CONFIDENTIAL

CLASSIFICATION CONFIDENTIAL

CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

50X1-HUM

[redacted]

COUNTRY USSR

SUBJECT Economic - Coke gas

HOW PUBLISHED Monthly periodical

WHERE PUBLISHED Moscow

DATE PUBLISHED May 1950

LANGUAGE Russian

DATE OF INFORMATION 1950

DATE DIST. 1 Aug 1950

NO. OF PAGES 2

SUPPLEMENT TO REPORT NO.

THIS IS UNEVALUATED INFORMATION

SOURCE Za Ekonomiyu Topliva, No 5, 1950.

EFFICIENT UTILIZATION OF COKE GAS IN THE USSR

B. I. Kustov and O. P. Vaysberg

The Five-Year Plan fixed the 1950 level of coke production at 30 million tons. This level would assure a production of approximately 11 billion cubic meters of coke gas, the second most valuable product of the coke-chemical industry.

During the period 1929 - 1940 the amount of coke gas produced in the USSR increased 470 percent. The geographical distribution and the technical level of the coke-chemical industry of the USSR also changed greatly during that period. At the same time gas obtained from coke-chemical plants connected with metallurgical plants increased 1,100 percent. Sale of coke gas to outsiders increased from 6.3 percent in 1928 to 21 percent in 1933, 45.9 percent in 1937, 52.5 percent in 1939, and 54.9 percent in 1940.

In 1940 coke-chemical plants were using so much coke gas for their own purposes (heating of coking ovens, for steam boilers, etc.) that an inadequate supply was available for ferrous metallurgy and other consumers of coke gas. During World War II, the coke-chemical industry continued to expand in Eastern USSR and a considerable number of coking ovens were heated by blast furnace gas. This reduced the consumption of coke gas for the plants' own purposes to 23-26 percent of the total gas output in 1942 - 1943.

A considerable number of the coke batteries in the restored metallurgical industry of the South had to be heated by coke gas. In spite of this, coke gas consumed for the plants' own purposes in the South decreased to 44 percent in 1948 as against 47.9 percent for 1940.

There is room for further progress in reducing coke gas for plants' own consumption. Blast furnace gas should be used more extensively for heating coking ovens. If inadequate supplies of blast furnace gas are available, producer gas could be used. Then it would be possible to raise the amount of gas for outside consumption to 90-92 percent. This has already been achieved by a number of outstanding coke plants, Magnitogorsk, Stalino, and others.

CLASSIFICATION CONFIDENTIAL

STATE	X	NAVY	X	NSRB	DISTRIBUTION
ARMY	X	AIR	X	FBI	

CONFIDENTIAL

With an increased gas supply based on coke gas in areas of the Donbass, the Dnepr, and the Urals, the use of liquid fuel can be completely eliminated in enterprises which are hooked up with the gas system. The consumption of coking coal, a valuable raw material for the chemical industry, can be cut down. The cost of heat can be reduced, labor and transport expenses lessened.

The 1950, 350 million cubic meters of coke gas will be supplied to city gas systems. This is equal to 3 percent of the planned output of coke gas or about 50 percent of the yield of one large coke-chemical plant. This will save 500,000 cubic meters of firewood, one million tons of coal, and 80,000 tons of petroleum fuel, equalling 900,000 tons of standard fuel per year with a value of 135 million rubles.

The use of coke gas can soon be adopted to a considerable extent in Dnepropetrovsk, Zaporozh'ye, Krivoy Rog, Dneprodzerzhinsk, Kerch', Yenakiyevo, Voroshilovsk, Magnitogorsk, Chelyabinsk, Stalinsk, and Nizhniy Tagil. A further increase of the coke gas supply for city consumption is to be expected as new coke-chemical plants are constructed.

Consumption of Coke Gas in the USSR

(in percent)

Type of Consumption	South			East			Total for USSR		
	1940	1947	1948	1940	1947	1948	1940	1947	1948
Heating coking ovens	43.9	46.3	40.3	29.8	21.7	23.1	40.2	31.1	30.6
Other uses coke-chemical plants	4.0	5.1	4.1	0.9	1.8	1.2	3.2	3.1	2.4
Total for plant needs	47.9	51.4	44.4	30.7	23.5	24.3	43.4	34.2	33.0
Sales to metallurgical plants	41.8	35.6	41.6	51.3	56.3	55.6	44.2	48.4	50.9
Sales to other consumers	8.7	9.0	9.1	15.4	19.1	18.6	10.4	15.2	14.5
Losses and unused gas	1.6	4.0	1.9	2.6	1.1	1.5	2.0	2.2	1.6

USSR Coke Gas Consumption Compared With US and German Figures

(in percent)

Type of Consumption	USSR 1948	USA 1947	Germany 1943
Heating coking ovens	30.6	37.5	46.5
Other uses by coke-chemcial plants	2.4	3.8	7.2
Total for plant needs	33.0	41.3	53.7
Sales	65.4	57.5	46.3
City gas systems	0.4	20.0	6.7
Metallurgical industry	50.9	33.9	no data

- E N D -

CONFIDENTIAL

CONFIDENTIAL