

EUROPEAN
COAL AND STEEL COMMUNITY

COMMISSION

**Investment in the Community
Coalmining and Iron and Steel
Industries**

REPORT ON THE 1968 SURVEY

Position as at January 1, 1968

JULY 1968

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I—GENERAL REMARKS

From 1955 onwards, the High Authority of the European Coal and Steel Community carried out a regular annual survey of past and future investment by ECSC enterprises as at 1 January of the year concerned, and its foreseeable effects on production potential. The merged Commission of the European Communities intends to continue this practice.

The survey covers all but a few very small enterprises, whose combined share of total production has dwindled in course of time, and has in any case never amounted to more than 1% for coal, 1.1% for crude steel and 2.2% for rolled products.

The figures from the previous surveys for the years 1954-64 are recapitulated in a Summary Report issued by the High Authority in August 1966; the statistical annexes to the present publication therefore show only the figures from 1964 onwards.

Annex I to each year's Report sets forth the **basic definitions** adopted. This year's Annex I specifies in particular that investment projects have been classified in three categories, according as they were on 1 January 1968 already completed or in progress (Category A), approved (Category B), or merely contemplated (Category C). Since in the case of the iron and steel industry projects merely "contemplated" can as a rule quite easily be dropped or deferred if necessary, the Category C projects dealt with in the Reports are those of the extractive industries (coal and iron ore) only.

Annex II contains tables showing for each sector actual and estimated **capital expenditure** and its impact on **production potential**.

a) Capital expenditure

Capital expenditure entered by Community enterprises on the credit side of their balance-sheets from 1 January 1954 onwards has been recorded for the purposes of the annual surveys in European Monetary Agreement ((EMA) units of account, the unit of account being to date equal in value to the United States dollar (see Annex I,1). It is true that computation in dollars does not entirely accurately reflect changes over a period in the cost of capital goods and in the wage costs involved by their installation; nevertheless, some general observations hold good.

Actual expenditure from 1954 to 1967 inclusive totalled 17,500m. dollar units of account, representing an annual average of about 1,250m. The 1967 figure was 1,012m. in all, the coal industry's outlay (including that on brown-coal briquettes and low-temperature brown-coal

coke) coming to 246m., the iron-ore mines' to 16m. and the iron and steel industry's to 750m. The estimated 1968 total is 1,180m., representing an increase of 16% in expenditure, which is due to the expected developments in the coal industry, is expected to remain steady and that in the steel industry and the iron-ore mines to show an appreciable rise.

TABLE 1

Capital Expenditure in the Community Industries, 1954—1969

'000,000 dollars (EMA units of account)

Sector	Actual expenditure										Estimated expenditure (Categories A+B+C) ⁽¹⁾	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
Coalmining industry ...	434	371	380	366	325	291	278	250	242	247	196	
Plants producing B.K.B. and low-temperature brown-coal coke.....	5	6	4	6	9	8	8	4	4	4	4	
Iron-ore mines.....	39	43	52	47	28	24	25	17	16	24	12	
Iron and steel industry ..	581	775	1,123	1,230	1,480	1,315	932	848	750	905	672	
Total	1,059	1,195	1,559	1,649	1,842	1,638	1,243	1,119	1,012	1,180	884	

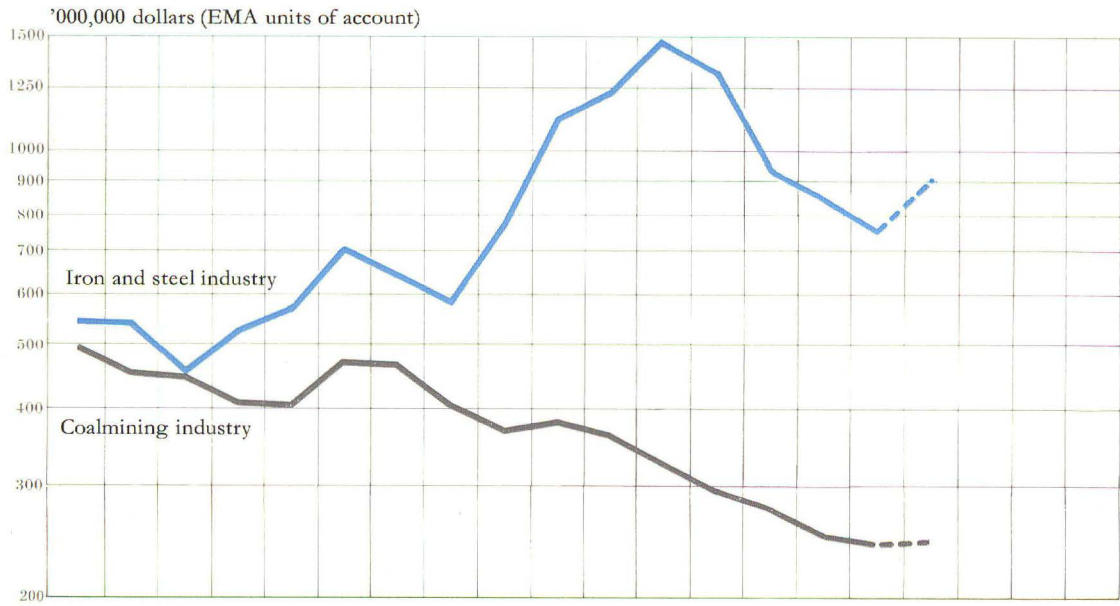
⁽¹⁾ The estimates for the iron and steel industry relate only to expenditure on projects already in progress (A) or approved (B) at 1 January 1968, not to those merely contemplated (C).

The fourteen years covered by the surveys can conveniently be divided into two parts. In 1954-59 investment remained pretty steady, the collieries' expenditure ranging from 405m. to 471m. dollars a year (average 434m.), the iron-ore mines' from 30 m. to 50m. (average 39m.), and the iron and steel industry's—in which, however, a certain upward trend was observable—from 453m. to 708m. (average 581m.). The eight years from 1960 were much more unsettled, as can be seen from the movements of the three investment indices in relation to the respective 1954-59 averages. The index for the coal industry fell progressively from 100 to 56; those for the iron and steel industry and the iron-ore mines first climbed steeply and then dropped again—in the latter case in fact plummeted—with the steel industry's soaring to 255 in 1963 and thereafter slumping to reach 130 in 1967, while the iron-ore mines', after touching a peak of 133 in 1961, was down by 1967 to a mere 41. The decline seems now to have ended in the steel and iron-ore industries of the Community.

FIGURE 1

Investment in the Coalmining and Iron and Steel Industries

A—Capital expenditure



B—Actual production and production potential

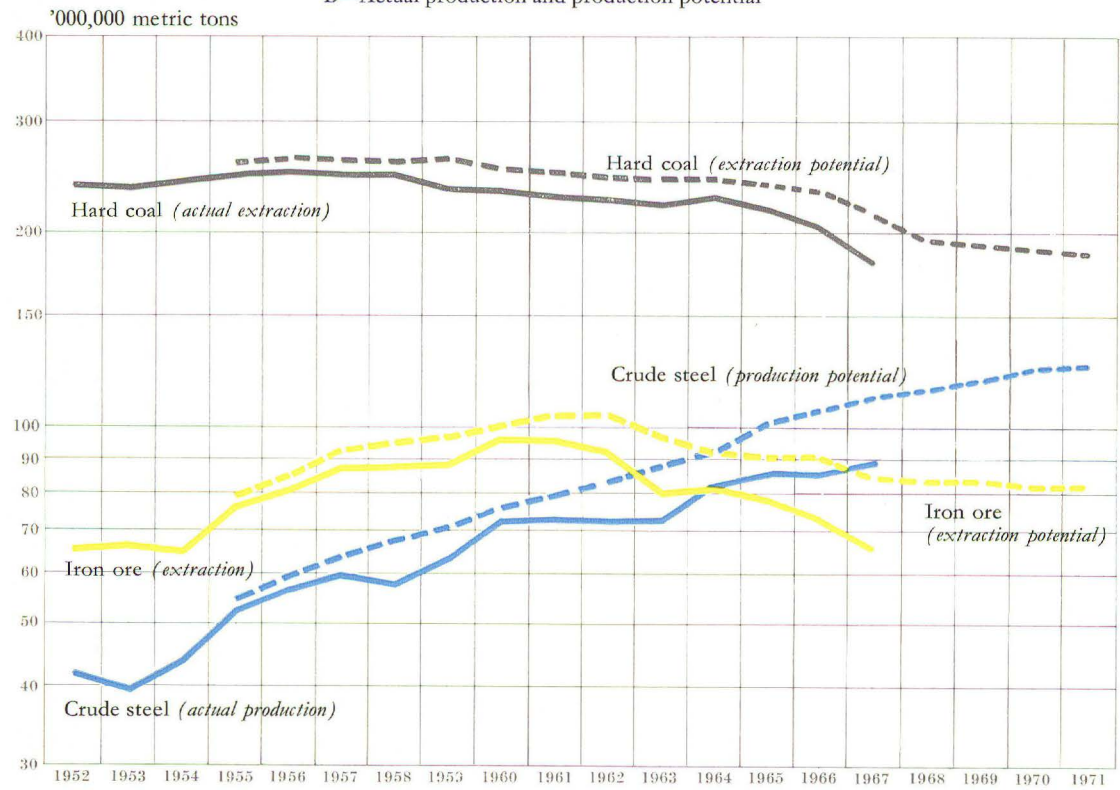


TABLE 2

General Trend in Investment in Recent Years

Indices

Sector	Projects effected									Projects planned for 1968
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	
Coalmining industry ...	100	85	88	84	75	67	64	58	56	57
Iron-ore mines	100	110	133	121	72	62	64	44	41	62
Iron and steel industry .	100	133	193	212	255	226	160	146	130	156
All E.C.S.C. industries	100	113	148	156	174	155	117	106	96	111

The figures for the years 1966 and 1967 do not altogether tally with those given in last year's Report, inasmuch as it is normally the case that

- (a) for the past year (1967) actual expenditure differs to varying extents from the estimates submitted on 1 January;
- (b) for the previous year (1966) the expenditure figures returned before the balance-sheets were closed are corrected when the next survey is drawn up.

The 1967 survey had suggested that capital expenditure in that year would total 1,110m. dollars, but the figure was in fact only 1,012m. Overall, therefore, the estimates proved 92% correct—96% for coal, 94% for iron ore and 90% for steel. As can be seen from Fig. 2, higher accuracy ratings have often been achieved in the past, especially for the steel industry.

b) Production potential

The collieries' declarations indicate that the **hard-coal** production potential surveyed will contract by 24.4m. tons from 1967 to 1971, which would bring it by the latter date to 186.1m. tons. This reduction may be compared with that already effected since 1959, which works out at 52m. tons in all, including 19.1m. in 1967 alone.

Iron-ore production potential, according to the producers' calculations, will decrease by 2.7m. tons over the same four years, to stand in 1971 at 81.6m. tons. This too is marginal in comparison with the shrinkage of 21.2m. tons since 1962, including 6.2m. in 1967.

Despite the financial difficulties of the last few years, the Community iron and steel industry is reckoning on maintaining a fair rate of expansion, though there will be some falling-off from that observed for pig-iron and crude-steel production from 1952 to 1967. Steelmaking potential, which was up by 4.2m. tons in 1967, is expected to increase by a further 12m. during the four years immediately ahead, reaching 124.2m. tons in 1971.

TABLE 3

Actual Production and Production Potential in the Community Industries

Product	Actual Production			Production potential		
	1952 (^{'000,000} metric tons)	Average cumulative annual movement (%)	1967 (^{'000,000} metric tons)	1967 (^{'000,000} metric tons)	Average cumulative annual movement (%)	1971 (^{'000,000} metric tons)
Hard coal ⁽¹⁾	237.4	-1.7	184.3	210.5	-3.1	186.1
Iron ore	65.3	+0.0	65.9	84.3	-0.8	81.6
Pig-iron	34.7	+4.4	65.9	83.2	+2.5	92.0
Crude steel	41.8	+5.2	89.8	112.0	+2.6	124.2

⁽¹⁾ Exclusive of "small mines" (see Annex I, p.38.).

In order to interpret the production-potential figures correctly, it must be borne in mind that the sum of the potentials declared by the individual mines and plants is bound to be slightly above the maximum production actually achievable in the Community, by reason of unforeseeable incidents or circumstances which, in the course of any one year, may make it impossible for some of them to attain their maximum, even where their sales position as such is satisfactory.

Thus, even during the best years, actual production has never exceeded 96% or so of the sum of the individual production potentials declared. On the other hand, there is nothing to stop it going down in bad years to any level, however low, and in fact in 1967 for the second year running the iron and steel plants were operating at 80% or less of capacity.

FIGURE 2

Comparison of Actual Capital Expenditure
and Estimated Capital Expenditure as at the Beginning of Each Year

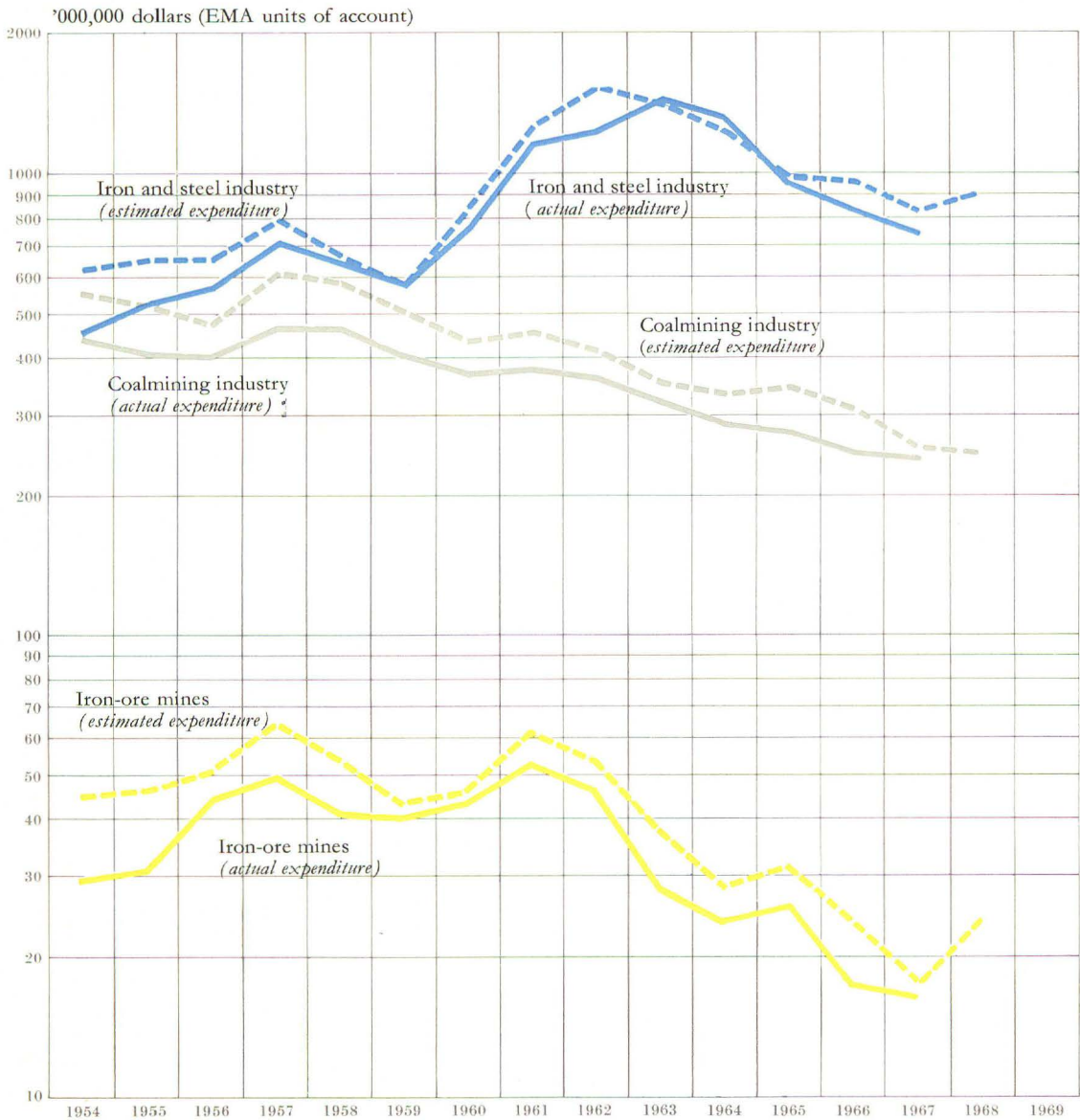


TABLE 4

Community Ratios of Actual Production to Production Potential

%

Product	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
Hard coal	94.9	94.6	95.1	94.8	89.3	92.6	92.7	92.0	91.7	94.0	91.1	88.9	87.9
Coke	93.2	96.5	96.1	92.2	84.3	85.7	85.3	85.0	84.2	90.2	92.7	88.9	87.1
Iron-ore	95.4	95.1	94.9	91.3	90.9	94.6	91.7	87.6	81.9	88.3	87.0	80.7	78.2
Pig-iron	96.3	96.0	94.7	87.9	88.3	94.3	90.9	85.5	81.0	88.2	83.8	77.0	79.2
Crude steel	95.8	96.1	94.1	85.7	89.6	95.6	91.7	87.3	83.4	90.0	84.3	78.7	80.0

II—THE COALMINING INDUSTRY

As forecast, the Community coalmining industry was obliged to make fresh cuts in its capital spending in 1967. Even the forward estimates are now gloomy, and producers in most coalfields are expecting to have to retrench further in 1968 and 1969.

TABLE 5

Capital Expenditure in the Coalmining Industry 1954—1969

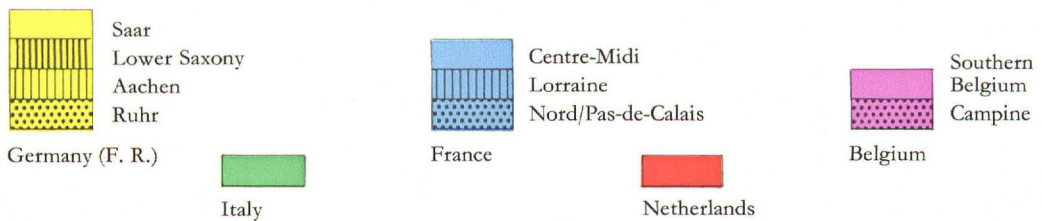
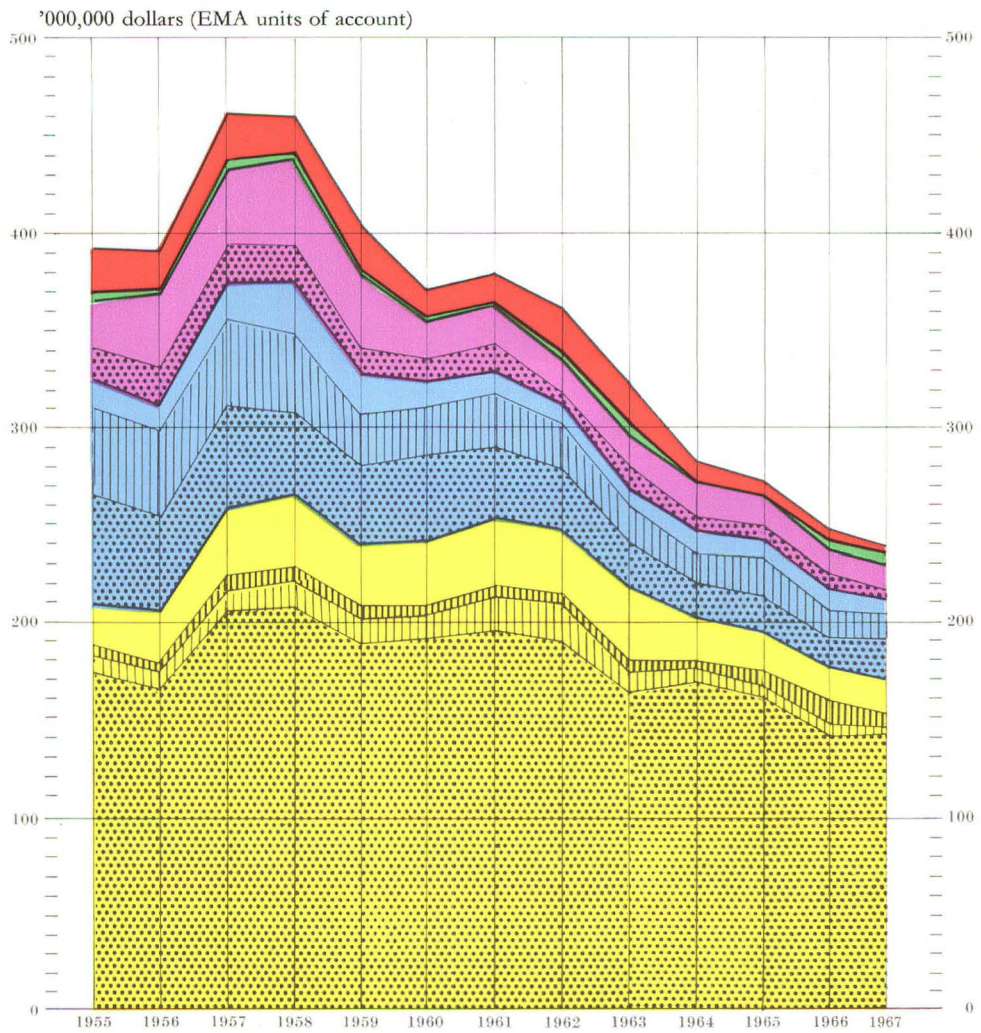
'000,000 dollars (EMA units of account)

Sector	Actual expenditure										Estimated expenditure (Categories A+B+C)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
Collieries	253.9	226.0	235.4	220.5	217.5	202.9	190.4	162.8	140.2	132.0	97.4	
Coking-plants, mine-owned	57.5	33.7	43.1	35.9	19.0	17.3	15.8	13.2	9.9	20.2	9.5	
Coking-plants independent ⁽¹⁾	10.8	1.6	1.4	5.1	3.5	5.9	5.0	5.3	3.8	5.3	2.8	
Briquetting-plants	5.0	7.1	3.4	5.1	9.5	9.1	7.5	7.3	4.8	2.6	2.5	
Pithead power-stations and other power-generating plants	107.0	102.6	96.9	99.9	75.8	55.5	58.9	61.2	82.7	86.8	83.6	
Total	434.2	371.0	380.2	366.5	325.3	290.7	277.6	249.8	241.4	246.9	195.8	
Plants producing B.K.B. and low-temperature brown-coal coke	5.0	6.0	3.8	6.0	9.0	8.3	7.9	3.8	4.2	4.0	4.0	

⁽¹⁾ Less the French nationalized gas industry (Gaz de France) from 1957.

FIGURE 3

Capital Expenditure in the Hard-Coal Industry ¹⁾



¹⁾ Exclusive of independent coking-plants.

FIGURE 4

Capital Expenditure in the Coalmining Industry



1) Mine-owned, steelworks-owned and independent coking-plants.

a) Pits

Capital expenditure both on the pits themselves and in the valorization sector is declining very markedly. The pits' share of the industry's total investment, which in 1965 was 69%, was back in 1967 to 58%, the same as the 1954-59 average. Specific expenditure per ton produced, which in 1954-59 worked out at approximately 1.05 dollars, has since then gone down progressively to 0.76 in 1967. This is the average for the Community overall: only the Ruhr came above it, with 0.87 dollars, while the Aachen coalfield registered the lowest figure, 0.34 dollars.

TABLE 6

Capital Expenditure on Collieries, 1954—1967

'000,000 dollars (E.M.A. units of account)

Type of installation	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967
Shafts and underground workings ..	56.3	48.7	42.6	37.0	41.3	38.3	35.3	25.8	20.1
Mechanical equipment below ground	56.8	52.7	58.3	56.4	56.5	59.8	56.6	51.4	49.4
Haulage and winding equipment ...	21.4	25.8	24.4	21.3	16.6	14.7	14.8	15.4	15.8
<i>Coal extraction</i>	<i>134.5</i>	<i>127.2</i>	<i>125.3</i>	<i>114.7</i>	<i>114.4</i>	<i>112.8</i>	<i>106.7</i>	<i>92.6</i>	<i>85.3</i>
Screening and washing	56.7	45.4	49.3	47.3	42.1	37.2	32.3	29.1	20.7
Other surface installations	32.9	32.9	35.1	33.9	35.7	30.2	27.8	21.8	20.2
Buildings, etc.	29.8	20.5	25.7	24.6	25.3	22.7	23.6	19.3	14.0
<i>Surface installations</i>	<i>119.4</i>	<i>98.8</i>	<i>110.1</i>	<i>105.8</i>	<i>103.1</i>	<i>90.1</i>	<i>83.7</i>	<i>70.2</i>	<i>54.9</i>
Total	253.9	226.0	235.4	220.5	217.5	202.9	190.4	162.8	140.2

The minor increases here and there in production potential which will result from various capital projects for productivity improvement and pit link-ups will nothing like offset the effects of current plans for the scrapping of capacity. The producers' own declarations indicate that they expect Community potential to contract by about 24.4m. tons in all between 1967 and 1971—a substantial cut enough, but small by comparison with the slashing of 19.1m. tons in 1967 alone. The resulting 1971 level of 186.1m. tons is still on the high side in relation to the estimated sales outlets.

