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## CONSUPPION OF COKE IN CANADA, 1936.

The apparent consumption of coke in Caneda during 1936 amounted to $5,263,988$ tons compared with 2,997,991 tons in 1935.

Production of coke (including petroleum coke) during 1936 totalled 2,469,499 tons, importa entered for consumption amounted to 730,801 tons, and procucers' stocks declined 96,401 tons, making an available supply of $3,296,701$ tons. But exports totalled 32,763 tons, leaving $3,263,938$ tons as the quantity available for use in Caneda during the year. The distribution of this tonnage by areas was as follows:- Maritines, 384,848 tons; Cuebec, 500,297 tons; Ontario, 2,164,768 tons; and the iestern Provinces, 214,025 tons. This calculation, of course, does not take into consideration any interprovincial shipments of coke or any changes in stocks held by dealers or users, as no records are available concerning such movements.

Actual consumption records, es compiled from the Census of Industry reports for 1936, show that $1,049,993$ tons of coke were used in blast furneces and cupolas, 270,947 tons were used as raw materials in manufacturing, end 345,397 tons mere used as fuel in menufacturing, mining and smelting industries. Thus a total of $1,666,337$ tons can be accounted for and the difference of $1,597,601$ tons must represent the quantity available for use as domestic fuel or in commercial establishments, such as retail stores, repair shops, farehouses, etc., fhich are not covered by the industrial census.

The distribution by areas of the domestic consumption of $1,597,601$ tons was as follows:Maritimes, 50,406 tons; Guebec, 331,c08 tons; Ontario, 1,123,159 tons, and the Festern Provinces, 92, 1.28 tons. Here, efain, no allowince has bew made for interrovincial shipments.

Cobe charged to smelting furneces and cupolas during 1936 amounted to $1,049,993$ tons, of which 672,210 tons were used in iron blast furnaces, 2,412 tons in steel furmaces, 16,964 tons in ferro-alloy furnaces, 279,452 tons in furnaces used for smelting non-ferrous ores, and 78,955 tons in foundry cupolas. The consumption by districts was as follows:- Maritimes, 300,128 tons: Guebec, 20,718 tons; Ontario, 652,353 tons; and the Western Provinces, 76,793 tons.

Coke used as a raw material in manufacturing in 1936 totalled 270,947 tons of which 110,975 tons were used in the manufacture of calcium carbide, 2,992 tons in making carbon dioxide, 97,238 tons in making illuminating and fuel gas, 28,078 tons in making artificiel abrasives, 25,384 tons in the manufacture of carbon electrodes, and 6,280 tons in making miscellancous products. Plants in Ontario used 141,635 tons; in quebec, 101,345 tons; in the Waritimes, 281 tons; and in the liestarn Provinces, 27,688 404\%.

Coke used for finel purposes by the menufacturing, mining and smelting industries emounted to E45, 507 toms in 1936. horhs in the hiaritines used 34,032 tons for this purpose; in Ontario, 247,621 tons; In fuecec, 40,528 tons, ence in the Piest, 17,416 tons.

Takle 1 - PRODTCTION OF COKE IN CANADA, 1936.

| P. E.I., Quebec ontario | Manitoba, <br> Sask., Alta., CAIHADA <br> and B.C. |
| :--- | :--- |


| Coke and Gas Irdustry | Tons $\uparrow$ | $\begin{array}{r} 379,861 \\ 1,394,628 \end{array}$ | $\begin{array}{r} 395,409 \\ 2,760,240 \end{array}$ | $\begin{array}{r} 1,441,833 \\ 10,807,611 \end{array}$ | $\begin{array}{r} 187,690 \\ 1,246,929 \end{array}$ | $\begin{array}{r} 2,404,793 \\ 16,710,008 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Petroleum Refining Industry | Tons 领 | $\begin{array}{r} 448 \\ 1,897 \end{array}$ | $\begin{array}{r} 3,168 \\ 15,523 \end{array}$ | $\begin{array}{r} 55,667 \\ 349,776 \end{array}$ | $\begin{array}{r} 5,423 \\ 25,964 \end{array}$ | $\begin{array}{r} 64,706 \\ 393,160 \end{array}$ |
| TOTAL | Tons $\$$ | $\begin{array}{r} 380,309 \\ 1,996,525 \\ \hline \end{array}$ | $\begin{array}{r} 398,577 \\ 2,776,363 \\ \hline \end{array}$ | $\begin{array}{r} 1,497,500 \\ 11,157, \equiv 87 \end{array}$ | $\begin{array}{r} 193,113 \\ 1,272,893 \\ \hline \end{array}$ | $\begin{array}{r} 2,469,499 \\ 17,103,168 \end{array}$ |


