

INDUSTRIAL AND CIVILIAN CONSUMPTION OF LIQUID FUELS
AND LUBRICANTS DURING THE FIRST SIX MONTHS OF 1944

1. General Considerations. The downward trend in the allocations of petroleum products to the civilian economy of Axis Europe continued unabated in 1944. Industrial and civilian consumption of liquid fuels and lubricants during the first six months of 1944 has been estimated at 2,760,000 tons, or about 15 percent below the 1943 level. Consumption during the month of June 1944 at 420,000 tons was nearly 8 percent below the average for the six months due in part to seasonal factors and in part to further substitutions and restrictions on the use of liquid fuel. A detailed breakdown of consumption by products and countries is appended in Table 1.

A large part of the economies achieved during the first six months of 1944 resulted from the extensive conversions to the use of substitute fuels made during 1943 and to a smaller extent during the early part of 1944. The total number of gaseous and solid substitute fuel using motor vehicles in Axis Europe increased during the nine months period, July 1943 to April 1944, from 410,000 to 520,000 units. Estimates on the number and kind of vehicles by country of registration are presented in Table 2.

Consumption was further reduced by savings accruing from the loss of large conquered territories in Russia and Italy, which need no

longer be provided with petroleum products. The German occupation of Hungary and the decline of refinery output in Rumania as a result of Allied air attacks have led to a reduction in the domestic consumption of these two countries which, because of favorable local supply conditions, had up to then enjoyed the highest European rate of consumption in terms of pre-war demand.

With the exception of such new factors as mentioned here, the most important considerations governing each estimate have been presented in the Enemy Oil Committee Report (EOC 68-4 on the "Industrial and Civilian Consumption of Liquid Fuels and Lubricants in Axis Europe, 1943".

2. Germany, the Protectorate and Slovakia. The estimate for the total number of civilian trucks as of March 1943 has been reduced to about 280,000 units as against 320,000 units as of June 1943. Solid fuels were used by about 130,000 trucks, gaseous fuels by about 13,000, liquid gas by 70,000, diesel oil by 10,000 and light motor fuel by 50-60,000. The number of busses has been put at 10-11,000 (as against 12,000 in June 1943), of which 3,000 used solid fuels, 3,000 gaseous fuels, 3,000 liquid gas and 1-2,000 light motor fuel and diesel oil. There are some 180,000 private cars (200,000 in June 1943), of which some ^{35,000}~~40,000~~ have been converted to substitute fuels. The number of motorcycles has been put at 600,000 (650,000 in June 1943). Total requirements of liquid fuels (including bottled gas) and lubricants for

German road transportation during the first six months of 1944 has been estimated at about 400,000 tons. -

Estimated consumption of railways, inland shipping, and bunkers during the half year amounted to 40,000 tons, 75,000 tons and 45,000 tons, respectively, or about 5 to 10 percent less than in 1943. Agricultural consumption was put at about 160,000 tons, or some 10 percent below the 1943 level to account for larger economies and further substitution. Industrial consumption amounted to 470,000 tons.

- It has been assumed that consumption in the Protectorate and Slovakia was cut by about the same percentage as that in Germany.

3. Italy, Bulgaria, and Finland. Consumption in the Italian territory remaining in German hands has been cut by about one-half of Italy's 1943 requirements. With the loss of further territory, consumption will decline correspondingly.

Consumption for Bulgaria and Finland has been reduced by about 10 percent because of increased conversions and ever more severe restrictions on the use of liquid fuels.

4. France, Belgium, Holland, Denmark and Norway. Intelligence on the actual size of allocations to some of these countries for particular months was available and has been used in estimating consumption. The trend here was also downward in spite of the fact that allocation for consumption in 1943 had already declined to a mere trickle.

5. Baltic States, Poland, Occupied Russia, Yugoslavia and Greece. It was assumed that consumption declined by another 10 percent in spite of the low level of demand shown in the 1943 estimates.

Table 1.

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CIVILIAN AND INDUSTRIAL CONSUMPTION OF LIQUID FUELS AND LUBRICANTS IN AXIS EUROPE
DURING THE FIRST SIX MONTHS OF 1944

(Annual Rate of Consumption in thousands of metric tons)

	<u>Light Fuel</u>	<u>Kerosene</u>	<u>Lubricants</u>	<u>Gas Oil</u>	<u>Fuel Oil</u>	<u>Annual Rate 6 months</u>	<u>Annual Rate as of June</u>
Germany	1,100	110	520	520	250	2,500	2,400
Protectorate and Slovakia	40	20	25	10	5	100	90
Italy	60	15	40	40	120	275	150
Hungary	70	80	15	35	45	240	220
Rumania	100	270	30	100	1,000	1,500	1,400
Bulgaria	8	15	5	10	2	40	35
Finland	20	10	11	4	-	50	45
France	200	10	50	60	30	250	220
Belgium	15	2	12	20	7	55	50
Holland	10	8	12	15	5	50	45
Denmark	8	6	10	20	1	45	40
Norway	10	7	8	40	5	70	60
Baltic States	10	7	4	3	11	35	30
General Government of Poland	18	15	8	4	5	50	45
Occupied Russia	50	15	10	15	10	100	60
Serbia and Croatia	7	5	6	6	6	30	30
Greece	6	3	4	10	7	30	30
Exports	50	10	20	10	20	100	90
TOTAL	1,682	507	790	922	1,519	5,520	5,040

Table 2.

