# Published by Authority of the Hon. James A. MacKinnon, M.P. Minister of Trade and Commerce 

## CANADA

## DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS

 ++ Census of Industry
## THE COKE AND GAS INDUSTRY

## IN

## CANADA 1945

1948


Director - Division of Census of Industry and Merchandising: Chief - Mining, Metallurgical and Chemical Statistics:
W. H. Losee
H. McLeod

## THE COKE AND GAS INDUSTRY, 1945

Production from coke plants and from illuminating and fuel ges plants in Canada during 1945 was valued at $\$ 68,483,305$, a decline of 1.6 per cent from the $\$ 69,575,715$ of the previous year. Output included $3,912,320$ tons of coke valued at $\$ 37,671,991$ at the works, $70,021,849 \mathrm{M} \mathrm{cubic}$ feet of gas, of which $70,268,116 \mathrm{M}$ cubic feet valued at $\$ 25,841,609$ were sold or used, and by-products valued at $\$ 4,969,705$.

Thirty coke and gas works operated in 1945, including 11 by-product and bee-hive plants, 18 retort coal and water gas plants, and 1 propane gas plant. Fifteen of these works were located in Ontario, 4 in British Columbia, 5 in Quebec, 2 in Manitoba, 2 in Nova Scotia, 1 in New Brunswick and 1 in Alberta. In addition to these producers, 1 company in Quebec and 2 in Ontario purchased coke-oven gas and distributed it for domestic or commercial use, and data covering their operations have been included to round out the figures for the industry.

Output of coke from gas retorts, by-products and bee-hive ovens totalled 3,912,320 tons in 1945 compared with $4,017,696$ tons in 1944 and $3,551,773$ tons in 1943. By-product and bee-hive ovens produced $3,604,611$ tons of coke in 1945 and gas retorts made 307,709 tons. In addition, 66,819 tons of petroleun coke mere recovered in petroleum refineries and 17,795 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 171,663 tons were sold direct to domestic consumers; $1,693,048$ tons were used in associated works operated by the producing companies; 377,527 tons were used by coke plants as fuel or to make water gas; 558,593 tons were sold direct to consumers for foundry and other uses (other than domestic); 1,178,601 tons were sold to dealers for resale, and 32,724 tons were sold for export. The total distribution was 4,021,364 tons, including imports by the producers of 59,000 tons. Total stocks of coke in the hands of producers amounted to 236,810 tons at the end of 1945.

Imports into Canada of coke made from coal increased to 1,244,398 tons in 1945 from 813,352 tons In 1944, and exports decreased to 38,665 tons from 42,588 tons. Imports of petroleum coke during this period declined to 192,122 tons from 221,970 tons and exports (including re-exports of imported coke) decreased to 22,314 tons from 27,104 tons.

Manufactured gas, sold and used, amounted to $70,268,116 \mathrm{M}$ cubic feet in 1945 , including $52,985,713 \mathrm{M}$ cubic feet from by-product ovens and $27,282,403 \mathrm{M}$ cubic feet from gas plants. Sales of gas by the producers totalled $21,551,189 \mathrm{M}$ cubic feet, of which $12,469,819 \mathrm{M}$ cubic feet mere from by-product ovens and 9,081,370 Mcubic feet were from gas works. Most of the remaining gas was used as fuel in the producing plants or in their associated metallurgical works. These figures do not include $57,132 \mathrm{M}$ cubic feet of (Pintsch) oil gas for lighting railway cars, $10,614,582 \mathrm{M}$ cubic feet of still gas recovered at petroleum refineries, nor iron blast furnace gas and some producer gas milch was recovered and used by the producers but for which no records are avallable.

The number of customers served with manufactured illuminating and fuel gas in 1945 was 532,613, the length of distributing mains was 2,948 miles, and the average calorific value of the gas sold ranged from 450-570 B.T.U. per cubic foot.

Table 1 - DISTRIBUTION OF COKE AND GAS MANUFACTURING PLANTS, BY PROVINCES, 1945

(*) 9 by-product only; 1 bee-hive only, and 1 both by-product and bee-hive.

TABIE 2 - SIZE OF ESTABLISHENTS ACCORDING TO QUANTITY OF COAL CHARGED TO OVENS OR RETORTS, 1945
Coal Used
Number of Total coal for
plants (*)
gas making

| Less than 5,000 tons .......... | 6 | 15,923 |
| :---: | :---: | :---: |
| 5,001-15,000 ........... . . . . . . . | 5 | 67,927 |
| 15,001-100,000 ............... | 3 | 228,389 |
| 100,001-500,000 ............... | 5 | 1,162,921 |
| Over 500,000 .................... | 4 | 3,660,858 |
| TOTAL (*) | 23 | 5,136,018 |

(*) Does not include 6 plants which distributed water gas only, and I plant which distributed propane gas only.

Table 3 - PRINCIPAL STATISTICS OF THE COKE AND GAS INDUSTRY, 1940-1945

| Year | Number of companies (*) | Average number of employees | $\begin{gathered} \text { Salarles } \\ \text { and } \\ \text { wages } \\ \hline \end{gathered}$ | Cost of fuel and electricity at works | Cost of materials at works | Gross selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | wag | 8 |  |  |


| 1940 | 13 | 2,421 | 3,829,937 | 2,974,347 | 18,143,915 | 36,310,384 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1941 | 13 | 2,488 | 4,073,482 | 3,611,421 | 20,505,807 | 39,999,164 |
| 1942 | 13 | 2,536 | 4,462,503 | 3,809,802 | 23,083,418 | 43,858,560 |
| 1943 | 14 | 2,718 | 5,112,660 | 4,138,202 | 27,293,247 | 48,478,935 |
| 1944 | 14 | 3,056 | 6,032,037 | 5,470,044 | 32 610,820 | 56,902,563 |
| 1945 | 14 | 3,018 | 6,058,717 | 5,476,808 | 32,533,770 | 55,515,287 |
| GAS (Retort and Water Gas) |  |  |  |  |  |  |
| 1940 | 18 | 1,674 | 2,546,528 | 994,587 | 2,893,414 | 10,363,276 |
| 1941 | 18 | 1,802 | 2,458,621 | 950,169 | 3,402,071 | 10,819,556 |
| 1942 | 18 | 1,865 | 2,819,400 | 1,063,414 | 4,211,08? | 11,929,931 |
| 1948 | 19 | 1,663 | 2,842,938 | 940,708 | 5,141,420 | 12,421,663 |
| 1944 | 20 | 1,691 | 2,008,576 | 1,008,767 | 5,198,433 | 12,673,152 |
| 1945 | 20 | 1,739 | 2,954,391 | 1,046,745 | 5,212,71? | 12,968,018 |
| TOTAL - Coke and Gas |  |  |  |  |  |  |
| 1940 | 51 | 4,095 | 6,376,465 | 3,968,934 | 21,037,329 | 46,673,660 |
| 1941 | 31 | 4,290 | 6,532,103 | 4,561,590 | 23,007,878 | 50,818,720 |
| 1942 | 31 | 4,401 | 7,281,903 | 4,873,216 | 27,294,505 | 55,788,491 |
| 1943 | 33 | 4,381 | 7,955,598 | 5,078,910 | 32,434,667 | 60,900,598 |
| 1944 | 34 | 4,747 | 8,940,613 | 6,478,811 | 37,809,253 | 69,575,715 |
| 1945 | 34 | 4,757 | 9,013,108 | 6,523,553 | 37,746,482 | 68,483,305 |

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

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

Table 4 - PRTNCIPAL STATISTICS, BY PROVINCES, 1944 and 1945

| Province | Number of $\mathrm{com}-$ panies | Average <br> number <br> of $\mathrm{em}-$ <br> ployees | Salaries and wages | Cost of fuel and electricity at works | Cost of materials at works | Gross selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1944 |  |  | \$ | \$ | § | \$ |
| Nova scotia and New |  |  |  |  |  |  |
| Brunswick | 3 | 471 | 870,871 | 779,319 | 4,760,357 | 7,752,033 |
| Quebec | 6 | 722 | 1,526,879 | 1,967,587 | 5,882,796 | 13,837,028 |
| Ontario ............ | 17 | 2,921 | 5,422,515 | 3,055,969 | 24,836,855 | 42,386,597 |
| Manstoba and Alberta | 3 | 209 | 366,390 | 173,481 | 976,148 | 1,955,020 |
| British Columbia | 4 | 424 | 753,958 | 502,454 | 1,353,097 | 3,665,037 |
| Canada | 33 | 4,747 | 8,940,613 | 6,478,811 | 37,809,253 | 69,575,715 |

