EUROPEAN COAL
AND STEEL COMMUNITY

THE HIGH AUTHORITY

Investment in the Community Coalmining and Iron and Steel Industries

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REPORT ON THE 1960 SURVEY

Position as at January 1, 1960

SEPTEMBER 1960

CONTENTS

I — GENERAL REMARKS

For the eighth year in succession, the High Authority has conducted a survey of past and future investment by Community enterprises as at January 1, 1960, and its foreseeable effects on production potential. Annex I following contains a classification of the development programmes covered by the survey; Annex II lists the basic definitions adopted.

As in previous years, the survey covers all but a few very small enterprises accounting among them for less than 1% of the Community's total coal production and less than 2% of its total steel production (see Annex II).

Capital expenditure entered by Community enterprises on the credit side of their balance-sheets over the eight years 1952-59 totalled 8,490 million dollar units of account, representing an annual average of 1,060 million (53.9% in the iron and steel industry, 42.1% in the coal-mines, 3.5% in the iron-ore mines, 0.5% in the B.K.B. plants).

Expenditure in most sectors touched a peak in 1957. The drop recorded in 1958 and 1959 was sufficiently limited for the levels concerned still to work out higher than the average level of investment between 1952 and 1956. The forecasts drawn up at January 1, 1960, for the coming year suggest a spectacular upsurge, at any rate in the case of the iron-ore mines and, more particularly, the iron and steel industry.

TABLE 1

General Trend in Investment Projects in Recent Years

Indices

Sector	Projects completed				Projects planned for 1960
	1952-56 (annual average)	1957	1958	1959	
Coalmining industry	100	105	105	90	97
Iron-ore mines	100	154	127	123	142
Iron and steel industry	100	134	122	112	155
All E.C.S.C. industries	**100**	**121**	**114**	**103**	**131**

Table 2 and Fig. 1 show, in absolute figures, the capital expenditure effected and planned in each of the main industries from 1954 to 1961. Fig. 2 indicates a satisfactory correlation between the producers' forecasts at the beginning of 1959 and the actual results recorded, namely 79% in the coalmining industry, 91% in the iron-ore mines and 101% in the iron and steel industry. The 1952 and 1953 figures have not been reproduced from previous reports, as they were less accurately computed.

TABLE 2

Capital Expenditure in the Community Industries 1954-1961

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

Sector	Actual expenditure						Estimated expenditure	
	1954	1955	1956	1957	1958	1959	1960	1961
Coalmining industry	445	408	404	471	469	404	437	385
Plants producing B.K.B. and low-temperature brown-coal coke .	5	8	5	2	5	5	9	6
Iron-ore mines	30	31	44	50	41	40	46	41
Iron and steel industry	453	524	570	708	644	590	838(1)	588(1)
Total	**933**	**971**	**1 023**	**1 231**	**1 159**	**1 039**	**1 330**	**1 020**

(1) Expenditure only on projects in progress (A) or approved (B) (see Annex I, page 29).

Notwithstanding the large amounts invested, the production potential of the coalmining industry shows a slow but steady decline, attributable in part to the smaller number of working days taken as a basis for calculation in certain coalfields. The investment effected seems likely, on the other hand, to produce quite a notable rate of expansion for iron ore, an outstanding one for crude steel, and a fairly considerable one for pig-iron.

TABLE 3

Actual Production and Production Potential

Product	Actual production			Production potential		
	1952 ('000,000 m.t.)	Mean annual rate of increase in %	1959 ('000,000 m.t.)	1959 ('000,000 m.t.)	Mean annual rate of increase in %	1963 ('000,000 m.t.)
Hard coal (1)	237.4	*— 0.2*	233.7	262.4	*— 0.4*	257.9
B.K.B. and low-temperature brown-coal coke	16.5	*— 1.3*	15.0	15.3	*— 1.5*	14.4
Iron ore	65.3	*+ 4.4*	88.3	97.2	*+ 1.9*	104.9
Pig-iron	34.7	*+ 4.3*	46.7	52.9	*+ 5.2*	64.8
Crude steel	41.8	*+ 6.1*	63.2	70.6	*+ 3.8*	81.9

(1) Exclusive of the "small mines" (see Annex II, page 32).

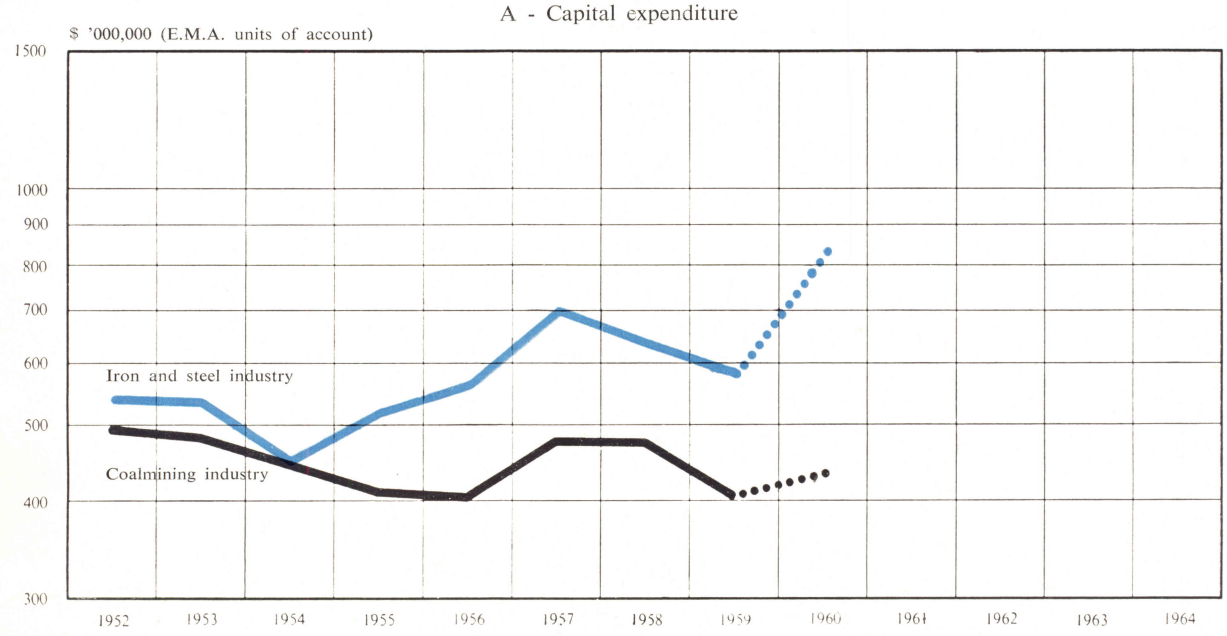
The sections following describe the trend in capital expenditure and production potential in the different Community industries.

The figures given are broken down by areas in the tables in Annex III.

FIGURE 1

Investment in the Coalmining and Iron and Steel Industries

A - Capital expenditure



B - Actual production and production potential

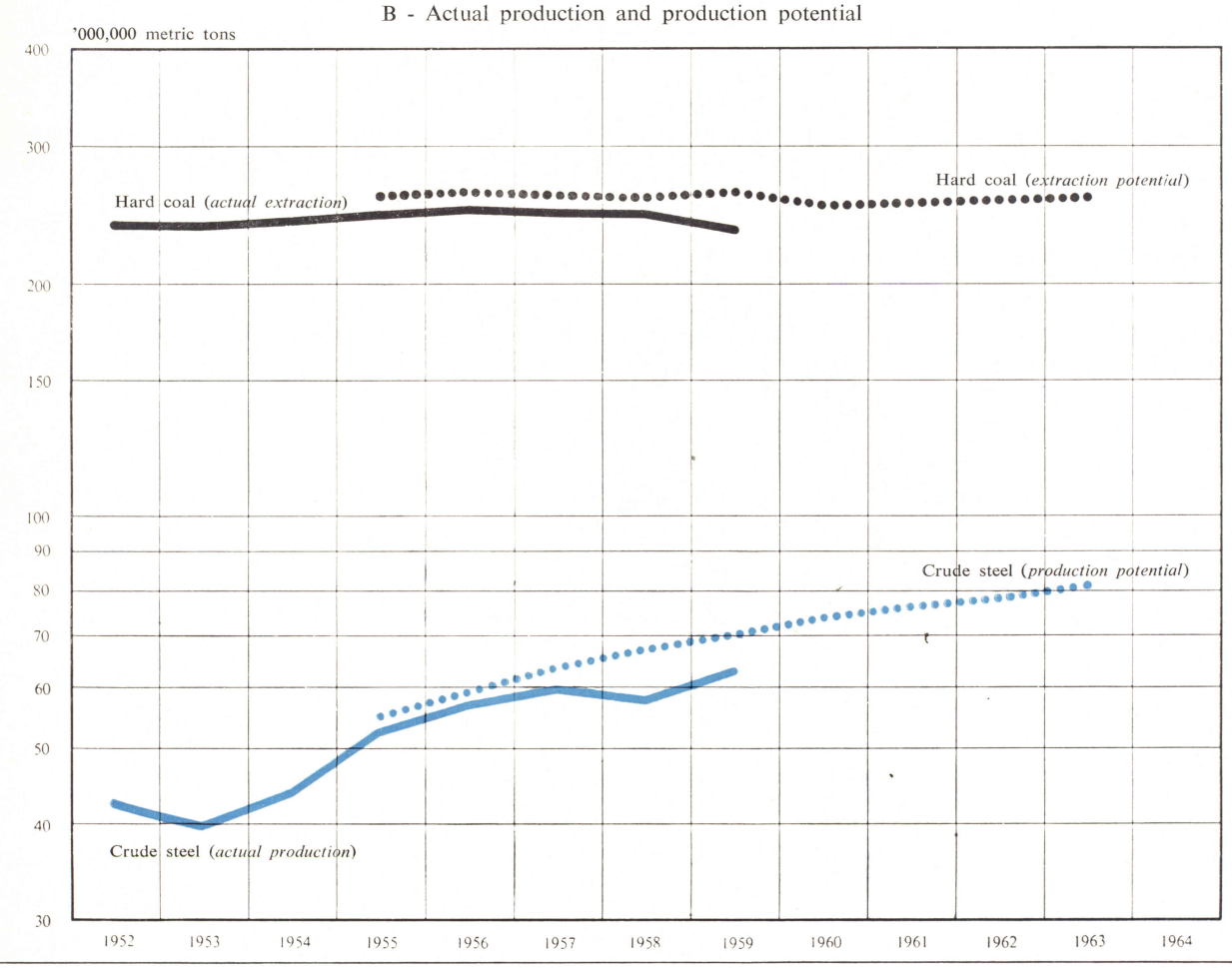
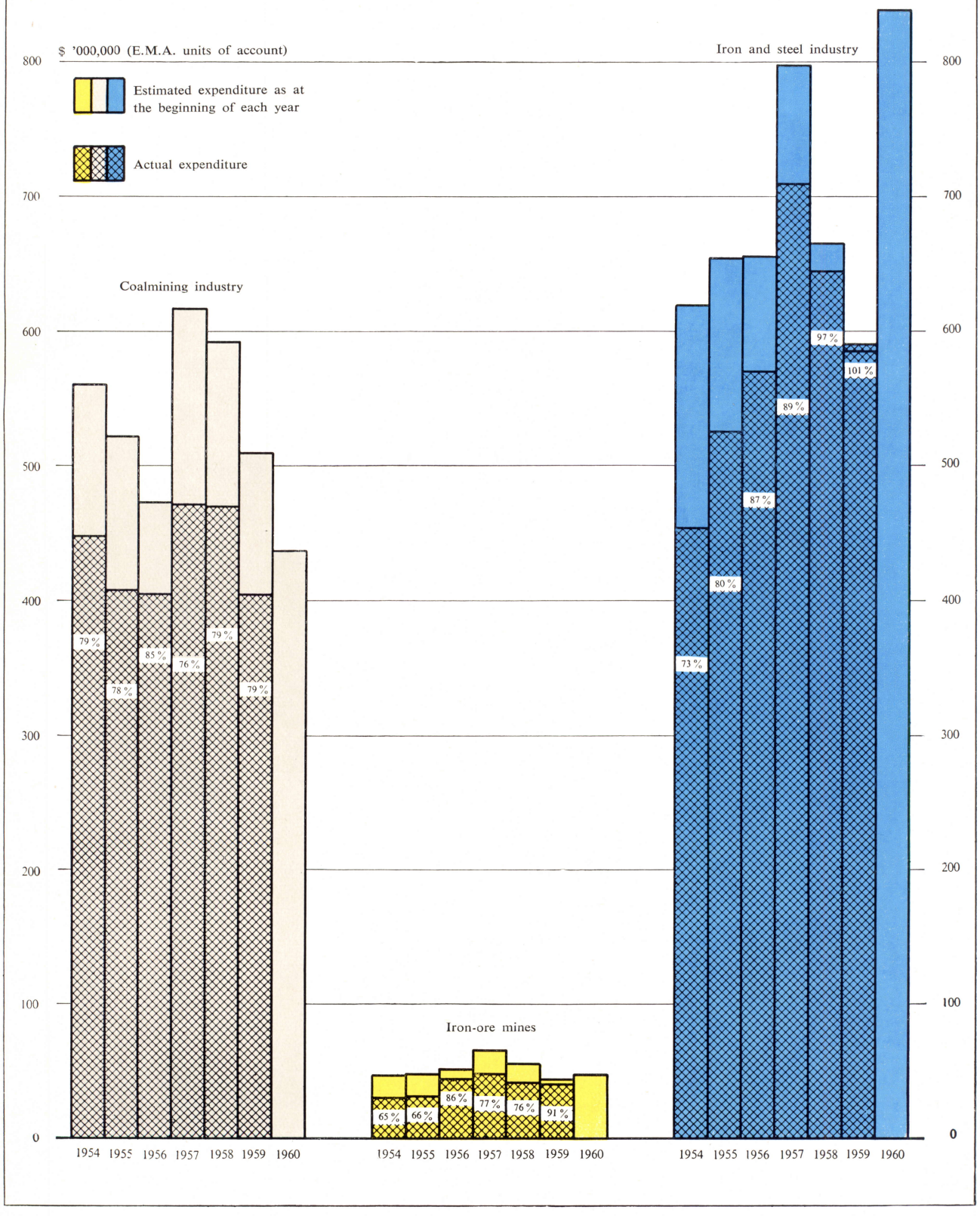


FIGURE 2

Comparison of Actual Capital Expenditure and Estimated Capital Expenditure as at the Beginning of Each Year
(Out-Turn Percentages)



II — THE COALMINING INDUSTRY

Table 4 shows the figures for the whole coalmining industry, broken down under collieries, coking-plants, briquetting-plants, and power-stations and other generating plant. The figures for the plants producing B.K.B. and low-temperature brown-coal coke are given separately.

TABLE 4

Capital Expenditure in the Coalmining Industry, 1954-1961

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

Sector	Actual expenditure						Estimated expenditure	
	1954	1955	1956	1957	1958	1959	1960	1961
Collieries	242	257	249	281	268	227	279	228
Coking-plants, mine-owned	68	52	46	59	63	54	42	38
Coking-plants, independent	19	12	11	9 (1)	9 (1)	4 (1)	3 (1)	4 (1)
Briquetting-plants	4	7	4	5	4	6	9	6
Pithead power-stations and other power-generating plant	112	80	94	117	125	113	104	109
of which:								
Pithead power-stations	(89)	(64)	(81)	(102)	(111)	(103)	(92)	(100)
Other power-generating plant	(23)	(16)	(13)	(15)	(14)	(10)	(12)	(9)
Total	**445**	**408**	**404**	**471**	**469**	**404**	**437**	**385**
Plants producing B.K.B. and low-temperature brown-coal coke	5	8	5	2	5	5	9	6

(1) Exclusive of Gaz de France.

TABLE 5

Trend in Capital Expenditure in the Coalmining Industry

Indices

Sector	Actual expenditure				Estimated expenditure 1960
	Average 1952-1956	1957	1958	1959	
Collieries	100	111	106	90	110
Coking-plants, mine-owned and independent	100	83	87	70	55
Briquetting-plants	100	109	76	120	185
Pithead power-stations and other power-generating plant	100	109	116	105	97
Overall index	**100**	**105**	**105**	**90**	**97**

a) Collieries

Capital expenditure on the collieries remained singularly constant from 1952 to 1956, in the region of 1 unit of account per metric ton of coal produced. In 1957 it reached 1.14 units per ton, and in 1958 1.09; in 1959 it stood at only 0.98. The absolute 1959 figure, 227.4 million units of account, is the lowest ever recorded in the High Authority's surveys: the level shows a decline in practically all the coalfields, and is in Belgium not much above half the average for the preceding years. Forecasts for 1960 are low in respect of the Belgian collieries; as regards the other coalfields they are much the same as those for 1959.

Capital expenditure from 1954 to 1959 may be broken down by categories of installation as follows:

TABLE 6

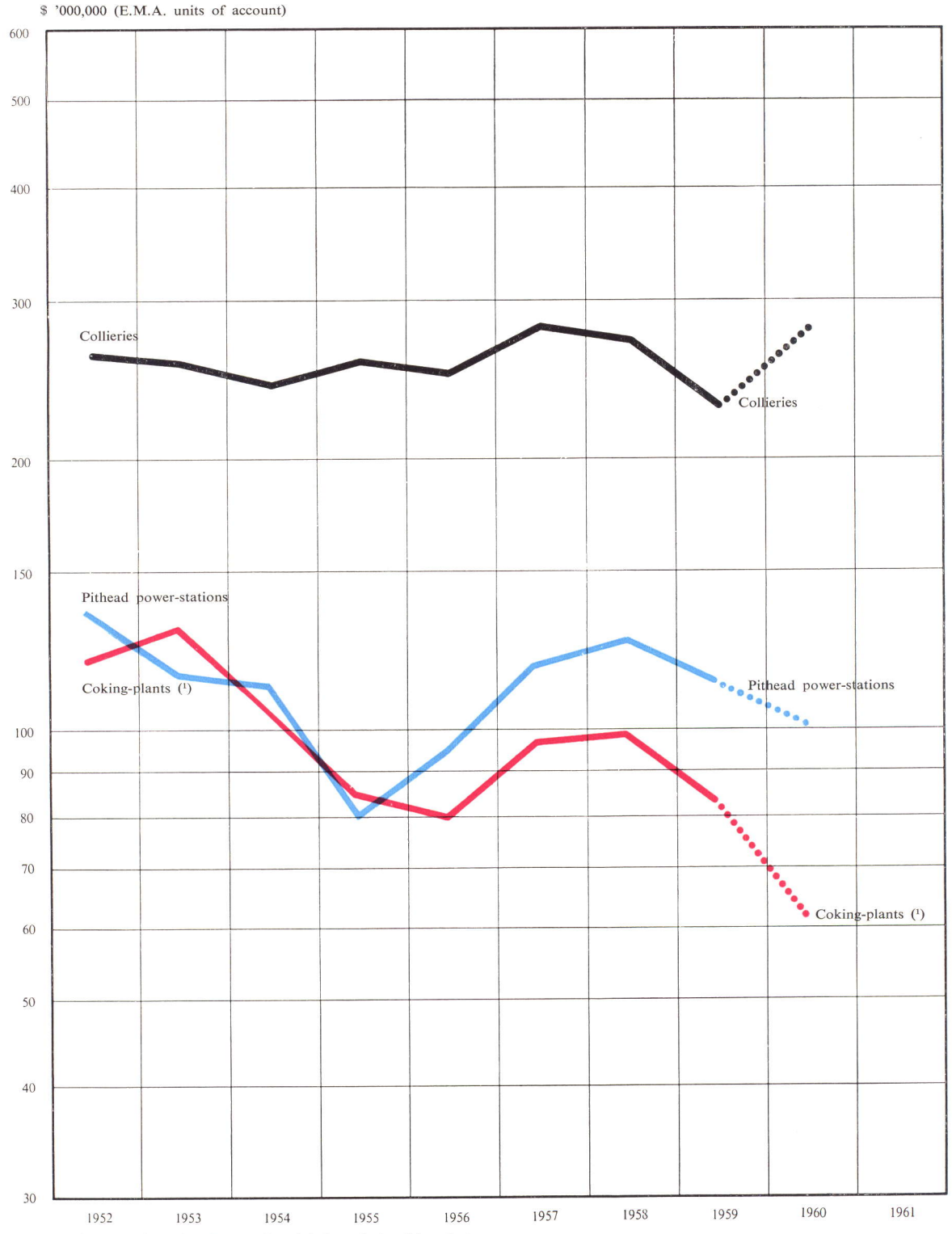
Capital Expenditure on Collieries, 1954-1959

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

Category	1954	1955	1956	1957	1958	1959
Shafts and underground workings	43.5	54.9	57.5	63.8	67.0	50.6
Machines and mechanical equipment below ground	49.0	53.8	57.7	68.3	62.9	49.9
Haulage and winding equipment	22.6	20.1	18.8	22.4	20.6	24.1
Screening and washing	68.4	64.9	50.4	57.4	50.6	47.3
Other surface installations	31.4	35.1	34.4	36.1	33.0	30.1
Buildings, etc.	26.9	27.6	29.8	33.5	34.3	25.4
Total	**241.8**	**256.4**	**248.6**	**281.5**	**268.4**	**227.4**

FIGURE 3

Capital Expenditure in the Coalmining Industry



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

As in previous years, expenditure on extraction proper accounts for slightly over 50 % of the whole.