|  | $\begin{aligned} & \text { T.I. } \\ & \text { and } H . B \text {. } \end{aligned}$ | Quebec | Onterio | hiani to be, Sask., Olta., and B.C..... | CANADA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Procuction | 380,309 | 398,577 | 1,497,500 | 193,113 | 2,469,499 |
| Add declines in producers' stocks | 56 | 57,778 | 19,892 | 18,675 | 96,401 |
| Deduct increases in producers' stocks | 380,365 | 456,355 | 1,517,392 | 211,788 | 2,565,900 |
|  | $\ldots$ | $\cdots$ | ... | ... |  |
|  | 380,365 | 456, 255 | 1,517,392 | 211,788 | 2,565,900 |
| Add imports (entered for consumption) | 5,107 | 48,212 | 658,210 | 19, 272 | 730,801 |
|  | 385,472 | 504,567 | 2,175,602 | 231,060 | 3,296,701 |
| Deduct exports | 624 | 4,270 | 10,834 | 17,035 | 32,783 |
| APPAFEIT CONSURPTION | 384,848 | 500,297 | 2,164,768 | 214,025 | 3,263,938 |

NOTES - 1. The imports "entered for consumption" represent tonnages cleared from customs' ports. The tomnages under this heading differ slightly from actual imports.
2. No allowance has been made for changes during the year in stocks of coke held by dealers or users.

Table 3 - CONSURPTION OF COKE IN CAMADA IN SMELIING FURNACES AND CUPOLAS, BY INDUSTRIES, 1936.

| Industries |  | $\begin{aligned} & \text { P.E.I. } \\ & \text { N.S. } \\ & \text { and N. B. } \end{aligned}$ | Quebec | Ontario | Menitoba Sask., Alta., and B.C. | CANADA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pig iron, ferro-alloys and steel ingots and castings | Tons $\$$ | $\begin{array}{r} 297,045 \\ 1,520,098 \end{array}$ | $\begin{aligned} & 1,314 \\ & 9,297 \end{aligned}$ | $\begin{array}{r} 392,749 \\ 2,196,443 \end{array}$ | $\begin{array}{r} 478 \\ 6,235 \end{array}$ | $\begin{array}{r} 691,586 \\ 3,732,073 \end{array}$ |
| Castings and forgings | Tons $\$$ | $\begin{array}{r} 1,160 \\ 15,598 \end{array}$ | $\begin{array}{r} 6,882 \\ 78,634 \end{array}$ | $\begin{array}{r} 23,386 \\ 259,796 \end{array}$ | $\begin{array}{r} 2,667 \\ 38,8,21 \end{array}$ | $\begin{array}{r} 34,095 \\ 392,8.49 \end{array}$ |
| Heating and cooking apparatus | Tons * | $\begin{array}{r} 1,059 \\ 15,150 \end{array}$ | $\begin{array}{r} 1,289 \\ 15,114 \end{array}$ | $\begin{array}{r} 5,757 \\ 65,564 \end{array}$ | $\begin{array}{r} 216 \\ 3,565 \end{array}$ | $\begin{array}{r} 8,321 \\ 99,393 \end{array}$ |
| Boilers, tanks and engines | Tons $+$ | 77 1,075 | $\begin{array}{r} 2,218 \\ 26,097 \end{array}$ | $\begin{array}{r} 4,678 \\ 52,888 \end{array}$ | $\begin{array}{r} 54 \\ 762 \end{array}$ | $\begin{array}{r} 7,027 \\ 80,822 \end{array}$ |
| Agricultural implements | Tons \$ | .... | 82 874 | $\begin{array}{r} 6,157 \\ 72,068 \end{array}$ | $\begin{array}{r} 23 \\ 299 \end{array}$ | $\begin{array}{r} 6,262 \\ 73,241 \end{array}$ |
| Machinery | Tons $\$$ | $\ldots$ | $\begin{array}{r} 2,808 \\ 30,159 \end{array}$ | $\begin{array}{r} 2,853 \\ 30,440 \end{array}$ | $\begin{array}{r} 176 \\ 2,559 \end{array}$ | $\begin{array}{r} 5,837 \\ 63,138 \end{array}$ |
| Railway rolling stock | Tons \& | $\begin{array}{r} 788 \\ 11,768 \end{array}$ | $\begin{array}{r} 4,766 \\ 47,826 \end{array}$ | $\begin{array}{r} 9,000 \\ 101,378 \end{array}$ | $\begin{array}{r} 2,459 \\ 36,682 \end{array}$ | $\begin{array}{r} 17,013 \\ 197,654 \end{array}$ |



