EUROPEAN COAL AND STEEL COMMUNITY

COMMISSION

Investment in the Community Coalmining and Iron and Steel Industries

REPORT ON THE 1976 SURVEY

Position as at 1 January 1976

in the nine countries of the enlarged Community

AUGUST 1976

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I—INTRODUCTION

1. Scope

This report contains the results of the European Commission's 1976 survey of past and future investment by coal and steel enterprises in the European Coal and Steel Community (ECSC) and of the impact of such investment on production potential. The survey is based on figures supplied by ECSC enterprises which in 1975 accounted for 99% of total coal production, 99% of crude steel production and 98% of finished products designated by the Treaty establishing the ECSC.

A full breakdown of the results of the survey by product and plant categories and by region is given in the statistical annex.

The standard ECSC definitions of capital expenditure and production potential which have been used in the survey are set out below.

In their replies to the survey, the enterprises are asked to distinguish the effects on capital expenditure and production potential of the following three categories of investment project:

(a) Projects completed or in progress before 1 January 1976;

(b) Projects approved but not yet in progress on 1 January 1976;

(c) Other projects planned to be started between 1 January 1976 and 31 December 1978.

However since investment projects drawn up by the enterprises are often revoked, production potential and capital expenditure resulting from projects which are merely planned (Category C) are not included in the statistical annex to the report. Some figures of planned projects are given in the text, but, unless specifically stated, the estimates elsewhere in the report are based solely on projects already completed, still in progress or decided by the enterprises at 1 January 1976.

2. Definitions

Capital expenditure

Capital expenditure means all expenditure shown or to be shown on the credit side of the balance sheet as fixed assets in the year under review at the prices ruling in that year, but excluding the financing of workers' housing schemes, outside shareholdings and all interests not directly connected with ECSC Treaty products.

Coal—Extraction potential

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

A number of mines with a low output, including the German 'small mines' , have not been included as regards either capital expenditure or production potential. They accounted for an extraction in 1975 of 396 000 tonnes.

The 'licensed' mines in the United Kingdom are also not included in the inquiry due principally to the difficulties in extending the survey to the large number of small enterprises concerned. Their production in 1975 was 600 000 tonnes.

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 potential of the ancillary and auxiliary installations. It is assumed that a ready market and unlimited raw material supplies are assured.

Iron ore—Extraction potential

The figures shown represent the maximum continuous output which can be achieved by each mine, allowing for the potential of the different installations, for example underground or surface ore-preparation plant where the ore is sold only after treatment.

Sinter, pig-iron, crude steel and finished steel products

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 normal holidays, employing the plant available at the beginning of the year but also taking into account both additional production from any new plant installed and any existing plant to be finally taken off production in the course of the year. Production estimates must be based on the probable composition of the charge in each plant concerned, on the assumption that the raw materials will be available.'

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

The capital expenditure of a number of very small iron- and steelworks has not been included in this survey. It was assumed that the production potential of these enterprises would over the next few years remain slightly above the level of actual production for 1975. The production potentials mentioned in this report therefore exceed those actually declared by a certain percentage which varies from sector to sector but does generally not exceed 1% for crude steel and 2% for finished rolled products.

The production potential of the **rolling mills** is governed by the shape, quality and width of the material fed into the mill and the products to be obtained. Where enterprises have not been able to forecast future demand conditions, they have been asked to assume that the mix of inputs and outputs, on any one mill and across the different types of mill, will be broadly the same as that in 1975.

3. Conversion rates between the unit of account and national currencies

Until the end of 1970, the unit of account adopted in this report was successively the unit of account of the European Payments Union and that of the European Monetary Agreement. The unit of account adopted for 1971 was the EUR unit of account as defined by the Statistical Office of the European Communities. The rates of exchange between this unit and the national currencies were calculated according to the weighted average of official rates in force before and after 18 December 1971. Rates in force in 1970 were considered valid until the Washington agreement of 18 December 1971, and for the period from 19 December 1971 the newly agreed central rates were applied.

In 1972 and 1973 the rates of exchange between the EUR unit of account and the national currencies continued to be calculated at central rates.

From 1974 onwards, the central rates have again been adopted for the fixed currencies. Floating currencies have been converted at the average market rates, expressed in terms of EUR units, according to the method adopted by the Statistical Office of the European Communities. Figures for 1976 and 1977 are converted at the average market rates at 1 January 1976.

Following the adoption by the Community of the European unit of account[1] for ECSC transactions, two supplementary tables in the statistical annex now show investment in the coalmining and steel industries on the basis of the new unit (EUA).

The table below gives details of the rates of exchange which have been applied since 1972. Details for the years prior to 1972 are available in the Report on the 1974 Survey (Office for Official Publications of the European Communities Ref. No 8447).

Country	Currency	1972	1973	1974	1975	1976 and after
FR Germany	DM	3.499	3.499	3.499	3.220	3.220
Belgium/Luxembourg	Bfrs/Lfrs	48.657	48.657	48.657	48.657	48.657
France	FF	5.554	5.554	6.010	5.680	5.554
Italy	Lit	631.342	631.342	813.000	863.000	867.000
Netherlands	Fl	3.523	3.523	3.355	3.355	3.355
United Kingdom	£	0.417	0.417	0.534	0.597	0.611
Denmark	Dkr	7.578	7.578	7.578	7.578	7.578
Ireland	£Ir	0.417	0.417	0.534	0.597	0.611

[1] Article 2 § 2 of Council Decision 75/250/EEC of 21 April 1975 and Article 2 § 2 of Commission Decision No 3289/75/ECSC of 18 December 1975.

4. Capital goods prices indices

The enterprises declare their capital expenditure at the ruling prices for the year concerned, the figures being converted into units of account at the rates shown above. In order to gain some idea of how investments have changed from year to year on a constant price basis, two capital goods price indices have been prepared—one for the iron and steel industry and the other for the coal industry. For the period before 1970 this has been done by taking the national indices for prices of all capital goods and by weighting these indices in accordance with the share of each country in total Community investment in each of the industries concerned. For the years since 1970, the price indices used relate only to metal machinery and equipment.

The table below shows the indices calculated according to these methods. These indices have been applied to the main series of expenditure figures in the report.

Community index 1970 = 100	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Iron and steel industry	81.8	83.9	85.3	87.4	91.8	100	108.0	112.1	117.1	137.9	160.7 [1]
Coal industry	82.6	85.0	85.7	87.8	92.0	100	108.6	114.7	121.4	137.3	164.9 [1]

[1] Estimated.

5. Interpretation of capital expenditure figures for 1974 and 1975

It should be borne in mind that even at current prices the figures given in this report for capital expenditure in 1974 and 1975 may differ from those in the 1975 report. There are three main reasons for this:

— first, for 1974, enterprises may revise their figures in the light of the completion of their final annual accounts;

— secondly, for 1975, actual spending by the enterprises may often depart from the expenditure estimates submitted at 1 January of that year;

— thirdly, again for 1975, the actual rates of exchange between the national currencies and the unit of account may differ from those used in the estimates of capital expenditure for the year ahead.

6. Breakdown of production potential and capital expenditure by region

In the tables, the producer regions in the original six countries other than mentioned by name are:

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

Northern England
(steel-producing regions only): North, North-West, Yorks and Humberside;
England other regions
(steel-producing regions only): West Midlands, East Midlands, East Anglia, South-West, South-East.

The National Coal Board Districts included in the coal-producing regions of the United Kingdom are shown in the table below:

Coal-producing regions	Scotland	North-umberland	Yorkshire	Western	Midlands	Wales
NCB Districts	Scottish North	North-umberland North Durham	North Yorkshire South Yorkshire	North-Western	North-Nottingham	East Wales
	Scottish South	South Durham	Barnsley	Stafford-shire	North Derbyshire	West Wales
			Doncaster		South Midlands	

Opencast mining has been considered as a separate category irrespective of regional locations.

For statistical purposes only, the production potentials and capital expenditure of steel-producing enterprises in Berlin have been included in the totals for the region of North-Rhine Westphalia.

7. Past statistics

The following organizations helped to provide statistics on British, Danish and Irish industries for years prior to 1974:

(i) UK Iron and Steel Statistics Bureau, Croydon;
(ii) National Coal Board, London;
(iii) Organization for Economic Cooperation and Development, Paris;
(iv) Department of Industry, London;
(v) The Danish and Irish enterprises covered by this survey.

Annex II of the report of the 1974 Survey (Office for Official Publications of the European Communities Ref. No 8447) lists the exact sources of past statistics on production and investment in the industries of the three new Member States.

Previous surveys covering the industries in the six countries of the original Community for the years 1954-1965 and 1966-1973 are summarized in two reports issued respectively in 1966 and 1974 and entitled 'Investment in the Community coalmining and iron and steel industries—recapitulative report on the 1956-1966 survey' and 'Recapitulative report on the 1966-1973 surveys in the six countries of the original Community'.

II—SUMMARY

The returns to the latest survey in the **coal industry** show that capital expenditure on coalmining in the Community increased from 326 million u.a. in 1974 to 562 million u.a. in 1975 and is expected to increase again to at least 631 million u.a. in 1976. Given the rise since 1973 in capital goods prices, particularly those in the United Kingdom, the industry has not yet fully attained the Community's objective of an average annual capital expenditure of 500 million u.a. at 1973 prices, but is getting quite close to doing so. Beyond 1976, the enterprises have also made plans for a total of over 3000 million u.a. of expenditure on investment projects of which nearly 600 million u.a. is already approved. Much now depends on whether the enterprises actually spend up to their forecasts. In the past they have usually spent less than they said they would, even at the expense of projects which had previously been approved.

While there is some sign of a change of direction on the investment front, the enterprises have again reduced their estimates of future coal **extraction potential.** Investment continues to be concentrated on rationalization and restructuring. Total Community extraction potential is now expected to decline from 259 m. tonnes in 1975 to 250 m. tonnes—about 237 million tce—in 1979. With the exception of several coalfields with specific problems it is less likely than in previous surveys that these estimates will be substantially reduced in the future. They now appear to be backed up by plans for a more extensive exploitation of reserves, including the enabling investments. But even if all planned (including unapproved) projects were implemented, the maximum potential realizable in 1979 would still only be 254 m. tonnes or 241 m. tonnes of coal equivalent. This is some way below the Community's objective of 250 m. tce in 1985 and means that major long-term projects such as the construction of new mines may have to play a bigger role than expected in reaching the target.

Moreover, the enterprises are still faced with a number of problems both in the short and long-term which could jeopardize the achievement of a stabilization of coal output at the Community level. In the short-term, the enterprises have had to completely rebuild their planning capability as they were previously oriented to contracting their operations. They have not therefore been able to react as swiftly as intended to the need to generate new schemes. In addition, when a detailed project has been undertaken it has often been difficult to find ways of achieving rapid improvements in output and productivity in existing pits, particularly those which are already fully mechanized and whose layout is not very flexible. The poor short-term prospects for coal sales since the beginning of 1975 and the parallel decline in output per manshift have also done nothing to encourage investments of this kind.

In the longer term the decisions to embark on major projects for the construction of new mines and the extension of existing large pits still depend crucially on the expected development of the energy markets and in particular on the projects for the building of new and replacement coal-fired power stations and for the conversion of other stations to solid fuel.

If estimates of future production potential again prove to be overestimated there could be difficulties in coke supply by 1979. Attention may have to be given to the need to replace some existing batteries and to provide for some expansion of coke requirements at iron-and steelworks. Investment in mine-owned and independent coking plant is at a very low level except in Lorraine, and although the projects which have been approved at steelworks-owned plants will involve a considerable amount of expenditure in Northern England and Wales, expenditure at steelworks in other regions of the Community may be insufficient. Some closures of mine-owned and independent plant could take place sooner than expected. This means that total Community coke production potential will increase by only 1.4% between 1975 and 1979, from 88.5 to 89.7 m. tonnes.

There was a sharp reduction in iron ore extraction potential in 1975. In the climate of the decline in demand for ore, extraction potential in 1975 was reduced to a level of only 66 m. tonnes against 77 m. tonnes in 1974. Between now and 1979 potential is expected to remain over 65 m. tonnes, although further closures cannot be ruled out.

The new survey in the iron and steel industry shows that the depression on the steel market in 1975 did not prevent steel enterprises from continuing to invest on a substantial scale. Total capital expenditure reached a total of 3100 million u.a.—in real terms only slightly lower than its level in 1974. However, most enterprises were faced with a situation where their trading revenues were not sufficient even to cover depreciation provisions and they therefore had to borrow heavily in order to continue their investments.

The United Kingdom has taken over from France as the country with the largest annual investment in the iron- and steel industry; in 1975 it accounted for nearly a quarter of total expenditure.

While expenditure is expected to be maintained at a high level in 1976 it is likely that investment in the Community will decline thereafter. The emphasis of the plans of the enterprises is now on replacement and modernization; some decisions to go ahead with major expansion schemes at coastal works have now been postponed.

The rates of utilization of blast furnace and steelworks capacities in the Community reached their lowest ever average levels during the course of 1975—65% and 66% respectively. Between 1974 and 1975 utilization declined more steeply than actual production mainly because of the entry into service of large new installations at coastal works in France and Italy. Among finished products, section mills and plate mills generally had better rates of utilization than wire rod, hot strip and cold rolling mills.

The expected trends in production potential in the steel industry over the next four years are very close to those announced by last year's enquiry. Crude steel production potential should reach a total of 215.8 m. tonnes in 1979 compared with 189.9 m. tonnes in 1975. The mix of production potential across the processes should be better than was previously expected because of an acceleration in the plans for the closure and where appropriate the conversion of some open-hearth and Basic Bessemer steelworks. However, plans for the modernization of some old capacities have not yet been finalized.

Although there has been a relative lull in the announcement of schemes for new mini-mills, the few announced cancellations have not had an effect on the total expected level of electric furnace production potential between now and 1979. Plans for extensions to existing steelworks should take total electric furnace capacity to 43.3 m. tonnes in 1979 compared with 32.7 m. tonnes in 1975. Production potential for oxygen blown steels will also expand rapidly over the period, principally as a result of the completion of projects in North Rhine/Westphalia and Northern England.

The production potential for finished products is expected to increase at an average 2.8% p.a. to a level of 173.8 m. tonnes in 1979. While for many years production potential has grown much faster for flats than for sections, the rate of growth for the two categories is now expected to be very similar. At the same time wire rod and plate capacities are again likely to expand faster than those for other product categories.

According to the General Objectives,[1] crude steel potential should reach a total of 228 m. tonnes by 1980 if all the announced investment projects—whether in progress, already decided or only planned—have been carried out by that date. The survey confirms that the poor trading conditions in 1975 did not prevent the enterprises, with a few exceptions, from carrying out the investment programmes which were in progress or already decided. However, the new decisions taken during the recession have been aimed more at replacement and modernizations than at expansion. According to the latest estimates by the Commission, the most likely outcome of a continuation of this trend would be an increase of crude steel potential up to 220 m. tonnes in 1980; only further decisions taken in the very near future could now lead to the possibility of a large excess of steelmaking potential over expected demand.

On the finished products side, the reductions in the estimates of production potential in 1980 do not indicate any major change in the recommendations on demand and supply equilibrium in the General Objectives. No real change can be expected in the imbalance of demand for and supply of wire rod. However the possible problem of overcapacity for heavy and light sections is less acute and the need for more investment in flat product, especially cold-rolled sheet capacity, seems to be fully confirmed.

[1] Memorandum on the General Objectives for the Community iron and steel industry for the years 1980-85.

III—THE COALMINING INDUSTRY

Capital expenditure

Coal undertakings in the Community invested 562 million u.a. on mining in 1975 as against 326 million in 1974 and 267 million in 1973. With the exception of Southern Belgium and Nord/Pas-de-Calais all regions of the Community registered an increase in spending of over 50% between 1974 and 1975.

TABLE 1

Actual and estimated capital expenditure in the Coalmining Industry 1973-1977

(million u.a.)

	Actual expenditure			Estimated expenditure			
				1976		1977	
	1973	1974	1975	Projects approved and in progress (cat. A + B)	All planned projects (cat. A + B + C)	Projects approved and in progress (cat. A + B)	All planned projects (cat. A + B + C)
Capital expenditure:							
at current prices.....	267.3	325.7	561.7	631.4	780.4	524.2	893.6
at constant prices of 1970.....	220.2	237.2	340.6	382.9	473.3	317.9	541.9

Total spending for the Community as a whole was nearly 10% higher than the forecast made by the undertakings at the beginning of 1975. Actual capital expenditure in the United Kingdom in fact exceeded forecasts by over 40% but this was offset by spending in the Ruhr undertakings being some 40% less than expected. The increase in spending compared with forecasts in the United Kingdom is partly explained by a real increase in investment activity, which had not been anticipated a year ago, and which arose as the national 'Plan for Coal' [1] began to be translated into detailed projects at the level of individual mines.

[1] Coal Industry Examination: Interim Report 1974 and Final Report 1974. H.M.S.O. London.

However, the most important factor in the increase was a sharp rise in the costs of bought-out equipment—particularly underground machinery and coal preparation plant.

As in previous years, despite a 50% increase in expenditure over the 1974 level, undertakings in the Ruhr did not invest up to the amounts they had forecast at the beginning of the year. Some projects for surface installations were not started during the course of the year; spending on others was at a slower rate than expected.

TABLE 2

Capital expenditure per tonne of coal produced 1972-1975

(u.a./tonne at current prices and current exchange rates)

Regions	1972	1973	1974	1975
Ruhr	0.63	0.80	1.09	1.46
Aachen	0.89	1.10	0.91	1.40
Lower Saxony	1.64	1.91	4.08	8.49
Saar	0.98	0.65	0.85	2.78
FR Germany	*0.71*	*0.83*	*1.12*	*1.72*
Campine	0.74	0.56	0.52	1.07
Southern	0.96	0.96	0.54	1.05
Belgium	*0.81*	*0.68*	*0.53*	*1.07*
Netherlands	*0.08*	*0.13*	*0.26*	—
Nord/Pas-de-Calais	0.60	0.55	0.48	0.73
Lorraine	0.63	0.90	1.02	2.04
Centre-Midi	0.23	0.22	0.55	0.86
France	*0.53*	*0.63*	*0.71*	*1.35*
Italy	*0.00*	*0.00*	—	—
Scotland	*	0.95	1.49	1.77
Northern	*	1.30	2.15	2.89
Yorkshire	*	1.32	1.85	3.11
Midlands and Kent	*	1.04	2.13	2.87
Western	*	2.51	2.34	2.91
South Wales	*	1.52	2.40	3.42
Opencast	*	0.39	0.87	1.46
United Kingdom	*1.42*	*1.26*	*1.93*	*2.78*
Community	**1.01**	**1.02**	**1.38**	**2.20**

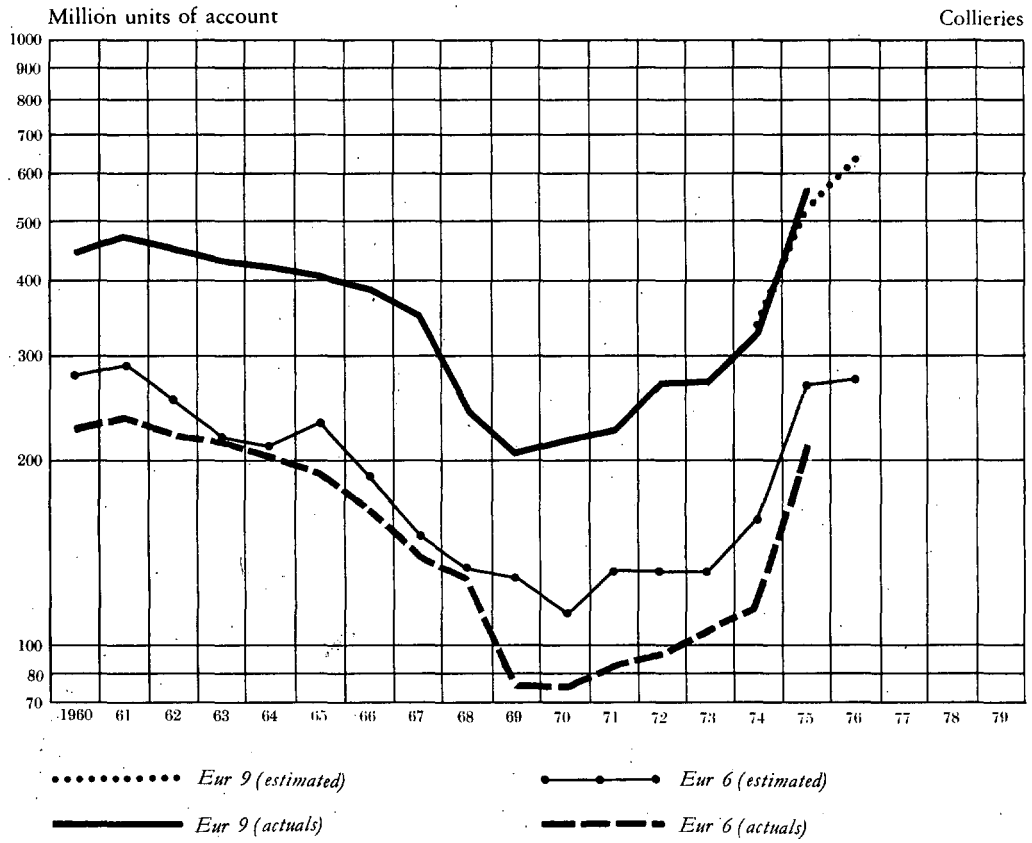
* Figures not available.

In the Community as a whole capital expenditure per tonne of coal produced reached a level of 2.20 u.a. in 1975 against 1.38 u.a. in 1974. Taking past inflation into account, the 1975 rate of spending per tonne corresponds to about 70% of the corresponding figure for the late nineteen-fifties. Between 1974 and 1975 all coalfields registered increases in expenditure per tonne: spending per tonne in the Saar and Lorraine regions more than doubled.

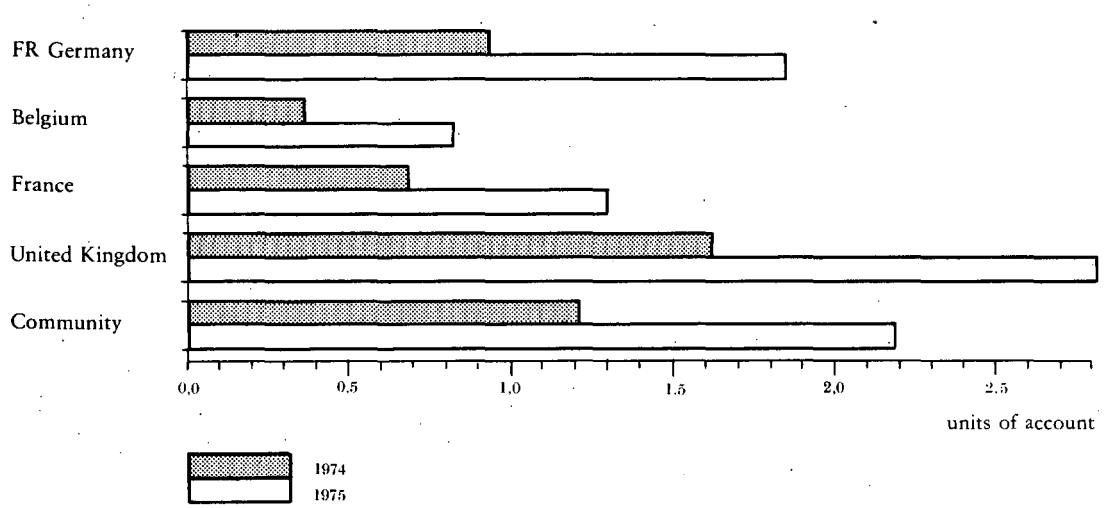
The coal undertakings estimate that their capital expenditure will continue to increase in 1976 to a level of over 630 million u.a. These totals only include expenditure on schemes already in progress or approved. In addition, a further 150 million u.a. of expenditure is planned for 1976 but not yet approved. Based on

FIGURE 1

Comparison of actual capital expenditure and estimated capital expenditure as at the beginning of each year



Capital expenditure per tonne of coal produced in 1974 and 1975



previous surveys, the undertakings are nevertheless unlikely to invest more than the totals of expenditure for schemes already approved or in progress. In the 1975 survey the forecast total of expenditure in 1975 on all schemes, including those not yet approved, was 590 million u.a. Although according to this year's survey, the amount actually spent—at 562 million u.a.—was only 28 million u.a. lower than this figure at current prices, this does not take into account the inflationary element in the figures of actual capital expenditure.

The figures for expenditure in 1976 on schemes already in progress or approved show that undertakings in most regions of the Community are planning to sustain or increase their spending. A marked acceleration in investment activity is expected in the Lorraine, Aix-la-Chapelle and Campine regions. Undertakings in the Ruhr also estimate that their expenditure could be as much as 20% higher than in 1975, although in the past their estimates have usually been well above the figures actually achieved.

Capital expenditure on open-cast mining is expected to continue at a high level. The figures given in the survey underestimate the total amount of capital expenditure expected for open-cast mining as part of the investments involved is undertaken by subcontractors.

TABLE 3

Breakdown of actual and planned capital expenditure on coalmines in Community by type of installation 1973-1977

(million u.a.)

Type of installation		Actual expenditure			Estimated expenditure (on projects decided or in progress)	
		1973	1974	1975	1976	1977
Shafts and underground	Eur 6	12.1	11.0	22.9	37.7	39.9
	Eur 9	17.4	27.0	82.1	93.0	98.8
Underground mechanical	Eur 6	37.1	47.0	81.9	71.3	42.4
	Eur 9	120.3	137.8	217.6	197.0	169.9
Haulage and winding equipment	Eur 6	6.6	7.9	17.5	33.1	22.6
	Eur 9	7.3	12.0	39.2	55.9	38.8
Screening and washing	Eur 6	21.2	24.8	37.7	53.1	43.7
	Eur 9	29.7	33.8	114.2	137.4	116.2
Other surface installations	Eur 6	26.6	24.3	48.3	78.3	48.4
	Eur 9	92.6	115.0	108.6	148.1	100.5
Total	**Eur 6**	**103.6**	**115.0**	**208.3**	**273.5**	**197.0**
	Eur 9	**267.3**	**325.6**	**561.7**	**631.4**	**524.2**

While expenditure in all major categories of plant has considerably increased between 1974 and 1975, there are indications that some categories have received more attention than others. The table above gives a breakdown of actual and planned capital expenditure by category of installation. In 1975 underground machinery continued to account for the largest part of total expenditure—39% of the total as against 41% in 1974. Actual spending on haulage and winding equipment was nevertheless over three times its 1974 level and is expected to represent over 9% of total expenditure in 1976 compared with an average 4% over the previous five years. Expenditure on screening and washing also rose proportionally more than total expenditure to represent a fifth of total spending in 1975. A similar proportion is expected for this category in 1976.

Extraction and Extraction Potential

The year 1975 must be described as characterized by a slight tendency to falling output by the coal industries of all member countries. Production in the Community, excluding the output of small mines, reached 249 m. tonnes—about 7% higher than its level of 233 m. tonnes in 1974. Due to the coal strike in 1974 U.K. output that year was exceptionally low at 109 m. tonnes. With normal working throughout 1975, production recovered to 126 m. tonnes, an increase of 18 m. tonnes, but this was still below output in 1973.

TABLE 4

Movement of Coal Extraction Potential

(in million tonnes)

		Extraction		Extraction Potential					
				Actual		Estimated based on projects approved or in progress			
		1960	1975	1970	1975	1976	1977	1978	1979
Community	tonnes	429.8	249.1	*	259.4	253.5	253.5	250.9	249.5
	tce	*	237.0	*	246.0	246.0	241.0	237.8	236.5
						Estimates based on all planned projects			
	tonnes				259.4	253.5	253.4	252.5	254.1
	tce				246.0	239.6	241.0	239.3	240.5

* Figures not available.