Table 4 - PRINCIPAL STATISTICS, BY PROVINCES, 1944 and 1945 (Concluded)

| Province | Number of companies | Average number of employees | $\begin{gathered} \text { Salaries } \\ \text { and } \\ \text { wages } \end{gathered}$ | Cost of fuel and electricity at works | Cost of materials at worke | Gross selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1945 |  |  | \% | 5 | $\ddagger$ | $\checkmark$ |
| Nova Scotia and New |  |  |  |  |  |  |
| Brunswick ......... | 3 | 462 | 928,259 | 764,443 | 4,641,515 | 7,895,026 |
| Quebec | 6 | 689 | 1,502,068 | 2,043,618 | 5,679,227 | 12,839,733 |
| Ontario | 18 | 2,970 | 5,388,380 | 3,059,935 | 25,086,610 | 42,190,328 |
| Manitoba and Alberta | 3 | 200 | 359,926 | 174,649 | 841,923 | 1,771,210 |
| British Columbia | 4 | 436 | 834,475 | 480,908 | 1,497,209 | 3,787,008 |
| Canada ....... | 34 | 4,757 | 9,013,108 | 6,523,553 | 37,746,482 | 68,483,305 |

Table 5 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1944 and 1945

| Province | Average Number of Employees |  |  |  |  | Salaries | Wages | total SALARIES and TAGES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | On Salaries |  | On Wages |  | total |  |  |  |
|  | Male | Female | Male | Femare |  |  |  |  |
|  |  |  |  |  |  | \% | \$ | \% |
| Nova $\mathrm{S} \frac{1944}{\cot \text { ia and New }}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brunswick ........ | 40 | 12 | 400 | 19 | 471 | 84,098 | 786,773 | 870,871 |
| Quebec | 224 | 60 | 438 | -. | 722 | 639,592 | 887,287 | 1,526,879 |
| Ontario | 454 | 271 | 2,142 | 54 | 2,921 | 1,413,634 | 4,008,881 | 5,422,515 |
| Manitoba and Alberta | 41 | 26 | 142 | . . . | 209 | 98,405 | 267,985 | 366,390 |
| British Columbia.. | 61 | 13 | 350 | . . . | 424 | 156,538 | 597,420 | 753,958 |
| CANADA .... | 820 | 382 | 3,472 | 73 | 4,747 | 2,392,267 | 6,548,346 | 8,940,615 |
| Nova $\frac{1945}{\operatorname{cotia} \text { and New }}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brunswick ........ | 38 | 12 | 404 | 8 | 462 | 86,141 | 842,118 | 928,259 |
| Quebec | 214 | 61 | 413 | 1 | 689 | 670,772 | 831,296 | 1,502,068 |
| Ontario ............. | 466 | 276 | 2,194 | 34 | 2,970 | 1,398,453 | 3,989,927 | 5,388,380 |
| Manitoba and Alberta | 40 | 22 | 138 | , | 200 | 102,481 | 257,445 | 359,926 |
| British Columbia... | 57 | 13 | 366 | ... | 436 | 154,637 | 679,838 | 834,475 |
| CANADA . ..... | 815 | 384 | 3,515 | 43 | 4,757 | 2,412,484 | 6,600,624 | 9,013,108 |

Table 6 - WAGE-EARNERS, BY MONTHS, 1944 and 1945 (Number on pay-roll on the last day of each month)

| Month | 1944 |  |  | 1945 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M1e | Female | TCTAL | Male | Fenalo | TOTAL |
| January | 3,459 | 74 | 3,533 | 3,472 | 66 | 3,538 |
| February | 3,463 | 75 | 3,538 | 3,494 | 69 | 3,565 |
| March | 3,463 | 74 | 3,557 | 3,469 | 66 | 3,555 |
| April | 3,449 | 73 | 3,522 | 3,438 | 65 | 3,501 |
| May | 3,519 | 72 | 3,591 | 3,483 | 65 | 3,548 |
| June | 3,519 | 73 | 3,592 | 5,488 | 57 | 5,545 |
| July | 3,455 | 73 | 3,528 | 3,471 | 57 | 5,508 |
| August | 3,480 | 72 | 3,552 | 3,468 | 31 | 3,499 |
| September | 3,501 | 72 | 3,573 | 3,561 | 25 | 5,586 |
| October | 3,487 | 70 | 3,557 | 3,595 | 14 | 5,607 |
| November | 3,446 | 69 | 3,515 | 3,627 | 11 | 5,658 |
| December | 3,432 | 68 | 3,500 | 3,600 | 10 | 5,610 |
| AVERAGE | 3,472 | 73 | 3,545 | 3,515 | 43 | 5,558 |

Table 7 - HOURS WORKED PER WEEK BY WAGE-EARNERS, 1944 and 1945 (In one week of highest employment; overtine included)

| Hours Worked per Week | $\frac{\text { Number of Thage-earners }}{1944} \frac{1945}{}$ | Hours Worked per Week | $\frac{\text { Number of Wage-earners }}{1944}$ |
| :---: | :---: | :---: | :---: |
| 30 hours or less .... | 224 251 | 55 hours | $30 \quad 28$ |
| 31-43 hours... | 428 461 | 56-64 howxs ........ | 524.519 |
| 44 hours | 352 435 | 65 hours and over ... | 64 51 |
| 45-47 hours | 193 194 | TOTAL | 3,705 3,911 |
| 48 hours ... | $1,310 \quad 1,430$ | doral |  |
| 49-50 hours | 187 | Total wages paid dur- |  |
| 51-54 hours | 393 385 | ing selected week .. \$ | 131,003 136,345 |

Table 8 - FUEL AND ELECTRICITY USED, 1944 and 1945
Note: Includes fuel for boilers, benches, retorts, etc., but does not incluae coal, coke, etc., charged to ovens, retorts or water gas sets.

| Kind | Unit of measure | 1944 |  | 1945 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Cost at works | Quantity | Cost at works |
|  |  |  | \$ |  | \$ |
| Anthracite coal | ton | 238 | 1,847 | 8 | 129 |
| Bituminous coal - Canadian . | ton | 21,468 | 113,944 | 19,569 | 109,067 |
| Imported ... | ton | 22,513 | 171,425 | 22,266 | 173,811 |
| Lignite coal - Canadian ...... | ton | 87 | 304 | -.. | ... |
| Coke | ton | 263,533 | 1,820,542 | 281,026 | 1,999,735 |
| Gasoline | Imp.gal. | 110;951 | 30,286 | 122,223 | 33,983 |
| Fuel ofl | Imp.gal. | 72,183 | 4,737 | 110,527 | 7,263 |
| Gas-Manufactured (all made in users' works) .......... | M cu. ft. | 31,188,404 | 3,968,197 | 32,116,115 | 3,822,980 |
| Other fuel |  |  | 24,279 | , ... | 30,424 |
| Electricity purchased | K.п.\%. | 64,137,580 | 343,250 | 66,008,124 | 346,161 |
| TOTAL . ........... | ... | ... | 6,478,811 | ... | 6,523,553 |

Table 9 - POHER EQUIPMENT, 1944 and 1945

| Table 9 - POWER EQUIPMENT, 1944 and 1945 |  |
| :---: | :---: |
|  | $\frac{\text { Ordinarily in Use }}{\text { Number Total rated }}$In Reserve or IdIe <br> Number Total rated <br> of units horse power of units horse power |

1944
Steam engines and turbines
Diesel engines
Gasoline, gas and
Hydraulic turbines or water wheels
Total Primary ..............................
Electric motors run by purchased power
TOTAL
.........
by .......................
Electric motors run by primary units shown above Stationary power boilers
Llotor-generator sets

## 1945

Steam engines and turbines
Diesel engines
Gasoline,
Hydraulic turbines or water wheels
Total Primary
Electrlc motors rus by purchased power
TOTAL . . . . ........................
Electric motors run by primary units shom above
Stationary power boilers ..............................