The following table shows the expected development of production potential. For the Ruhr and Southern Belgium the forecasts are below last year's. The figures are not fully comparable, as the number of working days which is used as a basis varies from one country and from one coalfield to another: 262 in Germany (296 in the Saar), 285 in Belgium, 300 in France. Further, pit closures are scheduled to take place in a number of coalfields.

TABLE 7

Development of Hard-Coal Extraction Potential

'000,000 metric tons

Extraction		Extraction potential				
1952	1959	1959	1960	1961	1962	1963
237.4	233.7	262.4	251.5	253.7	255.7	257.9

Tables I and V in Annex III give a detailed breakdown of expenditure and of the expected development of extraction potential. As in last year's survey, mines producing only small tonnages are excluded: the total production of these small mines in 1959 amounted to approximately 2 million metric tons.

b) Coking-Plants

Expenditure during 1959 on mine-owned coking-plants was lower than during 1958; it remained above the levels for 1955 and 1956, but the forecasts for 1960 are below the figures recorded for any previous year.

Specific capital expenditure per metric ton of coke produced in the mine-owned coking-plants amounted in 1959 to 1.19 units of account as against 1.28 (1) in 1958, but the tonnage to which this figure relates is itself shrinking (45.35 million metric tons in 1959 as against 49.7 million in 1958).

As regards the steelworks-owned coking-plants (which we include here in order to provide a full picture of the carbonization sector), expenditure continued high during 1959, but the forecasts suggest that it will be low in 1960 and 1961.

The following table shows the trend in capital expenditure on steelworks-owned coking-plants. The forecasts for 1960 and 1961 have been worked out twice, first as covering only projects already in progress or approved (categories A and B), and secondly as including projects only contemplated (categories A, B and C). Table 17 incorporates this trend, but for 1960 and 1961 indicates only expenditure on categories A and B.

(1) Corrected figures.

TABLE 8

Capital Expenditure on Steelworks-Owned Coking-Plants, 1954-1961

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

1954	1955	1956	1957	1958	1959	Forecasts 1960		Forecasts 1961	
						Cat. A+B	Cat. A+B+C	Cat. A+B	Cat. A+B+C
18.0	19.9	22.3	28.0	24.6	24.7	13.8	16.4	11.1	20.4

The breakdown of expenditure from 1954 to 1959 by categories of plant is as follows.

TABLE 9

Capital Expenditure on Mine-Owned, Independent and Steelworks-Owned Coking-Plants, 1954-1961

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

Category	1954	1955	1956	1957	1958	1959
Coke ovens	46.5	32.2	32.3	41.8	41.7	32.1
of which:						
New plant	(31.9)	(19.3)	(17.3)	(24.7)	(21.8)	(14.2)
Repairs and replacements	(14.6)	(12.9)	(15.0)	(17.1)	(19.9)	(17.9)
Gas producers and other gasification plant	5.7	3.4	2.0	1.3	1.3	0.7
Coke-oven gas and by-product plant	27.1	28.9	25.9	34.8	29.6	26.8
Miscellaneous	26.0	19.9	19.4	18.1	24.2	23.3
Total	**105.3**	**84.4**	**79.6**	**96.0**	**96.8**	**82.9**

The expected development of production potential is shown in the table below. While the mine-owned plants show only a small increase, and the independent plants none at all, the production potential of the steelworks-owned plants is expected by 1963 to be appreciably greater than in 1959.

TABLE 10

Development of Coke Production Potential

'000,000 metric tons

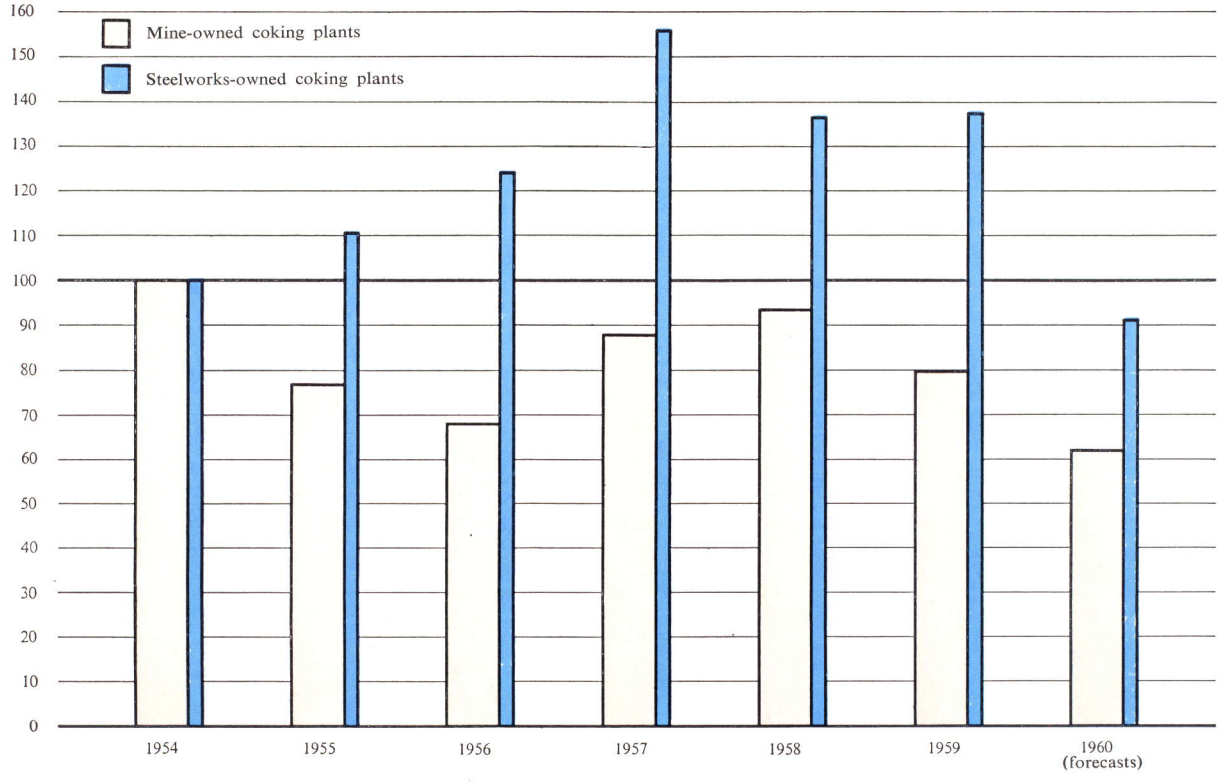
	Actual production		Production potential				
	1952	1959	1959	1960	1961	1962	1963
Mine-owned plants	42.2	45.4	54.3	56.0	57.0	58.0	58.6
Independent plants	3.2	3.2	4.2	4.4	4.5	4.4	4.5
Steelworks-owned plants (1)	15.8	19.8	22.6	23.7	24.1	24.5	25.0
Total	**61.2**	**68.4**	**81.1**	**84.1**	**85.6**	**86.9**	**88.1**

(1) Cf. Table 18, page 18. The production-potential figures above for the steelworks-owned plants are calculated on the same basis as for the other types of plant, *viz.* including not only projects in progess or approved (categories A and B) but also projects only contemplated (category C).

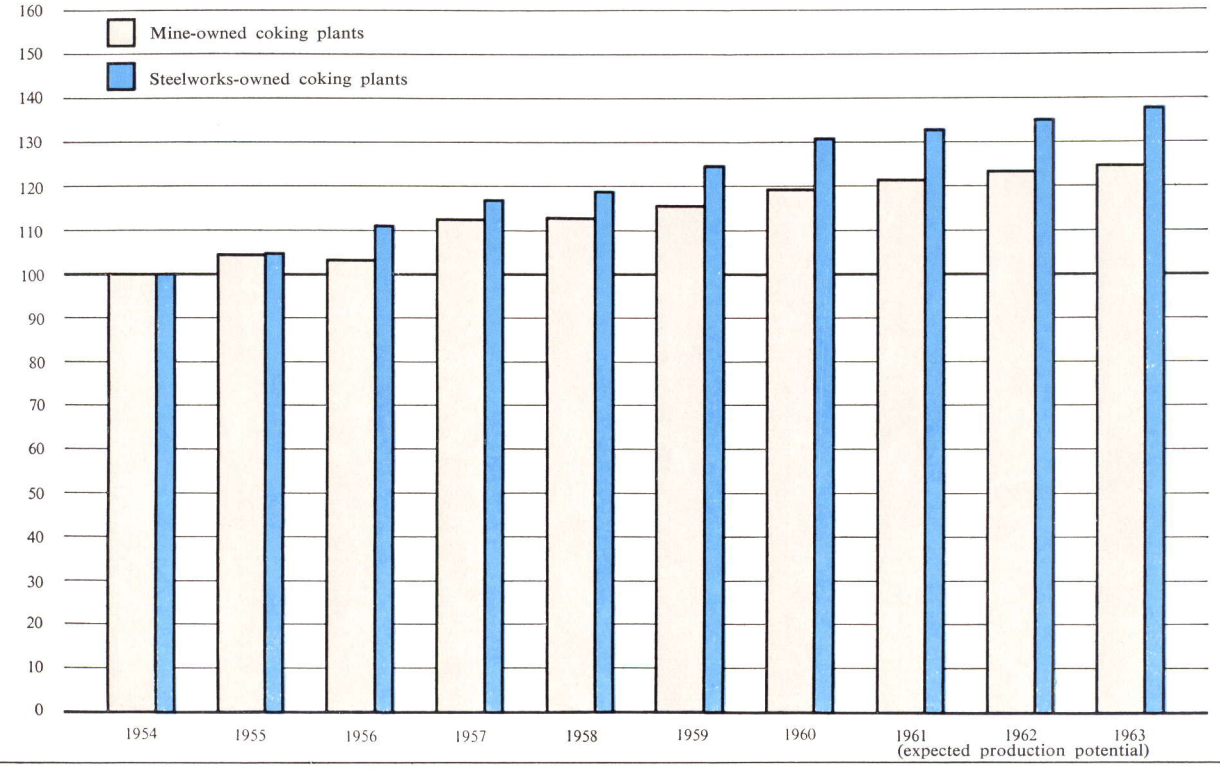
FIGURE 4

Investment in the mine-owned and steelworks-owned coking-plants (1)
(1954 = 100)

A - Capital Expenditure



B - Production Potential



(1) In the case of both steelworks-owned and mine-owned coking plants forecasts cover capital projects completed as well as those in progress (category A), approved (category B) or merely planned (category C).

The tables annexed give a detailed breakdown of expenditure and of the expected development of capacity, together with technical notes as to the operation of the coking-plants from 1954 to 1959.

c) Briquetting-Plants

Capital expenditure is very much lower in this sector than elsewhere, and is practically nil as regards those plants which are not actually colliery-owned.

Details will be found in the tables annexed.

d) Pithead Power-stations

Both actual and estimated expenditure continue high in this sector. As in previous surveys, we have included all expenditure on the so-called " shared " power-stations, *i.e.* those jointly owned by collieries and other bodies.

TABLE 11

Capital Expenditure on Pithead Power-Stations and Other Power-Generating Plant at Mines, by Types of Installation, 1954-1959

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

Type of Installation	1954	1955	1956	1957	1958	1959
Pithead power-stations						
Steam-raising plant	41.1	26.9	26.9	36.2	42.9	46.6
Power-generating plant and distribution switch-gear	26.8	21.0	28.6	34.5	35.4	35.1
Requisite buildings	9.2	6.1	6.8	10.7	15.1	7.6
Electricity distribution networks	6.5	4.4	12.6	9.0	6.1	4.7
Miscellaneous	4.9	5.5	6.3	11.3	11.7	8.8
Total	**88.5**	**63.9**	**81.2**	**101.7**	**111.2**	**102.8**
Other power-generating plant at mines						
Steam-raising plant	6.1	3.3	3.6	3.6	2.9	1.8
Power-generating plant and distribution switch-gear	3.5	3.3	2.4	3.8	3.2	2.3
Requisite buildings	0.5	0.2	0.5	0.2	0.3	0.3
Electricity distribution networks	4.7	3.5	1.9	2.6	2.3	1.4
Compressed-air plant	7.6	5.5	4.8	5.2	4.9	3.6
Miscellaneous	0.9	0.2	0.1	0.1	0.2	0.3
Total	**23.3**	**16.0**	**13.3**	**15.5**	**13.8**	**9.7**

The following table shows the expected development of the maximum electric capacity of the power plant installed.

TABLE 12

Development of Maximum Electric Capacity

MW

Beginning of 1959	Beginning of 1960	Beginning of 1961	Beginning of 1962	Beginning of 1963	Beginning of 1964
6 736	7 754	8 349	8 749	9 473	10 571

These figures show little change from those in last year's survey. The proportion of capital expenditure going on generating plant other than pithead power-stations continues to fall, as investment is being concentrated rather on the installation of large generating condensing sets. The number of load-hours (calculated on the basis of the average annual electric capacity), which had been rising steadily (4,761 in 1955, 4,934 in 1956, 5,036 in 1957), went down in 1958 to 4,530 and in 1959 to 4,185 (at the same time, the number of kilowat-hours produced by plant consuming over 4,000 calories per kWh fell from 6,100 million to 3,900 million, *i.e.* from 25 % of total production to 13%).

Even at 4,185 hours, however, the pithead power-stations should by 1963 be producing not less than 41,000 million kWh.

In 1959, 54.8% of the electric current produced was sold.

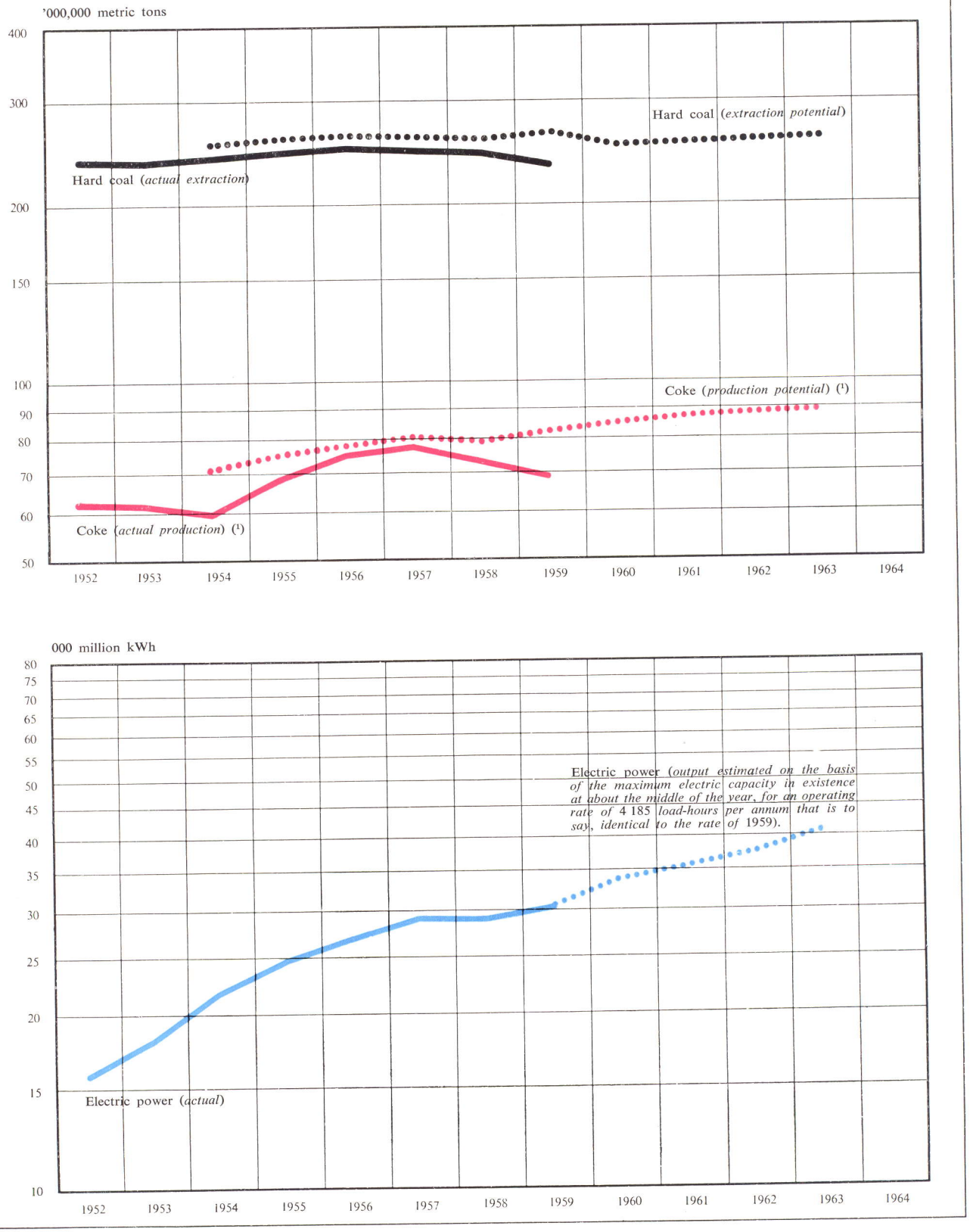
The tables annexed give a detailed breakdown of expenditure and of the development of maximum electric capacity, together with some technical data on the operation of the power-stations, number of load-hours, specific consumption (of calories per kWh), and consumption of low-grade fuels.

e) Plants Producing B.K.B. and Low-Temperature Brown-Coal Coke

The tables annexed give the breakdown of expenditure and expected development of production potential. The latter indicates a gradual decline in briquette production, with production of low-temperature coke expected to remain unchanged.

FIGURE 5

Actual Production and Production Potential of the Coalmining Industry



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

III — THE IRON-ORE MINES

Capital expenditure in the Community iron-ore industry was in the region of 30 million units of account from 1952 to 1955 and of 40 million from 1956 to 1959, with a peak of close on 50 million in 1957. Relatively, expenditure on ore extraction shows a gradual increase at the expense of that on surface installations.

