,853	31, 20		
Fluorspar	455	30,247	462	32, 51		
Lime**	38,929	549,379	50,309	637,60		
Nepheline syenite	19,279	509, 234	21,722	567,9		
Salt cake	4,714,172	82,801	5,757,146	100,9		
Selenium (metal and salts)	4,850	43, 205	5,047	35, 33		
Silica sandton	281, 381	2,466,311	310,299	2,846,3		
Shipping containers and packing materials		4, 391, 346		4,670,75		
All other materials		9, 405, 211		11,895.09		
Totals		18, 021, 639		21, 275, 19		

TABLE 4. Materials Used in Manufacturing, in the Glass and Glass Products Industry, 1938 and 1959

¹ No detailed information on materials used was collected from firms generally reporting value of shipments of less than \$100,000. The total value of materials used by these firms in 1959 was \$689,076 and this amount is included in "all other materials".

Туре	Establish- ments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	num	ber		dollars	
1958					
Individual ownership	27	133	362, 538	489,090	1, 063, 746
Partnerships	13	55	168, 832	253, 881	523, 806
Incorporated companies	62	7,691	29, 796, 985	35, 342, 095	92, 231, 297
Totals	102	7, 879	30, 328, 355	36, 085, 066	93, 818, 849
1959		1			
Individual ownership	29	153	424, 298	480, 258	1, 171, 303
Partnerships	7	27	89,330	94, 581	245, 777
Incorporated companies	65	8,662	34, 453, 763	42, 321, 743	106, 320, 350
Totals	101	8, 842	34, 967, 391	42, 896, 582	107, 737, 430

TABLE 5. Principal Statistics of the Glass and Glass Products Industry in Canada, classifiedaccording to Type of Ownership, 1958 and 1959

TABLE 6. Principal Statistics of the Glass and Glass Products Industry in Canada, groupedaccording to Selling Value of Factory Shipments, 1958 and 1959

Establishments having reporting factory shipments	Establish- ments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	nu	mber		dollars	
1958		1000			
Under \$10,000		8	17.739	24,313	54.160
\$ 10,000 to \$ 24,999		57	142, 374	101.554	315.084
25,000 '' 49,999	10	49	104, 129	168.953	3 90, 489
50,000 '' 99,999		146	443.189	412,061	976,555
100,000 '' 199,999	22	321	990, 329	1, 551, 907	3, 096, 944
200,000 ** 499,999		467	1, 375, 583	2,255,693	4, 285, 050
500,000 ** 999,999		177	573, 507	1, 573, 785	2, 825, 075
1,000,000 ** 4,999,999		1,498	6,386,556	8,857,214	23, 287, 528
5,000,000 and over	6	5, 070	19,713,708	21, 139, 586	58, 587, 964
Head offices		86	581, 241	-	-
Totals		7, 879	30, 328, 355	36, 085, 066	93, 818, 849
1959					
Under \$10,000		12	21,700	13,650	41,461
\$ 10,000 to \$ 24,999	22	54	136, 032	145, 681	373,001
25,000 ** 49,999		52	135, 496	119, 397	334, 375
50,000 '' 99,999		65	191, 308	317, 421	628, 278
100,000 " 199,999		303	868, 971	1, 137, 454	2, 577, 266
200,000 ** 499,999		492	1, 549, 053	2, 788, 200	5, 383, 414
500,000 '' 999,999		489	1, 798, 296	2, 434, 460	4, 240, 587
1,000,000 '' 4,999,999		872	3, 904, 389	4, 339, 448	12, 905, 461
5,000,000 and over		6,413	25, 747, 813	31,600,871	81, 253, 587
Head offices		90	614, 333	-	
Totals	101	8, 842	34, 967, 391	42, 896, 582	107, 737, 430