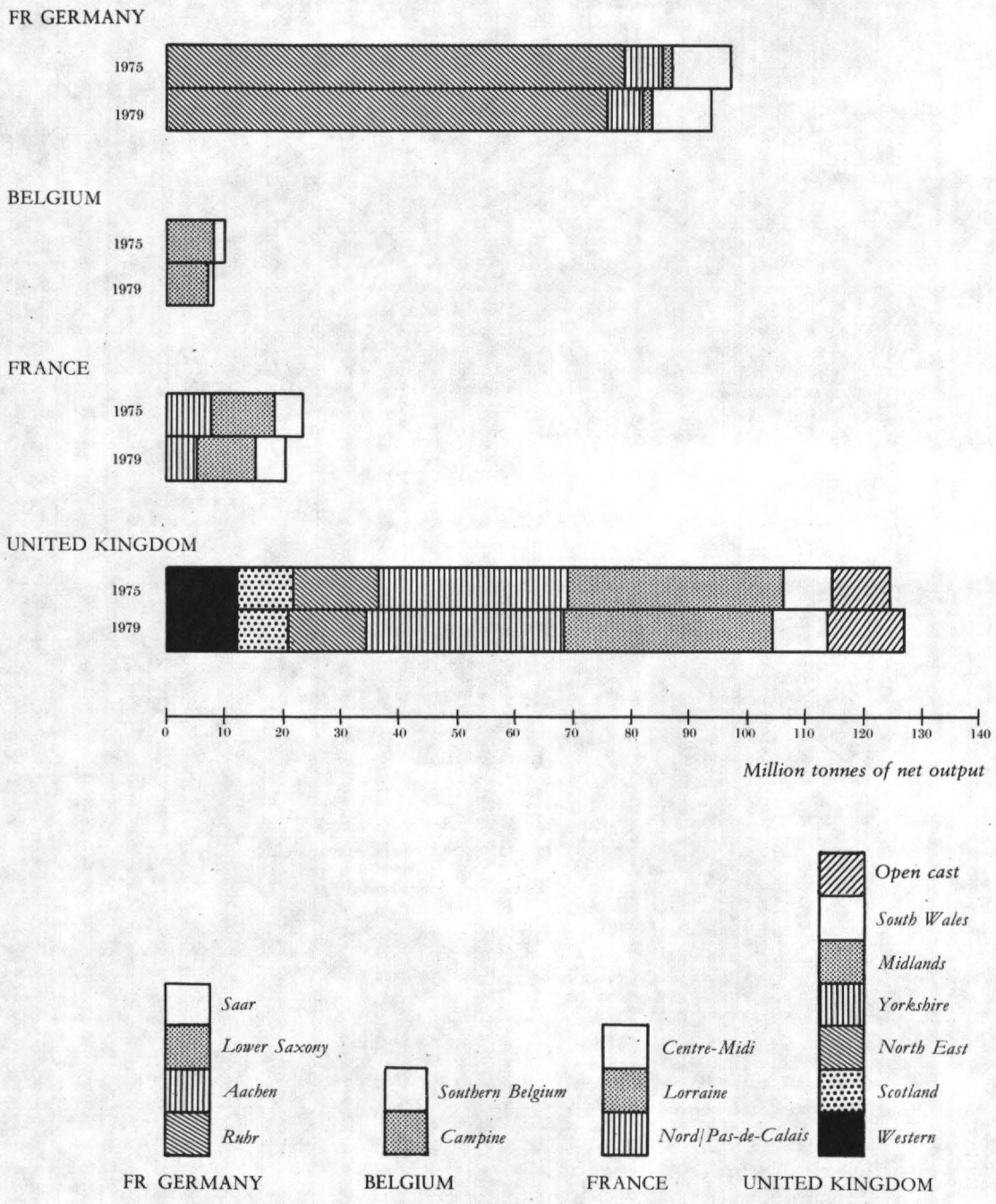
The returns to the new survey covering coal extraction potential indicate that the coal enterprises' estimates of Community extraction potential for the next four year period have been reduced. Between 1974 and 1975, total Community coal extraction potential had already fallen by 8 m. tonnes from just over 267 m. tonnes to 259 m. tonnes—twice the decrease expected at the beginning of the year. Taking into account investment projects which are in progress or approved, the enterprises now expect extraction potential to fall a further 9 million tonnes to just under 250 m. tonnes (237 m. tce) in 1979.

After a progressive decline in extraction potential up to 1974, enterprises on a number of coalfields have admittedly been able to maintain or even slightly increase their estimates of extraction potential. The extraction potential of the Lorraine coalfield, for example, is now expected to be held at a level of 11 m. tonnes, and that of the Saar at 10 m. tonnes, at least until the end of the seventies.

However, enterprises on most other coalfields now expect their extraction potential to decline at a faster rate over the next four years than they had shown in previous surveys. The list of enterprises who

FIGURE 2

Actual coal extraction potential in 1975 and forecast extraction potential for 1979



show lower estimates is not restricted to those on coalfields where investment remains at a low level and where long-term prospects for coal output are limited, such as Nord/Pas-de-Calais and Southern Belgium. It also includes enterprises on coalfields in Germany and the United Kingdom where there has been a resurgence of investment activity and where long-term prospects for coal output are relatively good. In the Ruhr, extraction potential is now expected to decrease from 79 m. tonnes in 1975 to 76 m. tonnes in 1979, about 2 m. tonnes lower than shown in last year's survey. In the United Kingdom some overall decline in extraction potential is likely. While a considerable increase in potential is still expected for opencast mining, the extraction potential of deep-mining is expected to decline from 119 m. tonnes in 1975 to 114 m. tonnes in 1979. Reductions in extraction potential during 1976 should cause total U.K. deep-mining potential to reach a level of 116 m. tonnes by the end of the year. Beyond 1976 an expected increase in extraction potential on the Yorkshire coalfield will not be sufficient to compensate for declines in capacity on other coalfields. Much depends upon the extent to which this net decline in capacity can be arrested by investment projects which are at present planned but are not yet approved. According to the returns to the survey, these projects, which are mainly on the Midlands coalfield and on opencast sites, could add a further 4 m. tonnes to United Kingdom, and therefore Community, extraction potential in 1979.

In order to gauge the possible impact of planned but unapproved projects of all Community coal enterprises, Table 4 compares estimates of future Community extraction potential based, on the one hand, on projects in progress or approved, and on the other hand on all planned projects.

Conclusions

On a strict comparison of the objectives for investment and capacity set in the Medium Term Guidelines for Coal,[1] it must be admitted that the coal industry looks no more likely than it did a year ago to meet either the target 1985 output of over 250 million tce or the capital expenditure target of an average 500 million u.a. per year at 1973 prices between 1974 and 1985.

On the output side, even taking into account planned projects, the very best that can be hoped for at the half way stage of 1980 is an extraction potential of 235 million tce, and actual output could as in the past be somewhat lower than this maximum potential. Given the likely exhaustion of the reserves of a large number of mines both before and after that date the achievement of the objective of 250 million tce therefore rests more heavily than expected on major projects such as the construction of new mines and the enlargement of existing large pits. On the capital expenditure side, spending in 1974 and 1975 was in real terms well below 500 million u.a. at 1973 prices.

However, spending in 1976 should be very near to this target provided all the estimates of expenditure on projects approved or in progress are fully realized; for the years beyond 1976 the coal enterprises have made plans for expenditure of a further 3000 million u.a. on projects which are approved or have already been planned. There is also some evidence that the estimates of capital expenditure and extraction potential given in the new survey may be much closer to the levels eventually achieved than those of previous surveys.

In the past, the coal enterprises have consistently underestimated the eventual decline in their extraction potential, even though they were investing at a very low level. Most enterprises found that the competitivity of their mines deteriorated more rapidly than they had expected. Judging from the returns it also appears that some mines and specific workings with no future prospects were only kept in operation in so far as

[1] Medium Term Guidelines for Coal 1975 to 1985; O J C 22 of 30.1.1975.

production could be continued without major investment. The level of future extraction potential therefore became more unpredictable as it depended principally on the geological condition of the seams being worked at the time. In the new survey, however, the estimates of future extraction potential now appear to be reinforced by more extensive plans for exploitation of reserves. Within these plans additional investment provides the necessary alternative extraction possibilities which are needed when existing workings become exhausted or prove unsatisfactory.

Nevertheless, despite these favourable developments, the objective of a stabilization of coal output at 250 million tonnes (tce) may be more difficult to achieve than had appeared before the detailed plans for the necessary investment projects had been worked out at the level of the enterprises. In this new context the major determining factors seem to be the following:

— the coal enterprises had been geared over a long period of time to the management of the process of contraction in the industry, and the new situation has obliged them to recreate the planning services they need to generate and administer new schemes. This in itself has led to delays which have been additional to the normal time needed to plan projects. It may therefore be longer than expected before the overall decline in extraction potential can be arrested;

— there appears to be some limit to the investments capable of maintaining or increasing output in the short term. This applies particularly to existing mines on coalfields which are already relatively productive and where the degree of mechanization at the face is already very high. A lot depends on how far the layout of the mines can be changed and to what extent amalgamations are possible. A number of successful amalgamations have already been carried out, for example, in the Ruhr. However, the average size of mine there is already large, and the prospects for further major mergers is limited. In the United Kingdom, although the average size of mine is small, amalgamations are often difficult. Many workings are very far advanced, the existing layout of the mines making it more advantageous to sink new drifts than to use existing ones from other mines. Clearly, investment can open the way to considerable improvements in mining methods and equipment in existing mines. The reintroduction of retreat methods in a number of British pits is a good example of this. Equally a number of enterprises have plans for modernization of winding and haulage equipment and manriding facilities. These projects should eventually bring some benefit in terms of output per manshift. At the same time, major changes in the extraction potential of existing mines may only be possible after the completion of substantial investment to deepen or extend workings which must be undertaken over a much longer period;

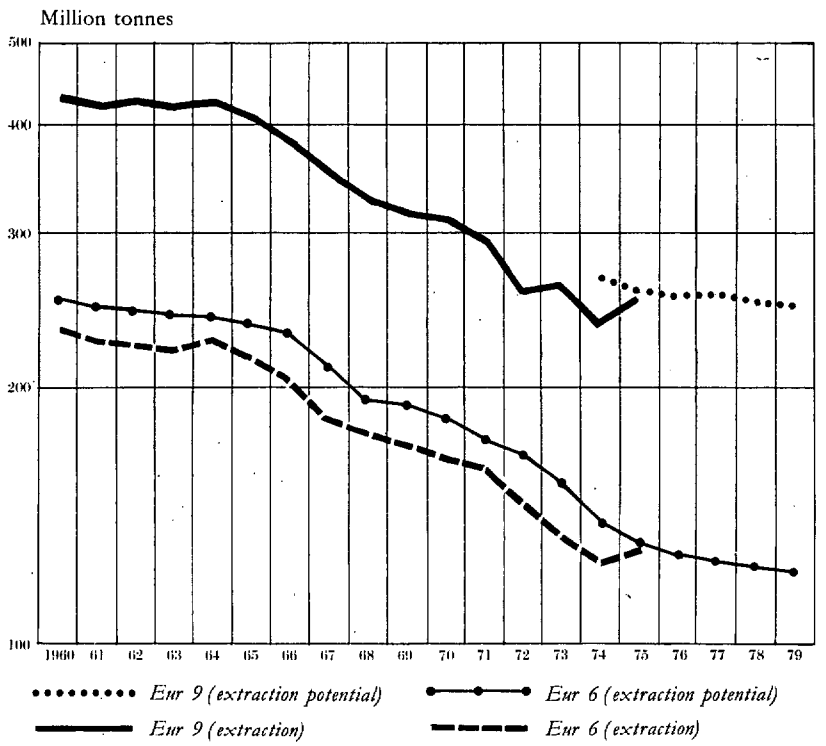
— the impact on extraction potential of major investments in new mines such as that at Selby in the United Kingdom may only be felt after 1985 even if the projects were started immediately. By that time the increases in extraction potential which they will bring about may only partially offset closures of other mines in the Community;

— the recent productivity performance in the mines has led to some grounds for concern. The decline in demand for coal during 1975, and the associated increase in stocks, was accompanied by a small overall decline in productivity during the year. While this decline is to some extent linked to the recessionary conditions, and to the transfer of workers to investment projects, any check in the growth of output per manshift must have implications for the longer term prospects. In some cases increased investment which has been undertaken may only serve to compensate for falls rather than lead to increases in productivity;

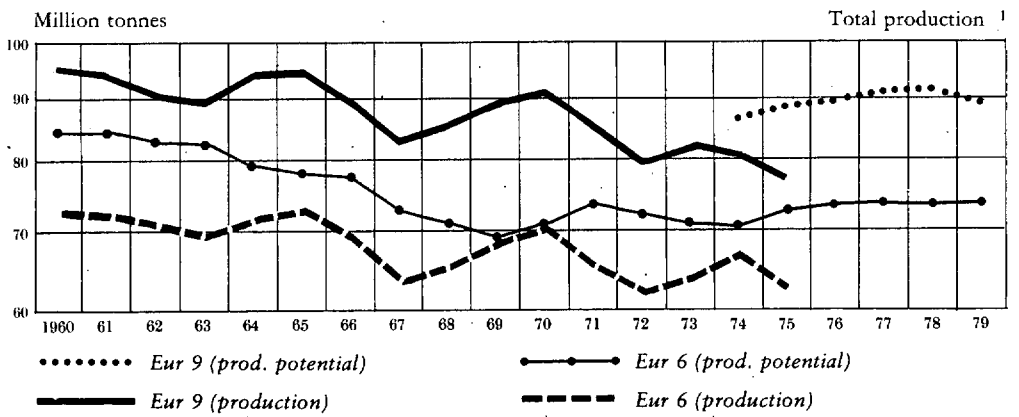
— the state of expectations on future coal demand and output remains unclear; current output forecasts and the uncertainty surrounding them are discouraging investment in both the short and long term. On the one hand, investments which might lead to rapid short-term improvements in output are unattractive in periods such as the present one when sales are stagnant and stocks are rising. On the other hand, investments which lead to improvements in output in the longer term are discouraged because of the continuing uncertainty over developments in the energy market.

FIGURE 3

Extraction and extraction potential
Coalmining industry



Production and production potential of coking plants



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

Taken together these five factors lead to the view that the contribution of the coal industry to Community energy supplies could be much lower than originally foreseen in the Community's Medium Term Guidelines for Coal.

IV—COKING AND BRIQUETTING PLANTS

1. Coking Plants

Capital expenditure on coking plants in the Community reached of total of 218 million u.a. in 1975 as against 254 million u.a. in 1974. Expenditure in the regions was generally as forecast at the beginning of the year, except in the Ruhr and in Italy. Projects for the replacement and rebuilding of some batteries of mine-owned plant in the Ruhr have again not been carried out although they had been declared as approved schemes in the 1974 and 1975 surveys. In Italy, a project for the modernization of an independent coking plant did not progress as fast as expected during the year.

Spending on steelworks-owned plant accounted for almost 80% of total expenditure. Of the 172 million u.a. spent on steelworks-owned plant, over 98 million u.a. is attributable to steelworks in Northern England, especially at two coastal works where a number of large new batteries are being erected.

Expenditure on schemes approved and in progress is expected to reach 305 million u.a. in 1976. The programme of modernization and expansion of steelworks-owned coking capacities in Wales and Northern England again accounts for over half the expected level of spending. At the same time, the decision to construct a new steelworks-owned plant in Lorraine appears to be subject to further delays. Expenditure on steelworks-owned coking plant in the Community as a whole could nevertheless be as large as 217 million u.a. in 1976. There will also be some resurgence in expenditure on modernization projects at

TABLE 5

Breakdown of actual capital spending at mine-owned, independent and steelworks coking plants 1973-1977

(million u.a.)

Sector	Actual expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Mine-owned	35.2	31.9	39.6	71.2	58.7
Independent	3.6	4.3	5.7	16.4	7.1
Steelworks	150.0	175.6	172.3	217.3	186.6
Total	**188.8**	**211.8**	**217.6**	**304.9**	**252.4**

mine-owned coking plants in Lorraine and, depending on whether the forecasts are realized, in the Ruhr. However, spending on mine-owned and independent coking plants elsewhere in the Community continues to be at a relatively low level. The tables below give a detailed breakdown of actual and forecast expenditure by category of coking plant and by type of installation.

TABLE 6

Breakdown of actual spending at mine-owned, independent and steelworks coking plants 1973-1977

(million u.a.)

Sector	Estimated expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Coking ovens	129.0	156.2	167.7	238.7	194.4
Miscellaneous	59.8	55.6	49.9	66.2	58.0
Total	**188.8**	**211.8**	**217.6**	**304.9**	**252.4**

The Community **production potential** for coke is now expected to reach a total of 89.7 m. tonnes as against 88.5 m. tonnes in 1975. The production potential of mine-owned coking plant should decline from 39.2 m. tonnes to 37.6 m. over the same period. As a result of closures in England during 1975, the production potential of independent coking plants should also fall from a level of 4.5 m. tonnes in 1975 to 4.1 m. tonnes in 1979. Only steelworks-owned coking plant is likely to show an increase in production

TABLE 7

Movement of production potential in coking plants

(million tonnes)

Coking plants		Production		Production potential					
				Actual		Forecast			
		1960	1975	1971	1975	1976	1977	1978	1979
Mine-owned coking plants	Eur 6	50.2	32.5	39.1	34.5	34.4	34.3	33.9	33.3
	Eur 9	56.9	37.2	*	39.2	39.2	39.1	38.5	37.6
Independent coking plants	Eur 6	3.9	3.0	3.7	3.6	3.6	3.6	3.6	3.6
	Eur 9	6.0	3.8	*	4.5	4.1	4.1	4.1	4.1
Steelworks coking plants	Eur 6	19.8	27.1	28.8	34.5	35.5	35.6	35.6	35.4
	Eur 9	32.3	35.4	*	44.8	46.6	47.8	48.7	48.0
Total	Eur 6	**73.9**	**62.6**	**71.6**	**72.6**	**73.5**	**73.5**	**73.1**	**72.3**
	Eur 9	**95.2**	**76.4**	*	**88.5**	**89.9**	**91.0**	**91.3**	**89,7**

* Figures not available.

potential over the period—from 45.2 m. tonnes to 48.0 m. tonnes. By 1979 steelworks-owned plant should therefore account for over 54% of total Community coking capacity. The expected net increases in potential are by no means evenly spread over countries and regions. Plants in the United Kingdom will account for 2.3 m. out of the total 2.8 m. net increase. Other smaller increases in potential in Italy and Germany make up the difference.

The announcement in the survey of an accelerated rate of closure of some mine-owned and independent coking plants, together with reductions in the potential announced for some steelworks-owned plant in Germany and Belgium, and further delays in some modernization programmes, gives some grounds for concern as to whether the Community's coke production potential will be adequate to meet blast furnace requirements over the next four years. First, given the low level of actual and forecast investment on mine-owned and independent coking plants in a number of regions, the announced extraction potential of these plants is almost certainly an overestimate of the eventually realizable potential.

TABLE 8

Ratio of actual and estimated production potential for coke to that for pig iron

(%)

	Actual			Estimated			
	1973	1974	1975	1976	1977	1978	1979
Community in its original form	66	64	61	59	58	57	56
Community	*	68	65	64	62	61	59

* Figures not available.

Secondly, as the table above shows, the ratio of actual coke production potential to that of pig iron has already been declining in recent years and on the basis of the latest estimates would fall still further by 1979. Some decline in the ratio could be understood in view of planned reductions in blast furnace coking rates. However, there is as yet no obvious connection between this factor and the announced closures of coking plant outside the steel sector.

In order to establish whether there could be a shortage of coke or not, an analysis has been therefore made of the expected sources of and requirements for coke up to 1979. The analysis has been carried out on certain broad assumptions about the trends in demand for coke in the different sectors, and its results are shown in Table 9. Perhaps the most critical assumption in the exercise is that pig iron production will reach 85% of maximum production potential at some time between now and 1979. For 1979 this corresponds to an output of 128.4 m. tonnes compared with an upper forecast of 129.1 m. tonnes in the General Objectives for Steel in 1980. It is also assumed that there will be continued improvements in blast furnace coking rates and some decline in deliveries of coke for industrial and domestic uses.

If these conditions turned out ot be realistic, there would be a deficit of coke supplies over requirements in 1979 of about 1.6 m. tonnes. This deficit would have to be made up mainly by changes in stocks. A deficit in 1974 of 1.1 m. tonnes has already been met with little difficulty. But as the coke production potential announced in the survey is almost certainly overestimated, the deficits shown in the table may be much larger in practice and the consequent difficulties in coke supply may be more acute.

The increasing possibility of a shortage of coke is due to the age structure of coke-oven batteries in the Community and the investment policies of the enterprises operating them. Many steel enterprises are just not prepared to invest in coking capacity until existing capacity can no longer operate effectively. Equally, some enterprises outside the steel sector are reluctant to rebuild batteries on sites which are some distance away from consumers in the steel industry. Independent studies of Community coking plants have therefore shown that on various assumptions about the life of coke-oven batteries a whole cluster of replacement projects would have to be undertaken around the year 1980 if coke requirements are to be met.

TABLE 9

Expected coke[1] sources and requirements 1975-1979

(million tonnes)

	Actual		Estimated	Forecast		
	1974	1975	1976	1977	1978	1979
Coke production potential	86.3	88.5	89.9	91.0	91.3	89.7
Maximum rate of output (at 95 % of production potential)	80.4 [2]	76.4 [2]	80.9	86.4	86.8	85.2
Deliveries to industrial users	6.2	5.4	6.2	6.0	5.8	5.6
Deliveries to domestic and other users	7.4	6.4	5.6	5.4	4.9	5.0
Availability of coke to the steel industry	66.8	70.0	69.1	75.0	76.1	74.6
Steel industry users:						
Blast furnaces	60.1	47.0	52.0	62.3	63.6	64.2
Sinter	7.5	5.2	6.4	11.2	11.4	11.6
Miscellaneous	0.3	0.4	0.4	0.4	0.4	0.4
Deficit −/surplus + of Community production over Community needs	− 1.1	+17.4	+ 10.3	+ 1.3	+ 0.7	− 1.6
Stock changes	− 7.1	+ 9.1	+ 3.2	—	—	—
Assumed blast furnace coking rate kg/t	537	525	519	500	500	500
Assumed pig iron production (at 85 % of production potential beyond 1976)	111.8	88.7	100.2	124.6	127.2	128.4

1 Excludes production and deliveries of low temperature carbonization fuels in the United Kingdom.
2 Actual output.

Briquetting Plants

Capital expenditure on hard coal briquetting was 3 million u.a. in 1975 and is likely to amount to only 2 million u.a. in 1976. As foreseen in the report on last year's survey, further closures of plant have been announced for the Nord/Pas-de-Calais and Aix-la-Chapelle regions. Total production potential should therefore fall from 8.7 m. tonnes in 1975 to only 7 m. tonnes in 1979.

Investment on **brown coal briquetting plants** totalled 7 million u.a. in 1975 and is expected to amount to 11 million u.a. in 1976. A further reduction in production potential is nevertheless announced by the survey—from 5.8 m. tonnes in 1975 to 4.1 m. tonnes in 1979.

V—IRON ORE MINING

Capital expenditure on iron ore mining increased from 26.9 million u.a. in 1974 to 31.8 million u.a. in 1975. Expenditure per tonne of ore extracted in 1975 was therefore 0.51 u.a. as against 0.39 u.a. in 1974.

TABLE 10

Capital expenditure in the Iron-ore Industry 1973-1977

(million u.a.)

Sectors	Actual expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Extraction of ore	19.6	20.6	26.7	24.3	14.1
Mine based preparations of ore	1.5	0.4	1.2	0.7	0.0
Miscellaneous surface	5.3	5.7	3.9	6.2	1.8
Total	**26.4**	**26.7**	**31.8**	**31.2**	**15.9**

The level of absolute expenditure and expenditure per tonne continues to be highest in Eastern France.

Compared with the 1975 survey, there is a considerable reduction this year in the estimates of iron ore extraction potential given by the enterprises, principally those in Eastern France, in Luxembourg and in the United Kingdom. After a small increase in potential in 1977 due to the completion of schemes in Eastern France, total Community extraction potential is now expected to be only 65 m. tonnes in 1979 as against 66 m. tonnes in 1975.

TABLE 11

Movement in crude ore extraction potential declared

(million tonnes)

Survey dates	Production potential estimated							
	1972	1973	1974	1975	1976	1977	1978	1979
1970 ..... Eur 6	80.7	79.5						
1971 ..... Eur 6	80.2	79.7	78.4					
1972 ..... Eur 6	73.2	74.5	75.6	75.5				
1973 ..... Eur 6	72.5	70.3	71.5	70.8	70.6			
1974 ..... Eur 6		73.2	67.7	68.6	68.4	67.1		
Eur 9		82.2	76.1	76.9	76.6	75.3		
1975 ..... Eur 6			70.7	68.6	68.1	67.0	66.0	
Eur 9			77.2	76.4	76.6	75.5	74.5	
1976 ..... Eur 6				59.8	58.2	61.3	59.7	59.1
Eur 9				65.9	63.9	67.2	65.9	65.3

In 1975 itself **extraction potential** turned out to be significantly less than the forecast of 76 m. tonnes announced at the beginning of the year. This was due to the withdrawal of a number of workings from operation in almost all countries in the climate of a very low level of demand for iron ore. Extraction potential in 1975 was nearly 16 m. tonnes lower than the level forecast for the year in the 1972 survey.

VI—THE IRON AND STEEL INDUSTRY

1. Capital expenditure

Steel enterprises in the Community continued to invest on a substantial scale in 1975 in spite of the sharp reduction in their revenues from trading. Total capital expenditure in the Community amounted to nearly 3100 million u.a. at current prices as against 2800 million u.a. in 1974. Capital expenditure per tonne of steel produced in 1975 was about 26 u.a. compared with 18 u.a. in 1974.

The United Kingdom has taken over from France as the country with the largest annual capital expenditure in the iron and steel industry: it accounted for nearly a quarter of total expenditure.

TABLE 12

Capital expenditure in the iron and steel industry 1973-1977

(million u.a.)

Type of installation	Actual expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Plant for production of:					
Pig iron	794.9	697.2	736.4	861.7	547.0
Steel	441.5	489.1	554.3	496.2	327.2
Rolled products	1 166.2	1 178.8	1 292.1	1 207.5	733.2
General services	625.8	437.1	514.4	544.7	248.6
Total	**3 028.4**	**2 802.2**	**3 097.2**	**3 110.1**	**1 856.0**
Total at constant 1970 prices	**2 586.2**	**2 032.1**	**1 927.3**	**1 935.3**	**1 154.9**

Total expenditure was slightly higher than the estimate of 3050 million u.a. given in last year's survey, but there was a considerable variation between the rates of achievement of estimated investments in the different countries and regions of the Community.

TABLE 13

Expected capital expenditure in 1975 and actual amounts spent in the Community iron and steel industry

Region	Estimated national currency (1)	Achieved national currency (2)	Rate of achievement % at current prices (3) = (2) : (1)
	DM (millions)	*DM (millions)*	
Northern Germany	414.39	529.84	127.9
North Rhine/Westphalia	1 442.32	1 319.03	91.5
Southern Germany	82.36	116.37	141.3
Saar	258.34	280.89	108.7
FR Fermany - Total	*2 197.41*	*2 246.13*	*102.2*
	FB (millions)	*FB (millions)*	
Belgium	*5 579.32*	*5 821.02*	*104.3*
	FF (millions)	*FF (millions)*	
Eastern France	992.11	1 031.05	103.9
Northern France	991.19	796.05	80.3
France - other regions	1 639.11	1 305.97	79.7
France - Total	*3 622.41*	*3 133.04*	*86.5*
	Lit (milliard)	*Lit (milliard)*	
Italy - coastal regions	317.83	281.10	88.4
Italy - other regions	183.72	215.84	117.5
Italy - Total	*501.55*	*496.94*	*99.1*
	Flux (millions)	*Flux (millions)*	
Luxembourg	*2 547.71*	*2 311.23*	*90.7*
	Fl. (millions)	*Fl. (millions)*	
Netherlands	*280.48*	*337.57*	*120.4*
	£ (millions)	*£ (millions)*	
United Kingdom	*409.53*	*449.62*	*109.8*
	Dkr (millions)	*Dkr (millions)*	
Denmark	*195.20*	*342.65*	*175.5*
	£ (millions)	*£ (millions)*	
Ireland	—	*292*	—
	million u.a.	*million u.a.*	
Community	3 050.27	3 097.17	101.5

Expenditure was much higher than forecast in Denmark, the Southern and Northern regions of Germany and the Netherlands. On the other hand, it was about 20% lower than expected in all regions of France except the East. Spending was also over 10% below expectations in Luxembourg, North Rhine/Westphalia and the coastal regions of Italy.

The rates of achievement for each country and regions, which are given in Table 13 above do not take into account the rise in capital equipment costs experienced throughout the industry. They therefore overestimate the real rate of achievement of the investment projects which the enterprises had previously

decided to carry out during the course of the year. It must also be emphasised that the book values of capital expenditure in the accounts of the enterprise do not necessarily give an accurate reflection of the physical progress of investment projects.

TABLE 14

Estimated capital expenditure in 1975 and actual amount spent in Community

(million u.a.)

Stage in production	Estimates (1)	Actual amounts spent (2)	Agreement with estimates % (3) = (2) : (1)
Pig iron	694.6	736.4	106.0
Crude steel	499.9	554.3	110.9
Rolling mills	1 340.1	1 292.1	96.3
General services	515.7	514.4	99.7
Total iron and steel industry	**3 050.3**	**3 097.2**	**101.5**

Table 14 above compares the rates of achievement of forecast expenditure on approved schemes at each stage of production. As a whole, there appears to have been a higher rate of achievement of spending on iron- and steelmaking facilities than on rolling and general services. On the other hand, enterprise by enterprise, there were widely differing rates of achievement of forecasts. An analysis has been made of the results of the 41 largest steelmaking groups in the Community who accounted for 87% of crude steel production and 75% of capital expenditure in the industry in 1975.

