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The Community Oil Market, its oil refining industry,  
and the external trade in petroleum products

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(Commission Staff Paper)

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ANNEXES

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SUMMARY AND CONCLUSIONS

1. On several occasions since 1977 the Commission has drawn the attention of the Council to the problems which confront the refining industry in the Community : excess distillation capacity implying an inadequate return on capital; an imbalance between product output and demand because of insufficient conversion capacity. These problems resulted essentially from the fall in demand for petroleum products, the profound change in the structure of demand, and from the increase in product imports from third countries.
2. The Council adopted the Commission's conclusions which advocated a policy "of proposing Community objectives and then leaving individual companies to bring their Community-wide capacity into line with the foreseen demand for their products"<sup>(1)</sup>. It asked the Commission to continue to monitor developments and to report to it periodically.
3. The present report is drawn up in a context considerably different from that of March 1985. A large and rapid fall in the price of crude oil during the first quarter of 1986 has created a climate of uncertainty as regards the future level of demand. It is, therefore, timely to examine the present situation and to consider the prospects for the industry on the basis of different assumptions regarding future oil prices.
4. This report is based, like its predecessors, upon consultations with the companies, national governments and trades unions. It presents for the first time refining figures for the enlarged Community of Twelve. It once again assesses, in the light of new estimates, the progress made in restructuring the industry and examines the prospective refining balance over the next five years. Recent developments in the external trade in petroleum products, and the likely effects on the Community of increased exports from OPEC refineries, are also discussed. Lastly, the paper considers the implications for the industry of proposed new Community legislation for environmental protection and the consequences for the common market in oil of differing national measures in regard to the environment, energy and taxation.

\* \* \*

(1) Doc. COM (85) 32 final, para 4. See also Council conclusions of 15 March and 20 June 1985.

5. Since the last report by the Commission on the situation of the refining industry and imports of petroleum products from third countries, rationalisation of the Community refining industry has continued. At the end of 1985 the primary distillation capacity installed (EEC-12) was 615 M.t/y, and excess capacity was 50 M.t/y or 9% above the capacity needed assuming a utilisation factor of 80%, considered to be the minimum consistent with efficient and profitable operation. At the end of 1984 the excess calculated in the same way was 75 M.t/y or 13% in relation to capacity of 655 M.t/y. In certain member states the surplus is still considerably higher than the Community average, particularly in Italy.

Utilisation rates of primary distillation capacity varied in 1985 around an average of 70%. They were above 80% in Denmark, Germany and the UK, less than 60% in Italy and Portugal. For conversion facilities, rates of utilisation were generally higher and averaged about 82%.

6. Further closures planned, mainly in France and Italy, would bring down primary distillation capacity in EEC-12 from 615 to 575 M.t/y in 1990.

It is particularly difficult to assess the future relationship between capacity and demand because of present uncertainties especially in regard to the price of crude oil.

\* \* \*

7. For this reason the Commission has studied three oil price scenarios. The base scenario corresponds to a price of about \$20/bbl and assumes that oil consumption will remain at its present level over the period 1985-90. In Scenario A the price stabilises at \$15, and demand increases by about 10% during this period. Scenario B, which assumes a return to a high price (\$25 or above) foresees a fall of 5%. Scenarios A and B thus define the range within which the Commission expects demand to be situated.
8. No new investment is foreseen for the coming years in export refineries located in the producing countries of North Africa and the Middle East. There have, in fact, been some cancellations of refining projects intended to supply domestic markets, for example in Saudi Arabia. The assessment put forward in the Commission's last report <sup>(2)</sup>, that the additional volume of products to be placed on the market by the new refineries would be about one m.b/d or 50 M.t/y, remains valid.
9. Net imports of finished products (excluding feedstocks) were higher in 1985 than was foreseen in the last report : they reached 30 M.t. instead of 25 M.t. Because of the impact of the miners' strike in the UK, and of a significant fall in exports from the Community to third countries, net imports by the Community increased from 15.5 M.t. in 1983 to 29.4 M.t. in 1984 compared with 20 M.t. provisionally estimated in last year's Communication. The continuation of the miners' strike through the first quarter

(2) -----  
(COM 85 32 final, para.43)

of 1985, together with the increase in imports from third countries, resulted in a net import balance for 1985 higher than the 25 M.t. foreseen.

10. There are many uncertainties regarding the level of net product imports which can reasonably be expected in 1986, particularly because of changes in the conditions of crude oil supply. Moreover, the effects of the commissioning of the last export refineries in the Middle East should be felt in the course of the next two years. In total, net imports of petroleum products (excluding feedstocks) from third countries may be expected to increase from 30 M.t. in 1985 to 40 M.t. in 1990. This estimate assumes that the additional exports from the Middle East and North Africa will be distributed among the main importing regions in accordance with market forces and without intervention by governments.

11. The three scenarios would have the following implications for distillation capacity

- in the base scenario excess capacity of 25 m.t/y would remain in 1990. The closures needed to reach by that date a satisfactory utilisation rate would be 65 M.t/y, including the 40 M.t/y of closures already planned by the industry.

- Scenario A would not require any major reduction in capacity beyond that planned by the industry over the period 1986-90 (40 M.t/y) : Community primary capacity and demand would be broadly in balance although one or two obsolete refineries might still have to be closed.

- Scenario B would imply the continuation of the trend observed during the last ten years. Closures totalling 95 M.t/y would be necessary to remove excess capacity.

12. The changes which have occurred in the product composition of demand, and particularly the heavy fall in the consumption of residual fuel oil, have obliged the industry to invest in new conversion facilities.

These investment programmes have been largely completed and conversion capacity is operating with an average utilisation rate of above 80%. If the contraction of the fuel oil market were to continue, however, as is foreseen in the Scenario for \$25, additional investment in deep conversion units would be necessary after 1990, especially in Germany and France.

The reverse situation would occur in the Scenario for \$15 because of the higher demand for heavy products. In this case, relatively unsophisticated refineries might again have a profitable outlet for the range of products for which they are technically equipped and can produce economically. Some industry excess capacity for conversion could arise in these circumstances.

13. Even in Scenario A, in which consumption is highest, there would be a margin of spare capacity sufficient in principle to cover the whole Community demand for oil products from domestic refineries. In overall terms, therefore, none of the scenarios considered

would present problems as regards security of supply. There could, nevertheless, in Scenario A be an increased import requirement for certain products. Particular attention will have to be given in this connection to the future evolution of the demand for gasoil.

14. The industry has put in hand the investment programmes necessary to conform with the Community Directive providing for the elimination of lead from motor gasoline. Preparations are also being made to meet a reduction in the sulphur content of gasoil to 0.3% as proposed by the Commission. A further reduction, however, in this limit to 0.2%, as has been requested by certain member states, would require, according to the industry, considerable additional capital expenditure. There is also to be considered the question of the implications for the industry of the proposed directive on emissions from large combustion installations.
15. The effects on employment of rationalisation of the refining industry, although difficult to assess with any precision, appear to have been relatively limited so far, with certain local or regional exceptions. Future trends will depend very much upon the future level of demand. For the various scenarios considered there could be new direct job losses of from 5,000-10,000.

\* \* \*

#### Orientations and Conclusions

16. The Commission proposes to the Council for its approval the following orientations and conclusions :
  - 1) In spite of the present uncertainties regarding the price of oil which complicate the task of forecasting trends in the Community refining industry over the next five years, the various scenarios considered lead to the conclusion that there is no need fundamentally to modify the approach which the Commission and the Council have so far followed in tackling the problems of this industry.
  - 2) It is therefore appropriate to maintain the policy which the Community has followed in recent years, of which the main elements are:
    - recognition that the industry is responsible for taking decisions about the closure of surplus capacity and about the investments necessary to adapt facilities to the structure of demand.
    - a positive attitude by the governments of the member states towards the measures of rationalisation taken by the industry.
    - monitoring by the Commission to ensure the balanced implementation of restructuring.
  - 3) In the event that one of the two extreme scenarios were to materialise, particular problems could arise (for example, a higher rate of closures in the low demand (25\$) case; excess

conversion capacity and deficits in certain products in the high demand (15\$) case). Close attention will therefore still be necessary and the Commission will continue to monitor the process of restructuring.

- 4) Whichever scenario is considered, there is no risk that capacity will fall below the critical level from the point of view of security of supply.
- 5) In view of the world-wide character of the problem of the rationalisation of refining, the Community must continue to watch that its industrialised partners make parallel efforts to its own, as they have undertaken to do.
- 6) There is no need to change the line of action which the Council approved in 1985 regarding additional imports of petroleum products from third countries, namely to keep the Community open to these imports provided that two conditions are fulfilled:

- that the other larger consumer markets adopt the same open attitude. The agreement made within the IEA, thanks to the efforts of the Commission and the member states of that organisation, has made it possible to obtain an undertaking in this respect from the United States and Japan. The monitoring systems set up by the Commission and by the IEA make it possible to verify that these engagements are carried out; preliminary results are positive.

- that the new exporters adopt a responsible attitude in the petroleum products market. Despite the recent large fluctuations in the price of crude oil, there is no reason to believe as things stand at present that they will do otherwise.

The Commission will therefore closely follow developments at the world level and will maintain the necessary contacts with industrialised countries and exporting states.

- 7) The Commission will follow closely trends in employment in the refining sector. Financial contributions from the Social and Regional Funds could be made available, in eligible cases, to complement measures taken by the member states for job creation, professional training, and to help depressed areas.
- 8) Although substantial progress has been made in the last five years in liberalising the international market in petroleum products, particular attention must be given to the completion of the Community internal market in the context of the programme which the Community has set itself for completion by 1992. Recent developments in fact give grounds to fear that this process may be slowed down.

The Commission draws the attention of the member states to the negative consequences of:

- the adoption of different quality standards for petroleum products which would create differences in refining costs and complicate intra-Community movements;
- different national practices in regard to the financing of security stocks;
- differences in the taxation of the same petroleum product leading to an increase in the disparities in consumer prices from one country to another. It would be preferable for the adjustment of excise taxes in response to the fall in the crude oil price to be made in a coordinated manner.

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I. The Community Oil Market

Oil Consumption

17. Projections have been prepared to 1990 for the Community energy balance for two oil price cases, namely \$15 and \$25/bbl. These projections are referred to a base case of 20/bbl. \$15 has been chosen because it is the minimum price at which the companies consulted consider the market will stabilise in the medium term. At such a price oil consumption is generally expected to increase significantly above its 1985 level because of higher GDP and energy demand growth and some inter-fuel substitution in favour of oil. The \$25 case (the results of which would be much the same for prices up to \$30) represents a return to the mid-1985 situation when oil was priced above alternative fuels. If the price stabilised in this region, GDP and energy growth would naturally be lower than in the \$15 case and oil consumption would decline slowly. For the base (\$20) case it is assumed that consumption remains at the 1985 level.

EEC-12 : Oil Consumption Scenarios\*

(millions of tonnes)

1984		497
1985 (prov.)		485
1990	\$25+	460
	\$20	485
	\$15	530

\*Based on consultations with oil companies in March 1986.