TABLE 7

Movement of Hard-Coal Extraction Potential ⁽¹⁾

'000,000 metric tons

Extraction		Extraction potential				
1952	1967	1967	1968	1969	1970	1971
237.4	184.3	210.5	195.2	193.2	187.9	186.1

⁽¹⁾ As in previous years, mines producing only small tonnages are excluded (see Annex I, para. IIa, p. 38). Their combined production in 1967 amounted to about 400,000 tons.

Potential is expected to be smaller in 1971 than in 1967 in all the Community coalfields except the Campine and Lower Saxony; it will, however, be larger than actual 1967 production in most of them, except in France and Southern Belgium.

As noted, the estimated decrease from 1967 to 1971 is 24.4m. tons/year as against 19.1m. in the single year 1967; of these totals, the Ruhr, the Nord/Pas-de-Calais and Dutch Limburg account between them for 16.6m. over the next four years as against 16.5m. in 1967—the Ruhr for 7.1m. and 12.9m. respectively, the Nord/Pas-de-Calais for 6.1m. and 1.6m., and Dutch Limburg for 3.3m. and 2.1m. The expected reductions in the other coalfields are smaller, in absolute terms at any rate.

The number of working days per annum on which the production potentials indicated are based is 284 in the French coalfields, 250 in Germany (295 in the Saar), 254 in the Netherlands, and 250 in most of the Belgian collieries.

b) Coking-plants

As can be seen from Table 5, capital expenditure on the mine-owned coking-plants has fallen year by year from an average 57.5m. dollars in 1954-59 to 15.8m. in 1965, 13.2m. in 1966 and 9.9m. in 1967. Only in the Ruhr, and to a very much lesser extent in the Nord/Pas-de-Calais, was there any investment activity to speak of in 1967, principally in connection with the replacement of obsolete installations. Specific expenditure per ton of coke produced was down from 1.3 dollars in 1954-59 to 0.3 in both 1966 and 1967.

Expenditure on the independent coking-plants, which averaged 10.8m. dollars a year from 1954 to 1959, suddenly slumped to not much over 1m. in 1960 and 1961. The slight revival since then has been due solely to the expansion of a number of plants on the Italian seaboard, where coke can be made economically from American fines.

Investment in the steelworks-owned coking-plants (here included to provide a full picture of the carbonization sector) remained substantial up to 1964, also in consequence of installations and extensions at the Italian coastal steelworks. This phase is now nearly over, but meantime work has begun on the construction of two new plants on the French and Dutch North Sea

coasts, to enable the neighbouring integrated steelworks to obtain coke made from the cheap fines on offer in the world market. The trend in capital expenditure on the steelworks-owned coking-plants over the years is shown below.

TABLE 8

Capital Expenditure on Steelworks-Owned Coking-Plants, 1954—1969 ⁽¹⁾

'000,000 dollars (EMA units of account)

1954-59 (annual average)	Actual expenditure								Estimated expenditure			
	1960	1961	1962	1963	1964	1965	1966	1967	1968		1969	
									A+B	A+B+C	A+B	A+B+C
22.9	11.5	18.3	25.0	33.8	29.7	17.2	10.4	11.5	18.0	19.2	28.5	31.2

⁽¹⁾ Cf. Table 16, under "The Iron and Steel Industry" (1968 and 1969 estimates for Categories A and B only).

Rather over a quarter of expenditure on the carbonization sector in 1967 (mine-owned, independent and steelworks-owned plants together) went on the construction of new coke ovens. The volume of operations of this kind is decreasing more slowly than that of work on renovations and on ancillary installations.

TABLE 9

Capital Expenditure on Mine-Owned, Independent and Steelworks-Owned Coking-Plants, 1954—1967

'000,000 dollars (EMA units of account)

Type of installation	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967
Coke ovens	37.9	20.7	26.6	29.2	28.0	17.6	12.2	9.9	10.6
<i>of which:</i>									
New plant	(21.6)	(9.6)	(13.7)	(14.4)	(21.2)	(12.4)	(5.3)	(4.1)	(6.8)
Renovations and replacements	(16.3)	(11.1)	(12.9)	(14.8)	(6.8)	(5.2)	(6.9)	(5.8)	(3.8)
Gas producers	2.4	0.9	0.6	2.1	0.7	3.6	1.7	0.3	0.1
Coke-oven gas and by-product plants	29.1	13.1	18.2	18.1	10.8	11.8	9.2	6.8	4.9
Miscellaneous	21.8	12.1	17.4	16.6	16.8	19.9	15.0	11.8	9.6
Total	91.2	46.8	62.8	66.0	56.3	52.9	38.1	28.8	25.2

Several mine-owned plants, mostly in the Ruhr, closed in 1967, reducing coking potential by some 4.9m. tons, and with further closures in prospect, the potential on the mine-owned side is expected to go down by another 3.1 m. tons between 1967 and 1971. The potential of the independent and steelworks-owned plants, on the other hand (both of them now increasingly using imported fines), will, it is estimated, increase over the four years by 1.1m. tons in all, which would bring the net contraction in Community coking potential by 1971 to only 2m. tons.

TABLE 10

Movement of Coke Production Potential

'000,000 metric tons

Category	Actual production		Production potential				
	1952	1967	1967	1968	1969	1970	1971
Mine-owned plants	42.2	38.5	45.0	43.5	42.4	42.0	41.9
Independent plants	3.2	3.5	3.9	3.9	3.8	3.8	3.8
Steelworks-owned plants ⁽¹⁾	15.8	21.2	23.7	23.4	23.8	24.9	24.9
Total	61.2	63.2	72.6	70.8	70.0	70.7	70.6

⁽¹⁾ Cf. Table 17, under "The Iron and Steel Industry." The production-potential figures above for the steelworks-owned plants are calculated on the same basis as for the other types of plant, i. e. including all three categories (A, B and C).

Table VIII in Annex II contains some technical data on the operation of the coking-plants (coal input, coke output, gas consumed and produced).

c) Briquetting-plants

Capital spending on hard-coal briquetting has always been low. The slight upturn due to the construction of desmoking plants in France and Belgium between 1963 and 1966 is now evidently over.

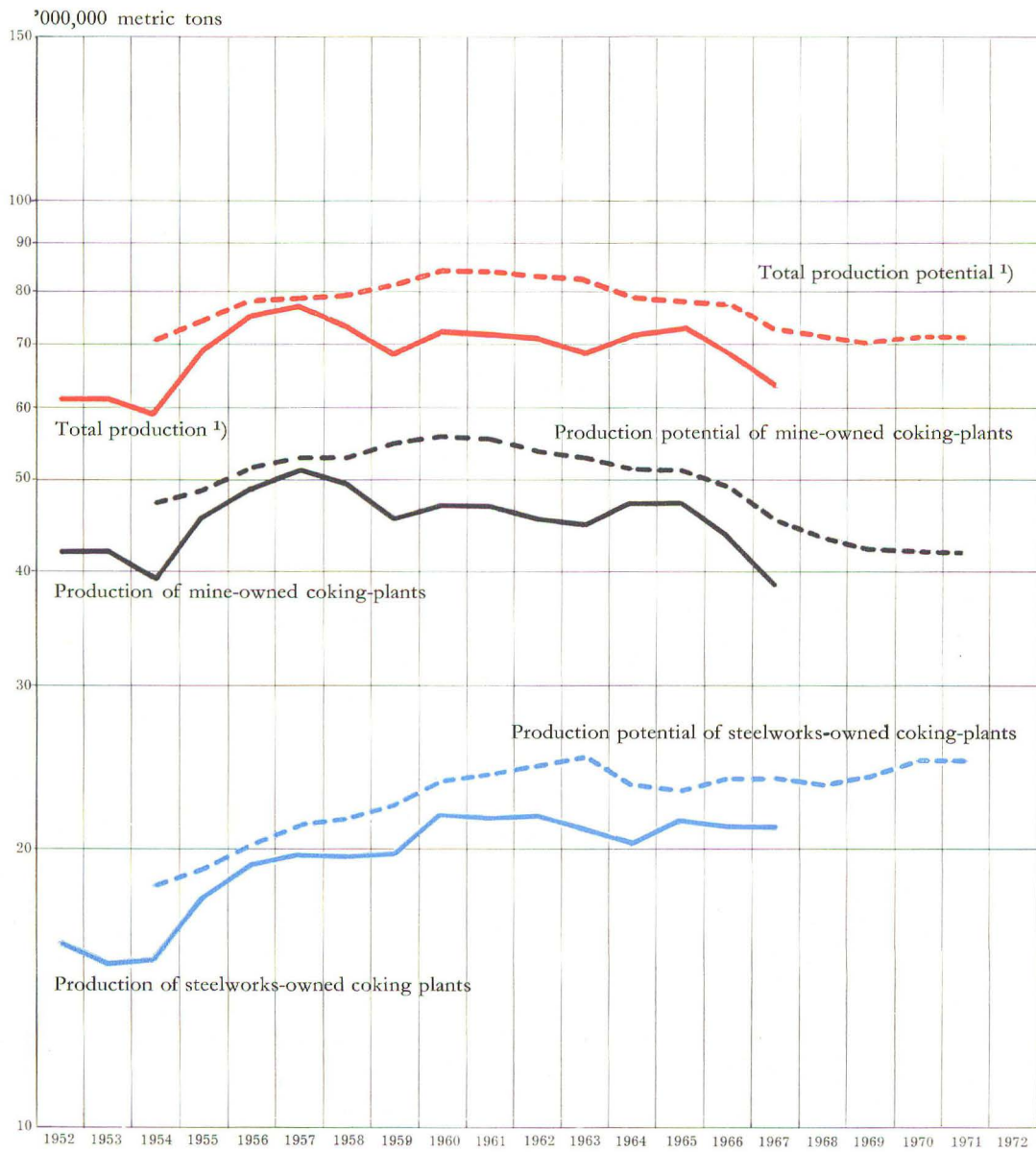
Community briquetting potential overall (smokeless and non-smokeless briquettes together) is expected to decrease by a further 2m. tons or so between 1967 and 1971.

d) Pithead power-stations

Capital expenditure under this head, which averaged over 100m. dollars a year from 1954 to 1962, worked out in 1967 at 82.7m., after plunging to around 60m. in 1965 and 1966. Only in the Ruhr and the French coalfields (the Nord/Pas-de-Calais/and Centre) is any sizeable expansion planned for the next few years ; in the Ruhr, in view of recent legislation to promote

FIGURE 5

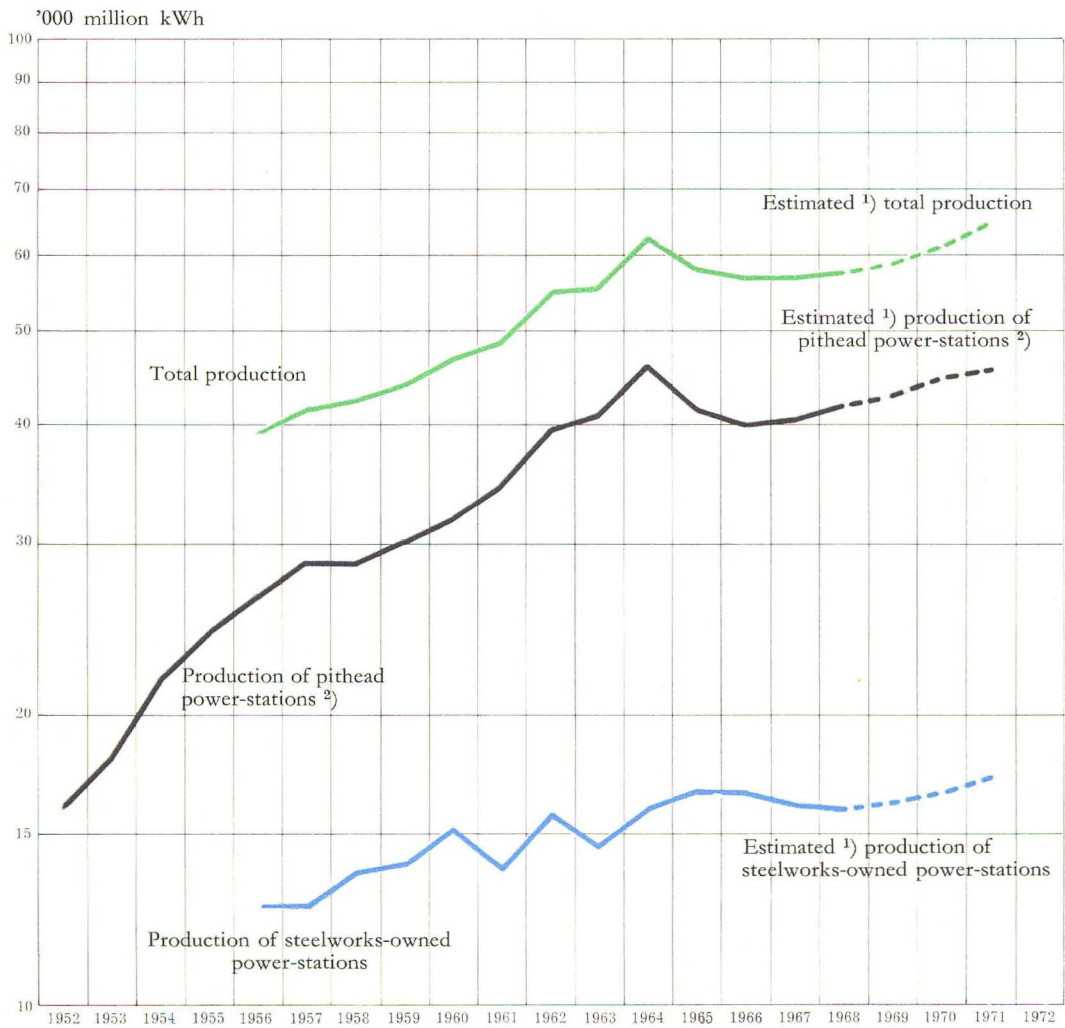
Production and Production Potential of Coking-Plants



1) Mine-owned, steelworks-owned and independent coking-plants.

FIGURE 6

Electric Power Production



1) For 1968 and following years energy production figures have been estimated on the basis of the maximum electric capacity as in mid-year assuming the same number of load-hours as in 1967, i.e. 4,033 hours per annum for the pithead power-stations and 4,624 hours per annum for the steelworks-owned power-stations.

2) Pithead power-stations proper and other power-stations plant at mines.

the use of coal for generating purposes, the majority of the collieries are now co-operating in building a number of joint power-stations, which are to be fuelled by coal from nearby pits and to supply current to the public grid of Land North Rhine/Westphalia.

TABLE 11

**Capital Expenditure on Pithead Power-Stations and Other
Power-Generating Plant at Mines, 1954—1967**

'000,000 dollars (EMA units of account)

Type of installation	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967
Steam-raising plant	40.2	36.4	28.2	40.3	25.2	17.2	20.1	25.6	38.3
Power-generating plant and dis- tribution switchgear	33.4	42.5	43.8	34.4	24.1	14.4	14.2	19.3	26.7
Buildings	9.6	7.5	10.1	9.4	11.7	8.8	7.2	5.2	6.8
Electricity distribution networks ...	9.8	7.0	5.7	6.0	5.6	3.2	9.9	3.0	2.5
Compressed-air plant	5.3	2.7	1.4	0.3	2.1	2.3	1.1	0.7	0.9
Miscellaneous	8.6	6.5	7.7	9.5	7.1	9.6	6.4	7.4	7.5
Total	106.9	102.6	96.9	99.9	75.8	55.5	58.9	61.2	82.7

Expenditure on the pithead power-stations having thus picked up somewhat, installed capacity will expand rather faster than previous surveys suggested. To a certain extent the same thing is happening for the steelworks-owned stations (here mentioned to provide a full picture of the power-generating position in both Community industries), but in their case the rate of expansion will be only a little higher owing to the continuing decrease in the coke rate at the blast-furnaces and consequently in the production of blast-furnace gas.

TABLE 12

**Electricity Production and Maximum Electric Capacity
of the Pithead and Steelworks-Owned Power-Stations**

	Production ('000,000,000 kWh)		Maximum electric capacity (MW)					
	1956	1967	Beginning of					
			1967	1968	1969	1970	1971	1972
Pithead stations	26.8	40.7	10,001	10,183	10,447	10,800	11,220	11,470
Steelworks-owned stations	12.6	16.1	3,490	3,475	3,390	3,573	3,573	3,848

A gradual increase can be expected in the installed capacity of the pithead and steelworks-owned stations: Assuming they continue working at the low 1967 rates of 4,033 and 4,624 load-hours respectively, the pithead stations' output of electric current should rise between 1967 and 1971 from 40,700m. to 45,700m. kWh and the steelworks-owned stations' from 16,100m. to 17,100m.

Tables XI in Annex II give some technical data on the operations of the pithead stations (specific consumption in calories per kWh, consumption of low-grade coal, load-hours per annum). It should be noted that their specific consumption is still falling despite the increased use of low-grade coal to fuel them: in 1967 the rate was only 2,872 kcal/kWh, although the coal employed consisted 85% of low-grade matter (reckoned ton for ton).

e) Plants producing BKB and Low-temperature Brown-coal coke

Very little is being spent on the brown-coal briquette (BKB) plants, and potential is unlikely to exceed 9.6m. tons, to which it declined in 1967 from 12.3m. in 1966.

The last low-temperature brown-coal coke plants ceased production in 1967.

III—THE IRON-ORE MINES

Capital spending in the Community iron-ore industry has been falling heavily since 1962, and in 1967, as in 1966, stood at barely one-third of the 1961 level. Only in Lorraine is further expenditure being planned on any scale to speak of: this could, however, bring a certain upturn in 1968.

TABLE 13

Capital Expenditure in the Iron-Ore Industry, 1954—1969

'000,000 dollars (EMA units of account)

Type of installation	Actual expenditure										Estimated expenditure (Categories A+B+C)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
Mining of ore	21.3	26.1	30.8	26.1	19.6	18.2	17.8	12.4	12.4	15.6	9.3	
Preparation of ore at mine ..	8.9	7.5	9.6	8.1	3.9	2.3	2.1	2.2	1.3	5.1	0.8	
Various surface installations.	9.0	9.6	12.0	12.4	4.7	3.4	5.7	2.7	2.8	3.6	2.0	
Total	39.2	43.2	52.4	46.6	28.2	23.9	25.6	17.3	16.5	24.3	12.1	

From 1952 to 1960 Community production of crude ore rose progressively from 65.3m. to 95.9m. tons, *i.e.* at an average cumulative annual rate of 4.9% for Lorraine the increase was 6.6% p.a., from 37.7m. to 62.7m. Since 1960, as a result of competition from overseas ores, the Community's production has gone down by 30m. tons, with 22.7m. tons of the decrease centred in Lorraine; notwithstanding, Lorraine's share in total Community production has gradually risen from 65% in 1960 to 69% in 1967.

TABLE 14

Movement of Crude-Ore Extraction Potential

'000,000 metric tons

Actual extraction		Extraction potential				
1952	1967	1967	1968	1969	1970	1971
65.3	65.9	84.3	83.3	83.4	81.9	81.6

Community potential reached its peak in 1962, with 105.5m. tons. Over the next five years it fell by 21.2m. in all—7.1m. in Lorraine (the last to be affected, over half the decrease there taking place in 1967 alone), 5m. in Lower Saxony, 1m. in Luxembourg, and 8.1m. in the various minor orefields. The Lorraine producers have hopes that the contraction in their case will be less marked in the coming years, amounting to not more than 2.7m. tons altogether between 1967 and 1971 ; during this period their combined share of Community potential is expected to increase from 80% in 1967 to 82% in 1971.

IV—THE IRON AND STEEL INDUSTRY

Since 1963, when the bulk of the expenditure on the series of major projects approved in 1960-61 was effected, investment activity in the Community iron and steel industry has been tending steadily downward: the 1967 level of 749.6m. dollars was lower than in any of the years since 1959.

As regards the breakdown of this total by areas, it can be seen from the annexed tables, and in particular from the recapitulation in Table XV, that, broadly speaking, the decrease has been greatest in the Italian coastal areas and the Ruhr—the share of the former shrinking from the outstandingly large figure of 32% in 1964 to less than 10% in 1967—while rather more began to be spent recently by enterprises in the Netherlands and to a lesser extent those in northern France.

As regards the breakdown by sectors, the drop in expenditure since 1963 first became apparent in the case of the general services—always a particularly costly item in new plants—and the pig-iron production side, especially burden preparation. It now seems to have halted in both, while a certain upturn has developed in the crude-steel sector in consequence of the intensifying switch to oxygen steelmaking. Expenditure on the rolling-mills in 1967, on the other hand, was lower than in the previous years, and in fact well below the level forecast at the beginning of the year, amounting to only 43% of the industry's total investment, as compared with 48% in 1966. The shares of the other three main sectors are now almost equal, with pig-iron production taking 17%, crude-steel production 20% and general services 19%.

TABLE 15

Capital Expenditure in the Iron and Steel Industry, 1954—1969

'000,000 dollars (EMA units of account)

Type of installation	Actual expenditure										Estimated expenditure (Categories A+B)		
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969		
<i>Plant for production of :</i>													
pig-iron	143.3	172.2	218.8	233.2	258.4	222.7	160.4	132.5	130.4	146.4	126.8		
crude steel	84.1	95.4	162.8	152.4	175.0	158.3	124.7	122.1	147.9	150.8	122.1		
rolled products	249.8	350.3	532.4	597.6	726.4	634.3	425.5	405.0	327.2	439.0	297.9		
<i>General services</i>	103.8	157.3	209.1	247.1	319.7	300.0	221.7	188.5	144.1	169.3	124.9		
Total	581.0	775.2	1,123.1	1,230.3	1,479.5	1,315.3	932.3	848.1	749.6	905.5	671.7		

The following subsections examine one by one the four main categories of investment and their effects on production potential.

a) Pig-iron production

The proportion of total expenditure devoted to pig-iron production plant (steelworks-owned coking-plants, burden-preparation installations and blast-furnaces), after steadily declining from 32% in 1958-59 to 16% in 1966, rose again a trifle in 1967.

Though some projects are in hand in northern France and the Italian coastal areas, expenditure on the industry's coking-plants remains very low. Less and less work is also being done on sinter and blast-furnace capacity, apart from reconstruction and enlargement of existing units. Most enterprises are reluctant to embark on projects for pelletization. Expenditure on burden-preparation installations and blast-furnaces is back to round about the same level as in 1954-59.