TABLE 13

Capital Expenditure in the Iron-Ore Industry, 1954-1961

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

Type of plant	Actual expenditure						Estimated expenditure	
	1954	1955	1956	1957	1958	1959	1960	1961
Mining of ore	14.8	16.3	22.3	29.4	22.7	22.4	26.8	22.1
Preparation of ore at mine . . .	7.3	5.9	10.6	10.9	9.6	8.9	10.2	9.7
Various surface installations . . .	7.4	8.5	11.0	9.5	8.9	8.4	9.3	9.2
Total	**29.5**	**30.7**	**43.9**	**49.8**	**41.2**	**39.7**	**46.3**	**41.0**

Actual and estimated expenditure is not sufficient to maintain the rate of expansion in extraction potential recorded to date. Extraction potential may be expected to rise from 97.2 million metric tons in 1959 to 104.9 million in 1963, a cumulative mean annual rate of only 1.9%. By way of comparison it may be noted that extraction increased from 1952 to 1959 at a cumulative mean annual rate of 4.4%.

Lorraine ore accounted for 65% of total extraction in 1959. Its share in Community extraction potential from 1959 to 1963 is estimated at 63%.

TABLE 14

Development of Crude-Ore Extraction Potential

'000,000 metric tons

Actual extraction		Extraction potential				
1952	1959	1959	1960	1961	1962	1963
65.3	88.3	97.2	101.1	102.8	104.0	104.9

IV — THE IRON AND STEEL INDUSTRY

Capital expenditure in the Community iron and steel industry reached a record level in 1957, with 708.2 million units of account. The 1958 figure was 9 % below the 1957 level, and the 1959 figure 8 % below that. Expenditure in 1959, which totalled 590.2 million units of account, was nevertheless higher than that in any year previous to 1957.

The drop between 1957 and 1958 actually affected only the crude-steel and rolled-products sectors. The drop from 1958 to 1959, on the other hand, was felt throughout the industry, although expenditure on pig-iron production and general services remained slightly above the 1957 level.

1960, according to forecasts by heads of enterprises, should see a recovery all round: it is not thought, however, that the overall record expected will as yet include higher figures than were achieved in 1958 for pig-iron and in 1957 for crude steel.

TABLE 15

Capital Expenditure in the Iron and Steel Industry, 1954-1961

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

Type of plant	Actual expenditure						Estimated expenditure (projects in progress or approved as at January 1, 1960)	
	1954	1955	1956	1957	1958	1959	1960	1961
Plant for production of:								
pig-iron	69.8	82.9	130.5	183.5	206.1	188.8	194.8	157.8
steel	44.1	63.2	101.6	128.4	94.8	71.6	92.8	84.4
rolled products	265.1	301.1	244.9	282.4	207.0	200.0	389.4	278.1
General services	74.5	77.1	92.9	113.9	135.7	129.8	161.4	87.9
Total	**453.5**	**524.3**	**569.9**	**708.2**	**643.6**	**590.2**	**838.4**	**588.2**

FIGURE 6

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

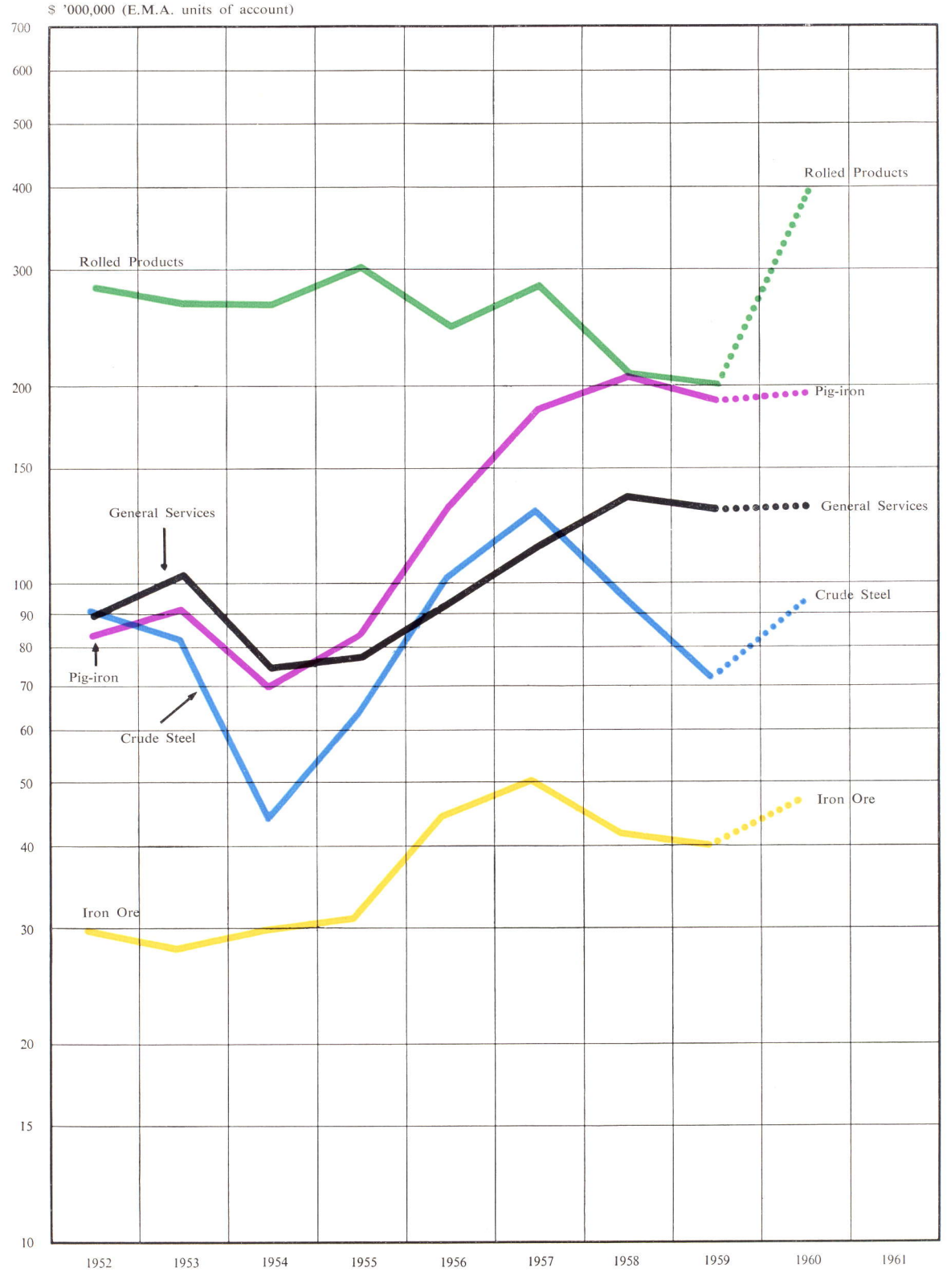


TABLE 16

Trend in Capital Expenditure in the Iron and Steel Industry

Indices

Type of plant	Actual expenditure				Estimated expenditure (projects in progress or approved as at January 1, 1960)
	Average 1952-1956	1957	1958	1959	1960
Plant for production of:					
pig-iron	100	201	226	207	213
steel	100	168	124	94	122
rolled products	100	104	76	74	143
General services	100	130	155	149	185
Overall index	**100**	**134**	**122**	**112**	**159**

We go on to deal one by one with the four main categories of project and their effects on production potential.

a) Pig-Iron Production

Capital expenditure on pig-iron production accounted in 1959 for 32% of all investment in the iron and steel industry, as against an average of 17.3% for the years 1952-1956. Within the framework of the all-round expansion in capital expenditure forecast for 1960, the shares of pig-iron may be expected to undergo a certain relative shrinkage, to only 24.7% of investment as a whole.

Expenditure on steelworks-owned coking-plants (already shown in Table 8, under " The Coalmining Industry ") remained in 1959 at much the same high level as in 1958, some 20 % above the average for 1952-1956.

Expenditure on the blast-furnaces shows a certain decline in relation to 1958, and even to 1957, but still works out 63% above the 1952-1956 average.

Expenditure on burden-preparation plant continued the most striking item of all: following year-to-year increases of 63% in 1957 and 30% in 1958, it shows a further rise of 12 % for 1959. It accounts for close on 40% of all expenditure on pig-iron production plant in 1959, and for almost 15% of total investment in the iron and steel industry.

TABLE 17

Capital Expenditure on Pig-Iron Production Plant, by Types of Installation, 1954-1961

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

Type of installation	Actual expenditure						Estimated expenditure (projects in progress or approved as at January 1, 1960)	
	1954	1955	1956	1957	1958	1959	1960	1961
Steelworks-owned coking-plants .	18.0	19.9	22.3	28.0	24.6	24.7	13.8	11.1
Burden preparation	11.6	21.1	31.5	51.5	66.7	74.8	84.5	65.9
Blast-furnaces	40.2	41.9	76.7	104.0	114.8	89.3	96.5	80.8
Total	**69.8**	**82.9**	**130.5**	**183.5**	**206.1**	**188.8**	**194.8**	**157.8**

The disparate trend in capital expenditure in the different sectors is reflected in sharp contrasts between the foreseeable increases in production potential from 1959 to 1963, *viz.* 8.5% for coke (steelworks-owned plants), 23% for pig-iron and 79% for sinter.

TABLE 18

Development of Production Potential of Pig-Iron Production Plant

'000,000 metric tons

Product	Actual production		Production potential				
	1952	1959	1959	1960	1961	1962	1963
Coke (steelworks-owned plants) (1) .	15.8	19.8	22.5	23.7	24.0	24.2	24.4
Sinter	14.0	26.5	30.2	35.4	42.4	49.4	54.0
Pig-iron	34.7	46.8	53.0	57.5	59.9	62.7	64.9

(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 projects in progress or approved (categories A and B).

b) Steel Production

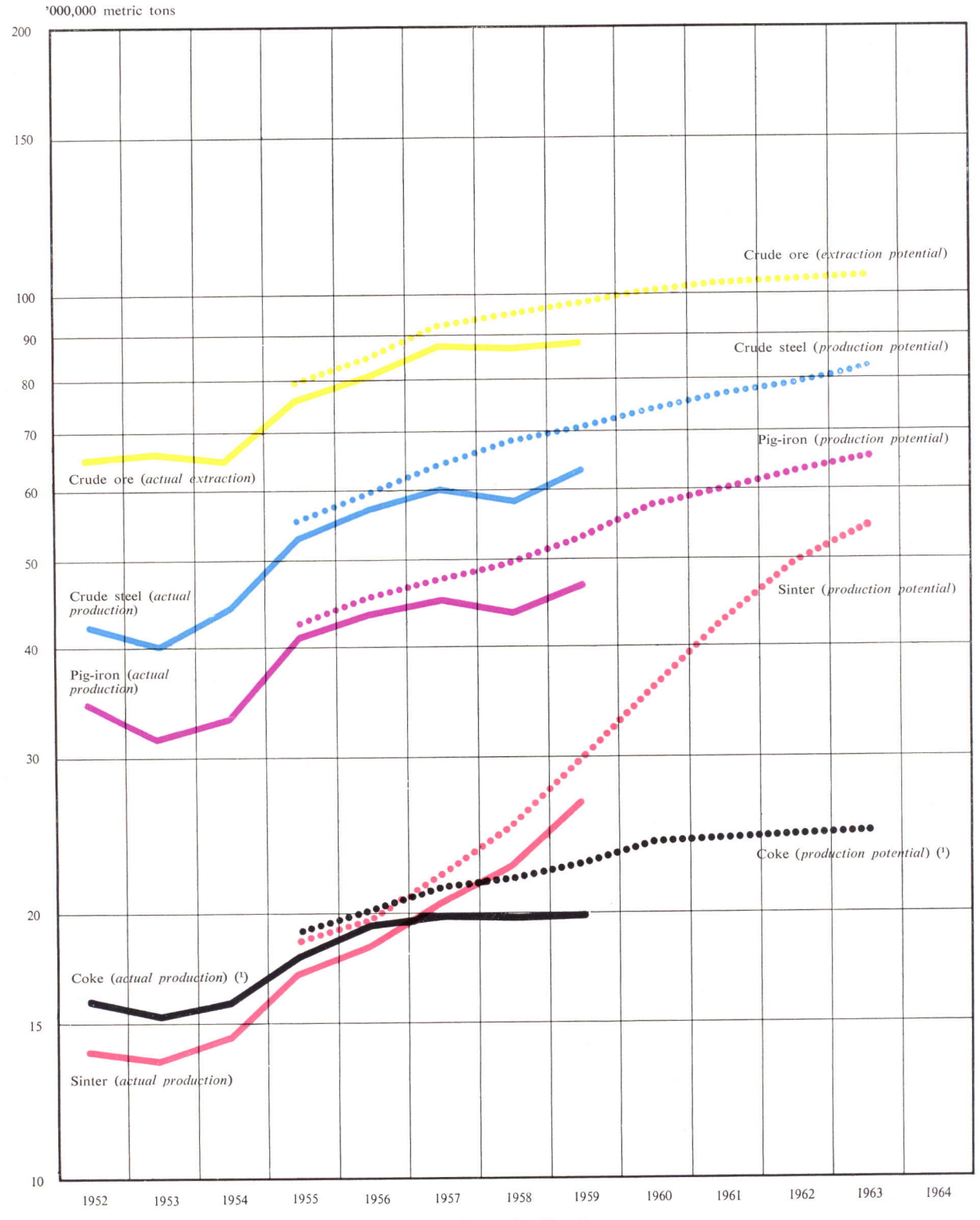
As regards all the traditional steel-production processes (basic Bessemer, open-hearth and electric-furnace) capital expenditure in 1959 was markedly lower than in 1957 and 1958. Expenditure on L/D and other steelworks, on the contrary, showed an upturn, which may be expected to develop into a positive surge in 1960 and 1961.

FIGURE 7

Breakdown of Capital Expenditure in the Iron and Steel Industry

FIGURE 8

Actual Production and Production Potential of the Iron and Steel Industry



(1) Actual production and production potential of the steelworks-owned coking-plants.

TABLE 19

Capital Expenditure on Steelmaking Plant, by Production Processes, 1954-1961

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

Production process	Actual expenditure						Estimated expenditure (projects in progress or approved as at January 1, 1960)	
	1954	1955	1956	1957	1958	1959	1960	1961
Basic Bessemer	13.9	17.2	22.4	45.1	49.7	35.4	25.5	11.9
Open-hearth	20.1	30.7	53.9	51.6	27.4	16.7	26.1	14.3
Electric-furnace	10.1	15.3	17.2	16.4	10.6	8.2	11.7	6.9
L/D, Rotor and others			8.1	15.3	7.1	11.3	29.6	31.3
Total	**44.1**	**63.2**	**101.6**	**128.4**	**94.8**	**71.6**	**92.9**	**64.4**

Although since the introduction of the Common Market the mean rate of growth in production has been appreciably higher for crude steel than for pig-iron, the new trend in investment suggests that the reverse is now likely to be the case. The expansion in production potential must not, however, be regarded as having come to a standstill: it is estimated as due to bring the total from 70.5 million metric tons in 1959 to 81.9 million in 1963, though in the case of the open-hearth furnaces the advance seems rather half-hearted.

The figures quoted do not, of course, take into account either production potential represented by steelworks not yet approved which might come into operation by 1964, or increases in productivity which might be achieved, more particularly, by the introduction on a general scale of oxygen-blowing in existing furnaces and converters.

TABLE 20

Development of Crude-Steel Production Potential, by Production Processes

'000,000 metric tons

Production process	Actual production		Production potential				
	1952	1959	1959	1960	1961	1962	1963
Basic Bessemer	23.0	32.2	34.7	36.7	37.3	38,1	38.9
Open-hearth	15.2	23.4	26.9	27.7	28.6	28.8	28.4
Electric-furnace	3.3	6.4	7.7	8.1	8.3	8.4	8.5
L/D, Rotor and others	0.3	1.2	1.2	1.8	2.7	3.7	6.1
Total, crude steel	**41.8**	**63.2**	**70.5**	**74.3**	**76.9**	**79.0**	**81.9**

From 1952 to 1959 steel production increased at a cumulative mean annual rate of 6.1%. Calculated purely on the basis of projects completed, in progress or approved as at January 1, 1960, production potential works out as rising only at an overall rate of 3.8% per annum from 1959 to 1963: this modest figure does not accurately reflect the outstanding increase expected in the " L/D and others " sector, for which the rate of increase is estimated at over 50% per annum up to 1963.

TABLE 21

Mean Annual Rate of Development of Crude-Steel Production, by Production Processes

%

Production process	Mean annual rate of increase in actual production, 1952-59	Mean annual rate of increase in production potential, 1959-63
Pig-iron (for comparison)	**4.3**	**5.2**
Basic Bessemer	*5.0*	*2.9*
Open-hearth	*6.4*	*1.4*
Electric-furnace	*9.9*	*2.6*
L/D, Rotor and others	*21.9*	*50.1*
Total, crude steel	**6.1**	**3.8**

This being so, crude-steel production potential by the traditional processes may be expected in all three cases to yield some ground to the L/D and other processes.

TABLE 22

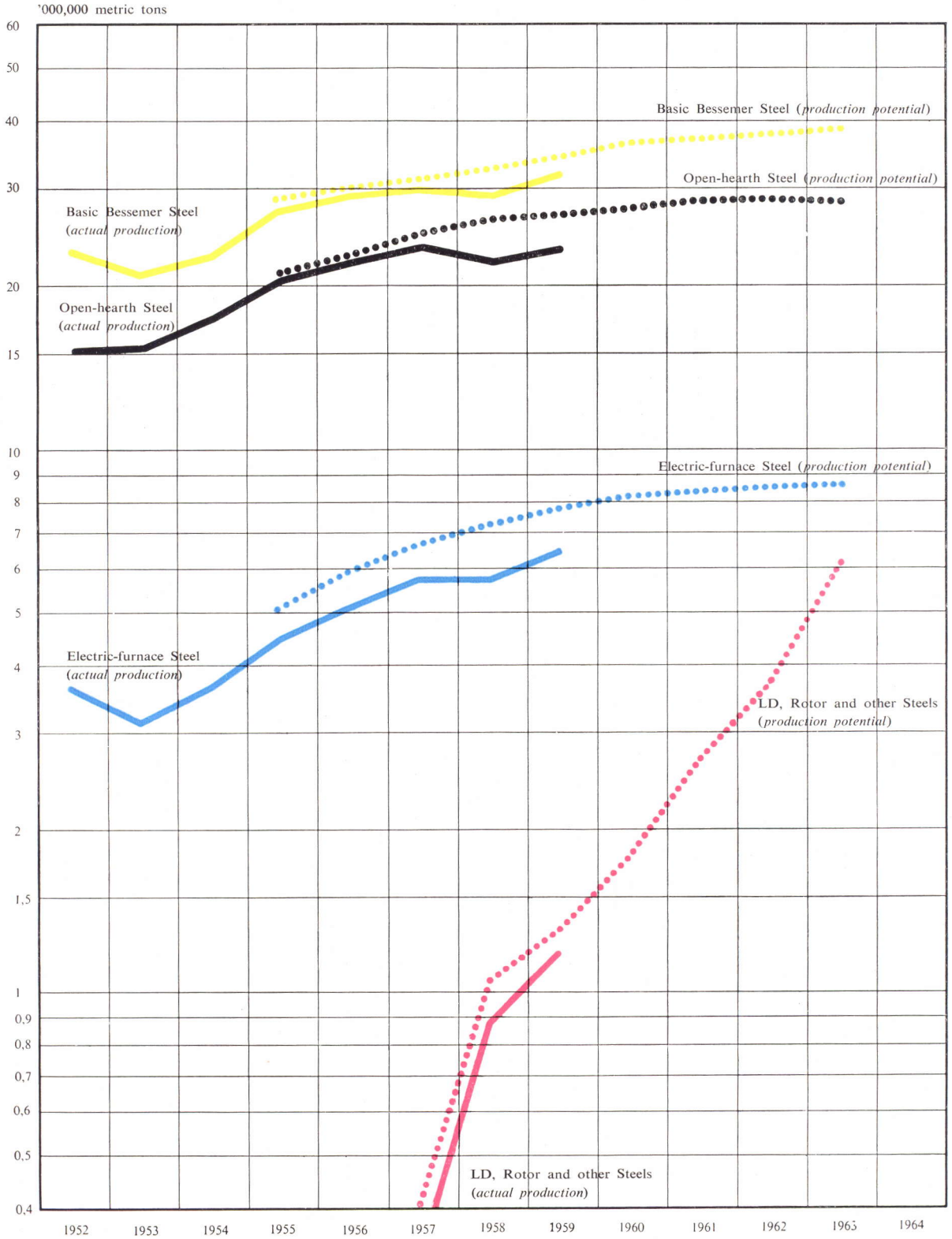
Share of the Different Steel Production Processes in Total Production Potential, 1959-1963

%

Production process	Actual share 1959	Estimated share 1963
Basic Bessemer	*49*	*47*
Open-hearth	*38*	*35*
Electric-furnace	*11*	*10,5*
L/D, Rotor and others	*2*	*7,5*
Total	**100**	**100**

FIGURE 9

Actual Production and Production Potential of Crude Steel by Production Processes



c) Production of Rolled Products

Capital expenditure on rolling-mills and ancillary plant accounted for approximately one-half of total capital expenditure in the iron and steel industry from 1952 to 1956, thereafter falling to two-fifths in 1957 and one-third in 1958 and 1959. According to forecasts by heads of enterprises, it should by 1960-61 be up again to one-half.