| Automobile parts .................. Tons |  | 3 21 | $\begin{array}{r} 17 \\ 218 \end{array}$ |  | 20 239 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Other iron and steel ................ Tons | ... | $\ldots$ | 174 | 206 | 380 |
| (1) | ... | ... | 1,766 | 5,415 | 5,179 |
| Non-ferrous metallurfical works .... Tons | - | 1,356 | 207,582 | 70,514 | 279,452 |
| \$ | ... | 12,871 | 2,078,299 | 636, 266 | 2,727,536 |
| Toral . .............................. . Tons | 300,129 | 20,718 | 652,353 | 76,793 | 1,049,993 |
| ${ }_{\$}$ | 1,565,699 | 220, 203 | 4,958,960 | 728,682 | 7,372,124 |

Tnble \& - CONSUTPTION OF COKE IN CANADA AS MARTFACTNRING MATERI RL, BY INDTSTRIES, 1936.

| Industries | $\begin{aligned} & \text { P.E.I. } \\ & \because . S . \end{aligned}$ <br> and N.B. | Quebec | Ontario | lisenitobe, Sask., flta., and B.C. | cavada |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Aclds, alkalies and salts .......... Tons | ... | $\begin{array}{r} 41,201 \\ 305,299 \end{array}$ | $\begin{array}{r} 69,774 \\ 515,049 \end{array}$ |  | $\begin{aligned} & 110,075 \\ & 820, \geq 48 \end{aligned}$ |
| Compressed gases .................. Tons | $\begin{array}{r} 281 \\ 4,400 \end{array}$ | $\begin{array}{r} 1,109 \\ 11,226 \end{array}$ | $\begin{array}{r} 932 \\ 9, ? 57 \end{array}$ | $\begin{array}{r} 670 \\ 8,873 \end{array}$ | $\begin{array}{r} 2,992 \\ 34,556 \end{array}$ |
| Artificial abrasives ................ Tons | .... | $\begin{array}{r} 9,046 \\ 112,216 \end{array}$ | $\begin{array}{r} 19,032 \\ 236,762 \end{array}$ | ... | $\begin{array}{r} 28,078 \\ 349,578 \end{array}$ |
| Coke and gas ...................... Tons | -. | $\begin{array}{r} 34,685 \\ 859,012 \end{array}$ | $\begin{array}{r} 35,587 \\ 25 \epsilon, 84 z \end{array}$ | $\begin{array}{r} 27,018 \\ 191,885 \end{array}$ | $\begin{array}{r} 97,238 \\ 707,740 \end{array}$ |
| Miscellaneous non-metallic mineral Tons products | $\ldots$ | $\begin{array}{r} 15,354 \\ 218,287 \\ \hline \end{array}$ | $\begin{array}{r} 16, \approx 10 \\ 99,475 \\ \hline \end{array}$ | ... | $\begin{array}{r} 31,664 \\ 313,360 \\ \hline \end{array}$ |
| TOTAL . ............................. Tons | $\begin{array}{r} 281 \\ 4,400 \\ \hline \end{array}$ | $\begin{aligned} & 101,245 \\ & 902,240 \\ & \hline \end{aligned}$ | $\begin{array}{r} 141,635 \\ 1,117,: 84 \end{array}$ | $\begin{array}{r} 27,688 \\ 200,758 \\ \hline \end{array}$ | $\begin{array}{r} 270,847 \\ 2,225,382 \\ \hline \end{array}$ |