FIGURE 7

Capital Expenditure in the Iron and Steel Industry

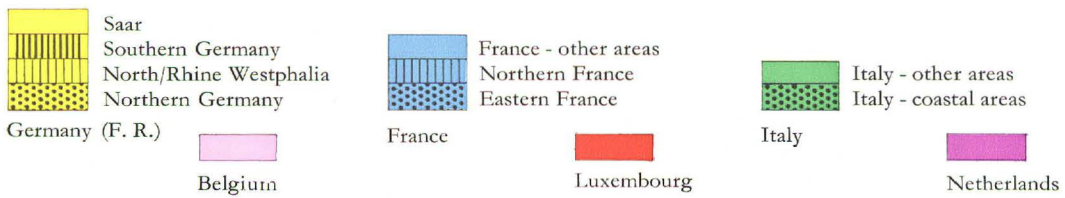
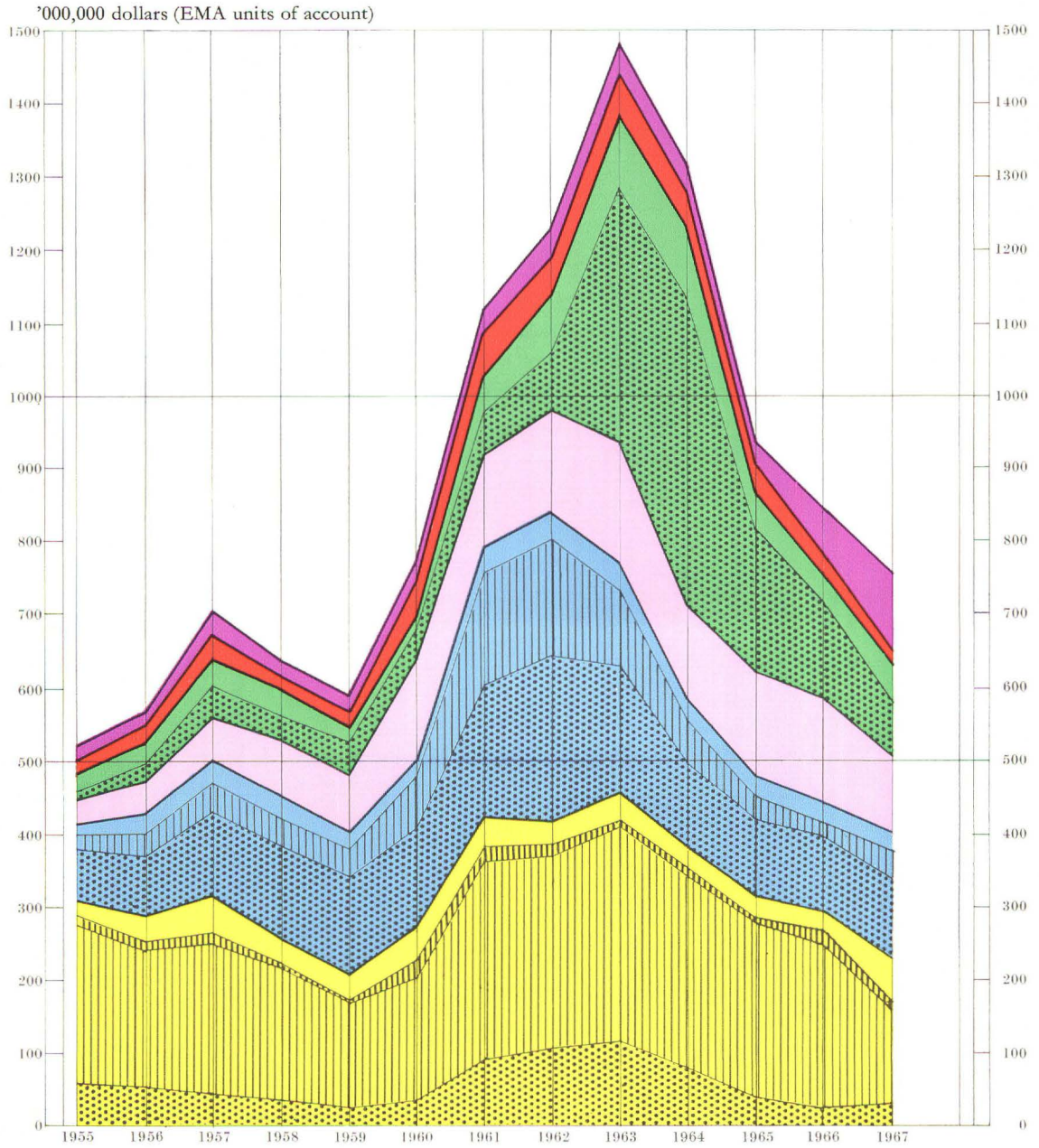


FIGURE 8

Capital Expenditure in the Iron-Ore Mines and Iron and Steel Industry

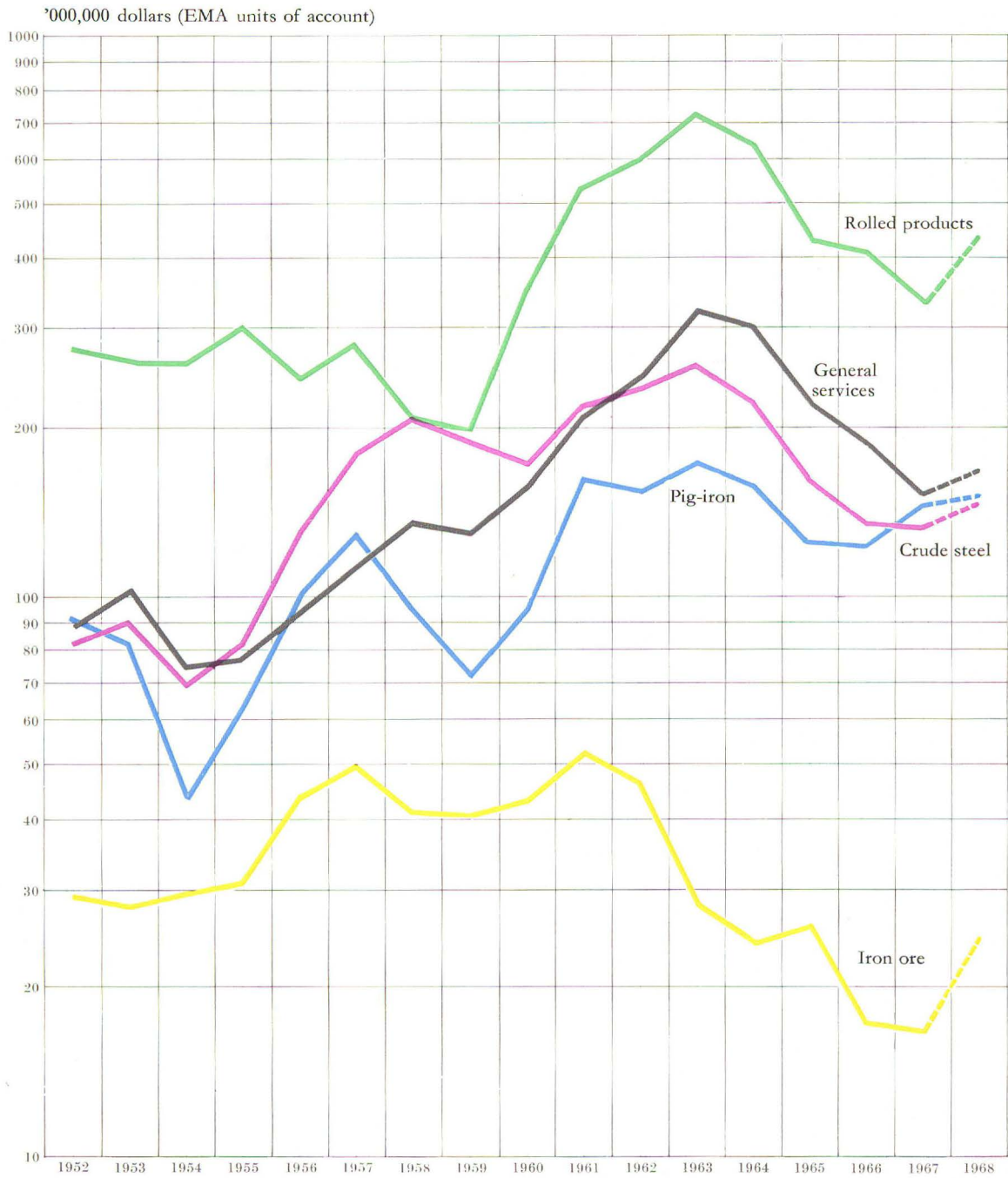


TABLE 16

Capital Expenditure on Pig-Iron Production Plant, 1954—1969

'000,000 dollars (EMA units of account)

Type of installation	Actual expenditure									Estimated expenditure (Categories A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Steelworks-owned coking-plants	22.9	11.5	18.3	25.0	33.8	29.7	17.2	10.4	11.5	18.0	28.5
Burden preparation	42.7	73.7	93.3	110.9	123.2	85.0	52.0	45.0	43.6	50.3	39.9
Blast-furnaces	77.7	87.0	107.2	97.3	101.4	108.0	91.2	77.1	75.3	78.1	58.4
Total	143.3	172.2	218.8	233.2	258.4	222.7	160.4	132.5	130.4	146.4	126.8

As was noted in Section II (see Table 10), the industry's **coke** production potential is expected to increase by 1.2m. tons between 1967 and 1971 (though of this 0.1m. tons is represented by projects still only contemplated). Notwithstanding the new North Sea schemes, expansion in this sector remains inconsiderable, nothing like sufficient to offset the drastic reduction in mine-owned coking potential.

Sinter potential topped 90m. tons in 1967, which is appreciably in excess of pig-iron potential. Nearly half the ore going into the blast-furnaces is now Community-sintered. Naturally, the push to install sinter strands is slackening off, though some work is still being done in this direction, chiefly in the areas using low-grade ores (the Saar and Lorraine).

Pig-iron potential is expected to increase fairly substantially, by close on 11%, between 1967 and 1971, as a result of action being taken to enlarge the hearth diameter of a good many blast-furnaces and the fact that it will be possible to use considerably larger amounts of high-grade ore and sinter.

TABLE 17
Movement of Pig-Iron Production Potential

'000,000 metric tons

Product	Actual production		Production potential				
	1952	1967	1967	1968	1969	1970	1971
Coke (steelworks-owned plant) ⁽¹⁾ .	15.8	21.2	23.7	23.4	23.8	24.8	24.8
Sinter	15.6	75.8	90.0	92.6	95.2	98.4	100.5
Pig-iron	34.7	65.9	83.2	85.3	88.9	90.6	92.0

⁽¹⁾ Cf. Table 10 under "The Coalmining Industry." The production-potential figures above for all three types of plant concerned in the production of pig-iron are based only on investment projects in progress or approved (Categories A and B).

b) Steel production

Very little is being spent on **basic Bessemer** and **open-hearth** steelmaking plant, and still less is planned for the years ahead.

Expenditure on **electric-furnace** capacity on the other hand, after dropping sharply in 1966, rose in 1967 to not far off the 1961-64 level of 20m. dollars. Most of it was effected in central France and in the Saar. Investment activity in this connection in northern Italy, which had been more or less at a standstill since the turnround in 1964, now appears to be getting under way again.

The rapid expansion in **oxygen steelmaking** capacity continues, accounting in 1967, as in 1966, for 76% of the industry's total investment in crude-steel production plant, as compared with 70% in 1963, 1964 and 1965. Expenditure was highest in the various German producer areas and in Belgium and Luxembourg; in addition work began on a major project in Lorraine.

TABLE 18
Capital Expenditure on Steelmaking Plant, 1954—1969

'000,000 dollars (EMA units of account)

Production process	Actual expenditure										Estimated expenditure (Categories A+B)		
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1968	1969
Basic Bessemer.....	30.4	21.2	24.2	23.0	18.4	9.2	10.2	10.2	13.7	6.8	3.1		
Open-hearth	33.5	29.1	44.8	30.2	18.5	22.7	13.0	8.7	4.4	6.1	3.6		
Electric-furnace	13.0	11.1	21.8	21.1	18.1	19.9	16.5	10.4	17.9	23.4	18.5		
L/D, Kaldo, etc.	7.2	34.0	72.0	78.1	120.0	106.5	85.0	92.8	111.9	114.5	96.9		
Total	84.1	95.4	162.8	152.4	175.0	158.3	124.7	122.1	147.9	150.8	122.1		

FIGURE 9

Breakdown of Capital Expenditure in the Iron and Steel Industry

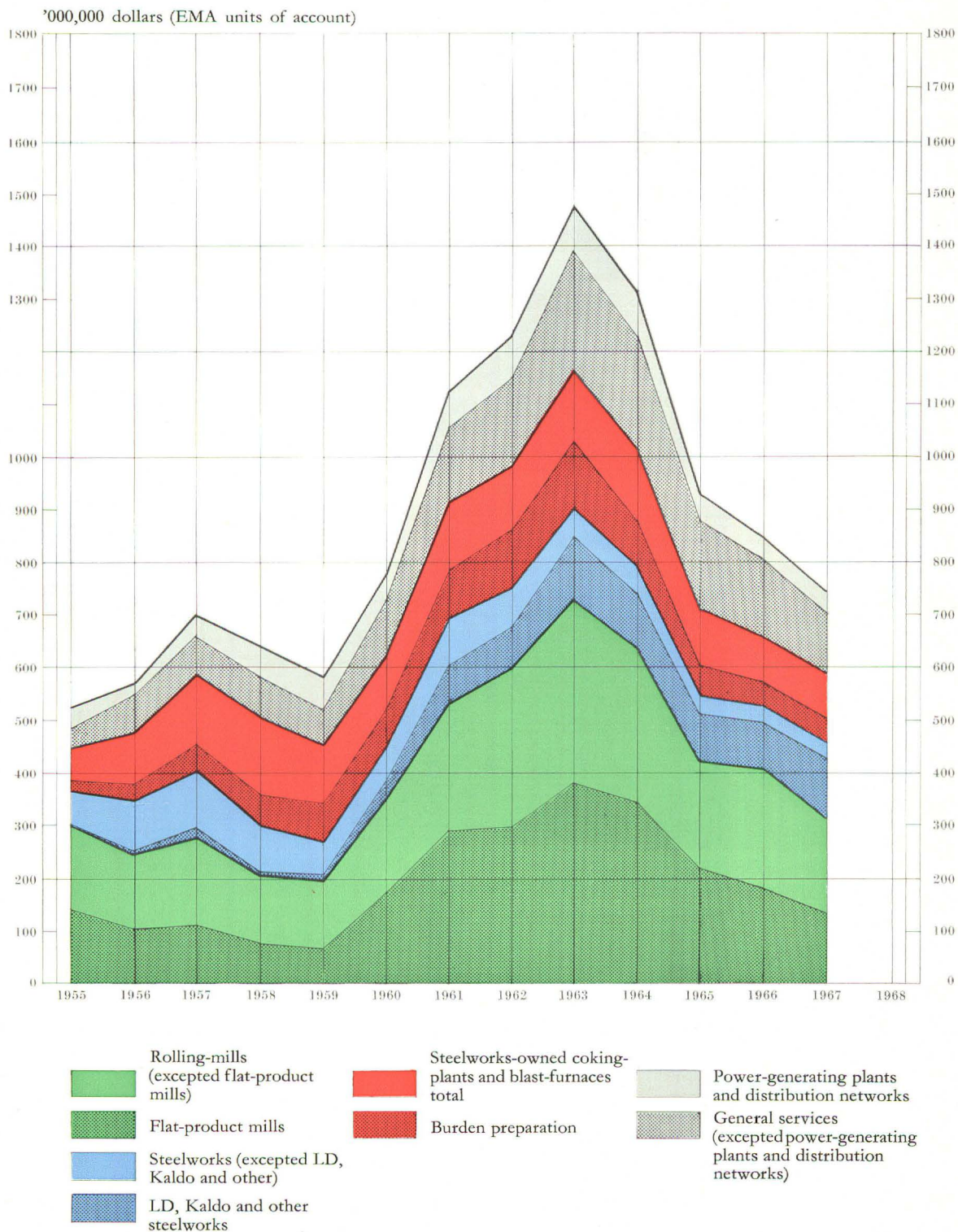


TABLE 16

Capital Expenditure on Pig-Iron Production Plant, 1954—1969

'000,000' dollars (EMA units of account)

Type of installation	Actual expenditure									Estimated expenditure (Categories A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Steelworks-owned coking-plants	22.9	11.5	18.3	25.0	33.8	29.7	17.2	10.4	11.5	18.0	28.5
Burden preparation	42.7	73.7	93.3	110.9	123.2	85.0	52.0	45.0	43.6	50.3	39.9
Blast-furnaces	77.7	87.0	107.2	97.3	101.4	108.0	91.2	77.1	75.3	78.1	58.4
Total	143.3	172.2	218.8	233.2	258.4	222.7	160.4	132.5	130.4	146.4	126.8

As was noted in Section II (see Table 10), the industry's coke production potential is expected to increase by 1.2m. tons between 1967 and 1971 (though of this 0.1m. tons is represented by projects still only contemplated). Notwithstanding the new North Sea schemes, expansion in this sector remains inconsiderable, nothing like sufficient to offset the drastic reduction in mine-owned coking potential.

Sinter potential topped 90m. tons in 1967, which is appreciably in excess of pig-iron potential. Nearly half the ore going into the blast-furnaces is now Community-sintered. Naturally, the push to install sinter strands is slackening off, though some work is still being done in this direction, chiefly in the areas using low-grade ores (the Saar and Lorraine).

Pig-iron potential is expected to increase fairly substantially, by close on 11%, between 1967 and 1971, as a result of action being taken to enlarge the hearth diameter of a good many blast-furnaces and the fact that it will be possible to use considerably larger amounts of high-grade ore and sinter.

TABLE 17
Movement of Pig-Iron Production Potential

'000,000 metric tons

Product	Actual production		Production potential				
	1952	1967	1967	1968	1969	1970	1971
Coke (steelworks-owned plant) ⁽¹⁾ .	15.8	21.2	23.7	23.4	23.8	24.8	24.8
Sinter	15.6	75.8	90.0	92.6	95.2	98.4	100.5
Pig-iron	34.7	65.9	83.2	85.3	88.9	90.6	92.0

⁽¹⁾ Cf. Table 10 under "The Coalmining Industry." The production-potential figures above for all three types of plant concerned in the production of pig-iron are based only on investment projects in progress or approved (Categories A and B).

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TABLE 18
Capital Expenditure on Steelmaking Plant, 1954—1969

'000,000 dollars (EMA units of account)

Production process	Actual expenditure										Estimated expenditure (Categories A+B)
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968		1969
Basic Bessemer.....	30.4	21.2	24.2	23.0	18.4	9.2	10.2	10.2	13.7	6.8	3.1
Open-hearth	33.5	29.1	44.8	30.2	18.5	22.7	13.0	8.7	4.4	6.1	3.6
Electric-furnace	13.0	11.1	21.8	21.1	18.1	19.9	16.5	10.4	17.9	23.4	18.5
L/D, Kaldo, etc.	7.2	34.0	72.0	78.1	120.0	106.5	85.0	92.8	111.9	114.5	96.9
Total	84.1	95.4	162.8	152.4	175.0	158.3	124.7	122.1	147.9	150.8	122.1

Community crude-steel production potential continues to grow : it worked out at 112.0m. tons in 1967 and is expected to reach 124.2m. in 1971. This net increase of 12.2m. tons over the four years represents a leap of 23.5m. for oxygen-blown steel and a more modest rise of 1.5m. for electric-furnace (25m. altogether), minus substantial cuts of 7.2m. for basic Bessemer and 5.6m. for open-hearth (12.8m. altogether).

TABLE 19

Movement of Crude-Steel Production Potential

'000,000 metric tons

Production process	Actual production		Production potential				
	1952	1967	1967	1968	1969	1970	1971
Basic Bessemer	23.0	28.6	36.1	33.9	32.1	28.8	28.9
Open-hearth	15.2	24.6	31.1	29.6	28.0	26.1	25.5
Electric-furnace	3.3	11.6	14.0	14.4	15.0	15.3	15.5
LD, Kaldo, etc.	0.3	25.0	30.8	36.7	44.3	52.8	54.3
Total	41.8	89.8	112.0	114.6	119.4	123.0	124.2

A very important feature in this pattern is the ever-increasing concentration on oxygen-blown plant (LD, Kaldo, etc.) : since oxygen steelworks usually comprise ultra-large converters, the very fact of their installation results in an expansion of capacity, even when they are constructed to replace obsolete or obsolescent basic Bessemer converters or open-hearth furnaces.

Although the bulk of the industry's expenditure on the crude-steel side is now going on LD and Kaldo plant, the estimated incidence varies considerably from one part of the Community to another. (Needless to say, this is absolutely no indication as to the relative competitive capacity of the industry in the different areas.) In all the coastal and semi-coastal producer regions it is hoped by 1971 to have over half the potential of this type—in the Netherlands 72% (as against 72% of actual production in 1967), in the Italian coastal plants 72% (51%), in north Germany 70% (31%), in northern France 58% (43%) and in Belgium 51% (28%). In the Ruhr also potential should consist 55% of LD steelworks by 1971 ; in Luxembourg, on the other hand the proportion is put at only a third and in the Saar and Lorraine at a sixth, while everywhere else in the Community practically no interest has as yet been shown in oxygen steelmaking at all.

For the Community as a whole, oxygen-blown plant will account in 1971 for 43.7% of all crude-steel production potential, just about exactly as much as basic Bessemer and open-hearth together.

TABLE 20

**Shares of the Different Steelmaking Processes
in 1952, 1967 and 1971**

%

Production process	Actual production		Production potential	
	1952	1967	1967 (actual share)	1971 (estimated share)
Basic Bessemer	55.0	31.8	32.2	23.3
Open-hearth	36.4	27.4	27.7	20.5
Electric-furnace	7.9	12.9	12.5	12.5
LD, Kaldo, etc.	0.7	27.9	27.6	43.7
Total	100.0	100.0	100.0	100.0

This makes a cumulative average annual increase of 15% for the oxygen steels and a decrease of over 5% for basic Bessemer and open-hearth from 1967 to 1971.

TABLE 21

Average Annual Movement of the Different Steelmaking Processes

%

Production process	Average annual movement in actual production, 1952-67	Estimated average annual movement in production potential 1967-71
Pig-iron (for comparison)	+ 4.4	+ 2.5
Basic Bessemer	+ 1.5	— 5.7
Open-hearth	+ 3.3	— 5.1
Electric-furnace	+ 8.7	+ 2.6
LD, Kaldo, etc.	+ 34.3	+ 15.0
Total, crude steel	+ 5.2	+ 2.6

FIGURE 10

Actual Production and Production Potential of the Iron and Steel Industry

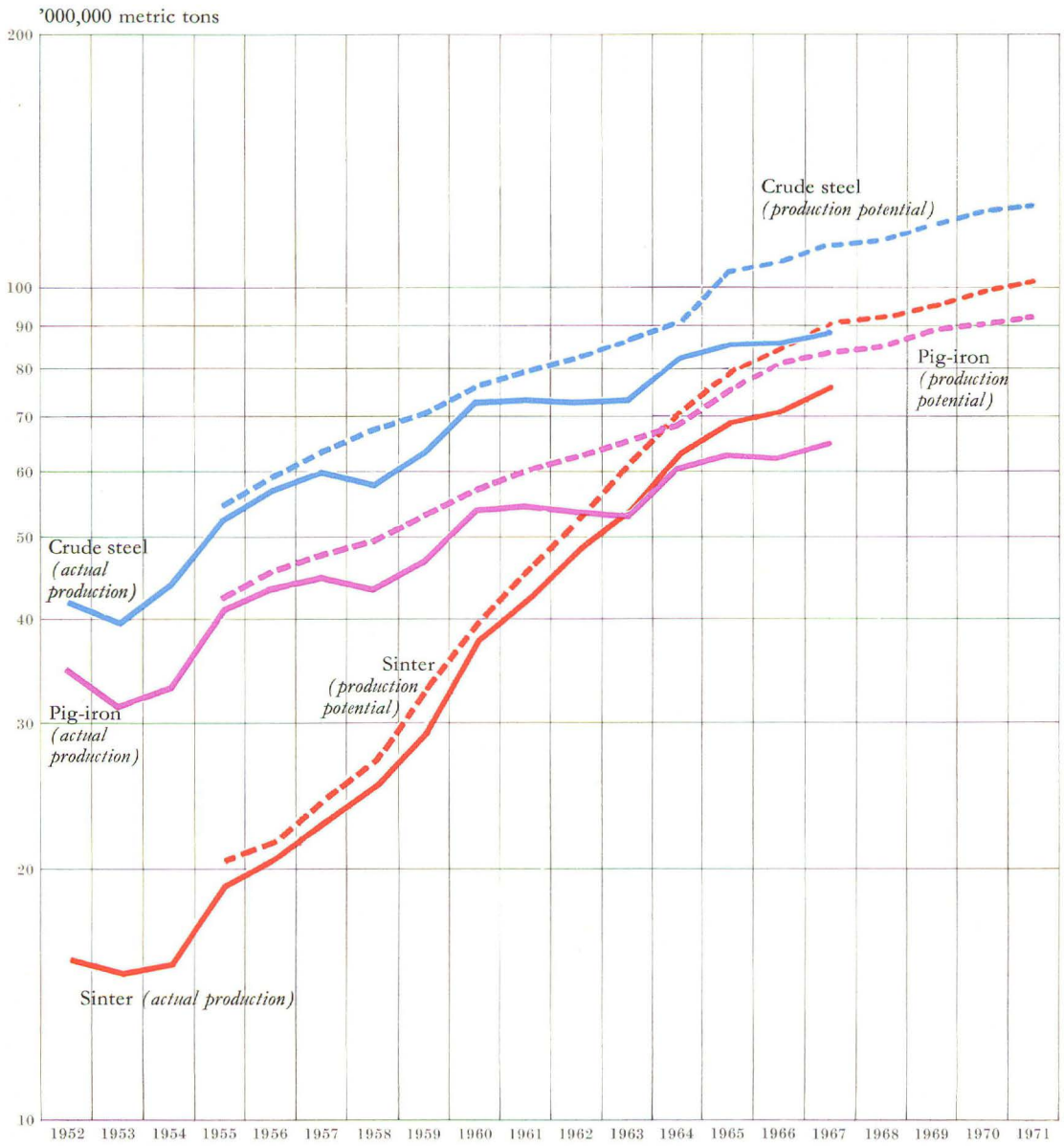
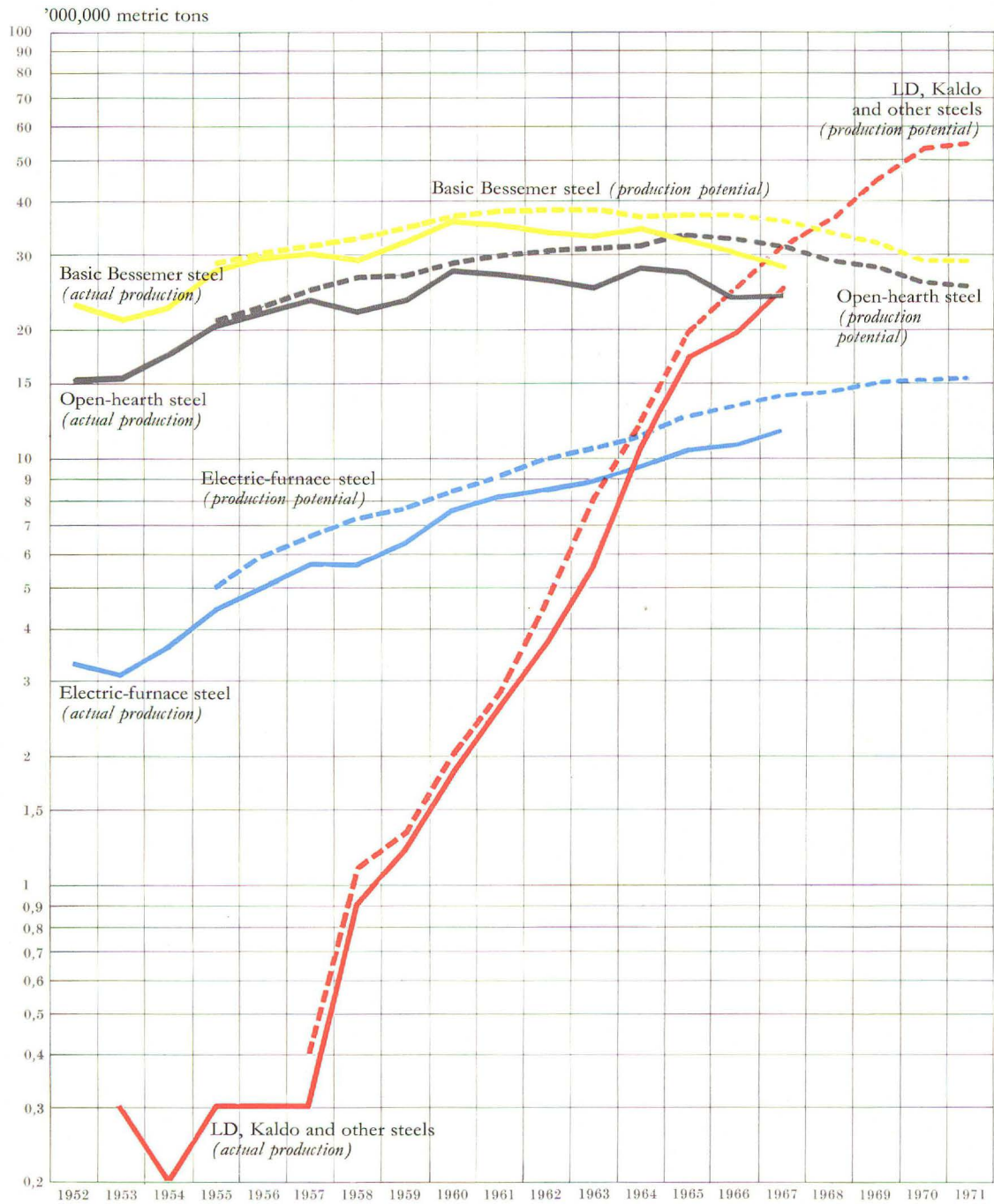