18. Company estimates given to the Commission of the effect upon world oil consumption in 1990 of a stable \$15 price mostly foresee an increase of at least 10% over 1985. The likely effect in the Community is generally thought to be smaller because of the increasing availability of nuclear power and natural gas, and political pressures in some member states to maintain large indigenous coal production. It would also vary considerably from country to country, depending upon the scope for increased use of residual fuel oil. In Germany, for example, electricity generation is expected to continue to be coal, lignite and nuclear based, while other industrial consumers, faced by strict controls on plant emissions, will switch to natural gas rather than incur the high costs of flue gas desulphurisation. Elsewhere in the Community some switching from coal to oil is to be expected, however, and even from natural gas to fuel oil in cases where gas prices are linked partially or wholly to gasoil.
19. In the view of the Commission a rise in oil consumption of the order of 10% over 5 years would bring with it the advantages for the oil industry of taking up excess capacity in refining and distribution and of reducing the need for expensive and energy intensive conversion of residues. It would not run counter to the Community policy of reducing the vulnerability associated with oil import dependence, provided that oil's share in total energy consumption did not rise, that the additional oil-burn occurred in dual fired plant, in those areas where this is technically possible, and that progress continued to be made in introducing dual and multi-fired capacity more widely.

#### The internal market

20. The Community oil market is relatively free of government restraints, except for Spain, Portugal and Greece, where the existing oil monopolies are still to be amended, and Ireland, where restrictions upon imports are allowed for the time being. Where, in other member states, commerce in petroleum products or their prices are still subject to government controls, they do not significantly affect intra-Community trade. As the results of the progressive removal or relaxation of controls in recent years, of improved transparency in consumer prices, and of the active trade among Member States, the pre-tax prices of petroleum products have converged considerably since 1980.
21. The Commission shares the concern of certain Member States that some of the progress made in liberalising the Community oil market may be undone by pressures upon Member Governments to act unilaterally in certain matters. The desire of certain Member States to adopt stricter measures of environmental protection than are acceptable to others, or to adopt common standards earlier (see section V), has the result of

increasing the costs of their domestic refiners relative to those of their neighbours. It also obliges export refineries to manufacture two or more qualities of the same product.

22. Many companies are concerned that differences in national policy regarding the holding of security stocks also result in differing costs for similar companies in neighbouring states. In normal stable times, these may be limited to the costs of carrying higher stocks in countries where companies are obliged to hold security stocks, but will increase greatly if falls in price dramatically reduce their inventory value. A general move to the centralisation of all security stocks would eliminate these discrepancies. Differences in emphasis and pace in implementing energy policy may also affect the competitiveness of individual refiners: those whose local outlet for residual fuel oil has been displaced by coal or nuclear power, for example, incur heavy costs in conversion or disposal of unsaleable material.
23. As regards consumer selling prices, varying fiscal treatment of petroleum products has already created considerable differences among Member States. This subject is fully discussed in "Petroleum Product Pricing in the Community" (Working Document SEC (85) 1301). As the crude oil price has fallen some Member States have raised excise taxes in varying degrees; others have left them unchanged. There is consequently a danger that existing discrepancies in the post-tax prices of the same product will be further increased. Such a development would be inconsistent with the objectives of the programme for completing the Common Market by the end of 1992.
24. Such discrepancies in refining costs and in consumer prices cause differences in the energy costs borne by consumers in the various Member States, inhibit inter-fuel competition, and may influence company decisions about the location of investments or capacity reductions.

#### Industry Profitability and Structure

25. The last ten years have, except for short periods, been characterised by low returns in refining and marketing. The companies have responded to declining volume and poor profitability by rationalising the whole of their downstream operations. In a few cases, where the share of a falling market was judged too small to be viable, companies have withdrawn altogether. Rationalisation and cost reduction have entailed not only concentrating refining in fewer more complex plants, with increased exchanges between them, but also reducing both the number of terminals and depots and the number of retail outlets. Exchange arrangements with other companies, and direct delivery over longer distances made possible by improved transport systems, have enabled companies to cover the same markets with far fewer supply points. Although all Member States have been affected by these changes, the pace of change has varied considerably,

particularly as regards the retail network. Whereas the number of outlets in Germany and the United Kingdom has already been greatly reduced, progress to date has been much less in Italy and France.

26. All these changes have so far had the effect only of reducing costs. Margins have remained depressed by the world-wide surpluses in crude oil production, shipping, refining and distribution, whose effects have been directly transmitted to the open Community market.
  27. Since late in 1985 the situation and prospects of the industry have been radically changed by the fall in the oil price and in the international value of the dollar, as well as by the generalisation of novel trading practices. All these changes tend to benefit the downstream activities at the expense of the exploration and production functions. If the price of crude oil stabilises at about \$15, the rise in oil consumption expected by 1990 should take up some of the world's spare capacity to ship, refine and distribute oil, so that international product prices should strengthen. In the Community the balance between capacity and demand would improve, unit costs would be reduced by higher throughput, and trading margins should rise. The situation of the less sophisticated refinery will tend to improve relative to its complex competitor because of the increase in demand for fuel oil. Assuming that the consumption of fuel oil rises by a larger percentage than gasoline, then conversion capacity is likely to be in excess supply and the motor gasoline price consequently weak.
  28. The introduction of netback deals has had the effect of assuring to the refiner a margin, albeit often slight, on his operations, and, depending on the netback formula used, of taking much of the risk out of crude oil purchasing in a falling market. It is doubtful, however, whether it will prove to be a durable form of trading. By motivating some refiners to increase volume with little regard for price, it strongly reinforces the downward pressure on prices in a weak market. The resultant fall in prices has so far been absorbed by the crude oil producers, but this cannot be acceptable to them over the long, or even medium, term. A return to more traditional trading methods is therefore to be expected.
  29. In this improved downstream environment, the pace of rationalisation will slow and withdrawals by established operators become less likely. The incentive for producers to integrate downstream will increase, but the costs of doing so will rise and the funds available for acquisitions diminish. A more stable industry structure in the Community than previously is therefore to be expected.
- If, on the other hand, the price returns to \$25 or above, little change is to be expected in the gradual decline in consumption and the process of rationalisation will have to continue.

## II. The Community's import policy and petroleum product imports<sup>1</sup>

30. At its meetings on 15 March, 20 June and 11 November 1985, the Council discussed the question of imports of petroleum products from non-Community countries. It decided to continue with the policy of openness pursued so far vis-à-vis the GSP (Generalized System of Preferences) countries provided that :
- a) the volumes coming from the new export refineries, mainly situated in Saudi Arabia, Kuwait and Libya, are marketed under normal commercial conditions; and
  - b) the other major consumer markets, especially the United States and Japan, adopt or confirm a policy of openness, comparable to that of the Community, vis-à-vis international trade in oil.

### Recent developments in the oil-exporting countries

31. In its March 1985 communication, the Commission analysed the expected developments in the refining sector in the oil-exporting countries, especially those in the Middle East and North Africa. The forecasts made at that time with regard to the bringing into service of the various new export refineries remain valid. The bringing into service in the near future of the Rabigh refinery (Petromin-Petrola) in Saudi Arabia and the increase in the capacity of the Mina Abdullah refinery in Kuwait will represent an additional capacity of around 500,000 b/d (25 million t/year). Once these new facilities are operational (towards the end of 1986), they should put an end to the wave of export refinery construction decided upon towards the end of the 1970s in the Gulf countries. No major new project is envisaged in the immediate future and it is even conceivable that the fall in oil prices, adversely affecting the available funds in the exporting countries concerned, might reduce the prospect of new investment.
32. The capacity utilization rate of the export refineries recently brought into service in Saudi Arabia in particular would seem to have been comparatively low in 1985 (between 50 and 60 %), as a result of operational difficulties and commercial considerations. In addition, the abandonment of refinery construction projects designed to cover the country's needs has resulted in an appreciable proportion (approximately one-third) of products coming from the export refineries being directed towards the Saudi internal market. The balance available for export will reportedly be distributed as follows : 25 % for the US market, 40 % for the Community and 35 % for the developing countries and the Far East.

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<sup>1</sup> The EEC's import policy and customs arrangements are described in paragraphs 45 and 46 of COM(85) 32 final of 1 March 1985. For 1986 the individual GSP ceilings per country are 225 800 t for light oils, 89 000 t for medium oils and 547 500 t for heavy oils.

Greater recourse to the "netback deals" formula should increase these refineries' capacity utilization rates in the course of 1986 and make them more competitive. That being so, in an oversupply situation, marketing problems could continue to arise, particularly in Saudi Arabia, as regards the share of production attributable to Petromin, since that company does not have refining and distribution facilities in the consumer countries.

33. Kuwait, thanks to its refining/distribution network in Europe, and Libya, in view of its pattern of exports which focuses to a large extent on fuel oils (generally used as feedstocks) and its proximity to the European market, could benefit from more regular outlets to the Community.
34. That being so, it can reasonably be expected that, with a higher capacity utilization rate (approaching 80 %) in the export refineries in Saudi Arabia in particular, and with the bringing into service in the near future of new facilities in that country and in Kuwait, exports of petroleum products from these regions could increase the volume of net imports of finished products into the Community. All other things being equal, the total volume of net imports of petroleum products could thus rise from 30 Mt in 1985 to approximately 40 Mt in 1990, after allowing for the expected increase in the internal consumption of the exporting countries concerned. This would represent around 8 % of the forecast internal consumption for the Community of Twelve at that time (compared with 7 % in 1985).
35. The conclusion of an agreement between the Community and the Gulf Cooperation Council countries would give the Community an opportunity to engage in regular exchanges of views with those countries e.g. concerning their policy on exports of refined products, thus improving the transparency of the patterns of trade between the two zones.

US and Japanese oil-import policy

36. The industrialized countries, and in particular the Community's two main partners, the United States and Japan, have also opted for a liberal approach - or at least a more liberal approach than hitherto - to international trade in oil. This approach was confirmed at the ministerial meeting of the International Energy Agency on 9 July 1985, and during bilateral meetings between the Commission and the US and Japanese authorities. The quarterly monitoring of the trend in refining and imports of petroleum products established by the Commission in March 1985 has been extended, following the conclusions of the IEA in July 1985, to cover all the OECD/IEA countries. It now provides an opportunity for verifying, on a quarterly basis, compliance with the commitments entered into by all the countries concerned with regard to the openness of their oil markets and the rationalization of their refining industry.
37. No particular changes in the American import arrangements regarding petroleum products occurred in the past year. There are still no quantitative restrictions, and low import duties are charged on imports from third countries, including OPEC countries which do not benefit from the GSP. Although in 1984/85 certain quarters were pushing for an increase in import duties on petroleum products in order to protect the refining industry, the fall in the rate of imports of petroleum products from third countries in recent months (1.3 million b/d in 1984 ; 1.1 million b/d in 1985) and the weakening of the dollar seem to have eased these fears.

The recent fall in oil prices and the resulting risks as regards American internal production are, however, generating new fears about the possible introduction of an import duty. The introduction of such a duty by the United States, in the absence of a general agreement among the industrialised countries, could have implications for the position adopted by the IEA in July 1985, especially if the duty were applied to products in a discriminatory manner.