Table 5 - CONSUMPTION OF COKL IN CANADA AS ITUTETGIA, FUEL IN THE MANUFACTURING, IUINING AKD SMELTING IMMISTEIES, 1936.


## MANUFACTTIRTNG

| Chemicals and allied products ..... Tons | 2 30 | $\begin{array}{r} 3,752 \\ 19,770 \end{array}$ | $\begin{array}{r} 6,111 \\ 28,524 \end{array}$ | $\begin{array}{r} 188 \\ 2,146 \end{array}$ | $\begin{aligned} & 10,053 \\ & 50,470 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Iron and steel, and products ...... Tons | 22,588 | 6,333 | 61, 378 | 1,385 | 91,684 |
| 4 | 56,702 | 53,635 | 246,724 | 18,840 | 575,901 |
| Non-ferrous metal products (ex- Tons | ... | 3,071 | 5,823 | 349 | 9,245 |
| cluding smelters) .................. \$ | ... | 22,677 | 49,978 | 4,602 | 77,257 |
| Non-metallic mineral products (ex- Tons | 3,580 | 24,149 | 131,020 | 10,847 | 169,596 |
| cluding cement, clay and lime) ... \$ | 24,580 | 89,420 | 645,078 | 55,173 | 814,251 |
| Animal products .................... Tons | 4 | 256 | 585 | 1,167 | 2,012 |
| \$ | 42 | 2,893 | 4,835 | 5,553 | 15,328 |
| Textile products ................. Tons | ... | 717 | 5,105 | 6 | 3,828 |
| S |  | 6,457 | 16,636 | 85 | 25,178 |
| Vegetable products ................ Tons | 4,337 | 7,464 | 27,191 | 3,089 | 42, 081 |
| \$ | 39,860 | 67,266 | 265,870 | 32,139 | 405,135 |
| Wood and paper products ........... Tons | 12 | 244 | 2,468 | 168 | 2,892 |
| \$ | 132 | 2,660 | 17,688 | 1,732 | 22,:12 |
| Misceilaneous products ............ Tons | ... | 156 | 256 | 5 | 397 |
| s | ... | 1.244 | 2,498 | 58 | 3,800 |
| Totel ilanufacturing Industries ... Tons | 30,5n5 | 40,122 | 257,937 | 17,204 | 331,786 |
| - | 121,346 | 206,02\% | 1,277,831 | 120,328 | 1,785,527 |
| Vining Industrics ................. Tons | 3,509 | 206 | 9,684 | 212 | 13,611 |
| 8 | 18,645 | 2,194 | 82,105 | \$,786 | 106,730 |
| TOTAL . ............................. Tons | 34,032 | 46,328 | 247,621 | 17,416 | 345,997 |
| \$ | 139,931 | 268,216 | 1,359,936 | 124,114 | 1,992,257 |