NUMBER OF GASEOUS AND SOLID SUBSTITUTE FUEL USING MOTOR VEHICLES IN AXIS EUROPE AS OF

(Thousand Units)

AXIS AND AXIS SATELLITES	Private Cars			Buses			Trucks		
	Using		Total	Using		Total	Using		Total
	Solid Fuels	Gaseous Fuels		Solid Fuels	Gaseous Fuels		Solid Fuels	Gaseous Fuels	
Germany	30.0	4.0	34.0	3.0	3.0	6.0	130.0	13.0	143.0
Protectorate and Slovakia	1.0	.5	1.5	.2	.3	.5	8.0	1.0	9.0
Italy ²	2.5	6.5	9.0	1.5	1.5	3.0	11.0	17.0	28.0
Hungary	.3	.4	.7	-	.1	.1	.6	.6	1.0
Bulgaria	.5	.2	.7	.5	-	.5	2.0	-	2.0
Finland	4.0	-	4.0	1.0	-	1.0	7.0	-	7.0
OCCUPIED COUNTRIES OF WESTERN AND NORTHERN EUROPE									
France	15.0	7.0	22.0	2.0	3.0	5.0	110.0	20.0	130.0
Belgium	.5	2.5	3.0	.3	.2	.5	10.0	12.0	22.0
Holland	.5	.5	1.0	.3	.5	.8	16.5	.5	17.0
Denmark	3.0	.5	3.5	.5	.2	.7	18.0	.5	18.5
Norway	4.0	-	4.0	1.5	-	1.5	15.0	-	15.0
OCCUPIED COUNTRIES OF EASTERN AND SOUTHERN EUROPE									
Baltic States	.2	-	.2	.1	.1	.2	3.0	-	3.0
General Government of Poland	.4	.4	.8	.2	.3	.5	3.5	1.5	5.0
Occupied Russia	1.0	-	1.0	1.0	-	1.0	10.0	-	10.0
Serbia and Croatia	.2	.2	.4	.1	.1	.2	.8	.4	1.0
Greece	.1	.1	.2	.2	-	.2	.4	-	.4
TOTAL	63.2	22.8	86.0	12.4	9.3	21.7	345.8	66.5	412.3

EXCLUDING military Vehicles.

2 Figures as of 1 July 1943.

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Table 2.

PER OF GASEOUS AND SOLID SUBSTITUTE FUEL USING MOTOR VEHICLES IN AXIS EUROPE AS OF 1 APRIL 1944¹

(Thousand Units)

Private Cars			Buses			Trucks			Total Road Vehicles		
Using			Using			Using			Using		
Solid Fuels	Gaseous Fuels	Total	Solid Fuels	Gaseous Fuels	Total	Solid Fuels	Gaseous Fuels	Total	Solid Fuels	Gaseous Fuels	Grand Total
30.0	4.0	34.0	3.0	3.0	6.0	130.0	13.0	143.0	163.0	20.0	183.0
1.0	.5	1.5	.2	.3	.5	8.0	1.0	9.0	9.2	1.8	11.0
2.5	6.5	9.0	1.5	1.5	3.0	11.0	17.0	28.0	15.0	25.0	40.0
.3	.4	.7	-	.1	.1	.6	.6	1.2	.9	1.1	2.0
.5	.2	.7	.5	-	.5	2.0	-	2.0	3.0	.2	3.2
4.0	-	4.0	1.0	-	1.0	7.0	-	7.0	12.0	-	12.0
15.0	7.0	22.0	2.0	3.0	5.0	110.0	20.0	130.0	127.0	30.0	157.0
.5	2.5	3.0	.3	.2	.5	10.0	12.0	22.0	10.8	11.7	22.5
.5	.5	1.0	.3	.5	.8	16.5	.5	17.0	17.3	1.5	18.8
3.0	.5	3.5	.5	.2	.7	18.0	.5	18.5	21.5	1.2	22.7
4.0	-	4.0	1.5	-	1.5	15.0	-	15.0	20.5	-	20.5
.2	-	.2	.1	.1	.2	3.0	-	3.0	3.3	.1	3.4
.4	.4	.8	.2	.3	.5	3.5	1.5	5.0	4.1	2.2	6.3
1.0	-	1.0	1.0	-	1.0	10.0	-	10.0	12.0	-	12.0
.2	.2	.4	.1	.1	.2	.8	.4	1.2	1.1	.7	1.8
.1	.1	.2	.2	-	.2	.4	-	.4	.7	.1	.8
63.2	22.8	86.0	12.4	9.3	21.7	345.8	66.5	412.3	421.4	98.6	520.0

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