# **COMMISSION OF THE EUROPEAN COMMUNITIES**

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## THE DEVELOPMENT OF AN ENERGY STRATEGY FOR THE COMMUNITY

Communication from the Commission to the Council

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The development of an energy strategy for the Community

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### Introduction

1. In the course of recent years the European Council has repeatedly declared the need for the Community to face up to the energy challenge.

This has led to two Council Resolutions — in 1974 and in 1980<sup>1</sup> — setting Community energy objectives whose main features are a reduction in oil dependence through the more rational use of energy and a broader diversification of energy supply.

But it has not led to the implementation of an overall strategy comprising action by the Community, Member States and producers and consumers. The inadequacy and inconsistency of the action taken in the wake of these expressions of political will can only be deplored.

Relatively slack demand between 1975 and 1980, combined with weak pricing and taxation policies, reversed the upward movement in real oil prices, leading to a certain complacency and slackening of efforts to use energy more efficiently and to replace oil. The events in Iran, which caused price tensions on the world market, gave rise to a new interest on the part of governments. The consequent vigilance displayed at a Community and an international level has helped to prevent any new pressures on the oil market in the short term. But the longer-term problems still await satisfactory solutions. It is inevitable in these circumstances that the scope for a sustained upturn in economic growth will be constrained once again by undue dependence on oil.

In stressing this situation the Commission does not intend to belittle the importance of the political commitments which have been made or that of the measures already adopted at national and at Community level. Its objective is to present — in the context of the follow-up work to its Report on the mandate of 30 May<sup>2</sup> — a framework for action allowing the Community to respond more effectively and without harmful delay to the serious challenges which the energy question raises now and for the future.

# The challenges to the Community

2. Despite the success of efforts to reduce energy and oil demand since 1973 the Community is still the single largest oil importer in the world (8.7 mbd in 1980).

More than half of these imports come from three countries (Saudi Arabia, Libya and Nigeria).

The broader international picture is also far from comforting. It would be risky to count on a fall or even a stabilizing in demand for energy.

As far as the less developed countries (LDCs) are concerned a marked increase is a real possibility. At the same time world market supplies for oil will be derived from a diminishing number of oil exporters, with Saudi Arabia playing a more and more dominant role.

3. The Community economy has been badly hit by the effects of the doubling of oil prices in 1979. The challenge is to shield it from the risk of further pressure, both by reducing as rapidly as possible the Community's dependence on oil and also by taking effective measures to limit possible causes of increase in the price of its supplies.

To these ends measures need to be taken both on the energy demand side (energy saving and rational use of energy) and on the supply side (diversification). In the latter field efforts must be stepped up, particularly by increasing coal consumption, pursuing vigorous nuclear programmes and by developing renewable energy sources.

4. To bring about the necessary changes will require first and foremost action within the Community itself. But its success will depend heavily on what is done externally. The industrialized countries need to work together if they are to reduce their dependence on oil. Avenues for cooperation with the energy exporting countries to assure stable supplies while respecting their legitimate interests must be explored. Finally, the serious problems faced by a large number of developing countries as a result of their position as oil importers calls for rapid, vigorous and broad action by the world community. The European Community has at its disposal instruments which allow it to give technical and financial help to these countries so as to enable them to develop their resources.

<sup>&</sup>lt;sup>1</sup> OJ C 153, 9.7.1975; OJ C 149, 18.6.1980.

<sup>&</sup>lt;sup>2</sup> Supplement 1/81 — Bull. EC.

5. But in other ways too the process of change poses new challenges and offers new hopes. The energy transition will have far-reaching consequences for Community industry, offering prospects for the development and application of new technologies to help revitalize the industrial base. This is underlined in the fifth medium-term economic policy programme. The challenge is to maintain the continuity of action required in the face of short-term economic fluctuations. Such continuity is essential both to give confidence and to ensure lasting changes.

## Forms of Community action

6. To meet these challenges the first imperative is to ensure more rapid progress towards consistency between energy policies of Member States. All Member States have a common interest in the success or failure of energy policy throughout the Community. Differences of effort and achievement between Member States will not only mean widening divergences in the security of energy supply. They will also adversely affect the level of economic activity in the Community as a whole. Equivalence of effort does not require any substantial centralization of energy policy instruments; nor does it require the pursuit of uniformity in the diversification of supply, which must vary according to national circumstances. But it does call for collective discipline going beyond mere expressions of common agreement. The policies of each Member State must reflect a willingness to pursue common goals.

Every year the Commission presents a report<sup>2</sup> on the energy policies of Member States in the light of the Community objectives and after consulting national administrations. By drawing attention to progress made and to constraints and weaknesses this report must now become the instrument ensuring consistency. It will be submitted to the Council, together with appropriate proposals and recommendations, after examination by the Medium-term Economic Policy Committee and the Energy Committee.