TABLE 23

Capital Expenditure on Rolling-Mills, 1954-1961

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

Type of mill	Actual expenditure						Estimated expenditure (projects in progress or approved as at January 1, 1960)	
	1954	1955	1956	1957	1958	1959	1960	1961
Heavy and medium-section mills	29.1	35.8	28.6	32.5	30.1	41.5	55.3	31.6
Small-bar mills	29.8	38.7	37.7	32.4	25.7	18.1	25.6	8.5
Wire mills	15.5	12.4	14.0	14.3	5.6	4.1	14.0	17.5
Total, section mills	*74.4*	*86.9*	*80.3*	*79.2*	*61.4*	*63.7*	*94.9*	*57.6*
Hoop and strip mills	13.6	12.5	5.6	12.5	5.7	2.8	7.0	4.3
Plate and universal mills	41.3	36.3	24.2	36.5	20.6	15.0	38.5	40.5
Hot sheet mills	4.3	3.6	1.8	2.0	2.3	3.1	4.1	0.9
Cold sheet mills	3.6	2.8	0.7	0.1	0.7	0.6	0.4	0.1
Hot wide-strip mills	31.6	35.8	30.3	31.9	16.2	16.2	22.1	13.5
Cold wide-strip mills	45.2	52.6	44.4	28.5	32.4	29.8	123.8	90.4
Total, flat-product mills	*139.6*	*143.6*	*107.0*	*111.5*	*77.9*	*67.5*	*195.9*	*149.7*
Blooming and slabbing-mills	23.1	41.3	31.2	45.1	31.6	39.3	46.9	42.8
Miscellaneous	28.0	29.3	26.4	46.6	36.2	29.4	51.7	28.0
Total	**265.1**	**301.1**	**244.9**	**282.4**	**207.1**	**199.9**	**389.4**	**278.1**

Both the drop between 1957 and 1959 and the recovery expected for 1960 and 1961 affect all the sectors listed, section, flat-product and blooming and slabbing-mills and ancillary plant. The movement is, however, especially marked in the case of the flat-product mills, and most of all in that of the wide-strip mills: expenditure on these, after averaging respectively 49 and 29% of total investment in rolling-mills and ancillary installations from 1953 to 1957, dropped to 38 and 23% in 1958 and 34 and 23 % in 1959, but are now expected to rise again to an average of 52 and 37% over the two years 1960-61.

TABLE 24

Share of Different Types of Rolling-Mill in Capital Expenditure, 1953-1961 %

Type of mill	Average share 1953-1957	1958	1959	Estimated average share 1960-1961
Section mills	*28*	*30*	*32*	*23*
Flat-product mills	*49*	*38*	*34*	*52*
(of which: wide-strip mills)	(*29*)	(*23*)	(*23*)	(*37*)
Blooming and slabbing-mills	*12*	*15*	*19*	*13*
Miscellaneous	*11*	*17*	*15*	*12*
Total	**100**	**100**	**100**	**100**

While actual crude-steel production increased from 1952 to 1959 at a cumulative mean annual rate of 6.1%, the rate for actual production of finished rolled products was 6.3%. The utilization rate of the rolling-mills improved during this period, while there was a falling-off in the share of crude steel used for other purposes (forgings, castings, tyres).

According to enterprises' forecasts, production potential should rise from 1959 to 1963 at an annual rate of 3.8 % for crude steel and 4.1 % for rolled products. The share of crude steel going to the mills to be rolled is thus likely to continue increasing, at the expense of that processed in other ways.

The rate of expansion in rolling-mill production varies, however, with the type of finished product.

TABLE 25

Mean Annual Rate of Development of Production of Rolled Product, by Types of Finished Product

Product	Actual production			Production potential		
	1952 ('000,000 m.t.)	Cumulative mean annual rate of increase in %	1959 ('000,000 m.t.)	1959 ('000,000 m.t.)	Cumulative mean annual rate of increase in %	1963 ('000,000 m.t.)
Heavy and light sections, incl. tube rounds and squares	15.2	+ *3.3*	19.1	23.0	+ *2.6*	25.6
Wire rod	2.8	+ *8.0*	4.8	5.4	+ *4.3*	6.4
Total, sections	*18.0*	+ *4.1*	*23.9*	*28.4*	+ *3.1*	*32.0*
Hoop and strip and tube strip	2.3	+ *8.2*	4.0	4.9	+ *3.4*	5.6
Plate of 3 mm. and over	4.3	+ *7.8*	7.3	9.0	+ *3.5*	10.3
Hot-rolled sheet of under 3 mm.	3.1	− *2.8*	2.5	3.0	− *1.7*	2.8
Cold-reduced sheet of under 3 mm.	0.8	+ *33.3*	6.0	6.4	+ *12.1*	10.1
Total, flat products	*10.5*	+ *9.5*	*19.8*	*23.3*	+ *5.4*	*28.8*
Total, rolled products	**28.5**	+ **6.3**	**43.7**	**51.7**	+ **4.1**	**60.8**

FIGURE 10

Sections and Flat Products

A - Capital expenditure

B - Actual production and production potential

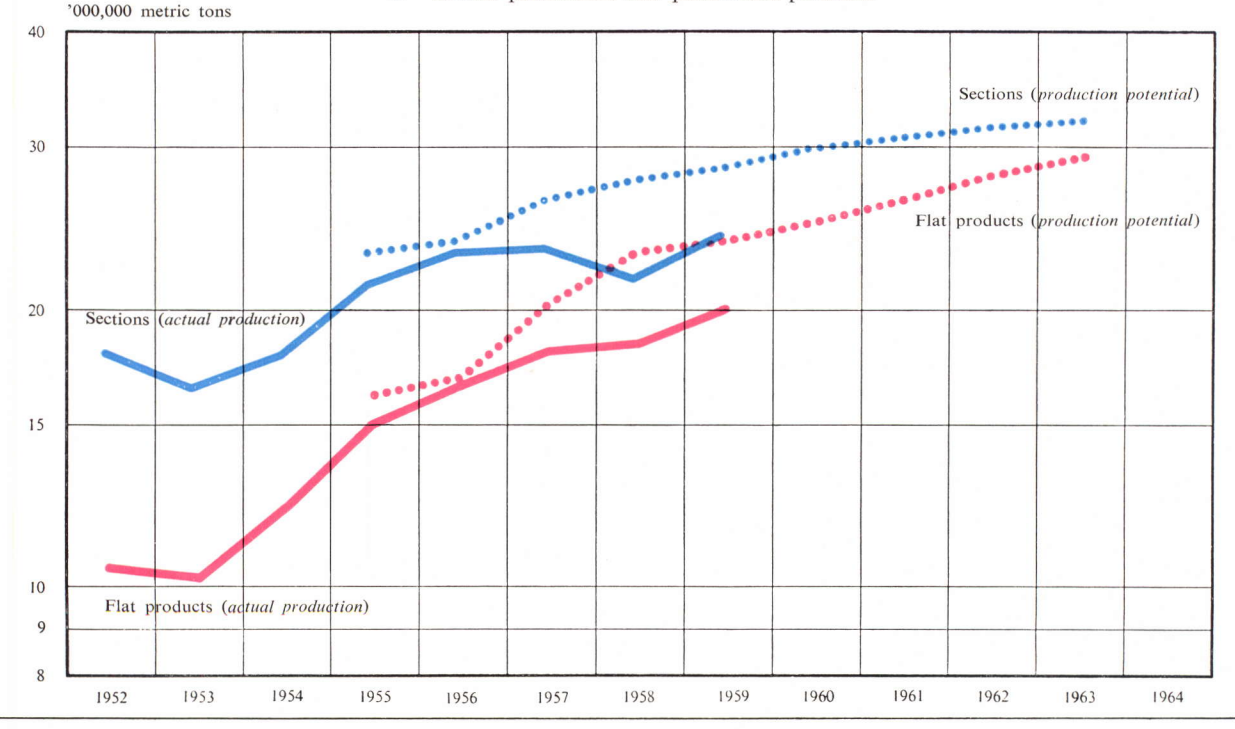


FIGURE 11

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

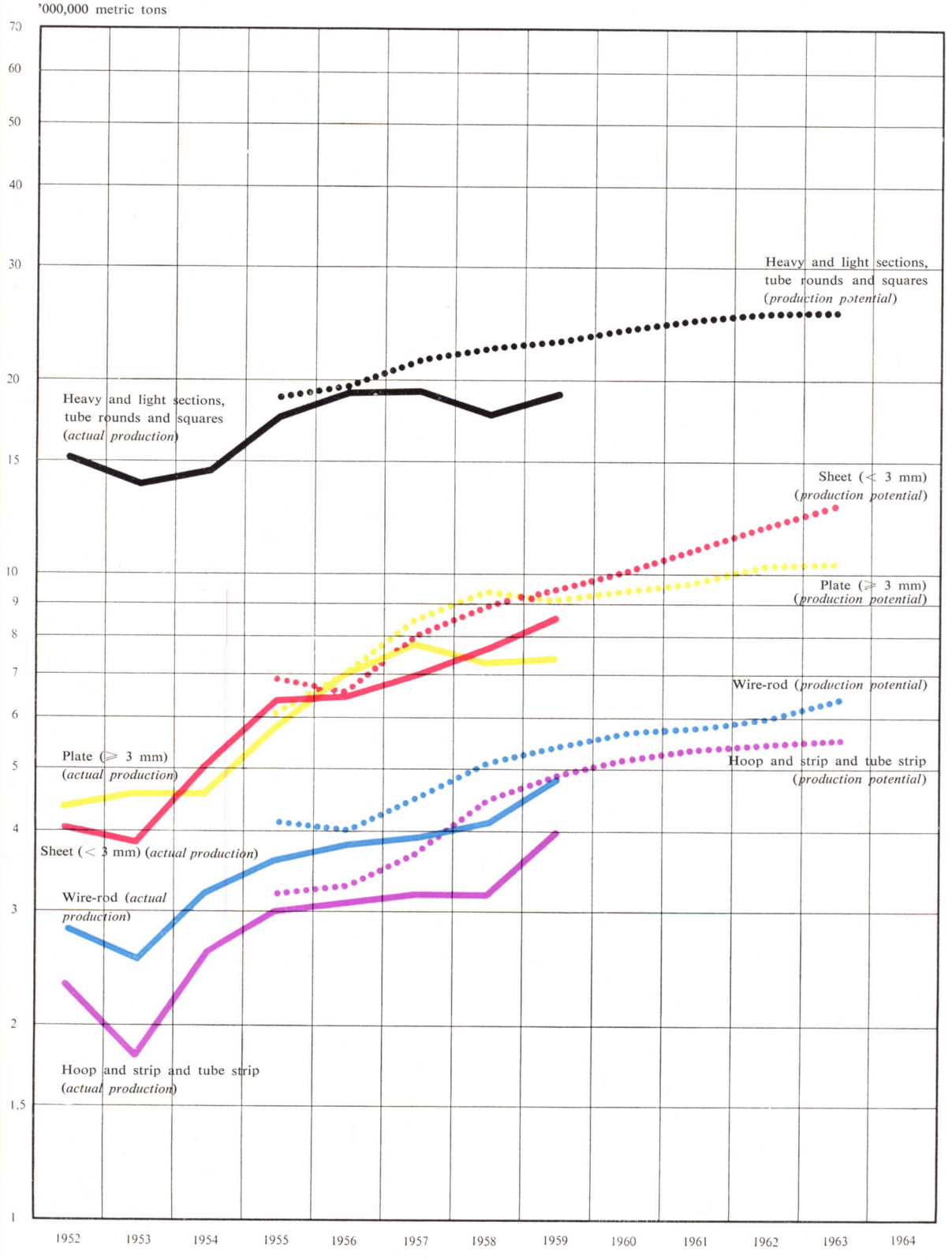
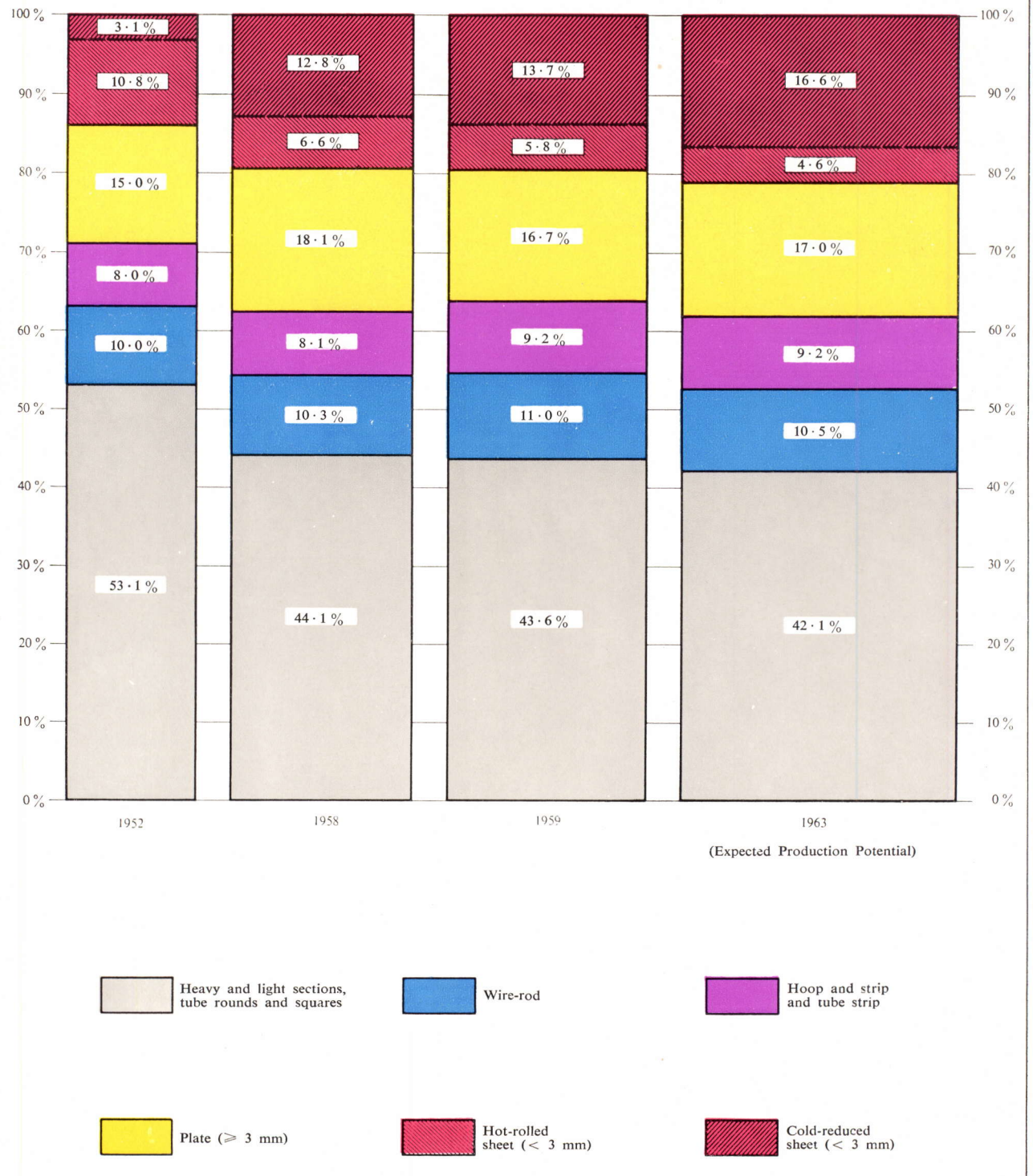


FIGURE 12

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



The forecasts now available indicate larger increases in production potential than those drawn up a year previously, for all types of product with the exception of heavy and light sections. Special mention should be made of the higher rates of increases expected for wire rod (4.3% per annum as against the earlier figure of 1.9%) and, in particular, for cold-reduced sheet (12.1% as against 4.5%).

Between 1959 and 1963 the production potential of the flat-product mills should show a relative increase from 45% to over 47% of total production potential for finished rolled products; the proportion in 1952 was only 37%.

d) General Services

Expediture on power-generating plant and other general services, which remained in the region of 90 million units of account per annum from 1952 to 1956, rose to approximately 114 million in 1957 and 136 million in 1958: the slight decline to 130 million in 1959 seems unlikely to persist. Large-scale investment in this sector is expected to continue for several years to come, principally in connection with the extension of existing works in coastal areas and the construction of new ones.

TABLE 26

Capital Expenditure on the General Services of the Iron and Steel Industry, 1952-1961

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

Type of installation	Actual expenditure						Estimated expenditure (projects in progress or approved as at January 1, 1960)	
	1954	1955	1956	1957	1958	1959	1960	1961
Power-generating plant and distribution networks	43.0	39.3	32.0	43.2	56.8	58.0	70.5	32.6
Miscellaneous	31.5	37.8	60.9	70.7	78.9	71.8	90.8	55.3
Total	**74.5**	**77.1**	**92.9**	**113.9**	**135.7**	**129.8**	**161.3**	**87.9**

Expenditure on steelworks-owned power-stations was slightly higher than the previous record figure for 1958, chiefly owing to projects in progress in Lorraine, which are scheduled to be completed in 1961 and 1962.

The number of load-hours was slightly below that for the previous year, 4,797 as against 4,941. On the basis of projects known, production of electric current by the steelworks-owned power-stations continuing at this rate would work out, as previously forecast, at approximately 17,000 million kWh in 1963.

Thus the total production of current by the mine-owned and steelworks-owned thermal power-stations should by 1963 amount to some 58,000 million kWh, representing about 26 % of the Community's supply of thermal current, and nearly 18 % of its supply of electric current from all sources forecast for that year.

V — CONCLUSIONS

In the light of the results recorded during the boom years, it has up to now been accepted that actual production in the various sectors cannot be much above 96 % of the sum of the individual production potentials declared for the purposes of the survey. In 1959, as in 1958, it amounted to barely 90 % of the potential declared, whether as regards ore, pig-iron or crude steel: some of the plant available thus remained unused during these two years. The same is true of the coalmining industry, and would have been even more so had not extraction potential been cut back in both years by the reduction in the number of working days taken as a basis for calculation in certain coalfields.