FIGURE 11

Actual Production and Production Potential of Crude Steel by Production Process



c) Production of semis and rolled products

Capital expenditure on continuous-casting installations, rolling-mills and ancillary plant, which in 1958-59 accounted for only 33% of the total, began after that to rise more steeply than investment elsewhere in the industry, and from 1963 to 1966 ranged between 45% and 49% ; in 1967, however, its share dropped to 43 %, some way short of the figure forecast at the beginning of the year.

From 1960 to 1965 about twice as much was spent on the flat-products mills as on the section mills, but since then the disproportion has not been quite so marked, there having been a slight increase in the share, mainly, of the heavy and medium section mills and the small-bar mills.

Special mention should be made of the continuous-casting installations, whose share in the industry's total expenditure in this sector was 1% in 1964, 2% in 1965, 3% in 1966 and nearly 9% in 1967. The projects concerned were practically all in the Ruhr and Saar and in inland Italy. It is not certain that expansion in this direction will continue equally rapidly in the coming years.

TABLE 22

Capital Expenditure on Production Capacity for Semis and Rolled Products, 1954—1969

'000,000 dollars (EMA units of account)

Type of mill	Actual expenditure									Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Heavy and medium section mills	33.5	55.0	66.4	66.0	74.6	54.9	52.4	51.3	35.8	36.7	15.7
Small-bar mills	29.9	19.2	26.2	27.5	48.8	67.3	44.3	49.6	27.7	25.9	12.7
Wire mills	11.0	16.2	28.4	51.0	40.0	24.1	12.8	15.4	21.0	25.4	12.5
<i>Total, section mills</i>	<i>74.4</i>	<i>90.4</i>	<i>121.0</i>	<i>144.5</i>	<i>163.4</i>	<i>146.3</i>	<i>109.5</i>	<i>116.3</i>	<i>84.5</i>	<i>88.0</i>	<i>40.9</i>
Hoop and strip mills	8.8	4.3	5.5	8.6	8.2	4.8	10.0	13.6	12.7	14.0	3.1
Plate and universal mills ..	29.0	24.8	35.4	46.2	64.0	32.2	23.1	33.2	20.6	37.8	26.4
Hot sheet mills	2.9	3.7	6.0	2.1	2.3	0.8	1.2	0.7	0.6	0.2	0.1
Cold sheet mills	1.4	0.4	0.7	0.4	0.1	0.4	0.5	0.1	2.4	3.3	—
Hot wide-strip mills	27.0	27.5	67.0	65.5	158.7	147.0	86.6	78.8	64.4	87.7	48.7
Cold wide-strip mills	38.8	114.8	178.6	175.9	147.1	159.3	97.6	59.6	35.2	61.5	73.7
<i>Total, flat-products mills</i>	<i>107.9</i>	<i>175.5</i>	<i>293.2</i>	<i>298.7</i>	<i>380.4</i>	<i>344.5</i>	<i>219.0</i>	<i>186.0</i>	<i>135.9</i>	<i>204.5</i>	<i>152.0</i>
Blooming and slabbing mills	35.5	43.6	74.8	91.3	108.7	78.6	44.1	43.4	52.4	86.3	65.9
Continuous-casting installations .....	.	.	.	2.3	4.1	5.6	10.0	13.1	28.8	26.7	14.8
Miscellaneous	32.1	40.8	43.4	60.8	69.8	59.3	42.9	46.2	25.6	33.5	24.3
Total	249.9	350.3	532.4	597.6	726.4	634.3	425.5	405.0	327.2	439.0	297.9

Since ECSC's inception, actual production of finished rolled products has increased at an average 5.1% per annum, 3.7% for sections and 7.1% for flats. The estimated rates for the next few years are very much lower, and also a good deal closer together, 1.8% and 2.3% respectively.

FIGURE 12

Sections and Flat Products

A—Capital expenditure



B—Actual production and production potential

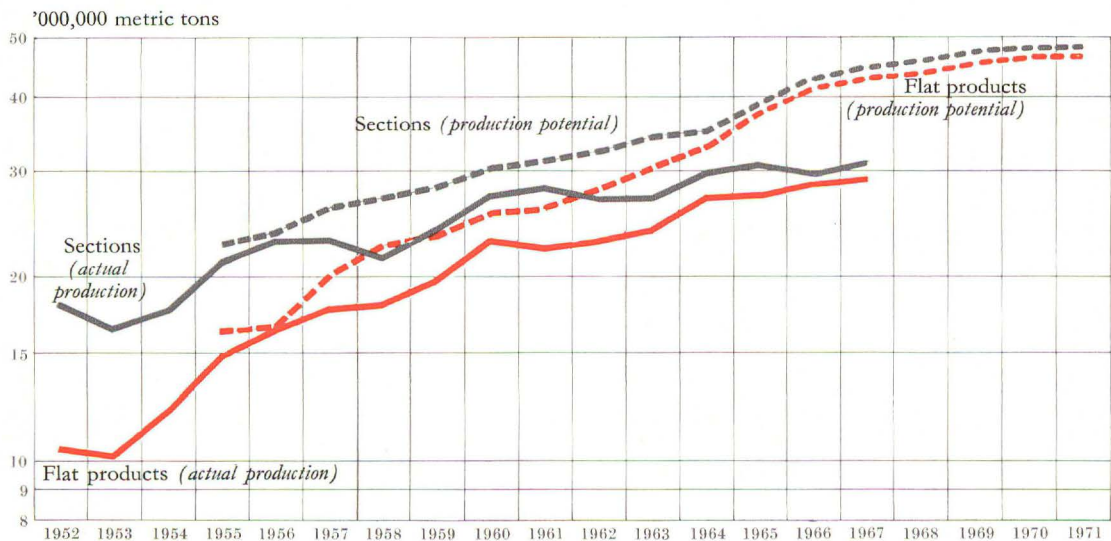


FIGURE 13

Actual Production and Production Potential for the Various Categories of Finished Rolled Product

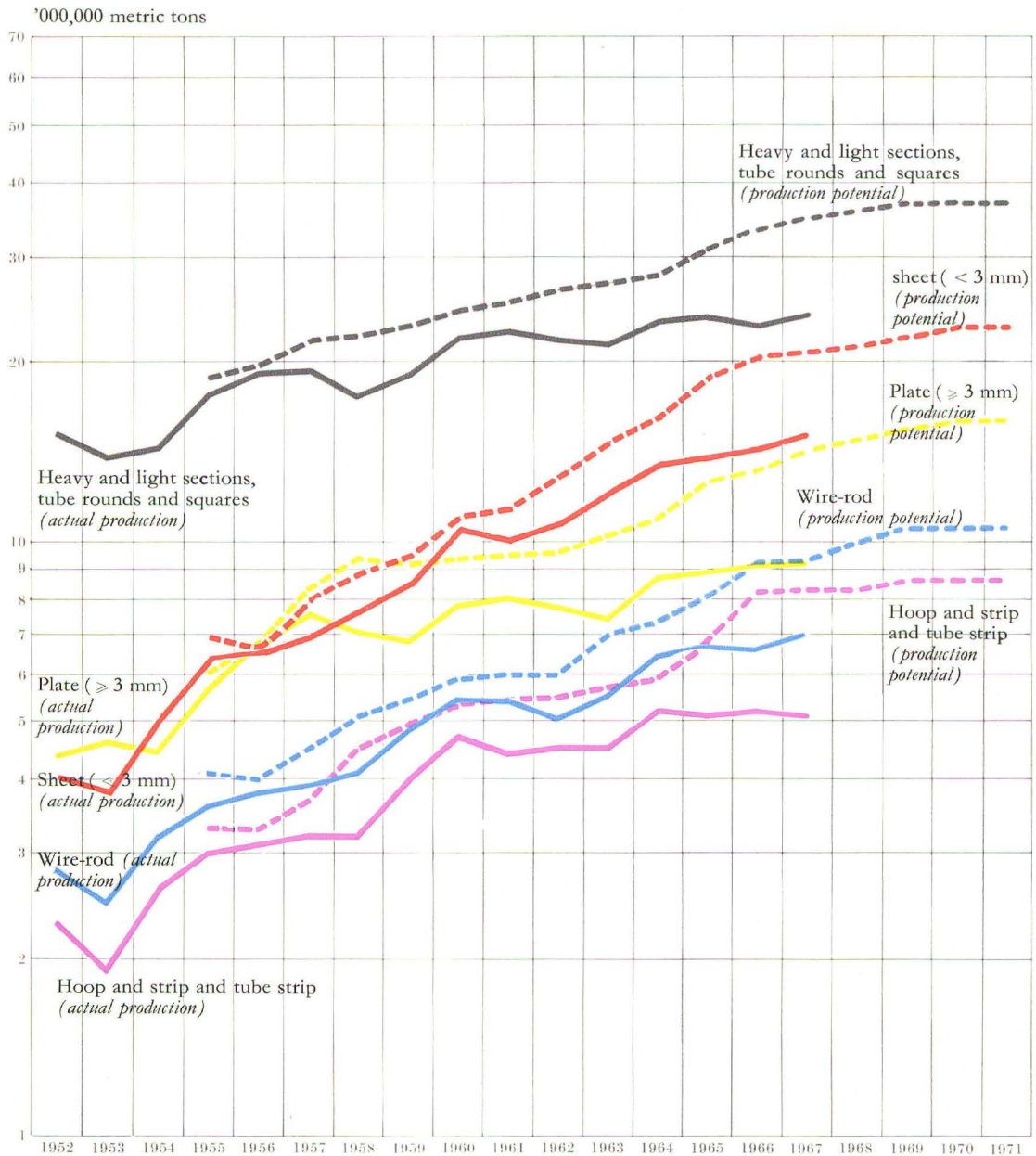


TABLE 23

Average Annual Movement of the Different Types of Finished Products

Product	Actual production			Production potential		
	1952 (^{'000,000} tons)	Average cumulative annual movement (%)	1967 (^{'000,000} tons)	1967 (^{'000,000} tons)	Average cumulative annual movement (%)	1971 (^{'000,000} tons)
Heavy and light sections, incl. tube rounds and squares	15.2	+ 3.1	24.1	35.3	+ 1.6	37.6
Wire-rod	2.8	+ 6.3	7.0	9.3	+ 2.6	10.3
<i>Total, sections</i>	<i>18.0</i>	<i>+ 3.7</i>	<i>31.1</i>	<i>44.6</i>	<i>+ 1.8</i>	<i>47.9</i>
Hoop and strip and tube strip	2.3	+ 5.5	5.1	8.4	+ 0.9	8.7
Plate of 3mm. and over ⁽¹⁾	4.3	+ 5.3	9.3	14.2	+ 2.9	15.9
Hot-rolled sheet under 3mm. ⁽¹⁾ . . .	3.1	— 4.6	0.8	1.5	— 1.7	1.4
Cold-reduced sheet under 3mm. . . .	0.8	+ 21.1	14.2	19.1	+ 2.8	21.3
<i>Total, flats</i>	<i>10.5</i>	<i>+ 7.1</i>	<i>29.4</i>	<i>43.2</i>	<i>+ 2.3</i>	<i>47.3</i>
Total, rolled products	28.5	+ 5.1	60.5	87.8	+ 2.0	95.2
(of which: products rolled in continuous and semi-continuous mills)	(.)	(.)	(39.7)	(56.3)	(+ 2.8)	(62.8)

¹⁾ Exclusive of coils rating as end products.

The share of flats in total rolling potential, which stood in 1952 at 37%, has increased by 1967 to 49%, where it is expected to remain at any rate until 1971.

The proportion of steel to be rolled in continuous and semi-continuous mills, which in 1960 was no more than one-half, is now 64%, and should rise by 1971 to 66%.

All these figures are for finished products only. A point to note, however, is that a growing proportion of the production of coils is being taken, by both the industry's Community and foreign customers, in the semi-finished state. It is something of an artificial exercise to try to compute the potential for "end-product" coils, as this is not really a technical concept at all but a purely business one: however, for what it is worth, we may mention that, according to the particulars supplied by the enterprises for the survey, the maximum possible production of "end-product" coils seems likely to increase between 1967 and 1971 from 4.3m. tons to 4.5m. Reckoned in with the finished-products total in Table 23, this would bring the share of flats in rolling potential overall in the years ahead to about 52% instead of 50%, with a corresponding increase in the proportion of steel for rolling in continuous and semi-continuous mills.

d) General services

Successive previous surveys showed particularly marked increases in the proportion of expenditure going on general services up to 1965, when it reached 24% ; since then, however, it has been declining, and in 1967 was only 19%.

Until about 1959 nearly half the expenditure under this head was on power-generating plant, but more recently there has been a progressive slowdown here owing to the smaller amounts of blast-furnace gas being produced in consequence of the reduction in the coke rate. The resulting stagnation in the steelworks-owned power-stations' potential is noted in Section II,d in connection with the pithead power-stations (see Table I2).

Expenditure on other general services, however, remains high, though less is being spent on civil-engineering operations and building than in 1963 and 1964, when a number of new integrated plants were under construction in the Community.

TABLE 24

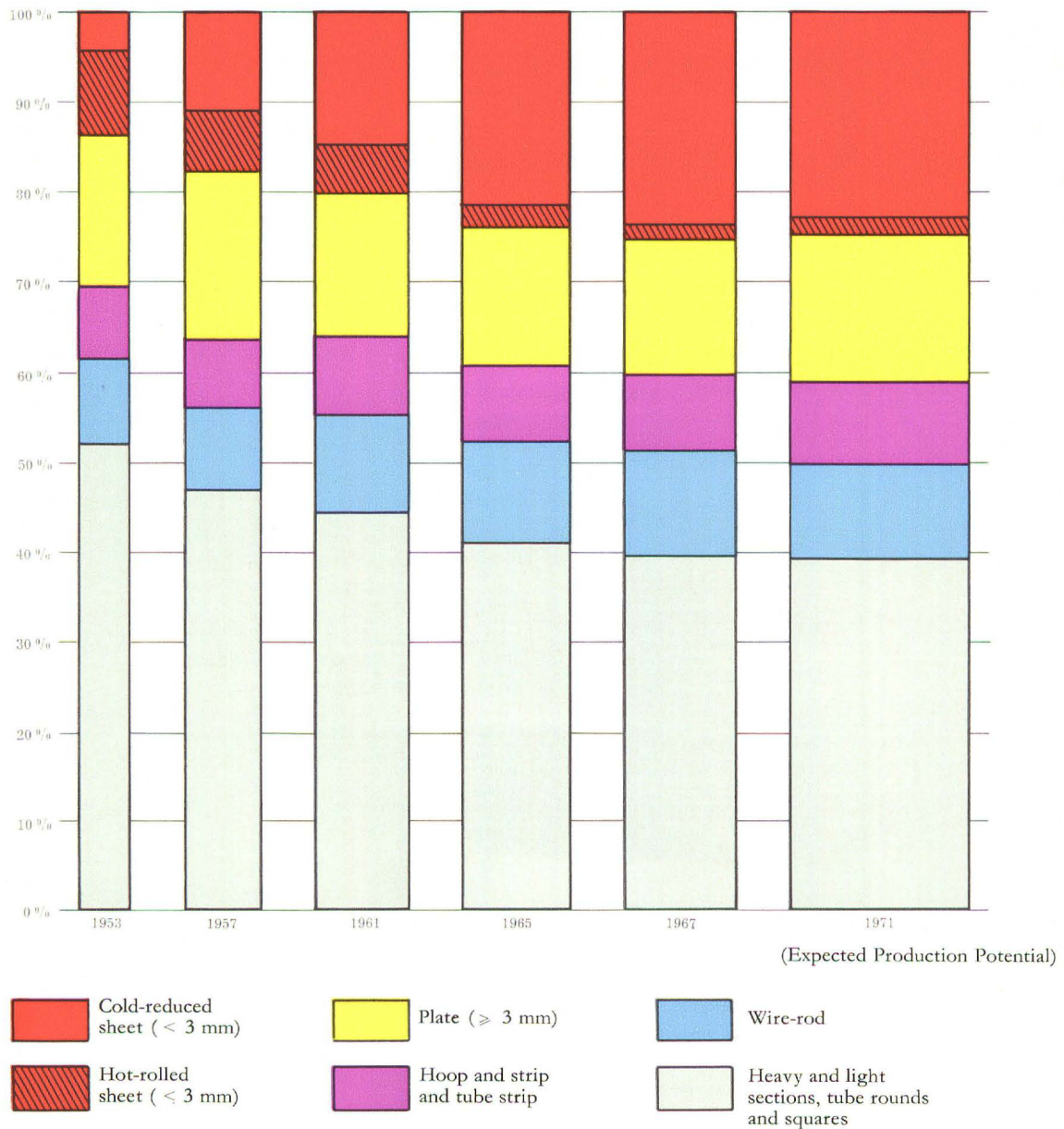
Capital Expenditure on the General Services of the Iron and Steel Industry, 1954—1969

'000,000 dollars (EMA units of account)

Type of installation	Actual expenditure									Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Power-generating plant and distribution networks ..	45.5	60.7	71.7	84.2	93.6	86.3	55.7	43.1	33.9	44.9	26.7
Miscellaneous	58.3	96.6	137.4	162.9	226.1	213.7	166.0	145.4	110.2	124.4	98.2
Total	103.8	157.3	209.1	247.1	319.7	300.0	221.7	188.5	144.1	169.3	124.9

FIGURE 14

Breakdown of Total Production of Finished Rolled Products by Types of Products



V—CONCLUSIONS

For the first time since 1963, this year's survey does not indicate a faster contraction than before in the production potential of the Community **coalmining industry**: the reduction between 1967 and 1971, as emerging from the collieries' declarations, works out at less than 25m. tons (though it is true that a total capacity of over 19m. tons was scrapped in 1967 alone). Accordingly, the estimated potential for 1971 still amounts to 186m. tons. Unless further cuts are made in the meantime, therefore, the rate of utilization must be expected to go still lower than it has done in the last few years. The principles and objectives of the Common Market for energy were laid down in the member Governments' Protocol of 21 April 1964. In accordance with these, the High Authority, with the consent of the ECSC Council of Ministers, issued its Decision No. 3/65 of 17 February 1965 establishing a Community system of State aid to collieries, whereby the Commission each year authorizes the individual Governments' plans (provided these are not liable to interfere with the proper functioning of the Common Market) for assisting the collieries in its readaptation and rationalization schemes and averting the serious hardships which could result in certain areas from over-hasty scaling-down of coal production. Although the assistance is substantial and comprehensive, it seems clear that disposals of Community coal will continue to be primarily to the iron and steel industry and the thermal power-stations.

Coking potential underwent sizeable reductions in 1966 and 1967, and will be reduced further by 1971 despite extensions to certain steelworks-owned plants. This can be ascribed directly to lower specific consumption of coke at the blast-furnaces due to the successful pruning of the coke rate, and indirectly to the smaller tonnages of steelmaking pig-iron now being consumed owing to the trend away from the basic Bessemer process. It can reasonably be hoped, however, that by and large the Community coking-plants, both mine-owned and steelworks-owned, will continue for some years to take much the same amounts of indigenous coal as before.

The fuel requirements of the **power-stations** on the other hand will continue to climb, especially in Germany, where two Acts were passed on 12 August 1965 and 5 September 1966 granting enterprises tax reliefs and subsidies with the object of ironing out the price disparities per calorie between Community coal and the alternative fuels. Thus for example the aggregate installed capacity of the power-stations operated or part-operated by colliery companies in the Community is scheduled to increase by over 11% between 1967 and 1972.

Community **iron-ore** production fell in 1967 to 66m. tons, the lowest level since 1953 and some 30m. below the peak touched in 1961. Potential also dwindled to around 84m. tons, 21m. less than in 1962.

1967 was indeed a year of exceptionally marked contraction, with capital expenditure smaller than at any time since ECSC's inception and potential down by over 6m. tons from the year

before. It is thought, however, that the trend will be rather slower in the next few years, the producers estimating the reduction between 1967 and 1971 at not much over 3m. tons altogether. In view of the special difficulties of the smaller outlying orefields, it is probable that by the end of that time the Lorraine and Luxembourg mines will be accounting between them for 82% of the total Community potential.

In the **iron and steel** industry too, though some increases were recorded in the Netherlands and to a lesser extent in France, capital expenditure overall was smaller than in any year since 1960. It was, however, primarily the rolling sector that was affected : crude-steel production potential will continue to expand.

In the latest set of General Objectives for Steel, published in the Official Gazette of the European Communities on 30 December 1966, it is calculated that the total demand to be met by the industry (internal requirements plus net exports) will rise from 86m. ingot tons in 1965 to approximately 95m. in 1970 and 110m. in 1975 : in face of this, the 1968 survey indicates that, given 96% utilisation of the potential by then existing according to the declarations, the industry would be already equipped to produce 110m. ingot tons in 1968 and 118m. in 1970. The utilization rate is therefore liable to fall still further in the future, and it will be necessary for the enterprises to concentrate more and more on plant rationalization and modernization, and to devote attention primarily to the quality rather than the amount of steel produced.

The replacement of obsolete equipment by machinery embodying the latest technological improvements very commonly entails expansions in capacity which are not at all calculated to help tailor production to the foreseeable movement of demand. In the case of many plants today, the modernization which is so indispensable will be of benefit from the point of view of the Community industry as a whole only if at the same time some capacity is taken out of service, either by the individual enterprise itself or under a joint arrangement among a number of firms. Several such arrangements, varying widely in form from straightforward medium-term sales agreements to full-scale legal mergers, have recently been instituted with the blessing of the High Authority and its successor the Commission, and other decisions are in preparation to ensure that the increases in capacity ordinarily involved by the modernization of pig-iron, steel-making or rolling installations are kept within reasonable bounds.