TABLE 15

Comparative rates of achievement of investment estimates among the 41 largest steelmaking groups in the Community

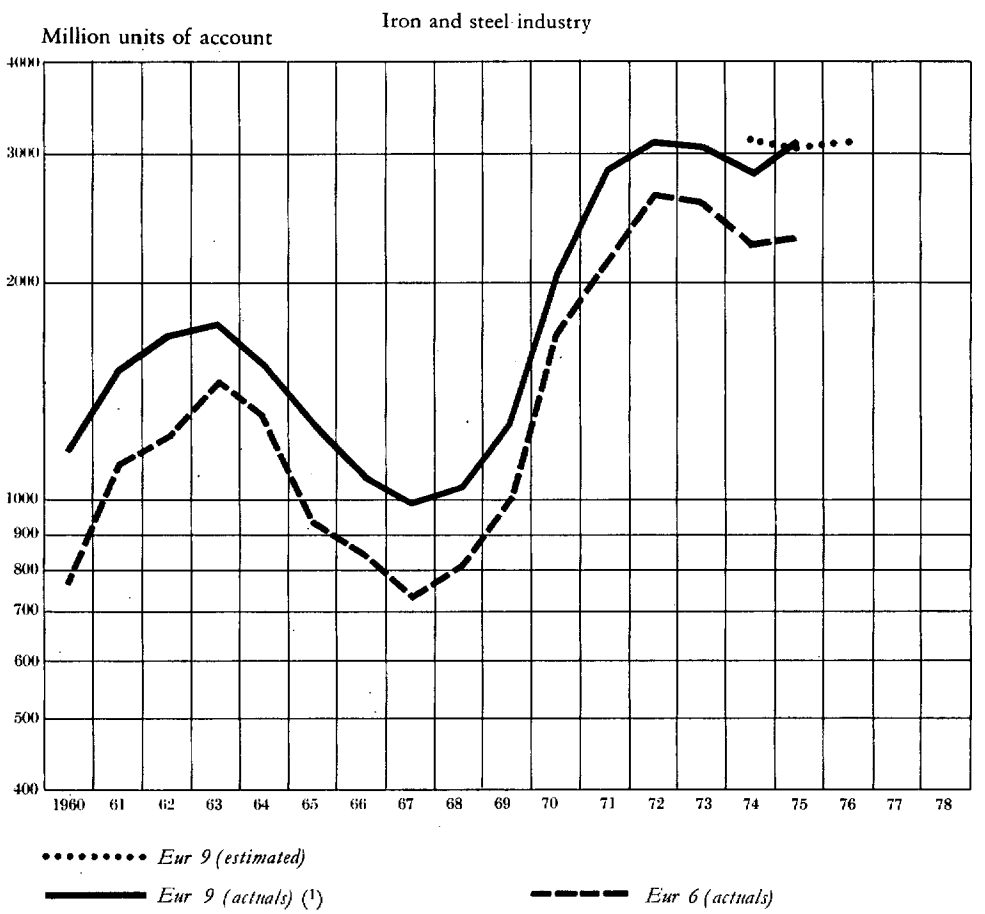
Rate of % achievement of forecast investment	Less than 80%	81-90%	91-100%	101-110%	110-120%	More than 120%
Number of steelmaking groups	9	8	5	4	5	10

Taken as a whole, the capital expenditure forecasts which were made by these steelmaking groups were 100% achieved. Table 15 above gives a breakdown of rates of achievement of the individual enterprises. With some exceptions—particularly in France—the very largest steelmaking groups seemed to be in a better position to fulfil their investment plans than their smaller competitors.

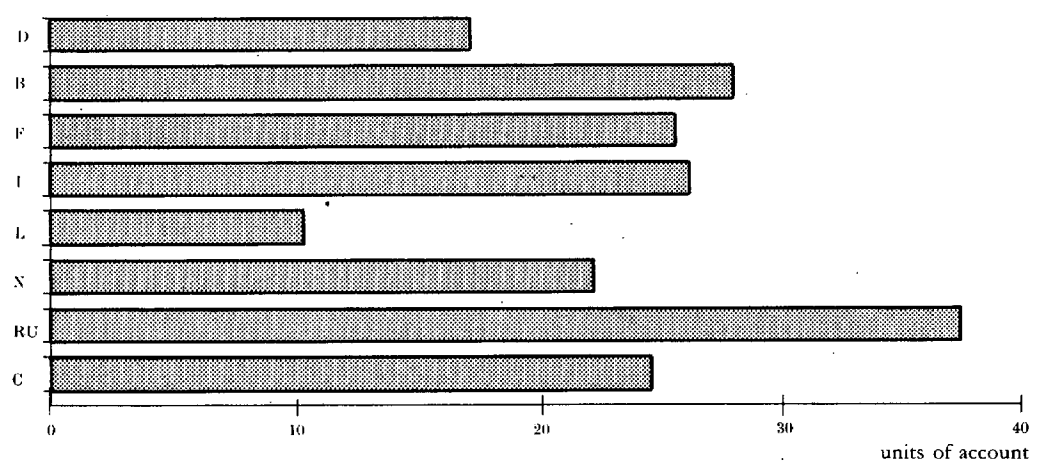
According to the latest returns, total capital expenditure in 1976 in the Community steel industry is expected to be maintained at its 1975 level of 3110 million u.a. With the continuance of the British Steel Corporation's plant modernization programme, there should be a considerable increase in expenditure in the United Kingdom from 753 million u.a. in 1975 to 966 million in 1976. This will mean that the United Kingdom will alone account for over 30% of total investment in the Community steel industry. Investment

FIGURE 4

Comparison of actual capital expenditure and estimated capital expenditure as at the beginning of each year



Capital expenditure per ton of crude steel produced in 1975



(1) *Capital expenditure included for the United Kingdom before 1973 is not strictly comparable to that declared for the other member countries since it includes expenditure on activities outside the ECSC, in particular on steel foundries, steel tubeworks and miscellaneous cold-working plants.*

in North Rhine/Westphalia should also show a substantial increase. Most other regions of the Community should nevertheless see some decline in capital expenditure in 1976 compared with last year.

Pig iron and Sponge iron production facilities

In 1975 capital expenditure on pig iron and sponge iron production facilities[1] increased to 736 million u.a. compared with 697 million u.a. in 1974 and is expected to increase again to 862 million in 1976. Table 16 analyses this expenditure into the major categories of plant involved.

TABLE 16

Capital expenditure on pig-iron production plant 1973-1977

(million u.a.)

Sectors	Actual expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Steelworks coking plants	150.0	218.3	172.3	217.3	186.6
Burden preparation and direct reduction	297.8	293.7	194.9	207.9	133.8
Blast furnace	347.1	296.5	369.2	436.5	226.6
Total	**794.9**	**808.5**	**736.4**	**861.7**	**547.0**

Expenditure on **blast furnaces** in 1975 amounted to 369 millions. Its relatively high level compared with that of recent years is due to the conjunction of projects for the construction of new blast furnaces such as those in North Rhine/Westphalia and Northern England, with projects for the modernization of existing ones in Eastern France, Wales and coastal Italy. In 1976 spending on blast furnaces is expected to increase even further to 437 millions with broadly the same split across the regions as in 1975. Expenditure per tonne of pig iron production potential in Luxembourg continues to be on a particularly low level—less than 1 u.a. per tonne during the last five years—either compared with over 2 u.a. per tonne for the Community as a whole or with a level of about 4 u.a. per tonne for the Lorraine region where ironmaking is similarly based on local ores. Following the improvements made to sintering capacity in Luxembourg, no major decisions have yet been taken on blast furnace capacities.

Modernization schemes in the United Kingdom continue to account for a large proportion of actual and expected expenditure on **steelworks-owned coking** plant and **burden preparation** plant in the Community. In 1975 there was also a considerable increase in expenditure on sintering plant in Belgium and Eastern France and spending there is expected to be sustained at the new levels in 1976.

Capital expenditure on **direct reduction** plant was 14 million u.a. in 1975 and is expected to reach 18 million in 1976 and 48 million in 1977. Spending is now expected to be at a much slower rate than announced in last year's survey; this is due to delays in the implementation of two of the three approved projects concerned.

1. Includes expenditure on steelworks-owned coking plant, burden preparation, blast furnaces and direct reduction plant.

Steelworks

Capital expenditure on steelworks rose from just under 500 million u.a. in 1974 to 544 million u.a. in 1975. Expenditure on **electric furnaces**—at 259 million u.a.—represented the highest proportion of total spending on steelworks of any individual process, although the **bottom- and top-blown oxygen processes** taken together accounted for half the total expenditure. In 1976, total investment in steelworks is expected to decrease again to below 500 million u.a. principally because most of the expenditure on projects for the installation of electric furnaces in inland Italy and Denmark has already been made.

TABLE 17

Capital expenditure on steelmaking plant 1973-1977 according to production process

(million u.a.)

Process	Actual expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Basic Bessemer	2.6	2.7	1.3	0.2	0.0
OBM; etc.	22.2	37.4	45.1	62.2	54.3
Open-hearth	5.0	6.9	13.4	25.7	16.0
Electric furnace	169.5	237.5	259.4	199.2	99.6
LD. Kaldo etc.	242.2	214.6	235.1	208.9	157.3
Total	**441.5**	**499.1**	554.3	496.2	327.2

Expenditure on **open-hearth steelworks,** which is now almost entirely devoted to anti-pollution schemes, is expected to amount to nearly 26 million u.a. in 1976 as against 13 million u.a. in 1975. Nearly all the forecast investment is associated with schemes at works in North Rhine/Westphalia.

Continuous casting and semi-finished production

Investment in **continuous casting** facilities, which was about 240 million u.a. in 1974 and 1975, is expected to decline to 189 millions in 1976. A decrease in expenditure is expected in North Rhine/Westphalia and the Saar where spending on continuous casting reached its highest ever levels in 1975. At the same time schemes in Northern England and Wales should result in an increase in expenditure in the United Kingdom from only 25 million u.a. in 1975 to 43 million in 1976.

Expenditure on **roughing** mills is now generally lower than spending on continuous casting. It is nevertheless expected to increase substantially between 1975 and 1976—from a 132 million u.a. to 169

FIGURE 5

Capital expenditure in the iron and steel industry

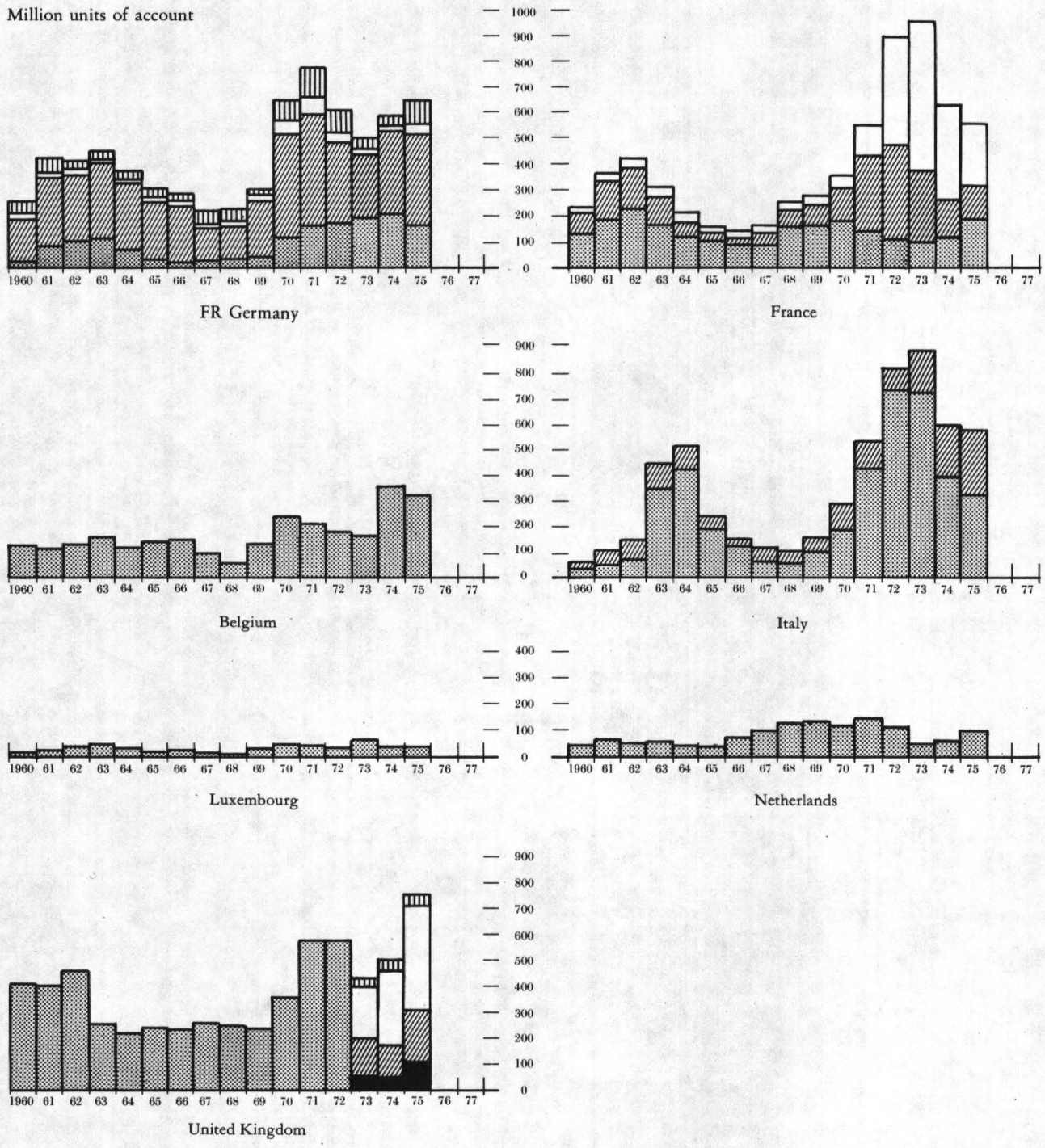


TABLE 18

Capital expenditure on production capital for semis and rolled products 1973-1977

(million u.a.)

Type of mill	Actual expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Blooming and slabbing mills	130.0	99.8	132.5	169.1	110.3
Continuous casting plants	145.9	229.4	241.2	189.2	129.4
Total Section mills	255.3	268.6	293.1	266.5	164.3
Total Flat-product mills	477.1	457.9	500.5	442.7	270.3
Miscellaneous (including coating lines)	157.9	123.0	124.8	140.1	58.9
Total	**1 166.2**	**1 178.7**	**1 292.1**	**1 207.6**	**733.2**

million u.a. This increase will be due to expected expenditure at two works in Northern England which are to concentrate on the production of billets.

Section mills

Capital expenditure on section mills, including rod mills, which reached a total of 293 million u.a. in 1975, is expected to decrease to a level of 266 millions in 1976. Current extensions of heavy sections capacity in Northern Germany are now nearing completion, while in Northern England and Wales, a number of new rod and light section mills are soon to be commissioned. The consequent decreases in spending in these regions should be partially compensated by increases in spending arising from projects involving heavy section capacity in North Rhine/Westphalia, bar mill capacity in Northern France and medium section capacity in coastal Italy.

TABLE 19

Capital expenditure on section mills 1973-1977

(million u.a.)

Sectors	Actual expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Heavy and medium section mills	80.6	78.0	115.5	112.5	88.5
Small bar mills	75.6	64.8	55.3	56.2	26.9
Wire rod mills	99.1	125.8	122.3	97.8	48.9
Total section mills	**255.3**	**268.6**	**293.1**	**266.5**	**164.3**

Flat product mills

Expenditure on flat product mills totalled 500 million u.a. in 1975. However in 1976 it is expected to be 443 millions—well below its levels in the last five years. Spending on **hot wide strip** mills is expected to decrease considerably from 163 million u.a. in 1975 to only 92 million in 1976, due to declines in expenditure in Northern Germany, North Rhine/Westphalia and Belgium.

On the other hand, capital expenditure on plate mills is expected to be maintained at a high level—127 million u.a. in 1976 compared with 107 millions in 1975 and 52 millions in 1974.

Expenditure on **cold wide strip** mills amounted to about 215 million u.a. in 1975 and should decrease 210 millions in 1976. With the exception, on the one hand, of a large increase in expenditure in Northern England, associated with the extension of stainless sheet capacities, and on the other hand of a decrease in expenditure of a project in Northern France, the regional distribution of expenditure on this category of plant should be about the same as it was in 1975.

TABLE 20

Capital expenditure on flat product mills 1973-1977

(million u.a.)

Sectors	Actual expenditure			Estimated expenditure (cat. A + B)	
	1973	1974	1975	1976	1977
Hot wide strip mills	219.3	194.4	162.8	92.0	53.9
Hoop and strip mills	6.2	5.9	13.8	13.5	3.8
Plate and universal mills	58.2	52.1	107.3	127.4	105.1
Hot sheet mills	—	0.0	1.4	0.3	0.5
Cold wide strip mills	193.4	205.5	215.2	209.6	106.9
Total flat-product mills	**477.1**	**457.9**	**500.5**	**442.7**	**270.3**

2. Actual production and production potential in 1975

Pig iron

Production potential for pig iron in the Community increased by 9.5 m. tonnes between 1974 and 1975 to a new level of 136.8 m. tonnes. Most of this increase came about as a result of the completion of major expansion programmes at coastal works in Italy and on the north and south coasts of France. At the same time, the production potential of existing blast furnaces in other regions was increased, in some cases because they had been extensively modernized, and in others because of a changeover to richer ores.

The final figure of Community pig iron production potential for the year was only 400 000 tonnes less than the 137.2 m. tonnes estimated by the enterprises in last year's survey. Some expected increases in potential were not achieved: in Wales, the commissioning of a large new blast furnace had to be postponed until 1976 because of an industrial dispute and in North Rhine/Westphalia and Belgium some

modernization projects were also delayed. However these delays were nearly compensated by improvements in blast furnace and steelworks performance in other regions.

While production potential increased considerably during the year, there was a drastic fall in actual output—from 111.8 m. tonnes in 1974 to 88.7 m. tonnes in 1975. Due to the increase in capacities, the rate of utilization of blast furnaces fell even more heavily—from 87.5% in 1974 to 64.9% in 1975. The average rate of utilization in 1975 in the six Member States of the Community in its original form—64.6—was the lowest rate ever recorded since the foundation of the European Coal and Steel Community. Rates of utilization were particularly below the Community average in Scotland, followed by the Saar, Northern France and Belgium. Rates in Northern England, Eastern France and coastal Italy were somewhat higher than that for the Community as a whole.

Crude steel

Crude steel production potential in the Community also increased by a substantial amount between 1974 and 1975. 11 m. tonnes was added, bringing crude steel production potential to a new total of 189.9 m. tonnes in 1975 as against 178.9 m. tonnes in 1974. There was an increase of over 6 m. tonnes at LD steelworks on the coasts of France and Italy, in connection with the same expansion programmes which brought about a parallel increase in blast furnace capacities. In addition, the production potential for electric steel increased by over 3 m. tonnes in 1975, following the commissioning of new plant in Italy, France and the United Kingdom.

As for pig iron, the crude steel production potential actually achieved in 1975—189.9 m. tonnes—was only slightly lower than the estimate of 191.3 m. tonnes given in last year's survey. Production potential in Wales fell slightly because of the postponement of the commissioning of a new blast furnace. There were also delays in projects effecting blast furnaces and LD steelworks in North Rhine/Westphalia and effecting electric furnaces in inland Italy. However there were improvements in blast furnace and steelworks production potential in other regions which had not been accounted for the enterprises in last year's survey; hence the net reduction compared with their previous estimates remained limited.

Similarly to pig iron production, the level of actual crude steel production in 1975 was at an unprecedently low level. Output was only 125.7 m. tonnes as against 155.5 m. tonnes in 1974 and the rate of utilization of production potential was 66.2% as against 87.2% in 1974.

Among the different processes, steelworks based on electric furnaces had the highest rate of utilization in 1975—72.6%—followed by open-hearth steelworks at 66.7% and LD and Kaldo steelworks at 64.7%. The low rate of utilization of LD steelworks is partly explained by the considerable increase in potential in the course of the year. In contrast, the high rate of utilization for open-hearth furnaces in influenced by closures during the course of the year. The lowest average rate of utilization—57.2%—was recorded by Basic Bessemer furnaces.

Across the regions, the Saar, the North of France, Belgium and Luxembourg recorded rates of utilization well below the Community average, while the Netherlands, Southern Germany and all regions of the United Kingdom, except Scotland, registerd relatively high rates of utilization.

Production potential of open-hearth steelworks declined by nearly 3 m. tonnes between 1974 and 1975—from 26.5 m. tonnes to 23.7 m. tonnes. A number of plants were closed during 1975, the low level of demand during the year making their operation less competitive compared to steelworks based on other

processes. However, most of the plant closures had already been decided on at the time of last year's survey, hence production potential for open-hearth steel in 1975 was only 200 000 tonnes lower than had been expected. The major impact of the steel recession on open-hearth steelworks appears to have been in the acceleration of plans for future closures.

Plans for the closure or conversion of Basic Bessemer steelworks did not alter course in 1975 itself. Production potential was reduced by 1.8 m. tonnes as previously forecast. As for open-hearth steelworks, the impact of the recession is to be found more in the plans of the enterprises for the future.

TABLE 21

Rate of utilization of production potential in the Community[1]

(%)

Sectors	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Pig iron	94.3	90.9	85.5	81.0	88.2	83.8	77.0	79.2	84.8	89.7	85.4	76.6	79.9	84.4	87.5	64.8
Crude steel	95.6	91.7	87.3	83.4	90.0	84.3	78.7	80.0	85.9	88.8	86.1	76.1	81.0	86.0	86.9	66.1
Finished products[2]	89.6	87.2	82.9	78.9	83.9	75.9	69.5	68.9	73.2	80.4	78.3	69.3	71.1	78.4	78.6	57.6

1 Up to and including 1972, Community in its original form only.
2 Except coils finished products.

Finished products

The rate of utilization of hot-rolled coil production potential fell considerably from 82.6% in 1974 to 55.4% in 1975. This decline was aggravated by the addition of over 5 m. tonnes of new capacity during the year.

The rate of utilization of finished product production potential, excluding that for coils rated as finished products, was 57.6% compared with 78.7% in 1974. There was an overall increase of 6.4 m. tonnes in finished product production potential over its 1974 level, of which 4 m. tonnes related to flats and 2.4 m. tonnes to sections.

On average, the rate of utilization of sections production potential in 1975 was higher than that for flat products—60.5% as against 55.1%. The lowest rates of utilization among flat product mills were recorded for narrow strip mills—49.9%—and cold-rolling mills—53.1%. Among section mills, wire rod mills had the lowest rate of utilization at 55.3%.

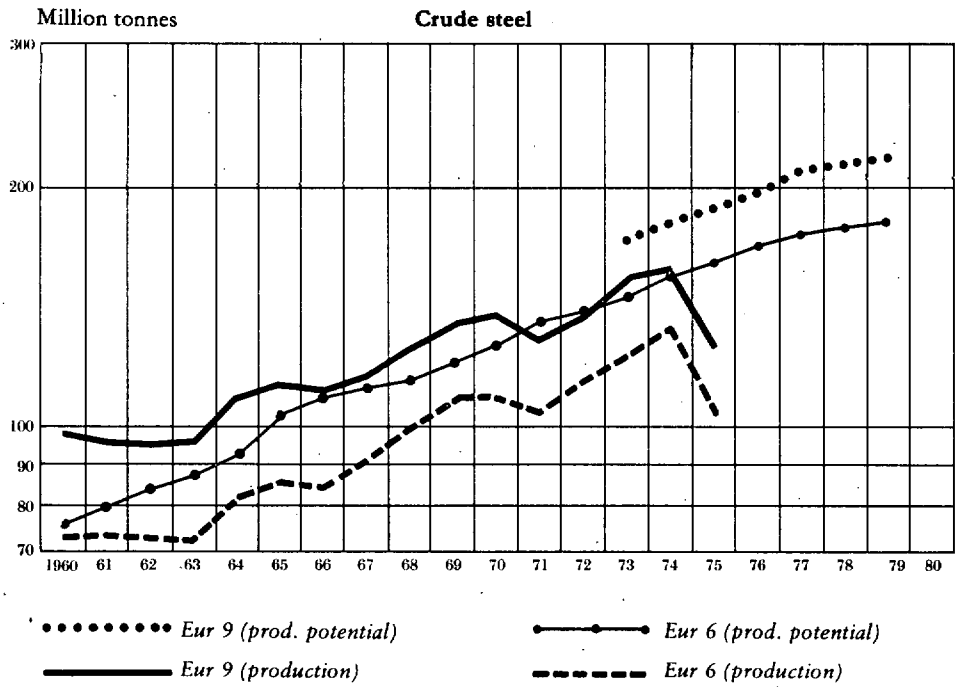
3. Expected production potential for the period 1975-1979

Pig iron

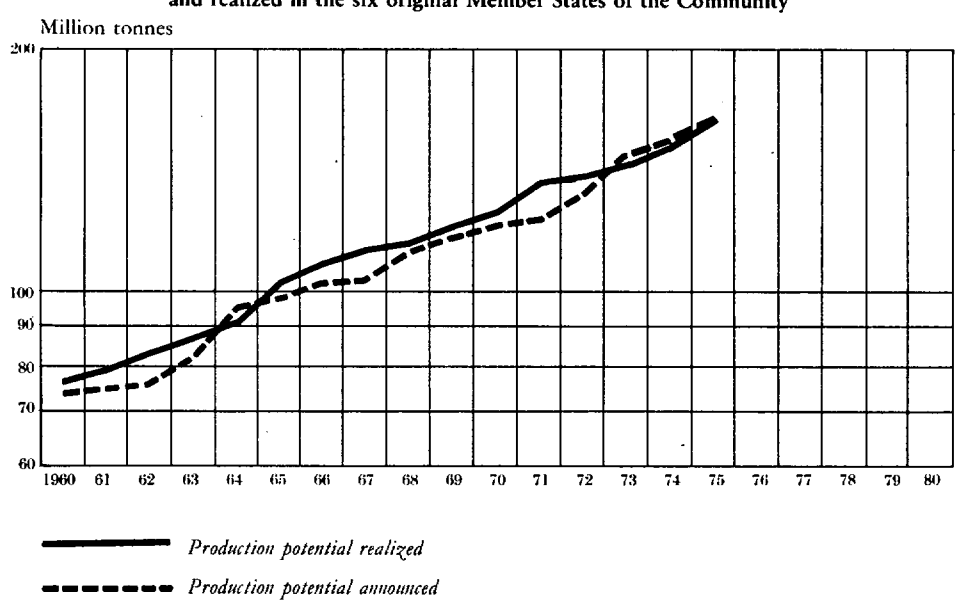
The expected development of Community production potential for pig iron, sinter and coking plant is given in the following table.

FIGURE 6

Actual production and production potential of the iron and steel industry



Community crude steel production potential announced and realized in the six original Member States of the Community



[1] *i.e. production potential announced by the enterprises four years in advance*

TABLE 22

Movement of production potential for coke, sinter and pig iron

(million tonnes)

Products	Actual production		Production potential					
			Realized		Estimated			
	1960	1975	1971	1975	1976	1977	1978	1979
Coke (steelworks- mine-owned and independent plants)	95.2	76.4	*	88.5	89.9	91.0	91.3	89.7
Sinter	49.1	125.4	*	170.9	173.9	187.0	191.8	194.8
Pig iron	70.1	88.7	*	136.8	141.2	146.7	149.6	151.1

* Figures not available.

Production potential for pig iron is expected to increase by an average 2.8% p.a. from 136.8 m. tonnes in 1975 to 151.1 m. tonnes in 1979. This rate of increase is much lower than the 4.1% p.a. increase announced by last year's survey for the period 1974 to 1978, mainly because much of the absolute increase in the period covered by last year's survey was expected in 1975. At the same time, no new expansion plans have been decided which could have a substantial influence on capacity before the end of the nineteen seventies. The estimate of total pig iron production potential in 1979 of 151.1 m. tonnes is consequently only 1.2 m. tonnes higher than the production potential announced by last year's survey for 1978.

The latest returns generally confirm the trends of production potential in the regions which were announced by last year's survey. The largest increases in blast furnace capacity are expected to result from the construction of new blast furnaces in Northern England and North Rhine/Westphalia. Modernization of existing capacities is also now expected to increase pig iron production potential in Belgium to 17.3 m. tonnes as against 15.3 m. tonnes in 1975. On the other hand, production potential in Northern and Eastern France is likely to increase at a slower rate than previously forecast because of the announcement of the closure of some old capacities.

Sponge iron

Production potential for sponge iron is expected to reach a total of 1.8 m. tonnes in 1979 compared with 0.6 m. tonnes in 1978. Further new projects are announced in the survey as planned but are not yet approved. If all these schemes are approved within the near future then production potential for sponge iron could increase by a further 2.5 m. tonnes to reach over 4.5 m. tonnes by the early nineteen eighties.

Crude steel

The production potential for crude steel in the Community is expected to reach 215.8 m. tonnes in 1979 compared with 189.9 m. tonnes in 1975. This represents an expected annual average rate of growth of 3.2% as against 4.4% announced by last year's survey.

The new returns covering crude steel production potential, like those covering pig iron production potential, generally confirm the expected increase in total capacity announced by last year's survey and do not contain any major new expansion plans. In a number of regions there is also some reduction in last year's estimates of production potential especially in the estimates for 1976 and 1977. In France, total crude

steel production potential is now expected to reach only 35.6 m. tonnes in 1977 as against the 37.8 m. tonnes announced by the 1975 survey; and in coastal Italy the figure announced for 1977 in last year's enquiry is carried over this year into 1978 and 1979.

On the other hand, the progress on some modernization and expansion schemes in Northern England and North Rhine/Westphalia has caused the enterprises concerned to increase their estimates of the production potential for the period beyond 1977. Production potential in Luxembourg is also expected to increase quite considerably between 1975 and 1979 while in the Netherlands the expected increase in production potential is even more substantial owing to the recently high level of investment on the steelworks.