See explanotor: notes milc:l follow table 7.
Table 7 - ANAJYSIS OF COKE CONSUPPTION IN CAYADA BY PRIMCIPAL USES, 1325 - 1935. (Short tons)

|  | Waritimes | Quebec | Ontario | Nest | GAisada |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1925 |  |  |  |  |  |
| Furnace charges | 256,210 | 26,995 | 602,265 | 111,202 | 996,662 |
| Manufacturime material | 202 | 51,339 | 132,553 | 10,249 | 194,347 |
| Industrial fuel .. | 42,998 | 76,871 | 190,993 | 35,017 | 345,859 |
| Aveilable for domestic use (by difference). | 10,853 | 90,207 | 644,113 | 91,541 | 836,723 |
| TOTAL | 310, 259 | 245,401 | 1,569,919 | 243,009 | 2,373,588 |
| 1926 |  |  |  |  |  |
| Furnace charzes | 321,919 | 32,543 | 750,057 | 112,235 | 1,216,758 |
| Maruiecturing meterial | 429 | 58,053 | 147,920 | 11,2.84 | 217,686 |
| Industriel fruel | 9,568 | 31,793 | 167,350 | 26,752 | 228,467 |
| Availasie for domestic use (by difference). | 159,491 | 132,350 | 944,550 | 74,088 | 1,310,489 |
| T0TAL . .............................. | 491,406 | 254,741 | 2,002,987 | 224,353 | 2,973,393 |

1927

| Purnece charges | 315,133 | 30,237 | 694,019 | 98,800 | 1,138,189 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| iinguiscturing meterial | 236 | 105,525 | 153,654 | 11,891 | 277,296 |
| Industrial fuel | 14,242 | 25,404 | 184,097 | 27,635 | 251,379 |
| Avaliable for domestic use (by difference). | 93,814 | 79,151 | 826,172 | 58,554 | 1,057,701 |
| TOTAL | 423,425 | 241,327 | 1,362,942 | 196,870 | 2,724,564 |

1928

| Furnace ch | 389,758 | 31,523 | 919,579 | 87,751 | 1,423,611 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Uanufacturing material | 274 | 83,534 | 153,511 | 11,944 | 249,413 |
| Inchustrial fuel | 25,366 | 29,536 | 215,666 | 38,330 | 309,899 |
| Available for domestic use (by difference). | 61,143 | 209,626 | 1,060,373 | 30,037 | 1,361,113 |
| TOTAL | 476,539 | 354,369 | 2,357,189 | 168,062 | 3,349,095 |

## 1929

| Furnace charges | 411,537 | 36,368 | 1,144,433 | 84,056 | 1,576,44.4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Manufacturing meterial | 326 | 128,515 | 222,095 | 13,315 | 364,251 |
| Industrial fuel | 52,181 | 51,953 | 241,392 | 40,672 | 386,823 |
| Available for domestic use (by difference). | 68,159 | 190,921 | 1,159,603 | 104,530 | 1,533,322 |
| TOTAL | 532,262 | 407,752 | 2,778,123 | 242,673 | 3,960,820 |

Table 6 - ANALYSIS OF COKE CONSUMPTION IN CAYADA, BY PHINCIPAL USES, 1925-1.935. (concluded) (Short tons)


## 1935

| Furnace charges | 240,785 | 15,553 | 577,200 | 88,131 | 922,679 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Manufacturing meterial | 229 | 79,419 | 132,455 | 4,435 | 216,538 |
| Industrial fuel | 52,036 | 53,633 | 265,333 | 35,754 | 386,756 |
| Available for domestis use (by difference). | 59,527 | 274,714 | 1,065,648 | 72.129 | 1,472,018 |
| TOTAL | 332,577 | 424,329 | 2,040,536 | 200,449 | 2,997,991 |

NOTES - 1. FYgures showing the tonnage of coke available for domestic use are obtained by difference and include the coke used for purposes other than specified in these tables.
2. No allowance has been made for changes in producers' stocks for 1931 and earlier years.
5. No allowance has been made for changes during the year in stocks of coke held by dealers or users.
4. No allowance has been made for interprovincial shipments of coke. A special survey made by the Bureau of Mines, Department of Mines and Resources, Ottawa, shows that in 1932 about 34,790 tons of Quebec coke were used in Ontario for tomestic purposes and about 10,585 tons of Ontario coke were used in Manitoba. In addition, about 40,000 tons of the imported coke used in Manitobe were brought in at Ontario ports of entry and, of course, are credited to Ontario in the above calculation.