In the **pig-iron** sector, the effect of the projects currently in hand and approved would be to bring production in 1970, at 96% utilization, to some 87m. tons, whereas the estimated demand for that date is no more than 70m. Despite this imbalance, it is a fact that the Community industry still has in service too many small and far from up-to-date blast-furnaces, and something needs to be done about it. Accordingly, plans will continue to be entertained for enlarging some furnaces and fitting them with high top pressure or fuel-oil injection and oxygen insufflation devices, and also for expanding certain burden-preparation installations ; since most of these operations involve substantial increases in unit capacity, it is desirable that action should be taken to offset this by scrapping furnaces which are out of date or otherwise uneconomic.

A notable feature of the estimated 1970-71 **crude-steel** potential—which tallies well enough with the corresponding figures for pig-iron—is the large and rapidly-growing proportion represented by the oxygen steels, namely 43% for the Community overall, as against 28% in 1967 ; the shares of the other, more traditional steels by that date are put at 23% for basic Bessemer, 21% for open-hearth and 13% for electric-furnace, compared with 32%, 28% and 12% respectively in 1967. While each of the production processes has its own particular advantages, according to the characteristics of the burdens and charges used and the purposes for which the finished products are intended, it is worth noting the contrasting trends with respect

to the installation of oxygen steelmaking capacity in the different parts of the Community : by 1970-71 this type of plants is expected to account for between half and three-quarters of aggregate potential in the coastal and semi-coastal areas, about half in the Ruhr, one-third in Luxemburg and one-sixth in the Saar and Lorraine. Wherever oxygen steelworks are installed in place of basic Bessemer and open-hearth, or new plants built entirely equipped with these, fresh increases in capacity are pretty well bound to result, so that even efficiency-raising projects of this kind will mostly need to be accompanied by cutbacks at other plants which are less efficient or less advantageously located.

Modernization in the **rolling-mill** sector is also obliging enterprises more and more to install large-capacity continuously-operating machinery. This trend has been in evidence for years in the case of the hot and indeed also of the cold wide-strip mills, and is now developing with regard to the wire and bar mills too. Here again, advancing technology is compelling modernization-minded enterprises to replace obsolete equipment by often very much larger-capacity installations : to prevent overall potential from growing to altogether unreasonable proportions, the new giant mills are sometimes only a practical proposition if operated jointly on behalf of several plants, or indeed several companies.

ANNEXES

I—Basic definitions

II—Statistical tables

I — BASIC DEFINITIONS

To ensure that the figures obtained shall be comparable, the High Authority and subsequently the Commission of the European Communities have adopted the following definitions.

I—INVESTMENT

(a) Capital expenditure

Capital expenditure means all expenditure shown or to be shown on the credit side of the balance-sheet as fixed assets in the year under review, except in respect of the collieries and pithead power-stations where the expenditure to be shown is that which would have been, or would be, entered on the credit side of the balance-sheet in accordance with Document AM 43 (*Directives relatives au calcul de l'amortissement des biens investis dans l'industrie charbonnière de la C.E.C.A.*), drawn up by the study committee of the coal producers of Western Europe (CEPCEO).

The term does not, however, cover the financing of workers' housing schemes, financial participation and all investment not directly connected with ECSC-Treaty products (chemical and synthetic products other than the conventional by-products of coking-plants, castings, tubes, etc.).

(b) Classification of investment projects

As regards the trend in capital expenditure and related production potential, the same breakdown of capital schemes as that used in the questionnaires submitted to the enterprises has been adopted, *viz.*

A — *Projects completed or in progress before January 1, 1968;*

B — *Projects approved but not yet in progress on January 1, 1968;*

C — *Other projects planned to be started between January 1, 1968 and December 31, 1970.*

In the case of the iron and steel industry except for the capacity of the power-stations the figures in respect of category C projects have been disregarded.

(c) Unit of account

The unit adopted is the *dollar* unit of account of the European Payment Union (EPÜ) and subsequently that of the *European Monetary Agreement* (EMA) Their equivalents in national currencies are given in the following table:

Country	Currency	Up to and including 1956	1957	1958	1959 and 1960	1961	1962 and onwards
Germany (Fed. Rep.)	DM	4.20	4.20	4.20	4.20	4.03 ⁽⁴⁾	4.00
Belgium/Luxembourg	BF-LF	50	50	50	50	50	50
France ⁽¹⁾	FF ⁽²⁾	350	377 ⁽³⁾	420	4.937 ⁽²⁾	4.937	4.937
Italy	Lire	625	625	625	625	625	625
Netherlands	Fl.	3.80	3.80	3.80	3.80	3.65 ⁽⁵⁾	3.62

⁽¹⁾ And Saar up to July 5, 1959.

⁽²⁾ N.F. as from January 1, 1959.

⁽³⁾ Mean between official rate of exchange in force from January 1 to August 11, 1957 (350) and that in force from August 12 to December 31, 1957 (420).

⁽⁴⁾ Mean between official rate of exchange in force from January 1 to March 3, 1961 (4.20) and that in force from March 4 to December 31, 1961 (4.00).

⁽⁵⁾ Mean between official rate of exchange in force from January 1 to March 3, 1961 (3.80), and that in force from March 4 to December 31, 1961 (3.62).

(d) Capital goods price indices

The statistics for the annual investment surveys are compiled from the enterprises' declarations at the ruling prices for the year concerned, the figures being converted into dollar units of account at the official rates shown above.

Although it is extremely difficult to work out capital goods price indices applying to all the Community industries and countries, the High Authority's publication of 1963, *La C.E.C.A. 1952-1962; Résultats, Limites, Perspectives*, suggests (p. 104) a series of indices, based on 1961 = 100. The indices for the years 1962-66 (see following table) have been compiled by the same methods.

1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
81.6	80.5	79.9	82.1	85.4	89.9	92.9	94.9	97.2	100.0	104.8	109.7	115.9	118.0	120.8

The figures in this report can thus be converted to 1961 prices by applying the index for the year concerned to the annual expenditures recorded.

II—MINING INDUSTRIES

(a) Coal

Extraction potential. — The figures shown represent the net maximum output technically achievable, allowing for the performance capacity of the different installations at the collieries (underground, surface, washeries), and assuming that it is not impeded by marketing difficulties, strikes or manpower shortages.

A number of mines with a low output, including the German "small mines," have not been included as regards either capital expenditure or production potential. They accounted for an extraction in 1967 of only about 0.4 million metric tons, out of 184.3 million, *i.e.* 0.2%.

(b) Coke

Production potential. — The figures shown represent the maximum annual coke production achievable with the plant in operation at a given date, taking into account the minimum coking time technically allowable for the normal composition of the coking blend, with due regard to the state of the ovens and the performance capacity of the ancillary and auxiliary installations. It is assumed that a ready market and unlimited raw material supplies are assured.

(c) Pithead power-stations

Maximum electric capacity of a power-station means the maximum electric power that could be produced throughout several hours of continuous operation with all plant in full working order and with adequate fuel stocks of normal quality, and assuming that there exist no restrictive external factors (fuel of inferior quality, shortage of cooling water, inadequacy of the network receiving the power produced, etc.), but taking full account of all plant limitations that may arise out of the maximum electric capacity of each component of the main plant and auxiliaries of the station.

The net output represents the maximum power that can be supplied, measured at the station bus-bars after deducting the electric power taken by the station auxiliaries and the losses in the station transformers, if any.

Current produced means the net production of electric current measured at the station bus-bars after deducting the electric current taken by the station auxiliaries and the losses in the station transformers, if any.

(d) Iron ore

Extraction potential. — The figures shown represent the maximum continuous output which can be achieved by each mine, allowing for the performance capacity of the different installations (underground, surface, ore-preparation plant where the ore is sold only after treatment) and for estimated manpower availabilities during the year under consideration.

(e) Geographical breakdown

In the tables, the orefields other than those mentioned by name are:

Central and Southern Germany: Sauerland-Waldeck, Lahn-Dill, Taunus-Hunsrück,
Upper Hesse;

Germany - other areas: Dogger orefield, Kreide orefield.

III — IRON AND STEEL INDUSTRY**(a) Production potential**

Sinter, pig-iron, crude-steel and rolled-products production potential means the *maximum production which can effectively be achieved by all the different sections of the plant together* allowing for possible bottlenecks in one section holding up all the others. This maximum possible production is defined as follows:

“Maximum possible production is the maximum production which it is possible to attain during the year under normal working conditions, with due regard for repairs, maintenance and the usual holidays, employing the plant available at the beginning of the year but also taking into account both additional production from any new plant installed and any existing plant to be finally taken off production in the course of the year. Production estimates must be based on the probable composition ratios of the charge in each plant concerned, on the assumption that the raw materials will be available.”

In the case of steels produced mainly from pig-iron, the production potential is estimated in respect of the blast-furnaces and steelworks as a whole and not each steelworks individually.

The capital expenditure of a number of very small iron and steel works has not been included in this survey. It was assumed that the production potential of these enterprises would over the next few years remain at the level of actual production for 1967. The production potentials mentioned in this report therefore exceed those actually declared by a certain percentage which varies from sector to sector but does generally not exceed 1.1% for crude steel and 2.2% for finished rolled-products.

As the production potential of the *rolling-mills* is governed by the shape (section), thickness and width of the material fed into the mill (metal input) and the products to be obtained, we have proceeded on the assumption that, should no forecast be possible as to future steel-rolling conditions, it will be necessary to base estimates on the conditions obtained in 1967. The same applies to the apportionment of steel availabilities among the different types of mill.

(b) Steelworks-owned power-stations

See “Mining Industries,” Section II, c, for definitions of maximum capacity and electric current.

(c) Geographical breakdown

In the tables, the producer regions other than those mentioned by name are:

Nothern Germany:	Länder Schleswig-Holstein, Lower Saxony, Hamburg, Bremen;
Southern Germany:	Länder Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria;
Eastern France:	Departments of Ardennes, Aube, Doubs, Haute-Marne, Meurthe-et-Moselle, Meuse, Vosges, Territoire de Belfort, Haute-Saône, Moselle, Bas-Rhin, Haut-Rhin;
Northern France:	Departments of Aisne, Nord, Oise, Pas-de-Calais, Seine, Région parisienne Seine-et-Marne, Somme;
France - other areas:	all other Departments.

II — STATISTICAL TABLES

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HARD-COAL INDUSTRY

Total investment

TABLE I
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure		
				on Jan. 1, 67 for 1967	on Jan. 1, 68 for	
	1965	1966	1967	1967	1968	1969
Ruhr	162.89	142.21	143.61	145.27	144.82	106.79
Aachen	6.05	6.44	4.16	1.72	4.26	3.18
Lower Saxony	8.15	11.72	7.88	6.32	1.20	1.88
Saar	19.94	17.67	16.01	14.80	13.46	7.13
<i>Germany (F.R.)</i>	<i>197.03</i>	<i>178.04</i>	<i>171.66</i>	<i>168.11</i>	<i>163.74</i>	<i>118.98</i>
Campine ⁽¹⁾	7.09	5.66	5.50	10.03	10.06	5.27
Southern Belgium ⁽¹⁾	14.12	12.68	11.78	18.44	11.77	7.55
Dutch Limburg ⁽¹⁾	10.70	50.4	2.55	3.34	1.33	0.69
<i>Belgium and the Netherlands</i>	<i>32.18</i>	<i>24.43</i>	<i>20.65</i>	<i>31.03</i>	<i>24.50</i>	<i>13.65</i>
Nord/Pas-de-Calais	17.22	16.15	21.02	23.80	27.61	26.78
Lorraine	18.14	14.20	12.89	15.18	11.71	12.18
Centre-Midi	7.52	8.65	7.35	7.10	11.84	19.97
Independent plants ⁽²⁾ ..	0.64	0.60	0.30	0.25	—	—
<i>France</i>	<i>43.52</i>	<i>39.60</i>	<i>41.56</i>	<i>46.33</i>	<i>51.16</i>	<i>58.93</i>
<i>Italy</i>	<i>4.89</i>	<i>7.75</i>	<i>7.67</i>	<i>8.30</i>	<i>7.58</i>	<i>4.22</i>
Total	277.62	249.82	241.54	253.77	246.98	195.78

⁽¹⁾ Exclusive of mine-owned and independent coking-plants, which are, however, included in the total for Belgium and the Netherlands.

⁽²⁾ Briquetting plants only.

HARD-COAL COLLIERIES

Investment

TABLE II
Capital Expenditure by Coalfields

'000,000 dollars (EMA units of account)

Coalfield	Actual expenditure			Estimated expenditure		
				on Jan. 1, 67 for 1967	on Jan. 1, 68 for	
	1965	1966	1967	1968	1969	
Ruhr	114.38	98.80	78.76	84.86	70.44	47.33
Aachen	5.27	4.26	2.36	1.22	2.88	2.14
Lower Saxony	2.66	1.60	0.88	1.03	1.01	1.57
Saar	13.62	8.54	9.41	8.09	6.59	6.04
<i>Germany (F.R.)</i>	<i>135.93</i>	<i>113.20</i>	<i>91.41</i>	<i>95.20</i>	<i>80.92</i>	<i>57.08</i>
Campine	4.51	4.71	5.49	9.99	10.01	5.27
Southern Belgium	7.55	5.06	5.73	9.27	8.92	6.54
<i>Belgium</i>	<i>12.06</i>	<i>9.77</i>	<i>11.22</i>	<i>19.26</i>	<i>18.93</i>	<i>11.81</i>
<i>Netherlands (Limburg) ..</i>	<i>7.04</i>	<i>3.63</i>	<i>2.08</i>	<i>1.68</i>	<i>1.08</i>	<i>0.63</i>
Nord/Pas-de-Calais	13.33	13.51	13.26	14.51	11.36	10.30
Lorraine	16.03	13.09	12.32	14.35	10.96	11.43
Centre-Midi	5.97	6.13	5.26	5.57	5.53	4.58
<i>France</i>	<i>35.33</i>	<i>32.73</i>	<i>30.84</i>	<i>31.43</i>	<i>27.85</i>	<i>26.31</i>
<i>Italy</i>	<i>—</i>	<i>3.51</i>	<i>4.66</i>	<i>3.60</i>	<i>3.20</i>	<i>1.60</i>
Total	190.36	162.84	140.21	154.17	131.98	97.43

MINE-OWNED AND INDEPENDENT COKING-PLANTS ⁽¹⁾
--

Investment

TABLE III
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure		
	1965	1966	1967	on Jan. 1, 67 for	on Jan. 1, 68 for	
				1967	1968	1969
Mine-owned coking-plants						
Ruhr	12.18	10.43	6.90	11.27	10.25	5.95
Aachen	0.06	0.16	0.23	0.29	1.19	0.81
Lower Saxony	—	—	—	—	—	—
Saar	0.99	0.18	0.39	0.31	4.11	0.85
<i>Germany (F.R.)</i>	<i>13.23</i>	<i>10.77</i>	<i>7.52</i>	<i>11.87</i>	<i>15.55</i>	<i>7.61</i>
<i>Belgium and Netherlands</i>	<i>0.11</i>	<i>0.01</i>	—	<i>0.18</i>	<i>0.39</i>	—
Nord/Pas-de-Calais	1.10	1.37	1.76	3.03	3.67	1.25
Lorraine	1.02	0.87	0.36	0.59	0.43	0.43
Centre/Midi	0.34	0.16	0.26	0.30	0.17	0.17
<i>France</i>	<i>2.46</i>	<i>2.40</i>	<i>2.38</i>	<i>3.92</i>	<i>4.27</i>	<i>1.85</i>
Total	15.80	13.18	9.90	15.97	20.21	9.46
Independent coking-plants						
<i>Belgium and Netherlands</i>	<i>0.16</i>	<i>1.04</i>	<i>0.82</i>	<i>0.04</i>	<i>0.95</i>	<i>0.14</i>
<i>France</i> ⁽²⁾	—	—	—	—	—	—
<i>Italy</i>	<i>4.89</i>	<i>4.24</i>	<i>3.01</i>	<i>4.70</i>	<i>4.38</i>	<i>2.62</i>
Total	5.05	5.28	3.83	4.74	5.33	2.76
Grand Total	20.85	18.46	13.73	20.71	25.54	12.22

⁽¹⁾ Including low and medium-temperature coking-plants.

⁽²⁾ Exclusive of Gaz de France.

HARD-COAL BRIQUETTING-PLANTS

Investment

TABLE IV
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure		
				on Jan. 1, 67 for	on Jan. 1, 68 for	
	1965	1966	1967	1967	1968	1969
Ruhr	1.19	0.79	0.21	0.35	0.08	0.45
Aachen	0.04	1.67	1.46	0.09	0.03	—
Lower Saxony	0.02	0.05	0.01	0.01	0.02	0.02
<i>Germany (F.R.)</i>	<i>1.25</i>	<i>2.51</i>	<i>1.68</i>	<i>0.45</i>	<i>0.13</i>	<i>0.47</i>
Campine	2.46	0.94	—	—	—	—
Southern Belgium	0.54	0.17	0.17	1.56	1.67	0.85
<i>Belgium</i>	<i>3.00</i>	<i>1.11</i>	<i>0.17</i>	<i>1.56</i>	<i>1.67</i>	<i>0.85</i>
<i>Netherlands (Limburg)</i> ...	<i>0.35</i>	<i>0.71</i>	<i>0.13</i>	<i>0.31</i>	<i>0.09</i>	<i>0.06</i>
Nord/Pas-de-Calais	1.64	0.67	1.59	1.61	0.53	0.93
Centre/Midi	0.63	1.70	0.96	0.83	0.21	0.19
Independent plants	0.64	0.60	0.30	0.25	—	—
<i>France</i>	<i>2.91</i>	<i>2.97</i>	<i>2.85</i>	<i>2.69</i>	<i>0.74</i>	<i>1.12</i>
Total	7.51	7.30	4.83	5.01	2.63	2.50

PITHEAD POWER-STATIONS ⁽¹⁾
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Investment

TABLE V
Capital Expenditure by Areas

^{'000,000 dollars (EMA units of account)}

Area	Actual expenditure			Estimated expenditure		
				on Jan. 1, 67 for 1967	on Jan. 1, 68 for	
	1965	1966	1967	1968	1969	
Ruhr	35.14	32.19	57.74	48.79	64.05	53.06
Aachen	} 11.48	} 19.37	} 13.31	} 11.80	} 3.09	} 0.76
Lower Saxony						
Saar						
<i>Germany (F.R.)</i>	46.62	51.56	71.05	60.59	67.14	53.82
Campine	0.12	0.01	0.01	0.04	0.05	—
Southern Belgium	6.03	7.45	5.88	7.61	1.18	0.16
<i>Belgium</i>	6.15	7.46	5.89	7.65	1.23	0.16
<i>Netherlands</i> (Limburg) ..	3.31	0.70	0.34	0.35	0.16	—
Nord/Pas-de-Calais	1.15	0.60	4.41	4.65	12.05	14.30
Lorraine	1.09	0.24	0.21	0.24	0.32	0.32
Centre-Midi	0.58	0.66	0.87	0.40	5.93	15.03
<i>France</i>	2.82	1.50	5.49	5.29	18.30	29.65
<i>Italy</i>	—	—	—	—	—	—
Total	58.90	61.22	82.77	73.88	86.83	83.63

⁽¹⁾ Pithead power-stations proper and other power-generating plant at mines.

HARD COAL

Extraction

TABLE VI

Extraction and Extraction Potential by Coalfields

'000,000 metric tons

Actual extraction	Coalfield	Extraction potential		Expected extraction potential			
		1966	1967	1968	1969	1970	1971
1967							
90.4	Ruhr	121.7	108.8	100.7	100.7	101.5	101.7
7.0	Aachen	8.4	8.4	8.2	8.2	7.3	7.3
2.2	Lower Saxony	2.0	2.3	2.3	2.3	2.3	2.3
12.4	Saar	14.3	13.9	12.2	13.3	13.3	13.3
112.0	<i>Germany (F.R.)</i>	<i>14.64</i>	<i>133.4</i>	<i>123.4</i>	<i>124.5</i>	<i>124.4</i>	<i>124.6</i>
8.8	Campine	10.0	9.0	9.4	9.5	9.5	9.7
7.4	Southern Belgium	10.0	9.4	6.8	5.6	5.3	5.3
16.2	<i>Belgium</i>	<i>20.0</i>	<i>18.4</i>	<i>16.2</i>	<i>15.1</i>	<i>14.8</i>	<i>14.0</i>
8.1	<i>Netherlands (Limburg)</i>	<i>11.4</i>	<i>9.3</i>	<i>8.6</i>	<i>8.5</i>	<i>6.0</i>	<i>6.0</i>
23.4	Nord/Pas-de-Calais	25.7	24.1	22.2	21.0	19.0	18.0
15.0	Lorraine	15.5	15.2	15.2	15.0	15.0	15.0
9.2	Centre/Midi	9.9	9.4	9.2	8.7	8.3	8.1
47.6	<i>France</i>	<i>51.1</i>	<i>48.7</i>	<i>46.6</i>	<i>44.7</i>	<i>42.3</i>	<i>41.1</i>
0.4	<i>Italy</i>	<i>0.7</i>	<i>0.7</i>	<i>0.4</i>	<i>0.4</i>	<i>0.4</i>	<i>0.4</i>
184.3	Total	229.6	210.5	195.2	193.2	187.9	186.1

N.B. The above table does not take into account the extraction of some mines of small capacity (0.4 million metric tons in 1967 of which 0.25 million metric tons from the "small" German mines, which do not figure in the official production statistics).

COKE

Production

TABLE VII a
Production and Production Potential by Areas

'000,000 metric tons

Actual production ⁽¹⁾	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1967							
	Mine-owned coking-plants						
25.1	Ruhr	34.4	30.5	28.8	28.6	28.3	28.2
1.9	Aachen ⁽²⁾	1.9	1.9	2.0	2.1	2.0	2.0
—	Lower Saxony	—	—	—	—	—	—
1.3	Saar	1.3	1.3	1.8	1.8	1.8	1.8
28.3	<i>Germany (F.R.)</i>	37.6	33.7	32.6	32.5	32.1	32.0
2.4	<i>Belgium and the Netherlands</i> ..	3.4	2.4	2.1	1.0	1.0	1.0
4.6	Nord/Pas-de-Calais	5.2	5.2	5.1	5.2	5.2	5.2
2.4	Lorraine	2.8	2.8	2.8	2.8	2.8	2.8
0.8	Centre/Midi	0.9	0.9	0.9	0.9	0.9	0.9
7.8	<i>France</i>	8.9	8.9	8.8	8.9	8.9	8.9
38.5	Total	49.9	45.0	48.5	42.4	42.0	41.9
	Independent coking-plants						
1.3	<i>Belgium and the Netherlands</i> ..	1.4	1.4	1.4	1.2	1.2	1.2
—	<i>France</i>	—	—	—	—	—	—
2.2	<i>Italy</i>	2.5	2.5	2.5	2.6	2.6	2.6
3.5	Total	3.9	3.9	3.9	3.8	3.8	3.8
	Steelworks-owned coking-plant						
6.7	<i>Germany (F.R.)</i>	8.4	8.1	7.9	7.9	8.0	8.0
6.3	<i>Belgium and the Netherlands</i> ..	6.6	6.7	6.8	6.9	7.1	7.1
4.2	<i>France</i>	4.5	4.6	4.4	4.7	5.1	5.0
4.0	<i>Italy</i>	4.3	4.3	4.3	4.3	4.7	4.8
21.2	Total	23.8	23.7	23.4	23.8	24.9	24.9
63.2	Grand Total	77.6	72.6	70.8	70.0	70.7	70.6

⁽¹⁾ These figures are not the same as those published in the High Authority's *Bulletin Statistique*, since certain coking-plants have been classified differently.

⁽²⁾ Including electrode coke (133,000 metric tons produced in 1967).

LOW- AND MEDIUM-TEMPERATURE COKE

Production

TABLE VII b

Production and Production Capacity

'000 metric tons

Actual pro- duction	Mine-, and steelworks- owned plants	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1967							
220	Mine-owned plants	360	360	360	360	320	320
—	Steelworks-owned plants	—	—	—	—	—	—

COKING-PLANTS

Technical Data

TABLE VIII

Coal Input and Coke Output (Mine-Owned, Independent and Steelworks-Owned Coking-Plants)

Type of coal	1966 ⁽¹⁾		1967	
	'000 metric tons	%	'000 metric tons	%
Group V ⁽²⁾	65,877	75.7	61,124	72.9
Group VI ⁽²⁾	16,168	18.5	17,092	20.4
Other groups	4,244	4.9	4,900	5.8
Coke breeze and low-temperature coke breeze ...	764	0.9	730	0.9
Total	87,053	100.0	83,846	100.0
	'000 metric tons	output kg./t. ⁽³⁾	'000 metric tons	output kg./t. ⁽³⁾
Coke production	65,630	753.9	63,256	754.4
	metric tons	% of total input	metric tons	% of total input
Oil input	55,204	0.063	27,463	0.033

⁽¹⁾ The 1966 figures represent only part of the independent coking-plants.