TABLE 27

Relation between Actual Production and the Sum of Individual Production Potentials

%

Sector	1955	1956	1957	1958	1959
Hard coal	*94.9*	*94.6*	*95.1*	*94.8*	*89.3*
Coke	*93.2*	*96.5*	*96.1*	*92.2*	*84.3*
Ore	*95.4*	*95.1*	*94.9*	*91.3*	*90.9*
Pig-iron	*96.3*	*96.0*	*94.7*	*87.9*	*88.3*
Crude steel	*95.8*	*96.1*	*94.1*	*85.7*	*89.6*

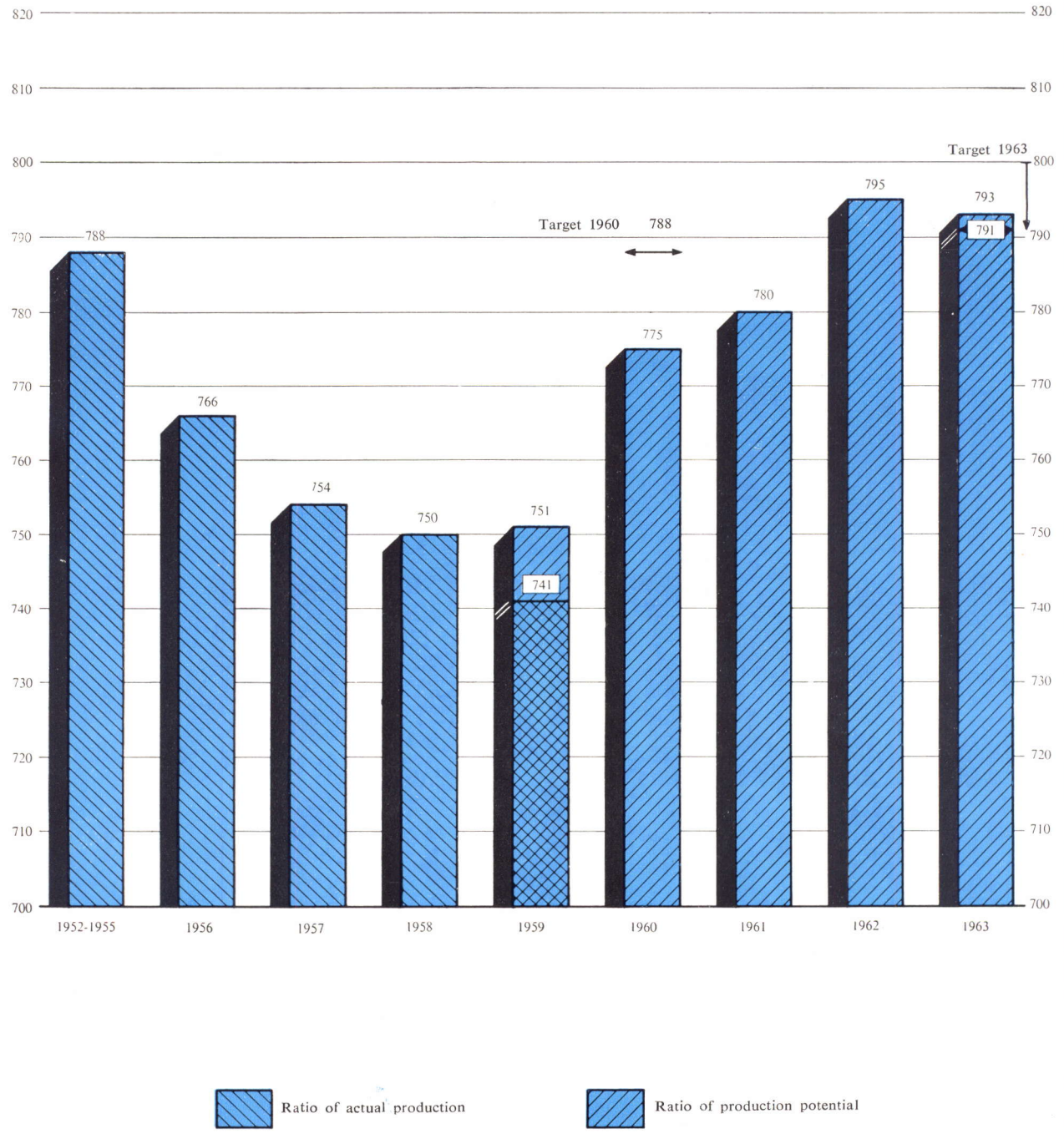
Although not fully utilized in 1958 and 1959, production potential is not expected in the years ahead to be greater in general than foreseeable requirements as indicated below in regard to the long-term trend.

In the *steelworks* sector, development projects in progress or approved should raise the aggregate production potential by 1963 to 81.9 million metric tons, which at a utilization rate of 96% represents a maximum actual production of 78.6 million, plus any additional tonnages from such capacity as may come into operation by that time as a result of projects not yet approved. In any event, the share of oxygen-blown converter steels will increase rapidly from 1960 to 1963. The General Objectives laid down on May 20, 1957, [1] suggest for 1963 requirements of up to 81 million metric tons of steel: in view of the caution observed in forecasting at that time, the production potential estimated does not seem unduly large.

[1] *Journal Officiel de la Communauté*, May 20, 1957.

FIGURE 13

Pig-Iron - Steel Ratio
(kg of pig-iron per ton of crude steel)



On the basis of projects in progress or approved in the *blast-furnace* sector, total production potential should by 1963 reach 64.9 million metric tons of pig-iron, representing a maximum actual production of 62.3 million. This is because the investments in question relate not only to the blast-furnaces themselves, but also, in very large part, to the sintering installations. The ratio of pig-iron to crude-steel production potential should thus rise from 73.1% in 1958 to 79.3% in 1963. This would mean that the recommendations made by the High Authority in 1957 were fulfilled and indeed surpassed, since the General Objectives indicated a minimum ratio of 79.1% for 1963. It must be borne in mind, however, that the growing preference in the steelworks sector for processes based on pig-iron, and more particularly for the L/D process, will necessitate parallel expansion in the blast-furnaces.

Although capital expenditure on the *iron-ore mines* continues high, Community extraction will remain well below the level of demand, and imports of overseas ores will grow steadily.

With regard to the *coking-plants* (mine-owned, independent and steelworks-owned), the slight falling-off in the rate of expenditure suggests that the maximum production in 1963 will be only 84.6 million metric tons, assuming a utilization rate of 96% of total production potential. If specific consumption of coke per metric ton of pig-iron produced in the Community were to go down from 950 kg. to only 850 in 1963, maximum requirements of metallurgical coke for blast-furnaces would amount to about 53 million metric tons. Other coke requirements of the iron and steel industry, for sintering plants, etc., may be estimated at a maximum of 4 million metric tons, so that total requirements would come to 57 million metric tons. It is difficult to tell to what extent it will be possible to sell the remaining 27 million tons produced to coke consumers outside the iron and steel industry, whose requirements in 1959 amounted to 24.4 million metric tons.

The forecasts based on *hard-coal extraction* potential declared for the next few years are lower than those drawn up in 1959, which were themselves lower than those in 1958. Pits were closed in 1959 in a number of coalfields, and further closures are planned for the years immediately ahead. The remaining pits, however, though exposed to competition from imported coal, from oil and from natural gas, will continue to play an essential part in meeting the Community's energy requirements.

ANNEXES

I — CLASSIFICATION OF DEVELOPMENT PROGRAMMES

A few explanatory remarks are necessary for this report to be fully understood.

1. Forecasts in respect of development projects are not always equally reliable. Operations in progress may be speeded up or slowed down in widely varying degrees, and even the entire structure of the programmes modified, in the course of construction. Moreover, the probability of the forecasts' being fulfilled varies according to the time-limit laid down for the completion of the projects: in the coalmining industry, development projects are planned much longer in advance of their being brought into operation than in the iron and steel industry. The sinking and equipment of a modern pit may take from 12 to 15 years, whereas in the iron and steel industry, whose activity is strongly influenced by market forces, the time required for development projects to be completed exceeds three years only in exceptional cases. Forecasts in respect of the coalmining industry, therefore, are more likely to materialize than those for the iron and steel industry.

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

A - Projects completed or in progress before January 1, 1960;

B - Projects approved but not yet in progress on January 1, 1960;

C - Other projects planned to be started between January 1, 1960, and December 31, 1962.

It follows from the remarks in the first paragraph that the figures in respect of category C projects are more appropriate for the coalmining industry than for the iron and steel industry. Hence this information has been disregarded in respect of the latter.

3. The figures given in this report for 1958 and subsequent years differ from those published in 1959, since

a) actual expenditure for the current year is generally less than had been estimated;

b) figures for expenditure during the preceding year are often supplied by the enterprises before they have closed their balance-sheets; they are then corrected for the following survey.

4. As regards the effect of investment on maximum possible production, it should be borne in mind that the maximum possible production of the Community as a whole is inevitably smaller than the arithmetical sum of the production potentials of the individual mines or plants; this is due to unforeseeable incidents or circumstances which in any given year may prevent some of the mines or plants from achieving their maximum production.

II — BASIC DEFINITIONS

To ensure that the figures obtained shall be comparable, the High Authority has adopted the following definitions.

I — INVESTMENT

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 pit-head 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.

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

Unit of account. — The unit adopted is the dollar unit of account of the European Payments Union (E.P.U.) and subsequently that of the European Monetary Agreement (E.M.A.). Their equivalents in national currencies are given in the following table:

Country	Currency	Up to and including 1956	1957	1958	1959 and onwards
Germany (Fed. Rep.)	DM	4.20	4.20	4.20	4.20
Belgium/Luxembourg	Bfr./Lfr.	50	50	50	50
France (1)	Ffr. (2)	350	377 (3)	420	4.937 (2)
Italy	Lit.	625	625	625	625
Netherlands	Hfl.	3.80	3.80	3.80	3.80

(1) And Saar up to July 5, 1959.
(2) NF as from January 1, 1959.
(3) The mean value between the official rate in force from January 1 to August 11, 1957 (350) and that in force from August 12 to December 31 1957 (420).

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 a production, in 1959, of only about 2 million metric tons (of which 0.9 million not shown in any official statistics), out of 233.7 million, *i.e.* less than 1 %.

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*

A distinction has been drawn between *power-stations proper* and *power-generating plant at the mines.* The following definitions have been adopted:

Power-stations proper means all power-stations with a maximum electric capacity exceeding or likely to exceed 25,000 kW after completion of development projects of all types (A + B + C).

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.

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

Current produced means the net production of electric current measured at the station busbars after deducting the electric current taken by 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.

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 to be 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 principally produced from pig-iron, the production potential is estimated in respect of the blast-furnaces and steelworks as a whole and not of each steelworks individually.

A number of very small enterprises have not been included in the survey as regards capital expenditure on crude steel and rolled products; on the other hand, as regards the development of production potential, their share has been assessed by subtracting the production figures for the enterprises covered by the survey from those of Community production as a whole. The resulting difference does not exceed 2 %.

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 obtaining in 1959. 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).

III — STATISTICAL TABLES

COAL

IRON ORE

STEEL

HARD-COAL COLLIERIES

Investment

TABLE I

Capital Expenditure by Coalfields

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

Coalfield	Actual expenditure						Estimated expenditure	
	1954	1955	1956	1957	1958	1959	1960	1961
Ruhr	83.23	103.14	97.76	121.51	122.05	101.36	137.18	101.17
Aachen	9.07	8.61	7.62	7.37	12.54	10.54	9.04	6.33
Lower Saxony	4.09	2.60	3.39	5.41	5.34	5.93	6.42	4.64
Saar	15.16	11.97	16.21	19.80	18.76	15.40	33.15	29.16
Campine	13.45	12.89	17.20	18.33	17.01	9.51	10.95	7.95
Southern Belgium	24.58	22.87	25.19	27.22	21.46	13.72	14.91	14.91
Nord/Pas-de-Calais	38.42	36.86	30.69	29.63	24.94	24.27	28.97	24.82
Lorraine	28.07	27.84	27.16	26.73	21.43	16.90	19.67	19.68
Centre/Midi	12.84	10.35	10.21	11.30	11.14	10.66	7.03	9.10
Sulcis and La Thuile	1.28	2.40	0.17	1.60	1.12	0.55	0.61	0.51
Limburg	11.60	16.87	12.96	12.55	12.63	18.55	11.12	10.13
Total	**241.79**	**256.40**	**248.56**	**281.45**	**268.42**	**227.39**	**279.05**	**228.40**

MINE-OWNED AND INDEPENDENT COKING-PLANTS [1]

Investment

TABLE II

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure	
	1954	1955	1956	1957	1958	1959	1960	1961
Mine-owned coking-plants								
Ruhr	32.55	24.83	22.00	29.91	34.78	31.96	24.89	16.17
Aachen	1.43	0.34	1.37	4.65	1.18	0.55	0.46	0.65
Lower Saxony	0.01	0.05	0.06	—	—	—	—	—
Saar	2.31	2.03	3.73	5.60	11.39	7.70	1.97	1.10
Belgium and the Netherlands	9.70	4.85	4.18	3.34	3.05	3.64	2.28	4.20
Nord/Pas-de-Calais	7.29	7.61	5.40	8.17	8.00	6.70	5.68	7.53
Lorraine	13.55	12.01	8.81	5.69	2.07	1.29	4.59	6.90
Centre-Midi	1.01	0.50	0.68	2.12	2.93	2.28	2.30	1.43
Total	*67.85*	*52.22*	*46.23*	*59.48*	*63.40*	*54.12*	*42.17*	*37.98*
Independent coking-plants								
Belgium and the Netherlands	2.02	0.45	1.05	1.96	5.57	3.55	1.11	0.26
France [2]	15.47	10.31	6.63	—	—	—	—	—
Italy	2.00	1.56	3.39	6.59	3.27	0.50	2.11	3.36
Total	*19.49*	*12.32*	*11.07*	*8.55*	*8.84*	*4.05*	*3.22*	*3.62*
Grand Total	**87.34**	**64.54**	**57.30**	**68.03**	**72.24**	**58.17**	**45.39**	**41.60**

[1] Including low- and medium-temperature coking-plants.
[2] Corrected figure.

HARD-COAL
BRIQUETTING-PLANTS

Investment

TABLE III

Capital Expenditure by Areas

$ '000,000 (E.M.A. units of account.

Area	Actual expenditure						Estimated expenditure	
	1954	1955	1956	1957	1958	1959	1960	1961
Ruhr	0.85	2.42	0.96	0.91	0.50	1.05	1.84	2.41
Aachen	—	0.09	0.07	0.16	—	0.14	0.09	0.15
Lower Saxony	0.05	0.08	0.01	0.01	0.03	0.11	0.54	0.38
Southern Belgium	0.49	0.81	0.72	0.96	0.85	0.61	1.09	1.12
Nord/Pas-de-Calais	0.57	1.95	0.86	1.38	0.98	2.31	3.68	1.93
Centre/Midi	0.66	0.93	0.92	0.26	0.63	0.92	0.90	0.16
France (independent plants)	0.99	0.77	0.61	1.04	0.41	0.33	0.21	0.09
Limburg	0.24	0.27	0.36	0.02	0.06	0.05	0.15	0.12
Total	**3.85**	**7.32**	**4.51**	**4.74**	**3.46**	**5.52**	**8.50**	**6.36**

PITHEAD POWER-STATIONS [1]

Investment

TABLE IV

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure	
	1954	1955	1956	1957	1958	1959	1960	1961
Ruhr	58.35	45.07	46.08	55.11	52.18	56.40	62.71	67.97
Aachen	0.66	0.73	0.58	0.31	0.55	0.51	0.84	0.17
Lower Saxony	5.67	0.98	0.28	1.09	0.86	0.32	2.03	5.61
Saar	1.89	4.96	6.36	7.55	6.00	5.56	6.54	8.62
Campine	3.44	2.87	3.22	2.62	3.00	3.44	7.77	3.46
Southern Belgium	5.00	1.59	11.65	12.90	23.40	24.58	10.69	9.77
Nord/Pas-de-Calais	8.90	10.72	11.81	15.07	10.51	6.29	7.23	9.09
Lorraine	11.21	5.70	9.50	11.26	15.48	8.42	3.33	1.70
Centre/Midi	9.63	3.21	1.58	4.80	10.30	6.36	2.42	1.37
Sulcis and La Thuile	3.41	1.57	0.16	0.45	0.88	0.05	—	—
Limburg	3.57	2.53	3.31	5.99	1.83	0.54	0.32	0.58
Total	**111.73**	**79.93**	**94.53**	**117.15**	**124.99**	**112.47**	**103.88**	**108.34**
of which								
for pithead power-stations	88.47	63.91	81.19	101.66	111.21	102.80	91.56	99.57
for power-generating plant at mines	23.26	16.02	13.34	15.49	13.78	9.67	12.32	8.77

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

HARD COAL

Extraction

TABLE V

Extraction and Extraction Potential by Coalfields

'000,000 metric tons net

Coalfield	Actual extraction potential						Actual extraction 1959	Expected extraction potential				
	1954	1955	1956	1957	1958	1959		1960	1961	1962	1963	1964
Ruhr	124.32	127.68	130.35	129.08	128.02	132.70	114.74	125.56	126.88	128.81	129.84	130.04
Aachen	7.26	7.55	7.63	7.82	8.13	8.43	7.89	8.04	7.92	7.96	8.01	8.01
Lower Saxony . .	2.50	2.66	2.49	2.22	2.27	2.25	2.27	2.25	2.45	2.50	2.55	2.55
Saar	17.12	17.65	17.66	17.84	17.11	16.61	16.10	16.54	16.36	16.67	16.97	16.98
Campine	10.26	10.46	10.78	10.54	10.91	11.13	8.77	11.32	11.67	11.84	11.84	11.99
Southern Belgium.	21.20	21.93	22.32	20.68	21.07	19.57	13.96	15.87	16.18	16.30	16.69	16.79
Nord/Pas-de-Calais	29.37	29.37	29.68	29.80	29.60	30.00	29.25	30.00	30.00	30.00	30.00	30.00
Lorraine	13.60	13.60	14.00	14.40	14.80	15.30	15.14	15.70	16.00	15.60	15.80	16.00
Centre/Midi. . . .	13.03	13.03	13.06	13.43	13.56	13.48	12.96	13.07	13.00	12.75	12.80	12.80
Sulcis and La Thuile	1.35	1.35	1.08	1.05	1.05	0.77	0.65	0.80	0.91	0.97	1.07	1.07
Limburg	12.98	12.98	12.95	12.97	11.85	12.19	11.98	12.31	12.31	12.31	12.31	12.31
Total	**252.99**	**258.26**	**262.00**	**259.83**	**258.37**	**262.43**	**233.71**	**251.46**	**253.68**	**255.71**	**257.88**	**258.54**

N.B. The above table does not take into account the extraction of some mines of small capacity (2.3 million metric tons in 1958, of which 1 million metric tons from the " small " German mines, which do not figure in the official production statistics).