TABLE 23

Comparison of the forecasts of crude steel production potential given in recent surveys

(million tonnes)

Year of inquiry	Production potential estimated							
	1972	1973	1974	1975	1976	1977	1978	1979
1971 ..... Eur 6	145.3	151.9	160.5					
1972 ..... Eur 6	142.3	148.8	157.5	164.0				
1973 ..... Eur 6	139.7	146.1	155.7	164.1	167.9			
1974 ..... Eur 6		144.9	153.5	163.0	170.3	173.3		
Eur 9		174.5	183.2	197.4	204.5	206.1		
1975 ..... Eur 6			150.4	162.3	169.8	173.9	177.8	
Eur 9			178.9	191.3	200.6	207.5	212.8	
1976 ..... Eur 6				162.1	169.7	175.6	177.9	180.3
Eur 9				189.9	198.0	207.8	212.4	215.8

Crude steel by process

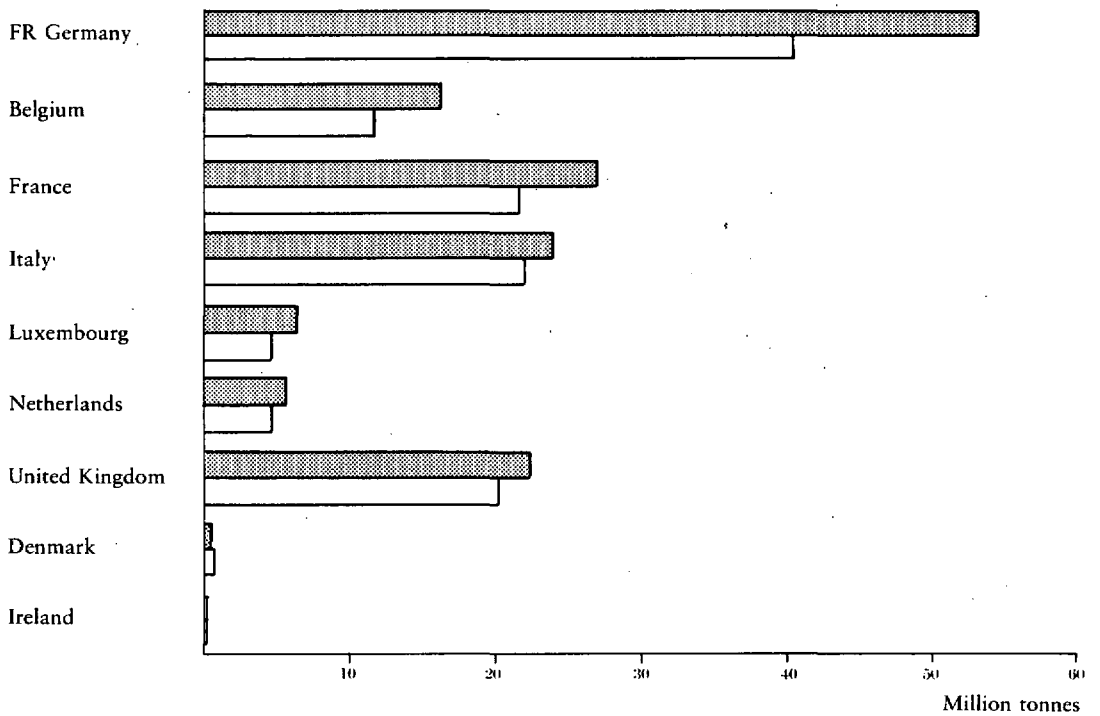
In contrast to the expectations for total crude steel production potential, the split of production potential between the processes is now expected to be considerably different from that indicated in previous estimates.

Production potential for **open-hearth** steel is expected to decline somewhat faster than indicated last year. It is now expected to amount to only 13.5 m. tonnes in 1979 compared with 23.7 m. tonnes in 1975. Open-hearth steelworks would then account for only 6.3% of total crude steel production potential in the Community as against 12.5% in 1975. However as Table 25 indicates, nearly 10 m. tonnes of openhearth capacity will still remain in existence in 1980 and beyond unless new schemes are brought forward for their closure and replacement.

FIGURE 7

Crude steel

Production by country 1974-1975



Utilization rate of production potential by country 1974-1975

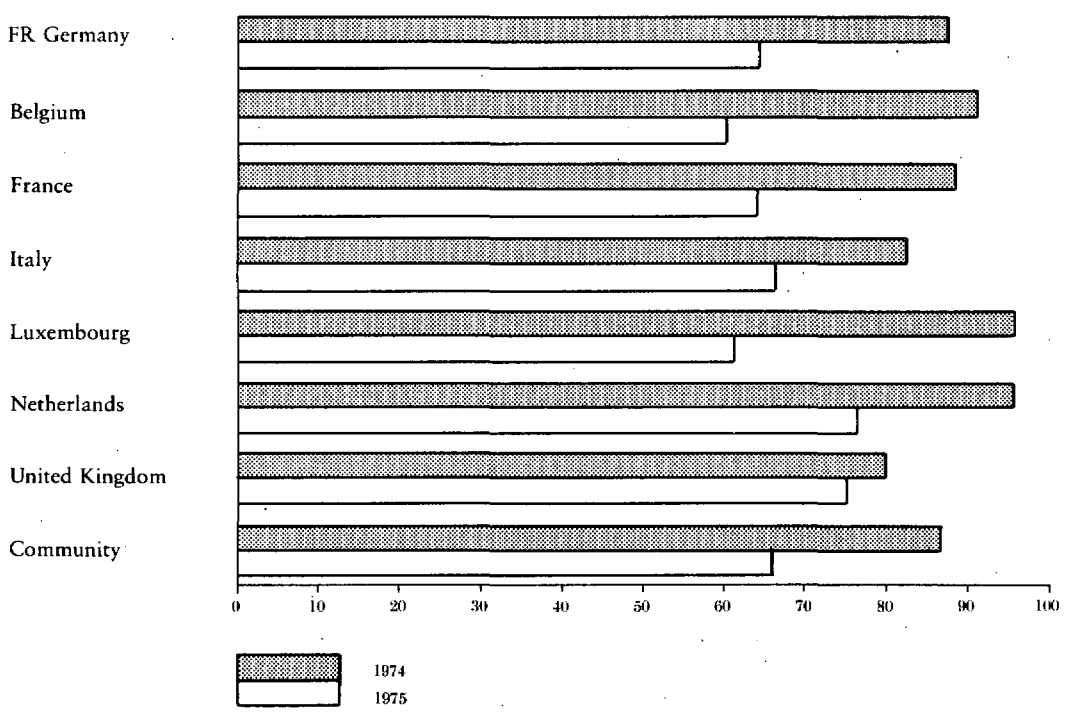


TABLE 24

Movement of actual crude steel production potential according to steelmaking process

(million tonnes)

Process		Production		Production potential					
		1960	1975	1971	1975	1976	1977	1978	1979
Basic Bessemer	Eur 6	35.9	6.0	18.4	10.5	7.5	5.4	4.5	4.1
	Eur 9	37.6	6.0	*	10.5	7.5	5.4	4.5	4.1
OBM and similar processes	Eur 6	—	6.4	2.6	10.1	12.3	16.4	18.2	18.4
	Eur 9	—	6.4	*	10.1	12.3	16.4	18.2	18.4
Open-hearth	Eur 6	27.5	10.9	17.3	17.3	15.0	12.5	10.6	10.4
	Eur 9	48.7	15.8	*	23.7	19.8	17.1	14.4	13.5
Electric furnace	Eur 6	7.6	18.5	14.4	25.5	28.0	29.7	31.7	32.5
	Eur 9	9.3	24.3	*	32.7	36.4	39.6	42.2	43.3
LD, Kaldo etc.	Eur 6	1.8	63.1	50.7	98.6	106.9	111.6	113.0	115.1
	Eur 9	2.2	73.2	*	112.7	122.0	129.4	133.2	136.7
Total	Eur 6	72.8	104.8	103.4	162.1	169.7	175.6	177.9	180.3
	Eur 9	97.8	125.7	*	189.9	198.0	207.8	212.4	215.8

* Figures not available

TABLE 25

Expected movement of Community production potential for open-hearth steel 1975-1980

(million tonnes)

	1975	Estimated	
		1979 based on schemes in progress and approved	1980 and after based on all planned schemes including those not approved
Total: open-hearth steelworks	**23.7**	**13.5**	**9.9**

The production potential of **Basic Bessemer** steelworks should also decline more rapidly than previously expected over the period covered by the survey: potential should amount to only 4.1 m. tonnes in 1979 compared with 10.5 m. tonnes in 1975.

Nevertheless as for open-hearth steelworks, the process of the closure and replacement of old steelworks will not be completed by the schemes currently approved by the enterprises. Further schemes will need to be approved if a full modernization of steelworks based on the Bessemer process is to be carried out. Table 26 below shows the expected production of Basic Bessemer steelworks together with that for OBM and LWS steelworks. The production potential for OBM steels is broken down between new steelworks and steelworks which have been converted to the OBM process from the Basic Bessemer process.

TABLE 26

Expected movement of Community production potential for Basic Bessemer and OBM steels

(million tonnes)

	1975	Estimated	
		1979 Based on schemes in progress and approved	1980 and after based on all planned schemes including those not approved
New OBM/LWS steelworks	2.0	8.5	15.6
Other OBM steelworks (converted from Basic Bessemer steelworks)	8.1	9.9	5.6
Basic Bessemer steelworks	10.5	4.1	0.4
Total existing or converted Basic Bessemer steelworks	18.6	14.0	6.0

The production potential of entirely new OBM steelworks will reach a total of 8.5 m. tonnes in 1979 compared with only 2 m. tonnes in 1975. In addition, a further 1.8 m. tonnes of Basic Bessemer capacity will be converted to the OBM process, bringing the production potential from converted shops to a total of 9.9 m. tonnes. However, the conversion of old capacities to OBM may only offer a temporary solution to the problem of the modernization of works based on Basic Bessemer steelmaking. Although conversion may bring some immediate increase in production potential as well as in steel quality, full replacement of the capacities may often be necessary in the medium to long term, not only so that the works concerned can remain competitive but also to avoid heavy anti-pollution investments connected with obsolete infrastructure.

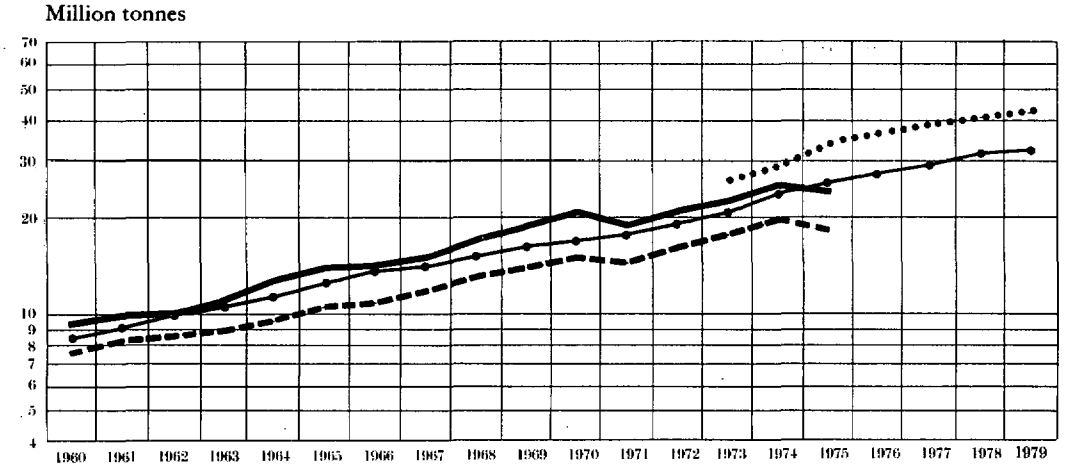
The figures of OBM and Bessemer production potential in 1980 and after, which are given in the third column of Table 26 are based on all schemes currently envisaged by the enterprises. They indicate that the total of existing or converted Basic Bessemer steelworks could be as low as 6 m. tonnes in 1980 provided that commitment is made to a number of schemes, especially those in Northern and Eastern France, which are not yet approved. Some of these schemes involve construction of new OBM or LWs steelworks while others involve a changeover to LD processes. Without implementation of these schemes there could still be as much as 14 m. tonnes of crude steel production potential in the early nineteen eighties which would come from existing or converted Basic Bessemer capacities.

While most enterprises still operating Kaldo furnaces are now considering their closure within the next five years, the production potential of steelworks based on LD processes is expected to continue to increase rapidly. 134 m. tonnes of production potential for LD steels should exist in 1979 compared with 110.6 m. tonnes in 1975. Because of an extension of pig iron capacity and improvements in steelmaking facilities,

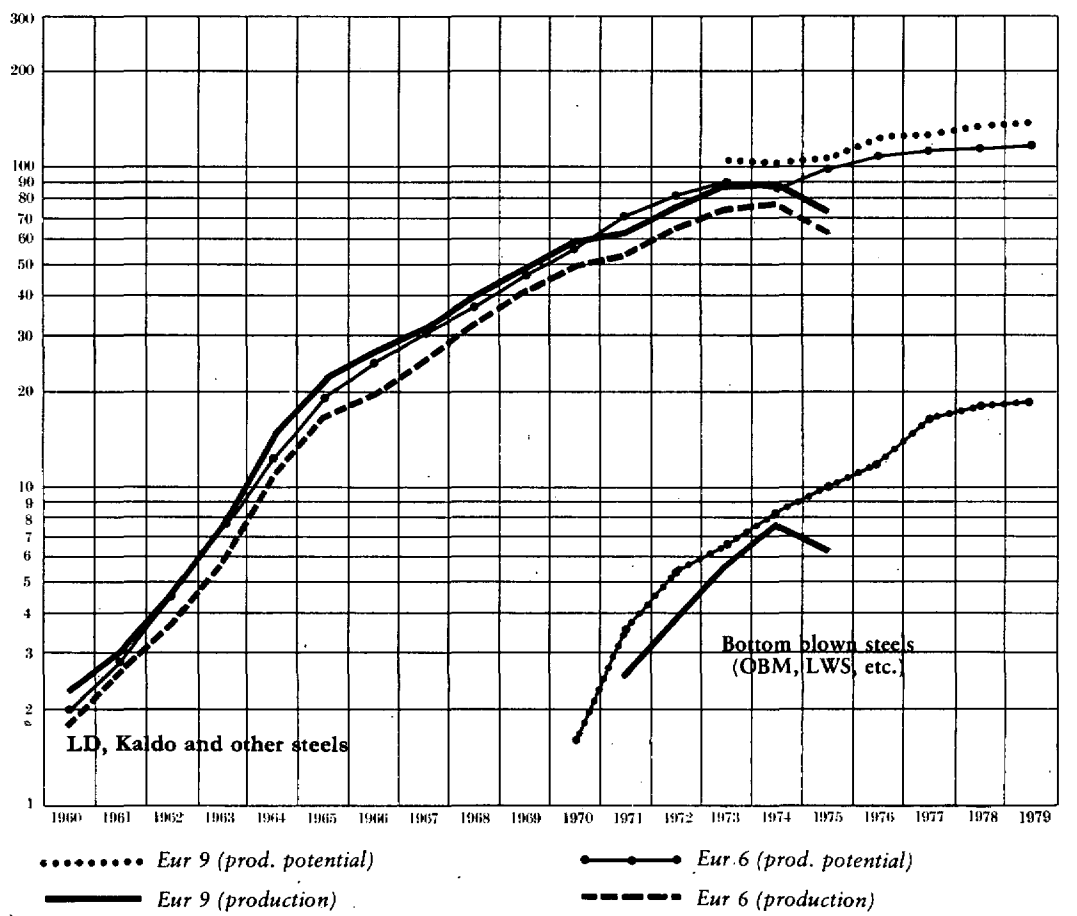
FIGURE 8

Actual production and production potential of crude steel by production process

A — Electric-furnace steel



B — Electric, LD, Kaldo and other steels



some LD steelworks in North Rhine/Westphalia, Wales and Northern England are expected to be able to increase their maximum production potential by large amounts. In addition, extensions to existing steelworks should also bring about a considerable increase in production potential in Luxembourg.

TABLE 27

Shares of the different steelmaking processes in 1960, 1975, 1979

(%)

Process	Actual production		Production potential	
	1960	1975	1975	1979 estimated share
Basic Bessemer	38.5	4.8	5.5	1.9
OBM and similar processes	—	5.1	5.3	8.5
Open-hearth	49.7	12.6	12.5	6.3
Electric furnace	9.5	19.3	17.3	20.0
LD. Kaldo. etc.	2.3	58.2	59.4	63.3
Total	100.0	100.0	100.0	100.0

The production potential of electric steelworks in the Community should reach a total of 43.3 m. tonnes in 1979 against a figure of 32.7 m. tonnes in 1975. Since last year's survey, some projects for new mini-mills, which had been decided by the enterprises and notified to the Commission under the procedure for prior notification of investments, were postponed or abandoned, notably in France and in coastal Italy. However, some projects for the extension of existing mini-mills have been announced, in particular in Germany, and these, together with other projects at steelworks producing special steels have increased the estimates of future electric furnace potential given in last year's survey. In boom years the available production potential for electric steel could also be increased by the re-entry into service of a number of relatively obsolete small furnace which could be used to produce semi-products by conventional casting methods.

Continuous casting

According to the latest returns, production potential for continuous casting should amount to 56.0 m. tonnes compared with 33.4 m. tonnes in 1975. This would mean that it would theoretically be possible to cast nearly 26% of maximum crude steel output on a continuous basis as against a corresponding figure of under 18% in 1975. Table 28 shows the estimated ratio of continuous casting production potential to crude steel production potential in each Member State of the Community in 1975 and 1979.

TABLE 28

Ratio of continuous casting production potential to crude steel production potential in 1975 and 1979

(%)

Country	1975 %	1979 %
FR Germany	22.6	32.1
Belgium	4.0	17.9
France	14.8	20.3
Italy	30.6	41.5
Luxembourg	—	—
Netherlands	—	—
United Kingdom	11.6	18.5
Denmark	17.5	58.3
Ireland	—	100.0
Community	**17.6**	**25.9**

Coils

The new survey indicates that no new major extensions to hot wide strip mill capacity have been decided since the last survey. The new mills which have been installed at coastal works in Italy and France were brought into operation in 1975; the only remaining major development being in Southern Belgium where production potential for coils should increase from 7.4 m. tonnes in 1975 to 9.1 m. tonnes in 1979. Elsewhere the increases in production potential which are anticipated will arise mainly through a better balance of production potential upstream and downstream from the hot wide strip mills.

In total, production potential for coils is expected to increase from 61.3 m. tonnes in 1975 to 68.5 m. tonnes in 1979.

TABLE 29

Annual rate of growth in coils production potential

	Production potential				
	1971 (million tonnes)	Average cumulative annual movement %	1975 (million tonnes)	Average cumulative annual movement %	1979 (million tonnes)
Coils Eur 6	38.4	8.8	54.0	2.4	59.3
Eur 9	*	*	61.3	2.8	68.5

* Figures not available.

Finished products

The expected movement of Community production potential for finished products is shown in the following Table.

FIGURE 9

Movement of actual crude steel production potential according to steelmaking process

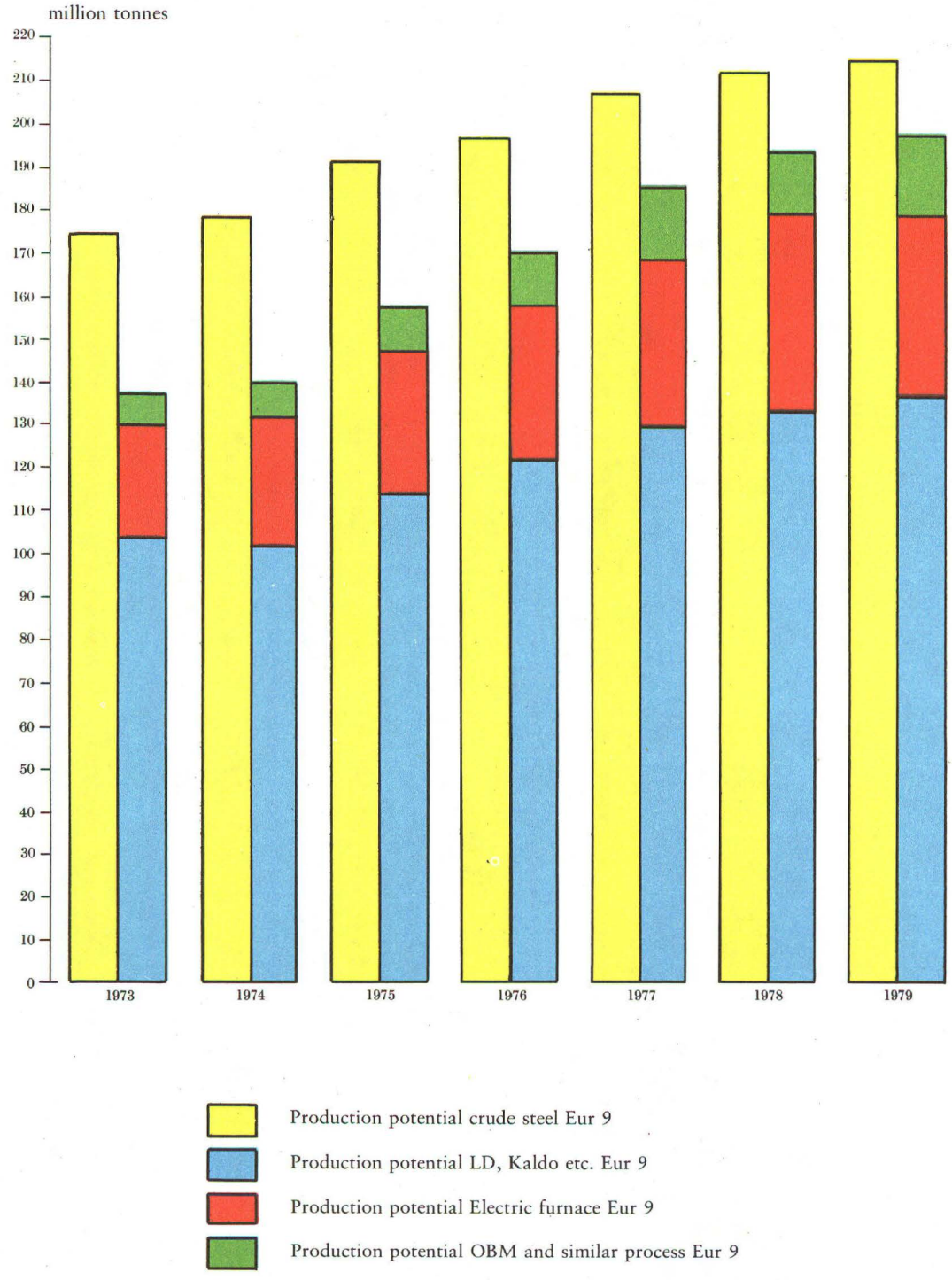


TABLE 30

Actual and expected rates of growth of production potential for finished products

Products		Actual production			Production potential				
		1960 (million tonnes)	Average cumulative annual movement %	1975 (million tonnes)	1971 (million tonnes)	Average cumulative annual movement %	1975 (million tonnes)	Average cumulative annual movement %	1979 (million tonnes)
Heavy and light sections, incl. tube rounds and squares	Eur 6	21.9	1.2	26.1	26.0	13.4	43.0	1.9	46.4
	Eur 9	28.4	0.7	31.5	*	*	50.8	2.2	55.5
Wire rod	Eur 6	5.4	1.9	7.2	8.1	14.3	13.8	3.0	15.5
	Eur 9	6.9	1.8	9.0	*	*	16.3	4.5	19.4
Total sections	Eur 6	**27.3**	**1.3**	**33.3**	**34.1**	**13.7**	**56.9**	**2.1**	**61.9**
	Eur 9	**35.3**	**0.9**	**40.6**	*	*	67.1	**2.8**	**74.9**
Hoop strip for tubemaking	Eur 6	4.7	— 0.4	4.4	5.8	12.2	9.2	3.1	10.4
	Eur 9	6.5	— 1.1	5.5	*	*	11.0	3.3	12.5
Plate of 3 mm and over[1]	Eur 6	7.8	3.0	12.1	10.6	17.2	20.0	3.9	23.3
	Eur 9	10.9	1.9	14.4	*	*	22.9	4.3	27.1
Hot rolled sheet under 3 mm[1]	Eur 6	3.0	—16.5	0.2	0.5	21.8	1.1	2.2	1.2
	Eur 9	*	*	0.3	*	*	1.2	2.0	1.3
Cold rolled sheet under 3 mm	Eur 6	7.4	6.3	18.5	19.5	15.2	34.3	2.0	37.1
	Eur 9	*	*	21.5	*	*	40.4	1.9	43.5
Total flats[1]	Eur 6	**22.9**	**2.9**	**35.2**	**36.4**	**15.4**	**64.6**	**2.8**	**72.1**
	Eur 9	**31.9**	**1.8**	**41.6**	*	*	**75.5**	**2.9**	**84.5**
Total finished rolled products[1]	Eur 6	**50.2**	**2.1**	**68.5**	**70.5**	**14.6**	**121.5**	**2.5**	**134.0**
	Eur 9	**67.2**	**1.4**	**82.2**	*	*	**142.6**	**2.8**	**159.4**
Coils finished products	Eur 6	*	*	6.7	5.1	*	12.9	0.5	13.1
	Eur 9	*	*	7.2	*	*	13.3	2.2	14.5
Grand total	Eur 6	*	*	**75.2**	**75.6**	**15.5**	**134.4**	**2.3**	**147.1**
	Eur 9	*	*	**89.4**	*	*	**155.9**	**2.8**	**173.9**

1 Exclusive of coils rating as end products.
* Figures not available.

According to the survey total Community production potential for finished products, including coils rated as finished products, should increase from 155.8 m. tonnes in 1975 to 173.9 m. tonnes in 1979. This amounts to an average annual increase of 2.8% p.a. compared with the 3.7% p.a. announced by last year's survey for the period 1975-1979.

Production potential for flat products is still expected to increase at a slightly faster average annual rate than that for sections products—2.9% p.a. compared with 2.8% p.a. The number of new schemes for increases in flat product potential announced by the survey is nevertheless limited. After a 2.1 m. tonnes increase in production potential for cold-rolled sheet between 1974 and 1975, the increase in potential between 1975 and 1979 is expected to be 2.1 m. tonnes over the four years. The highest rate of increase in

production potential for flat products is now expected to be recorded for plate over 3 mm. despite delays in implementing a major extension project in France. Production potential for plate should expand by an average 4.3% p.a. to reach a level of 27.1 m. tonnes in 1979 compared with 22.9 m. tonnes in 1975.

Production potential for wire rod is expected to increase at a faster rate—4.5% p.a.—than that for other section products, although the expected rate of increase over the period 1975-1979 is lower than the 5.5% p.a. announced by the previous survey for the period 1974-1978. Production potential should reach a total of 19.4 m. tonnes in 1979 as against 16.3 m. tonnes in 1975. After the substantial additions to capacities which have recently been made in the Saar and Eastern France, most of the future increases in production potential is expected to occur in Italy and the United Kingdom.

Community production potential for heavy and light sections, including rounds and squares for tubes, should increase by an average 2.2% p.a. between 1975 and 1979. Capacity is to be expanded considerably in all regions of Italy while that in North Rhine/Westphalia, Northern France, Luxembourg and Northern England should increase by a somewhat lesser amount.

Conclusions

Judging from the returns to the survey, the depression on the steel market in 1975 did not prevent steel enterprises from continuing to invest on a substantial scale. In real terms capital expenditure by the industry was only slightly lower in 1975 than it was in 1974. However some enterprises, and particularly those in France, did not spend up to their previous forecasts. Most of those who did manage to maintain a high level of expenditure also had to increase their borrowings and lines of credit on a substantial scale in a situation in which their trading revenues were not sufficient even to cover depreciation provisions.

Investment in 1976 is still expected to be on the same scale as in the last two years. This is mainly because of the substantial expenditure still to be made within the British Steel Corporation's plant modernization programme and within capacity extension projects in North Rhine/Westphalia. With a few exceptions, expenditure in 1976 is expected to decline elsewhere. Beyond 1976, total Community investment in the steel industry should show an overall decline. The most important effect of the recent recession has been to put the emphasis principally on investment in replacement and modernization and to postpone the decisions to go ahead with some expansion schemes which were already considered with some hesitation even during the boom year of 1974. These schemes include notably a major expansion on coastal sites in Belgium, France and Italy.