⁽²⁾ The breakdown between Groups V and VI is only approximate.

⁽³⁾ Output of coke (ton for ton) for coal input (also ton for ton). The figure is of practical value; considerable variations may, however, arise as a result of variations in the moisture content of the coal input and the coke produced.

	1966	1967
a) Coke-oven gas delivered	29,481	28,602
b) Gas output	339	341
c) Coke-oven gas delivered to outside enterprises or for consumption other than d)	19,925 (67.6)	19,666 (68.7)
d) Consumption for heating oven :		
1. Coke-oven gas	9,556 (70.8)	8,936 (71.3)
2. Producer gas	702 (5.2)	552 (4.4)
3. Blast-furnace and other gases ..	3,237 (24.0)	3,050 (24.3)
4. Total consumption of gas for heating ovens	13,495 (100.0)	12,538 (100.0)
e) Specific consumption in kcal./kg. of dry-charged coal (assuming an average moisture content of 8%)	725	699

N.B. The gas volumes have been calculated on the basis of a calorific power of 4,300 Kilocalories per standard cubic metre.

HARD-COAL BRIQUETTES

Production

TABLE IX

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1967	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
2.5	Ruhr	4.6	4.4	3.8	3.2	3.2	3.2
0.7	Aachen	0.8	0.9	1.0	1.0	1.0	1.0
0.5	Lower Saxony	0.6	0.6	0.6	0.6	0.6	0.6
3.7	<i>Germany (F.R.)</i>	6.0	5.9	5.4	4.8	4.8	4.8
0.0	Campine	0.2	0.2	0.2	0.2	0.2	0.2
0.8	Southern Belgium	2.3	1.8	1.8	1.7	1.7	1.7
0.8	<i>Belgium</i>	2.5	2.0	2.0	1.9	1.9	1.9
1.1	<i>Netherlands (Limburg)</i>	1.7	1.7	1.7	1.7	1.7	1.7
2.7	Nord/Pas-de-Calais	4.1	4.1	3.8	3.5	3.5	3.5
1.2	Centre/Midi	2.0	1.9	1.8	1.7	1.7	1.7
0.5	Independent plants	1.5	1.5	1.5	1.5	1.5	1.5
4.4	<i>France</i>	7.6	7.5	7.1	6.7	6.7	6.7
10.0	Total	17.8	17.1	16.2	15.1	15.1	15.1

ELECTRIC CURRENT

Output

TABLE X

Output of Electric Current and Electric Capacity of Pithead Power-Stations⁽¹⁾ by Areas

Actual output '000,000 kWh. 1967	Area	Actual electric capacity MW.		Expected electric capacity MW.			
		Begin-ning 1967	Begin-ning 1968	Begin-ning 1969	Begin-ning 1970	Begin-ning 1971	Begin-ning 1972
18,575	Ruhr	4,499	4,483	4,747	5,100	5,285	5,295
3,666	Aachen	1,088	1,356	1,356	1,356	1,356	1,356
	Lower Saxony						
	Saar						
22,241	<i>Germany (F.R.)</i>	5,587	5,839	6,103	6,456	6,641	6,651
548	Campine	389	230	230	230	230	230
5,316	Southern Belgium	863	981	981	981	981	981
5,864	<i>Belgium</i>	1,252	1,211	1,211	1,211	1,211	1,211
2,231	<i>Netherlands (Limburg)</i>	470	441	441	441	441	441
5,177	Nord/Pas-de-Calais	1,406	1,406	1,406	1,406	1,641	1,641
2,965	Lorraine	729	729	729	729	729	729
2,153	Centre-Midi	557	557	557	557	557	797
10,295	<i>France</i>	2,692	2,692	2,692	2,692	2,927	3,167
—	<i>Italy</i>	—	—	—	—	—	—
40,681	Total	10,001	10,183	10,447	10,800	11,220	11,470

¹⁾ Pithead power-stations proper and other power-generating plant at mines.

TABLE XI a
Specific Consumption of Coal 1967⁽²⁾

PITHEAD
POWER-STATIONS⁽¹⁾

Technical Data

C = Output of electric current in '000,000 kWh.
P = Maximum electric capacity in '000 MW. (average at beginning 1967 - beginning 1968)
H = Load-hours per annum (1967) } by type of specific consumption

Specific consumption Country/Coalfield	< 3000 kcal/kWh			3000-3499 kcal/kWh			3500-3999 kcal/kWh			4000-4999 kcal/kWh			≥ 5000 kcal/kWh			Total			Average consumption kcal./kWh.
	C	P	H	C	P	H	C	P	H	C	P	H	C	P	H	C	P	H	
Ruhr	11,955	2,959	4,378	2,688	705	3,813	1,598	398	4,015	842	237	3,553	492	151	3,258	18,575	4,450	4,174	2,958
Aachen	3,014	1,069	2,819	652	152	4,289	—	—	—	—	—	—	—	—	—	3,666	1,221	3,002	2,736
Lower Saxony																			
Saar																			
Germany (F.R.)	15,969	4,028	3,964	3,340	857	3,897	1,598	398	4,015	842	237	3,553	492	151	3,258	22,241	5,671	3,922	2,922
Campine	—	—	—	209	97	2,155	240	86	2,791	99	51	1,941	—	—	—	548	234	2,342	3,619
Southern coalfields	5,065	818	6,192	127	30	4,233	124	47	2,638	—	—	—	—	—	—	5,316	895	5,940	2,431
Belgium	5,065	818	6,192	336	127	2,646	364	133	2,737	99	51	1,941	—	—	—	5,864	1,129	5,194	2,542
Nord/Pas-de-Calais	4,133	718	5,756	632	214	2,953	363	269	1,349	49	205	239	—	—	—	5,177	1,406	3,682	2,692
Lorraine	2,919	674	4,331	—	—	—	—	—	—	—	—	—	46	55	836	2,965	729	4,067	2,917
Centre-Midi	—	—	—	1,390	325	4,277	649	197	3,294	—	—	—	114	35	3,257	2,153	557	3,865	3,412
France	7,052	1,392	5,066	2,022	539	3,751	1,012	466	2,172	49	205	239	160	90	1,778	10,295	2,692	3,824	2,907
Netherlands	1,026	178	5,764	746	130	5,738	390	105	3,714	116	29	4,000	—	—	—	2,273	442	5,154	3,068
Total	29,112	6,416	4,537	6,444	1,653	3,898	3,364	1,102	3,053	1,106	522	2,119	652	241	2,705	40,678	9,934	4,095	2,872

⁽¹⁾ Pithead power-stations proper and other power-generating plant at mines.

⁽²⁾ This table covers only power-stations proper and other power-generating plant which actually produced electric current from coal before January 1, 1968. Their load-hours per annum were calculated by dividing the annual output by the average maximum electric capacity (arithmetical mean between the electric capacity at the beginning of 1967 and 1968). A possible source of error arises where new power-stations had not yet been brought into operation and obsolete plant had not been closed down by July 1, 1967.

PITHEAD POWER-STATIONS⁽¹⁾

Technical Data

TABLE XI b

Specific Consumption of Coal 1966-1967

	1966	1967	1972 (Forecast)
Average specific consumption in kcal./kWh.	2,897	2,872 ⁽²⁾	.
Consumption of secondary products in % of consumption of coal (ton for ton)	89%	85%	.
Load-hours per annum	4,029	4,095 ⁽²⁾	.
Ratio (at the beginning of the year) of maximum electric capacity to nominal installed capacity	89.9%	90.0%	91.1%

⁽¹⁾ Pithead power-stations proper and other power-generating plant at mines.

⁽²⁾ See Table XI a for breakdown by coalfields.

B.K.B. AND LOW- TEMPERATURE BROWN-COAL COKE
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Investment and Production
TABLE XII a
**Capital Expenditure on Plants Producing B.K.B. (Brown-Coal Briquettes) and
Low-Temperature Brown-Coal Coke**
'000,000 dollars (EMA units of account)

	Actual expenditure			Estimated expenditure		
				on Jan. 1, 1967 for	on Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Briquetting-plants	7.90	3.79	4.20	4.72	4.00	4.00
Low-temperature coking-plants	0.02	—	—	—	—	—
Total	7.92	3.79	4.20	4.72	4.00	4.00

TABLE XII b
Production and Production Potential for B.K.B. and Low-Temperature Brown-Coal Coke
'000,000 metric tons

Production		Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
11.1	B.K.B.	12.3	9.6	9.6	9.6	9.6	9.6
0.4	Low-temperature-coke	0.6	0.4	—	—	—	—

IRON-ORE INDUSTRY

Investment

TABLE XIII

Capital Expenditure by Orefields

'000,000 dollars (EMA units of account)

Orefield	Actual expenditure			Estimated expenditure		
				on Jan. 1, 1967 for	on Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Salzgitter, Ilsede, Harz- vorland	4.03	1.09	0.52	0.59	0.68	—
Osnabrück, Weser-Wiehen- gebirge	0.11	0.17	0.01	0.10	0.15	—
Siegerland-Wied	0.16	0.17	0.20	0.04	0.03	—
Central and Southern Germ.						
Other German fields	1.50	0.65	0.37	1.01	1.32	0.69
<i>Germany (F.R.)</i>	<i>5.80</i>	<i>2.08</i>	<i>1.10</i>	<i>1.74</i>	<i>2.18</i>	<i>0.69</i>
<i>Belgium</i>	—	—	0.02	—	—	—
Eastern France	16.07	12.51	13.28	12.36	18.05	8.44
Western France	1.96	1.12	1.15	1.46	2.48	1.15
France - Centre/Midi	0.11	0.03	0.03	0.05	0.09	0.14
<i>France</i>	<i>18.14</i>	<i>13.66</i>	<i>14.46</i>	<i>13.87</i>	<i>20.62</i>	<i>9.73</i>
<i>Italy</i>	<i>0.68</i>	<i>0.67</i>	<i>0.28</i>	<i>1.14</i>	<i>0.82</i>	<i>1.52</i>
<i>Luxembourg</i>	<i>0.97</i>	<i>0.91</i>	<i>0.61</i>	<i>0.73</i>	<i>0.68</i>	<i>0.14</i>
Total	25.59	17.32	16.47	17.48	24.30	12.08

IRON-ORE INDUSTRY

Extraction

TABLE XIV

Extraction and Extraction Potential by Orefields

'000,000 metric tons

Actual extraction	Ore field	Extraction potential		Expected extraction potential			
		1966	1967	1968	1969	1970	1971
1967							
6.3	Salzgitter, Ilsede, Harzvorland	8.6	7.5	7.7	7.2	7.2	7.2
	Osnabrück, Weser-Wiehen- gebirge						
0.5	Siegerland-Wied	0.7	0.5	0.4	0.3	0.2	0.2
	Central and Southern Germany						
1.7	Other German fields	2.1	2.0	1.6	1.6	1.6	1.6
8.5	Germany (F.R.)	11.4	10.0	9.7	9.1	9.0	9.0
0.1	Belgium	0.2	0.2	0.2	0.2	0.2	0.2
46.0	Eastern France	64.5	60.6	60.6	61.9	60.6	60.3
3.7	Western France	4.7	4.7	4.4	3.8	3.8	3.8
0.1	France - Centre/Midi	0.2	0.1	0.1	0.1	0.1	0.1
49.8	France	69.4	65.4	65.1	65.8	64.5	64.2
1.2	Italy	1.5	1.4	1.4	1.4	1.4	1.4
6.3	Luxembourg	8.0	7.3	6.9	6.9	6.8	6.8
65.9	Total	90.5	84.3	83.3	83.4	81.9	81.6

IRON AND STEEL INDUSTRY

Total Investment

TABLE XV
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	35.60	21.66	29.97	33.87	37.08	18.19
North Rhine/Westphalia	238.20	220.84	128.56	132.52	157.45	101.92
Southern Germany	9.06	22.78	10.16	9.41	14.35	2.39
Saar	28.70	29.05	56.75	71.26	55.83	8.84
<i>Germany (F.R.)</i>	<i>311.56</i>	<i>294.33</i>	<i>225.44</i>	<i>247.06</i>	<i>264.71</i>	<i>131.34</i>
<i>Belgium</i>	<i>142.35</i>	<i>142.87</i>	<i>106.56</i>	<i>106.72</i>	<i>84.05</i>	<i>42.62</i>
Eastern France	111.45	99.91	106.96	144.20	148.40	109.94
Northern France	30.93	22.42	42.46	59.63	76.59	70.56
France - other areas	27.53	25.23	28.95	31.41	28.62	27.01
<i>France</i>	<i>169.91</i>	<i>147.56</i>	<i>178.37</i>	<i>235.24</i>	<i>253.61</i>	<i>207.51</i>
Italy - coastal areas	193.98	131.50	71.07	88.34	111.70	165.01
Italy - other areas	52.29	35.09	57.56	54.31	60.80	37.13
<i>Italy</i>	<i>246.27</i>	<i>166.59</i>	<i>128.63</i>	<i>142.65</i>	<i>172.50</i>	<i>202.14</i>
<i>Luxembourg</i>	<i>24.83</i>	<i>28.37</i>	<i>15.80</i>	<i>19.87</i>	<i>18.17</i>	<i>13.59</i>
<i>Netherlands</i>	<i>37.32</i>	<i>68.35</i>	<i>94.84</i>	<i>86.13</i>	<i>112.45</i>	<i>74.50</i>
Total	932.24	848.07	749.64	837.67	905.49	671.70

STEELWORKS-OWNED COKING-PLANTS

Investment

TABLE XVI a
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	0.26	0.10	0.03	0.11	0.03	—
North Rhine/Westphalia	0.10	0.50	0.31	0.34	0.67	0.24
Southern Germany	0.03	0.02	0.06	0.06	—	—
Saar	0.12	0.10	0.88	1.05	0.54	—
<i>Germany (F.R.)</i>	<i>0.51</i>	<i>0.72</i>	<i>1.28</i>	<i>1.56</i>	<i>1.24</i>	<i>0.24</i>
<i>Belgium</i>	<i>1.91</i>	<i>2.18</i>	<i>1.27</i>	<i>0.99</i>	<i>0.14</i>	<i>0.08</i>
Eastern France	0.17	0.40	0.27	0.34	0.27	—
Northern France	0.45	0.21	3.96	7.80	9.60	17.20
France - other areas	0.10	0.02	0.08	0.02	0.11	—
<i>France</i>	<i>0.72</i>	<i>0.63</i>	<i>4.31</i>	<i>8.16</i>	<i>9.98</i>	<i>17.20</i>
Italy - coastal areas	12.49	5.47	1.72	2.80	5.63	10.56
Italy - other areas	—	—	—	—	—	—
<i>Italy</i>	<i>12.49</i>	<i>5.47</i>	<i>1.72</i>	<i>2.80</i>	<i>5.63</i>	<i>10.56</i>
<i>Luxembourg</i>	—	—	—	—	—	—
<i>Netherlands</i>	<i>1.61</i>	<i>1.37</i>	<i>2.88</i>	<i>6.09</i>	<i>0.97</i>	<i>0.41</i>
Total	17.24	10.37	11.46	19.60	17.96	28.49

BURDEN-PREPARATION

Investment

TABLE XVI b
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
				on Jan. 1, 1967 for	en Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Northern Germany	1.16	0.35	0.16	0.27	3.29	2.75
North Rhine/Westphalia	3.16	1.95	2.56	3.19	3.47	3.13
Southern Germany	0.24	0.06	0.16	0.01	—	—
Saar	1.56	3.63	16.32	11.73	3.38	1.20
<i>Germany (F.R.)</i>	<i>6.12</i>	<i>5.99</i>	<i>19.20</i>	<i>15.20</i>	<i>10.14</i>	<i>7.08</i>
<i>Belgium</i>	<i>5.11</i>	<i>11.41</i>	<i>6.73</i>	<i>6.13</i>	<i>5.26</i>	<i>2.09</i>
Eastern France	13.51	11.79	9.74	9.16	14.37	3.34
Northern France	5.00	5.20	2.50	6.96	7.86	8.54
France - other areas	0.54	0.11	0.40	0.14	0.87	0.18
<i>France</i>	<i>19.05</i>	<i>17.10</i>	<i>12.64</i>	<i>16.26</i>	<i>23.10</i>	<i>12.06</i>
Italy - coastal areas	19.91	9.61	3.47	4.64	4.79	10.05
Italy - other areas	0.05	0.02	—	0.09	0.10	0.06
<i>Italy</i>	<i>19.96</i>	<i>9.63</i>	<i>3.47</i>	<i>4.73</i>	<i>4.89</i>	<i>10.11</i>
<i>Luxembourg</i>	<i>0.62</i>	<i>0.43</i>	<i>0.28</i>	<i>0.15</i>	<i>0.03</i>	—
<i>Netherlands</i>	<i>1.08</i>	<i>0.49</i>	<i>1.30</i>	<i>3.26</i>	<i>6.88</i>	<i>8.51</i>
Total	51.94	45.05	43.62	45.73	50.30	39.85

BLAST-FURNACES

Investment

TABLE XVI c

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	7.73	4.19	5.30	3.82	1.97	0.50
North Rhine/Westphalia	28.63	16.31	8.19	8.50	12.79	8.80
Southern Germany	0.59	0.49	0.66	0.14	0.92	—
Saar	4.34	1.96	1.52	2.37	4.26	0.61
<i>Germany (F.R.)</i>	<i>41.29</i>	<i>22.95</i>	<i>15.67</i>	<i>14.83</i>	<i>19.94</i>	<i>9.91</i>
<i>Belgium</i>	<i>11.26</i>	<i>16.22</i>	<i>12.68</i>	<i>11.20</i>	<i>9.39</i>	<i>3.69</i>
Eastern France	9.82	7.31	11.32	8.72	12.38	4.72
Northern France	2.31	2.50	11.26	14.31	15.27	8.61
France - other areas . . .	0.56	0.22	0.28	0.32	0.32	0.47
<i>France</i>	<i>12.69</i>	<i>10.03</i>	<i>22.86</i>	<i>23.35</i>	<i>27.97</i>	<i>13.80</i>
Italy - coastal areas . . .	18.14	12.81	9.90	5.28	13.00	22.18
Italy - other areas	0.25	0.27	0.62	0.83	0.68	0.13
<i>Italy</i>	<i>18.39</i>	<i>13.08</i>	<i>10.52</i>	<i>6.11</i>	<i>13.68</i>	<i>22.31</i>
<i>Luxembourg</i>	<i>4.27</i>	<i>2.11</i>	<i>0.53</i>	<i>2.49</i>	<i>5.25</i>	<i>7.42</i>
<i>Netherlands</i>	<i>3.29</i>	<i>12.67</i>	<i>13.02</i>	<i>9.93</i>	<i>1.89</i>	<i>1.30</i>
Total	91.19	77.06	75.28	67.91	78.12	58.43

**STEELWORKS-OWNED
COKING-PLANTS, BURDEN
PREPARATION AND BLAST-
FURNACES-TOTAL**

Investment

TABLE XVI d
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	9.15	4.64	5.49	4.20	5.29	3.25
North Rhine/Westphalia	31.89	18.76	11.06	12.03	16.93	12.17
Southern Germany	0.86	0.57	0.88	0.21	0.92	—
Saar	6.02	5.69	18.72	15.15	8.18	1.81
<i>Germany (F.R.)</i>	<i>47.92</i>	<i>29.66</i>	<i>36.15</i>	<i>31.59</i>	<i>31.32</i>	<i>17.23</i>
<i>Belgium</i>	<i>18.23</i>	<i>29.81</i>	<i>20.68</i>	<i>18.32</i>	<i>14.79</i>	<i>5.86</i>
Eastern France	23.50	19.50	21.33	18.22	27.02	8.06
Northern France	7.76	7.91	17.72	29.07	32.73	34.35
France - other areas	1.20	0.35	0.76	0.48	1.30	0.65
<i>France</i>	<i>32.46</i>	<i>27.76</i>	<i>39.81</i>	<i>47.77</i>	<i>61.05</i>	<i>43.06</i>
Italy - coastal areas	50.54	27.89	15.09	12.72	23.42	42.79
Italy - other areas	0.30	0.29	0.62	0.92	0.78	0.19
<i>Italy</i>	<i>50.84</i>	<i>28.18</i>	<i>15.71</i>	<i>13.64</i>	<i>24.20</i>	<i>42.98</i>
<i>Luxembourg</i>	<i>4.89</i>	<i>2.54</i>	<i>0.81</i>	<i>2.64</i>	<i>5.28</i>	<i>7.42</i>
<i>Netherlands</i>	<i>5.98</i>	<i>14.53</i>	<i>17.20</i>	<i>19.28</i>	<i>9.74</i>	<i>1.022</i>
Total	160.37	132.48	130.36	133.24	146.38	126.77

BASIC BESSEMER STEELWORKS

Investment

TABLE XVII a
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	0.60	0.52	0.07	0.05	0.02	—
North Rhine/Westphalia	1.32	0.69	6.20	4.43	0.40	—
Southern Germany	0.52	0.16	0.88	0.31	0.94	—
Saar	1.61	1.37	1.76	0.77	0.73	—
<i>Germany (F.R.)</i>	<i>4.05</i>	<i>2.74</i>	<i>8.91</i>	<i>5.56</i>	<i>2.09</i>	—
<i>Belgium</i>	<i>2.37</i>	<i>1.80</i>	<i>0.89</i>	<i>0.99</i>	<i>0.83</i>	<i>0.22</i>
Eastern France	2.32	3.33	2.88	3.42	3.71	2.87
Northern France	0.20	0.20	—	—	—	—
France - other areas	0.11	0.08	0.04	0.03	0.08	—
<i>France</i>	<i>2.63</i>	<i>3.61</i>	<i>2.92</i>	<i>3.45</i>	<i>3.79</i>	<i>2.87</i>
Italy - coastal areas	—	—	—	—	—	—
Italy - other areas	—	—	—	—	—	—
<i>Italy</i>	—	—	—	—	—	—
<i>Luxembourg</i>	<i>1.11</i>	<i>20.8</i>	<i>0.95</i>	<i>1.34</i>	<i>0.08</i>	—
<i>Netherlands</i>	—	—	—	—	—	—
Total	10.16	10.23	13.67	11.34	6.79	3.09

OPEN-HEARTH STEELWORKS

Investment

TABLE XVII b
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
				on Jan. 1, 1967 for	on Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Northern Germany	2.19	0.59	0.13	0.26	0.15	—
North Rhine/Westphalia	4.80	3.37	1.54	1.87	1.79	1.45
Southern Germany	0.35	0.37	0.59	0.15	0.05	0.01
Saar	0.46	0.32	0.60	0.12	0.16	—
<i>Germany (F.R.)</i>	<i>7.80</i>	<i>4.65</i>	<i>2.86</i>	<i>2.40</i>	<i>2.15</i>	<i>1.46</i>
<i>Belgium</i>	<i>0.21</i>	<i>0.05</i>	<i>0.03</i>	<i>0.07</i>	<i>0.03</i>	<i>0.02</i>
Eastern France	1.03	0.86	0.37	0.75	0.76	0.40
Northern France	0.20	0.67	0.21	0.33	0.23	—
France - other areas	0.07	0.03	0.06	0.19	0.20	0.05
<i>France</i>	<i>1.30</i>	<i>1.56</i>	<i>0.64</i>	<i>1.27</i>	<i>1.19</i>	<i>0.45</i>
Italy - coastal areas	2.32	0.41	0.24	4.13	1.12	0.62
Italy - other areas	0.90	1.35	0.66	0.40	1.56	1.02
<i>Italy</i>	<i>3.22</i>	<i>1.76</i>	<i>0.90</i>	<i>4.53</i>	<i>2.68</i>	<i>1.64</i>
<i>Luxembourg</i>	—	—	—	—	—	—
<i>Netherlands</i>	<i>0.52</i>	<i>0.63</i>	<i>0.02</i>	<i>0.11</i>	<i>0.06</i>	<i>0.01</i>
Total	13.05	8.65	4.45	8.38	6.11	3.58

ELECTRIC-FURNACE STEELWORKS
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Investment