COKE

TABLE VI a

Production and Production Capacity by Areas

Production

'000,000 metric tons

Area	Actual capacity							Actual production 1959 (1)	Expected production			
	Beginning 1954	Beginning 1955	Beginning 1956	Beginning 1957	Beginning 1958	Beginning 1959	Beginning 1960		Beginning 1961	Beginning 1962	Beginning 1963	Beginning 1964
Mine-owned coking-plants												
Ruhr	35.50	36.13	37.57	39.57	39.60	38.96	39.68	31.34	40.73	41.08	41.18	41.10
Aachen (2)	1.07	1.30	1.30	1.23	1.78	1.78	1.93	1.81	1.83	1.97	1.86	1.98
Lower Saxony	0.27	0.27	0.23	0.15	0.15	0.15	0.15	0.12	0.15	0.15	—	—
Saar	0.76	0.88	0.88	0.88	0.76	0.91	1.63	1.10	1.63	1.63	1.63	1.63
Belgium and the Netherlands	3.57	4.43	4.14	4.30	4.41	4.41	4.51	4.04	4.52	4.69	4.74	4.74
Nord/Pas-de-Calais	3.76	3.70	4.19	4.25	4.25	4.26	4.89	4.38	5.03	5.03	4.59	5.31
Lorraine	0.67	0.66	1.44	1.53	1.49	1.94	1.94	1.88	1.86	1.86	2.80	2.80
Centre/Midi	0.59	0.57	0.59	0.65	0.63	0.71	0.76	0.68	0.86	0.86	0.95	0.95
Total	*46.19*	*47.94*	*50.34*	*52.56*	*53.07*	*53.12*	*55.49*	*45.35*	*56.61*	*57.27*	*58.75*	*58.51*
Independent coking-plants												
Belgium and the Netherlands	1.62	1.81	1.82	1.89	1.90	1.91	1.92	1.62	1.92	1.92	1.92	1.92
France (3)	1.68	1.85	2.23	2.26	2.26	—	—	—	—	—	—	—
Italy	1.74	1.77	1.97	2.31	2.41	2.32	2.36	1.60	2.52	2.61	2.46	2.61
Total	*5.04*	*5.43*	*6.02*	*6.46*	*6.57*	*4.23*	*4.28*	*3.22*	*4.44*	*4.53*	*4.38*	*4.53*
Steelworks-owned coking-plants												
Germany	4.62	5.06	5.35	5.99	5.97	6.18	7.23	5.30	7.24	6.98	7.31	7.31
Saar	3.09	3.10	3.46	3.66	3.77	3.66	3.67	3.23	3.74	3.74	3.74	3.74
Belgium and the Netherlands	5.02	5.11	5.17	5.59	5.77	5.77	5.78	5.60	6.08	6.04	6.13	6.25
France	3.53	4.12	4.11	4.36	4.37	4.55	4.57	4.17	4.62	4.64	4.56	4.51
Italy	1.36	1.36	1.23	1.38	1.53	1.57	2.18	1.53	2.33	2.87	2.96	3.52
Total	*17.62*	*18.75*	*19.32*	*20.98*	*21.41*	*21.73*	*23.43*	*19.83*	*24.01*	*24.27*	*24.70*	*25.33*
Grand Total	**68.85**	**72.12**	**75.68**	**80.00**	**81.05**	**79.08**	**83.20**	**68.40**	**85.06**	**86.07**	**87.83**	**88.37**

(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 (138.000 metric tons produced in 1958).

(3) Exclusive of Gaz de France after the beginning of 1958.

LOW- AND MEDIUM-TEMPERATURE COKE

Production

TABLE VI b

Production and Production Capacity

000' metric tons

	Actual capacity							Actual production	Expected capacity			
	Beginning 1954	Beginning 1955	Beginning 1956	Beginning 1957	Beginning 1958	Beginning 1959	Beginning 1960	1959	Beginning 1961	Beginning 1962	Beginning 1963	Beginning 1964
Mine-owned plants.	413	569	535	490	477	462	452	429	452	452	452	452
Steelworks-owned plants	—	—	86	86	86	86	—	—	—	—	—	—
Total	**413**	**569**	**621**	**576**	**563**	**548**	**452**	**429**	**452**	**452**	**452**	**452**

COKING-PLANTS

Technical Data

TABLE VI c

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

Type of coal	1954		1955		1956		1957		1958		1959	
	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%	'000 metric tons	%
Group V (1). . . .	62 341	*78.9*	70 770	*77.9*	73 822	*74.8*	77 815	*76.5*	72 061	*75.1*	68 590	*75.7*
Group VI (1) . . .	11 795	*14.9*	14 541	*16.0*	19 506	*19.8*	17 877	*17.6*	18 566	*19.4*	16 958	*18.7*
Other groups . . .	4 680	*5.9*	5 215	*5.7*	4 806	*4.9*	5 395	*5.3*	4 735	*4.9*	4 470	*4.9*
Coke breeze and low-temperature coke breeze . .	228	*0.3*	366	*0.4*	465	*0.5*	564	*0.6*	576	*0.6*	636	*0.7*
Total	**79 044**	**100.0**	**90 892**	**100.0**	**98 599**	**100.0**	**101 651**	**100.0**	**95 938**	**100.0**	**90 654**	**100.0**
	'000 metric tons	output kg/t (2)	'000 metric tons	output kg/t (2)	'000 metric tons	output kg/t (2)	'000 metric tons	output kg/t (2)	'000 metric tons	output kg/t (2)	'000 metric tons	output kg/t (2)
Coke production .	59 585	753.8	68 850	757.5	75 097	761.6	77 428	761.7	72 799	758.8	68 394	754.5
	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input	metric tons	% of total input
Oil input	..	..	43 900	*0.047*	50 751	*0.051*	29 658	*0.029*	39 808	*0.041*	45 527	*0.050*

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

		1954	1955	1956	1957	1958	1959
a) Coke-oven gas delivered	'000,000 stand. cub. metres	25 560	29 960	32 848	34 064	31 945	30 310
b) Gas output	stand. cub. metres per ton of wet-charged coal	323	330	333	335	333	334
c) Coke-oven gas delivered to outside enterprises or for consumption other than *d*)	'000,000 stand. cub.m.	17 749	20 335	22 196	22 937	21 484	21 117
	% of *a*)	(69.4)	(67.9)	(67.6)	(67.3)	(67.3)	(69.7)
d) Consumption for heating ovens:							
1) Coke-oven gas.	'000,000 stand. cub.m.	7 911	9 625	10 652	11 127	10 461	9 193
	% of 4)		(68.0)	(70.8)	(72.7)	(71.5)	(67.1)
2) Producer gas	'000,000 stand. cub.m.	1 534	1 119	1 331	914	815	1 165
	% of 4)		(7.9)	(8.9)	(6.0)	(5.6)	(8.5)
3) Blast-furnace and other gases. .	'000,000 stand. cub.m.	..	3 408	3 053	3 270	3 351	3 349
	% of 4)		(24.1)	(20.3)	(21.3)	(22.9)	(24.4)
4) Total consumption of gas for heating ovens	'000,000 stand. cub.m.	..	14 152	15 036	15 311	14 627	13 707
			(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
e) Specific consumption in kcal/kg. of dry-charged coal (assuming an average moisture content of 8 %)		..	728	713	704	713	707

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 VII

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential 1959	Actual production 1959	Expected production potential				
			1960	1961	1962	1963	1964
Ruhr (1)	6.73	3.80	5.97	5.89	5.74	5.68	5.79
Aachen	0.68	0.52	0.66	0.66	0.66	0.66	0.66
Lower Saxony	0.41	0.46	0.47	0.50	0.50	0.50	0,50
Southern Belgium	2.53	0.97	2.36	2.52	2.43	2.44	2.44
Nord/Pas-de-Calais	3.84	3.43	3.94	4.17	4.17	4.17	4.17
Lorraine	0.20	0.05	—	—	—	—	—
Centre/Midi	2.18	1.83	2.08	2.05	2.05	2.04	2.04
Independent French plants	2.50	0.58	1.80	1.82	1.82	1.82	1.82
Limburg	1.12	1.02	1.6	1.16	1.16	1.16	1.16
Total	**20.19**	**12.66**	**18.44**	**18.76**	**18.53**	**18.47**	**18.58**

(1) Including several plants not owned by collieries (62,000 metric tons of briquettes in 1959).
N.B. The survey did not cover a number of plants which in 1959 produced 0.2 million metric tons of briquettes.

ELECTRIC CURRENT (1)

Output

TABLE VIII

Output of Electric Current and Electric Capacity of Pithead Power-Stations

Area	Actual electric capacity MW							Actual output 1958 '000,000 kWh	Expected electric capacity MW			
	Beginning 1954	Beginning 1955	Beginning 1956	Beginning 1957	Beginning 1958	Beginning 1959	Beginning 1960	1959	Beginning 1961	Beginning 1962	Beginning 1963	Beginning 1964
Ruhr	1 524	1 727	1 920	2 034	2 409	2 754	3 113	13 872	3 359	3 804	4 301	5 009
Aachen	116	116	119	109	120	120	120	558	120	120	120	120
Lower Saxony	63	113	113	113	100	94	94	554	94	97	219	219
Saar	243	298	270	270	422	396	499	1 557	503	503	638	778
Campine	233	253	272	286	303	303	299	1 122	414	414	414	539
Southern Belgium	376	388	385	369	369	371	594	1 999	826	826	951	951
Nord/Pas-de-Calais	856	856	981	975	976	1 206	1 321	4 817	1 321	1 321	1 166	1 281
Lorraine	375	475	476	483	473	566	686	2 677	684	684	684	700
Centre/Midi	377	459	460	450	461	461	565	1 369	565	565	565	559
Sulcis and La Thuile	—	—	64	64	64	64	64	111	64	64	64	64
Limburg	285	283	369	360	359	401	399	1 598	399	351	351	351
Total	**4 448**	**4 968**	**5 429**	**5 513**	**6 056**	**6 736**	**7 754**	**30 234**	**8 349**	**8 749**	**9 473**	**10 571**
of which												
pithead power-stations proper	..	..	4 788	4 861	5 399	6 087	7 127	27 496	7 720	8 117	8 845	9 965
power-generating plant at mines	..	..	641	652	657	638	627	2 738	629	632	628	606

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

TABLE IX a

Specific Consumption of Coal 1959

PITHEAD POWER-STATIONS (1)

Technical Data

C = Output of electric current in '000,000 kWh
O = Maximum electric capacity in '000 kW (average at beginning 1959 - beginning 1960)
H = Load-hours per annum (1959) (2)
} by type of specific consumption

Specific consumption	< 3000 kcal/kWh			3000-3499 kcal/kWh			3500-3999 kcal/kWh			4000-4999 kcal/kWh			≥ 5000 kcal/kWh			Total			Average consumption kcal/kWh
Country/Coalfield	C	O	H	C	O	H	C	O	H	C	O	H	C	O	H	C	O	H	
Germany (Fed. Rep.)																			
Ruhr	4 980	1 100	4 527	4 954	974	5 086	1 951	390	5 003	1 427	334	4 272	560	136	4 118	13 872	2 934	4 728	3 340
Aachen	—	—	—	521	103	5 058	—	—	—	37	17	2 176	—	—	—	558	120	4 650	3 195
Lower Saxony	—	—	—	465	80	5 813	—	—	—	89	14	6 357	—	—	—	554	94	5 894	3 406
Saar	558	170	3 282	651	161	4 043	—	—	—	338	105	3 219	10	12	833	1 557	448	3 475	3 543
Total	*5 538*	*1 270*	*4 361*	*6 591*	*1 318*	*5 001*	*1 951*	*390*	*5 003*	*1 891*	*470*	*4 023*	*570*	*148*	*3 851*	*16 541*	*3 596*	*4 600*	*3 356*
Belgium																			
Campine	270	72	3 750	495	120	4 125	124	38	3 263	233	71	3 282	—	—	—	1 122	301	3 728	3 445
Southern coalfields	764	211	3 621	608	104	5 846	275	70	3 929	329	88	3 739	23	10	2 300	1 999	483	4 139	3 415
Total	*1 034*	*283*	*3 654*	*1 103*	*224*	*4 924*	*399*	*108*	*3 694*	*562*	*159*	*3 535*	*23*	*10*	*2 300*	*3 121*	*784*	*3 981*	*3 423*
France																			
Nord/Pas-de-Calais	2 783	591	4 709	929	261	3 559	583	226	2 580	456	161	2 832	66	25	2 640	4 817	1 264	3 811	3 076
Lorraine	894	200	4 470	1 677	370	4 532	36	45	800	—	—	—	70	11	6 364	2 677	626	4 276	3 258
Centre-Midi	—	—	—	138	78	1 769	1 131	380	2 976	44	14	3 143	56	33	1 697	1 369	513	2 669	3 752
Total	*3 677*	*791*	*4 649*	*2 744*	*709*	*3 870*	*1 750*	*651*	*2 688*	*500*	*175*	*2 857*	*192*	*69*	*2 783*	*8 863*	*2 403*	*3 701*	*3 236*
Italy	—	—	—	—	—	—	*111*	*64*	*1 701*	—	—	—	—	—	—	—	—	—	*3 643*
Netherlands	*637*	*120*	*5 308*	—	—	—	*831*	*250*	*3 324*	*130*	*30*	*4 333*	—	—	—	*1 598*	*400*	*3 995*	*3 533*
Grand Total	**10 886**	**2 464**	**4 418**	**10 438**	**2 251**	**4 637**	**5 062**	**1 463**	**3 499**	**3 083**	**834**	**3 697**	**785**	**227**	**3 458**	**30 234**	**7 247**	**4 185**	**3 337**

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

(2) The number of load-hours is calculated by dividing annual output by the average maximum electric capacity (*i.e.* the arithmetic mean between the electric capacity at the beginning of 1959 and of 1960). 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, 1959. The number of load-hours represents an artificial index, based on the assumption that the stations were operating continuously under full load.

PITHEAD POWER-STATIONS (1)

Technical Data

TABLE IX b

Specific Consumption of Coal, 1954-1959

	1954	1955	1956	1957	1958	1959
Average specific consumption in kcal/kWh. . .	3 780 (2)	3 703 (2)	3 649	3 556	3 492	3 337 (3)
Consumption of secondary products in % of consumption of coal (ton for ton)	..	(88)	(88)	(88)	(87)	(87)
Load-hours per annum	4 642	4 761	4 934	5 036	4 530	4 185 (3)

(1) Pithead power-stations proper and other power-generating plant at mines.
(2) Approximate figures.
(3) See Table IX*a* for breakdown by coalfields.

The ratio of maximum electric capacity to nominal installed capacity varies as follows:

Beginning of	1954	*83.5 %*
do.	1955	*84.5 %*
do.	1956	*87.9 %*
do.	1957	*87.9 %*
do.	1958	*88.8 %*
do.	1959	*88.8 %*
do.	1960	*89.4 %*
	....	
Forecast for beginning of	1964	*91.5 %*

B.K.B. AND LOW-TEMPERATURE BROWN-COAL COKE

Investment and Production

TABLE X a

Capital Expenditure on Plants Producing B.K.B. (Brown-Coal Briquettes) and Low-Temperature Brown-Coal Coke

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

	Actual expenditure						Estimated expenditure	
	1954	1955	1956	1957	1958	1959	1960	1961
Briquetting - plants	5.10	7.87	4.07	1.76	4.45	4.54	8.36	5.72
Low-temperature coking-plants . . .	0.24	0.27	0.45	0.55	0.60	0.50	0.50	0.06
Total	**5.34**	**8.14**	**4.52**	**2.31**	**5.05**	**5.04**	**8.86**	**5.78**

TABLE X b

Production and Production Potential for B.K.B. and Low-Temperature Brown-Coal Coke

'000,000 metric tons

	Production potential					Production 1959	Expected production potential				
	1955	1956	1957	1958	1959		1960	1961	1962	1963	1964
B.K.B.	16.78	17.20	17.02	16.55	14.74	14.37	14.24	13.97	13.77	13.77	13.72
Low-temperature coke . .	0.62	0.59	0.62	0.59	0.59	0.60	0.59	0.59	0.59	0.59	0.59

IRON-ORE INDUSTRY

Investment

TABLE XI

Capital Expenditure by Orefields

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

Orefield	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Salzgitter, Ilsede, Harzvorland . .	2.21	4.73	4.90	3.54	5.78	6.53	5.04	4.40
Osnabrück, Weser-Wiehengebirge .	1.15	0.70	0.39	0.75	0.52	0.52	0.30	0.08
Siegerland-Wied	2.20	1.30	2.25	2.18	0.99	0.85	0.91	1.36
Central and Southern Germany (1)	0.83	0.77	0.54	0.53	0.86	0.83	0.71	0.57
Other German fields (2)	0.73	1.25	1.17	1.36	1.58	1.57	1.29	1.43
Belgium	—	—	—	0.04	0.08	—	0.10	0.05
Eastern France	16.43	16.62	25.86	33.73	25.80	23.76	30.47	26.93
Western France	1.26	1.83	3.03	2.94	2.87	2.93	3.67	4.12
French-Centre/Midi	0.19	0.15	0.29	0.22	0.25	0.28	0.32	0.44
Italy	4.09	2.47	3.98	2.87	1.77	1.10	2.35	1.18
Luxembourg	0.37	0.88	1.45	1.64	0.68	1.34	1.11	0.40
Total	**29.46**	**30.70**	**43.86**	**49.80**	**41.18**	**39.71**	**46.27**	**40.96**

(1) Sauerland-Waldeck, Lahn-Dill, Taunus-Hunsrück, Oberhessen.
(2) Doggererzgebiet, Kreideerzgebiet.

TABLE XII

Extraction and Extraction Potential by Orefields

'000,000 metric tons

Orefield	Extraction potential		Actual extraction 1959	Expected extraction potential				
	1958	1959		1960	1961	1962	1963	1964
Salzgitter, Ilsede, Harzvorland . .	11.60	11.65	10.90	12.07	12.22	12.45	12.67	12.80
Osnabrück, Weser-Wiehengebirge .	2.20	2.35	2.07	2.35	2.35	2.35	2.35	2.35
Siegerland-Wied	1.44	1.44	1.24	1.29	1.29	1.29	1.29	1.29
Central and Southern Germany (1)	1.69	1.74	1.44	1.74	1.76	1.77	1.74	1.75
Other German fields (2)	2.89	2.94	2.41	2.99	3.17	3.17	3.17	3.17
Belgium	0.20	0.23	0.14	0.27	0.27	0.27	0.27	0.27
Eastern France	58.86	61.03	57.24	64.46	65.75	66.59	66.68	66.49
Western France	5.16	4.85	3.97	5.00	4.99	5.12	5.72	5.72
French-Centre/Midi	0.40	0.41	0.39	0.40	0.39	0.40	0.40	0.40
Italy	2.65	2.41	2.04	2.43	2.43	2.44	2.44	2.44
Luxembourg	8.29	8.14	6.50	8.19	8.19	8.19	8.19	8.19
Total	**95.38**	**97.19**	**88.34**	**101.19**	**102.81**	**104.04**	**104.92**	**104.87**

(1) Sauerland-Waldeck, Lahn-Dill, Taunus-Hunsrück, Oberhessen.
(2) Doggererzgebiet, Kreideerzgebiet.