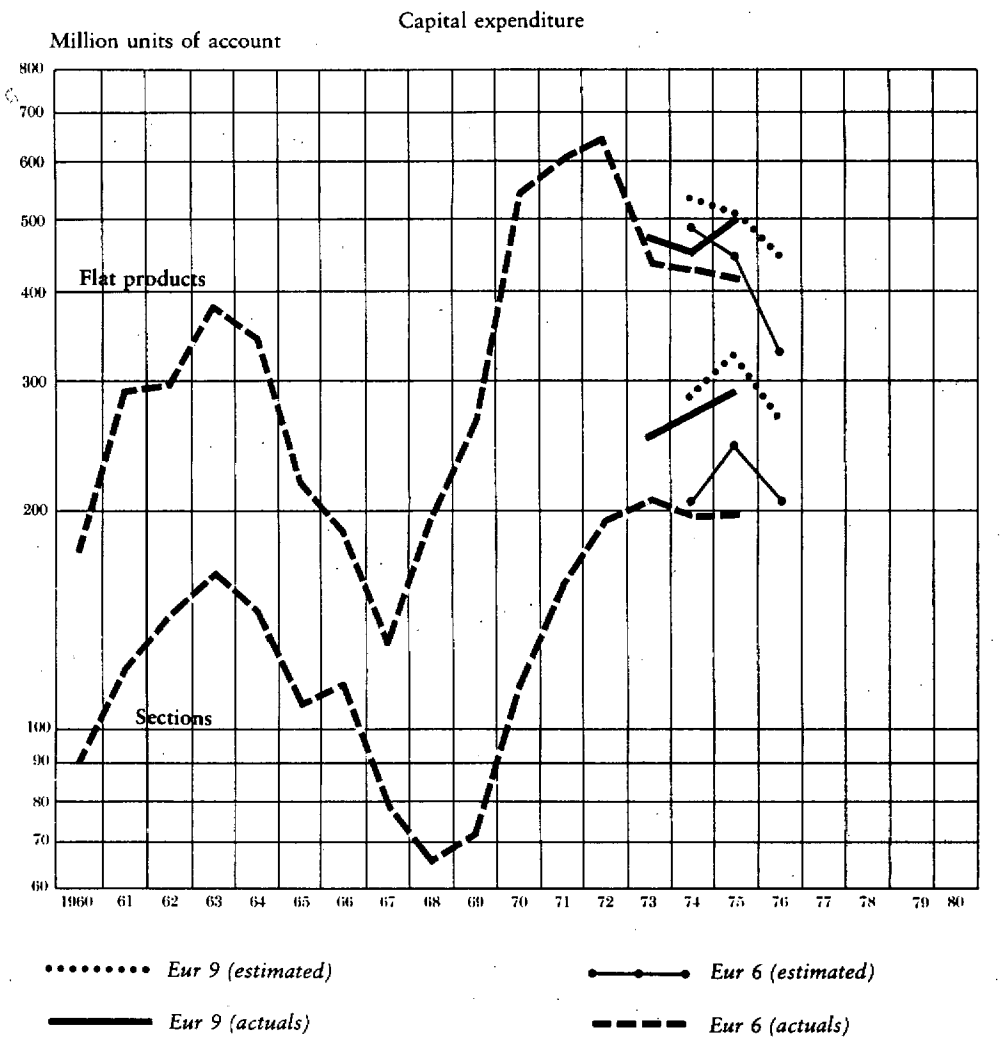
The number of decisions to construct new mini-mills dropped considerably in 1975 and some previously decided schemes were postponed. Nevertheless, production potential at existing electric steelworks is expected to continue to increase. A lack of flexibility of crude steel supply in periods of high activity could again bring about a further crop of new mini-mill projects.

Looking at the expected development of production potential over the next four years, there is a general confirmation of the trends outlined in last year's survey. Among the few new factors in this year's survey is that the mix of crude steel production potential across the processes should be better by 1979 than had been expected in previous surveys. There were some unscheduled closures of open-hearth steelworks during 1975 and plans for closures of others have now been accelerated. There are also signs of an acceleration in

FIGURE 10

Flat Products

Sections



the closure of Basic Bessemer steelworks or their conversion to the OBM process. At the same time capacities for LD, OBM and electric steels are expected to continue to expand rapidly. Since the date of the survey, further decisions have been taken to replace obsolete capacity, notably in Northern and Eastern France as well as in the Saar. However by the end of the nineteen seventies there is still expected to be substantial open-hearth capacity in North Rhine/Westphalia as well as a considerable amount of old or converted Basic Bessemer capacities in Eastern France.

According to the survey, the expected development of direct reduction capacity in the Community remains relatively limited although a further project in the United Kingdom has been decided on since the beginning of the year. A number of other projects are envisaged but there still appears to be some genuine uncertainty, at least as far as ordinary steels are concerned, as to whether the direct reduction — electric furnace route offers a really competitive alternative over the whole cycle to classical steelmaking methods. If direct reduction plants must be justified solely on grounds of shortage or quality of scrap, then as recommended in the General Objectives, joint ventures between a number of enterprises could provide a successful formula for direct reduction schemes.

According to the General Objectives, crude steel potential should reach a total of 228 m. tonnes by 1980 if all the announced projects—whether in progress, already decided or only planned—have been carried out by that date. Supply would then considerably exceed forecast demand.

The survey confirms that the poor trading conditions in 1975 did not prevent the enterprises, with a few exceptions, from carrying out the investment programmes which were in progress or already decided. However, the new decisions taken during the recession have been aimed more at replacement and modernization than at expansion. According to the latest estimates, the most likely outcome of a continuation of this trend would be an increase of crude steel potential up to 220 m. tonnes in 1980.

It cannot be excluded that some additional increase in production potential above this level could be achieved simply through the continuing process of technical and organizational improvement at existing works. At the same time, given the long gestation period of investments, only further new projects started in the very near future could lead to an increase in potential which would be considerably above 220 m. tonnes, and to that extent could result in a large amount of excess steelmaking capacity in 1980.

On the finished products side, the reductions in the estimates of production potential in 1980 do not indicate any major change in the recommendations on demand and supply equilibrium in the General Objectives. No real change can be expected in the imbalance of demand for and supply of wire rod. However the possible problem of overcapacity for heavy and light sections is less acute and the need for more investment in flat products, especially cold-rolled sheet capacity, seems to be fully confirmed.

VII—PRODUCTION POTENTIAL IN 1980 GENERAL OBJECTIVES ESTIMATES AND MOST LIKELY OUTCOMES

1. Comparison of results of the survey against the General Objectives estimates

The General Objectives for the period 1980-85 contained estimates of pig iron, crude steel and finished products production potential in 1980. These estimates were based principally on surveys carried out during 1974 and early 1975. Assuming the implementation of all projects then envisaged by the enterprises,

TABLE 31

Expected movement of Community crude steel production potential
by country 1975-1980

(million tonnes)

Country	For comparison 1975	1976 Survey estimates			General Objectives estimates 1980	Difference
		Based on projects approved and in progress 1979	Based on projects approved and in progress 1980 and after	Based on all planned projects 1980 and after		
		(1)	(2)	(3)	(4)	(4) less (1)
FR Germany	62.9	69.5	69.5	72.9	69.9	+ 0.4
Belgium	19.0	21.8	21.8	26.8	25.4	+ 3.6
France	33.7	35.9	36.0	37.5	40.4	+ 4.5
Italy	32.7	36.9	37.3	37.6	38.0	+ 1.1
Luxembourg	7.5	8.2	8.2	8.2	7.9	− 0.3
Netherlands	6.3	8.0	8.4	8.4	8.5	+ 0.5
United Kingdom	27.0	34.0	34.2	34.9	36.4	+ 2.4
Denmark	0.7	1.2	1.2	1.2	1.2	—
Ireland	0.1	0.3	0.3	0.3	0.4	+ 0.1
Community	**189.9**	**215.8**	**216.9**	**228.0**	**228.0**	**+ 12.2**

the production potentials foreseen were 157.2 m. tonnes for pig iron, 228 m. tonnes for crude steel and 183.1 m. tonnes for finished products.

Since the formulation of these estimates, the industry has been through a severe recession in steel demand. Judging by the replies to this year's survey the changed expectations which have been brought about by the recession have not had the effect of substantially reducing the real level of investment in the industry in the short term. On the other hand, it is clear that the decisions to go ahead with a number of expansion projects have been postponed. Capacities in 1980 will not therefore be as large as the enterprises had originally planned in 1974.

Table 31 compares the General Objectives estimates of crude steel production potential for 1980 with the estimates shown in the latest annual survey.

Comparing the original estimates for 1980 and the capacities which are already announced on the basis of approved projects for 1979, the major differences lie in the figures for Belgium[1], France[1], and the United Kingdom. This applies as much to the figures for pig iron as to those for crude steel.

In the United Kingdom, even if there was an immediate decision to embark on the next phases of expansion at coastal works in Wales and Northern England, it is now unlikely that crude steel production

TABLE 32

Expected movement of crude steel production potential by process in Belgium 1975-1980

(million tonnes)

Process	For comparison 1975	1976 survey estimates			General Objectives estimates	Difference
		Based on projects approved or in progress		Based on all projects		
		1979 (1)	1980 and after (2)	1980 and after (3)	1980 (4)	(4) less (1)
Basic Bessemer	2.2	—	—	—	0.4	+ 0.4
Open-hearth	0.3	0.1	0.1	0.1	0.1	—
Electric	0.8	1.3	1.3	1.3	1.5	+ 0.2
OBM/LWS	2.0	4.5	4.5	4.5	4.4	— 0.1
LD and others	13.7	15.9	15.9	20.0	19.0	+ 3.1
Total crude steel	**19.0**	**21.8**	**21.8**	**26.8**	**25.4**	**+ 3.6**

[1] Belgian and French enterprises did not take part officially in the preparation of capacity estimates for the General Objectives.

potential could reach a figure of much more than 34 m. tonnes in 1980. This is mainly because implementation of the British Steel Corporation's development strategy, although now considerably advanced, has been somewhat slower than expected.

In Belgium, the shortfall between expected 1979 production potential and the original 1980 estimate is due for the most part to the postponement of the decision to double the capacity of a major coastal works.

TABLE 33

Expected movement of crude steel production potential in France 1975-1980

(million tonnes)

Process	For comparison 1975	1976 survey estimates			General Objectives estimates	Difference
		Based on projects approved or in progress		Based on all projects		
		1979 (1)	1980 and after (2)	1980 and after (3)	1980 (4)	(4) less (1)
Basic Bessemer	4.8	3.2	3.2	0.4	—	− 3.2
Open-hearth	2.7	1.2	1.2	0.4	1.9	+ 0.7
Electric	4.3	5.5	5.6	6.7	6.3	+ 0.8
OBM/LWS	4.4	5.5	5.5	9.1	9.9	+ 4.4
LD and others	17.5	20.5	20.5	20.9	22.3	+ 1.8
Total crude steel	**33.7**	**35.9**	**36.0**	**37.6**	**40.4**	**+ 4.5**

In France the major reason for the difference is connected with changes in the plans for modernization and extensions of works in the Eastern and Northern regions. In some cases, the plans now involve some rationalization of capacity across more than one works and this has led to some reduction in the planned capacity estimate for 1980.

In other cases, the difference against the original estimates lies in the fact that the decisions to go ahead with the modernization plans had not been taken at the time of the latest survey.

A comparison of the results of the latest survey against the General Objectives estimates for continuous casting, coils and finished products is given in Table 34.

FIGURE 11

Actual production and production potential for the various categories of finished rolled products

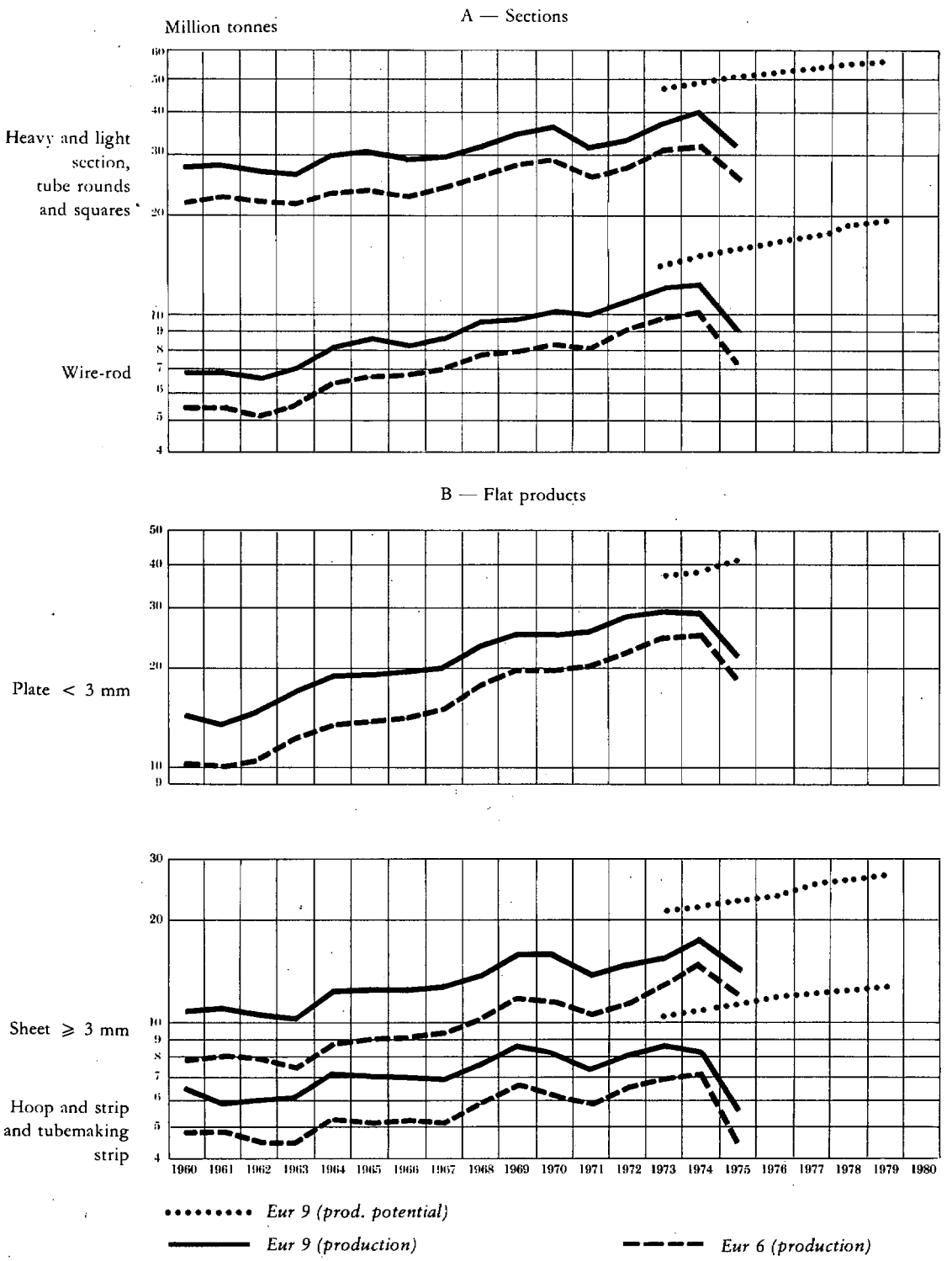


TABLE 34

Expected movement of Community production potential for continuous casting, coils and finished products 1975-1980

(million tonnes)

Products	For comparison 1975	Survey estimates			General Objectives estimates	Difference
		Based on projects in progress or approved		Based on all planned projects		
		1979 (1)	1980 and after (2)	1980 and after (3)	(4)	(4) less (1)
Continuous casting	33.4	56.1	56.6	66.2	65.7	+ 9.6
Coils	61.3	68.5	69.0	75.1	73.9	+ 5.4
Heavy sections	18.3	21.4	21.3	23.4	23.8	+ 2.4
Light sections	32.5	34.1	34.2	35.3	37.1	+ 3.0
Wire rod in coil	16.3	19.4	19.9	21.1	20.8	+ 1.4
Total sections	67.1	74.9	75.9	79.8	81.7	+ 6.8
Hot strip and hoop for tubemaking	11.0	12.5	12.6	12.7	12.2	− 0.3
Plate over 3 mm	22.9	27.1	27.3	28.7	26.9	− 0.2
Hot rolled sheet under 3 mm	1.2	1.3	1.3	1.4	1.9	+ 0.6
Cold rolled sheet under 3 mm	40.4	43.5	43.9	45.6	46.3	+ 2.8
Total flats	75.5	84.5	84.1	88.4	87.3	+ 2.8
Total finished products	142.6	159.4	156.0	168.2	169.0	+ 9.6
Coils finished products	13.3	14.5	14.6	16.4	14.1	− 0.3
Total all finished products	155.9	173.9	174.6	184.6	183.1	+ 9.2

Given the gap of nearly 10 million tonnes between the production potential for 1979, based on approved schemes, and the original estimate, it would seem unlikely that the General Objectives estimate of 65.7 m. tonnes for continuous casting production potential could be reached by 1980 without immediate commitment to a number of planned schemes. A similar conclusion must be reached on the figures for coils production potential.

As far as finished products are concerned, the situation obviously differs between individual products: the production potentials for wire rod, hot strip and hoop, and plate appear to be expanding at a rate which could bring them close to the General Objectives estimate in 1980. On the other hand, for heavy and light sections and hot and cold rolled sheet, even the planned production potentials for 1980 and after are now below the original General Objectives estimates for 1980.

2. Production potential in 1980—most likely outcomes

In order to take account of the considerable changes in expectations brought on by the recent steel recession, revised estimates of Community production potential for steel products have now been produced and are shown in the tables below. These estimates are based on the one hand on the production potentials which are now foreseen for 1979 given the implementation of approved projects, and on the other hand on an assessment, based on experience of past surveys and on further information provided by the enterprises, of the likely rate of approval of planned schemes which could have an effect on production potential before or during 1980.

These new estimates show that pig iron production potential in 1980 should amount to 152.7 m tonnes as against an original estimate of 157.7 m. tonnes and that crude steel production potential should reach a total of 220.4 m. tonnes in 1980 as against the original figure of 228 m. tonnes.

The revised estimates for finished product production potentials show that the rates of utilization of heavy and light section mills could be much better than expected—an average 78.0% if the upper limit of expected demand in 1980 is met, compared with 79.3% in 1974. However, no real change can be expected in the expected imbalance of demand for and supply of wire rod.

TABLE 35

Community production potential for pig iron and crude steel 1980 — Most likely outcomes

(million tonnes)

Country	Pig iron	Total crude steel	Basic Bessemer	Open-hearth	Electric	OBM/ LWS	LD and others
FR Germany	53.1	70.9	—	7.1	8.9	3.5	51.4
Belgium	17.7	22.4	—	0.1	1.3	4.5	16.5
France	28.2	36.6	1.0	0.4	6.2	9.3	19.7
Italy	17.7	37.4	—	0.4	18.1	2.6	16.3
Luxembourg	6.8	8.3	—	—	0.1	0.6	7.6
Netherlands	6.9	8.4	—	—	0.4	—	8.0
United Kingdom	22.3	34.9	—	1.2	11.3	—	22.4
Denmark	—*	1.2	—	0.5	0.7	—	—
Ireland	—	0.3	—	—	0.3	—	—
Community	**152.7**	**220.4**	**1.0**	**9.7**	**47.3**	**20.5**	**141.9**

As far as flat product potential is concerned, the new estimates confirm the possible need for more investments in this sphere. Even on the basis of the average demand trend, the rate of utilization of cold rolled sheet capacities could be as high as 88.6% in 1980 compared with 76.3% in 1974.

TABLE 36

Net increase[1] in production potential in 1980 resulting from planned projects if they were to be decided soon

(million tonnes)

Country	Pig iron	Total crude steel	Basic Bessemer	Open-hearth	Electric	LD & Kaldo	OBM
FR Germany	+ 1.3	+ 1.4	—	− 1.4	+ 1.3	+ 3.2	− 1.7
Belgium	+ 0.4	+ 0.6	—	—	—	+ 0.6	—
France	− 0.8	+ 0.7	− 2.2	− 0.8	+ 0.7	− 0.9	+ 3.9
Italy	+ 0.3	+ 0.4	—	− 0.1	+ 0.5	—	—
Luxembourg	+ 0.0	+ 0.1	− 0.9	—	—	+ 1.0	—
Netherlands	+ 0.4	+ 0.5	—	—	—	+ 0.5	—
United Kingdom	—	+ 0.9	—	− 1.4	+ 1.5	+ 0.8	—
Community	**+ 1.6**	**+ 4.6**	**− 3.1**	**− 3.7**	**+ 4.0**	**+ 5.2**	**+ 2.2**

1 Increase over the production potential in 1979; based on projects already decided.

TABLE 37

Revised estimates[1] of Community production potential for pig iron, crude steel and finished products in 1980, with expected rates of utilization based on demand forecast of the General Objectives

Products	Estimated production potential in 1980 million tonnes	Rates of utilization in 1980	
		Given upper limit of demand	Given average demand trend
Pig iron	152.7	84.5	77.6
Crude steel	220.4	83.0	77.1
Heavy sections	57.6	78.0	72.5
Wire rod in coils	20.2	69.3	64.3
Hot strip and hoop for tubemaking	12.6	87.3	79.3
Plate over 3 mm	28.1	81.4	76.1
Hot rolled sheet under 3 mm	1.5	—	—
Cold rolled sheet under 3 mm	44.8	88.6	81.0
Total finished products[2]	**164.8**	**80.8**	**74.8**

1 Based on the achievement by 1980 of the projects listed in the attached annex.
2 Excluding coils finished products.
N.B. The revised estimate of production potential for Continuous Casting in 1980 is 61.7 m. tonnes and that for coils 71.6 m. tonnes.

ANNEX

STATISTICAL TABLES

[1] Within the annex, investments are expressed in terms of units of account as described in the introduction to the report: from 1974 onwards the unit of account used is the unit of account EUR. Exceptionnally, Tables 2 and 11 give total capital expenditure in the coalmining and steel industries in terms of new European unit of account.

CONTENTS

HARD COAL COLLIERIES

Investments

TABLE 1

Capital expenditure by coalfields

million u.a.

Coalfield	Actual expenditure			Estimated expenditure		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Ruhr [1]	64.33	79.10	119.79	193.27	142.18	106.83
Aachen [2]	6.52	5.17	8.39	6.90	24.32	15.04
Lower Saxony	4.41	2.37	16.98	16.85	17.13	4.39
Saar	5.96	7.70	24.99	16.51	30.98	20.63
FR Germany	*81.22*	*94.34*	*170.15*	*233.53*	*214.61*	*146.89*
Campine	3.54	3.32	6.42	11.86	13.98	1.75
Southern Belgium	2.42	1.10	1.58	1.66	0.92	0.12
Belgium	*5.96*	*4.42*	*8.00*	*13.52*	*14.90*	*1.87*
Netherlands (Limburg)	*0.23*	—	—	—	—	—
Nord/Pas-de-Calais	5.82	4.44	5.66	5.37	7.35	8.48
Lorraine	9.18	9.10	20.44	13.78	32.90	33.58
Centre-Midi	1.19	2.68	4.05	1.83	3.71	6.22
France	*16.19*	*16.22*	*30.15*	*20.98*	*43.96*	*48.28*
Italy	—	—	—	—	—	—
Total EUR 6	**103.60**	**114.98**	**208.30**	**268.03**	**273.47**	**197.04**
Scotland	10.00	12.91	17.67	*	13.75	*
North East	20.04	27.72	43.05	*	41.08	*
Yorkshire	44.74	51.78	102.26	*	107.20	*
Midlands and Kent	39.91	67.13	106.90	*	103.50	*
Western	31.12	25.47	38.16	*	35.94	*
South Wales	13.98	17.70	30.15	*	38.46	*
Opencast	3.95	7.96	15.24	*	18.01	*
United Kingdom	*163.74*	*210.67*	*353.43*	*246.20*	*357.94*	*327.15*
Total EUR 9	**267.34**	**325.65**	**561.73**	**514.23**	**631.41**	**524.19**

1 Without the expenses of the Ruhr part of EBV.
2 Includes the expenses of the Ruhr part of EBV.
* Figures not available.

HARD COAL COLLIERIES

Investments

TABLE 2

Capital expenditure by coalfields

million European units of account[4]

Coalfield	Actual expenditure		Estimated expenditure[3] on Jan. 1, 1976 for	
	1974	1975	1976	1977
Ruhr [1]	68.56	113.60	134.84	101.31
Aachen [2]	4.48	7.95	23.06	14.26
Lower Saxony	2.05	16.10	16.24	4.16
Saar	6.67	23.70	29.38	19.56
FR Germany	*81.76*	*161.35*	*203.52*	*139.29*
Campine	3.09	6.07	13.23	1.65
Southern Belgium	1.02	1.49	0.87	0.11
Belgium	*4.11*	*7.56*	*14.10*	*1.76*
Netherlands (Limburg)	*0.0*	*0.0*	—	—
Nord/Pas-de-Calais	4.12	5.20	6.90	7.96
Lorraine	8.45	18.78	30.92	31.55
Centre-Midi	2.48	3.72	3.48	5.84
France	*15.05*	*27.70*	*41.30*	*45.35*
Italy	—	—	—	—
Total EUR 6	**100.92**	**196.61**	**258.92**	**186.40**
Scotland	12.94	17.04	12.96	*
North East	27.78	41.53	38.72	*
Yorkshire	51.90	98.65	101.05	*
Midlands and Kent	67.28	103.13	97.56	*
Western	25.53	36.81	33.87	*
South Wales	17.74	29.08	36.25	*
Opencast	7.97	14.70	16.97	*
United Kingdom	*211.14*	*340.94*	*337.38*	*308.39*
Total EUR 9	**312.06**	**537.55**	**596.30**	**494.79**

1 Without the expenses of the Ruhr part of EBV.
2 Includes the expenses of the Ruhr part of EBV.
3 The estimates relate only to expenditure on projects already in progress (cat. A) and approved (cat. B).
4 1974: 1 EUA = DM 3.03306, FB/FLux. 45.4186, FF 5.58265, Lit. 819.807, Fl. 3.15606, £ 0.535282, Dkr 7.13073;
1975: 1 EUA = DM 3.05382, FB/FLux. 46.0606, FF 5.21981, Lit. 797.769, Fl. 3.13120, £ 0.575973, Dkr 7.19697;
1976, 1977: 1 EUA = DM 3.05382, FB/FLux. 46.0606, FF 5.21981, Lit. 797.769, Fl. 3.13120, £ 0.575973, Dkr 7.19697.
* Figures not available.

TABLE 3

Extraction and extraction potential by coalfields

million tonnes national series

Actual extraction 1975	Coalfield	Extraction potential 1973	1974	1975	Expected extraction potential 1976	1977	1978	1979
76.5	Ruhr	90.1	81.4	79.0	77.1	77.0	75.9	76.3
5.7	Aachen	7.2	7.0	6.0	5.8	5.7	5.7	5.7
1.8	Lower Saxony	2.7	2.7	1.9	1.9	1.9	1.7	1.5
8.8	Saar	12.4	9.8	10.1	10.2	10.1	10.1	10.4
92.8	*FR Germany*	*112.4*	*100.9*	*97.0*	*95.0*	*94.7*	*93.4*	*93.9*
6.0	Campine	9.2	9.1	8.0	7.2	7.2	7.2	7.2
1.5	Southern Belgium	3.2	2.7	1.7	1.4	0.7	0.6	0.6
7.5	*Belgium*	*12.4*	*11.8*	*9.7*	*8.6*	*7.9*	*7.8*	*7.8*
—	*Netherlands* (Limburg)	*2.2*	*1.0*	—	—	—	—	—
7.7	Nord/Pas-de-Calais	11.5	9.2	7.8	7.2	6.5	5.9	5.2
10.0	Lorraine	11.1	10.0	10.6	11.2	11.2	11.2	11.2
4.7	Centre-Midi	5.3	4.4	4.8	4.6	4.7	4.3	4.1
22.4	*France*	*27.9*	*23.6*	*23.2*	*23.0*	*22.4*	*21.4*	*20.5*
—	*Italy*	—	—	—	—	—	—	—
122.7	**Total EUR 6**	**154.9**	**137.3**	**129.9**	**126.6**	**125.0**	**122.6**	**122.2**
9.9	Scotland	*	*	10.2	9.9	9.4	9.1	9.0
14.8	Northern	*	*	15.0	14.1	13.7	13.5	13.2
32.7	Yorkshire	*	*	34.0	32.6	33.4	33.2	34.0
37.7	Midlands and Kent	*	*	37.7	37.7	38.3	37.8	36.4
12.3	Western	*	*	13.1	12.2	12.1	12.1	12.0
8.6	South Wales	*	*	8.8	8.5	9.1	9.3	9.4
10.4	Opencast	*	*	10.5	11.0	13.0	13.0	13.0
126.2	*United Kingdom*	*	*130.0*	*129.3*	*126.0*	*129.0*	*128.0*	*127.0*
249.1	**Total EUR 9**	*	**267.3**	**259.2**	**252.6**	**254.0**	**250.6**	**249.2**

* Figures not available.

STEELWORKS-OWNED, MINE-OWNED AND INDEPENDENT COKING PLANTS

TABLE 4

Capital expenditure by coalfields

Investment

million u.a.