TABLE XVII c

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
				on Jan. 1, 1967 for	on Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Northern Germany	0.05	—	0.06	—	—	—
North Rhine/Westphalia .	2.51	1.21	1.83	1.90	3.89	1.88
Southern Germany	0.51	0.38	0.20	0.51	3.00	—
Saar	—	1.49	4.66	6.49	2.26	—
<i>Germany (F.R.)</i>	<i>3.07</i>	<i>3.08</i>	<i>6.75</i>	<i>8.90</i>	<i>9.15</i>	<i>1.88</i>
<i>Belgium</i>	<i>0.34</i>	<i>0.23</i>	<i>0.17</i>	<i>0.53</i>	<i>0.93</i>	<i>3.20</i>
Eastern France	0.77	0.05	0.04	—	0.08	—
Northern France	0.34	0.38	0.72	2.66	0.13	1.08
France - other areas	6.30	3.58	2.63	2.98	5.05	6.60
<i>France</i>	<i>7.41</i>	<i>4.01</i>	<i>3.39</i>	<i>5.64</i>	<i>5.26</i>	<i>7.68</i>
Italy - coastal areas	1.41	0.85	0.85	0.88	0.73	0.16
Italy - other areas	3.46	2.06	6.70	7.16	7.35	5.60
<i>Italy</i>	<i>4.87</i>	<i>2.91</i>	<i>7.55</i>	<i>8.04</i>	<i>8.08</i>	<i>5.76</i>
<i>Luxembourg</i>	<i>0.01</i>	<i>0.01</i>	—	—	—	—
<i>Netherlands</i>	<i>0.75</i>	<i>0.19</i>	<i>0.05</i>	—	—	—
Total	16.45	10.43	17.91	23.11	23.42	18.52

LD, KALDO AND OTHER STEELWORKS

Investment

TABLE XVII d
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
				on Jan. 1, 1967 for	on Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Northern Germany	0.63	0.18	12.43	17.93	17.25	8.74
North Rhine/Westphalia	23.58	31.96	14.20	12.05	18.94	17.63
Southern Germany	—	—	—	—	—	—
Saar	0.36	3.26	10.19	11.18	8.64	0.16
<i>Germany (F.R.)</i>	<i>24.57</i>	<i>35.40</i>	<i>36.82</i>	<i>41.16</i>	<i>44.83</i>	<i>26.53</i>
<i>Belgium</i>	<i>25.86</i>	<i>21.72</i>	<i>28.20</i>	<i>25.38</i>	<i>11.87</i>	<i>3.20</i>
Eastern France	2.51	3.36	8.44	22.10	21.12	26.71
Northern France	2.40	1.20	2.60	3.30	4.70	3.80
France - other areas	0.15	1.27	1.91	2.00	2.36	1.96
<i>France</i>	<i>5.06</i>	<i>5.83</i>	<i>12.95</i>	<i>27.40</i>	<i>28.18</i>	<i>32.47</i>
Italy - coastal areas	18.16	8.37	7.52	6.82	11.02	25.81
Italy - other areas	—	—	0.73	0.48	1.96	0.66
<i>Italy</i>	<i>18.16</i>	<i>8.37</i>	<i>8.25</i>	<i>7.30</i>	<i>12.98</i>	<i>26.47</i>
<i>Luxembourg</i>	<i>9.79</i>	<i>12.59</i>	<i>7.73</i>	<i>6.70</i>	<i>2.22</i>	<i>1.60</i>
<i>Netherlands</i>	<i>1.59</i>	<i>8.90</i>	<i>17.95</i>	<i>14.95</i>	<i>14.42</i>	<i>6.62</i>
Total	85.03	92.81	111.90	122.89	114.50	96.89

STEELWORKS TOTAL

Investment

TABLE XVII e
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	3.47	1.29	12.69	18.24	17.42	8.74
North Rhine/Westphalia .	32.21	37.23	23.77	20.25	25.02	20.96
Southern Germany	1.38	0.91	1.67	0.97	3.99	0.01
Saar	2.43	6.44	17.21	18.56	11.79	0.16
<i>Germany (F.R.)</i>	<i>39.49</i>	<i>45.87</i>	<i>55.34</i>	<i>58.02</i>	<i>58.22</i>	<i>29.87</i>
<i>Belgium</i>	<i>28.78</i>	<i>23.80</i>	<i>29.29</i>	<i>26.97</i>	<i>13.66</i>	<i>6.64</i>
Eastern France	6.63	7.60	11.73	26.27	25.67	29.98
Northern France	3.14	2.45	3.53	6.29	5.06	4.88
France - other areas	6.63	4.96	4.64	5.20	7.69	8.61
<i>France</i>	<i>16.40</i>	<i>15.01</i>	<i>19.90</i>	<i>37.76</i>	<i>38.42</i>	<i>43.47</i>
Italy - coastal areas	21.89	9.63	8.61	11.83	12.87	26.59
Italy - other areas	4.36	3.41	8.09	8.04	10.87	7.28
<i>Italy</i>	<i>26.25</i>	<i>13.04</i>	<i>16.70</i>	<i>19.87</i>	<i>23.74</i>	<i>33.87</i>
<i>Luxembourg</i>	<i>10.91</i>	<i>14.68</i>	<i>8.68</i>	<i>8.04</i>	<i>2.30</i>	<i>1.60</i>
<i>Netherlands</i>	<i>2.86</i>	<i>9.72</i>	<i>18.02</i>	<i>15.06</i>	<i>14.48</i>	<i>6.63</i>
Total	124.69	122.12	147.93	165.72	150.82	122.08

BLOOMING AND SLABBING MILLS
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Investment

TABLE XVIII a
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	1.53	1.25	1.20	2.17	1.53	0.95
North Rhine/Westphalia	6.50	13.11	8.15	7.24	9.22	3.40
Southern Germany	0.56	3.48	0.46	0.35	0.13	—
Saar	4.14	0.82	0.47	0.43	0.33	0.08
<i>Germany (F.R.)</i>	<i>12.82</i>	<i>18.66</i>	<i>10.28</i>	<i>10.19</i>	<i>11.21</i>	<i>4.43</i>
<i>Belgium</i>	<i>10.95</i>	<i>10.29</i>	<i>8.20</i>	<i>9.85</i>	<i>8.63</i>	<i>2.94</i>
Eastern France	2.57	4.66	19.00	25.19	34.94	34.24
Northern France	1.80	0.90	2.50	2.10	5.00	4.80
France - other areas	0.25	0.32	0.32	0.48	0.48	1.67
<i>France</i>	<i>4.62</i>	<i>5.88</i>	<i>21.82</i>	<i>27.77</i>	<i>40.42</i>	<i>40.71</i>
Italy - coastal areas	8.96	5.33	5.62	4.85	4.08	6.77
Italy - other areas	3.51	1.68	1.42	1.63	1.68	0.64
<i>Italy</i>	<i>12.47</i>	<i>7.01</i>	<i>7.04</i>	<i>6.48</i>	<i>5.76</i>	<i>7.41</i>
<i>Luxembourg</i>	<i>0.06</i>	<i>0.16</i>	<i>0.15</i>	<i>0.23</i>	<i>1.00</i>	<i>0.60</i>
<i>Netherlands</i>	<i>3.22</i>	<i>1.43</i>	<i>4.95</i>	<i>5.52</i>	<i>19.28</i>	<i>9.84</i>
Total	44.14	43.43	52.44	60.04	86.30	65.93

CONTINUOUS CASTING PLANTS

Investment

TABLE XVIII b

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	—	—	—	—	—	—
North Rhine/Westphalia ..	9.55	9.56	12.58	16.93	7.31	9.90
Southern Germany	0.02	0.20	0.05	0.80	1.02	—
Saar	0.15	1.88	8.35	10.45	7.18	—
<i>Germany (F.R.)</i>	<i>9.72</i>	<i>11.64</i>	<i>20.98</i>	<i>28.18</i>	<i>15.51</i>	<i>9.90</i>
<i>Belgium</i>	—	—	—	—	—	—
Eastern France	0.03	—	—	0.10	0.11	0.04
Northern France	—	—	0.67	0.11	1.33	1.32
France - other areas	—	—	0.01	—	1.03	0.59
<i>France</i>	<i>0.03</i>	—	<i>0.68</i>	<i>0.21</i>	<i>2.47</i>	<i>1.95</i>
Italy - coastal areas	—	0.41	0.01	0.02	0.96	—
Italy - other areas	0.26	1.07	7.11	8.91	7.81	2.92
<i>Italy</i>	<i>0.26</i>	<i>1.48</i>	<i>7.12</i>	<i>8.93</i>	<i>8.77</i>	<i>2.92</i>
<i>Luxembourg</i>	—	—	—	—	—	—
<i>Netherlands</i>	—	—	—	—	—	—
Total	10.01	13.12	28.78	37.82	26.75	14.77

SECTION MILLS

Investment

TABLE XVIII c
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	3.79	2.86	0.88	1.00	1.11	0.84
North Rhine/Westphalia	22.45	16.07	18.08	13.68	14.55	6.62
Southern Germany	0.93	2.35	0.28	0.82	3.93	0.53
Saar	1.60	2.42	3.62	13.06	17.52	4.11
<i>Germany (F.R.)</i>	<i>28.77</i>	<i>23.70</i>	<i>22.86</i>	<i>28.56</i>	<i>37.11</i>	<i>12.10</i>
<i>Belgium</i>	<i>4.93</i>	<i>3.62</i>	<i>3.00</i>	<i>1.79</i>	<i>7.38</i>	<i>6.25</i>
Eastern France	25.88	41.10	24.20	41.21	19.39	10.04
Northern France	1.35	1.47	1.39	3.32	1.96	0.10
France - other areas	8.39	6.12	3.27	4.16	3.07	2.22
<i>France</i>	<i>35.62</i>	<i>48.69</i>	<i>28.86</i>	<i>48.69</i>	<i>24.42</i>	<i>12.36</i>
Italy - coastal areas	20.57	22.49	11.86	14.66	6.82	2.24
Italy - other areas	6.33	9.23	14.06	10.78	9.75	5.61
<i>Italy</i>	<i>26.90</i>	<i>31.72</i>	<i>25.92</i>	<i>25.44</i>	<i>16.57</i>	<i>7.85</i>
<i>Luxembourg</i>	<i>5.42</i>	<i>2.58</i>	<i>0.38</i>	<i>0.74</i>	<i>1.97</i>	<i>2.20</i>
<i>Netherlands</i>	<i>7.83</i>	<i>5.97</i>	<i>3.52</i>	<i>4.04</i>	<i>0.59</i>	<i>0.10</i>
Total	109.47	116.28	84.54	109.26	88.04	40.86

FLAT-PRODUCT MILLS

Investment

TABLE XVIII d
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	7.01	5.07	2.09	2.19	2.73	1.64
North Rhine/Westphalia	77.51	84.90	31.26	33.06	36.41	18.25
Southern Germany	2.40	4.17	2.34	2.04	0.81	0.25
Saar	0.48	0.43	0.42	1.97	1.55	0.93
<i>Germany (F.R.)</i>	<i>87.40</i>	<i>94.57</i>	<i>36.11</i>	<i>39.26</i>	<i>41.50</i>	<i>21.07</i>
<i>Belgium</i>	<i>51.87</i>	<i>47.76</i>	<i>24.69</i>	<i>26.90</i>	<i>20.72</i>	<i>9.28</i>
Eastern France	13.93	4.40	6.86	9.51	9.90	5.03
Northern France	10.68	4.67	10.42	11.86	21.61	12.64
France - other areas	6.04	5.41	8.17	11.11	6.63	9.78
<i>France</i>	<i>30.65</i>	<i>14.48</i>	<i>25.45</i>	<i>32.48</i>	<i>38.14</i>	<i>27.45</i>
Italy - coastal areas	10.65	3.35	6.89	12.26	33.29	47.45
Italy - other areas	29.87	12.41	14.42	14.76	18.89	12.61
<i>Italy</i>	<i>40.53</i>	<i>15.76</i>	<i>21.31</i>	<i>27.02</i>	<i>52.18</i>	<i>60.06</i>
<i>Luxembourg</i>	<i>1.56</i>	<i>3.31</i>	<i>3.81</i>	<i>6.02</i>	<i>4.67</i>	—
<i>Netherlands</i>	<i>7.03</i>	<i>10.12</i>	<i>24.52</i>	<i>17.53</i>	<i>47.24</i>	<i>34.18</i>
Total	219.04	186.00	135.89	140.21	204.45	152.04

ROLLING-MILLS TOTAL⁽¹⁾
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Investment

TABLE XVIII e
Capital Expenditure by Area

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
				on Jan. 1, 1967 for	on Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Northern Germany	12.64	9.72	4.97	5.74	7.55	4.33
North Rhine/Westphalia	132.60	134.62	73.77	77.85	72.91	41.87
Southern Germany	4.58	18.50	4.73	5.55	7.60	1.26
Saar	8.62	6.95	13.96	26.54	27.25	5.12
<i>Germany (F.R.)</i>	<i>158.44</i>	<i>169.79</i>	<i>97.43</i>	<i>115.68</i>	<i>115.31</i>	<i>52.58</i>
<i>Belgium</i>	<i>71.71</i>	<i>64.35</i>	<i>38.26</i>	<i>43.79</i>	<i>41.39</i>	<i>24.59</i>
Eastern France	47.95	54.49	53.12	79.66	68.84	50.87
Northern France	15.07	7.33	15.73	17.65	32.43	21.36
France - other areas	17.10	16.10	19.10	22.98	15.35	15.71
<i>France</i>	<i>80.12</i>	<i>77.92</i>	<i>87.95</i>	<i>120.29</i>	<i>116.62</i>	<i>87.94</i>
Italy - coastal areas	46.61	34.32	25.15	34.83	49.66	61.48
Italy - other areas	41.85	25.88	39.77	37.53	40.70	24.20
<i>Italy</i>	<i>88.46</i>	<i>60.20</i>	<i>64.92</i>	<i>72.36</i>	<i>90.36</i>	<i>85.68</i>
<i>Luxembourg</i>	<i>7.27</i>	<i>7.92</i>	<i>4.64</i>	<i>7.58</i>	<i>7.89</i>	<i>2.80</i>
<i>Netherlands</i>	<i>19.49</i>	<i>24.83</i>	<i>34.05</i>	<i>28.10</i>	<i>67.44</i>	<i>44.29</i>
Total	425.49	405.01	327.25	387.80	439.01	297.88

(1) Including ancillary and auxiliary plants.

**STEELWORKS-OWNED
POWER-GENERATING
PLANTS AND DISTRIBUTION NETWORKS**

Investment

TABLE XIX a
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	3.55	1.89	1.93	1.70	3.54	0.85
North Rhine/Westphalia	10.12	7.03	7.40	8.45	24.47	18.38
Southern Germany	1.10	0.79	0.84	0.87	0.69	0.57
Saar	1.23	0.63	0.41	0.63	0.72	0.19
<i>Germany (F.R.)</i>	<i>16.00</i>	<i>10.34</i>	<i>10.58</i>	<i>11.65</i>	<i>29.42</i>	<i>19.99</i>
<i>Belgium</i>	<i>13.62</i>	<i>13.97</i>	<i>7.70</i>	<i>6.63</i>	<i>5.70</i>	<i>2.60</i>
Eastern France	3.26	3.04	3.08	2.68	1.76	0.45
Northern France	1.47	0.41	0.23	0.66	0.29	0.14
France - other areas	0.65	0.78	1.10	1.26	1.33	0.44
<i>France</i>	<i>5.38</i>	<i>4.23</i>	<i>4.41</i>	<i>4.60</i>	<i>3.38</i>	<i>1.03</i>
Italy - coastal areas	16.65	5.20	0.94	3.49	0.62	—
Italy - other areas	1.37	1.68	2.76	2.22	1.29	0.84
<i>Italy</i>	<i>18.02</i>	<i>6.88</i>	<i>3.70</i>	<i>5.71</i>	<i>1.91</i>	<i>0.84</i>
<i>Luxembourg</i>	<i>0.50</i>	<i>1.50</i>	<i>0.47</i>	<i>0.48</i>	<i>0.52</i>	—
<i>Netherlands</i>	<i>2.20</i>	<i>6.12</i>	<i>7.02</i>	<i>5.94</i>	<i>3.94</i>	<i>2.24</i>
Total	55.72	43.04	33.88	35.01	44.87	26.70

MISCELLANEOUS (IRON AND STEEL WORKS)

Investment

TABLE XIX b
Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
				on Jan. 1, 1967 for	on Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Northern Germany	6.79	4.12	4.89	3.99	3.28	1.02
North Rhine/Westphalia ..	31.38	23.20	12.56	13.94	18.12	8.54
Southern Germany	1.14	2.01	2.04	1.81	1.15	0.55
Saar	10.40	9.34	6.45	10.38	7.89	1.56
<i>Germany (F.R.)</i>	<i>49.71</i>	<i>38.67</i>	<i>25.94</i>	<i>30.12</i>	<i>30.44</i>	<i>11.67</i>
<i>Belgium</i>	<i>9.96</i>	<i>10.94</i>	<i>10.63</i>	<i>11.01</i>	<i>8.51</i>	<i>2.93</i>
Eastern France	30.11	15.28	17.70	17.37	25.11	20.58
Northern France	3.49	4.32	5.25	5.96	6.08	9.83
France - other areas	1.95	3.04	3.35	1.49	2.95	1.60
<i>France</i>	<i>35.55</i>	<i>22.64</i>	<i>26.30</i>	<i>24.82</i>	<i>34.14</i>	<i>32.01</i>
Italy - coastal areas	58.29	54.46	21.28	25.47	25.13	34.15
Italy - other areas	4.41	3.83	6.32	5.60	7.16	4.62
<i>Italy</i>	<i>62.70</i>	<i>58.29</i>	<i>27.60</i>	<i>31.07</i>	<i>32.29</i>	<i>38.77</i>
<i>Luxembourg</i>	<i>1.26</i>	<i>1.73</i>	<i>1.20</i>	<i>1.13</i>	<i>2.18</i>	<i>1.77</i>
<i>Netherlands</i>	<i>6.79</i>	<i>13.15</i>	<i>18.55</i>	<i>17.75</i>	<i>16.85</i>	<i>11.12</i>
Total	165.97	145.42	110.22	115.90	124.41	98.27

GENERAL SERVICES (IRON AND STEEL WORKS) TOTAL
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Investment

TABLE XIX c

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
				on Jan. 1, 1967 for	on Jan. 1, 1968 for	
	1965	1966	1967	1967	1968	1969
Northern Germany	10.34	6.01	6.82	5.69	6.82	1.87
North Rhine/Westphalia .	41.50	30.23	19.96	22.39	42.59	26.92
Southern Germany	2.24	2.80	2.88	2.68	1.84	1.12
Saar	11.63	9.97	6.86	11.01	8.61	1.75
<i>Germany (F.R.)</i>	<i>65.71</i>	<i>49.01</i>	<i>36.52</i>	<i>41.77</i>	<i>59.86</i>	<i>31.66</i>
<i>Belgium</i>	<i>23.58</i>	<i>24.91</i>	<i>18.33</i>	<i>17.64</i>	<i>14.21</i>	<i>5.53</i>
Eastern France	33.37	18.32	20.78	20.05	26.87	21.03
Northern France	4.96	4.73	5.48	6.62	6.37	9.97
France - other areas	2.60	3.82	4.45	2.75	4.28	2.04
<i>France</i>	<i>40.93</i>	<i>26.87</i>	<i>30.71</i>	<i>29.42</i>	<i>37.52</i>	<i>33.04</i>
Italy - coastal areas	74.94	59.66	22.22	28.96	25.75	34.15
Italy - other areas	5.78	5.51	9.08	7.82	8.45	5.46
<i>Italy</i>	<i>80.72</i>	<i>65.17</i>	<i>31.30</i>	<i>36.78</i>	<i>34.20</i>	<i>39.61</i>
<i>Luxembourg</i>	<i>1.76</i>	<i>3.23</i>	<i>1.67</i>	<i>1.61</i>	<i>2.70</i>	<i>1.77</i>
<i>Netherlands</i>	<i>8.99</i>	<i>19.27</i>	<i>25.57</i>	<i>23.69</i>	<i>20.79</i>	<i>13.36</i>
Total	221.69	188.46	144.10	150.91	169.28	124.97

SINTER

Production

TABLE XX

Production and Production Potential by Areas

'000,000 metric tons

Actual production	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1967							
6.2	Northern Germany	7.9	8.4	8.4	8.8	9.9	9.9
19.4	North Rhine/Westphalia	21.4	20.8	21.6	21.3	21.3	21.3
0.3	Southern Germany	0.4	0.4	0.3	0.2	0.2	0.2
4.8	Saar	6.1	6.1	6.6	6.6	6.6	6.6
30.7	Germany (F.R.)	35.8	35.7	36.9	36.9	38.0	38.0
7.7	Belgium	9.4	10.1	10.6	11.2	11.4	11.4
16.4	Eastern France	18.0	19.7	19.9	21.8	21.8	21.8
3.7	Northern France	3.7	4.3	5.0	5.0	5.1	5.3
0.9	France - other areas	1.4	1.4	1.4	1.5	1.5	1.5
21.0	France	23.1	25.4	26.3	28.3	28.4	28.6
8.0	Italy - coastal areas	8.0	9.3	9.3	9.3	10.4	10.9
0.4	Italy - other areas	0.6	0.5	0.5	0.5	0.5	0.5
8.4	Italy	8.6	9.8	9.8	9.8	10.9	11.4
4.7	Luxembourg	5.6	5.7	5.7	5.7	5.7	5.7
3.3	Netherlands	3.2	3.3	3.3	3.3	4.0	5.4
75.8	Total	85.7	90.0	92.6	95.2	98.4	100.5

PIG-IRON

Production

TABLE XXI

Production and Production Potential by Areas

'000,000 metric tons

Actual production	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1967							
4.0	Northern Germany	5.7	5.9	6.2	6.5	6.5	6.5
18.9	North Rhine/Westphalia	23.3	23.6	24.0	24.4	24.4	25.3
1.0	Southern Germany	1.8	1.7	1.5	1.4	1.4	1.4
3.5	Saar	5.0	5.1	5.3	5.4	5.4	5.4
27.4	<i>Germany (F.R.)</i>	35.8	36.3	37.0	37.7	37.7	38.6
9.0	<i>Belgium</i>	10.2	11.3	11.9	12.6	12.8	12.8
11.1	Eastern France	14.1	14.1	14.2	14.4	14.5	14.6
3.7	Northern France	4.1	4.2	4.5	5.6	5.8	5.8
0.9	France - other areas	1.1	1.0	0.9	0.9	1.0	1.0
15.7	<i>France</i>	19.3	19.3	19.6	20.9	21.3	21.4
6.9	Italy - coastal areas	7.3	8.1	8.1	8.7	9.6	10.0
0.4	Italy - other areas	0.5	0.5	0.6	0.7	0.7	0.7
7.3	<i>Italy</i>	7.8	8.6	8.7	9.4	10.3	10.7
3.9	<i>Luxembourg</i>	4.8	5.1	5.1	5.1	5.1	5.1
2.6	<i>Netherlands</i>	2.4	2.6	3.0	3.2	3.4	3.4
65.9	Total	80.3	83.2	85.3	88.9	90.6	92.0

BASIC BESSEMER STEEL

Production

TABLE XXII a
Production and Production Potential by Areas

'000,000 metric tons

Actual production	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
0.8	Northern Germany	1.2	1.2	0.6	0.2	—	—
4.4	North Rhine/Westphalia	7.4	6.4	4.9	4.0	2.1	2.1
0.6	Southern Germany	1.0	1.0	1.0	1.0	1.0	1.0
2.7	Saar	3.8	3.9	3.9	3.6	3.6	3.6
8.5	<i>Germany (F.R.)</i>	13.4	12.5	10.4	8.8	6.7	6.7
6.5	<i>Belgium</i>	7.1	7.4	7.2	6.9	6.2	6.2
8.5	Eastern France	10.2	10.5	10.6	10.9	11.0	11.1
1.1	Northern France	1.4	1.2	1.4	1.2	0.6	0.6
0.5	France - other areas	0.6	0.5	0.4	0.4	0.4	0.4
10.1	<i>France</i>	12.2	12.2	12.4	12.5	12.0	12.1
—	Italy - coastal areas	—	—	—	—	—	—
—	Italy - other areas	—	—	—	—	—	—
—	<i>Italy</i>	—	—	—	—	—	—
3.5	<i>Luxembourg</i>	4.3	4.0	3.9	3.9	3.9	3.9
—	<i>Netherlands</i>	—	—	—	—	—	—
28.6	Total	37.0	36.1	33.0	32.1	28.8	28.9

OPEN-HEARTH STEEL

Production

TABLE XXII b

Production and Production Potential by Areas

'000,000 metric tons

Actual production	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
2.6	Northern Germany	3.4	3.6	3.1	2.1	2.1	2.1
9.6	North Rhine/Westphalia	14.2	12.2	11.2	10.8	9.8	9.8
0.5	Southern Germany	0.8	0.8	0.8	0.8	0.8	0.8
0.8	Saar	1.1	1.1	1.2	1.2	1.2	1.2
13.5	<i>Germany (F.R.)</i>	19.5	17.7	16.3	14.9	13.9	13.9
0.2	<i>Belgium</i>	0.5	0.5	0.5	0.5	0.3	0.3
2.1	Eastern France	2.8	2.9	2.7	2.7	2.6	2.5
1.8	Northern France	2.4	2.2	2.2	2.2	2.2	2.2
0.4	France - other areas	0.5	0.5	0.5	0.5	0.5	0.4
4.3	<i>France</i>	5.7	5.6	5.4	5.4	5.3	5.1
3.6	Italy - coastal areas	3.7	3.9	3.9	3.7	3.1	2.7
2.0	Italy - other areas	2.4	2.4	2.4	2.4	2.4	2.4
5.6	<i>Italy</i>	6.1	6.3	6.3	6.1	5.5	5.1
—	<i>Luxembourg</i>	—	—	—	—	—	—
1.0	<i>Netherlands</i>	1.0	1.0	1.1	1.1	1.1	1.1
24.6	Total	32.8	31.1	29.6	28.0	26.1	25.5