IRON AND STEEL INDUSTRY

Total Investment

TABLE XIII

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	210.22	60.88	56.43	46.70	35.86	25.75	42.93	37.39
North Rhine/Westphalia		216.31	183.24	205.81	182.30	140.55	164.51	103.97
Southern Germany (2)		12.00	11.28	15.61	8.50	3.74	28.16	17.16
Saar	15.61	19.41	34.96	46.17	27.93	40.96	40.09	23.68
Belgium	32.92	33.14	45.52	60.08	77.92	82.29	122.60	72.40
Lorraine	125.86	71.40	83.72	116.58	130.41	132.98	148.56	93.33
Northern France		22.54	33.63	42.89	37.70	34.33	66.84	66.84
France - other areas		14.27	23.88	30.29	32.84	22.56	26.23	11.91
Italy - coastal areas	35.85	10.35	23.48	43.24	33.07	45.89	85.97	86.95
Italy - other areas		25.56	28.48	35.91	36.45	17.74	28.76	21.14
Luxembourg	25.08	22.13	19.11	30.93	21.55	22.72	31.93	13.41
Netherlands	7.94	16.34	26.16	33.96	19.04	20.66	51.80	40.04
Total	**453.48**	**524.33**	**569.89**	**708.17**	**643.57**	**590.17**	**838.38**	**588.22**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

STEELWORKS-OWNED COKING-PLANTS

Investment

TABLE XIV a

Capital Expenditure by Areas

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

Area	Actual Expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	5.23	0.10	1.00	0.34	0.49	0.30	0.42	0.14
North Rhine/Westphalia		1.53	2.40	4.81	9.24	10.85	1.02	0.16
Southern Germany (2)		0.14	2.08	3.13	0.41	0.25	0.05	0.02
Saar		4.05	5.60	9.05	3.14	3.93	0.43	—
Belgium	1.39	2.82	3.75	3.95	2.44	1.00	3.81	0.76
Lorraine	9.29	5.10	5.94	3.85	2.73	2.11	1.78	0.42
Northern France		—	0.07	—	0.12	0.14	0.30	0.22
France - other areas		0.81	0.73	0.37	0.66	0.38	0.33	0.08
Italy - coastal areas	—	—	0.13	2.11	4.34	2.75	4.83	8.65
Italy - other areas	—	—	—	—	—	0.65	0.15	0.53
Luxembourg	—	—	—	—	—	—	—	—
Netherlands	2.08	5.39	0.63	0.35	0.98	2.38	0.64	0.16
Total	**17.99**	**19.94**	**22.33**	**27.96**	**24.55**	**24.74**	**13.76**	**11.14**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

BURDEN PREPARATION

Investment

TABLE XIV b

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	3.08	2.69	5.47	1.46	3.57	2.83	1.17	0.14
North Rhine/Westphalia		8.43	3.60	9.79	26.44	24.79	25.04	13.44
Southern Germany (2)		0.04	0.16	0.45	0.22	0.30	0.14	0.09
Saar	0.12	0.03	0.35	1.41	0.94	3.14	2.66	1.75
Belgium	0.10	0.27	3.60	8.47	8.32	16.25	14.89	7.80
Lorraine	0.57	1.48	7.71	16.51	15.66	16.89	20.62	25.19
Northern France		0.15	1.62	2.80	1.50	2.70	6.75	7.21
France - other areas		0.01	0.78	3.27	2.57	1.01	0.52	—
Italy - coastal areas	0.61	0.84	2.06	2.56	2.36	2.70	3.69	3.64
Italy - other areas		0.17	0.15	0.32	0.15	0.02	0.10	0.16
Luxembourg	7.11	6.13	3.25	3.61	4.54	2.89	6.06	4.28
Netherlands	—	0.90	2.77	0.88	0.46	1.26	2.92	2.18
Total	**11.59**	**21.14**	**31.52**	**51.53**	**66.73**	**74.78**	**84.56**	**65.88**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

BLAST-FURNACES

Investment

TABLE XIV c

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	16.74	0.26	3.02	9.76	8.13	4.13	4.23	4.04
North Rhine/Westphalia		16.16	25.61	29.17	32.56	25.73	22.51	17.04
Southern Germany (2)		2.53	2.94	2.08	1.48	0.93	0.57	0.28
Saar	1.92	1.56	2.46	3.50	4.72	5.89	9.31	4.48
Belgium	7.34	5.83	10.37	8.57	11.06	8.77	4.09	7.98
Lorraine	11.14	9.43	20.20	25.66	29.90	26.35	27.81	19.10
Northern France		1.10	4.05	7.55	9.48	5.96	12.39	10.80
France - other areas		0.71	1.15	3.90	4.62	2.28	1.02	0.43
Italy - coastal areas	0.59	1.68	0.20	1.39	6.00	4.99	6.78	10.87
Italy - other areas		0.08	0.61	1.25	1.42	0.68	0.61	0.45
Luxembourg	2.01	2.33	3.67	3.64	2.98	2.51	3.13	—
Netherlands	0.44	0.18	2.40	7.57	2.42	1.11	4.02	5.31
Total	**40.18**	**41.85**	**76.68**	**104.04**	**114.77**	**89.33**	**96.47**	**80.78**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

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

Investment

TABLE XIV d

Capital Expenditure by Areas

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

Area	Actual Expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	24.00	3.05	9.49	11.56	12.19	7.26	5.82	4.32
North Rhine/Westphalia		26.12	31.61	43.77	68.24	61.37	48.57	30.64
Southern Germany (2)		2.71	5.18	5.66	2.11	1.48	0.76	0.39
Saar	3.09	5.64	8.41	13.96	8.80	12.96	12.40	6.23
Belgium	8.83	8.92	17.72	20.99	21.82	26.02	22.79	16.54
Lorraine	21.00	16.01	33.85	46.02	48.29	45.35	50.21	44.71
Northern France		1.25	5.74	10.35	11.45	8.80	19.44	18.23
France - other areas		1.53	2.66	7.54	7.50	3.67	1.87	0.51
Italy - coastal areas	1.20	2.52	2.39	6.06	12.70	10.44	15.30	23.16
Italy - other areas		0.25	0.76	1.57	1.57	1.35	0.86	1.14
Luxembourg	9.12	8.46	6.92	7.25	7.52	5.40	9.19	4.28
Netherlands	2.52	6.47	5.80	8.80	3.86	4.75	7.58	7.65
Total	**69.76**	**82.93**	**130.53**	**183.53**	**206.05**	**188.85**	**194.79**	**157.80**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

BASIC BESSEMER STEELWORKS

Investment

TABLE XV a

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	3.24	2.99	1.74	2.02	0.83	0.39	1.00	0.78
North Rhine/Westphalia		4.05	3.09	8.22	17.10	13.31	4.37	1.78
Southern Germany (2)		0.24	0.25	0.74	0.62	0.11	0.01	—
Saar	0.40	1.36	3.87	6.01	5.53	4.39	3.62	1.75
Belgium	1.75	2.57	3.25	10.95	14.32	7.49	6.85	0.85
Lorraine	5.72	3.54	3.98	5.84	3.80	4.76	7.41	5.06
Northern France		0.15	0.50	—	1.45	1.00	0.75	1.00
France - other areas		0.20	0.50	1.00	0.60	0.36	0.45	0.50
Italy - coastal areas	0.16	0.05	0.25	0.28	0.64	0.40	0.58	0.24
Italy - other areas		—	—	—	—	—	—	—
Luxembourg	2.64	2.10	5.00	10.05	4.80	3.17	0.42	—
Netherlands	—	—	—	—	—	—	—	—
Total	**13.91**	**17.25**	**22.43**	**45.11**	**49.69**	**35.38**	**25.46**	**11.96**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

OPEN-HEARTH STEELWORKS

Investment

TABLE XV b

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	12.33	2.92	7.87	6.18	0.98	0.84	1.00	0.40
North Rhine/Westphalia		15.62	25.05	26.78	14.03	8.51	10.62	6.12
Southern Germany (2)		0.30	0.14	1.52	0.02	—	0.85	—
Saar	0.47	0.08	1.46	0.32	0.78	0.45	0.05	—
Belgium	0.30	0.05	0.24	0.53	0.60	0.49	0.27	0.51
Lorraine	5.43	3.78	2.77	2.79	2.89	2.56	4.49	1.77
Northern France		3.52	3.69	4.09	2.28	0.50	0.94	0.20
France - other areas		0.21	2.05	0.40	0.21	0.09	0.81	0.44
Italy - coastal areas	1.38	1.62	4.52	5.68	2.97	0.89	5.40	3.72
Italy - other areas		0.82	1.37	1.41	1.49	0.80	0.67	0.70
Luxembourg	—	—	—	—	—	—	—	—
Netherlands	0.21	1.73	4.76	1.91	1.13	1.62	1.00	0.42
Total	**20.12**	**30.65**	**53.92**	**51.61**	**27.38**	**16.75**	**26.10**	**14.28**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

ELECTRIC - FURNACE STEELWORKS

Investment

TABLE XV c

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954 (1)	1955 (1)	1956	1957	1958	1959	1960	1961
Northern Germany (2)	5.42	0.05	0.61	—	—	0.38	0.71	0.10
North Rhine/Westphalia		9.76	8.47	8.30	2.57	1.57	2.02	1.28
Southern Germany (3)		—	—	0.13	—	—	—	—
Saar	—	0.02	—	—	—	0.01	—	—
Belgium	1.60	1.41	1.22	0.37	0.14	0.14	0.22	0.05
Lorraine	1.14	—	0.18	0.04	1.48	1.34	1.01	0.76
Northern France		1.22	0.07	—	—	—	1.30	0.32
France - other areas		0.94	2.41	4.31	3.29	1.56	3.41	2.71
Italy - coastal areas	1.75	—	—	—	—	—	0.54	0.18
Italy - other areas		1.46	3.63	2.91	3.08	3.15	2.37	1.47
Luxembourg	—	0.04	0.02	0.02	0.01	0.01	0.12	—
Netherlands	0.15	0.17	0.56	0.34	0.02	—	—	—
Total	**10.06**	**15.07**	**17.17**	**16.42**	**10.59**	**8.16**	**11.70**	**6.87**

(1) For the years 1954-1955 including " other steelworks ".
(2) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(3) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

LD, ROTOR AND OTHER STEELWORKS

Investment

TABLE XV d

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955 (1)	1956	1957	1958	1959	1960	1961
Northern Germany (2)	—	—	—	0.03	1.89	1.92	4.72	2.62
North Rhine/Westphalia	—	0.15	5.67	9.73	3.00	0.23	0.12	8.50
Southern Germany (3)	—	—	—	—	—	—	—	—
Saar	—	—	—	—	—	0.83	2.32	0.69
Belgium	—	—	—	—	—	—	5.00	3.80
Lorraine	—	0.06	0.02	—	0.51	5.84	5.34	0.74
Northern France	—	—	—	—	—	—	2.86	3.40
France - other areas	—	—	0.16	—	—	—	—	—
Italy - coastal areas	—	—	—	—	—	—	3.85	3.85
Italy - other areas	—	—	—	—	—	—	—	—
Luxembourg	—	—	—	—	—	0.49	1.20	0.81
Netherlands	—	—	2.23	5.47	1.70	2.02	4.19	6.90
Total	—	**0.21**	**8.08**	**15.23**	**7.10**	**11.33**	**29.60**	**31.31**

(1) For 1955, LD, Rotor and similar works only.
(2) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(3) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

STEELWORKS - TOTAL

Investment

TABLE XV e

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	20.99	5.96	10.22	8.23	3.70	3.53	7.43	3.90
North Rhine/Westphalia		29.58	42.28	53.03	36.70	23.62	17.13	17.68
Southern Germany (2)		0.54	0.39	2.39	0.64	0.11	0.86	—
Saar	0.87	1.46	5.33	6.33	6.31	5.68	5.99	2.44
Belgium	3.65	4.03	4.71	11.85	15.06	8.12	12.34	5.21
Lorraine	12.29	7.38	6.95	8.67	8.68	14.50	18.25	8.33
Northern France		4.89	4.26	4.09	3.73	1.50	5.85	4.92
France - other areas		1.35	5.12	5.71	4.10	2.01	4.67	3.65
Italy - coastal areas	3.29	1.67	4.77	5.96	3.61	1.29	10.37	7.99
Italy - other areas		2.28	5.00	4.32	4.57	3.95	3.04	2.17
Luxembourg	2.64	2.14	5.02	10.07	4.81	3.67	1.74	0.81
Netherlands	0.36	1.90	7.55	7.72	2.85	3.64	5.19	7.32
Total	**44.09**	**63.18**	**101.60**	**128.37**	**94.76**	**71.62**	**92.86**	**64.42**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

BLOOMING AND SLABBING MILLS

Investment

TABLE XVI a

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	.	9.42	0.31	0.19	0.86	0.25	1.13	0.90
North Rhine/Westphalia	.	20.84	17.12	19.66	11.35	6.19	13.09	7.93
Southern Germany (2)	.	0.53	0.01	—	—	—	0.03	—
Saar	.	0.04	—	1.99	1.63	6.86	2.23	4.40
Belgium	.	1.11	1.75	6.43	4.08	4.14	7.34	8.20
Lorraine	.	3.21	4.03	3.98	3.40	3.60	5.47	5.20
Northern France	.	—	1.48	7.00	2.85	1.89	4.89	5.67
France - other areas	.	0.17	2.43	1.62	0.41	0.72	1.27	0.41
Italy - coastal areas	.	0.18	0.77	0.45	4.38	13.06	6.55	5.82
Italy - other areas	.	1.99	0.77	2.43	1.78	0.69	2.47	2.12
Luxembourg	.	2.76	0.54	0.51	0.18	0.25	0.50	0.34
Netherlands	.	1.09	1.95	0.83	0.67	1.63	1.89	1.77
Total	**23.10**	**41.34**	**31.16**	**45.09**	**31.59**	**39.28**	**46.86**	**42.76**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

SECTION MILLS

Investment

TABLE XVI b

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	.	12.02	8.42	0.89	0.29	0.48	4.16	4.24
North Rhine/Westphalia	.	38.20	21.71	17.93	9.12	10.70	14.90	6.17
Southern Germany (2)	.	2.85	0.82	0.65	0.61	0.36	0.58	0.25
Saar	.	8.12	15.63	12.25	2.95	6.40	12.05	8.93
Belgium	.	2.63	2.75	2.62	8.39	16.20	20.70	10.32
Lorraine	.	8.76	12.03	12.92	9.93	9.11	13.14	11.26
Northern France	.	1.61	2.31	3.60	3.51	2.92	4.20	4.21
France - other areas	.	3.85	5.75	8.96	7.77	2.90	2.23	1.91
Italy - coastal areas	.	0.32	0.22	0.32	0.36	0.75	3.70	2.69
Italy - other areas	.	8.29	10.30	13.70	14.93	5.44	4.89	1.59
Luxembourg	.	0.23	0.33	5.35	3.43	8.43	14.35	6.06
Netherlands	.	—	—	0.01	0.07	0.03	—	—
Total	**74.40**	**86.88**	**80.27**	**79.20**	**61.36**	**63.72**	**94.90**	**57.63**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

FLAT-PRODUCT MILLS

Investment

TABLE XVI c

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	.	23.26	19.74	17.01	11.00	7.62	15.06	20.84
North Rhine/Westphalia	.	67.33	38.07	35.90	22.04	12.71	36.43	29.31
Southern Germany (2)	.	1.98	0.46	1.21	1.02	0.12	21.78	15.02
Saar	.	0.44	1.10	5.75	0.40	0.36	0.30	0.14
Belgium	.	7.59	7.33	3.35	11.74	12.43	32.37	19.93
Lorraine	.	11.49	5.82	12.66	12.86	9.28	12.97	3.73
Northern France	.	11.33	12.12	7.97	3.70	5.24	16.74	19.29
France - other areas	.	3.86	3.51	2.15	3.01	3.54	4.68	2.06
Italy - coastal areas	.	1.77	8.43	16.72	3.19	8.38	16.42	18.04
Italy - other areas	.	7.09	6.07	3.54	4.71	2.84	13.34	10.94
Luxembourg	.	4.42	0.38	0.29	0.31	0.07	0.97	0.56
Netherlands	.	3.03	4.08	4.89	3.93	4.91	24.81	9.85
Total	**139.60**	**143.59**	**107.11**	**111.44**	**77.91**	**67.50**	**195.87**	**149.71**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

ROLLING-MILLS - TOTAL (1)

Investment

TABLE XVI d

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (2)	138.03	45.52	29.30	19.14	13.01	10.66	21.11	25.98
North Rhine/Westphalia		136.30	83.15	78.10	48.67	34.20	69.89	45.26
Southern Germany (3)		6.75	2.32	3.43	3.35	0.59	24.85	15.91
Saar	8.00	9.80	17.78	20.54	5.79	14.06	15.22	13.59
Belgium	15.57	13.80	16.63	16.05	27.22	34.81	70.27	43.78
Lorraine	64.00	29.63	23.97	36.71	33.91	26.11	37.16	23.11
Northern France		13.52	17.55	24.50	14.36	12.81	29.89	31.62
France - other areas		9.23	12.24	13.56	14.03	12.94	14.10	5.31
Italy - coastal areas	25.39	4.52	13.97	25.06	11.26	26.34	38.24	34.81
Italy - other areas		18.69	17.80	24.47	23.32	9.57	21.17	15.19
Luxembourg	11.21	8.40	3.27	9.30	5.23	10.48	17.21	6.96
Netherlands	2.95	4.92	6.91	11.48	6.90	7.31	30.26	16.62
Total	**265.15**	**301.08**	**244.89**	**282.34**	**207.05**	**199.88**	**389.37**	**278.14**

(1) Including ancillary and auxiliary plants.
(2) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(3) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

STEELWORKS-OWNED POWER-GENERATING PLANTS AND DISTRIBUTION NETWORKS

Investment

TABLE XVII a

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	14.83	4.07	1.99	2.10	1.83	2.16	4.54	2.65
North Rhine/Westphalia		12.19	8.91	9.27	9.56	5.72	13.52	4.15
Southern Germany (2)		1.24	2.62	2.85	1.40	0.64	0.58	0.22
Saar	0.88	0.57	1.02	2.29	2.61	0.70	1.18	—
Belgium	2.35	2.86	1.59	4.48	7.06	7.26	8.41	3.13
Lorraine	21.15	12.45	9.02	14.17	22.87	30.36	25.44	8.93
Northern France		0.67	0.60	0.39	0.53	0.80	3.99	4.25
France - other areas		0.79	1.28	1.60	2.14	1.29	1.67	0.64
Italy - coastal areas	1.20	0.38	0.72	1.08	3.57	5.70	8.03	6.47
Italy - other areas		1.10	0.53	1.28	1.27	0.70	0.63	0.42
Luxembourg	1.32	2.30	2.51	2.21	1.74	0.83	0.54	0.06
Netherlands	1.25	0.69	1.18	1.48	2.24	1.80	2.00	1.66
Total	**42.98**	**39.31**	**31.97**	**43.20**	**56.82**	**57.96**	**70.53**	**32.58**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

MISCELLANEOUS
(IRON AND STEEL WORKS)

Investment

TABLE XVII b

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	12.37	2.28	5.43	5.67	5.13	2.14	4.03	0.54
North Rhine/Westphalia		12.12	17.29	21.64	19.13	15.64	15.40	6.24
Southern Germany (2)		0.76	0.77	1.28	1.00	0.92	1.11	0.64
Saar	2.77	1.94	2.42	3.05	4.42	7.56	5.30	1.42
Belgium	2.52	3.53	4.87	6.71	6.76	6.08	8.79	3.74
Lorraine	7.42	5.93	9.93	11.01	16.66	16.66	17.50	8.25
Northern France		2.21	5.48	3.56	7.98	10.42	7.67	7.82
France - other areas		1.37	2.58	1.88	4.72	2.65	3.92	1.80
Italy - coastal areas	4.77	1.26	1.63	5.08	1.93	2.12	14.03	14.52
Italy - other areas		3.24	4.39	4.27	5.72	2.17	3.06	2.22
Luxembourg	0.79	0.83	1.39	2.10	2.25	2.34	3.25	1.30
Netherlands	0.86	2.36	4.72	4.48	3.19	3.16	6.77	6.79
Total	**31.50**	**37.83**	**60.90**	**70.73**	**78.89**	**71.86**	**90.83**	**55.28**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

GENERAL SERVICES - TOTAL
(IRON AND STEEL WORKS)