| 183 |
| ---: |
| 1 |
| 27 |
| -211 |
| 981 |
| 1,292 |
| 110 |
| 83 |
| 1 |

Table 10 - MATERIALS USED IN COKE AND GAS PLANTS, 1944 and 1945

| Material | Onit of measure | 1944 |  | 1945 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Cost at works | Quantity | Cost at works |
|  |  |  | \$ |  | $\$$ |
| Bituminous coal carbonized in ovens or retorts - |  |  |  |  |  |
| (a) Canadian ................... | ton | 1,221,275 | 6,557,024 | 1,136,436 | 6,509,235 |
| (b) Imported | ton | 4,090,680 | 28,300,251 | 3,996,049 | 28,248,799 |
| Bituminous coal for making water gas Imported | ton | 4,756 | 48,396 | 6,764 | 57,532 |
| Coke for gas-making - <br> (a) Purchased <br> (b) Companies' own make | ton | 9,522 85,726 | 109,068 691,636 | 10,759 91,122 | 120,273 742,909 |
| (b) Companies' own make ......... | ton | 85,726 $10,195,115$ | 691,636 810,200 | 91,122 $10,655,717$ | 742,909 836,488 |
| Absorbing and wash oil .......... | Imp.gal. | 412,864 | 56,895 | 275,792 | 36,117 |
| Caustic soda ........................... | lb. | 2,029,873 | 41,293 | 1,936,288 | 39,239 |
| Lime | ton | 2,078 | 29,301 | 1,849 | 26,087 |
| Water | -•• |  | 43,123 |  | 39,967 |
| Iron oxide | ton | 2,194 | 71,545 | 7,357 | 57,441 |
| Sulphuric acid, $66^{\circ}$ Bé | 1 b . | 70,498,674 | 570,177 | 67,830,415 | 560,007 |
| A21 other materials. | ... | , | 480,344 | , | 472,388 |
| Total cost | ... | **. | 37,809,253 | ... | 37,746,482 |

Table 11 - MATERIALS USED IN COKE AND GAS PLANTS, BY AREAS, 1945

| Naterial | thit of measure | Eastern Provinces |  | Ontario |  | Hestern Provinces |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Cost at works $\$$ | Quantity | Cost at works - | Quantity | Cost at morks E |
| Bituminous coal carbonized |  |  |  |  |  |  |  |
| in ovens and retorts - <br> (a) Canadian | ton | 783,347 | 4,606,924 |  |  |  | 1,902,311 |
| (b) Imported ......... | ton | 645,564 | 4,952,010 | 3,333,816 | 23,159,768 | 16,669 | $157,021$ |
| Bituminous coal for making water gas - |  |  |  |  |  |  |  |
| Inported ............... | ton | 223 | 2,342 | 6,541 | 55,190 | -•• |  |
| Coke for gas-making - |  |  |  |  |  |  |  |
| (a) Purchased | ton | 1,239 | 14,434 | 7,980 | 92,939 | 1,540 |  |
| (b) Companies' own make | ton | 14,511 | 146,722 | 60,560 | 500,640 | 16,051 | $95,547$ |
| 011 used for enriching |  |  |  |  |  |  |  |
| Absorbing and wash oil ... | Imp.gal. | 120,804 | 17,408 | 136,114 | 17,182 | 18,874 | 1,527 |
| Caustic soda .......... | pound | 773,814 | 19,763 | 1,162,474 | 19,476 | , | 1,527 |
| Lime | ton | 1,754 | 25,162 | 95 | 925 | ... |  |
| Water ..... | ㅂ.. |  | 6,431 |  | 12,617 | -i2 | 20,919 |
| Iron oxide .............. | ton | 3,529 | 23,361 | 3,303 | 26,385 | 525 | 7,695 |
| Sulphuric acid, $66^{\circ}$ Bé | pound | 26,716,234 | 206,304 | 41,114,181 | 353,703 | ... |  |
| A11 other materials ...... | ... | , | 229,958 | ... | 228,447 | ... | 13,985 |
| TOTAL COST ........ | . | - . | 10,320,740 | ... | 25,086,610 | ... | 2,539,152 |

Table 12 - PRODUCTS MADE IN COKE AND GAS PLANTS, 1944 and 1945

| Product | Unit of measure | 1944 |  | 1945 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | $\begin{aligned} & \text { Gross sell- } \\ & \text { ing value } \\ & \text { at works } \end{aligned}$ | Quantity | Gross selling value at works |
|  |  |  | \$ |  | \$ |
| Gas Made - |  |  |  |  |  |
| Retort coal gas | M cu.ft. | 4,778,326 |  | 12,661,741 |  |
| Coke oven gas. | ucu.ft. | 51,346,077 |  | 49,313,480 |  |
| Producer gas | M cu.ft. | 17,389,414 |  | 2,031,124 |  |
| Water gas | $\mathrm{Mcu} . \mathrm{ft}$. | 5,605,752 |  | 5,885,110 |  |
| Propane and butane gas | Mcu.ft. | 108,945 | ... | 130,394 |  |
| TOTAL GAS MADE | Mcu.ft. | $79,228,514$ | -. | 70,021,849 |  |
| Gas Sold or Used - |  |  |  |  |  |
| Gas sold ... | Mcu.ft. | 21,101,351 | 19,392,362 | 21,551,189 | 19,916,643 |
| Gas used in own coke or gas plants ... | N cu.ft. | 28,133,317 | 3,780,315 | 20,999,668 | $2,656,833$ |
| Gas used in associated metallurgical | M cu.ft. | 26,861,445 | 2,387,023 | 24,531,485 | 2,160,752 |
| Gas otherwise accounted for but not sold | L'cu.ft. | 218,933 | 54,268 | 328,489 | 125,693 |
| Gas not accoumted for | M cu.ft. | 2,740,357 |  | $2,857,285$ |  |
| TOTAL GAS SOLD OR USED | Ecu.ft. | 79,055,403 | 26,571,271 | $70,268,116$ | $25,841,609$ |
| Coke Made - |  |  |  |  |  |
| Coke from by-product or bee-hive ovens | ton | 3,437,555 | 34,295,098 | 3,332,578 | 34,210,045 |
| Coke from gas retorts ................ | ton | 270,646 | 2,429,353 | 271,018 | 2,435,505 |
| Coke breeze from by-product ovens .... | ton | 274,849 | 975,641 | 272,033 | 940,017 |
| Coke breeze from gas retorts ......... | ton | 34,646 | 80,066 | 36,691 | 86,424 |
| TOTAL COKE. | ton | 4,017,696 | 37,780,158 | 3,912,320 | 37,671,991 |
| Other Products - |  |  |  |  |  |
| Tar | Imp.gal. | 37,907,935 | 2,281,504 | 37,995,126 | 2,193,711 |
| Ammonia liquor .......................... | 1b. $\mathrm{NH}_{3}$ | 1,569,615 | 16,461 | 1,703,170 | 16,457 |
| Ammonium sulphate . .................... | pound | 82,051,650 | 1,201,052 | 78,573,124 | 1,140,273 |
| Benzol | Imp.gal. | 7,246,900 | 1,000,170 | 7,412,377 | 1,009,159 |
| Toluol, xylol and naphthalene | Imp.gal. | 2,009,792 | 681,971 | 1,675,115 | $558,279$ |
| All other products .................... | ... | 2, $\ldots$ | 43,128 | 1,675, ... | 51,826 |
| GRAND TOTAL ............. | $\ldots$ | . | 69,575,715 | . | 68,483, 305 |

Table 13 - PRODUCTS MADE IN COKE AND GAS PLANTS, BY AREAS, 1945

| Product | thit of measure | Eastern Provinces |  | Ontario |  | Western Provinces |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | $\begin{aligned} & \text { Gross sell- } \\ & \text { ing value } \\ & \text { at works } \end{aligned}$ | Quantity | Gross selling value at works | Quantity | $\begin{aligned} & \text { Gross sell- } \\ & \text { ing value } \\ & \text { at works } \end{aligned}$ |
|  |  |  | - |  | \$ |  | 5 |
| Gas Made - |  |  |  |  |  |  |  |
| Retort coal gas | M cu.ft. | 8,045,768 |  | 4,389,777 |  | 226,196 |  |
| Coke oven gas | M cu.ft. | 15,213,507 | *. | 31,029,538 | ... | 3,070,435 |  |
| Producer gas | M cu.ft. | 1,091,097 | ... | 940,027 |  |  |  |
| Water gas | M cu.ft. | 408,224 | *. | 4,602,111 | ... | 874,775 |  |
| Propane gas | 4 cu.ft. |  | *. | 85,394 | $\ldots$ |  |  |
| Butane gas | $M$ cu.ft. | 45,000 |  |  |  |  |  |
| Total gas Made | \%cu.ft. | 24,803,596 | $\cdots$ | 41,046,847 | $\ldots$ | 4,171,406 |  |
| Gas Sold or Used - |  |  |  |  |  |  |  |
| Gas sold ............. | ucu.ft. | 6,895,873 | 7,296,945 | 11,439,389 | 9,480,935 | 3,215,927 | 3,138,763 |
| Gas used in own plants. | k cu.ft. | 5,322,282 | 762,685 | 15,070,614 | 1,812,148 | 606,772 | 82,000 |
| Gas used in associated metallurgical works.. | 4 cu.ft. | 12,622,803 | 927,756 | 11,762,682 | 1,225,696 | 146,000 | 7,300 |
| Gas otherwise accounted for but not sold .... | M cu.ft. | 34,401 | 31,880 | 294,030 | 93,726 | 58 | 87 |
| Gas not accounted for.. | M cu.ft. | 620,497 | 227,421 | 2,035,450 | 645,552 | 201,338 | 108,715 |
| Total Gas Sold or Used. | Mcu.ft. | 25,495,856 | 9,246,687 | 40,602,165 | 13,258,057 | 4,170,095 | 3,336,865 |