38. Japan, for its part, has made substantial changes to its import arrangements. Following up the commitments entered into in the IEA, on 13 December 1985 Japan adopted a law on petrol, gas oil and kerosene imports which entered into force on 6 January 1986. The law in question represents definite progress since it authorizes imports of products which de facto could not be marketed in Japan hitherto. It is, however, only partially satisfactory in terms of the IEA conclusions since in practice only refiners established in Japan have the right to import.

Only the trend in import flows will make it possible to assess the real scale of the change made and its impact on international trade in petroleum products. It is to be expected that the rate of increase in imports of products, which rose from 0.750 million b/d in 1984 to 0.790 million b/d in 1985, will continue. Imports of the recently-deregulated products should increase to a greater extent. Accordingly, in the first two months of 1986, Japanese imports of petrol, kerosene and gas oil were reportedly 5.8 %, 9 % and 1 % respectively of the country's internal consumption.

Recent trends in the Community's external trade in petroleum products from non-Community countries

39. The proportion of total gross imports of products, including feedstocks, from non-member countries, continued to increase (by 12 %), reaching 105 Mt in 1985. Deducting exports to non-Community countries, the adverse external trade balance, including feedstocks, was reportedly some 75 Mt for the Community of Ten.
40. With regard to the origins of the petroleum products (including feedstocks) imported from third countries, the developing countries' share has again grown (by 35 %) to the detriment in particular of that of the industrialized countries (which has fallen by 3.6 %). The share of the State-trading countries has also increased, but only by 5 %. Deliveries from the developing countries now represent nearly half of the total (45 %), deliveries from the State-trading countries approximately 33 % and deliveries from the industrialized countries 22 %. Among the OPEC countries, it is the OAPEC countries and especially Libya (190 % increase) and Saudi Arabia (49 % increase) which have recorded the biggest changes. The increases in question should be seen in the light of the bringing into service of new export refineries in those two countries.
41. Turning to the trend in imports of petroleum products on the basis of customs treatment, the proportion of zero-duty imports has continued to increase relative to 1984 and now stands at over 65 %. Nearly half of the volumes in question concern semi-finished products necessitating subsequent chemical conversion or processing.

Imports under the GSP have also increased, and now cover 21 % of total imports. Consequently, only approximately 14 % of imports of products into the Community in 1985 were subject to normal Common Customs Tariff (CCT) duties.

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<sup>2</sup> The tables annexed to this communication and on which the analysis of external trade in petroleum products is based have been drawn up on the basis of NIMEXE data (customs statistics relating to external trade) and CRONOS data (SOEC statistics). Annex B.10 contains an explanatory note concerning these statistical sources. The data relate only to the Community of Ten, since Spain and Portugal have been members of the Community only since 1 January 1986.



42. With regard to the breakdown of imports, the proportion of heavy oils (gas oils/fuel oils) is now approaching three-quarters of total imports (73.4 %), light oils and medium oils have levelled off to some extent (17 % and 0.8 % respectively) while the share of the other products has fallen slightly (8.6 %) compared with 1984.
43. The share of heavy oils has steadily increased since 1981, partly as a result of more frequent recourse to these products as feedstocks for refineries and conversion units.
- Accordingly, nearly 47 % (48.9 Mt) of total imports of products from non-Community countries in 1985 were intended for specific processing or chemical conversion, representing nearly two-thirds of the total imports of heavy oils into the Community. Compared with 1984, the increase in imports for specific processing is around 9 Mt, i.e. close to the total increase of 11.3 Mt in imports from third countries.
44. The net import balance for finished products of the Community of Ten (feedstocks, estimated at 45 Mt, having been deducted) totalled approximately 30 Mt in 1985 (75 Mt-45 Mt), i.e. the same as in 1984.

#### Options open to the Community

45. International trade in petroleum products has been liberalized in recent months, in accordance with the Council's wishes. This is beneficial both for the consumer countries and for the producer countries.

It is important that the commitments entered into in the IEA/OECD framework are met by all the participating countries. Similarly, appropriate contacts should be maintained or developed with the main exporting countries in order to work towards the harmonious and balanced operation of world oil trade.

46. The trend in the last five years indicates that the balance of imports of finished products from non-member countries, after considerable fluctuations, levelled off in 1985. Many factors of uncertainty remain with regard to the future trend in import flows. For example, maintenance of crude oil sales following the "netback deals" formula might reduce the propensity of Community refiners to import large volumes of feedstocks. In addition, persistently low crude oil prices may result in an increase in consumption, but probably not a proportionate increase in imports of products from third countries.

Lastly, the expected increase in imports of products resulting from the bringing into service in the near future of the last export refineries scheduled for 1986 should be temporary and gradually level off between now and 1990 resulting in a net import balance of 40 Mt/year or 8 % of the Community's internal consumption.

### III. CAPACITY AND REFINING IN THE COMMUNITY

#### World distillation capacity

47. The problems of surplus primary capacity are not confined to the Community. They affect all parts of the world to varying degrees.

Table 1

#### Capacity and utilisations in the main regions of the world 1980-85

(million tonnes per year)

	1980		1982		1985		% change 85/80	
	Cap. %used		Cap. %used		Cap. %used		Cap. Intake	
USA	875	74	800	71	730	83	- 17	- 7
Japan	270	71	265	61	230	66	- 16	-21
EEC-12	905	63	810	59	640	70	- 29	-21
World(excl CPEs)	3170	71	3000	67	2645	77	- 17	-10

Sources : EEC-12 : Commission  
 Other regions : 1980 & 82 BP statistics  
 1985 Commission estimates

48. Table 1 shows, however, that these problems were felt more severely in the Community than elsewhere and that more radical measures had to be taken to remedy the situation.

Not only was surplus capacity in 1980 much higher than the world average (rate of utilisation of 63% compared with 71%) but the 21% fall in production between 1980 and 1985 was much greater than the world average of 10%. Compared with maximum primary capacity the reduction in capacity from 1980 to 1985 was greater in the Community (-31%) than in the United States (-20%) or Japan (-23%).

49. There has been an improvement in all regions especially since 1982. The average rate of utilisation of 77% is not far from the 80% level which is generally recognised as being a satisfactory minimum. The Community is, however, slightly below this minimum, its present rate of utilisation being around 70%.

Regional differences will diminish as a result of planned closures, particularly in Japan where 50 M.t./year are to be taken out of service.

#### Community distillation capacity

50. In the period from 1975 to 1985 primary distillation capacity in the Community's refining industry (EEC-12) increased between 1973 and 1977, stabilized at this level up to 1978 and then fell from 1979.

There are two reasons why primary capacity increased between 1973 and 1977 despite the first major slump in oil consumption in the wake of the 1973 oil shock. Firstly, a number of new refineries on which building had started before 1973 came into service in this period. Secondly, the relative rally in consumption between 1976 and 1979 prompted some companies to maintain and even increase their capacity.

The result was that from 1975 the refining industry was faced with a huge surplus capacity (see Table 2). Since 1980 the situation has 'deteriorated' following the second slump in consumption. In 1980 and 1981 surplus capacity even increased as the sudden drop in demand and rise in imports failed to be offset by closures in these two years.

Since 1982 the refining industry has been forced to speed up closures in order to reduce this surplus. This major rationalisation drive has led to an improvement in refining indicators with a 10-point rise in the rate of utilisation and a two-third drop in surplus capacity in 1985.

51. In quantitative terms this trend in the Community (EEC-12)<sup>2</sup> looks as follows:

- the primary distillation capacity, which increased from 810 Mt in 1973 to 925 Mt in 1979 (the maximum), has since dropped regularly in subsequent years to 655 Mt. in January 1985 and 415 Mt. in January 1986 (cf. Annex A.4);

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<sup>2</sup>For information we include some figures for the Community of Ten (EEC-10):

- (a) Primary capacity rose from 788 M.t. in 1973 to 844 M.t. in 1977 (maximum), falling to 574 M.t. in January 1985 and 541 million tonnes in January 1986 (an overall reduction of 36%).
- (b) Capacity reductions and closures accounted for 305 million tonnes between 1977 and January 1986.
- (c) The number of refineries of over one million tonnes in service fell from 120 to 82 as a result of 38 plants being closed.

- primary installed capacity thus fell by 83% between 1977 and January 1986;
- outbacks and closures of primary distillation capacity between 1977 and January 1986 can be estimated at 320 Mt
- the number of refineries with more than 1 Mt. in operation dropped by 38 from 132 in 1977 to 94 in January 1986 (see Table 4);
- the excess capacity, which had reached 230 Mt. in 1981, had come down considerably (see Table 2) to 50 Mt. in January 1986;
- the rate of utilisation dropped from 84% in 1973 to 65% over the period 1975-80 and 59% in 1981-82. From 1984 onwards the upward trend in the rate of utilisation was confirmed, reaching 70% in 1985. Over the entire period from 1975 to 1985 the rate of utilisation was thus considerably below the threshold of 80%.

Table 2

EUR-12 : Nominal primary capacity, quantities processed, excess capacity and rate of utilisation

(in million tons)

	Nominal primary capacity		Quantities processed	Capacity required to cover the quantities processed at 80 % utilis.	Excess capacity (2-4) (*, **)	Rate utilisation % (3:2) (**)
	at 1 Jan.	at mid-year				
	1	2	3	4	5	6
1973	800	810	682	855	-	84
1975	860	880	550	690	190	63
1977	915	920	592	740	180	64
1979	925		632	790	135	60
1980	920	905	570	715	190	63
1981	875	870	510	640	230	59
1982	835	810	475	595	215	59
1983	760	745	464	580	165	62
1984	700	680	465	580	100	67
1985	655	640	450	565	75	70
1986	615					

(\*) Excess capacity is calculated by the difference between the nominal capacity at mid-year and the capacity required to cover the quantities processed in the refineries at a rate of utilisation of 80%.

(\*\*) Calculated on the basis of capacity at mid-year.

52. Since 1977 the Council has recognised the need to rationalise the distillation capacity in the Community. Developments in refining capacities since 1977 prove that considerable success has already been achieved.

The trend towards an improvement in the refining situation was confirmed quite clearly in 1984 and 1985, although the objective of an 80% rate of utilisation of capacity at Community level was not attained. A further reduction in capacities will be necessary, but to what extent will depend on future consumption developments (see point 65).

#### Distillation capacity in the Member States

53. Over the period 1977-85 reductions in primary capacity were not the same in all Member States, the percentage reductions at 1 January 1986 compared with maximum capacity varying greatly :

- Germany (-45%)<sup>1</sup> and Belgium (-44%) have a considerably higher shutdown percentage than the Community average (-33%);
- France (-37%)<sup>2</sup>, the United Kingdom (-37%) and Italy (-34%) are above the Community average;
- the Netherlands (-24%), Denmark (-24%), Portugal (-23%), Spain (-15%)<sup>3</sup>, Greece (-11%) and Ireland (-0%) are below the Community average.

The utilisation rates of primary capacity<sup>4</sup> also vary greatly, from over 80% in Germany, Denmark and the United Kingdom to less than 60% in some countries, including Italy and Portugal. Excess capacities are proportionally higher in the countries of this latter group.

<sup>1</sup>-----  
<sup>1</sup>The rate of utilisation is calculated on the basis of the total quantity of crude oil and feedstocks processed in the refineries.