Investment

TABLE XVII c

Capital Expenditure by Areas

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

Area	Actual expenditure						Estimated expenditure (projects in progress or approved)	
	1954	1955	1956	1957	1958	1959	1960	1961
Northern Germany (1)	27.20	6.35	7.42	7.77	6.96	4.30	8.57	3.19
North Rhine/Westphalia		24.31	26.20	30.91	28.69	21.36	28.92	10.39
Southern Germany (2)		2.00	3.39	4.13	2.40	1.56	1.69	0.86
Saar	3.65	2.51	3.44	5.34	7.03	8.26	6.48	1.42
Belgium	4.87	6.39	6.46	11.19	13.82	13.34	17.20	6.87
Lorraine	28.57	18.38	18.95	25.18	39.53	47.02	42.94	17.18
Northern France		2.88	6.08	3.95	8.51	11.22	11.66	12.07
France - other areas		2.16	3.86	3.48	6.86	3.94	5.59	2.44
Italy - coastal areas	5.97	1.64	2.35	6.16	5.50	7.82	22.06	20.99
Italy - other areas		4.34	4.92	5.55	6.99	2.87	3.69	2.64
Luxembourg	2.11	3.13	3.90	4.31	3.99	3.17	3.79	1.36
Netherlands	2.11	3.05	5.90	5.96	5.43	4.96	8.77	8.45
Total	**74.48**	**77.14**	**92.87**	**113.93**	**135.71**	**129.82**	**161.36**	**87.86**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

SINTER

Production

TABLE XVIII a

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	1.08	1.70	1.33	1.77	1.91	1.95	1.95
North Rhine/Westphalia	10.51	12.04	10.85	13.64	14.72	15.88	15.88
Southern Germany (2)	0.31	0.31	0.18	0.31	0.31	0.31	0.31
Saar	3.54	3.72	3.56	3.72	5.03	5.45	5.45
Belgium	1.25	2.04	1.66	2.82	4.70	5.65	5.65
Lorraine	2.57	3.48	2.99	5.38	6.47	10.43	13.57
Northern France	0.33	0.40	0.40	0.59	1.01	1.52	2.12
France - other areas	0.07	0.54	0.41	0.67	0.72	0.72	0.72
Italy - coastal areas	2.00	1.98	1.54	2.06	2.06	2.06	2.32
Italy - other areas	0.51	0.64	0.31	0.65	0.65	0.65	0.65
Luxembourg	2.04	2.48	2.41	2.66	2.66	2.66	3.26
Netherlands	0.70	0.90	0.81	1.10	2.15	2.15	2.15
Total	**24.91**	**30.23**	**26.45**	**35.37**	**42.39**	**49.43**	**54.03**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

PIG-IRON

Production

TABLE XVIII b

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	2.67	2.88	2.63	3.42	3.66	3.71	3.71
North Rhine/Westphalia	16.01	17.54	14.85	19.08	19.31	20.16	20.56
Southern Germany (2)	1.21	1.31	1.05	1.29	1.34	1.34	1.34
Saar	3.28	3.44	3.21	3.53	3.67	3.86	3.88
Belgium	6.60	6.87	5.97	7.23	7.72	7.74	8.29
Lorraine	10.03	10.32	9.57	11.17	11.72	12.56	13.27
Northern France	1.81	2.10	1.89	2.41	2.51	2.87	3.42
France - other areas	1.06	1.20	0.97	1.31	1.35	1.38	1.40
Italy - coastal areas	1.75	1.82	1.77	2.40	2.79	2.99	2.81
Italy - other areas	0.53	0.55	0.35	0.56	0.58	0.58	0.58
Luxembourg	3.57	3.82	3.41	3.84	3.88	3.91	3.97
Netherlands	0.96	1.15	1.14	1.30	1.40	1.63	1.70
Total	**49.48**	**53.00**	**46.81**	**57.54**	**59.93**	**62.73**	**64.93**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

BASIC BESSEMER STEEL

Production

TABLE XIX a

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	1.42	1.64	1.61	1.74	1.59	1.59	1.59
North Rhine/Westphalia	9.03	9.60	8.62	10.07	10.15	10.20	10.20
Southern Germany (2)	0.50	0.56	0.50	0.56	0.60	0.60	0.60
Saar	2.75	2.80	2.73	2.96	3.01	3.16	2.85
Belgium	6.02	6.09	5.52	6.58	6.90	6.93	7.42
Lorraine	7.60	8.00	7.66	8.45	8.50	8.99	9.54
Northern France	1.18	1.39	1.23	1.46	1.51	1.56	1.56
France - other areas	0.34	0.39	0.37	0.43	0.45	0.45	0.45
Italy - coastal areas	0.36	0.41	0.40	0.59	0.70	0.70	0.70
Italy - other areas	—	—	—	—	—	—	—
Luxembourg	3.53	3.82	3.58	3.84	3.88	3.91	3.97
Netherlands	—	—	—	—	—	—	—
Total	**32.73**	**34.70**	**32.22**	**36.68**	**37.29**	**38.09**	**38.88**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

OPEN-HEARTH STEEL

Production

TABLE XIX b

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	1.88	1.91	1.76	2.05	2.05	2.05	2.05
North Rhine/Westphalia	11.45	11.72	10.08	11.99	12.17	12.23	12.22
Southern Germany (2)	1.02	1.03	0.82	1.03	1.04	1.04	1.04
Saar	0.78	0.82	0.82	0.82	0.83	0.84	0.84
Belgium	0.80	0.84	0.60	0.86	0.86	0.86	0.80
Lorraine	2.17	2.23	2.17	2.30	2.37	2.36	2.36
Northern France	2.14	2.10	1.90	2.20	2.22	2.24	2.24
France - other areas	0.87	0.70	0.48	0.68	0.69	0.69	0.69
Italy - coastal areas	2.39	2.41	2.04	2.49	2.87	3.02	2.88
Italy - other areas	2.11	1.98	1.71	2.12	2.35	2.24	2.14
Luxembourg	—	—	—	—	—	—	—
Netherlands	1.07	1.19	1.04	1.19	1.19	1.19	1.14
Total	**26.68**	**26.93**	**23.42**	**27.73**	**28.64**	**28.76**	**28.40**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

ELECTRIC-FURNACE STEEL

Production

TABLE XIX c

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	0.09	0.10	0.10	0.18	0.18	0.18	0.18
North Rhine/Westphalia	1.63	1.82	1.58	1.88	1.99	2.01	2.05
Southern Germany (2)	0.12	0.13	0.13	0.13	0.13	0.13	0.13
Saar	0.08	0.08	0.07	0.08	0.08	0.08	0.08
Belgium	0.52	0.57	0.30	0.59	0.59	0.59	0.59
Lorraine	0.39	0.41	0.37	0.46	0.48	0.52	0.52
Northern France	0.20	0.17	0.17	0.17	0.21	0.22	0.22
France - other areas	0.91	0.97	0.74	1.00	1.03	1.06	1.08
Italy - coastal areas	0.29	0.29	0.25	0.27	0.26	0.27	0.24
Italy - other areas	2.71	2.84	2.36	2.99	3.04	3.06	3.07
Luxembourg	0.08	0.09	0.09	0.09	0.09	0.09	0.09
Netherlands	0.20	0.19	0.19	0.21	0.21	0.21	0.21
Total	**7.22**	**7.66**	**6.35**	**8.05**	**8.29**	**8.42**	**8.46**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

LD, ROTOR AND OTHER STEELS

Production

TABLE XIX d

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	—	0.05	0.02	0.09	0.48	0.48	0.48
North Rhine/Westphalia	0.57	0.59	0.59	0.63	0.63	1.08	1.48
Southern Germany (2)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Saar	—	—	—	0.05	0.08	0.10	0.48
Belgium	0.03	0.02	0.02	0.02	0.02	0.02	0.17
Lorraine	0.01	0.01	—	0.28	0.58	0.58	0.58
Northern France	0.09	0.06	0.05	0.10	0.15	0.45	1.05
France - other areas	0.06	0.06	0.05	0.06	0.06	0.06	0.06
Italy - coastal areas	—	—	—	—	—	—	0.80
Italy - other areas	—	—	—	—	—	—	—
Luxembourg	—	—	—	—	—	—	—
Netherlands	0.28	0.45	0.44	0.56	0.65	0.90	1.00
Total	**1.05**	**1.25**	**1.18**	**1.80**	**2.66**	**3.68**	**6.11**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

STEEL - TOTAL

Production

TABLE XIX e

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	3.39	3.70	3.49	4.06	4.30	4.30	4.30
North Rhine/Westphalia	22.68	23.73	20.87	24.57	24.94	25.52	25.95
Southern Germany (2)	1.65	1.73	1.46	1.73	1.78	1.78	1.78
Saar	3.61	3.70	3.62	3.91	4.00	4.18	4.25
Belgium	7.37	7.52	6.44	8.05	8.37	8.40	8.98
Lorraine	10.17	10.65	10.20	11.49	11.93	12.45	13.00
Northern France	3.61	3.72	3.35	3.93	4.09	4.47	5.07
France - other areas	2.18	2.12	1.64	2.17	2.23	2.26	2.28
Italy - coastal areas	3.04	3.11	2.69	3.35	3.83	3.99	4.62
Italy - other areas	4.82	4.82	4.07	5.11	5.39	5.30	5.21
Luxembourg	3.61	3.91	3.67	3.93	3.97	4.00	4.06
Netherlands	1.55	1.83	1.67	1.96	2.05	2.30	2.35
Total	**67.68**	**70.54**	**63.17**	**74.26**	**76.88**	**78.95**	**81.85**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

SECTIONS

Production

TABLE XX a

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	1.23	1.29	1.18	1.38	1.42	1.42	1.47
North Rhine/Westphalia	8.05	8.23	7.02	8.52	8.54	8.70	9.00
Southern Germany (2)	0.64	0.75	0.56	0.76	0.80	0.80	0.81
Saar	1.78	1.87	1.73	1.93	2.06	2.26	2.31
Belgium	3.29	3.42	2.69	3.48	3.65	3.91	4.06
Lorraine	4.86	4.77	4.24	5.19	5.41	5.48	5.65
Northern France	1.02	1.03	0.87	1.14	1.17	1.27	1.27
France - other areas	0.87	0.89	0.71	1.01	1.04	1.08	1.08
Italy - coastal areas	1.02	1.02	0.76	1.05	1.16	1.07	0.87
Italy - other areas	2.45	2.87	2.08	3.03	3.07	3.12	3.05
Luxembourg	1.89	2.06	1.88	2.06	2.08	2.10	2.14
Netherlands	0.21	0.21	0.17	0.21	0.21	0.21	0.21
Total	**17.31**	**18.41**	**23.89**	**29.76**	**30.61**	**31.42**	**31.92**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

FLAT PRODUCTS

Production

TABLE XX b

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	0.91	0.83	0.80	1.05	1.08	1.18	1.33
North Rhine/Westphalia	8.17	8.27	6.43	8.35	8.88	9.38	9.31
Southern Germany (2)	0.80	0.81	0.66	0.79	0.84	1.04	1.04
Saar	0.85	0.84	0.74	0.85	0.87	0.92	0.92
Belgium	2.39	2.42	1.94	2.43	2.46	2.53	2.90
Lorraine	3.37	3.44	3.38	3.89	4.12	4.30	4.57
Northern France	1.50	1.60	1.42	1.67	1.82	1.99	2.17
France - other areas	0.44	0.49	0.40	0.51	0.56	0.56	0.56
Italy - coastal areas	1.12	1.22	1.15	1.52	1.69	1.96	1.91
Italy - other areas	1.29	1.45	0.97	1.48	1.55	1.44	1.74
Luxembourg	0.81	0.94	0.88	0.96	0.96	0.96	1.00
Netherlands	1.03	1.06	1.03	1.05	1.10	1.31	1.36
Total	**22.68**	**23.37**	**19.80**	**24.55**	**25.93**	**27.57**	**28.81**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

FINISHED ROLLED PRODUCTS

Production

TABLE XX c

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	2.14	2.12	1.98	2.43	2.50	2.60	2.80
North Rhine/Westphalia	16.22	16.50	13.45	16.87	17.42	18.08	18.31
Southern Germany (2)	1.44	1.56	1.22	1.55	1.64	1.84	1.85
Saar	2.63	2.71	2.47	2.78	2.93	3.18	3.23
Belgium	5.68	5.84	4.63	5.91	6.11	6.44	6.96
Lorraine	8.23	8.21	7.62	9.08	9.53	9.78	10.22
Northern France	2.52	2.63	2.29	2.81	2.99	3.26	3.44
France - other areas	1.31	1.38	1.11	1.52	1.60	1.64	1.64
Italy - coastal areas	2.14	2.24	1.91	2.57	2.85	3.03	2.78
Italy - other areas	3.74	4.32	3.05	4.51	4.62	4.56	4.79
Luxembourg	2.70	3.00	2.76	3.02	3.04	3.06	3.14
Netherlands	1.24	1.27	1.20	1.26	1.31	1.52	1.57
Total	**49.99**	**51.78**	**43.69**	**54.31**	**56.54**	**58.99**	**60.73**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

HEAVY AND LIGHT SECTIONS
(INCLUDING TUBE SEMIS)

Production

TABLE XXI a

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	1.23	1.29	1.18	1.38	1.42	1.42	1.47
North Rhine/Westphalia	6.12	6.26	5.34	6.54	6.55	6.66	6.76
Southern Germany (2)	0.63	0.74	0.55	0.75	0.79	0.79	0.80
Saar	1.50	1.56	1.43	1.62	1.75	1.95	2.00
Belgium	2.72	2.79	2.09	2.82	2.95	3.07	3.10
Lorraine	3.68	3.49	3.07	3.79	3.99	4.05	4.14
Northern France	1.02	1.03	0.87	1.14	1.17	1.27	1.27
France - other areas	0.70	0.72	0.54	0.80	0.82	0.85	0.85
Italy - coastal areas	0.94	0.90	0.64	0.93	1.03	0.94	0.74
Italy - other areas	1.93	2.33	1.65	2.45	2.49	2.54	2.48
Luxembourg	1.66	1.82	1.65	1.82	1.84	1.87	1.89
Netherlands	0.06	0.06	0.05	0.06	0.06	0.06	0.06
Total	**22.19**	**22.99**	**19.06**	**24.10**	**24.86**	**25.47**	**25.56**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

WIRE-ROD

Production

TABLE XXI b

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	—	—	—	—	—	—	—
North Rhine/Westphalia	1.93	1.97	1.68	1.98	1.99	2.04	2.24
Southern Germany (2)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Saar	0.28	0.31	0.30	0.31	0.31	0.31	0.31
Belgium	0.57	0.63	0.60	0.66	0.70	0.84	0.96
Lorraine	1.18	1.28	1.17	1.40	1.42	1.43	1.51
Northern France	—	—	—	—	—	—	—
France - other areas	0.17	0.17	0.17	0.21	0.22	0.23	0.23
Italy - coastal areas	0.08	0.12	0.12	0.12	0.13	0.13	0.13
Italy - other areas	0.52	0.54	0.43	0.58	0.58	0.58	0.57
Luxembourg	0.23	0.24	0.23	0.24	0.24	0.23	0.25
Netherlands	0.15	0.15	0.12	0.15	0.15	0.15	0.15
Total	**5.12**	**5.42**	**4.83**	**5.66**	**5.75**	**5.95**	**6.36**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

HOOP AND STRIP
AND TUBE STRIP

Production

TABLE XXI c

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	—	—	—	—	—	—	—
North Rhine/Westphalia	2.30	2.51	1.79	2.47	2.50	2.64	2.64
Southern Germany (2)	0.03	0.03	0.02	0.03	0.03	0.03	0.03
Saar	0.26	0.26	0.23	0.26	0.27	0.30	0.30
Belgium	0.27	0.27	0.24	0.37	0.37	0.32	0.35
Lorraine	0.80	0.85	0.80	0.91	1.03	1.03	1.03
Northern France	—	—	0.03	—	—	—	—
France - other areas	—	—	—	—	—	—	—
Italy - coastal areas	0.09	0.16	0.15	0.24	0.28	0.28	0.27
Italy - other areas	0.23	0.28	0.19	0.29	0.31	0.32	0.32
Luxembourg	0.41	0.51	0.46	0.53	0.53	0.53	0.57
Netherlands	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Total	**4.46**	**4.94**	**3.98**	**5.17**	**5.39**	**5.52**	**5.58**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

PLATE ⩾ 3 mm.

Production

TABLE XXI d

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	0.81	0.68	0.67	0.85	0.84	0.84	0.84
North Rhine/Westphalia	3.86	3.68	2.80	3.68	3.83	4.04	3.98
Southern Germany (2)	0.02	0.02	0.03	0.02	0.02	0.02	0.02
Saar	0.54	0.53	0.47	0.53	0.54	0.56	0.56
Belgium	0.98	0.98	0.67	0.93	0.95	1.02	1.09
Lorraine	0.90	0.92	0.84	1.00	1.06	1.18	1.18
Northern France	0.43	0.45	0.38	0.39	0.39	0.56	0.74
France - other areas	0.12	0.13	0.08	0.13	0.14	0.14	0.14
Italy - coastal areas	0.47	0.46	0.42	0.57	0.64	0.71	0.65
Italy - other areas	0.63	0.63	0.35	0.64	0.64	0.53	0.53
Luxembourg	0.16	0.16	0.15	0.16	0.16	0.16	0.16
Netherlands	0.36	0.39	0.43	0.39	0.39	0.39	0.39
Total	**9.28**	**9.03**	**7.29**	**9.29**	**9.60**	**10.15**	**10.28**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

HOT-ROLLED SHEET < 3 mm.

Production

TABLE XXI e

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	0.03	—	—	—	—	—	—
North Rhine/Westphalia	0.90	0.93	0.79	0.93	0.96	0.96	0.91
Southern Germany (2)	0.45	0.46	0.35	0.42	0.40	0.33	0.33
Saar	0.05	0.05	0.04	0.06	0.06	0.06	0.06
Belgium	0.46	0.46	0.32	0.39	0.39	0.32	0.32
Lorraine	0.54	0.44	0.46	0.47	0.49	0.51	0.49
Northern France	0.34	0.33	0.27	0.34	0.34	0.34	0.34
France - other areas	0.13	0.17	0.15	0.18	0.19	0.19	0.19
Italy - coastal areas	0.06	0.05	0.04	0.08	0.10	0.13	0.10
Italy - other areas	0.12	0.12	0.10	0.13	0.13	0.10	0.10
Luxembourg	—	—	—	—	—	—	—
Netherlands	0.01	0.01	0.01	—	—	—	—
Total	**3.09**	**3.02**	**2.53**	**3.00**	**3.06**	**2.94**	**2.84**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

COLD-REDUCED SHEET < 3 mm.

Production

TABLE XXI f

Production and Production Potential by Areas

'000,000 metric tons

Area	Production potential		Actual production	Expected production potential			
	1958	1959	1959	1960	1961	1962	1963
Northern Germany (1)	0.07	0.15	0.13	0.20	0.24	0.34	0.49
North Rhine/Westphalia	1.11	1.15	1.05	1.27	1.59	1.74	1.78
Southern Germany (2)	0.30	0.30	0.26	0.32	0.39	0.66	0.66
Saar	—	—	—	—	—	—	—
Belgium	0.68	0.71	0.71	0.74	0.75	0.87	1.14
Lorraine	1.13	1.23	1.28	1.51	1.54	1.58	1.87
Northern France	0.73	0.82	0.74	0.94	1.09	1.09	1.09
France - other areas	0.19	0.19	0.17	0.20	0.23	0.23	0.23
Italy - coastal areas	0.50	0.55	0.54	0.63	0.67	0.84	0.89
Italy - other areas	0.31	0.42	0.33	0.42	0.47	0.49	0.79
Luxembourg	0.24	0.27	0.27	0.27	0.27	0.27	0.27
Netherlands	0.59	0.59	0.52	0.59	0.64	0.85	0.90
Total	**5.85**	**6.38**	**6.00**	**7.09**	**7.88**	**8.96**	**10.11**

(1) Schleswig-Holstein, Lower Saxony, Hamburg, Bremen.
(2) Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria.

PUBLICATIONS DEPARTMENTS OF THE EUROPEAN COMMUNITIES
2501/5/60/1