Table 13 - PRODUCTS MADE IN COKE AND GAS PLANTS, BI AREAS, 1945 (Concluded)

| Product | Unit of measure | Eastern Provinces |  | Ontario |  | Western Provinces |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Gross selling value at works | Quantity | $\begin{aligned} & \text { Gross sell- } \\ & \text { ing value } \\ & \text { at works } \end{aligned}$ | Quantity | Tross sell- <br> ing value <br> at works |
|  |  |  | \$ |  | $\$$ |  | $\$$ |
| Coke Made - |  |  |  |  |  |  |  |
| Coke from by-product or bee-hive ovens | ton | 926,452 | 763,753 | 437 | 68 | 223,689 | 1,930,624 |
| Coke from gas retorts.. | ton | 71,977 | 827,519 | 190,340 | 1,551,217 | 8,701 | 56,769 |
| Coke breeze from byproduct ovens ........ | ton | 68,502 | 315,287 | 171,677 | 534,926 | 31,854 | 90,804 |
| Coke breeze from gas retorts $\qquad$ | ton | 3,446 | 21,890 | 32,597 | 60,685 | 648 | 3,849 |
| Total Coke Made | ton | 1,070,377 | 9,928,449 | 2,577,051 | 25,662,496 | 264,892 | 2,082,046 |
| Other Products - |  |  |  |  |  |  |  |
| Tar .................. | Irp.gal. | 11,391,366 | 548,577 | 24,530,863 | 1,525,583 | 2,072,897 | 119,551 |
| Other products | ... | ... | 1,011,046 | ... | 1,744,192 | -... | 20,756 |
| GRAND TOTAL ...... | $\ldots$ | - | 20,734,759 | $\cdots$ | 42,190,328 | $\cdots$ | 5,559,218 |

Table 14 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, 1935-1945 (short tons)

| Year | Ey-product and bee-hive coke |  | Gas retort coke |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Selling value at works | Quantity | $\begin{aligned} & \text { Selling value } \\ & \text { at works } \end{aligned}$ | Quantity | Selling value at works |
|  |  | \$ |  | \$ |  | \$ |
| 1935 | 1,962,844 | 13,121,614 | 294,760 | 2,739,545 | 2,257,604 | 15,861,159 |
| 1936 | 2,147,810 | 14,343,959 | 256,983 | 2,366,049 | 2,404,793 | 15,710,008 |
| 1937 | 2,334,556 | 16,283,370 | 235,829 | 2,182,698 | 2,750,385 | 18,466,068 |
| 1938 | 2,120,588 | 14,599,384 | 231,415 | 2,295,683 | 2,352,003 | 16,895,067 |
| 1939 | 2,147,210 | 14,517,186 | 262,885 | 2,246,331 | 2,410,095 | 16,763,517 |
| 1940 | 2,725,873 | 19,574,651 | 289,521 | 2,363,210 | 3,015,394 | 21,937,861 |
| 1941 | 2,847,624 | 22,484,595 | 298,091 | 2,403,428 | 3,145,715 | 24,888,023 |
| 1942 | 2,966,983 | 25,004,065 | 298,566 | 2,707,608 | 3,265,549 | 27,711,673 |
| 1943 | 3,243,747 | 28,841,420 | 308,026 | 2,498,558 | 3,551,773 | 31,339,978 |
| 1944 | 3,712,404 | 35,270,739 | 305,292 | 2,509,419 | 4,017,696 | 37,780,158 |
| 1945 | 3,604,6.1 | 35,150,062 | 307,709 | 2,521,929 | 3,912,320 | 37,671,991 |

Table 15 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, BI PROVINCES, 1935-1945 (short tons)

| Year | Nova Scotia, Now Brunswick and Quebec |  | Ontario |  | Manitoba, Alberta and British Columbia |  | CANADA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Selling value at works | Quantity | Selling value at works | Quantity | $\begin{aligned} & \text { Selling } \\ & \text { value at } \\ & \text { works } \end{aligned}$ | Quantity | Selling value at works |
|  |  | \$ |  | \% |  | \$ |  | , |
| 1935 | 730,469 | 4,738,191 | 1,334,081 | 9,868,953 | 193,054 | 1,254,015 | 2,257,604 | 15,861,159 |
| 1936 | 775,275 | 4,655,468 | 1,441,833 | 10,807,611 | 187,690 | 1,246,929 | 2,404,795 | 16,710,008 |
| 1937 | 853,122 | 5,548,042 | 1,504,334 | 11,522,965 | 212,929 | 1,395,061 | 2,570,385 | 18,466,068 |
| 1938 | 754,075 | 5,040,400 | 1,365,571 | 10,339,065 | 231,457 | 1,515,602 | 2,352,003 | 16,895,067 |
| 1939 | 802,072 | 5,583,317 | 1,379,942 | 9,712,164 | 228,081 | 1,468,036 | 2,410,095 | 16,763,517 |
| 1940 | 1,040,999 | 7,582,337 | 1,732,303 | 12,842,138 | 242,092 | 1,413,386 | 3,015,394 | 21,937,861 |
| 1541 | 1,029,028 | 8,038,506 | 1,832,109 | 14,985,196 | 284,578 | 1,864,321 | 3,145,715 | 24,888,023 |
| 1942 | 1,127,797 | 9,258,034 | 1,839,593 | 16,328,365 | 298,159 | 2,125,274 | 3,265,549 | 27,711,673 |
| 1943 | 1,068,670 | 9,038,173 | 2,178,743 | 20,044,820 | 304,551 | 2,256,985 | 3,551,775 | 31,339,978 |
| 1944 | 1,093,939 | 9,961,967 | 2,626,186 | 25,489,173 | 297,571 | 2,329,018 | 4,017,696 | 37,780,158 |
| 1945 | 1,070,377 | 9,928,449 | 2,577,051 | 25,662,496 | 264,892 | 2,082,046 | 3,912,320 | 37,671,991 |

Table 16 - BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE SOLD AND USED BY PRODUCERS DLRINO 1944 and 1945 and STOCKS ON HAND AT END OF YEAR


Coke sold -
(a) Direct to consumers:

For domestic use
For other uses

| 118,963 | 19,694 | 53,953 | 10,952 |
| ---: | ---: | ---: | ---: |
| 545,418 | 53,998 | 67,565 | 2,183 |
| $1,044,363$ | 15,059 | 3,622 | 315 |
| 36,852 | 3,130 | $\ldots$ | $\ldots$ |
| $3,483,639$ | 242,522 | 310,265 | 23,264 |
| 117,763 | 176,385 | 3,007 | 13 |

Stocks of coke on hand at the end of 1944..

## 1945

Coke actually used by reporting companies -
In coke or gas plant (for fuel, water

## gas and producer gas)

In iron blast furnaces 1,355,810
In other associated works $\qquad$ 60,275
65,458
$\ldots$


14,248
(b) To dealers for resale
(c) For export

TOTAL SOLD OR USED
,382,756
83,925
...

Coke sold -
(a) Direct to consumers:

For domestic use
For other uses

| 137,425 | 32,779 | 1,459 | $\ldots$ |
| ---: | ---: | ---: | ---: |
| 486,918 | 59,638 | 11,731 | 341 |
| $1,089,123$ | 12,185 | 77,293 | $\ldots$ |
| 30,140 | 2,584 | $\ldots$ | $\ldots$ |
| $3,447,070$ | 288,999 | 270,706 | 14,589 |
| 60,080 | 168,642 | 2,706 | 5,382 |

Stocks of coke on hand at the end of 1945.
(b) To dealers for resale
$\qquad$

$$
\ldots
$$

$\qquad$
TOTAL SOLD OR USED $\qquad$
168,642
2,706
The above eigures on consumption and sales by the producers include 99,000 tons in 1944 and 59,000 tons in 1945. Duplication because of interplant sales has been eliminated in each year.