ELECTRIC-FURNACE STEEL

Production

TABLE XXII c

Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1967							
0.2	Northern Germany	0.3	0.3	0.3	0.3	0.3	0.3
2.4	North Rhine/Westphalia	3.1	2.9	2.9	3.1	3.1	3.1
0.2	Southern Germany	0.2	0.3	0.3	0.5	0.5	0.5
0.3	Saar	0.2	0.3	0.4	0.4	0.4	0.4
3.1	<i>Germany (F.R.)</i>	3.8	3.8	3.9	4.3	4.3	4.3
0.3	<i>Belgium</i>	0.6	0.6	0.5	0.5	0.6	0.6
0.5	Eastern France	0.6	0.6	0.6	0.5	0.5	0.5
0.2	Northern France	0.3	0.3	0.4	0.4	0.5	0.5
1.2	France - other areas	1.4	1.5	1.5	1.6	1.6	1.7
1.9	<i>France</i>	2.3	2.4	2.5	2.5	2.6	2.7
0.6	Italy - coastal areas	0.6	0.7	0.7	0.7	0.7	0.7
5.4	Italy - other areas	5.9	6.1	6.4	6.6	6.7	6.8
6.0	<i>Italy</i>	6.5	6.8	7.1	7.3	7.4	7.5
0.0	<i>Luxembourg</i>	0.1	0.1	0.1	0.1	0.1	0.1
0.3	<i>Netherlands</i>	0.3	0.3	0.3	0.3	0.3	0.3
11.6	Total	13.6	14.0	14.4	15.0	15.3	15.5

LD, KALDO AND OTHER STEELS

Production

TABLE XXII d

Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1.6	Northern Germany	1.8	1.9	3.3	5.2	5.7	5.7
9.7	North Rhine/Westphalia	8.7	11.4	14.1	15.2	18.4	18.4
—	Southern Germany	0.0	—	—	—	—	—
0.3	Saar	0.3	0.4	0.5	1.0	1.0	1.0
<i>11.6</i>	<i>Germany (F.R.)</i>	<i>10.8</i>	<i>13.7</i>	<i>17.9</i>	<i>21.4</i>	<i>25.1</i>	<i>25.1</i>
<i>2.7</i>	<i>Belgium</i>	<i>2.9</i>	<i>3.9</i>	<i>5.1</i>	<i>6.1</i>	<i>7.3</i>	<i>7.3</i>
1.0	Eastern France	1.1	1.1	1.1	1.5	2.3	2.8
2.3	Northern France	2.1	2.5	2.6	3.6	4.5	4.5
0.0	France - other areas	0.0	0.1	0.2	0.3	0.4	0.4
<i>3.3</i>	<i>France</i>	<i>3.2</i>	<i>3.7</i>	<i>3.9</i>	<i>5.4</i>	<i>7.2</i>	<i>7.7</i>
4.3	Italy - coastal areas	4.9	5.7	5.7	6.4	7.8	8.7
0.0	Italy - other areas	0.0	0.0	0.0	0.2	0.2	0.3
<i>4.3</i>	<i>Italy</i>	<i>4.9</i>	<i>5.7</i>	<i>5.7</i>	<i>6.6</i>	<i>8.0</i>	<i>9.0</i>
<i>1.0</i>	<i>Luxembourg</i>	<i>0.7</i>	<i>1.6</i>	<i>1.7</i>	<i>1.7</i>	<i>1.7</i>	<i>1.7</i>
<i>2.1</i>	<i>Netherlands</i>	<i>2.1</i>	<i>2.2</i>	<i>2.4</i>	<i>3.1</i>	<i>3.5</i>	<i>3.5</i>
25.0	Total	24.6	30.8	36.7	44.3	52.8	54.3

STEEL-TOTAL

Production

TABLE XXII e

Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
5.2	Northern Germany	6.7	7.0	7.3	7.8	8.1	8.1
26.1	North Rhine/Westphalia	33.4	32.9	33.1	33.1	33.4	33.4
1.3	Southern Germany	2.0	2.1	2.1	2.3	2.3	2.3
4.1	Saar	5.4	5.7	6.0	6.2	6.2	6.2
36.7	Germany (F.R.)	47.5	47.7	48.5	49.4	50.0	50.0
9.7	Belgium	11.1	12.4	13.3	14.0	14.4	14.4
12.1	Eastern France	14.7	15.1	15.0	15.6	16.4	16.9
5.4	Northern France	6.2	6.2	6.6	7.4	7.8	7.8
2.1	France - other areas	2.5	2.6	2.6	2.8	2.9	2.9
19.6	France	23.4	23.9	24.2	25.8	27.1	27.6
8.5	Italy - coastal areas	9.2	10.3	10.3	10.8	11.6	12.1
7.4	Italy - other areas	8.3	8.5	8.8	9.2	9.3	9.5
15.9	Italy	17.5	18.8	19.1	20.0	20.9	21.6
4.5	Luxembourg	5.1	5.7	5.7	5.7	5.7	5.7
3.4	Netherlands	3.4	3.5	3.8	4.5	4.9	4.9
89.8	Total	108.0	112.0	114.6	119.4	123.0	124.2

SECTIONS

Production

TABLE XXIII a

Production and Production Potential by Areas

'000,000 metric tons

Actual production	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1.4	Northern Germany	2.6	2.8	2.9	3.0	3.0	3.0
7.4	North Rhine/Westphalia	12.5	12.7	12.6	12.4	12.6	12.6
0.8	Southern Germany	1.0	1.1	1.1	1.2	1.2	1.2
2.1	Saar	3.7	3.6	3.6	3.6	3.6	3.7
11.7	Germany (F.R.)	19.8	20.2	20.2	20.2	20.4	20.5
3.8	Belgium	4.6	4.9	5.0	5.3	5.6	5.7
5.1	Eastern France	6.0	6.1	6.4	6.9	7.1	7.1
1.3	Northern France	1.8	1.6	1.7	1.7	1.7	1.7
0.9	France - other areas	1.2	1.2	1.2	1.2	1.2	1.2
7.3	France	9.0	8.9	9.3	9.8	10.0	10.0
1.3	Italy - coastal areas	1.5	1.9	2.5	2.5	2.5	2.5
4.3	Italy - other areas	4.7	5.3	5.5	5.7	5.7	5.7
5.6	Italy	6.2	7.2	8.0	8.2	8.2	8.2
2.2	Luxembourg	2.5	2.7	2.7	2.7	2.7	2.7
0.5	Netherlands	0.7	0.7	0.7	0.7	0.8	0.8
31.1	Total	42.8	44.6	45.9	46.9	47.7	47.9

FLAT PRODUCTS⁽¹⁾

Production

TABLE XXIII b

Production and Production Potential by Areas

'000,000 metric tons

Actual production	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1.7	Northern Germany	2.7	3.1	3.2	3.2	3.2	3.2
7.6	North Rhine/Westphalia	14.2	14.4	14.6	14.9	15.0	15.0
1.2	Southern Germany	1.8	1.9	1.9	1.9	1.9	1.9
0.6	Saar	1.4	1.4	1.5	1.5	1.5	1.5
11.1	<i>Germany (F.R.)</i>	<i>20.1</i>	<i>20.8</i>	<i>21.2</i>	<i>21.5</i>	<i>21.6</i>	<i>21.6</i>
3.5	<i>Belgium</i>	<i>4.0</i>	<i>4.7</i>	<i>4.9</i>	<i>5.4</i>	<i>5.5</i>	<i>5.5</i>
4.0	Eastern France	5.0	5.0	5.1	5.3	5.3	5.3
2.3	Northern France	2.7	2.8	2.9	3.1	3.5	3.5
0.5	France - other areas	0.5	0.5	0.6	0.7	0.7	0.7
6.8	<i>France</i>	<i>8.2</i>	<i>8.3</i>	<i>8.6</i>	<i>9.1</i>	<i>9.5</i>	<i>9.5</i>
2.3	Italy - coastal areas	2.4	2.9	3.3	3.4	3.4	3.4
2.8	Italy - other areas	3.0	3.3	3.3	3.3	3.5	3.5
5.1	<i>Italy</i>	<i>5.4</i>	<i>6.2</i>	<i>6.6</i>	<i>6.7</i>	<i>6.9</i>	<i>6.9</i>
1.2	<i>Luxembourg</i>	<i>1.4</i>	<i>1.5</i>	<i>1.5</i>	<i>1.5</i>	<i>1.5</i>	<i>1.5</i>
1.7	<i>Netherlands</i>	<i>1.9</i>	<i>1.7</i>	<i>1.8</i>	<i>2.1</i>	<i>2.3</i>	<i>2.3</i>
29.4	Total	41.0	43.2	44.6	46.3	47.3	47.3

⁽¹⁾ Except coils (finished products).

FINISHED ROLLED PRODUCTS-TOTAL⁽¹⁾

Production

TABLE XXIII c

Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1967							
3.1	Northern Germany	5.3	5.9	6.1	6.2	6.2	6.2
15.0	North Rhine/Westphalia	26.7	27.1	27.2	27.3	27.6	27.6
2.0	Southern Germany	2.8	3.0	3.0	3.1	3.1	3.1
2.7	Saar	5.1	5.0	5.1	5.1	5.1	5.2
22.8	<i>Germany (F.R.)</i>	<i>39.9</i>	<i>41.0</i>	<i>41.4</i>	<i>41.7</i>	<i>42.0</i>	<i>42.1</i>
7.3	<i>Belgium</i>	<i>8.6</i>	<i>9.6</i>	<i>9.9</i>	<i>10.7</i>	<i>11.1</i>	<i>11.2</i>
9.1	Eastern France	11.0	11.1	11.5	12.2	12.4	12.4
3.6	Northern France	4.5	4.4	4.6	4.8	5.2	5.2
1.4	France - other areas	1.7	1.7	1.8	1.9	1.9	1.9
14.1	<i>France</i>	<i>17.2</i>	<i>17.2</i>	<i>17.9</i>	<i>18.9</i>	<i>19.5</i>	<i>19.5</i>
3.6	Italy - coastal areas	3.9	4.8	5.8	5.9	5.9	5.9
7.1	Italy - other areas	7.7	8.6	8.8	9.0	9.2	9.2
10.7	<i>Italy</i>	<i>11.6</i>	<i>13.4</i>	<i>14.6</i>	<i>14.9</i>	<i>15.1</i>	<i>15.1</i>
3.4	<i>Luxembourg</i>	<i>3.9</i>	<i>4.2</i>	<i>4.2</i>	<i>4.2</i>	<i>4.2</i>	<i>4.2</i>
2.2	<i>Netherlands</i>	<i>2.6</i>	<i>2.4</i>	<i>2.5</i>	<i>2.8</i>	<i>3.1</i>	<i>3.1</i>
60.5	Total	88.8	87.8	90.5	93.2	95.0	95.2

⁽¹⁾ Except coils (finished products).

HEAVY AND LIGHT SECTIONS (INCLUDING TUBE ROUNDS AND SQUARES)

Production

TABLE XXIV a
Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1.2	Northern Germany	2.4	2.8	2.6	2.7	2.7	2.7
5.3	North Rhine/Westphalia	9.5	9.7	9.3	9.0	9.2	9.2
0.8	Southern Germany	0.9	1.0	1.0	1.0	1.0	1.0
1.6	Saar	3.1	3.0	3.0	3.0	3.0	3.1
8.9	<i>Germany (F.R.)</i>	15.9	16.3	15.9	15.7	15.9	16.0
2.8	<i>Belgium</i>	3.4	3.7	3.8	4.0	4.3	4.4
3.6	Eastern France	4.2	4.4	4.7	5.1	5.3	5.3
1.1	Northern France	1.5	1.3	1.3	1.3	1.3	1.3
0.7	France - other areas	0.9	0.9	0.9	0.9	0.9	0.9
5.4	<i>France</i>	6.6	6.6	6.9	7.3	7.5	7.5
1.1	Italy - coastal areas	1.3	1.6	2.2	2.2	2.2	2.2
3.7	Italy - other areas	3.9	4.4	4.5	4.7	4.7	4.7
4.8	<i>Italy</i>	5.2	6.0	6.7	6.9	6.9	6.9
1.9	<i>Luxembourg</i>	2.2	2.4	2.4	2.4	2.4	2.4
0.3	<i>Netherlands</i>	0.3	0.3	0.3	0.3	0.4	0.4
24.1	Total	33.6	35.3	36.0	36.6	37.4	37.6

WIRE-ROD

Production

TABLE XXIV b

Production and Production Potential by Areas

'000,000 metric tons

Actual production	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
0.2	Northern Germany	0.2	0.2	0.3	0.3	0.3	0.3
2.1	North Rhine/Westphalia	3.0	3.0	3.3	3.4	3.4	3.4
0.0	Southern Germany	0.1	0.1	0.1	0.2	0.2	0.2
0.5	Saar	0.6	0.6	0.6	0.6	0.6	0.6
2.8	<i>Germany (F.R.)</i>	3.9	3.9	4.3	4.5	4.5	4.5
1.0	<i>Belgium</i>	1.2	1.2	1.2	1.3	1.3	1.3
1.5	Eastern France	1.8	1.7	1.7	1.8	1.8	1.8
0.2	Northern France	0.3	0.3	0.4	0.4	0.4	0.4
0.2	France - other areas	0.3	0.3	0.3	0.3	0.3	0.3
1.9	<i>France</i>	2.4	2.3	2.4	2.5	2.5	2.5
0.2	Italy - coastal areas	0.2	0.3	0.3	0.3	0.3	0.3
0.6	Italy - other areas	0.8	0.9	1.0	1.0	1.0	1.0
0.8	<i>Italy</i>	1.0	1.2	1.3	1.3	1.3	1.3
0.3	<i>Luxembourg</i>	0.3	0.3	0.3	0.3	0.3	0.3
0.2	<i>Netherlands</i>	0.4	0.4	0.4	0.4	0.4	0.4
7.0	Total	9.2	9.3	9.9	10.3	10.3	10.3

HOOP AND STRIP AND TUBE STRIP
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Production

TABLE XXIV c

Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
0.1	Northern Germany	0.1	0.1	0.1	0.1	0.1	0.1
1.8	North Rhine/Westphalia	4.0	3.8	3.7	3.8	3.8	3.8
0.0	Southern Germany	0.0	0.0	0.0	0.0	0.0	0.0
0.2	Saar	0.4	0.4	0.4	0.4	0.4	0.4
2.1	<i>Germany (F.R.)</i>	4.5	4.3	4.2	4.3	4.3	4.3
0.4	<i>Belgium</i>	0.6	0.6	0.6	0.7	0.7	0.7
1.0	Eastern France	1.2	1.2	1.2	1.2	1.2	1.2
0.0	Northern France	0.0	0.0	0.0	0.0	0.0	0.0
0.0	France - other areas	0.0	0.0	0.0	0.0	0.0	0.0
1.0	<i>France</i>	1.2	1.2	1.2	1.2	1.2	1.2
0.4	Italy - coastal areas	0.5	0.7	0.8	0.8	0.8	0.8
0.4	Italy - other areas	0.5	0.6	0.6	0.6	0.6	0.6
0.8	<i>Italy</i>	1.0	1.3	1.4	1.4	1.4	1.4
0.7	<i>Luxembourg</i>	0.8	0.9	0.9	0.9	0.9	0.9
0.1	<i>Netherlands</i>	0.1	0.1	0.1	0.2	0.2	0.2
5.1	Total	8.2	8.4	8.4	8.7	8.7	8.7

**PLATE \geq 3 mm.
(INCLUDING
WIDE FLAT STEEL)⁽¹⁾**

Production

TABLE XXIV d

Production and Production Potential by Areas

'000,000 metric tons

Actual pro- duction	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
0.7	Northern Germany	1.2	1.3	1.3	1.3	1.3	1.3
3.1	North Rhine/Westphalia	5.5	5.9	6.0	6.2	6.3	6.3
0.1	Southern Germany	0.1	0.1	0.1	0.1	0.1	0.1
0.4	Saar	1.0	1.0	1.1	1.1	1.1	1.1
4.3	<i>Germany (F.R.)</i>	7.8	8.3	8.5	8.7	8.8	8.8
1.1	<i>Belgium</i>	1.2	1.4	1.5	1.6	1.7	1.7
0.9	Eastern France	1.0	1.1	1.1	1.1	1.1	1.1
0.7	Northern France	0.7	0.8	0.8	0.9	1.0	1.0
0.1	France - other areas	0.1	0.1	0.2	0.2	0.2	0.2
1.7	<i>France</i>	1.8	2.0	2.1	2.2	2.3	2.3
1.1	Italy - coastal areas	0.9	1.2	1.4	1.4	1.4	1.4
0.5	Italy - other areas	0.5	0.6	0.7	0.7	0.8	0.8
1.6	<i>Italy</i>	1.4	1.8	2.1	2.1	2.2	2.2
0.2	<i>Luxembourg</i>	0.3	0.3	0.3	0.3	0.3	0.3
0.4	<i>Netherlands</i>	0.5	0.4	0.4	0.5	0.6	0.6
9.3	Total	13.0	14.2	14.9	15.4	15.9	15.9

⁽¹⁾ Except coils (finished products).

HOT-ROLLED SHEET < 3 mm.⁽¹⁾
--

Production

TABLE XXIV e

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1967	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
0.0	Northern Germany	0.0	0.0	0.0	0.0	0.0	0.0
0.2	North Rhine/Westphalia	0.6	0.4	0.4	0.4	0.4	0.4
0.1	Southern Germany	0.2	0.2	0.1	0.1	0.1	0.1
—	Saar	0.0	—	—	—	—	—
0.3	<i>Germany (F.R.)</i>	0.8	0.6	0.5	0.5	0.5	0.5
0.1	<i>Belgium</i>	0.2	0.2	0.2	0.2	0.2	0.2
0.1	Eastern France	0.3	0.2	0.2	0.2	0.2	0.2
0.1	Northern France	0.1	0.1	0.1	0.2	0.2	0.2
0.1	France - other areas	0.1	0.1	0.1	0.1	0.1	0.1
0.3	<i>France</i>	0.5	0.4	0.4	0.5	0.5	0.5
0.1	Italy - coastal areas	0.2	0.2	0.2	0.2	0.2	0.2
0.0	Italy - other areas	0.1	0.1	0.0	0.0	0.0	0.0
0.1	<i>Italy</i>	0.3	0.3	0.2	0.2	0.2	0.2
0.0	<i>Luxembourg</i>	0.0	0.0	0.0	0.0	0.0	0.0
0.0	<i>Netherlands</i>	0.0	0.0	0.0	0.0	0.0	0.0
0.8	Total	1.8	1.5	1.3	1.4	1.4	1.4

⁽¹⁾ Except coils (finished products).

COLD-REDUCED SHEET < 3 mm.
--

Production

TABLE XXIV f

Production and Production by Areas

'000,000 metric tons

Actual production	Area	Production potential		Expected production potential			
		1966	1967	1968	1969	1970	1971
1967							
0.9	Northern Germany	1.4	1.7	1.8	1.8	1.8	1.8
2.5	North Rhine/Westphalia	4.1	4.3	4.5	4.5	4.5	4.5
1.0	Southern Germany	1.5	1.6	1.7	1.7	1.7	1.7
—	Saar	—	—	—	—	—	—
4.4	<i>Germany (F.R.)</i>	7.0	7.6	8.0	8.0	8.0	8.0
1.9	<i>Belgium</i>	2.0	2.5	2.6	2.9	2.9	2.9
2.0	Eastern France	2.5	2.5	2.6	2.8	2.8	2.8
1.5	Northern France	1.9	1.9	2.0	2.0	2.3	2.3
0.3	France - other areas	0.3	0.3	0.3	0.4	0.4	0.4
3.8	<i>France</i>	4.7	4.7	4.9	5.2	5.5	5.5
0.7	Italy - coastal areas	0.8	0.8	0.9	1.0	1.0	1.0
1.9	Italy - other areas	1.9	2.0	2.0	2.0	2.1	2.1
2.6	<i>Italy</i>	2.7	2.8	2.9	3.0	3.1	3.1
0.3	<i>Luxembourg</i>	0.3	0.3	0.3	0.3	0.3	0.3
1.2	<i>Netherlands</i>	1.3	1.2	1.3	1.4	1.5	1.5
14.2	Total	18.0	19.1	20.0	20.8	21.3	21.3

HOT WIDE-STRIP MILLS

Investment
(already included in the
capital expenditure for the flat-
product mills: Table XVIII d)

TABLE XXV a
Capital Expenditure by Areas

'000,000 dollars (E.M.A. units of account)

Area	Actual expenditure			Estimated expenditure (projects in progress, or approved)		
	1965	1966	1967	on Jan. 1, 1967 for	on Jan. 1, 1968 for	
				1967	1968	1969
Northern Germany	2.62	1.56	0.33	0.20	1.88	1.17
North Rhine/Westphalia	33.56	37.21	10.81	14.82	13.80	2.95
Southern Germany	—	—	—	—	—	—
Saar	—	—	—	—	—	—
<i>Germany (F.R.)</i>	<i>36.18</i>	<i>38.77</i>	<i>11.14</i>	<i>15.02</i>	<i>15.63</i>	<i>4.12</i>
<i>Belgium</i>	<i>22.90</i>	<i>25.78</i>	<i>18.07</i>	<i>15.32</i>	<i>8.89</i>	<i>3.77</i>
Eastern France	—	1.09	2.17	—	3.69	2.41
Northern France	4.50	1.70	7.10	7.30	11.20	2.80
France - other areas	0.06	—	—	—	—	—
<i>France</i>	<i>4.56</i>	<i>2.79</i>	<i>9.27</i>	<i>7.30</i>	<i>14.89</i>	<i>5.21</i>
Italy - coastal areas	6.70	0.61	0.04	0.89	3.45	6.20
Italy - other areas	14.53	4.09	3.34	3.36	1.51	0.03
<i>Italy</i>	<i>21.23</i>	<i>4.70</i>	<i>3.38</i>	<i>4.25</i>	<i>4.96</i>	<i>6.23</i>
<i>Luxembourg</i>	<i>0.55</i>	<i>0.50</i>	<i>0.16</i>	<i>0.61</i>	<i>0.04</i>	—
<i>Netherlands</i>	<i>1.15</i>	<i>6.31</i>	<i>22.34</i>	<i>14.90</i>	<i>43.24</i>	<i>29.38</i>
Total	86.57	78.85	64.36	57.40	87.70	48.71

COILS⁽¹⁾

Production

TABLE XXV b

Production and Production Potential by Areas

'000,000 metric tons

Actual production		Area	Production potential		Expected production potential			
Total	of which coils (finished products)		1966	1967	1968	1969	1970	1971
1.9	0.5	Northern Germany	2.8	2.9	3.0	3.1	3.1	3.1
5.6	1.2	North Rhine/Westphalia	6.3	7.5	8.1	8.4	8.4	8.4
—	—	Southern Germany	—	—	—	—	—	—
—	—	Saar	—	—	—	—	—	—
7.5	1.7	<i>Germany (F.R.)</i>	9.1	10.4	11.1	11.5	11.5	11.5
2.9	0.3	<i>Belgium</i>	2.8	4.0	4.3	4.7	4.9	4.9
2.7	0.1	Eastern France	2.6	2.7	2.7	3.0	3.0	3.0
2.5	0.3	Northern France	2.8	2.7	2.8	3.4	3.7	3.7
0.0	0.0	France - other areas	0.1	—	—	—	—	—
5.2	0.4	<i>France</i>	5.5	5.4	5.5	6.4	6.7	6.7
3.3	0.6	Italy - coastal areas	3.4	4.1	4.1	4.2	4.8	4.8
0.7	0.0	Italy - other areas	0.8	1.1	1.2	1.2	1.2	1.2
4.0	0.6	<i>Italy</i>	4.2	5.2	5.3	5.4	6.0	6.0
0.3	0.0	<i>Luxembourg</i>	0.4	0.5	0.5	0.5	0.5	0.5
1.6	0.1	<i>Netherlands</i>	1.6	1.6	1.7	2.0	2.5	2.7
21.5	3.1	Total	23.6	27.1	28.4	30.5	32.1	32.3

(1) Treaty products obtained by transformation of hot-rolled coils are included in the tables XXIII b and c, XXIV c, d, e and f.