	Capital expenditures			Repai maintenance			Total capital				
Year	Construction	Machinery and equipment	Sub-total	Construction	Machinery and equipment	Sub-total	and repair expenditures				
	thousands of dollars										
1955	1.360	1.794	3, 154	493	4,473	4,966	8, 120				
1956	1,663	2,344	4.007	449	5,034	5,483	9,490				
1957	1,270	2,275	3, 545	455	5.511	5,966	9, 511				
1958	1,633	2,615	4.248	414	5,530	5.944	10.192				
1959 ^p	2,702	5,887	8, 589	570	7.090	7.660	16,249				

TABLE 7. Capital and Repair Expenditures in the Glass and Glass Products Industry, 1955-59

TABLE 8. Employees and their Earnings in the Glass and Glass Products Industry, by Provinces,1958 and 1959

	100	E	mployee	S	Earnings			
Province	Superand	visory office	Production workers		Total	Supervisory	Production	Total
	Male	Female	Male	Female		and office	workers	
		<u> </u>	number			1.000	dollars	
1958								
Quebec	393	179	2,069	298	2.939	2, 478, 209	8, 478, 197	10, 956, 406
Ontario	515	266	2,977	496	4.254	3,605,023	13, 527, 050	17, 132, 073
British Columbia	5	2	20	8	35	36,155	91,082	127, 237
Other provinces	60	16	342	233	651	280, 094	1,832,545	2,112,639
Canada	973	463	5,408	1, 035	7, 879	6, 399, 481	23, 928, 874	30, 328, 355
1959								
Quebec	438	204	2, 293	332	3,267	2,862,143	9, 645, 724	12, 507, 867
Ontario	538	271	3,310	690	4,809	3,826,002	16,024,859	19,850,861
British Columbia	5	1	18	7	31	23,854	74,694	98, 548
Other provinces	70	18	372	275	735	397, 347	2, 112, 768	2, 510, 115
Canada	1,051	494	5, 993	1.304	8, 842	7, 109, 346	27, 858, 045	34, 967, 391

Month	Establishment monthly d		Establishments reporting quarterly detail ²		
19/04/64	Male	Female	Male	Female	
January	5,337	977			
February	5,314	1,055	15		
March	5,275	1,114	262	109	
April	5,414	1.210			
May June	5,800	1,204	289	128	
July	5,790	1, 246	205	120	
Augus:	5,713	1,176			
September	5,820	1,143	286	142	
October	5,706	1,153			
November	5,470 5,673	1,185	278	122	
Average for establishments reporting monthly detail			5,615	1,154	
Average for establishments reporting quarterly detail	** ** *** * * * * * * * * * * * * * * *	**********	264	124	
Average estimated for small establishments ³	********		114	26	
Average for all establishments			5,993	1,304	

TABLE 9. Production Workers, by Months, 1959

¹ The number of production workers, by months, was collected only for establishments generally reporting value of shipments of \$300,000 and over.

³ The number of production workers, by quarters, was collected only for establishments generally reporting value of shipments between \$100,000 and \$300,000. ³ For establishments generally reporting value of shipments of less than \$100,000, no data on number of workers were collected. Average was estimated by using change in value of shipments to arrive at value of payroll which was then used in conjugation of workers. used in conjunction with estimated average earnings to arrive at number of workers.

Kind		Quantity	Cost at plant
			\$
Establishments reporting commodity detail:1			
Bituminous coal - Imported	ton	2,864	34,441
Anthracite coal		382	5,746
Gasoline (including gasoline used in cars and trucks)	Imp. gal.	263,468	89, 748
Fuel oil including kerosene or coal oil	e 6	34,409,793	2,707.45
Gas (a) Liquefied petroleum gases	68	209,415	39,672
(b) Natural gas	M cu. ft.	1, 213, 935	847,066
Other fuel			19,455
Electricity purchased	kwh.	176,083,241	1, 105, 531
Steam purchased			1,100
Establishments reporting group detail: ²			
Cost of fuel			34, 585
Cost of electricity	1		23,314
Estimate for establishments for which no data were collected:			
Cost of fuel and electricity	4877		40, 19
All establishments:			
Total cost of fuel and electricity			4,948,320

TABLE 10. Fuel and Electricity Used in the Glass and Glass Products Industry, 1959

¹ Establishments generally reporting value of shipments of \$300,000 and over.
 ² Establishments generally reporting value of shipments between \$100,000 and \$300,000.
 ³ Establishments generally reporting value of shipments of less than \$100,000.