Table 17 - COAL CARBONIZED, COKL PRODUCED, ARD DISTRIBUTION OF COKE BY MANUFACTURERS, 1945


Table 17 - COAL CARBONIZED, COKE PRODUCED, AND DISTRIBUTION OF COKE BY MANUFACTURERS, 1945 (Concluded)


NOTE: The above figures on consumption and sales include 59,000 tons of imported coke.

Pable 18 - PRODUCTION OF BEE-HIVE, BY-PRODUCT AND GAS RETORT COKE, BY MONTHS, 1941-1945 (In 000's of short tons)

| Month | 1941 | 1942 | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| January . ......................... | 268 | 278 | 232 | 345 | 341 |
| February | 240 | 253 | 250 | 331 | 314 |
| March ... | 266 | 287 | 276 | 356 | 342 |
| April . | 253 | 270 | 268 | 338 | 326 |
| May | 260 | 277 | 278 | 343 | 353 |
| June | 248 | 270 | 266 | 328 | 324 |
| July | 259 | 275 | 308 | 322 | 329 |
| August | 266 | 274 | 314 | 328 | 329 |
| September | 263 | 269 | 326 | 320 | 318 |
| October | 276 | 278 | 349 | 331 | 310 |
| November . | 270 | 269 | 339 | 329 | 384 |
| December . ....................... | 277 | 265 | 345 | 347 | 362 |
| TOTAL | 3,146 | 3,265 | 3,551 | 4,018 | 3,912 |
| Monthly Average . ....... | 262 | 272 | 296 | 355 | 326 |

Table 19 - BITUMINOUS COAL CHARGED TO COKE OVENS AND GAS RETORTS, 1935-1945

(*) Includes 3,261 tons used in making water gas in 1935; 3,159 tons in 1936; 2,392 tons in 1937; 3,650 tons in 1938; 2,882 tons in 1939; 2,699 tons in 1940; 3,522 tons in 1941; 4,030 tons in 1942; 5,104 tons in 1943; 4,756 tons in 1944, and 6,764 tons in 1945.

Table 20 - BITUMINOUS COAL CHARGED TO COKE OVENS AND GAS RETCRTS, BY PROVINCES, 2935-1945

| Year | Nova Scotia, New Brunswick and Quebec |  | Ontario |  | $\begin{array}{r} \text { Nan } \\ \text { Albe } \\ \text { British } \end{array}$ | ba, and <br> lumbia | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Canadian | Imported | Canadian | Imported(\%) (Tons | Canadian | Imported |  |
| 1935 | 708,873 | 326,342 | 600 | 1,820,847 | 279,681 |  | 3,136,343 |
| 1936 | 765,743 | 328,216 | 15,684 | 1,973,183 | 275,672 |  | 3,358,498 |
| 1937 | 853,949 | 338,861 | 6,028 | 2,060,077 | 294,838 | 26,197 | 3,579,950 |
| 1938 | 673,625 | 345,319 | 3,200 | 1,058,798 | 335,270 | 11,802 | 3,228,014 |
| 1939 | 733,972 | 352,236 | 9,260 | 1,843,570 | 333,746 | 1,424 | 3,274,208 |
| 1940 | 1,071,156 | 355,024 | ... | 2,344,726 | 347,515 | 2,528 | 4,120,949 |
| 1941 | 1,020,956 | 397,814 | . . . | 2,489,684 | 413,259 | 131 | 4,321,844 |
| 1942 | 1,051,828 | 502,626 | -. | 2,481,271 | 436,166 |  | 4,471,891 |
| 1943 | 798,824 | 702,291 |  | 2,851,297 | 428,191 |  | 4,780,603 |
| 1944 | 826,305 | 670,997 | $\ldots$ | 3,389,976 | 394,970 | 34,463 | 5,316,711 |
| 1945 | 783,347 | 645,787 | ... | 3,340,357 | 353,089 | 16,669 | 5,139,249 |

(*) See footnote to Table 19.

Table 21 - PRODICTION OF PETROIETM COKE, 1935-1945

| Year | Made for Own Use |  | Made for Sale |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tons | Selling value at works | Tons | Selling value at works | Tons | Selling value at works |
|  |  | \$ |  | \$ |  | $\delta$ |
| 1935 | 8,348 | 21,256 | 63,843 | 372,723 | 72,191 | 393,979 |
| 1936 | 2,629 | 11,687 | 62,077 | 381,473 | 64,706 | 393,160 |
| 1937 | 2,381 | 8,942 | 59,634 | 371,198 | 62,015 | 380,140 |
| 1938 | 634 | 1,547 | 63,375 | 388,753 | 64,009 | 390,300 |
| 1939 | 4,238 | 18,253 | 62,094 | 370,936 | 66,332 | 389,189 |
| 1940 | 4,876 | 25,328 | 63,458 | 416,262 | 68,334 | 441,590 |
| 1941 | 3,138 | 21,774 | 67,702 | 471,564 | 70,840 | 493,338 |
| 1942 | 8,950 | 63,411 | 64,461 | 464,326 | 73,411 | 527,737 |
| 1943 | 7,141 | 49,310 | 74,634 | 535,853 | 81,775 | 585,163 |
| 1944 | 1,651 | 10,997 | 71,158 | 507,166 | 72,809 | 518,163 |
| 1945 | 7,260 | 36,269 | 59,559 | 472,933 | 66,819 | 509,202 |

[^0]Table 22 - TOTAL PRODUCTION OF COKE (Including Petroleum and P1tch Coke) IN CANADA, 1942-1945

Manitoba,
Nova Scotia
and New Quebec Ontario

Saskatchewan, Alberta and British Columbia

| 1942 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coke and gas Industry ..... | Tons | 639,698 | 488,099 | 1,839,593 | 298,159 | 3,265,549 |
|  | \$ | 4,542,247 | 4,715,787 | 16,328,365 | 2,125,274 | 27,711,673 |
| Petroleum refining industry | Tons | 195 | , ... | 71,486 | 1,730 | 73,411 |
|  | \$ | 491 | . $\cdot$. | 517,386 | 9,860 | 527,737 |
| Pitch coke ..... | Tons | 5,975 | 807 | 9,548 | 904 | 17,234 |
|  | $\$$ | 44,427 | 5,878 | 80,117 | 6,767 | 137,189 |
|  | Tons | 645,868 | 488,906 | 1,920,627 | 300,793 | 3,356,194 |
|  | $\stackrel{1}{1}$ | 4,587,165 | 4,721,665 | 16,925,868 | 2,141,901 | 28,376,599 |


| Coke and gas industry ..... | $\begin{aligned} & \text { Tons } \\ & \$ \end{aligned}$ | $\begin{array}{r} 557,696 \\ 3,971,707 \end{array}$ | $\begin{array}{r} 510,983 \\ 5,066,466 \end{array}$ | $2,178,743$ $20,044,820$ | $\begin{array}{r} 304,351 \\ 2,256,985 \end{array}$ | $\begin{array}{r} 3,551,773 \\ 31,339,078 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Petroleum refining industry | Tons | 273 | 1,122 | 78,897 | 1,483 | 81,775 |
|  | \$ | 696 | 8,938 | 567,100 | B,429 | 585,163 |
| Pitch coke ...... | Tons | 5,054 | 638 | 11,781 | 522 | 17,995 |
|  | \$ | 46,689 | 6,076 | 88,497 | 6,673 | 147,935 |
|  | Tons | 563,023 | 512,743 | 2,269,421 | 306,356 | 3,651,543 |
|  | $\$$ | 4,019,092 | 5,081,480 | 20,700,417 | 2,272,087 | 32,073,076 |
| 1944 |  |  |  |  |  |  |
| Coke and gas industry ..... | Tons | 588,338 | 505,601 | 2,626,186 | 297,571 | 4,017,696 |
|  | + | 4,946,366 | 5,015,601 | 25,489,173 | 2,329,018 | 37,780,158 |
| Patroleum refining industry | Tons | 300 | 3,337 | 67,364 | 1,808 | 72,809 |
|  | * | 841 | 20,021 | 484,756 | 12,545 | 518,163 |
| Pitch coke ...... | Tons | 3,856 | 987 | 8,311 | 635 | 13,789 |
|  | \$ | 31,658 | 9,333 | 60,925 | 6,403 | 108,319 |
|  | Tons | 592,494 | 509,925 | 2,701,861 | 300,014 | 4,104,294 |
|  | \$ | 4,978,865 | 5,044,955 | 26,034,854 | 2,347,966 | 38,406,640 |


| Coke and gas industry ..... | Tons | 576,283 | 494,094 | 2,577,051 | 264,892 | 3,912,320 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | 5,077,112 | 4,851,337 | 25,662,496 | 2,081,046 | 37,671,991 |
| Petroleum refining industry | Tons | 236 | 1,347 | 62,857 | 2,399 | 66,819 |
|  | \% | 784 | 8,351 | 490,049 | 10,018 | 509,202 |
| Pitch coke ...... | Tons | 4,074 | 1,252 | 11,819 | 650 | 17,795 |
|  | $\$$ | 27,852 | 9,017 | 85,143 | 6,956 | 128,968 |
|  | Tons | 580,593 | 496,693 | 2,651,707 | 267,941 | 3,996,934 |
|  | \$ | 5,105,748 | 4,868,705 | 26,237,688 | 2,098,020 | 38,310,161 |