Area	Actual expenditure			Estimated expenditure		
				on Jan. 1, 1975 for	on Jan.1, 1976 for	
	1973	1974	1975	1975	1976	1977
Mine-owned coking plants						
Ruhr[1]	25.70	15.99	16.98	42.63	26.82	22.19
Aachen[2]	2.16	5.82	6.57	4.04	4.00	1.75
Saar	1.09	2.38	1.53	0.73	3.64	2.44
FR Germany	*28.95*	*24.19*	*25.08*	*47.40*	*34.46*	*26.38*
Nord/Pas-de-Calais	1.00	1.07	1.71	1.43	2.54	3.66
Lorraine	1.85	3.49	11.09	9.65	30.32	28.52
Centre-Midi	0.30	0.38	0.21	0.22	0.04	0.15
France	*3.15*	*4.94*	*13.01*	*11.30*	*32.90*	*32.33*
Total EUR 6	**32.10**	**29.13**	**38.09**	**58.70**	**67.36**	**58.71**
United Kingdom	*3.09*	*2.79*	*1.47*	*1.40*	*3.86*	—
Total EUR 9	**35.19**	**31.92**	**39.56**	**60.10**	**71.22**	**58.71**
Independent coking plants						
Belgium and *Netherlands*	*1.42*	*0.91*	*0.91*	*0.19*	*2.06*	*0.06*
Italy	*0.96*	*1.26*	*4.83*	*11.02*	*14.33*	*7.02*
Total EUR 6	**2.38**	**2.17**	**5.74**	**11.21**	**16.39**	**7.08**
United Kingdom	*1.23*	*2.14*	—	—	—	—
Total EUR 9	**3.61**	**4.31**	**5.74**	**11.21**	**16.39**	**7.08**
Steelworks-owned coking plants						
FR Germany	*7.47*	*14.24*	*5.83*	*6.49*	*4.99*	*4.54*
Belgium and *Netherlands*	*10.61*	*12.14*	*16.41*	*16.64*	*12.48*	*10.84*
France	*32.89*	*30.66*	*13.74*	*18.83*	*14.75*	*28.36*
Italy	*58.24*	*34.62*	*26.51*	*28.71*	*25.78*	*28.34*
Total EUR 6	**109.21**	**91.66**	**62.49**	**70.67**	**58.00**	**72.08**
Scotland	1.19	2.91	0.25	0.06	7.49	5.53
Wales	11.20	8.47	10.34	1.52	31.33	44.34
Northern England	28.00	71.89	98.53	108.69	118.90	63.69
England - other areas	0.44	0.69	0.68	1.06	1.53	0.92
United Kingdom	*40.83*	*83.96*	*109.80*	*111.33*	*159.25*	*114.48*
Total EUR 9	**150.04**	**175.62**	**172.29**	**182.00**	**217.25**	**186.56**
Grand total EUR 6	**143.69**	**122.96**	**106.32**	**140.58**	**141.75**	**137.87**
Grand total EUR 9	**188.84**	**211.85**	**217.59**	**253.31**	**304.86**	**252.35**

1 Without the expenses of the Ruhr part of EBV.
2 Includes the expenses of the Ruhr part of EBV.

COKE

Production

TABLE 5

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
	Mine-owned coking plants							
23.7	Ruhr	24.9	24.1	24.1	24.2	24.0	23.8	23.2
1.3	Aachen	2.1	2.1	1.3	1.2	1.3	1.3	1.3
1.4	Saar	1.5	1.5	1.5	1.5	1.5	1.5	1.5
26.4	*FR Germany*	*28.5*	*27.7*	*26.9*	*26.9*	*26.8*	*26.6*	*26.0*
—	*Belgium* and *Netherlands*	—	—	—	—	—	—	—
3.6	Nord/Pas-de-Calais	5.0	4.8	4.8	4.8	4.8	4.3	4.3
2.1	Lorraine	2.7	2.4	2.3	2.2	2.2	2.5	2.5
0.4	Centre-Midi	0.8	0.6	0.5	0.5	0.5	0.5	0.5
6.1	*France*	*8.5*	*7.8*	*7.6*	*7.5*	*7.5*	*7.3*	*7.3*
32.5	**Total EUR 6**	**37.0**	**35.5**	**34.5**	**34.4**	**34.3**	**33.9**	**33.3**
4.7	*United Kingdom*	*	*4.5*	*4.7*	*4.8*	*4.8*	*4.6*	*4.3*
37.2	**Total EUR 9**	*	**40.0**	**39.2**	**39.2**	**39.1**	**38.5**	**37.6**
	Independent coking plants							
1.0	*Belgium* and *Netherlands*	*1.2*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
2.0	*Italy*	*2.5*	*2.5*	*2.6*	*2.6*	*2.6*	*2.6*	*2.6*
3.0	**Total EUR 6**	**3.7**	**3.5**	**3.6**	**3.6**	**3.6**	**3.6**	**3.6**
0.8	*United Kingdom*	*1.0*	*1.0*	*0.9*	*0.5*	*0.5*	*0.5*	*0.5*
3.8	**Total EUR 9**	**4.7**	**4.5**	**4.5**	**4.1**	**4.1**	**4.1**	**4.1**
	Steelworks-owned coking plants							
8.3	*FR Germany*	*8.4*	*8.4*	*8.9*	*9.6*	*9.6*	*9.6*	*9.6*
7.4	*Belgium* and *Netherlands*	*9.9*	*10.2*	*10.3*	*10.2*	*10.3*	*10.3*	*10.2*
5.3	*France*	*4.8*	*5.9*	*6.9*	*6.7*	*6.7*	*6.7*	*6.6*
6.1	*Italy*	*6.9*	*6.9*	*8.4*	*9.0*	*9.0*	*9.0*	*9.0*
27.1	**Total EUR 6**	**30.0**	**31.4**	**34.5**	**35.5**	**35.6**	**35.6**	**35.4**
0.7	Scotland	*	1.1	1.1	1.2	1.5	1.5	1.9
2.8	Wales	*	3.3	3.5	3.9	4.0	4.0	3.8
3.9	Northern England	*	4.9	4.7	5.1	5.8	6.7	6.0
0.9	England - other regions	*	1.1	1.0	0.9	0.9	0.9	0.9
8.2	*Total United Kingdom*	*	*10.4*	*10.3*	*11.1*	*12.2*	*13.1*	*12.6*
35.4	**Total EUR 9**	*	**41.8**	**44.8**	**46.6**	**47.8**	**48.7**	**48.0**
62.6	**Grand total EUR 6**	**70.7**	**70.4**	**72.6**	**73.5**	**73.5**	**73.1**	**72.3**
76.4	**Grand total EUR 9**	*	**86.3**	**88.5**	**89.9**	**91.0**	**91.3**	**89.7**

* Figures not available.

HARD COAL BRIQUETTES

Production

TABLE 6

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
0.8	Ruhr	1.2	1.0	0.8	0.8	0.8	0.8	0.8
0.6	Aachen	1.1	1.2	1.1	1.1	0.9	0.9	0.9
0.2	Lower Saxony	0.7	0.7	0.7	0.7	0.7	0.7	0.7
1.6	*FR Germany*	*3.0*	*2.9*	*2.6*	*2.6*	*2.4*	*2.4*	*2.4*
0.3	*Belgium*	*1.0*	*0.8*	*0.6*	*0.4*	*0.3*	*0.3*	*0.3*
—	*Netherlands* (Limburg)	*0.6*	—	—	—	—	—	—
1.7	Nord/Pas-de-Calais	2.9	2.7	2.7	2.7	2.0	1.7	1.7
0.6	Centre-Midi	1.1	0.8	0.8	0.8	0.8	0.8	0.8
0.5	Independent plants	0.6	0.8	0.8	0.8	0.8	0.8	0.8
2.8	*France*	*4.6*	*4.3*	*4.3*	*4.3*	*3.6*	*3.3*	*3.3*
4.7	**Total EUR 6**	**9.2**	**8.0**	**7.5**	**7.3**	**6.3**	**6.0**	**6.0**
1.2	*United Kingdom*	*1.5*	*1.4*	*1.2*	*1.2*	*1.2*	*1.1*	*1.0*
5.9	**Total EUR 9**	**10.7**	**9.4**	**8.7**	**8.5**	**7.5**	**7.1**	**7.0**

BROWN COAL BRIQUETTES

Production

TABLE 7

Production and production potential for BKB (brown coal briquettes)

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
5.0	**Total EUR 6**	**6.7**	**6.2**	**5.8**	**4.8**	**4.6**	**4.3**	**4.1**

IRON ORE MINING

Investment

TABLE 8

Capital expenditure by country

million u.a.

Country	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan.1, 1976 for	
	1973	1974	1975	1975	1976	1977
FR Germany	*4.44*	*4.26*	*4.90*	*4.60*	*6.41*	*1.45*
Belgium	*0.04*	*0.02*	*0.13*	—	—	—
France	*18.12*	*19.73*	*25.14*	*21.76*	*22.67*	*13.85*
Italy	*0.64*	*0.03*	*0.03*	*0.45*	*0.06*	*0.06*
Luxembourg	*1.91*	*2.13*	*0.89*	*1.00*	*1.58*	*0.38*
Total EUR 6	**25.15**	**26.17**	**31.09**	**27.81**	**30.72**	**15.74**
United Kingdom	*1.22*	*0.50*	*0.67*	*0.45*	*0.49*	*0.10*
Total EUR 9	**26.37**	**26.67**	**31.76**	**28.26**	**31.21**	**15.84**

IRON ORE MINING

Extraction

TABLE 9

Extraction and extraction potential by country

million tonnes

Country	Extraction		Extraction potential				
	1974	1975	1975	1976	1977	1978	1979
FR Germany	*5.7*	*4.3*	*6.1*	*4.1*	*4.2*	*2.9*	*3.1*
Belgium	*0.1*	*0.1*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*
France	*54.7*	*50.1*	*49.7*	*51.0*	*54.0*	*53.7*	*52.9*
Italy	*0.8*	*0.7*	*0.8*	*0.7*	*0.7*	*0.7*	*0.7*
Luxembourg	*2.7*	*2.3*	*3.0*	*2.2*	*2.2*	*2.2*	*2.2*
Total EUR 6	**64.0**	**57.5**	**59.8**	**58.2**	**61.3**	**59.7**	**59.1**
United Kingdom	*3.6*	*4.5*	*6.1*	*5.7*	*5.9*	*6.2*	*6.2*
Total EUR 9	**67.6**	**62.0**	**65.9**	**63.9**	**67.2**	**65.9**	**65.3**

IRON AND STEEL INDUSTRY

Total Investment

TABLE 10

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	185.79	203.92	164.58	128.73	153.58	89.40
North Rhine/Westphalia	249.38	297.19	409.65	447.95	480.15	231.01
Southern Germany	17.91	30.03	36.12	25.58	18.41	6.15
Saar	48.84	50.47	87.27	80.22	71.93	23.85
FR Germany	*501.92*	*581.61*	*697.62*	*682.48*	*724.07*	*350.41*
Belgium	*169.91*	*358.20*	*325.15*	*320.20*	*266.28*	*120.78*
Eastern France	103.27	107.18	181.59	168.13	162.01	127.43
Northern France	259.48	153.51	140.17	167.96	113.96	101.35
France - other areas	577.68	369.64	229.88	277.85	172.06	66.61
France	*940.43*	*630.33*	*551.64*	*613.94*	*448.03*	*295.39*
Italy - coastal areas	711.41	379.63	325.72	361.14	387.12	332.77
Italy - other areas	150.03	201.90	250.13	208.78	171.79	72.23
Italy	*861.44*	*581.53*	*575.85*	*569.92*	*558.91*	*405.00*
Luxembourg	*61.40*	*46.72*	*47.52*	*52.35*	*65.82*	*24.83*
Netherlands	*49.17*	*64.88*	*100.63*	*79.64*	*70.14*	*35.14*
Total EUR 6	2 584.27	2 263.27	2 298.41	2 318.53	2 133.25	1 231.55
Scotland	61.91	61.61	110.88	75.19	110.76	128.46
Wales	145.41	120.05	201.41	171.95	265.87	120.65
Northern England	200.47	278.94	400.22	416.37	560.45	366.45
England - other areas	24.82	39.76	40.56	42.47	29.32	8.84
United Kingdom	*432.61*	*500.36*	*753.07*	*705.98*	*966.40*	*624.40*
Denmark	*11.54*	*38.60*	*45.21*	*25.76*	*10.46*	—
Ireland	—	—	*0.49*	—	—	—
Total EUR 9	3 028.42	2 802.23	3 097.18	3 050.27	3 110.11	1 855.95

TABLE 11

Capital expenditure by regions

million European units of account[1]

Region	Actual expenditure		Estimated expenditure (projects in progress. and approved) on Jan. 1. 1976 for	
	1974	1975	1976	1977
Northern Germany	176.76	156.08	145.65	84.78
North Rhine/Westphalia	257.61	388.50	455.37	219.08
Southern Germany	26.03	34.25	17.45	5.83
Saar	43.74	82.76	68.21	22.61
FR Germany	*504.14*	*661.59*	*686.68*	*332.30*
Belgium	*334.35*	*307.79*	*252.07*	*114.33*
Eastern France	99.55	166.87	152.26	119.76
Northern France	142.59	128.81	107.10	95.25
France - other areas	343.35	211.25	161.70	62.60
France	*585.49*	*506.93*	*421.06*	*277.61*
Italy - coastal areas	382.80	301.09	356.20	306.19
Italy - other areas	203.59	231.22	158.07	66.46
Italy	*586.39*	*532.31*	*514.27*	*372.65*
Luxembourg	*43.61*	*44.98*	*62.30*	*23.50*
Netherlands	*61.03*	*93.91*	*65.46*	*32.79*
Total EUR 6	**2 115.01**	**2 147.51**	**2 001.84**	**1 153.18**
Scotland	61.75	106.97	104.41	121.09
Wales	120.33	194.31	250.62	113.73
Northern England	279.60	386.12	528.32	345.44
England - other areas	39.85	39.13	27.63	8.33
United Kingdom	*501.53*	*726.53*	*910.98*	*588.59*
Denmark	*36.32*	*42.93*	*9.93*	—
Ireland	—	*0.51*	—	—
Total EUR 9	**2 652.86**	**2 917.48**	**2 922.75**	**1 741.77**

1 1974: 1 EUA = DM 3.03306, FB/FLux. 45.4186, FF 5.58265, Lit. 819.807, Fl. 3.15606, £ 0.535282, Dkr 7.13073;
1975: 1 EUA = DM 3.05382, FB/FLux. 46.0606, FF 5.21981, Lit. 797.769, Fl. 3.13120, £ 0.575973, Dkr 7.19697;
1976, 1977: 1 EUA = DM 3.05382, FB/FLux. 46.0606, FF 5.21981, Lit. 797.769, Fl. 3.13120, £ 0.575973, Dkr 7.19697.

BLAST FURNACES

Investment

TABLE 12

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	14.14	8.24	9.27	9.27	33.68	32.91
North Rhine/Westphalia	81.17	47.08	81.84	82.02	109.36	59.41
Southern Germany	0.55	1.82	0.32	0.50	1.75	—
Saar	5.79	18.04	6.58	5.45	10.28	1.33
FR Germany	*101.65*	*75.18*	*98.01*	*97.24*	*155.07*	*93.65*
Belgium	*17.22*	*38.09*	*33.17*	*29.18*	*12.50*	*5.79*
Eastern France	11.05	28.51	56.15	43.86	43.87	35.92
Northern France	40.82	9.58	3.97	5.89	4.64	0.88
France - other areas	42.32	36.62	16.37	16.80	5.92	1.91
France	*94.19*	*74.71*	*76.49*	*66.55*	*54.43*	*38.71*
Italy - coastal areas	90.30	48.22	47.80	33.15	87.36	50.09
Italy - other areas	0.29	1.38	1.20	1.23	0.29	0.24
Italy	*90.59*	*49.60*	*49.00*	*34.38*	*87.65*	*50.33*
Luxembourg	*1.37*	*1.29*	*5.00*	*2.20*	*4.16*	*1.31*
Netherlands	*1.84*	*5.08*	*11.35*	*10.11*	*8.61*	*4.29*
Total EUR 6	**306.86**	**243.95**	**273.02**	**239.66**	**322.42**	**194.08**
Scotland	3.53	4.07	7.96	2.01	4.12	5.86
Wales	27.32	16.28	21.24	3.18	48.81	11.25
Northern England	4.58	8.74	65.39	31.41	57.76	15.25
England - other areas	4.77	5.71	1.59	1.43	3.41	0.13
United Kingdom	*40.20*	*34.80*	*96.18*	*38.03*	*114.10*	*32.49*
Denmark	—	—	—	—	—	—
Ireland	—	—	—	—	—	—
Total EUR 9	**347.06**	**278.75**	**369.20**	**277.69**	**436.52**	**226.57**

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

Investment

TABLE 13

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	34.67	31.11	14.82	15.81	42.97	43.03
North Rhine/Westphalia	96.21	72.94	95.53	99.62	128.07	88.52
Southern Germany	0.88	2.09	1.01	1.14	2.20	0.05
Saar	6.21	19.01	8.01	7.43	10.81	2.11
FR Germany	*137.97*	*125.15*	*119.37*	*124.00*	*184.05*	*133.71*
Belgium	*30.76*	*78.79*	*84.56*	*79.95*	*71.45*	*19.00*
Eastern France	26.26	33.08	76.44	66.18	68.31	67.99
Northern France	51.13	16.77	8.49	9.63	8.18	1.30
France - other areas	123.96	91.85	39.02	46.81	22.83	9.19
France	*201.35*	*141.70*	*123.95*	*122.62*	*99.32*	*78.48*
Italy - coastal areas	229.17	113.16	92.15	90.22	139.07	95.68
Italy - other areas	0.29	1.38	1.20	1.23	0.29	0.24
Italy	*229.46*	*114.54*	*93.35*	*91.45*	*139.36*	*95.92*
Luxembourg	*23.26*	*9.36*	*7.13*	*4.08*	*7.63*	*1.81*
Netherlands	*9.41*	*8.71*	*21.75*	*17.12*	*18.34*	*9.04*
Total EUR 6	632.21	478.25	450.11	439.22	520.15	337.96
Scotland	5.51	11.36	38.88	33.63	31.88	61.06
Wales	75.69	53.62	58.89	45.01	106.78	62.69
Northern England	75.78	147.05	185.92	173.33	196.34	82.16
England - other areas	5.67	6.92	2.55	3.45	6.57	3.11
United Kingdom	*162.65*	*218.95*	*286.24*	*255.42*	*341.57*	*209.02*
Denmark	—	—	—	—	—	—
Ireland	—	—	—	—	—	—
Total EUR 9	794.86	697.20	736.35	694.64	861.72	546.98

OPEN HEARTH STEELWORKS

Investment

TABLE 14

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	0.15	0.56	1.62	0.12	1.47	0.37
North Rhine/Westphalia	1.63	3.09	6.44	8.61	21.70	11.59
Southern Germany	0.24	0.20	0.42	0.82	0.12	—
Saar	—	0.01	0.02	0.02	0.04	—
FR Germany	*2.02*	*3.86*	*8.50*	*9.57*	*23.33*	*11.96*
Belgium	*0.12*	*0.07*	—	—	—	—
Eastern France	0.61	0.39	0.69	0.43	0.21	0.07
Northern France	0.46	0.16	0.29	0.27	0.43	0.83
France - other areas	0.10	0.64	0.95	0.59	0.09	—
France	*1.17*	*1.19*	*1.93*	*1.29*	*0.73*	*0.90*
Italy - coastal areas	—	—	—	—	—	—
Italy - other areas	0.13	0.82	2.23	1.53	0.39	—
Italy	*0.13*	*0.82*	*2.23*	*1.53*	*0.39*	—
Luxembourg	—	—	—	—	—	—
Netherlands	*0.03*	—	—	—	—	—
Total EUR 6	**3.47**	**5.94**	**12.66**	**12.39**	**24.45**	**12.86**
Scotland	0.28	0.09	0.10	0.17	0.02	—
Wales	0.72	0.63	0.48	0.93	0.26	—
Northern England	0.29	—	0.08	0.03	—	—
England - other areas	0.24	0.04	0.07	0.02	0.72	3.18
United Kingdom	*1.53*	—	*0.73*	*1.15*	*1.00*	*3.18*
Denmark	—	*0.17*	*0.04*	—	*0.23*	—
Ireland	—	—	—	—	—	—
Total EUR 9	**5.0**	**6.87**	**13.43**	**13.54**	**25.68**	**16.04**

ELECTRIC FURNACE STEELWORKS

Investment

TABLE 15

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	17.18	24.50	12.92	5.68	6.94	1.40
North Rhine/Westphalia	8.41	3.24	10.71	16.53	13.28	12.12
Southern Germany	0.51	3.95	8.22	1.25	2.27	—
Saar	—	—	0.90	0.49	4.09	1.48
FR Germany	*26.10*	*31.69*	*32.75*	*23.95*	*26.58*	*15.00*
Belgium	*8.10*	*4.86*	*7.26*	*8.78*	*10.67*	*4.06*
Eastern France	5.61	3.65	3.89	3.36	3.39	1.63
Northern France	3.31	8.43	12.71	10.62	3.26	9.06
France - other areas	26.63	28.38	16.47	17.96	16.35	5.86
France	*35.55*	*40.46*	*33.07*	*31.94*	*23.00*	*16.55*
Italy - coastal areas	4.56	8.87	10.77	17.49	14.67	7.53
Italy - other areas	49.19	69.71	91.54	63.72	46.78	21.89
Italy	*53.75*	*78.58*	*102.31*	*81.21*	*61.45*	*29.42*
Luxembourg	—	—	—	*0.01*	*0.01*	—
Netherlands	*0.11*	—	—	*0.68*	—	—
Total EUR 6	**123.61**	**155.59**	**175.39**	**146.57**	**121.71**	**65.03**
Scotland	10.65	14.63	4.97	6.58	2.17	0.29
Wales	1.25	1.49	17.89	21.46	34.08	11.93
Northern England	20.71	20.37	24.12	26.17	32.66	22.33
England - other areas	7.99	12.73	9.85	10.21	4.08	—
United Kingdom	*40.60*	*49.22*	*56.83*	*64.42*	*72.99*	*34.55*
Denmark	*5.28*	*22.70*	*27.07*	*11.43*	*4.49*	—
Ireland	—	—	*0.14*	—	—	—
Total EUR 9	**169.49**	**227.51**	**259.43**	**222.42**	**199.19**	**99.58**

LD, KALDO AND OTHER STEELWORKS

Investment

TABLE 16

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	6.98	5.94	9.33	7.55	23.20	12.84
North Rhine/Westphalia	23.05	36.91	51.21	47.03	34.61	21.48
Southern Germany	—	—	—	—	—	—
Saar	2.39	7.59	2.44	3.00	1.02	—
FR Germany	*32.36*	*50.44*	*62.98*	*57.58*	*58.83*	*34.32*
Belgium	*14.15*	*29.28*	*23.63*	*18.59*	*19.84*	*23.54*
Eastern France	3.85	3.19	4.00	3.65	4.14	4.53
Northern France	18.39	5.58	5.04	5.70	4.27	2.68
France - other areas	43.07	44.47	25.02	25.28	24.24	7.41
France	*65.31*	*53.24*	*34.06*	*34.63*	*32.65*	*14.62*
Italy - coastal areas	72.25	32.09	13.25	18.15	11.21	15.04
Italy - other areas	0.13	1.16	1.16	0.15	0.14	0.16
Italy	*72.38*	*33.25*	*14.41*	*18.30*	*11.35*	*15.20*
Luxembourg	*9.85*	*3.72*	*17.13*	*18.92*	*31.72*	*15.29*
Netherlands	*15.37*	*24.60*	*40.07*	*30.96*	*18.98*	*9.42*
Total EUR 6	**209.42**	**194.53**	**192.28**	**178.98**	**173.37**	**112.39**
Scotland	5.64	5.15	22.09	11.55	10.88	11.08
Wales	18.37	12.81	10.41	9.21	2.67	1.11
Northern England	8.47	1.48	9.77	15.75	21.87	32.60
England - other areas	0.34	0.60	0.54	0.22	0.12	0.07
United Kingdom	*32.82*	*20.04*	*42.81*	*36.73*	*35.54*	*44.86*
Denmark	—	—	—	—	—	—
Ireland	—	—	—	—	—	—
Total EUR 9	**242.24**	**214.57**	**235.09**	**215.71**	**208.91**	**157.25**

BOTTOM BLOWN STEELS (OBM, LWS, ETC.)

Investment

TABLE 17

Capital expenditure

million u.a.

Total EUR 6	**22.16**	**37.37**	**45.10**	**46.61**	**62.18**	**54.31**
Total EUR 9	**22.16**	**37.37**	**45.10**	**46.61**	**62.18**	**54.31**

STEELWORKS TOTAL

Investment

TABLE 18

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	24.31	31.00	23.87	13.35	31.61	14.61
North Rhine/Westphalia	33.09	43.24	68.36	72.17	70.06	45.66
Southern Germany	0.90	8.87	18.06	7.20	6.67	3.94
Saar	5.86	11.18	20.62	22.92	15.98	12.47
FR Germany	*64.16*	*94.29*	*130.91*	*115.64*	*124.32*	*76.68*
Belgium	*36.49*	*61.99*	*42.14*	*38.68*	*52.14*	*27.64*
Eastern France	13.63	10.45	14.75	16.07	17.04	20.54
Northern France	22.30	14.30	18.39	16.87	8.16	12.57
France - other areas	70.00	73.55	43.39	44.39	40.68	13.27
France	*105.93*	*98.30*	*76.53*	*77.33*	*65.88*	*46.38*
Italy - coastal areas	76.81	40.96	24.27	37.91	41.21	46.77
Italy - other areas	49.45	71.83	94.93	65.40	47.43	22.08
Italy	*126.26*	*112.79*	*119.20*	*103.31*	*88.64*	*68.85*
Luxembourg	*12.93*	*4.28*	*17.87*	*19.58*	*32.03*	*15.64*
Netherlands	*15.51*	*24.60*	*40.07*	*31.64*	*18.98*	*9.42*
Total EUR 6	**361.28**	**396.25**	**426.72**	**386.18**	**381.99**	**244.61**
Scotland	16.57	19.87	27.16	18.30	13.07	11.37
Wales	20.34	14.93	28.78	31.60	37.01	13.04
Northern England	29.47	21.85	33.97	41.95	54.53	54.93
England - other areas	8.57	13.37	10.46	10.45	4.92	3.25
United Kingdom	*74.95*	*70.02*	*100.37*	*102.30*	*109.53*	*82.59*
Denmark	*5.28*	*22.87*	*27.11*	*11.43*	*4.72*	—
Ireland	—	—	*0.14*	—	—	—
Total EUR 9	**441.51**	**489.14**	**554.34**	**499.91**	**496.24**	**327.20**

CONTINUOUS CASTING PLANTS

Investment

TABLE 19

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	13.06	15.19	5.78	0.34	1.88	5.34
North Rhine/Westphalia	10.04	54.09	58.48	42.37	32.04	21.84
Southern Germany	1.33	0.19	0.37	0.20	1.64	0.52
Saar	0.08	3.93	18.19	19.02	0.67	—
FR Germany	*24.51*	*73.40*	*82.82*	*61.93*	*36.23*	*27.70*
Belgium	*11.04*	*24.18*	*37.70*	*30.63*	*31.93*	*20.47*
Eastern France	0.33	6.91	2.51	1.05	1.05	0.12
Northern France	16.02	10.76	13.09	20.65	20.18	13.50
France - other areas	1.21	25.39	21.50	27.22	15.00	2.81
France	*17.56*	*43.06*	*37.10*	*48.92*	*36.23*	*16.43*
Italy - coastal areas	51.57	35.85	14.12	16.67	20.66	29.70
Italy - other areas	12.68	21.08	28.89	20.05	18.86	4.68
Italy	*64.25*	*56.93*	*43.01*	*36.72*	*39.52*	*34.38*
Luxembourg	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—
Total EUR 6	**117.36**	**197.57**	**200.63**	**178.20**	**143.91**	**98.98**
Scotland	17.01	6.76	3.20	4.09	0.18	0.16
Wales	0.05	1.35	8.67	10.91	12.27	0.47
Northern England	5.99	4.72	9.87	19.89	28.48	29.79
England - other areas	1.52	6.39	3.62	5.16	1.70	—
United Kingdom	*24.57*	*19.22*	*25.36*	*40.05*	*42.63*	*30.42*
Denmark	*3.96*	*12.58*	*15.18*	*5.94*	*2.64*	—
Ireland	—	—	—	—	—	—
Total EUR 9	**145.89**	**229.37**	**241.17**	**224.19**	**189.18**	**129.40**

BLOOMING AND SLABBING MILLS

Investment

TABLE 20

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	5.36	7.09	5.43	2.79	0.69	0.08
North Rhine/Westphalia	8.51	16.06	20.88	12.93	15.89	5.06
Southern Germany	0.73	0.45	0.79	0.76	0.33	—
Saar	0.03	0.04	3.97	4.05	4.58	0.70
FR Germany	*14.63*	*23.64*	*31.07*	*20.53*	*21.49*	*5.84*
Belgium	*6.62*	*7.46*	*8.46*	*12.89*	*6.62*	*2.96*
Eastern France	8.36	9.80	13.34	10.44	18.38	10.48
Northern France	0.04	0.31	0.37	—	1.43	0.29
France - other areas	34.54	16.15	12.11	10.51	1.99	0.46
France	*42.94*	*26.26*	*25.82*	*20.95*	*21.80*	*11.23*
Italy - coastal areas	26.25	9.52	5.26	4.58	6.03	8.42
Italy - other areas	1.99	2.60	11.38	6.76	4.59	2.48
Italy	*28.24*	*12.12*	*16.64*	*11.34*	*10.62*	*10.90*
Luxembourg	*7.36*	*11.00*	*7.81*	*7.74*	*8.81*	*4.26*
Netherlands	*5.08*	*8.07*	*4.66*	*5.89*	*3.28*	*1.60*
Total EUR 6	**104.87**	**88.55**	**94.46**	**79.34**	**72.62**	**36.79**
Scotland	4.67	0.66	1.39	0.58	0.70	0.10
Wales	8.59	4.23	5.33	3.61	7.38	2.05
Northern England	11.72	6.16	30.20	35.68	87.87	71.27
England - other areas	0.14	0.21	1.10	0.92	0.49	0.10
United Kingdom	*25.12*	*11.26*	*38.02*	*40.79*	*96.44*	*73.52*
Denmark	—	—	—	—	—	—
Ireland	—	—	*0.01*	—	—	—
Total EUR 9	**129.99**	**99.81**	**132.49**	**120.13**	**169.06**	**110.31**