Item		1958	1959
Glass, cut, pressed or blown:			
Glass plates or discs, rough cut or unwrought, for the manufacture of		200.020	600 160
Decanters and machine-made tumblers of glass, not cut or decorated,	\$	733,278	573,157
n.o.p. Lamp chimneys	\$	694.298 64.144	583.117 43.768
Glass demijohns, carboys, bottles, flasks, phials and jars, and balls, not	6		7,282,302
Cut Glass tableware and cut glassware, n.o.p.	\$	8,068.463 4,309,171	4,642,024
Incandescent lamp bulbs and glass tubing for the manufacture of incan- descent lamps, vials and ampoules and glass tubing, n.o.p., in straight			
lengths of not less than three feet	\$	2.593,519	2,803,406
Glass shades or globes, opal and illuminating glassware, n.o.p	\$	153,083 315,826	155.842 503.009
Fresnel type lenses, sections and globes, of glass	\$	108,830	129,465
electric light fixtures	\$	1,820,149	2.190.387
	\$	4,922,557	5,865,126
			and an and the
Glass, stained, ornamental and silvered:	-		
Ornamental, figured and enamelled coloured glass and memorial or other		246,943	050 010
omamental window glass Painted or vitrified, chipped, figured, enamelled and obscured white	\$		259,812
glass	\$	963,580 198,273	982,216 165,248
Silvered glass, bevelled or not, and framed or not, n.o.p.	\$	1.532,141	1,808,465
other glass and glassware:			
Glass balls or marbles for the manufacture of glass fibres or glass yarn	\$	386,699	467, 538
Articles of glass, not plate or sheet, designed to be cut or mounted; articles of glassware for the manufacture of receptacles made of, or			
electroplated with precious metals		499,288	444,429
Blanks of uncoloured clear glass for the manufacture of reflectors or refractors, for lighting systems	\$	257,476	358,526
Beads, drops or other shapes of glass, for the manufacture of imitation	s	32,431	15,301
Artificial eyes for human use and contact eye glasses or lenses	\$	12,953	56,542
Photographic dry plates Spectacles, eye glasses and ground or finished spectacle or eye glass	\$	173,977	231,710
lenses, n.o.p.	\$	949,904	1,100,440
Glass blocks	\$	672,663 3,493,248	514,527 3,376,478
Plate, sheet and window glass:			
Sheet glass transparent, in rectangles, not over 34 oz. per sq. ft	sa ft	64.348.600	67, 174, 964
	\$	5, 150, 757	5, 275, 248
Sheet glass, transparent, in rectangles, over 34 oz. per sq. ft., and sheet glass transparent, n.o.p.	sq. ft.	8,064,951	12,954,515
Plate glass, not bevelled, in sheets or panes not exceeding 7 sq. ft.	\$	2,058,995	3,175,809
each, n.o.p.	sq. ft.	784.001	1,195,102
Plate glass, not bevelled, in sheets or panes exceeding 7 sq. ft. each.	\$	325,433	495,803
and not exceeding 25 sq. ft. each, n.o.p.	sq. ft.	7,488,590	8,695,328
Plate glass, n.o.p.	sq. ft.	3,267,347 17,581,342	3,829,821 24,664,490
Laminated glass, sheet or plate, and manufactures, n.o.p.	\$	8,509,026 286,676	12,057,822 324,408
Glass in sheets, wired Glass, cast, and sheet glass, n.o.p.	\$	495,999	628,768
Glass, cast, and sheet glass, n.o.p.	\$	61,051	96,283
Totals	\$	53, 358, 178	60, 436, 797