Table 23 - APPARENT COHSUPTION OF COKE (Including Petroleum and Pitch Coke) IN CANADA, BY PROVINCES, 1939-1945

|  | Prince Edward Island, Nova Scotia and New Brunswick | Quebec | Ontario | Manitoba, Saskatchewan, Alberta and British Columbia | CANADA |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Tons) |  |  |  |  |
| Apparent consumption - 1939 | 398,790 | 500,502 | 2,011,859 | 207,231 | 3,118,382 |
| 1940 | 584,966 | 608,280 | 2,455,112 | 236,186 | 3,884,544 |
| 1941 | 597,817 | 612,146 | 2,609,137 | 272,927 | 4,092,027 |
| 1942 | 641,878 | 699,083 | 2,734,286 | 292,561 | 4,367,808 |
| 1943 | 559,018 | 821,422 | 3,096,692 | 297,555 | 4,774,687 |

Table 23 - APPARENT CONSUMPTION OF CONE (Including Petroleum and Pitch Coke) IN CANADA, BY PROVINCES, 1939-1945 (Concluded)

|  | Prince Edward Island, Nova Scotia and New Brunswick | Quebec | Ontario | Manitoba, Saskatchewan Alberta and British Columbia | CANADA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1944 (Tons) | (Tons) |  |  |  |  |
| Production | 592,494 | 509,925 | 2,701,861 | 300,014 | 4,104,294 |
| Add decline or deduct increase in producers' stocks |  |  |  |  |  |
|  | -14,039 | -15,622 | -38,220 | -14,123 | -82,004 |
|  | 578,455 | 494,303 | 2,663,641 | 285,891 |  |
| Add - Imports entered for consumption | 148 | 231,767 | -779,080 | 24,327 | $1,035,322$ |
|  | 578,603 | 726,070 | 3,442,721 | 310,218 |  |
| Deduct - Exports and re-exportsAPPARENT CONSIMPTION | $5,107$ | 1,983 | $23,283$ | $39,314$ |  |
|  | $573,496$ | 724,087 | $3,419,438$ | $270,904$ | $4,987,925$ |
| 1945 |  |  |  |  |  |
| Production | 580,593 | 496,693 | 2,651,707 | 267,941 | 3,996,934 |
| Add decline or deduct increase in |  |  |  |  |  |
| producers' stocks | $\begin{array}{r} +20,597 \\ \hline 601,190 \end{array}$ | $\begin{array}{r} +15,584 \\ \hline 512,277 \end{array}$ | $\begin{array}{r} +24,753 \\ \hline 2,676,460 \end{array}$ | $\begin{array}{r} +2,810 \\ \hline 270,751 \end{array}$ | $\begin{array}{r} \div 63,744 \\ 4,060,678 \end{array}$ |
| Add - Imports entered for consumption | 195 | 320,397 | 1,085,342 | 30,838 | $1,436,772$ |
|  | 601,385 | 832,674 | 3,761,802 | 301,589 | 5,497,450 |
| Deduct - Exports and re-exportsAPPARENT CONSUPTION .. | 4,252 | 2,488 | 20,872 | 33,373 | 60,985 |
|  | 597,133 | 830,186 | 3,740,930 | 268,216 | 5,436,465 |

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

Table 24 - QUANTITY OF COKE IN THE HANDS OF THE PRODUCERS AT THE END OF 1944 and 1945

| Province | 1944 |  |  | 1945 |  |  | D1fierence 1945 from 1944 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Petroleum refineries | Coke and gas plants | TOTAL | Petroleum refineries | Coke and gas plants | TOTAL |  |
| (Tons) |  |  |  |  |  |  |  |
| Nova Scotia |  | 23,677 | 23,677 |  | 3,083 | 3,083 | -20,594 |
| New Brunswick . |  | 7 | 7 | . | 4 | 4 | -3 |
| Quebec | 2,510 | 29,809 | 32,319 | 95 | 16,640 | 16,785 | -15,584 |
| Ontario | 1,616 | 214,136 | 215,752 | 1,768 | 189,231 | 190,999 | -24,753 |
| Manitoba | ... | 4,106 | 4,106 | ... | 1,744 | 1,744 | -2,362 |
| Saskatchewan | 1,414 | ... | 1,414 | 2,456 | ... | 2,456 | +1,042 |
| Alberta ....... | 2,235 |  | 2,235 |  |  |  | -2,235 |
| British Columbia | , | 25,433 | 25,433 | 70 | 26,108 | 26,178 | +845 |
| total | 7,775 | 297,168 | 304,943 | 4,389 | 236,810 | 241,199 | -63,744 |

NOTE: No data for producers' stocks of pitch coke.
Table 25 - ANALYSIS OF COKE CONSLMPTION IN CANADA, BY PRINCIPAL AREAS, 1941-1945

Manitoba,
Prince Edward Island, Novs Scotia and
New Brunswick

Saskatchewan, Alberta and

CANADA British
Columbia
(Tons)

## 1941

Furnace charges ............
Kanufacturing material....
Industrial fuel ...........
Available for other uses
(mostly domestic) $\qquad$
APPARENT CONSUTPTION ..

| 450,126 | 44,190 | $1,358,509$ | 91,326 | $1,944,151$ |
| ---: | ---: | ---: | ---: | ---: |
| 29,097 | 249,793 | 192,177 | 67,905 | 509,875 |
| 118,594 | 48,928 | 252,272 | 15,469 | 345,766 |
| 597,317 | 269,235 | 806,179 | 98,227 | $1,292,235$ |

Table 25 - ANALYSIS OF COKE CONSUMPTION IN CANADA, BY PRINCIPAL AREAS, 1941-1945 (Concluded)

| - | Prince Edward Island, Nova Scotia and New Brunswick | Quebec | Ontario | Manitoba, Saskatchewan, Alberta and British Columbia | CANADA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1942 |  |  | (Tons) |  |  |
| Furnace charges ........... | 510,725 | 49,312 | 1,763,242 | 93,722 | 2,417,011 |
| Manufacturing material .... |  | 298,191 | 273,354 | 62,695 | 634,240 |
| Industrial fuel ............ | 36,441 | 53,980 | 285,675 | 21,736 | 397,832 |
| Available for other uses (mostly domestic) ....... | 94,712 | 297,600 | 412,015 | 114,408 | 918,735 |
| APPARENT CONS UMPTION ... | 641,878 | 699,083 | 2,734,286 | 292,561 | 4,367,808 |
| 1943 |  |  |  |  |  |
| Furnace charges ........... | 395,883 | 47,895 | 1,710,724 | 90,560 | 2,245,062 |
| Manufacturing material .... |  | 423,107 | 328,123 | $70,404$ | $821,639$ |
| Industrial fuel ............ | 35,878 | 60,443 | 284,987 | $21,974$ | $403,282$ |
| Available for other uses (mostly domestic) ........ | 126,225 | 286,984 | 705,147 | 114,528 | $1,232,854$ |
| APPARENT CONSURPTION ... | 557,986 | 818,429 | 3,028,986 | 297,466 | 4,702,837 |
| 1944 |  |  |  |  |  |
| Furnace charges .......... | 407,131 | 49,737 | 1,721,222 | 73,357 | 2,251,447 |
| Manufacturing material ... |  | 311,837 | 318,885 | 40,872 | $671,594$ |
| Industrial fuel | 35,645 | 119,079 | 533,542 | 114,913 | 803,179 |
| Available for other uses (mostly domestic) ....... | 130,720 | $24,3,434$ | 845,789 | 41,762 | 1,261,705 |
| APPARENT CONSUPTION ... | 573,496 | 724,087 | 3,419,438 | 270,904 | 4,987,925 |
| 1945 |  |  |  |  |  |
| Fumace charges | 399,902 | 57,346 | 1,660,489 | 67,435 | 2,185,172 |
| Manufacturing material |  | 248,836 | 393,397 | 50,425 | 692,658 |
| Industrial fvel ............ | 37,187 | 127,127 | 526,765 | 110,627 | 801,706 |
| Available for other uses (mostily domestic) ........ | 160,044 | 396,877 | 1,160,279 | 39,729 | 1,756,929 |
| APPARENT CONSUMPTION ... | 597,133 | 830,186 | 3,740,930 | 268,216 | 5,436,465 |

NOTES: 1. Figures showing the tonnages of coke available for damestic or other uses are obtained by difference and include the coke used for purposes other than specified in these tables.
2. No allowance has been made for changes during the year in stocks of coke held by dealers or users.
3. No allowance has been made for interprovincial shipment of coke.