SECTION MILLS

Investment

TABLE 21

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	20.38	28.99	29.82	30.53	11.99	0.47
North Rhine/Westphalia	11.05	6.74	14.52	33.93	33.07	25.47
Southern Germany	7.38	2.99	1.04	2.19	0.28	—
Saar	19.41	3.13	3.37	4.58	1.42	1.21
FR Germany	*58.22*	*41.85*	*48.75*	*71.23*	*46.76*	*27.15*
Belgium	*13.91*	*41.63*	*33.76*	*41.59*	*32.41*	*12.75*
Eastern France	18.11	12.35	30.78	24.55	23.14	8.64
Northern France	6.53	4.77	2.27	14.44	18.33	19.85
France - other areas	69.14	37.42	11.33	12.82	7.65	6.19
France	*93.78*	*54.54*	*44.38*	*51.81*	*49.12*	*34.68*
Italy - coastal areas	9.38	11.60	27.51	46.03	43.68	43.28
Italy - other areas	24.99	29.17	34.01	23.03	26.05	13.18
Italy	*34.37*	*40.77*	*61.52*	*69.06*	*69.73*	*56.46*
Luxembourg	*7.02*	*12.08*	*4.94*	*7.65*	*6.94*	*1.80*
Netherlands	*0.37*	*0.28*	*0.20*	*1.53*	*0.68*	*0.41*
Total EUR 6	**207.67**	**191.15**	**193.55**	**242.87**	**205.64**	**133.25**
Scotland	0.22	1.07	0.98	0.94	0.92	0.07
Wales	3.99	14.48	25.86	26.37	15.90	5.91
Northern England	39.85	54.00	55.27	43.32	33.29	23.82
England - other areas	3.59	6.79	15.80	14.81	9.62	1.26
United Kingdom	*47.65*	*76.34*	*97.91*	*85.44*	*59.73*	*31.06*
Denmark	—	*1.14*	*1.55*	—	*1.12*	—
Ireland	—	—	*0.05*	—	—	—
Total EUR 9	**255.32**	**268.63**	**293.06**	**328.31**	**266.49**	**164.31**

FLAT PRODUCT MILLS

Investment

TABLE 22

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	50.91	46.91	55.87	51.84	36.67	22.96
North Rhine/Westphalia	39.61	55.89	71.49	72.95	74.65	27.94
Southern Germany	2.91	10.74	9.24	7.91	1.24	0.18
Saar	2.86	3.32	16.75	5.21	24.03	—
FR Germany	*96.29*	*116.86*	*153.35*	*137.91*	*136.59*	*51.08*
Belgium	*36.40*	*86.30*	*75.46*	*88.17*	*38.93*	*27.07*
Eastern France	7.08	10.06	10.40	15.34	8.17	5.14
Northern France	94.49	58.94	59.21	67.46	32.24	46.04
France - other areas	82.99	46.41	33.35	48.62	37.86	18.54
France	*184.56*	*115.41*	*102.96*	*131.42*	*78.27*	*69.72*
Italy - coastal areas	100.32	56.95	48.83	37.57	38.53	50.30
Italy - other areas	12.06	31.24	30.91	49.37	30.72	9.20
Italy	*112.38*	*88.19*	*79.74*	*86.94*	*69.25*	*59.50*
Luxembourg	*0.72*	*0.75*	*0.35*	*0.71*	*1.97*	*0.41*
Netherlands	*1.59*	*3.30*	*4.08*	*2.58*	*2.94*	*1.55*
Total EUR 6	**431.94**	**410.81**	**415.94**	**447.73**	**327.95**	**209.33**
Scotland	10.91	10.47	8.04	9.75	9.19	7.63
Wales	25.41	21.94	48.61	5.82	50.00	15.87
Northern England	5.70	13.04	25.85	34.44	53.62	36.86
England - other areas	1.83	1.44	1.45	0.77	0.82	0.59
United Kingdom	*43.85*	*46.89*	*83.95*	*50.78*	*113.63*	*60.95*
Denmark	*1.32*	*0.24*	*0.63*	*5.28*	*1.12*	—
Ireland	—	—	—	—	—	—
Total EUR 9	**477.11**	**457.94**	**500.52**	**503.79**	**442.70**	**270.28**

HOT WIDE STRIP MILLS

Investment
(already included in capital expenditure for flat product mills: Table 22)

TABLE 23

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	43.50	42.81	44.38	41.87	13.16	5.62
North Rhine/Westphalia	10.96	22.12	27.75	25.30	15.64	7.52
Southern Germany	—	—	—	—	—	—
Saar	—	—	—	—	—	—
FR Germany	*54.46*	*64.93*	*72.13*	*67.17*	*28.80*	*13.14*
Belgium	*12.60*	*50.42*	*52.61*	*58.06*	*21.42*	*19.92*
Eastern France	0.71	1.63	1.86	2.57	1.34	1.13
Northern France	17.36	4.40	0.69	1.96	0.71	1.26
France - other areas	68.80	25.05	6.70	23.05	13.49	4.32
France	*86.87*	*31.08*	*9.25*	*27.58*	*15.54*	*6.71*
Italy - coastal areas	51.35	22.84	6.79	12.03	4.64	4.24
Italy - other areas	1.04	2.76	6.06	17.03	6.91	0.82
Italy	*52.39*	*25.60*	*12.85*	*29.06*	*11.55*	*5.06*
Luxembourg	—	*0.09*	*0.07*	*0.14*	*0.09*	—
Netherlands	*0.80*	*1.81*	*2.35*	*1.42*	*0.97*	*0.55*
Total EUR 6	**207.12**	**173.93**	**149.26**	**183.43**	**78.37**	**45.38**
Scotland	6.40	6.40	2.53	3.52	2.05	1.23
Wales	4.65	9.10	6.23	1.75	6.15	3.79
Northern England	1.10	4.94	4.82	6.21	5.40	3.54
England - other areas	—	—	—	—	—	—
United Kingdom	*12.15*	*20.44*	*13.58*	*11.48*	*13.60*	*8.56*
Denmark	—	—	—	—	—	—
Ireland	—	—	—	—	—	—
Total EUR 9	**219.27**	**194.37**	**162.84**	**194.91**	**91.97**	**53.94**

ROLLING MILLS
TOTAL [1]

Investment

TABLE 24

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	92.14	101.52	102.35	87.08	51.71	28.91
North Rhine/Westphalia	84.60	141.83	189.40	192.88	189.37	83.86
Southern Germany	12.85	14.94	12.56	12.10	4.47	0.70
Saar	25.00	11.70	45.12	35.89	32.97	4.08
FR Germany	*214.59*	*269.99*	*349.43*	*327.95*	*278.52*	*117.55*
Belgium	*78.98*	*174.26*	*163.05*	*181.47*	*118.72*	*70.85*
Eastern France	44.01	44.29	59.84	60.52	52.66	25.88
Northern France	142.38	94.37	91.01	119.85	84.70	84.00
France - other areas	229.35	160.59	98.12	120.61	82.24	30.70
France	*415.74*	*299.25*	*248.97*	*300.98*	*219.60*	*140.58*
Italy - coastal areas	224.62	134.23	106.74	118.31	119.02	141.38
Italy - other areas	57.94	91.16	114.71	109.12	89.48	35.90
Italy	*282.56*	*225.39*	*221.45*	*227.43*	*208.50*	*177.28*
Luxembourg	*15.45*	*24.68*	*13.15*	*16.16*	*18.01*	*6.57*
Netherlands	*7.06*	*11.81*	*9.50*	*10.27*	*7.08*	*3.63*
Total EUR 6	**1 014.38**	**1 005.38**	**1 005.55**	**1 064.26**	**850.43**	**516.46**
Scotland	32.81	18.96	13.61	15.53	10.99	7.96
Wales	41.50	46.16	109.04	90.20	113.41	38.41
Northern England	64.45	78.53	122.88	135.97	214.84	168.41
England - other areas	7.75	15.80	23.36	22.90	12.97	1.97
United Kingdom	*146.51*	*159.45*	*268.89*	*264.60*	*352.21*	*216.75*
Denmark	*5.28*	*13.96*	*17.36*	*11.22*	*4.88*	—
Ireland	—	—	*0.30*	—	—	—
Total EUR 9	**1 166.17**	**1 178.79**	**1 292.10**	**1 340.08**	**1 207.52**	**733.21**

1 Including ancillary and auxiliary plants.

STEELWORKS-OWNED POWER-GENERATING PLANTS AND DISTRIBUTION NETWORKS

Investment

TABLE 25

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	17.00	19.15	7.98	4.76	8.44	1.45
North Rhine/Westphalia	12.17	10.29	16.10	18.46	21.07	5.17
Southern Germany	1.37	2.34	1.52	1.60	1.36	0.16
Saar	1.26	0.76	0.45	0.32	0.45	—
FR Germany	*31.80*	*32.54*	*26.05*	*25.14*	*31.32*	*6.78*
Belgium	*2.74*	*10.92*	*10.93*	*10.10*	*12.80*	*0.89*
Eastern France	5.26	4.30	11.40	9.95	9.72	4.44
Northern France	0.33	3.73	5.12	2.65	1.23	0.05
France - other areas	48.65	11.25	29.87	22.91	6.06	1.71
France	*54.24*	*19.28*	*46.39*	*35.51*	*17.01*	*6.20*
Italy - coastal areas	34.64	13.44	11.01	25.59	8.24	9.05
Italy - other areas	18.59	16.52	10.95	8.46	10.73	5.36
Italy	*53.23*	*29.96*	*21.96*	*34.05*	*18.97*	*14.41*
Luxembourg	*0.49*	*0.40*	*0.33*	*1.36*	*0.54*	*0.07*
Netherlands	*3.06*	*4.97*	*8.55*	*3.59*	*4.98*	*2.20*
Total EUR 6	**145.56**	**98.07**	**114.21**	**109.75**	**85.62**	**30.55**
Scotland	0.66	0.02	0.10	0.39	0.03	0.02
Wales	3.45	0.07	0.03	0.17	0.05	0.18
Northern England	4.21	5.25	11.35	20.85	14.93	11.99
England - other areas	0.98	1.48	0.69	0.83	2.08	0.08
United Kingdom	*9.30*	*6.82*	*12.17*	*22.24*	*17.09*	*12.27*
Denmark	—	—	—	—	—	—
Ireland	—	—	—	—	—	—
Total EUR 9	**154.86**	**104.89**	**126.38**	**131.99**	**102.71**	**42.82**

MISCELLANEOUS (IRON- AND STEELWORKS)

Investment

TABLE 26

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	17.67	21.14	15.56	7.73	18.85	1.40
North Rhine/Westphalia	23.31	28.89	40.26	64.82	71.58	7.80
Southern Germany	1.91	1.79	2.97	3.54	3.71	1.30
Saar	10.51	7.82	13.07	13.66	11.72	5.19
FR Germany	*53.40*	*59.64*	*71.86*	*89.75*	*105.86*	*15.69*
Belgium	*20.94*	*32.24*	*24.47*	*10.00*	*11.17*	*2.40*
Eastern France	14.11	15.06	19.16	15.41	14.28	8.58
Northern France	43.34	24.34	17.16	18.96	11.69	3.43
France - other areas	105.72	32.40	19.48	43.13	20.25	11.74
France	*163.17*	*71.80*	*55.80*	*77.50*	*46.22*	*23.75*
Italy - coastal areas	146.17	77.84	91.55	89.11	79.58	39.89
Italy - other areas	23.76	21.01	28.34	24.57	23.86	8.65
Italy	*169.93*	*98.85*	*119.89*	*113.68*	*103.44*	*48.54*
Luxembourg	*9.27*	*8.00*	*9.04*	*11.17*	*7.61*	*0.74*
Netherlands	*14.13*	*14.79*	*20.76*	*17.02*	*20.76*	*10.85*
Total EUR 6	**430.84**	**285.32**	**301.82**	**319.12**	**295.06**	**101.97**
Scotland	6.36	11.40	31.13	7.34	54.79	48.05
Wales	4.43	5.27	4.67	4.97	8.62	6.33
Northern England	26.56	26.26	46.10	44.27	79.81	48.96
England - other areas	1.85	2.19	3.50	4.84	2.78	0.43
United Kingdom	*39.20*	*45.12*	*85.40*	*61.42*	*146.00*	*103.77*
Denmark	*0.98*	*1.77*	*0.74*	*3.11*	*0.86*	—
Ireland	—	—	*0.05*	—	—	—
Total EUR 9	**471.02**	**332.21**	**388.01**	**383.65**	**441.92**	**205.74**

GENERAL SERVICES (IRON AND STEEL-WORKS) TOTAL

Investment

TABLE 27

Capital expenditure by regions

million u.a.

Region	Actual expenditure			Estimated expenditure (projects in progress, and approved)		
				on Jan. 1, 1975 for	on Jan. 1, 1976 for	
	1973	1974	1975	1975	1976	1977
Northern Germany	34.67	40.29	23.54	12.49	27.29	2.85
North Rhine/Westphalia	35.48	39.18	56.36	83.28	92.65	12.97
Southern Germany	3.28	4.13	4.49	5.14	5.07	1.46
Saar	11.77	8.58	13.52	13.98	12.17	5.19
FR Germany	*85.20*	*92.18*	*97.91*	*114.89*	*137.18*	*22.47*
Belgium	*23.68*	*43.16*	*35.40*	*20.10*	*23.97*	*3.29*
Eastern France	19.37	19.36	30.56	25.36	24.00	13.02
Northern France	43.67	28.07	22.28	21.61	12.92	3.48
France - other areas	154.37	43.65	49.35	66.04	26.31	13.45
France	*217.41*	*91.08*	*102.19*	*113.01*	*63.23*	*29.95*
Italy - coastal areas	180.81	91.28	102.56	114.70	87.82	48.94
Italy - other areas	42.35	37.53	39.29	33.03	34.59	14.01
Italy	*223.16*	*128.81*	*141.85*	*147.73*	*122.41*	*62.95*
Luxembourg	*9.76*	*8.40*	*9.37*	*12.53*	*8.15*	*0.81*
Netherlands	*17.19*	*19.76*	*29.31*	*20.61*	*25.74*	*13.05*
Total EUR 6	**576.40**	**383.39**	**416.03**	**428.87**	**380.68**	**132.52**
Scotland	7.02	11.42	31.23	7.73	54.82	48.07
Wales	7.88	5.34	4.70	5.14	8.67	6.51
Northern England	30.77	31.51	57.45	65.12	94.74	60.95
England - other areas	2.83	3.67	4.19	5.67	4.86	0.51
United Kingdom	*48.50*	*51.94*	*97.57*	*83.66*	*163.09*	*116.04*
Denmark	*0.98*	*1.77*	*0.74*	*3.11*	*0.86*	—
Ireland	—	—	*0.05*	—	—	—
Total EUR 9	**625.88**	**437.10**	**514.39**	**515.64**	**544.63**	**248.56**

SINTER AND SPONGE IRON

Production

TABLE 28

Production and production potential

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
111.4	**Total EUR 6**	**131.8**	**143.1**	**148.6**	**151.0**	**157.6**	**160.3**	**162.5**
125.4	**Total EUR 9**	**154.1**	**163.2**	**170.9**	**173.9**	**187.0**	**191.8**	**194.8**

PIG IRON

Production

TABLE 29

Production and production potential by regions

million tonnes

5.7	Northern Germany	8.1	8.9	9.4	9.4	9.4	10.2	10.2
19.4	North Rhine/Westphalia	28.1	29.1	29.3	31.5	31.8	32.0	32.5
0.9	Southern Germany	1.3	1.3	1.3	1.3	1.3	1.4	1.4
4.1	Saar	6.8	6.7	7.3	7.5	7.7	7.7	7.7
30.1	*FR Germany*	*44.3*	*46.0*	*47.3*	*49.7*	*51.2*	*51.3*	*51.8*
9.2	*Belgium*	*14.6*	*14.4*	*15.5*	*16.1*	*16.8*	*17.0*	*17.3*
9.9	Eastern France	13.9	13.9	14.0	14.3	14.7	14.8	14.8
5.5	Northern France	7.6	8.9	9.6	9.2	9.5	9.8	9.9
2.5	France - other areas	1.2	2.4	3.9	4.2	4.3	4.3	4.3
17.9	*France*	*22.7*	*25.2*	*27.5*	*27.7*	*28.5*	*28.9*	*29.0*
11.1	Italy - coastal areas	13.3	13.3	16.3	16.8	17.1	17.1	17.1
0.2	Italy - other areas	0.6	0.5	0.5	0.3	0.3	0.3	0.3
11.3	*Italy*	*13.9*	*13.8*	*16.8*	*17.1*	*17.4*	*17.4*	*17.4*
3.9	*Luxembourg*	*5.5*	*5.7*	*6.3*	*6.8*	*6.8*	*6.8*	*6.8*
4.0	*Netherlands*	*5.5*	*5.0*	*5.0*	*6.3*	*6.5*	*6.5*	*6.5*
76.4	**Total EUR 6**	**106.5**	**110.1**	**118.4**	**123.7**	**127.2**	**127.9**	**128.8**
1.0	Scotland	2.0	1.9	1.9	1.6	2.1	2.8	2.8
3.5	Wales	6.2	5.3	5.4	5.1	6.0	6.3	6.2
6.3	Northern England	9.2	8.2	8.9	8.9	9.3	10.5	11.2
1.4	England - other regions	2.6	2.2	2.2	1.9	2.1	2.1	2.1
12.3	*United Kingdom*	*20.0*	*17.6*	*18.4*	*17.5*	*19.5*	*21.7*	*22.3*
—	*Denmark*	—	—	—	—	—	—	—
—	*Ireland*	—	—	—	—	—	—	—
88.7	**Total EUR 9**	**126.5**	**127.7**	**136.8**	**141.2**	**146.7**	**149.6**	**151.1**

STEEL - TOTAL

Production

TABLE 30

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
7.4	Northern Germany	10.2	11.0	11.8	12.0	12.6	12.9	12.9
26.1	North Rhine/Westphalia	37.8	38.4	39.6	42.1	42.9	42.7	43.5
2.2	Southern Germany	2.7	2.8	2.9	3.1	3.6	3.7	3.8
4.7	Saar	8.1	8.2	8.6	8.9	9.3	9.3	9.3
40.4	*FR Germany*	*58.8*	*60.4*	*62.9*	*66.1*	*68.4*	*68.6*	*69.5*
11.6	*Belgium*	*17.3*	*17.8*	*19.0*	*19.2*	*20.6*	*21.0*	*21.8*
10.6	Eastern France	15.5	15.6	15.6	15.6	15.7	15.8	16.1
6.8	Northern France	9.5	11.0	11.8	11.5	12.0	12.4	12.4
4.1	France - other areas	3.1	3.9	6.3	7.0	7.3	7.4	7.4
21.5	*France*	*28.1*	*30.5*	*33.7*	*34.1*	*35.0*	*35.6*	*35.9*
11.9	Italy - coastal areas	15.3	15.3	18.2	19.0	19.3	19.7	19.7
9.9	Italy - other areas	12.8	13.6	14.5	15.4	16.1	16.8	17.2
21.8	*Italy*	*28.1*	*28.9*	*32.7*	*34.4*	*35.4*	*36.5*	*36.9*
4.6	*Luxembourg*	*6.5*	*6.7*	*7.5*	*8.2*	*8.2*	*8.2*	*8.2*
4.9	*Netherlands*	*6.1*	*6.1*	*6.3*	*7.7*	*8.0*	*8.0*	*8.0*
104.8	**Total EUR 6**	**144.9**	**150.4**	**162.1**	**169.7**	**175.6**	**177.9**	**180.3**
1.9	Scotland	3.5	3.2	2.9	2.7	3.2	3.7	3.7
5.4	Wales	9.0	7.8	7.4	7.3	8.9	9.4	9.3
10.3	Northern England	12.8	13.3	13.0	13.5	15.0	16.3	17.1
2.6	England - other regions	3.6	3.5	3.7	3.6	3.8	3.8	3.9
20.2	*United Kingdom*	*28.9*	*27.8*	*27.0*	*27.1*	*30.9*	*33.2*	*34.0*
0.6	*Denmark*	*0.6*	*0.6*	*0.7*	*1.2*	*1.2*	*1.2*	*1.2*
0.1	*Ireland*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.3*
125.7	**Total EUR 9**	**174.5**	**178.9**	**189.9**	**198.0**	**207.8**	**212.4**	**215.8**

BASIC BESSEMER STEEL

Production

TABLE 31

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
—	North Rhine/Westphalia ...	—	—	—	—	—	—	—
0.6	Saar	2.2	1.9	1.0	0.8	—	—	—
0.6	*FR Germany*	*2.2*	*1.9*	*1.0*	*0.8*	—	—	—
0.8	*Belgium*	*2.9*	*2.6*	*2.2*	*0.5*	—	—	—
2.9	Eastern France	6.1	5.2	4.3	3.7	3.7	3.6	3.2
0.4	France - other areas	0.5	0.5	0.5	0.5	0.1	—	—
3.3	*France*	*6.6*	*5.7*	*4.8*	*4.2*	*3.8*	*3.6*	*3.2*
1.3	*Luxembourg*	*3.2*	*2.1*	*2.5*	*2.0*	*1.6*	*0.9*	*0.9*
6.0	**Total EUR 6**	**14.9**	**12.3**	**10.5**	**7.5**	**5.4**	**4.5**	**4.1**
6.0	**Total EUR 9**	**14.9**	**12.3**	**10.5**	**7.5**	**5.4**	**4.5**	**4.1**

OPEN HEARTH STEEL

Production

TABLE 32

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
0.9	Northern Germany	1.5	1.4	1.3	1.3	1.0	1.0	1.0
5.0	North Rhine/Westphalia	7.7	7.8	7.8	6.8	6.8	6.7	6.6
0.4	Southern Germany	0.5	0.6	0.6	0.5	0.5	0.5	0.5
0.4	Saar	0.6	0.6	0.6	0.6	0.4	0.4	0.4
6.7	*FR Germany*	*10.3*	*10.4*	*10.3*	*9.2*	*8.7*	*8.6*	*8.5*
0.2	*Belgium*	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.1*	*0.1*
0.5	Eastern France	1.6	1.4	1.0	0.8	0.6	0.6	0.6
0.8	Northern France	1.6	1.5	1.4	1.1	0.8	0.7	0.6
0.2	France - other areas	0.5	0.4	0.3	0.3	0.1	—	—
1.5	*France*	*3.7*	*3.3*	*2.7*	*2.2*	*1.5*	*1.3*	*1.2*
1.7	Italy - coastal areas	2.6	2.5	2.4	2.4	1.2	—	—
0.8	Italy - other areas	2.2	1.9	1.5	0.8	0.7	0.5	0.5
2.5	*Italy*	*4.8*	*4.4*	*3.9*	*3.2*	*1.9*	*0.5*	*0.5*
0.0	*Netherlands*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
10.9	**Total EUR 6**	**19.3**	**18.5**	**17.3**	**15.0**	**12.5**	**10.6**	**10.4**
1.0	Scotland	2.0	1.9	1.3	0.9	0.8	0.3	0.3
2.2	Wales	3.2	3.1	2.8	2.2	2.1	1.8	1.7
0.4	Northern England	2.3	1.1	0.8	0.6	0.6	0.6	—
0.8	England - other regions	1.5	1.3	1.0	0.6	0.6	0.6	0.6
4.4	*United Kingdom*	*9.0*	*7.4*	*5.9*	*4.3*	*4.1*	*3.3*	*2.6*
0.5	*Denmark*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
0.0	*Ireland*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	—
15.8	**Total EUR 9**	**28.9**	**26.5**	**23.7**	**19.8**	**17.1**	**14.4**	**13.5**

ELECTRIC FURNACE STEEL

Production

TABLE 33

Production and production potential by regions

million tonnes

Actual pro-duction	Region	Production potential			Expected production potential			
1975		1973	1974	1975	1976	1977	1978	1979
0.9	Northern Germany	0.7	1.2	1.3	1.5	1.7	2.0	2.0
2.6	North Rhine/Westphalia ...	3.6	3.7	3.5	3.3	3.4	3.2	3.2
1.1	Southern Germany	1.1	1.1	1.3	1.5	1.7	1.8	1.9
0.4	Saar	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5.0	*FR Germany*	*5.9*	*6.5*	*6.6*	*6.8*	*7.3*	*7.5*	*7.6*
0.6	*Belgium*	*0.7*	*0.8*	*0.8*	*0.8*	*0.8*	*1.3*	*1.3*
1.1	Eastern France	0.9	1.1	1.3	1.3	1.3	1.3	1.3
0.5	Northern France	0.5	0.7	0.7	1.1	1.2	1.4	1.5
1.5	France - other areas.....	1.6	1.8	2.3	2.4	2.6	2.7	2.7
3.1	*France*.....	*3.0*	*3.6*	*4.3*	*4.8*	*5.1*	*5.4*	*5.5*
0.3	Italy - coastal areas	0.3	0.4	0.5	0.7	0.8	1.0	1.1
9.0	Italy - other areas	10.3	11.5	12.8	14.4	15.2	16.1	16.5
9.3	*Italy*	*10.6*	*11.9*	*13.3*	*15.1*	*16.0*	*17.1*	*17.6*
0.1	*Luxembourg*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
0.4	*Netherlands*.....	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
18.5	**Total EUR 6**	**20.7**	**23.3**	**25.5**	**28.0**	**29.7**	**31.7**	**32.5**
0.3	Scotland	0.3	0.3	0.4	0.5	0.5	0.6	0.6
0.4	Wales	0.5	0.5	0.5	0.5	1.2	1.4	1.4
4.0	Northern England	4.1	4.5	4.9	5.0	5.6	5.9	6.0
0.9	England - other regions	0.7	0.7	1.2	1.6	1.8	1.8	1.8
5.7	*United Kingdom*	*5.6*	*6.0*	*7.0*	*7.6*	*9.1*	*9.7*	*9.8*
0.1	*Denmark*	*0.1*	—	*0.1*	*0.7*	*0.7*	*0.7*	*0.7*
0.0	*Ireland*	—	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.3*
24.3	**Total EUR 9**	**26.4**	**29.4**	**32.7**	**36.4**	**39.6**	**42.2**	**43.3**

LD, KALDO AND OTHER STEELS

Production

TABLE 34

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
5.6	Northern Germany	8.0	8.5	9.1	9.1	10.0	10.0	10.0
18.5	North Rhine/Westphalia	26.5	26.9	28.1	31.7	32.4	32.4	33.2
2.1	Saar	4.0	4.0	4.9	5.0	5.0	5.0	5.0
26.2	*FR Germany*	*38.5*	*39.4*	*42.1*	*45.8*	*47.4*	*47.4*	*48.2*
9.0	*Belgium*	*12.0*	*12.5*	*13.7*	*14.3*	*15.1*	*15.1*	*15.9*
3.7	Eastern France	4.8	4.9	5.2	5.3	5.4	5.5	5.5
4.9	Northern France	6.6	7.9	8.8	8.9	9.6	9.9	10.4
2.0	France - other areas	0.5	1.3	3.2	3.8	4.5	4.7	4.7
10.6	*France*	*11.9*	*14.1*	*17.2*	*18.0*	*19.5*	*20.1*	*20.6*
9.9	Italy - coastal areas	12.4	12.3	15.3	15.9	16.0	16.1	16.1
0.1	Italy - other areas	0.3	0.2	0.2	0.2	0.2	0.2	0.2
10.0	*Italy*	*12.7*	*12.5*	*15.5*	*16.1*	*16.2*	*16.3*	*16.3*
2.8	*Luxembourg*	*2.8*	*3.8*	*4.3*	*5.5*	*5.9*	*6.6*	*6.6*
4.5	*Netherlands*	*5.6*	*5.6*	*5.8*	*7.2*	*7.5*	*7.5*	*7.5*
63.1	Total EUR 6	83.5	87.9	98.6	106.9	111.6	113.0	115.1
0.5	Scotland	1.2	1.0	1.2	1.2	1.9	2.8	2.8
2.8	Wales	5.3	4.2	4.1	4.5	5.8	6.2	6.2
5.9	Northern England	6.4	7.8	7.3	7.9	8.8	9.8	11.1
0.8	England - other regions	1.4	1.4	1.5	1.5	1.3	1.4	1.5
10.1	*United Kingdom*	*14.3*	*14.4*	*14.1*	*15.1*	*17.8*	*20.2*	*21.6*
73.2	Total EUR 9	97.8	102.3	112.7	122.0	129.4	133.2	136.7

BOTTOM BLOWN STEELS (OBM, LWS, ETC.)