54. Changes in capacity levels in 1985, and forecast for 1986-89, are as follows :

Table 3

(in million tons)

	Capacity at 1.1.85	Reduction in 1985	Reduction in 1986-89	Capacity at 1.1.90	Reduction from max. level
EUR-12	656,6	40,1	41,9	574,6	-38%
B	31,2	0	-1,6	29,6	-46%
D	104,1	-16	-9,2	78,9	-51%
E	66,5	-5	0	61,5	-15%
F	110,5	0	-13,7	96,8	-45%
I	128	-6,5	-9,8	111,7	-39%
NL	73,6	-1,1	-5,8	66,7	-35%
UK	99,1	-11,5	-1,8	85,8	-38%

Capacity in the other member states is unchanged since 1 January 1985: Denmark (8.3); Greece (18); Ireland (2.9); Portugal (14.4) and no change is envisaged up to 1990.

#### Conversion and upgrading capacity in the Community

55. The oil refining industry has expanded conversion capacity in response to major changes in the pattern of consumption.<sup>4</sup> Installed conversion capacity in the Community (EEC-12) almost tripled between 1973 and January 1986 (see Annex A9). In terms of equivalent catalytic cracking capacity, conversion capacity now accounts for 23% of installed primary capacity (compared with 7% in 1971), and corresponds to 32% of refinery throughput (compared with 8% in 1973).

Conversion capacity utilisation is generally over 80% : most companies have a policy of running their conversion units flat out, in order to maximise output of petrol and high value-added products, and obtaining the balance of their needs for other products (gas oil and fuel oil) through international trade channels.

<sup>4</sup> Between 1973 and 1985 internal deliveries (in EEC-10) of heavy fuel oil fell from 175 to 67 million tonnes (a 62% drop), deliveries of gas oil also fell, although be less, (from 176 to 149 million tonnes, a 15% fall) and petrol deliveries rose from 73 to 84 million tonnes (i.e. a 15% increase).

Existing conversion capacity, combined with that due to come on stream in the next few years, will be adequate to meet the forecast level and pattern of consumption up to 1990.

A surplus of conversion capacity might develop if the present fall in the oil price were to continue, bringing a recovery in heavy fuel oil consumption. This would give a somewhat heavier product barrel in 1990 than in 1985 and consequently less need for conversion.

Table 4 :

EUR-12 : Restructuring in the oil refining industry 1977-86.

Type of refinery	1977			January 1986		
	N°	Primary Capacity mio t/an	%	N°	Primary Capacity mio t/y	%
Simple	88	379	41	24	68	11
semi-complex	15	82	9	16	73	12
complex	48	455	50	61	477	77
TOTAL	151	916	100	101	617	100
dont raff. $\geq$ 1 Mt/an	132	908		94	615	

(1) Definitions

"Simple refinery" : Primary distillation plus reforming and hydro-desulphurisation

"Semi-complex refinery" : "Simple refinery" plus visbreaking unit and thermal crackers.

"Complex refinery" : "Simple" or "semi-complex" refinery plus catalytic cracker, hydrocracker or coking unit.

56. In addition to conventional units for the conversion of heavy residues, refineries have added, or plan to add, units needed to produce lead free petrol and low sulphur gas oil in response to changes in product quality standards (see Chapter IV).
57. Refiners have a choice of three methods for producing more lead free petrol :
- further refining and reforming their product and stepping up the production of petrol compounds with a high octane number;
  - buying alcohol-type additives (methanol, ethanol, TBA) or ether (MTBE) which when mixed with petrol raise its octane number;

- producing some of these additives in the refineries.

Some refineries already have units for producing high octane additives (mainly TBA and MTBE) and others are planning units which will come on stream by 1990. Because of the fairly short lead time required for such units (two years) and the possibility of using this process as an alternative or in addition to further refining processes, the present uncertainty as regards the market penetration rate of lead-free petrol in the Member States should not be a serious problem for the industry between now and 1990.

Nevertheless in the 1990's, as the proportion of lead-free petrol increases and in spite of the contribution to be obtained from oxygenated organic substances, the refineries will have to make considerable further investments. Only about one third of present reforming capacity produces the high octane petrol that will be required in future and the industry will therefore have to gradually modify or replace most of the plant at present in operation.

58. Where low sulphur gas oil is concerned the desulphurisation capacities currently in operation or under construction will enable the refineries to produce gas oil with a 0.3% sulphur content. According to the industry, lower content levels will require additional desulphurisation capacities and costs will be high as a larger proportion of gas oil will have to be treated, even that obtained from low sulphur crudes.

#### Employment Trends in the Community Refining Industry

59. The estimates provided in the Communication to the Council of March 1985 of job losses resulting from the rationalisation of the refining industry are still largely valid. The net loss of jobs to end 1986 is estimated to be in the region of 16,000 (see annex A.10). Although this figure is relatively low compared with losses in other big industries, the local effects of shutdowns have been considerable in some cases.
60. Future prospects will depend firstly on demand upon refineries and secondly on investment programmes. The demand is mainly a function of the oil price. Investment will be determined by decisions yet to be taken in the Council regarding the standards to be met in regard to product quality and plant emissions, subjects discussed in Section IV. At all events, high levels of investment will have to be kept up into the 1990's.
61. If the price stabilises at US\$15 and demand rises, future closures should not exceed at most 10 refineries, employing about 5,000 people. If demand stagnates or declines then these figures could rise to 20 sites and 10,000 people. Past experience suggests that the majority of those concerned would be re-employed or leave with a pension.
62. Indirect job losses in firms dependent on refineries may be one to three times direct losses, according to local circumstances. On the other hand, there are gains to employment in the



refining and construction industries resulting from investments in new plants. A study made by the Netherlands Economic Institute in October 1984<sup>5</sup> suggests that, for the level of investment maintained by the Community industry over the period 1975-90, these gains are of a similar order of magnitude to the indirect losses due to closures. It should be emphasised, however, that new jobs created by industry investment are often in different areas from those where refineries are closed. The local consequences of closures in areas of high unemployment may consequently be severe.

Balance for the Community refining industry for the period 1973-1990.

63. The full balance for the Community refining industry (EEC-12) is set out in Annex A4, which gives historical figures for the period 1973-1984, the situation in 1985 (provisional figures) and a forecast for the period 1986-1990 based on the baseline scenario (see point 64).

Broadly speaking, the balance for the Community refining industry between 1973 and 1985 may be summarised as follows :

- a 25% drop in oil consumption;
- an even bigger drop in the amount of oil refined (down 34%) due to the reversal in the Community's external trade balance so that, from being a net exporter (27 M.t.) it is now a net importer (30 M.t.);
- low utilisation rate over the whole period 1975-85 in spite of the substantial reduction in primary capacity by the industry (by 31% between 1979 and 1985); however the utilisation rate did rise considerably in 1984 and 1985.

64. Table 5 gives a concise statistical history and suggests three scenarios for the period from 1986 to 1990.

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<sup>5</sup>"The Significance of Shell Investments for the Dutch Economy".

Table 5

## EEC-12 : The Community Refining Industry 1973-90

(in million tons/year)

				Baseline scenario		Scenarios	
	1973	1984	1985 (1)	1986	1990	A 1990	B 1990
Total consumption	648	501	485	485	485	530	460
Net imports of finished products	-27	30	30	40	40	40	40
Primary energy sources (3)	1	5	5	5	5	5	5
Drawn from stocks	-3	1	-	-	-	-	-
Crude oil and feedstocks processed by the refinery	682	465	450	440	440	485	415
Nominal primary capacity (mid-year)	810	680	640	600	575	575	575
Utilisation rate (%)	84	68	70	73	77	84	72
Surplus primary capacity	-	100	75	50	25	-	55

(1) Provisional figures for 1985

(2) Including bunkers and in-house consumption by refineries.

(3) Directly usable associated products, including those from the production of natural gas.

The baseline scenario assumes that oil consumption in the Community will remain unchanged between 1985 and 1990 and that net imports will increase from 30 M.t. in 1985 to 40 M.t. in 1990. It assumes an oil price of USD20/barrel.

Scenario A assumes that total consumption will increase by 2% a year, i.e. by 10% between 1985 and 1990, and that the price of oil will remain low (USD15/barrel), stimulating demand.

Scenario B assumes that total consumption will drop by 1% a year, i.e. by 5% between 1985 and 1990, and that the price of oil will increase again (to USD25/barrel or more) stifling demand.

Thus scenarios A and B differ from the baseline scenario in their consumption trends, import assumptions being the same in all three cases.

65. These three scenarios concerning demand for oil products between 1985 and 1990 result in very different positions for the refining industry by the year 1990:

Scenario A (increase in consumption) will result in absorption of surplus primary capacity by 1990; in other words, there should be no reduction of capacity apart from closures already planned by the industry (some 40 million tonnes) and possibly the closure of one or two obsolete refineries.

Scenario B (decrease in consumption) will result in surplus primary capacity of 55 million tonnes by 1990; in order to achieve a utilisation rate of 80%, capacity will have to be reduced by a total of 95 M.t. by 1990 by closing principally simple refineries but also some complex ones.

The baseline scenario represents the middle path. By 1990 there will still be surplus capacity of 25 million tonnes, which means that capacity will have to be reduced by 65 million tonnes to achieve a satisfactory utilisation rate.

These figures of primary capacity closures of 95 M.t and 65 M.t. by 1990 include the 40 M.t. closures already planned by the industry.

#### IV. Petroleum product quality and environmental protection measures

##### 66. Changes in product quality and substitute fuel components

Recently a series of national and Community measures have been adopted to protect the environment more effectively. Others are planned. They concern the lead content in petrol and the sulphur content in gasoil and therefore have a direct bearing on the quality of the refined products allowed onto the market and, hence, on the economics of refining.

##### Lead in petrol

67. Directive 85/210/EEC of 20 March 1985 concerning the lead content of petrol retains the previous 0.15-0.40 g/l limit on the permitted lead content in petrol and lays down the quality standards for unleaded petrol brought onto the market (minimum motor octane number : 85.0; minimum research octane number : 95.0 at the pump).

Several Member States (Germany, Denmark, Belgium, the Netherlands, the United Kingdom, Luxembourg and Greece for the Athens area) have already adopted the lower limit of 0.15 g/l. This has necessitated investment (in alkylation and isomerisation) and new refining practices (for example, more severe reforming) on the part of the industry.

68. The Directive also calls for the introduction of unleaded petrol throughout the Community by 1989. To stimulate demand for unleaded petrol immediately, several Member States have introduced tax incentives to offset the increase in production costs, compared with those for leaded petrol, and to enable pump prices for unleaded petrol to undercut leaded petrol. Some are even aiming at making regular leaded petrol the top-priced grade, thus, in practice, squeezing it out of the market. This would obviate the need for four pumps, since only leaded premium, unleaded regular and unleaded premium petrol would be sold. But in return the octane pool at refineries would increase. To date, Denmark, Germany and the Netherlands have all decided to introduce measures of this type. These tax changes call for the same response from the refining industry as the switch to low-lead petrol.