Table 26 - SALES (a) OF PETROLEUM COKE IN CANADA FOR FUEL PURPOSES, 1940-1945

| Areas | and Year | Fuel for domestic and industrial heating (b) | Inventory on December 31, including stocks at refineries |
| :---: | :---: | :---: | :---: |
|  |  | (Tons) |  |
| 1940 |  | 44,392 | 183,579 |
| 1941 |  | 39,150 | 3,985 |
| 1942 |  | 29,480 | 1,986 |
| 1943 | -0.0.0.0.0.0.0.0.0.0. | 18,868 | 6,466 |
| 1944 |  | 25,616 | 6,580 |
| 1945 | - Maritimes | 236 |  |
|  | Quebec | 423 | 1,690 |
|  | Ontario. | 58,475 | 16,971 |
|  | Western provinces | 721 | 2,541 |
|  | Canadian | 52,302 | 21,202 |
|  | Imported | 7,553 | ... |
|  | TOTAL FOR 1945 | 59,855 | 21,202 |

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

Table 27 - PRODUCTION AND SAIES OF MANUFACTURED GAS BY THE COKE AND GAS INDUSTRY, 1935-1945

| Year | From By-product and Gas Plants |  |  | Production of still gas from petroleum refineries |
| :---: | :---: | :---: | :---: | :---: |
|  | Production(i) | Sales |  |  |
|  |  | Quantity | Income from sales |  |
|  | Ncu.ft. | Mcu.ft. | \$ | cu.ft. |
| 1935 | 39,721,010 | 15,398,952 | 1.5,358,572 | 5,154,885 |
| 1.936 | 44,345,358 | 15,321,832 | 15,163,664 | 6,083,549 |
| 1937 | 46,009,633 | 15,289,839 | 14,732,531 | 6,199,110 |
| 1938 | 42,932,721 | 15,198,068 | 15,001,142 | 6,486,618 |
| 1939 | 41,632,773 | 14,936,902 | 14,562,246 | 7,802,666 |
| 1940 | 55,112,521 | 15,392,723 | 14,803,049 | 8,706,834 |
| 1941 | 57,728,803 | 16,031,434 | 1.5,888,723 | 9,071,268 |
| 1942 | 68,839,292 | 18,913,230 | 17,316,135 | 7,643,715 |
| 1943 | 74,731,346 | 20,403,544 | 18,609,364 | 10,086,340 |
| 1944 | 82,337,655 | 21,101,351 | 19,392,362 | 10,601,455 |
| 1945 | 70,021,849 | 21,551,189 | 19,916,643 | 10,614,582 |

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

Table 28 - SALES OF MANUFACTURED AND NATITAL GAS IN CANADA, 1944 and 1945

|  | 1944 |  |  | 1945 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of customers | Quantity sold | Revenue from sales | Number of customers | $\begin{aligned} & \text { Quantity } \\ & \text { sold } \end{aligned}$ | Revenue from sales |
|  |  | M cu.ft. | \$ |  | Mcu.ft. | \$ |
| Manufactured Gas - |  |  |  |  |  |  |
| Domestic ....... | 488,653 | 12,098,351 | 13,334,020 | 493,307 | 12,720,922 | 13,928,374 |
| House heating .. | 5,864 | 1,333,339 | 731,868 | 6,217 | 1,679,796 | 914,981. |
| Industrial . | 3,236 | 5,786,717 | 4,435,914 | 3,356 | 5,109,828 | 2,996,984 |
| Commercial | 29,056 | 3,671,522 | 3,253,155 | 29,619 | 3,893,848 | 3,429,237 |
| Miscellaneous | 116 | 47,350 | 46,562 | 114 | 48,423 | 49,040 |
| TOTAL | 526,925 | 22,937,279 | 21,801,519 | 532,613 | 23,452,817 | 21,318,616 |
| Natural Gas - |  |  |  |  |  |  |
| Domestic. | 186,269 | 14,565,801. | 7,081,369 | 194,098 | 16,875,164 | 7,975,469 |
| Industrial | 1,122 | 6,144,211 | 1,851,076 | 1,162 | 8,375,151 | 1,930,018 |
| Commercial | 10,932 | 7,410,938 | 1,888,976 | 11,728 | 8,276,943 | 2,164,934 |
| Niscellaneous | 506 | 1,062,106 | 47,864 | 482 | 404,328 | 36,011 |
| TOTAL ....... | 198,829 | 29,183,056 | 10,869,285 | 207,470 | 33,931,586 | 12,106,427 |
| TOTAL-ALL GAS ... | 725,754 | 52,120,335 | 31,670,804 | 740,083 | 57,384,403 | 33,425,043 |

NOTE: The sales figures for manufactured gas as recorded in this table are higher than those given in Table 27 because of some petroleum refinery gas treated and distributed by the natural gas companies.

Table 29 - PRODUCTIOH OF CRUDE COAL TAR, BY PROVINCES, 1943-1945

| Province | 1943 | 1944 | 1945 |
| :---: | :---: | :---: | :---: |
|  | (Imperial gallons) |  |  |
| Nova Scotia and New Brunswick | 8,164,375 | 7,977,607 | 7,892,890 |
| Quebec | 3,620,295 | 3,648,345 | 3,498,476 |
| Ontario | 21,689,211. | 24,760,068 | 24,530,863 |
| Manitoba | 459,792 | 497,186 | 479,013 |
| British Columbia | 1,600,724 | 1, 024,729 | 1,596,804 |
| CANADA | 35,534,397 | 37,907,935 | 37,995,126 |

Table 30 - PRODUCTION, INPORTS AND EXPORTS OF AMNONIUM SULPHATE, 1935-1945

| Year | Production (*) |  | Imports |  | Exports |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tons | \% | Tons | $\$$ | Tons | $\pm$ |
| 1935 | 67,362 | 1,473,675 | 4,280 | 94,222 | 45,055 | 977,552 |
| 1956 | 98,483 | 1,883,088 | 5,729 | 148,956 | 83,835 | 1,802,818 |
| 1937 | 87,621 | 1,782,364 | 3,230 | 82,440 | 56,485 | 1,212,258 |
| 1938 | 119,520 | 2,590,994 | 5,911 | 156,540 | 77,191 | 1,697,204 |
| 1939 | 129,865 | 3,107,977 | 3,217 | 94,854 | 109,260 | 2,508,364 |
| 1940 | 115,679 | 3,217,268 | 355 | 13,506 | 72,485 | 2,172,049 |
| 1941 | 98,662 | 3,156,880 | 57 | 4,951 | 59,480 | 2,147,613 |
| 1942 | 116,796 | 3,776,372 | 5,044 | 185,608 | 79,236 | 2,908,266 |
| 1943 | 196,404 | 6,176,623 | 39 | 2,653 | 141,080 | 4,794,695 |
| 1944 | 209,578 | 6,387,397 | 105 | 13,117 | 167,497 | 5,505,115 |
| 1945 | 221,499 | 7,255,308 | 104 | 12,576 | 181,189 | 6,179,877 |

(*) Includes output of synthetic amonium sulphate in the Fertilizer Industry.

DIRECTORY OF FIRNS IN THE COKE AND GAS INDUSTRY, 1945

| Names of Firms and Location of Plants | Coke and gas making equipment, including reserve equip- <br> ment (Rated annual capacity in tons of coal carbonized <br> or in cubic feet of gas produced given in brackets). |
| :--- | :--- |

## 1. COKE PLANTS

## By-product Ovens

Dominion Steel and Coal Corp. Ltd., Sydney, N.S.
Montreal Coke \& Manufacturing $\mathrm{Co}_{\mathrm{m}}$, (Montreal Light, Heat \& Power Consolidated) (b)
435 St. Patrick St., Ville La Salle. Que.

Algona Steel Corporation Ltd. (Great Northern Gas Co. Ltd.) (b) Sault Ste. Marie, Ont.