Production

TABLE 35

Production and production potential

million tonnes

6.4	Total EUR 6	6.5	8.4	10.1	12.3	16.4	18.2	18.4
6.4	Total EUR 9	6.5	8.4	10.1	12.3	16.4	18.2	18.4

CONTINUOUS CASTING PLANTS

Production

TABLE 36

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
2.1	Northern Germany	1.4	2.3	3.3	3.5	3.7	4.0	4.0
5.3	North Rhine/Westphalia ...	6.0	6.2	7.7	10.5	11.0	11.0	13.0
1.1	Southern Germany	1.1	1.2	1.3	1.7	1.8	2.0	2.1
1.4	Saar	2.0	2.0	2.0	3.2	3.2	3.2	3.2
9.9	*FR Germany*	*10.5*	*11.7*	*14.3*	*18.9*	*19.7*	*20.2*	*22.3*
0.5	*Belgium*	—	*0.4*	*0.8*	*1.4*	*2.5*	*3.7*	*3.9*
0.1	Eastern France	0.1	0.1	0.3	0.4	0.4	0.4	0.4
2.1	Northern France	2.1	3.4	4.0	4.2	4.8	5.3	5.4
0.5	France - other areas.....	0.2	0.2	0.7	1.1	1.5	1.5	1.5
2.7	*France*	*2.4*	*3.7*	*5.0*	*5.7*	*6.7*	*7.2*	*7.3*
1.8	Italy - coastal areas	1.6	1.6	4.0	4.8	5.2	6.4	6.5
4.1	Italy - other areas	3.0	3.8	6.0	7.1	7.7	8.4	8.8
5.9	*Italy*	*4.6*	*5.4*	*10.0*	*11.9*	*12.9*	*14.8*	*15.3*
—	*Luxembourg*	—	—	—	—	—	—	—
—	*Netherlands*	—	—	—	—	—	—	—
19.2	**Total EUR 6**	**17.5**	**21.2**	**30.1**	**37.9**	**41.8**	**45.9**	**48.8**
0.1	Scotland	—	0.1	0.6	0.6	0.7	1.0	1.0
—	Wales	—	—	0.0	0.1	0.6	0.6	0.7
1.1	Northern England	—	1.0	1.7	1.7	1.9	2.8	3.4
0.6	England - other regions	—	0.6	0.9	0.9	1.2	1.2	1.2
1.8	*United Kingdom*	—	*1.7*	*3.2*	*3.3*	*4.4*	*5.6*	*6.3*
0.1	*Denmark*	—	—	*0.1*	*0.7*	*0.7*	*0.7*	*0.7*
—	*Ireland*	—	—	—	—	—	—	*0.3*
21.1	**Total EUR 9**	**17.5**	**22.9**	**33.4**	**41.9**	**46.9**	**52.2**	**56.1**

COILS [1]

Production

TABLE 37

Production and production potential by regions

million tonnes

Actual production		Region	Production potential			Expected production potential			
Total	of which: coils-finished pro-ducts								
1975			1973	1974	1975	1976	1977	1978	1979
3.1	1.1	Northern Germany	5.0	5.9	6.3	6.3	6.7	6.7	6.7
7.7	1.8	North Rhine/Westphalia	12.8	12.7	12.7	13.0	13.5	13.5	13.5
—	—	Southern Germany	—	—	—	—	—	—	—
—	—	Saar	—	—	—	—	—	—	—
10.8	*2.9*	*FR Germany*	*17.8*	*18.6*	*19.0*	*19.3*	*20.2*	*20.2*	*20.2*
4.4	*0.6*	*Belgium*	*6.3*	*6.7*	*7.4*	*7.6*	*8.9*	*9.1*	*9.1*
2.0	0.1	Eastern France	3.2	3.2	3.3	3.3	3.5	3.5	3.5
3.1	0.4	Northern France	5.0	5.8	6.1	6.1	6.2	6.4	6.3
1.4	0.6	France - other areas	—	1.3	2.2	2.8	3.0	3.0	3.0
6.5	*1.1*	*France*	*8.2*	*10.3*	*11.6*	*12.2*	*12.7*	*12.9*	*12.8*
4.7	1.6	Italy - coastal areas	7.1	6.9	10.3	10.4	10.5	10.6	10.6
0.5	0.0	Italy - other areas	0.9	0.9	0.7	0.7	0.8	0.8	0.8
5.2	*1.6*	*Italy*	*8.0*	*7.8*	*11.0*	*11.1*	*11.3*	*11.4*	*11.4*
0.4	—	*Luxembourg*	*0.5*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*
2.6	*0.5*	*Netherlands*	*5.0*	*4.3*	*4.4*	*5.0*	*5.0*	*5.0*	*5.2*
29.9	**6.7**	**Total EUR 6**	**45.8**	**48.3**	**54.0**	**55.8**	**58.7**	**59.2**	**59.3**
0.4	0.1	Scotland	1.1	1.0	1.2	0.9	1.2	1.8	1.9
3.5	0.3	Wales	6.4	6.1	5.2	4.9	5.8	5.7	5.9
0.4	0.1	Northern England	1.1	0.9	0.9	1.0	1.3	1.4	1.4
—	—	England - other regions	—	—	—	—	—	—	—
4.3	*0.5*	*United Kingdom*	*8.6*	*8.0*	*7.3*	*6.8*	*8.3*	*8.9*	*9.2*
—	—	*Denmark*	—	—	—	—	—	—	—
—	—	*Ireland*	—	—	—	—	—	—	—
34.2	**7.2**	**Total EUR 9**	**54.4**	**56.3**	**61.3**	**62.6**	**67.0**	**68.1**	**68.5**

1 Treaty products obtained by transformation of hot rolled coils are included in the Tables 38, 39, 40 and 41.

HEAVY AND LIGHT SECTIONS (INCLUDING TUBE ROUNDS AND SQUARES)

Production

TABLE 38

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
1.3	Northern Germany	2.5	2.2	2.3	2.3	2.4	2.4	2.4
5.1	North Rhine/Westphalia	8.6	8.8	8.8	8.9	9.1	9.2	9.2
1.0	Southern Germany	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1.7	Saar	2.7	2.9	3.1	3.1	3.1	3.1	3.1
9.1	*FR Germany*	*15.5*	*15.6*	*15.9*	*16.0*	*16.3*	*16.4*	*16.4*
2.6	*Belgium*	*5.6*	*5.9*	*5.7*	*5.5*	*5.3*	*5.4*	*5.4*
3.2	Eastern France	4.4	4.5	4.5	4.6	4.7	4.8	4.7
1.1	Northern France	1.3	1.4	1.5	1.7	1.8	1.8	1.9
1.0	France - other areas	1.2	1.4	1.6	1.6	1.6	1.7	1.7
5.3	*France*	*6.9*	*7.3*	*7.6*	*7.9*	*8.1*	*8.3*	*8.3*
1.1	Italy - coastal areas	2.0	1.9	1.9	2.0	2.2	2.5	2.6
5.7	Italy - other areas	7.5	7.8	8.4	8.9	9.3	9.7	9.7
6.8	*Italy*	*9.5*	*9.7*	*10.3*	*10.9*	*11.5*	*12.2*	*12.3*
1.8	*Luxembourg*	*2.8*	*2.9*	*3.1*	*3.5*	*3.5*	*3.5*	*3.5*
0.3	*Netherlands*	*0.4*	*0.4*	*0.4*	*0.4*	*0.5*	*0.5*	*0.5*
25.9	**Total EUR 6**	**40.7**	**41.8**	**43.0**	**44.2**	**45.2**	**46.3**	**46.4**
0.3	Scotland	0.6	0.5	0.4	0.3	0.3	0.3	0.3
0.4	Wales	0.4	0.4	0.5	0.7	0.9	0.9	0.9
2.8	Northern England	3.8	4.4	4.2	4.4	4.8	4.8	4.9
1.6	England - other regions	2.1	2.4	2.3	2.2	2.3	2.4	2.4
5.1	*United Kingdom*	*6.9*	*7.7*	*7.4*	*7.6*	*8.3*	*8.4*	*8.5*
0.2	*Denmark*	*0.2*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
0.1	*Ireland*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.3*
31.3	**Total EUR 9**	**47.9**	**49.9**	**50.8**	**52.2**	**53.9**	**55.1**	**55.5**

WIRE ROD

Production

TABLE 39

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
0.1	Northern Germany	0.4	0.6	0.7	0.7	0.7	0.7	0.7
1.7	North Rhine/Westphalia	3.6	3.5	3.6	3.6	3.6	3.7	3.7
0.3	Southern Germany	0.3	0.3	0.4	0.4	0.4	0.4	0.4
0.7	Saar	0.9	1.3	1.6	1.6	1.6	1.6	1.6
2.8	*FR Germany*	*5.2*	*5.7*	*6.3*	*6.3*	*6.3*	*6.4*	*6.4*
0.6	*Belgium*	*0.9*	*0.9*	*0.9*	*0.9*	*1.1*	*1.1*	*1.5*
1.6	Eastern France	2.3	2.7	2.8	2.9	3.0	3.0	3.0
0.1	Northern France	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.4	France - other areas	0.5	0.6	0.7	0.8	0.8	0.8	0.8
2.1	*France*	*3.1*	*3.6*	*3.8*	*4.0*	*4.1*	*4.1*	*4.1*
0.2	Italy - coastal areas	0.3	0.3	0.3	0.3	0.3	0.5	0.6
0.9	Italy - other areas	1.4	1.5	1.5	1.7	1.9	1.9	1.9
1.1	*Italy*	*1.7*	*1.8*	*1.8*	*2.0*	*2.2*	*2.4*	*2.5*
0.3	*Luxembourg*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
0.3	*Netherlands*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
7.2	**Total EUR 6**	**11.9**	**13.0**	**13.8**	**14.2**	**14.7**	**15.0**	**15.5**
—	Scotland	—	—	—	—	—	—	—
0.3	Wales	0.4	0.4	0.4	0.4	0.5	0.6	0.6
1.4	Northern England	1.8	1.8	2.0	2.2	2.5	2.8	2.9
0.1	England - other regions	0.1	0.1	0.1	0.2	0.3	0.4	0.4
1.8	*United Kingdom*	*2.3*	*2.3*	*2.5*	*2.8*	*3.3*	*3.8*	*3.9*
—	*Denmark*	*0.1*	—	—	—	—	—	—
—	*Ireland*	—	—	—	—	—	—	—
9.0	**Total EUR 9**	**14.3**	**15.3**	**16.3**	**17.0**	**18.0**	**18.8**	**19.4**

HOOP AND STRIP FOR TUBE MAKING

Production

TABLE 40

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
0.2	Northern Germany	0.1	0.2	0.2	0.4	0.4	0.4	0.4
1.6	North Rhine/Westphalia ...	3.3	3.4	3.2	3.4	3.6	3.6	3.6
0.1	Southern Germany	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	Saar	0.3	0.3	0.3	0.3	0.3	0.3	0.3
2.0	*FR Germany*	*3.8*	*4.0*	*3.8*	*4.2*	*4.4*	*4.4*	*4.4*
0.1	*Belgium*	*0.2*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
0.9	Eastern France	1.5	1.5	1.5	1.5	1.5	1.6	1.6
0.1	Northern France	0.1	0.2	0.2	0.2	0.2	0.2	0.2
0.0	France - other areas	0.0	0.2	0.4	0.5	0.5	0.5	0.5
1.0	*France*	*1.6*	*1.9*	*2.0*	*2.2*	*2.2*	*2.3*	*2.3*
0.3	Italy - coastal areas	0.9	0.8	0.9	0.9	0.9	0.9	0.9
0.3	Italy - other areas	0.7	0.7	0.7	0.8	0.8	0.8	0.8
0.6	*Italy*	*1.6*	*1.5*	*1.6*	*1.7*	*1.7*	*1.7*	*1.7*
0.6	*Luxembourg*	*1.1*	*1.1*	*1.2*	*1.2*	*1.2*	*1.2*	*1.2*
0.1	*Netherlands*	*0.3*	*0.3*	*0.3*	*0.4*	*0.5*	*0.5*	*0.5*
4.4	**Total EUR 6**	**8.6**	**9.1**	**9.2**	**10.0**	**10.3**	**10.4**	**10.4**
—	Scotland	—	—	—	—	—	—	—
0.1	Wales	0.2	0.2	0.2	0.2	0.3	0.3	0.3
0.3	Northern England	0.6	0.5	0.4	0.4	0.4	0.4	0.4
0.7	England - other regions	1.1	1.1	1.2	1.2	1.3	1.3	1.4
1.1	*United Kingdom*	*1.9*	*1.8*	*1.8*	*1.8*	*2.0*	*2.0*	*2.1*
—	*Denmark*	—	—	—	—	—	—	—
—	*Ireland*	—	—	—	—	—	—	—
5.5	**Total EUR 9**	**10.5**	**10.9**	**11.0**	**11.8**	**12.3**	**12.4**	**12.5**

PLATE ⩾ 3 mm (INCLUDING WIDE FLATS) [1]

Production

TABLE 41

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
0.7	Northern Germany	1.1	1.0	1.0	1.0	1.1	1.1	1.1
4.3	North Rhine/Westphalia	6.6	6.3	6.4	6.7	7.2	7.5	7.7
—	Southern Germany	—	—	—	—	—	—	—
0.9	Saar	1.9	1.9	1.9	2.0	2.3	2.3	2.3
5.9	*FR Germany*	*9.6*	*9.2*	*9.3*	*9.7*	*10.6*	*10.9*	*11.1*
1.2	*Belgium*	*1.8*	*2.2*	*2.4*	*2.4*	*2.5*	*2.6*	*2.8*
0.6	Eastern France	1.1	1.1	1.1	1.0	1.0	1.0	1.0
0.8	Northern France	1.2	1.2	1.3	1.3	1.3	1.4	1.5
0.4	France - other areas	0.2	0.4	0.6	0.7	0.7	0.9	0.9
1.8	*France*	*2.5*	*2.7*	*3.0*	*3.0*	*3.0*	*3.3*	*3.4*
2.1	Italy - coastal areas	2.4	2.9	3.4	3.5	4.1	4.1	4.1
0.5	Italy - other areas	0.8	0.8	0.8	0.8	0.8	0.8	0.8
2.6	*Italy*	*3.2*	*3.7*	*4.2*	*4.3*	*4.9*	*4.9*	*4.9*
0.2	*Luxembourg*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
0.4	*Netherlands*	*0.8*	*0.8*	*0.8*	*0.7*	*0.7*	*0.7*	*0.7*
12.1	**Total EUR 6**	**18.2**	**18.9**	**20.0**	**20.4**	**22.0**	**22.7**	**23.3**
0.5	Scotland	0.6	0.6	0.6	0.6	0.6	0.7	0.7
0.2	Wales	0.2	0.2	0.2	0.1	0.1	0.1	0.1
1.2	Northern England	1.5	1.5	1.5	1.8	2.0	2.0	2.1
0.2	England - other regions	0.3	0.3	0.3	0.3	0.3	0.3	0.3
2.1	*United Kingdom*	*2.6*	*2.6*	*2.6*	*2.8*	*3.0*	*3.1*	*3.2*
0.2	*Denmark*	*0.2*	*0.3*	*0.3*	*0.5*	*0.5*	*0.6*	*0.6*
—	*Ireland*	—	—	—	—	—	—	—
14.4	**Total EUR 9**	**21.0**	**21.8**	**22.9**	**23.7**	**25.5**	**26.4**	**27.1**

[1] Except coils - finished products. (See Table 37)

HOT-ROLLED SHEET < 3 mm [1]

Production

TABLE 42

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
0.0	Northern Germany	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	North Rhine/Westphalia	0.2	0.2	0.2	0.2	0.2	0.1	0.1
—	Southern Germany	—	—	—	—	—	—	—
—	Saar	—	—	—	—	—	—	—
0.1	*FR Germany*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.1*	*0.1*
0.0	*Belgium*	*0.2*	*0.2*	*0.1*	*0.2*	*0.2*	*0.2*	*0.2*
0.0	Eastern France	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.0	Northern France	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	France - other areas	0.1	0.1	0.2	0.2	0.2	0.2	0.2
0.1	*France*	*0.3*	*0.3*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
0.0	Italy - coastal areas	0.3	0.3	0.4	0.4	0.4	0.5	0.5
—	Italy - other areas	—	—	—	—	—	—	—
0.0	*Italy*	*0.3*	*0.3*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
—	*Luxembourg*	—	—	—	—	—	—	—
0.0	*Netherlands*	—	—	*0.0*	*0.0*	*0.0*	*0.1*	*0.1*
0.2	**Total EUR 6**	**1.0**	**1.0**	**1.1**	**1.2**	**1.2**	**1.2**	**1.2**
0.0	Scotland	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	Wales	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.0	Northern England	0.0	0.0	0.0	0.0	0.0	0.0	0.0
—	England - other regions	—	—	—	—	—	—	—
0.1	*United Kingdom*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
—	*Denmark*	—	—	—	—	—	—	—
—	*Ireland*	—	—	—	—	—	—	—
0.3	**Total EUR 9**	**1.1**	**1.1**	**1.2**	**1.3**	**1.3**	**1.3**	**1.3**

1 Except coils - finished products.

COLD-REDUCED SHEET
< 3 mm

Production

TABLE 43

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
1.2	Northern Germany	2.2	2.2	2.5	2.5	2.6	2.7	2.7
3.4	North Rhine/Westphalia	7.7	7.0	7.5	7.8	7.8	7.9	7.9
1.3	Southern Germany	2.9	2.8	2.8	2.8	2.8	2.8	2.8
—	Saar	—	—	—	—	—	—	—
5.9	*FR Germany*	*12.8*	*12.0*	*12.8*	*13.1*	*13.2*	*13.4*	*13.4*
2.8	*Belgium*	*4.4*	*4.5*	*4.8*	*4.9*	*5.1*	*5.1*	*5.1*
2.4	Eastern France	3.4	3.5	3.7	3.8	3.8	3.9	3.9
2.0	Northern France	2.8	3.3	3.9	4.0	4.2	4.2	4.2
0.4	France - other areas	0.6	0.7	0.7	0.8	0.9	0.9	0.9
4.8	*France*	*6.8*	*7.5*	*8.3*	*8.6*	*8.9*	*9.0*	*9.0*
1.2	Italy - coastal areas	2.3	2.6	2.7	2.8	2.8	3.2	3.2
2.1	Italy - other areas	2.8	2.8	2.9	2.9	3.0	3.0	3.0
3.3	*Italy*	*5.1*	*5.4*	*5.6*	*5.7*	*5.8*	*6.2*	*6.2*
0.2	*Luxembourg*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
1.5	*Netherlands*	*2.1*	*2.3*	*2.4*	*2.8*	*2.9*	*2.9*	*3.0*
18.5	**Total EUR 6**	**31.6**	**32.1**	**34.3**	**35.5**	**36.3**	**37.0**	**37.1**
0.3	Scotland	0.5	0.5	0.6	0.6	0.6	0.6	0.6
2.7	Wales	4.9	5.0	5.5	5.6	5.6	5.7	5.7
0.0	Northern England	—	0.1	0.0	0.0	0.1	0.1	0.1
—	England - other regions	—	—	—	—	—	—	—
3.0	*United Kingdom*	*5.4*	*5.6*	*6.1*	*6.2*	*6.3*	*6.4*	*6.4*
—	*Denmark*	—	—	—	—	—	—	—
—	*Ireland*	—	—	—	—	—	—	—
21.5	**Total EUR 9**	**37.0**	**37.7**	**40.4**	**41.7**	**42.6**	**43.4**	**43.5**

TABLE 44

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
1.4	Northern Germany	2.9	2.6	3.0	3.0	3.1	3.1	3.1
6.8	North Rhine/Westphalia	12.2	12.2	12.4	12.6	12.7	12.8	12.8
1.3	Southern Germany	2.0	2.0	2.1	2.1	2.1	2.2	2.2
2.3	Saar	3.6	4.1	4.7	4.7	4.7	4.7	4.7
11.8	*FR Germany*	*20.7*	*20.9*	*22.2*	*22.4*	*22.6*	*22.8*	*22.8*
3.2	*Belgium*	*6.5*	*6.8*	*6.7*	*6.4*	*6.5*	*6.5*	*6.9*
4.8	Eastern France	6.7	7.2	7.2	7.4	7.6	7.8	7.7
1.3	Northern France	1.6	1.7	1.9	2.0	2.1	2.2	2.2
1.4	France - other areas	1.7	2.0	2.3	2.3	2.4	2.4	2.5
7.5	*France*	*10.0*	*10.9*	*11.4*	*11.7*	*12.1*	*12.4*	*12.4*
1.3	Italy - coastal areas	2.3	2.2	2.2	2.3	2.5	3.0	3.2
6.8	Italy - other areas	8.9	9.2	9.9	10.6	11.1	11.5	11.6
8.1	*Italy*	*11.2*	*11.4*	*12.1*	*12.9*	*13.6*	*14.5*	*14.8*
2.1	*Luxembourg*	*3.3*	*3.4*	*3.6*	*4.0*	*4.0*	*4.0*	*4.0*
0.6	*Netherlands*	*0.9*	*0.9*	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*
33.3	**Total EUR 6**	**52.6**	**54.3**	**56.9**	**58.3**	**59.8**	**61.2**	**61.9**
0.3	Scotland	0.6	0.5	0.3	0.3	0.3	0.3	0.3
0.7	Wales	0.8	0.8	0.9	1.0	1.4	1.6	1.6
4.3	Northern England	5.6	6.2	6.2	6.8	7.3	7.7	7.8
1.7	England - other regions	2.3	2.5	2.4	2.4	2.6	2.7	2.7
7.0	*United Kingdom*	*9.3*	*10.0*	*9.8*	*10.5*	*11.6*	*12.3*	*12.4*
0.2	*Denmark*	*0.2*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
0.1	*Ireland*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.3*
40.6	**Total EUR 9**	**62.2**	**64.7**	**67.1**	**69.2**	**71.8**	**73.9**	**74.9**

FLAT PRODUCTS [1]

Production

TABLE 45

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
2.1	Northern Germany	3.4	3.5	3.7	3.9	4.1	4.3	4.3
9.3	North Rhine/Westphalia	17.8	16.9	17.3	18.2	18.8	19.0	19.2
1.4	Southern Germany	3.0	2.8	2.9	2.9	2.9	2.9	2.9
1.0	Saar	2.2	2.2	2.2	2.2	2.6	2.6	2.6
13.8	*FR Germany*	*26.4*	*25.4*	*26.1*	*27.2*	*28.4*	*28.8*	*29.0*
4.1	*Belgium*	*6.6*	*7.3*	*7.6*	*7.9*	*8.2*	*8.3*	*8.5*
3.9	Eastern France	6.1	6.2	6.4	6.4	6.4	6.5	6.5
2.9	Northern France	4.2	4.8	5.4	5.5	5.8	5.8	6.0
0.9	France - other areas	0.9	1.4	1.9	2.2	2.3	2.5	2.6
7.7	*France*	*11.2*	*12.4*	*13.7*	*14.1*	*14.5*	*14.8*	*15.1*
3.7	Italy - coastal areas	5.9	6.5	7.4	7.6	8.1	8.6	8.6
2.9	Italy - other areas	4.3	4.3	4.4	4.5	4.6	4.7	4.7
6.6	*Italy*	*10.2*	*10.8*	*11.8*	*12.1*	*12.7*	*13.3*	*13.3*
1.0	*Luxembourg*	*1.8*	*1.8*	*1.9*	*1.9*	*1.9*	*1.9*	*1.9*
2.0	*Netherlands*	*3.2*	*3.4*	*3.5*	*3.9*	*4.1*	*4.2*	*4.3*
35.2	**Total EUR 6**	**59.4**	**61.1**	**64.6**	**67.1**	**69.8**	**71.3**	**72.1**
0.7	Scotland	1.2	1.2	1.2	1.2	1.2	1.3	1.3
3.0	Wales	5.3	5.5	6.0	6.0	6.1	6.2	6.2
1.5	Northern England	2.1	2.1	1.9	2.2	2.5	2.5	2.6
1.0	England - other regions	1.4	1.4	1.5	1.5	1.6	1.6	1.7
6.2	*United Kingdom*	*10.0*	*10.2*	*10.6*	*10.9*	*11.4*	*11.6*	*11.8*
0.2	*Denmark*	*0.2*	*0.2*	*0.3*	*0.5*	*0.6*	*0.6*	*0.6*
—	*Ireland*	—	—	—	—	—	—	—
41.6	**Total EUR 9**	**69.6**	**71.5**	**75.5**	**78.5**	**81.8**	**83.5**	**84.5**

1 Except coils - finished products.

TOTAL FINISHED ROLLED PRODUCTS [1]

Production

TABLE 46

Production and production potential by regions

million tonnes

Actual production 1975	Region	Production potential 1973	1974	1975	Expected production potential 1976	1977	1978	1979
3.6	Northern Germany	6.3	6.1	6.8	6.9	7.2	7.4	7.4
16.2	North Rhine/Westphalia	30.0	29.1	29.7	30.7	31.5	31.9	32.1
2.7	Southern Germany	5.0	4.9	4.9	4.9	5.0	5.0	5.0
3.3	Saar	5.8	6.4	6.8	7.0	7.3	7.3	7.3
25.8	*FR Germany*	*47.1*	*46.5*	*48.2*	*49.5*	*51.0*	*51.6*	*51.8*
7.3	*Belgium*	*13.1*	*14.1*	*14.3*	*14.3*	*14.7*	*14.8*	*15.4*
8.7	Eastern France	12.8	13.4	13.6	13.9	14.1	14.3	14.3
4.2	Northern France	5.8	6.5	7.3	7.5	7.8	7.9	8.3
2.2	France - other areas	2.6	3.3	4.2	4.5	4.7	5.0	5.0
15.1	*France*	*21.2*	*23.2*	*25.1*	*25.9*	*26.6*	*27.2*	*27.6*
5.0	Italy - coastal areas	8.2	8.7	9.7	9.8	10.6	11.6	11.8
9.7	Italy - other areas	13.2	13.5	14.3	15.2	15.7	16.2	16.2
14.7	*Italy*	*21.4*	*22.2*	*24.0*	*25.0*	*26.3*	*27.8*	*28.0*
3.1	*Luxembourg*	*5.1*	*5.2*	*5.5*	*5.9*	*5.9*	*5.9*	*5.9*
2.5	*Netherlands*	*4.1*	*4.3*	*4.4*	*4.8*	*5.1*	*5.2*	*5.3*
—	**Total EUR 6**	**112.0**	**115.5**	**121.5**	**125.4**	**129.6**	**132.5**	**134.0**
1.1	Scotland	1.8	1.7	1.5	1.5	1.5	1.6	1.6
3.7	Wales	6.1	6.3	6.9	7.0	7.5	7.8	7.8
5.8	Northern England	7.7	8.3	8.1	9.0	9.8	10.2	10.4
2.6	England - other regions	3.7	3.9	3.9	3.9	4.2	4.3	4.4
13.2	*United Kingdom*	*19.3*	*20.2*	*20.4*	*21.4*	*23.0*	*23.9*	*24.2*
0.4	*Denmark*	*0.5*	*0.5*	*0.6*	*0.8*	*0.9*	*0.9*	*0.9*
0.1	*Ireland*	—	—	*0.1*	*0.1*	*0.1*	*0.1*	*0.3*
82.2	**Total EUR 9**	**131.8**	**136.2**	**142.6**	**147.7**	**153.6**	**157.4**	**159.4**

1 Except coils - finished products.

TABLE 47

Rate of utilization of production potential for pig-iron. crude steel. coils and finished products

in %

Country	Pig iron	Basic Bessemer	OBM. LWS	Open hearth	Electric	LD. Kaldo and others	Crude steel total	Continuous casting	Coils	Heavy sections	Light sections	Wire rod	Hoop and skip	Plate ⩾ 3 mm	Cold-reduced sheet < 3 mm	Finished rolled products Total (excl. coils finished products)
FR Germany	63.6	56.0	70.9	65.6	75.8	62.0	64.3	69.0	56.8	62.0	54.1	48.3	51.1	63.0	46.7	53.9
Belgium	59.1	37.3	47.7	48.7	76.0	66.1	60.9	63.0	58.9	71.1	34.9	61.8	24.0	50.7	57.9	51.1
France	65.2	68.9	64.1	56.4	71.3	62.0	64.0	55.3	56.3	73.4	69.2	56.4	48.2	58.9	57.8	60.7
Italy	68.0	—	—	63.3	70.6	64.3	66.7	61.3	48.0	50.6	70.4	62.1	39.0	62.2	58.1	60.3
Luxembourg	61.9	53.2	64.1	—	54.2	66.1	61.5	—	60.8	55.9	57.3	56.2	53.8	65.2	56.5	56.4
Netherlands	96.1	—	—	38.0	82.5	76.8	76.8	—	58.1	—	69.5	64.0	49.6	51.2	60.8	58.6
Total EUR 6	**64.6**	**57.2**	**62.8**	**63.5**	**72.6**	**64.3**	**64.7**	**63.1**	**55.3**	**63.1**	**59.0**	**52.0**	**47.7**	**60.3**	**53.9**	**56.3**
United Kingdom	67.1	—	—	74.7	80.7	71.3	74.2	54.5	59.1	65.4	75.8	68.8	58.2	81.9	48.7	64.7
Denmark	—	—	—	86.4	64.7	—	81.6	—	—	100.0	67.9	—	—	92.6	—	81.6
Ireland	—	—	—	80.0	79.1	—	79.4	—	—	85.7	33.7	—	—	—	—	40.8
Total EUR 9	**64.9**	**59.2**	**62.8**	**66.7**	**74.3**	**64.7**	**66.2**	**62.9**	**55.4**	**63.7**	**60.8**	**55.3**	**49.9**	**62.9**	**53.1**	**57.6**