##### Substitute fuel components

69. One alternative to more severe refining as a means of compensating for the lowering of the octane number brought about by the obligation to produce low-lead or even lead-free petrol is for the refining industry to turn to substitute fuel components. At the moment this normally takes the form of addition of methanol blended with tertiary butyl alcohol (TBA) and ethers such as methyl tertiary butyl ether (MTBE) or tertiary amyl-methyl ether (TAME).

Council Directive 85/536/EEC of 5 December 1985 lays down the permissible percentages of these substitute fuel components in petrol. Consumption of these components by the oil industry is rising steadily, from 400,000 tonnes in 1980 to over 1.5 million tonnes in 1985; estimates suggest that it will reach 4 million tonnes by 1990. At present, almost all these additives are produced away from the refineries. But several oil companies have decided to add MTBE and TAME units to their refineries.

#### Sulphur content of gas oil

70. Community Directive 75/716/EEC limits the sulphur content in gas oils for motor vehicles and in domestic heating oil to between 0.5% and 0.3% by weight. In July 1985 the Commission put to the Council a proposed amendment lowering the sulphur content in gas oil to 0.3% and permitting the adoption of a limit of 0.2% in special circumstances. The Council discussed this proposal in November 1985 and again in March 1986 without reaching agreement.

Existing capacity combined with the planned investments will be enough to enable the Community refining industry as a whole to turn out gas oil with a sulphur content of 0.3%. But a 0.2% limit in certain regions, countries or even Community-wide would entail, in the opinion of the industry, extra investment at most refineries. But this issue must be seen against the background of the demand expectations, and in particular the steady increase in demand for gas oil for motor vehicles, even though petrol consumption remains virtually stagnant.

Still in the same field, a series of national tax measures to protect the environment have been boosting demand for diesel-powered cars. All these factors could create problems for the refining industry, which, in the long run, might be unable to maintain present-day diesel fuel quality, and in particular cetane numbers and fuel density.

The Commission will keep a close watch on the impact of the national measures taken to implement these Directives and on any problems which they pose for the oil industry.

#### Consequences of the environmental protection measures for the refining industry.

71. The environmental measures concerning refined product quality (i.e. the lead content in petrol and the sulphur content in gas oil) are not the only measures affecting the refining industry. It is also subject to a series of constraints on refinery operation. A host of national and Community measures limit gas or dust emissions into the atmosphere, discharges of liquid effluents, procedures for treating cooling water from various processes, noise, etc.

The Commission has asked an outside consultant to assess the financial impact (in terms of investment and operating costs) of the national and Community environmental measures applicable to the refining industry in each Member State. The final

report should be ready in June 1986 and will be forwarded to the Member States. Amongst other things, it will help to assess how far the impact of the environmental measures differs from one member state to another.

#### Harmonisation of refined products

72. Within the Intergovernmental Conference, the Heads of Government of the Member States have taken the political decision to do everything necessary to create a single internal Community market by the end of 1992. For the oil industry, this implies harmonisation of refined product specifications to put an end to all barriers to trade within the Community.

At present, specifications for refined products such as petrol or gas oil are laid down by national legislation, national standards or voluntary agreements by the industry. Even though, in practice, consumers find no problem in using petroleum products, intra-Community trade is a different matter.

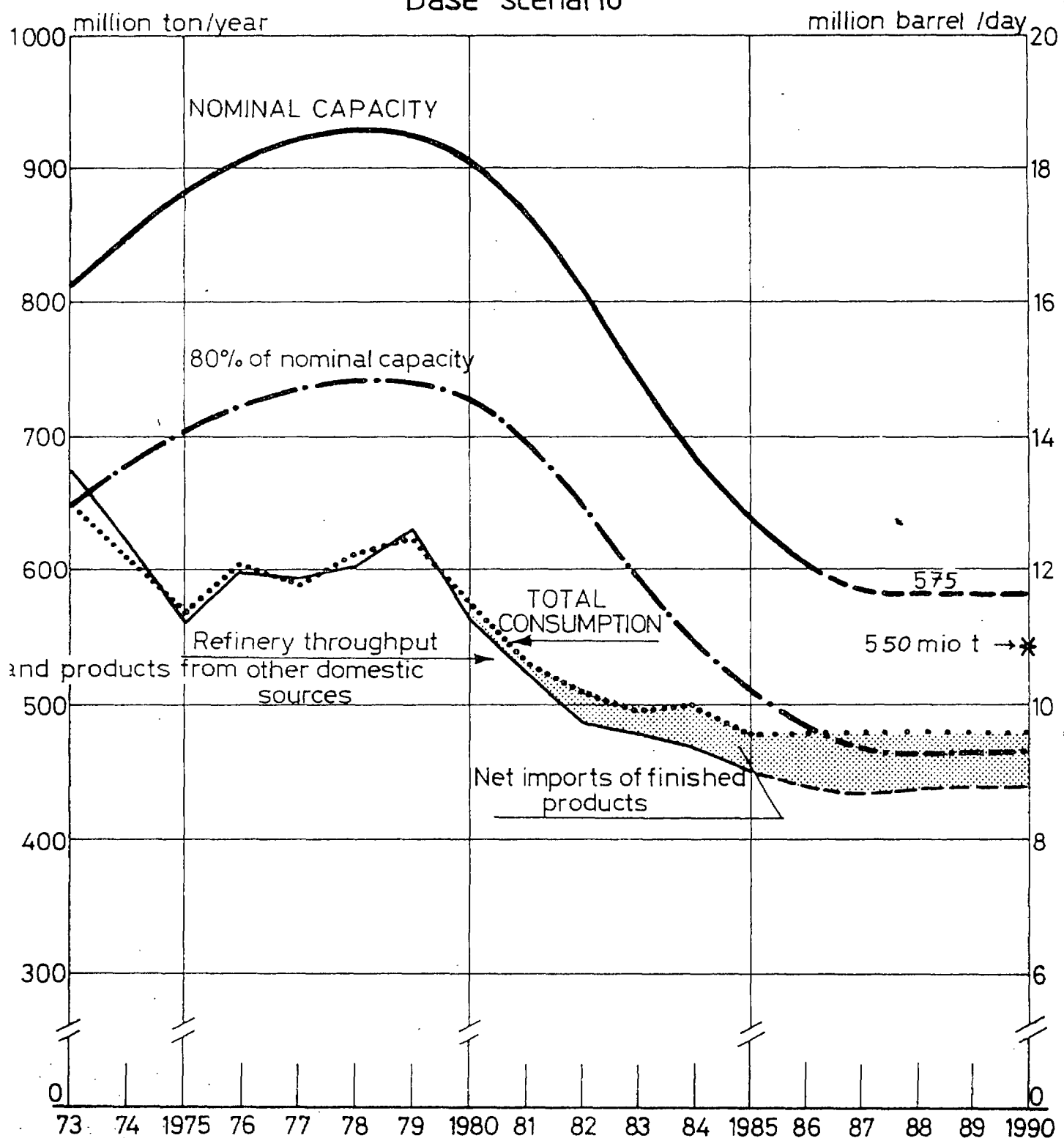
With no significant changes expected in market demand for petrol or gas oil in the medium term and complex product specifications to be satisfied, Community-wide standardisation would be highly desirable. And it would free the refining industry from having to consider which market the products were bound for.

The Community's objective must therefore be to harmonise refined petroleum products by 1992. This would in no way preclude the present practice of setting permissible ranges for certain parameters influenced by specific factors such as climate.

\* \* \*

# EUR-12: Primary distillation capacity, total consumption and demand on refineries and other sources (1973-1990)

Base scenario

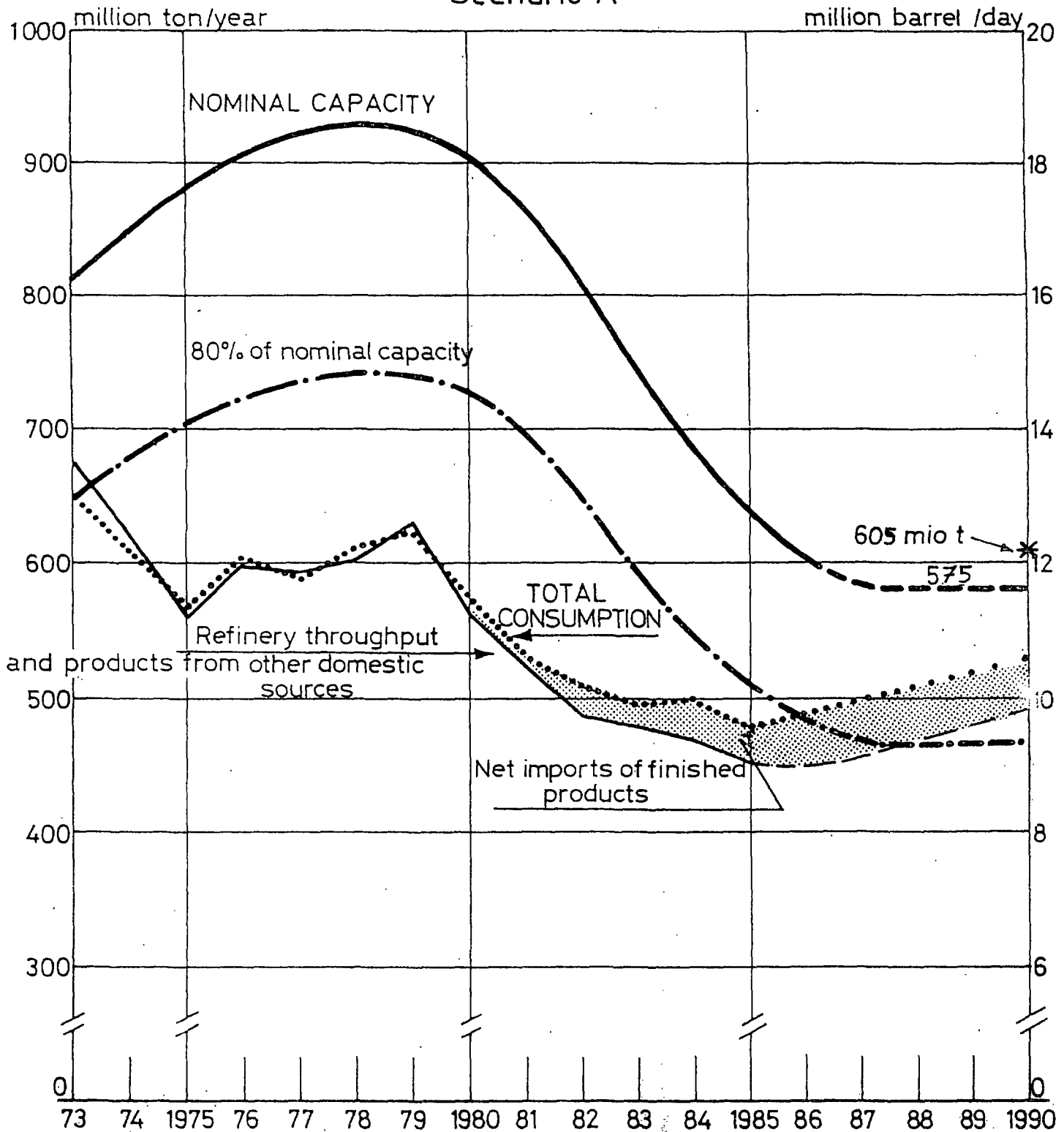


BASE SCENARIO = STABLE CONSUMPTION UP TO 1990

\* Nominal Capacity required in 1990 (at 80% utilisation).