Hamilton By-Product Coke Ovens, Ltd. (United Gas \& Fuel Co. Ltd.) (b) Hamilton, Ont.

Ontario Coke Ovens Division, Hamilton By-Product Coke Ovens Ltd., Hamilton, Ont.

Public Utilities Comission, Owen Sound, Ont.
Steel Company of Canada, Limited, Hamilton, Ont.
Winripeg Electric Company (b) Elec. Railway Chambers, Sutherland Ave, and Gladstone St., Winnipeg, Man.
B.C. Electric Power \& Gas Co. Ltd. (a) (b) Keefer St., and Carrall St., Vancouver, B.C.

In Use - 180 Koppers horizontal ovens ( 813,000 tons)
In Use - 59 Koppers Becker type horizontal ovens (560,275 tons); 4 Koppers Kerpely Ring type producers (12,702,000 M cu.ft.)
In Reserve or Idle - 5 Water Gas sets $(8,000,000 \mathrm{M}$ cu.It.)
In Use - 103 Wilputte ovens (660,000 tons) and 141 Koppers ovens (1,121,500 tons)
In Use - 25 Semet-Solvay ovens (175,000 tons), and 35 Wilputte ovens (240,000 tons); I Carbureted Water Ges Set ( $1,095,000 \mathrm{Mcu.ft}$. ); 2 Propane Vaporizers ( $600,000 \mathrm{M}$ cu.ft.)
In Use - 54 Curran-Knowles Sole Flue Type ( 328,500 tons) In Reserve or Idle - 4 Galusha Cleveland Ohio Producers (5,504 M cu.ft.)

In Use - 3 Curran-Knowles ovens (12,775 tons)
In Use - 80 WIIputte ovens (641,232 tons)
In Use - 17 Koppers Becker type horizontal ovens (84,500 tons)
In Reserve or Idle - I Western Gas water gas set $1,460,000 \mathrm{Mcu} . \mathrm{ft}^{2}$ )
In Use - 45 intermittent Chamber ovens ( 131,604 tons); $\bar{S}$ internal and 3 external mechanical producers for chamber oven plants; 40 continuous vertical retorts
( $700,500 \mathrm{M}$ cu.ft.): 2 water gas generators (1,095,000 M cu.ft.)

NOTE: Names of gas distributing companies in brackets.
(a) Indicates carbureted water gas was distributed.
(b) Indicates coke oven gas was distributed for domestic and cormercial use.

Directory of Firms in the Coke and Gas Industry, 1945 (Continued)

| Names of Firms and Location of Plants | Coke and gas making equipment, includgng reserve equip- <br> ment (Rated annual capacity in tons of coal carbonized <br> or.in cubic feet of gas produced given in brackets) |
| :--- | :--- |

## 1. COKE PLANTS (Concluded) <br> Beohive ovens

International Coal \& Coke Co. Itd., Coleman, Alta. In Use - 104 beehive ovens ( 109,500 tons)
Crom's Nest Pass Coal Con Ltd., Mehel, B.C. $\quad \frac{\text { In Use }}{\text { product ovens ( } 80,000 \text { tons) }} 230$ beehive ovens ( 128,000 tons); 20 byIn Reserve or Idle - 608 beehive ovens ( 340,000 tons)

## 2. ILLUMINATING AND FUEL GAS PLANTS

Retort Coal Gas and Carbureted Water Gas

Nova Scotia Light \& Power Company Limited (b) Halifax, N.S.

New Brunswick Power Company (b)
Saint John, N.B.

Shawinigan Chemicals Ltd., Shawinigan Falls, Que.

City of Sherbrooke Gas and Electricity Dept. (a) Sherbrooke, Que.

Quebec Pomer Company (Cas Division) (b) Quebec, Que.

Board of Light \& Heat Commission (b) Guelph, Ont.

Brockville Public Utilities Commission (a) Brockville, ant.

Consumers Gas Compary of Toronto (a) (b)
19 Toronto St., Toronto, Ont.

Belleville Public Utilities Comission (b) Belleville, Ont.

Ontario Shore Gas Co. Ltd. (a), Oshawa, Ont.

Peterborough Utilities Conmiesion (a) Peterborough, Ont.

In Use - 12 Glover-West continuous vertical retorts (18,000 tons)

In Use - 12 Russell horizontal retorts ( 3,786 tons)
In Reserve or Idle - 6 Russell horizontal retorts (1,550 tons)

11 chemical type coking stokers of own design (330,000 tons)

In Use - 1 Western Gas water gas set ( $146,000 \mathrm{M}$ cu.ft.)

In Use - 12 Woodall-Duckham vertical continuous retorts (25,300 tons); I U.Y.I. (1,000 M cu.ft.)
In Reserve or Idle - I Western Gas water gas sets ( 1,250
Mcu.ft.); 1 U.Y.I. water gas set ( $1,000 \mathrm{Mcu.ft)}$.
In Use - 6 Glover-West vertical continuus retorts
(10,000 tons); I Shell Lowe carbureted water gas set
( $350 \mathrm{Mcu.ft)}$.
In Reserve or Idle -2 Glover-West vertical ovens
(3,500 tons)
In Use -2 Water Gas sets ( $500,000 \mathrm{Mcu} . \mathrm{It}_{\mathrm{t}}$ )

In Use - 104 Glover-West vertical retorts ( 190,000 tons)
र2ॅO Drakes Ltd. horizontal retorts (112,420 tons); 8
Lowe Principal water gas sets.
In Use - 4 Glover-West continuous vertical retorts (5,475 tons)

In Use - 1 water gas set
In Reserve or Idle -1 water gas set.
In Use - 1 Merrifield pearson water gas set ( $90,000 \mathrm{M}$ cu.ft.)
In Reserve or Idle - 1 Merrifield Pearson water gas set (70,000 M cu.ft.)

Directory of Firms in the Coke and Gas Industry, 1945 (Concluded)

| Names of Firms and Location of PlantsCoke and gas making equipment, inciuding reserve equip- <br> ment (Rated annual capacity in tons of coal carbonized <br> or in cubic feet of gas produced given in brackets) |
| :--- |

## 2. ILLUMNATING AND FUEL GAS PLANTS (Concluded)

Retort Coal Gas and Carbureted Hater Gas (Con.)

| C Uilities Commasion (a), Kingston, Ont. | $\begin{aligned} & \frac{\text { In Use }}{\text { cu.ft. })}-1 \text { Merrifield-Mestcott water gas set }(300,000 \mathrm{M} \\ & \text { In Reserve or Idle }-1 \text { Merrifield-Westcott water gas set } \\ & (150,000 \text { M cu.ft. }) \end{aligned}$ |
| :---: | :---: |
| Public Ttilities Comission (a) (b) Kitchener, Ont. | ```In Use - 3 horizontal retorts (3,900 tons); 1 water gas 8et(219,000 M cu.ft.) In Reserve or Idle - 2 horisontal retorts (2,600 tons); 1 water gas set (219,000 M cu.ft.)``` |
| Ot tawa Light, Heat \& Power Co. Ltd. (a) 56 Sparks St., ottawa, ont. | In Use - 1 carbureted blue gas set ( $547,500 \mathrm{mcu} . \mathrm{ft}$. In Reserve or Idle - 1 carbureted blue gas set (547,000 w cu.f.t.) |
| Public Utility Comission (b), Stratiord, ant. | $\begin{aligned} & \text { In Use }-12 \text { horizontal retorts ( } 5,000 \text { tons) } \\ & \text { In Reserve or Idle }-6 \text { horlsontal retorts ( } 2,500 \text { tons) } \end{aligned}$ |
| Manitobs Power Commission (b), Brandon, Man. | In Use - 12 Russell Mig. Co. retorts and 12 Kerr-Murray retorts ( $27,740 \mathrm{Mcu.ft)}$. |
| Victoria Gas Company, Ltd. (a)(b), Victoria, B, C. | In Dae - 16 Glover-West vertical retorts ( 16,552 tons); <br> I Humphrey \& Glasgow water gas set ( 500 m cu.ft.) ; <br> 1 water gas set ( 500 M cu.ft.) |
| Corporation City of Melson.(b), Nelson, B.C. | In Use -8 horizontal retorts ( 1,500 tons) |

## Propane Gas

Clto Mas and Electric Corporation, Ltd., Three Rivers, Que.
(a) Indicates that carbureted water gas was distributed.
(b) Indicates that retort ooal gas was distributed to customers.



[^0]:    NOTE: Petroleum coke is not included in coke production figures given for the coke and gas industry.