- 7. In the second place specific Community action must be set in train where this is required by the provisions of the Treaty or where it will be more effective than the sum of national measures even when these are properly coordinated. This is true as much for action within the Community as in external relations, where solidarity strengthens collective security of supply.
- 8. Some action must be supported by financial means, whether from the Community budget or from the Community's lending instruments. Up to now recourse to these means has enabled significant support to be given, but this has been limited in relation to the total financing requirements of the energy sector. The tables annexed to this paper summarize the figures.

The necessary role for Community finance is already recognized in some areas, notably research and development, aid to LDCs and aid to certain kinds of investment. There are other sectors, such as technological demonstration and the encouragement of certain categories of investment, where spending is essential to meet common energy objectives and to improve collective energy security. Community financing measures in these sectors should also command general support.

It is of course true that the success of common action cannot be measured in terms of the amount of budgetary finance involved. Many of the objectives described above can and should be pursued through, for example, better coordination of national policies supported by a system of agreed analysis and recommendation. But the financial means available to the Community must be equal to the requirements for action determined by its strategic objectives. The amounts assigned to energy in the Community budget must therefore grow more quickly than in the past, reflecting the strategic priorities.

9. These principles of action will be applied to every sector of energy supply and demand.

It is generally accepted that coal should have a more important role to play in Community energy supply. The scope for possible reconversion to coal is considerable, especially in industry. Large expenditure is needed throughout the Community in this area and in coal transport, import and storage. The basis therefore exists

<sup>&</sup>lt;sup>1</sup> European Economy No 9. July 1981.

<sup>&</sup>lt;sup>2</sup> Bull. EC 2-1981, points 1.5.1 to 1.5.7.

for a re-examination of Community coal strategy and for common action to ensure greater consistency between the coal policies of Member States, and to bypass the sterile arguments between coal-producing and coal-importing countries in the Community. In its absence the prospects for coal within the Community will remain uncertain, damaging the morale of the coal industry and adding further uncertainties to the development of new technologies in the coal sector.

The development of nuclear energy is vital to ensure security of energy supply and one of the main ways of reducing dependence on oil. The pursuit of vigorous nuclear programmes is an essential element in an economic policy for Europe aimed at overcoming structural problems in the energy sector.

The Community can help to ensure the best possible progress in the nuclear sector not only by exercising its specific responsibilities in the field but also by setting the development of nuclear power within the framework of an overall energy strategy.

Natural gas has become over the past fifteen years an important element in the energy balance of Member States, making a useful contribution to diversification of supply. Maintenance of this trend, however, poses a number of problems as regards security of deliveries, coordination of investments and coherence in pricing policy.

New energy sources have a great potential for growth, but there are problems of cost and of timing. A smooth entry onto the markets of all Member States will not be assured without action ahead of time (in research and technological development). Such action will not bear all its fruit — in the energy and industrial fields — without a Community approach taking account of the different possibilities in each Member State.

Oil is bound to remain a major element in the Community's energy balance, and the bulk of oil supplies will come from outside. There must be Community solidarity in measures to guarantee security of these supplies. The pricing of oil products must reflect both the need to reduce oil dependence and the objectives of economic policy.

On the demand side, structural change is already under way. This must be continued so

that consumers can adapt in the best possible economic conditions to the shift from oil to other energy sources.

Agriculture is a special case both on the supply and the demand side.<sup>1</sup>

It consumes directly and indirectly large amounts of energy. It has therefore an urgent need for new technologies and additional investment to reduce its energy consumption. But while increases in oil product prices set new constraints on agriculture, they also offer the possibility of new outlets for products of agricultural origin for use as raw material for energy production. The Community has every interest in promoting progress in both these directions and in using its financial instruments to that end.

Between now and the end of March 1982, the Commission will set out its views in each of these areas in more detail, together with proposals.

## **Operational priorities**

- 10. There are five main priorities for Community action:
- ensuring an adequate level of investment both in alternatives to oil and in the more rational use of energy;
- the development of a common approach to energy pricing and taxation;
- the establishment of measures of Community solidarity to avoid instability on the markets;
- the reinforcement of common policies in the fields of research, development and technological demonstration:
- the further development of common approaches and initiatives in external energy relations.

#### Investment

11. Diversifying the sources of energy supply and the more rational use of energy (including energy saving) will require a major investment effort.

<sup>&</sup>lt;sup>1</sup> Supplement 6/80 — Bull. EC.