# EUR-12: Primary distillation capacity, total consumption and demand on refineries and other sources (1973-1990)

## Scenario A



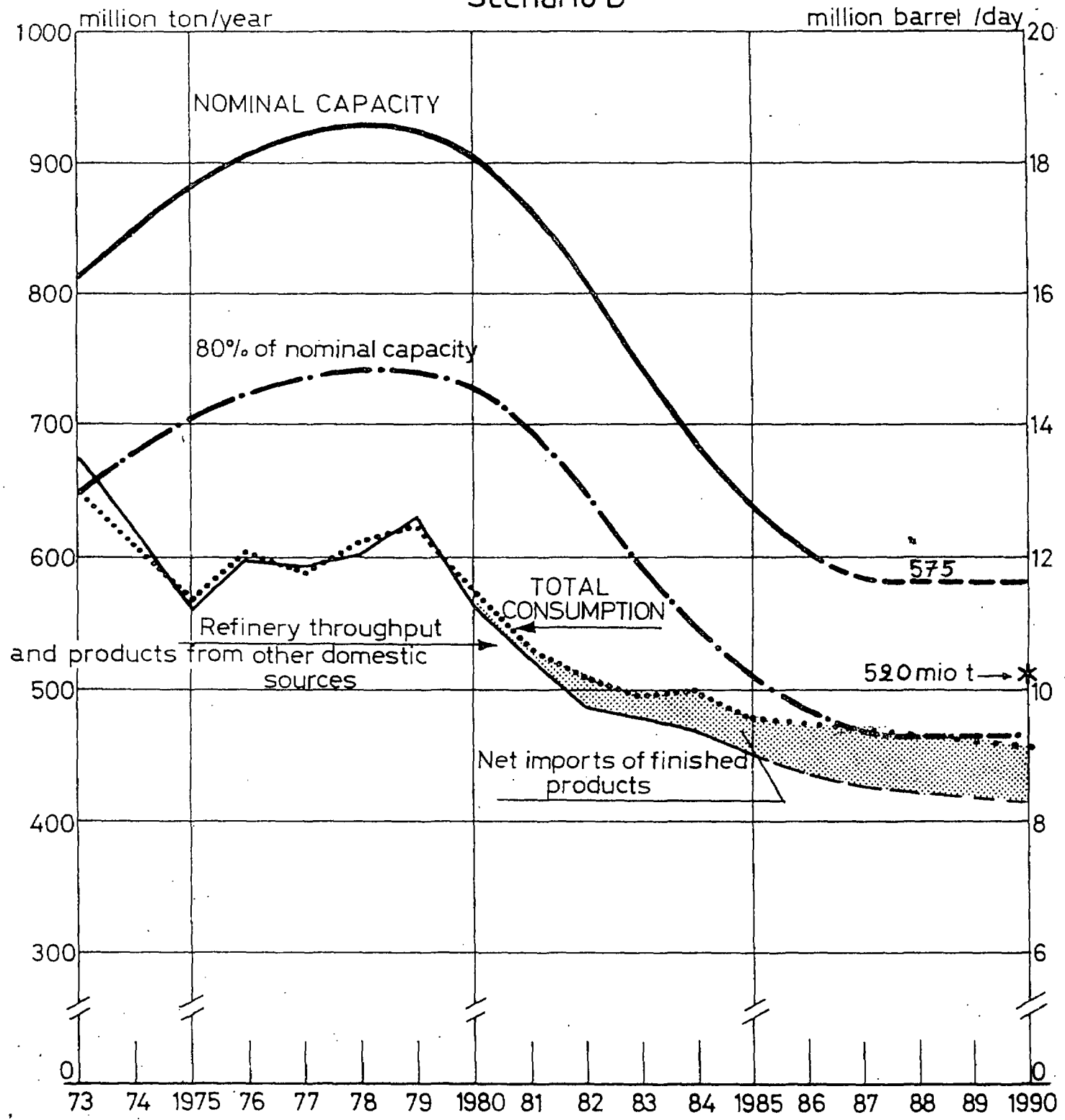
SCENARIO A = HIGHER CONSUMPTION IN 1990 (+2% per year)

\* Nominal capacity required in 1990 (at 80% utilisation)



# EUR-12: Primary distillation capacity, total consumption and demand on refineries and other sources (1973-1990)

## Scenario B



SCENARIO B = LOWER CONSUMPTION IN 1990 (-1% per year)

\*: Nominal capacity required in 1990 ( at 80% utilisation)

EEC-12 : REFINING BALANCE 1973 - 1990

(in million tons).

	Mid-Year Capacity (Primary Distillation)		Total Consumption	Net Imports (Exports) of Finished products	Demand from domestic sources (3 - 4)	Products from primary sources	Products from (to) Stocks	Statistical Difference	Refinery Intake	Utilisation %  (9 : 1)
	Nominal	Usable (80% of 1)								
	1	2								
1973	810	650	648	- 27	675	1	- 3	- 5	682	84
1974	845	675	608	- 14	622	1	-11	- 4	636	75
1975	880	705	567	4	563	1	13	- 1	550	63
1976	900	720	605	4	601	1	4	- 4	600	67
1977	920	735	589	- 2	591	1	- 1	- 1	592	64
1978	925	740	611	7	604	1	6	- 2	595	64
1979	925	740	625	- 4	629	2	- 9	4	632	68
1980	905	725	577	12	565	2	- 5	- 2	570	63
1981	870	695	534	8	526	2	12	2	510	59
1982	810	650	510	22	488	3	9	1	475	59
1983	745	595	495	16	479	4	10	1	464	62
1984	680	545	501	30	471	5	1	0	465	68
1985*	640	510	485	30	455	5	0	0	450	70
1986*	600	480	485	40	445	5	0	0	440	73
1990*	575	460	485	40	445	5	0	0	440	77

\* Estimates

Sources : Eurostat for EEC-10 and OECD for Portugal and Spain

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A. 4  
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E.E.C. : REDUCTION IN PRIMARY DISTILLATION CAPACITY SINCE 1977

CAPACITY, AMOUNTS PROCESSED, UTILISATION AND TOTAL CONSUMPTION IN 1985

(in million tons)

	Max. CAPACITY		1985				1.1.1986		1990	
	CAPACITY	YEAR	AVERAGE CAPACITY	AMOUNTS PROCESSED (*)	UTILISATION	TOTAL CONSUMPTION (*)	CAPACITY	% RED.	CAPACITY (*)	% RED.
E.E.C. - 12	926	1979	637	450	71	485	617	- 33	575	- 38
E.E.C. - 10	844	1977	558	400	72	437	541	- 36	499	- 41
BELGIUM	55,3	1977	31,2	19,8	63	22,5	31,2	- 44	29,6	- 46
DENMARK	10,9	1977	8,3	7,0	84	11,1	8,3	- 24	8,3	- 24
F.R. GERMANY	159,4	1979	96,1	84,8	88	114,4	88,1	- 45	78,9	- 51
FRANCE	174,5	1977	110,5	76,6	69	82,9	110,5	- 37	96,8	- 45
GREECE	20,3	1977	18,0	12,0	67	12,0	18,0	- 11	18,0	- 11
IRELAND	2,9	1977	2,9	1,3	45	3,8	2,9	0	2,9	0
ITALY	183,2	1977	124,8	72,3	58	83,4	121,5	- 34	111,7	- 39
NETHERLANDS	102,4	1977	73,1	48,0	66	28,1	72,5	- 29	66,7	- 35
PORTUGAL	18,7	1980	14,4	7,5	52	8,0	14,4	- 23	14,4	- 23
SPAIN	72,1	1980	64,0	45,2	71	40,1	61,5	- 15	61,5	- 15
UNITED KINGDOM	138,0	1978	93,4	77,5	83	79,4	87,6	- 37	85,8	- 38

(\*) Commission estimate  
 DG.XVII-C-2 - 17 April 1986

NOTE ON ANNEXUtilisation

Figures express total intake of crude oil and feedstocks as a percentage of nominal primary distillation capacity.

They are consequently overstated to the extent that some feedstocks by-pass the primary distillation process. This overstatement is particularly significant in the case of Germany.

E.E.C. : FALL IN PRIMARY DISTILLATION CAPACITY 1977-90

(capacities on 1 January, in millions of tonnes/year)

	max. capacity (*)	1980	1985	1986	1990 (**)
Belgium	55	55	31	31	30
Denmark	11	11	8	8	8
F.R. Germany	159	154	104	88	79
France	175	167	111	111	97
Greece	20	20	18	18	18
Ireland	3	3	3	3	3
Italy	183	180	128	122	112
Netherlands	102	102	74	73	67
Portugal	19	19	14	14	14
Spain	72	72	67	62	62
United Kingdom	138	137	99	88	86
EEC-10	844	829	576	541	499
EEC-12	926	920	657	617	575

(\*) Maximum capacity reached in 1980 for Spain and Portugal, in 1979 for Germany and EEC-12, in 1978 for the United Kingdom and in 1977 for the other States and EEC-10.

(\*\*) Commission estimate based on closure notices published in the press and on information received from oil companies.

## E.E.C. : FALL IN PRIMARY DISTILLATION CAPACITY 1985-90

State	Capacity on 1 Jan. (Mt)	Closures and reductions (RED) in capacity (Mt)
B	1985 : 31,2 1986 : 31,2 1990 : 29,6	1986 : Reduction - 1,6
DK	1985 : 8,3 1986 : 8,3 1980 : 8,3	
DE	1985 : 104,1 1986 : 88,1 1990 : 78,9	1985 : BP/ENI Ingolstadt -4 BP - Olwerke Schindler -0,4 Mobil Wilhelmshaven -8 Saarland Refinery -3,6 1986 : Esso Hamburg -5,5 Esso/Shell Misburg -2,3 1987 : Wintershall Lingen RED -1,4 } - 1,6 } - 7,8
F	1985 : 110,5 1986 : 110,5 1990 : 96,8	1986 : Reduction -4,0 Mobil Frontignan -5,7 Shell Paulliac -4 } -13,7
GR	1985 : 18,0 1986 : 18,0 1990 : 18,0	
IR	1985 : 2,9 1986 : 2,9 1990 : 2,9	

State	Capacity on 1 Jan. (Mt)	Closures and reductions (RED) in capacity (Mt)
IT	1985 : 128,0 1986 : 121,5 1990 : 111,7	1985 : ENI-SAROM Ravenna -2 TOTAL - AQUILA Trieste -4,5 1986 : Reduction -2,5 1987/88 : ENI-IP Rho -4 Reduction -3,3 - 6,5 - 7,3
NL	1985 : 73,6 1986 : 72,5 1990 : 66,7	1985 : Reduction -1,1 1986 : Reduction -5,8
P	1985 : 14,4 1986 : 14,4 1990 : 14,4	
SP	1985 : 66,5 1986 : 61,5 1990 : 61,5	1985 : EMP Cartagena RED - 4,0 Reduction - 1,0 - 5,0
UK	1985 : 99,1 1986 : 87,6 1990 : 85,8	1985 : BP Llandarcy -5,5 Reduction -5,7 Shell Ardrossan Bitumen -0,3 -11,5 1986 : Reduction -1,8
EUR-10	1985 : 575,7 1986 : 540,6 1990 : 498,7	Closures and reductions in 1985 : -35,1 in 1986 : -33,2 in 1987/1989 : - 8,7
EUR-12	1985 : 656,6 1986 : 616,5 1990 : 574,6	Closures and reductions in 1985 : -40,1 in 1986 : -33,2 in 1987/1989 : - 8,7