TABLE 11. Imports of Glass and Glassware, 1958 and 1959

Note: The letters "n.o.p." mean "not otherwise provided for" in the classification of imports for statistical pur-

NON-METALLIC MINERAL PRODUCTS

Ite=	1958	1950
Common and colourless window glass	6, 535, 541 690, 716	7.921.079 873,919
Tableware of glass	12,046	12,526
Lenses of glass, rough or finished	463, 893	862, 643
Glass bottles, empty\$	89, 868	82, 398
Glass and glassware, n.o.p. \$	71,582	103, 026
Totals	1, 328, 105	1, 934, 512

TABLE 12. Exports of Glass and Glassware, 1958 and 1959

Directory of Firms Included in the Glass and Glass Products Industry, 1959

Name of firm	Location of plant
(a) Pressed, Blown and Drawn Glass	
Quebec:	
Canadian Pittsburgh Industries Ltd. Consumers' Glass Company, Limited Dominion Glass Company, Limited Iroquois Glass Ltd.	300 Ste. Croix Blvd., Ville St. Laurent 258 Second Ave., Ville St. Plare 2376 Wellington St., Montreal Candiac
Ontario:	
Dominion Glass Company, Limited Consumers' Glass Company, Limited Corning Glass Works of Canada, Ltd. Pilkington Glass Manufacturing Co. Ltd.	Hamilton and Wallaceburg 249 Kipling Ave. S., Etooicoke Vanderhoof Ave., Leaside 350 Danforth Road, Scarborough
Alberta:	
Altaglass Dominion Glass Company, Limited	Medicine Hat Redcliff
(b) Cut and Bevelled Glass	
iova Scotia:	
Poly-Perm Products Ltd.	Central Ave., Wolfville
Quebec:	
Acme Glass Company Limited Canadian Plate Glass & Mirror Canadian Co. Reg'd. Citadel Glass Inc. Consolidated Glass Industries, Ltd. Crystal Glass & Plastics Ltd., Technical Glass Div. David, R. Cie Enr'g. Despres, J.R., Glass Co. Dugal Auto Glass Franklin Glass & Paint Co. Glass Hall Co., Ltd Insulation Manufactures & Processors Ltd. Lafayette Glass Co. La Vitrerie Moderne	1311 Bonaventure St., Montreal 715 St. Maurice St., Montreal 186 St. Paul St., Quebec 636 St. Paul St., Quebec 636 St. Paul St., Wontreal 1017 William St., Montreal 708 Walnut St., Montreal 708 Walnut St., Montreal 709 Rue Rachel Est., Montreal 969 Rue Rachel Est., Montreal 9135 Taillon St. Québec 6832 Garnier St., Montreal 75 Stinson Blvd., St. Laurent 2165, rue Parthenais, Montreal 535 St. Germain, Quebec



Directory of Firms Included in the Glass and Glass Products Industry, 1959 - Continued

 Name of firm
 Location of plant

 (b) Cut and Bevelled Glass - Concluded

 Quebec - Concluded:

 Leclair, G., Enr'g.
 179, rue Laurier Est, Montreal

Miroirs Laurier Enr'g.L4Miroirs Victoriaville Ltée84Naimco Inc.18Phillips Cut Glass Company, Limited22Pion, Georges91Silex Company, Limited, The16Star Glass Limited40Stotter, E., Glass Products Ltd.26Vilteray Glass10Vitrefie Belanger Enr'g.60Vitrefie Bouchard Glass51Vitrefie Contrecoeur Enr'g.61Vitrefie General Enr'g.62Vitrefie Glass Co.40	
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Ontario:

Bath & Sons Mirrors & Manufacturing Ltd.	1388 Main St. E., Hamilton
Peach Neon	54 Alice Cresent, Toronto
Belgium Mirror & Glass Co.	407 Dundas St. W., Toronto 2B
Bonnett Glass Co. Ltd.	1004 Walker Road, Windsor
Bennett Glass Co. Litt	59 York St., London
Canadian Pittsburgh Industries Ltd.	
Central Ornamental Glass Co.	83 McCaul St., Toronto
Clapperton & Sons, Limited	23 River St., Toronto
Consolidated Glass Industries Limited	161 Bridgeland Ave., Toronto
Cutler Brands Limited	126 Geary Ave., Toronto
De Paoli Industries	542 Brant St., Windsor
Duplate, Canada, Ltd.	Kerr St., Oakville
Duplate (Canada), Limited	1850 Walker Road, Windsor
Duplate (Canada) Limited	First Ave., Oshawa
Emerald Glass Company	544 Rogers Road, Toronto
Excelsior Glass Co.	127 Rivalda Rd., Weston
Glass Guild Limited, The	175 King St., Stratford
Holophane Company, Limited	418 Kipling Ave., S. Etobicoke, Toronto
Rolophane Company, Limited	103 River St., Toronto
Holliday Flint Glass Works of Toronto	102 Tycos Drive, Toronto
Hughes, W.J., & Sons "Corn Flower" Limited	374 Montrose Ave., Toronto
Jewell, Ernest C., & Son	
Johns, O.H., Glass Co. Limited	219 Broadview Ave., Toronto 8
Lipmen Sterling Limited	191 George St., Toronto
Lloyd's Glass Co.	180 King St. W., Hamilton
London Glass & Mirror Co.	679 York St., London
Luxfer Prism Company, Limited	162 Parliament St., Toronto
McCausland, Robert, Limited	212-214 John St., Toronto
McConnell Mirrors & Glass	164 St. Patrick St., Stratford
Meikle Stained Glass Studio	Maple
Monogram Glass Co, of Canada Limited	Staffordshire Place, Toronto 14
Pilkington Brothers (Canada) Ltd.	111 Millward Rd., Leaside
Precision Glasscraft Co.	121 Judge Rd., Toronto
Pringle & London	162 Parliament St., Toronto
Queen City Glass Company, Limited	243 Victoria St., Toronto 1
Richards Glass Co. Limited	102 Atlantic Ave., Toronto
Service Glass Mirror Ltd.	1185 Roselawn Ave., Toronto
Smith, Kenneth M., Co., Ltd.	30 Industrial St., Leaside
Smith, Kenneth M., Co., Etd.	442 Sherbourne St., Toronto 5
Smit & Ramsdale	216 Adelaide St. W., Toronto
Shetiff, R.G.	
Strathroy Glass Company	Canaan St., Strathroy
Litermo-Rite Mfg., Co.	134 Hartzel Road. St. Catharines
Tooke, Gerald, E. Stained Glass Designer	186 Dupont St., Toronto
Teronto Glass & Mirror Ltd.	67 Racine Rd., Rexdale
X.L. Glass Company	59 King St. W., Hamilton



Name of firm	Location of plant
(b) Cut and Bevelled Glass - Concluded	
Manitoba:	
Brooker Window Ltd. Consolidated Plate Glass (Western), Ltd. Paramount Glass Limited Seal-Dow Co. Western Industries Ltd.	602 Des Meurons St., St. Boniface 450 Deschambault St., St. Boniface 362 Panet Rd., St. Boniface 2029 Somerville Ave., Fort Garry 309 Elgin Ave., Winnipeg
Alberta:	
Paraglas Ltd.	1708-42nd Ave., S.E., Calgary
British Columbia:	I TO AT SULL
Fraser, J., Glass Works Hastings Glass & Mirrors Twin Seal Glass Co. Ltd. Vitric Manufacturing Ltd. Wallin's Glass Co. Limited	2132 Granville St., Vancouver 1146 E. Cordova St., Vancouver Vancouver 2628 Yew St., Vancouver 1069 S.W. Marine, Vancouver

Directory of Firms Included in the Glass and Glass Products Industry, 1959 - Concluded