EEC - 12 : CONVERSION CAPACITY (mt/a)

CEE-12 : CAPACITE DE TRAITEMENT DES INSTALLATIONS DE CONVERSION (Mt/an)

	<u>1973</u>	<u>1981</u>	<u>1983</u>	<u>1985</u>	<u>1986</u>	<u>1990</u>
Cat. Craker/Craqueurs catalytiques	43.7	47.6	70.4	79.8	83.0	83.4
Thermal Cracker/Visbreaker Craqueurs thermiques/Viscoréducteurs	22.2	44.8	65.5	66.2	66.1	72.4
Hydrocracker/Hydrocraqueurs	2.1	5.8	6.7	10.6	10.5	13.0
Coker/Cokéfaction	-	1.4	9.0	7.1	7.1	8.6
<b>Total</b>	<b>68.0</b>	<b>99.6</b>	<b>151.6</b>	<b>163.7</b>	<b>166.7</b>	<b>177.4</b>
Cat. Cracker Equivalent*/Capacité équivalente de craqueurs catalytiques	55.4	74.4	114.3	134.1	137.0	147.4
% of installed primary capacity/ % par rapport à la capacité primaire	7	9	15	21	23	25
% of estimated crude processed/ % du brut traité	8	15	25	31	32	35

\* Based on total distillate yield as percentage of feed, relative to that of a cat-cracker. Ratios use are :  
Visbreaker 0.33 - Thermal Cracker 0.65 - Hydrocracker 1.3 - Coker 1.7 - Flexicoker 2.1 - Hydroconversion 2.1.

\* Sur base du rendement total en distillat exprimé en pourcent de l'alimentation, par rapport à celui de cracker  
catalytique. Les rapports utilisés sont : Viscoréducteur 0.33 - Craqueur thermique 0.65 - Hydrocraqueur 1.3 -  
cokéfaction 1.7 - Flexicocker 2.1 - Hydroconversion 2.1.



EEC-12 : Effect on employment of changes in refining structure  
(includes only refineries over one million tons/year)

EUR-12 : Effects sur l'emploi des changements dans la structure du raffinage  
(comprend seulement les raffineries d'une capacité supérieure à 1 Mt/an)

	1 9 7 7				1 9 8 6			
	Refineries Raffineries		Average Moyenne	Total	Refineries Raffineries		Average Moyenne	Total
	No.	%	No. employed * nombre d'emplois *		No.	%	No. employed * Nombre d'emplois*	
Simple/semi-complex Simple/semi-complexe	84	64	450	37.800	33	35	450	14.850
Complex/Complexe	48	36	550	26.400	61	65	550	33.550
Total	132	100	-	64.200	94	100	-	48.400

Est. reduction in employment 1977-1986 : - 15.800

\* Based on sample of 42 refineries. Ignores falls in employment due to higher productivity.

\* Sur base d'un échantillon de 42 raffineries. Ne tient pas compte des réductions d'emplois dues à des augmentations de productivité.

Employees in employment by sex and NACE class  
(cont.)

Salariés par sexe et par classe de la NACE  
(suite)

1 000

	BR Deutsch- land	France	Italia	Neder- land	Belgique/ België	Luxem- bourg	United Kingdom	Ireland	Danmark	EUR 9
	Mineral oil refining - NACE 14 - Raffinage de pétrole Total									
1974	36,2	37,9 (estim)	23,3	10,8	6,0	:	27,7	0,3	2,0	144,2
1975	36,0	34,9	24,4	10,9	5,6	:	27,8	0,3	1,7	141,7
1976	34,9	34,2	24,1	10,4	5,3	:	26,5	0,3	1,8	137,5
1977	33,1	34,0	24,6	10,3	5,6	:	26,2	0,3	1,1	135,2
1978	32,2	33,2	25,0	10,0	5,4	:	28,8	0,3	1,2	136,2
1979	31,8	32,7	24,7	9,8	5,4	:	33,0	0,3	1,3	139,0
1980	32,0	32,6	26,1	10,0	5,6	:	33,0	0,3	1,2	140,8
1981	32,5	32,6	25,9	10,7	5,7	:	31,0	0,4	3,2	141,9
1982	32,4	31,7	25,0	10,6	5,5	:	27,0	0,4	3,5	136,1
1983	31,7	30,6	25,0 (est)	10,8	5,0	:	24,0	0,4	3,1	130,6
1984	29,9	29,6	24,9	10,0	4,7	:	23,0	0,4	3,2	125,7
1985	28,1	-	-	-	-	:	-	-	-	-
1984/1974	-6,3	-8,3	+1,6	-0,8	-1,3	:	-4,7	+0,1	+1,2	-18,5
%	-17%	-22%	+7%	-7%	-22%	:				-13%

N.B. Les changements de séries sont indiqués par \_\_\_\_\_

Source : Eurostat.

Includes personnel employed on refining sites but engaged in work other than refining such as distribution, blending and packing of lubricants and bitumen, etc..

Y compris le personnel employé sur les sites des raffineries mais travaillant à des activités autres que le raffinage tels que la distribution, les mélanges, le conditionnement des lubrifiants, le bitume, etc...

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A: 11

PETROLEUM PRODUCTS IMPORTS OF THE EUROPEAN COMMUNITY  
FROM THIRD-PARTY COUNTRIES

in thousand tons

Petroleum products imports from third-party countries to the E.C.	1984	1985	Variations 1985/	
			000 t.	% 1984
All products/all uses, of which:	94 202	105.533	+ 11 331	+ 12.0
- light oils	15 770	18 188	+ 2 418	+ 15.3
- medium oils	559	863	+ 304	+ 54.4
- gas-oil	22 002	28 015	+ 6 013	+ 27.3
- fuel-oils	46 095	49 389	+ 3 294	+ 7.1
- other products	9 776	9 078	- 698	- 7.1
All products/all uses, of which:	94 202	105 533	+ 11 331	+ 12.0
- specific treatment or chemical conversion	40 733	49 245	+ 8 512	+ 20.9
- other uses (destined for consumption)	53 469	56 288	+ 2 819	+ 5.3
All products/all uses, from:	94 202	105 533	+ 11 331	+ 12.0
- Industrialized third countries, of which:	24 266	23 397	- 869	- 3.6
EFTA	10 212	9 184	- 1 028	- 10.1
United States	6 254	6 840	+ 586	+ 9.4
Spain	4 892	4 641	- 251	- 5.1
- Developing countries, of which:	37 076	47 562	+ 10 486	+ 28.3
OPEC (total)	27 179	36 803	+ 9 624	+ 35.4
. Venezuela	3 418	4 357	+ 939	+ 27.5
OAPEC (total) (Egypt included)	25 314	35 053	+ 9 739	+ 38.5
. Algeria	7 228	8 099	+ 871	+ 12.0
. Libya	1 669	4 847	+ 3 178	+ 190.4
GCC (total)	12 443	15 948	+ 3 505	+ 28.2
. Saudi Arabia	2 916	4 349	+ 1 433	+ 49.1
. Kuwait	9 146	10 521	+ 1 375	+ 15.0
- Countries with State trade, of which	32 860	34 574	+ 1 714	+ 5.2
. USSR	24 427	27 519	+ 3 092	+ 12.7
. Romania	5 723	4 166	- 1 557	- 27.2

Source: External trade statistics of the Community  
(customs declarations: Nimex System) - Feedstocks included

EUR-10 - BALANCE OF INTRACOMMUNITY TRADE AND TRADE WITH THIRD-COUNTRIES TO THE EC OF PETROLEUM PRODUCTS

Evolution from 1981 to 1985 (1)

Balance net importer/(exporter) of all petroleum products (including feedstocks)

in millions of tonnes

	1 9 8 1		1 9 8 2		1 9 8 3		1 9 8 4		1 9 8 5	
	Balance intra-EC	Balance extra-EC	Balance intra-EC	Balance extra-EC	Balance intra-EC	Balance extra-EC	Balance intra-EC	Balance extra-EC	Balance intra-EC	Balance extra-EC
France	(3.6)	6.3	(0.0)	10.5	1.7	9.9	1.6	7.2	0.3	9.7
Belg. - Lux.	(3.3)	0.7	(1.2)	2.0	(0.4)	2.7	(0.1)	3.4	0.8	3.9
Netherlands	(16.7)	7.1	(21.7)	9.9	(24.0)	9.0	(28.6)	8.7	(29.0)	12.8
F.R.G.	17.4	8.1	17.1	10.1	20.7	12.3	21.3	12.0	24.9	13.3
Italy	(0.3)	8.6	(2.0)	10.0	(0.5)	16.1	(1.3)	20.5	(1.6)	22.6
United Kingdom	(2.3)	2.6	(2.6)	4.6	(3.5)	5.7	0.7	11.5	(2.4)	9.7
Ireland	4.1	0.2	3.8	0.2	2.8	0.2	2.8	0.3	2.6	0.2
Denmark	3.1	2.4	2.7	3.6	1.2	3.1	(0.0)	3.6	0.3	3.6
Greece	(0.2)	(0.6)	(0.4)	(1.0)	(0.2)	(0.6)	(0.5)	(0.4)	(0.7)	(0.1)
EUR-10 feeds incl.	(1.9)*	35.5	(4.3)*	49.9	(2.2)*	58.4	(4.0)*	66.9	(4.6)*	75.5
feeds excl.	n.a **	7.0	n.a **	21.3	n.a **	15.5	n.a **	29.4	n.a **	29.6

\* Statistical error : Difference between the import and export returns at intra-Community level

Source : External trade statistics of the Community and trade between Member States (customs declarations : NIMEXE nomenclature)

n.a. \*\* : non available

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EUR-10 - PETROLEUM PRODUCTS IMPORTS OF THE EUROPEAN COMMUNITY  
FROM THIRD-PARTY COUNTRIES

Period: YEAR 1985

Quantities: in thousand tons

	EUR-10	FRG <sup>1)</sup>	FRANCE	ITALY	NETHERL.	BELG./ LUX.	UNITED KINGDOM	IRELAND	DENMARK	GREECE
All products/all uses, from:	105 533	16 399	14 897	28 987	17 294	6 212	15 317	205	5 015	1 207
- Industrialized third countries, of which	23 397	5 186	2 928	4 120	2 204	1 018	4 372	24	3 417	127
EFTA	9 184	3 035	573	263	764	312	893	0	3 343	1
United States	6 840	1 154	1 251	2 298	735	323	1 023	8	3	46
Spain	4 641	789	688	206	510	311	2 044	16	72	5
- Developing countries, of which:	47 562	4 190	8 188	18 267	6 090	1 596	8 013	22	452	744
OPEC (total)	36 803	3 715	6 347	15 220	4 673	1 008	4 919	-	340	580
. Venezuela	4 357	362	431	2 125	437	81	659	-	262	-
OAPEC (total) (Egypt included)	35 053	3 324	6 685	14 453	4 315	975	4 481	-	77	744
. Algeria	8 099	1 782	1 413	1 937	1 922	141	856	-	47	-
. Libya	4 847	344	528	1 415	457	165	1 917	-	22	-
GCC (total)	15 948	1 069	3 081	8 313	1 771	303	1 276	-	-	135
. Saudi Arabia	4 349	195	1 108	2 022	335	248	336	-	-	105
. Kuwait	10 521	830	1 392	6 041	1 360	19	870	-	-	9
- Countries with State trade, of which:	34 574	7 023	3 780	6 601	9 000	3 598	2 931	159	1 146	336
. USSR	27 519	5 813	3 228	3 470	8 114	3 361	2 589	159	616	169
. Romania	4 166	149	296	2 992	355	50	192	-	-	133

1) Imports from GDR not included

Source: External trade statistics of the Community (customs declarations: NIMEXE System) - Feedstocks included

EUR-10 - PETROLEUM PRODUCTS IMPORTS OF THE EUROPEAN COMMUNITY  
FROM THIRD-PARTY COUNTRIES

Period: YEAR 1984

Quantities: in thousand tons

	EUR-10	FRG <sup>1.</sup>	FRANCE	ITALY	NETHERL.	BELG./ LUX.	UNITED KINGDOM	IRELAND	DENMARK	GREECE
All products/all uses, from:	94 202	14 978	11 520	26 297	12 581	6 419	16 381	292	4 975	758
- Industrialized third countries, of which:	24 266	4 927	3 194	4 189	1 845	1 086	5 107	40	3 792	87
EFTA	10 212	3 231	850	91	532	133	1 806	32	3 536	0
United States	6 254	897	1 581	2 133	277	224	847	2	238	56
Spain	4 892	635	343	228	752	668	2 222	6	18	20
- Developing countries, of which:	37 076	3 170	5 580	14 466	4 648	1 003	7 638	52	143	375
OPEC (total)	27 179	2 685	4 051	12 321	3 446	564	3 658	-	81	373
. Venezuela	3 418	140	300	2 063	116	59	697	-	44	-
OAPEC (total) (Egypt included)	25 314	2 654	4 425	10 838	3 310	488	3 188	-	37	375
. Algeria	7 228	1 346	1 449	1 623	1 496	155	1 134	-	22	2
. Libya	1 669	113	205	847	93	74	337	-	-	-
GCC (total)	12 443	1 035	1 782	6 471	1 627	219	1 289	-	15	4
. Saudi Arabia	2 916	60	940	664	571	146	535	-	-	0
. Kuwait	9 146	975	685	5 719	1 007	50	690	-	15	4
- Countries with State trade, of which:	32 860	6 881	2 745	7 642	6 088	4 331	3 636	200	1 041	296
. USSR	24 427	5 891	2 334	3 742	5 326	4 281	2 148	190	449	66
. Romania	5 723	56	264	3 729	426	1	1 112	10	-	125

1. Imports from GDR not included

Source: External trade statistics of the Community (customs declarations: NIMEXE System) - Feedstocks included

EUR-10 - OIL PRODUCTS IMPORTS BY COUNTRY OF ORIGIN AND  
ECONOMIC AREA - IN % OF TOTAL THIRD COUNTRIES IMPORTS <sup>(1)</sup>

in %

	1981	1982	1983	1984	1985
- Industrialised countries of which :	20.2	24.5	27.0	25.8	22.2
EFTA	9.6	8.6	11.4	10.8	8.7
USA	7.6	9.7	8.6	6.6	6.5
SPAIN	1.9	4.2	4.9	5.2	4.4
- Developing countries of which :	44.9	40.4	37.7	39.3	45.1
O.P.E.C.	25.2	25.4	27.1	28.9	34.9
O.A.P.E.C. (*)	22.3	21.1	24.1	26.9	33.2
G.C.C.	9.6	8.4	11.5	13.2	15.1
Saudi Arabia	5.2	2.7	1.3	3.1	4.1
Kuwait	3.3	5.2	9.3	9.7	10.0
- State trading countries	34.9	35.1	35.3	34.9	32.7

(1) Source : E.E.C. external trade statistics - NIMEXE - Feedstocks included

(\*) Egypt included

A N N E X

EUR-10 - ANALYSIS OF OIL PRODUCTS IMPORTS FROM THIRD COUNTRIES ON THE BASIS OF CUSTOMS DEFINITIONS (1)

in mio t./in %

	1 9 8 1		1 9 8 2		1 9 8 3		1 9 8 4		1 9 8 5	
	mio t	%	mio t	%	mio t	%	mio t	%	mio t	%
A) Imports at zero duty :	41.8	65.0	52.9	66.7	58.1	65.8	59.8	63.5	69.2	65.6
- For specific treatment or chemical conversion	26.3	40.9	32.8	41.4	41.4	46.9	40.7	43.2	49.2	46.6
- By virtue of preferen- tial agreement	15.5	24.1	20.1	25.3	16.7	18.9	19.1	20.3	20.0	19.0
B) Imports under GSP	11.1	17.3	11.3	14.2	12.5	14.2	16.1	17.1	22.0	20.8
C) Imports subject to normal CCT duty	11.4	17.7	15.1	19.1	17.7	20.0	18.3	19.4	14.3	13.6
Total imports from third countries	64.3	100.0	79.3	100.0	88.3	100.0	94.2	100.0	105.5	100.0

(1) Source : E.E.C. External Trade Statistics - NIMEXE. Feedstocks included.



EUR-10 - PATTERN OF OIL PRODUCTS IMPORTS FROM THIRD COUNTRIES <sup>(1)</sup>

in %

	1981	1982	1983	1984	1985
Light oils	24.1	18.9	17.9	16.7	17.2
Medium oils	1.4	1.2	1.0	0.6	0.8
Heavy oils	61.9	69.2	70.5	72.3	73.4
- gasoil	(21.8)	(24.2)	(25.3)	(23.3)	(26.6)
- fuel-oils	(40.1)	(45.0)	(45.2)	(49.0)	(46.8)
Other products (of which LPG)	12.7	10.7	10.6	10.4	8.6

(1) Source : E.E.C. External trade statistics - NIMEXE - Feedstocks included.

EUR-10 - IMPORTS FROM THIRD-PARTY COUNTRIES BY CATEGORY OF PRODUCT AND BY IMPORTING MEMBER STATE  
YEARLY EVOLUTION FROM 1983 TO 1985

(in million tons)

		EUR-10	FRG*	FRANCE	ITALY	NETHERL.	BELG/LUX	UNITED KINGDOM	IRELAND	DENMARK	GREECE
1983	1. Specific treatment/ chemical conversion	41.4	9.7	4.9	8.7	10.4	3.2	3.9	0.0	0.6	0.1
	2. Other uses	46.9	5.4	9.5	14.6	4.2	2.7	6.2	0.2	3.8	0.2
	3. All products/all uses (1+2) of which light and medium oils heavy oils (gasoil + fuel-oils)	88.3 (16.7) (62.3)	15.1 (4.9) (9.1)	14.4 (2.7) (9.1)	23.3 (2.4) (18.3)	14.6 (3.5) (10.4)	5.9 (0.6) (4.9)	10.1 (1.7) (6.9)	0.3 (0.1) (0.2)	4.4 (0.7) (3.3)	0.3 (0.0) (0.1)
1984	1. Specific treatment/ chemical conversion	40.7	9.4	2.8	11.6	6.5	4.5	4.9	0.0	0.8	0.4
	2. Other uses	53.5	5.6	8.7	14.7	6.1	1.9	11.5	0.3	4.2	0.4
	3. All products/all uses (1+2) of which light and medium oils heavy oils (gasoil + fuel-oils)	94.2 (16.3) (68.1)	15.0 (4.7) (8.9)	11.5 (2.4) (7.1)	26.3 (2.3) (21.2)	12.6 (4.1) (6.9)	6.4 (0.5) (5.6)	16.4 (1.2) (14.1)	0.3 (0.0) (0.2)	5.0 (0.9) (3.5)	0.8 (0.1) (0.6)
1985	1. Specific treatment/ chemical conversion	49.2	10.1	3.6	11.7	10.0	4.9	6.9	0.0	1.1	0.9
	2. Other uses	56.3	6.3	11.3	17.3	7.3	1.3	8.4	0.2	3.9	0.3
	3. All products/all uses (1+2) of which light and medium oils heavy oils (gasoil + fuel-oils)	105.5 (19.1) (77.4)	16.4 (4.8) (10.2)	14.9 (3.2) (10.0)	29.0 (2.6) (22.9)	17.3 (4.5) (12.1)	6.2 (0.8) (5.0)	15.3 (2.0) (12.2)	0.2 (0.1) (0.1)	5.0 (1.0) (3.8)	1.2 (0.1) (1.0)

\*) Imports from GDR not included

Source: Statistics of Community external trade and trade between Member States  
 (Customs declarations : NIMEXE nomenclature)- Feedstocks included.

## EUR-10 - OVERALL PATTERN OF OIL PRODUCTS EXTERNAL TRADE

in mio t.

	1981	1982	1983	1984	Provisional figures 1985	Variations 1985/1984 in %
- Total imports of finished products *	122.5	138.7	136.0	145.1	145.0	- 0.1
- Total exports of finished products *	115.5	117.4	120.5	115.7	115.4	- 0.3
- Net imports (exports) of finished products	7.0	21.3	15.5	29.4	29.6	+ 0.7

SOURCE : CRONOS (national statistics) Feedstocks excluded

\*) Intra-Community trade included

Annex D 10EXPLANATORY NOTES ON THE STATISTICS ON IMPORTS OF PETROLEUM  
PRODUCTS INTO THE COMMUNITY

The Community has two main sources of statistics on imports of petroleum products from non-Community countries. First, it has the "NIMEXE" statistics on the Community's foreign trade and on trade between Member States, compiled from customs sources. Second, there are the "CRONOS" data from a variety of sources, including the national authorities, industrial federations, etc.

NIMEXE offers detailed information on the precise types of products imported, on their origin and on the customs and tariff treatment given. These are therefore the most useful statistics for analysing imports from non-Community countries.

However, they draw no clear distinction between imports of consumer products and imports of feedstocks needing further refining.

This distinction is fundamental, however, for the purposes of assessing the real impact of imports on activity in the refining industry. Consequently, the Commission also uses the CRONOS data to compile the overall statistics on foreign trade in petroleum products, as set out in the Annex, and the statistics on refining in the Community.

Unlike the NIMEXE statistics, the CRONOS figures cover general trade in the Community, including transfers from customs warehouses. For the quarterly statistical surveys, they do not normally contain declared feedstocks imports.

However, it is not absolutely certain that all feedstocks imported are declared as such. For one thing, some Member States are unable to differentiate clearly between imported feedstocks and feedstocks produced at their own refineries. For another, feedstocks can be imported without declaring them as such, for instance under the GSP or preferential agreements.