- 12. At the present time energy investment is stagnating at around 1.6% of GDP. The most optimistic forecasts of Member States point to a possible rise to an average of 2.2% of GDP over the decade. Over the same period the United States expects energy investment to amount to above 4% of GDP and Japan to between 3 and 3.5%. The particular circumstances of these countries are not a sufficient explanation of this difference in order of magnitude. If the Community does not take the necessary decisions its overall level of investment could be too low, adversely affecting its ability to adapt to high energy costs and thereby its competitiveness.
- 13. There is, moreover, a real risk that the forecasts themselves will not be realized. Action must therefore be taken in relation to every factor liable to influence the level of investment:
- Many decisions are held up by the uncertainty of investors and consumers about future trends in oil import prices and about the energy pricing and taxation policies of public authorities. The action proposed by the Commission on energy pricing and taxation (see page 13) will have an essential role to play in this respect.
- There are risks inherent in the industrial application of new processes such as coal gasification and liquefaction or in the large-scale exploitation of solar energy and other renewable energy sources. The action proposed by the Commission in the field of technological demonstration (see page 14) is intended to help overcome the constraints on the behaviour of investors in this field.
- Public concern is another factor delaying certain projects. It is felt most clearly about the health and safety risks in nuclear programmes. More recently it has also been expressed in relation to the ecological impact of increased coal consumption.

The Community has a direct role to play both in presenting balanced information on the advantages and disadvantages of different ways of meeting energy needs and in developing common action to resolve specific problems. Community action in the fields of research on radioactive waste disposal, improving security of supply and safeguarding nuclear materials must be strengthened. The Commission will present proposals very shortly.

• The recession and the risk that it may persist also raise doubts about the profitability of certain investments.

This factor weighs particularly heavily on the development of investments in the more rational use of energy: in new energy-efficient equipment, the conversion of oil-fired heating and motive power to coal, and the application of new energy technologies in industry. These investments offer the best prospects for the regeneration of Community industry and for the direct and indirect creation of employment, and they have the most direct effects in reducing oil imports and helping the balance of payments.

- 14. Two studies completed for the Commission have examined, respectively, the technical feasibility of rapid advances in the more rational use of energy1 and its investment and employment implications,<sup>2</sup> concluding that the scope for and benefits of accelerated investment on the demand side are considerable. The upper limit of cost-effective investment of this kind amounts perhaps to as much as 250 000 million ECU over this decade. These investments are delayed, however, because they involve a large number of decision-makers households and companies — many of whom are affected in the present economic climate by problems of short-term profitability and access to external finance on acceptable terms.
- 15. There is already an active debate on how to accelerate these investments, and the Commission is conducting with the aid of Member States a detailed survey of the perspectives and problems associated with investment in the more rational use of energy. This survey will enable it to define the most effective ways of stimulating these investments and will serve as a basis for proposals in this area that will follow shortly from the Commission.

In the meantime the Commission will propose that the New Community Instrument should be used more in support of investment in the more rational use of energy with a specific tranche set aside for that purpose. The Commission will also use interest-rate subsidies financed from the ECSC budget to support the same kind of investment in the coal and steel sectors.

<sup>&</sup>lt;sup>1</sup> In favour of an energy-efficient society.

<sup>&</sup>lt;sup>2</sup> Investment and employment in an energy-efficient society.

Investment in energy saving and in substitution for oil must be encouraged both as a means of reducing the share of oil in total energy consumption and because of its favourable effects on the level of economic activity and employment. The responsibility of the Community in this field is linked to that in the field of medium-term economic policy.

#### Prices and taxation

16. Through its impact both on energy demand and in the long term on energy investment, energy pricing has a fundamental role to play in the pursuit of energy policy objectives. But pricing policy also has wider implications, affecting industrial competitiveness and trade between Member States and with the rest of the world. A common approach to energy pricing is therefore a critical determinant of the coherence of the energy policies of Member States, supporting investment policy and enabling proper judgments to be made about the effectiveness of energy saving measures and the economics of alternatives to oil. Moreover, it is essential to the avoidance of distortions in intra-Community competition and in the encouragement of greater consistency between the pursuit of general macroeconomic or budgetary objectives, on the one hand, and energy policy objectives, on the other. Finally, it is important to the credibility of the Community in its encouragement of sensible pricing practices in the countries with which it trades and competes.

17. The Commission has already underlined these points in a communication on energy and economic policy,<sup>1</sup> and has developed some of them in its paper on oil taxation.<sup>2</sup> The Council has also been invited to adopt a recommendation on electricity tariff structures.<sup>3</sup>

In a separate communication the Commission has further developed the principles of energy pricing adopted by the Council in a Resolution of 9 June 1980.<sup>4</sup> These principles emphasize the need for consumer prices to reflect in full the cost of development of alternative energy

resources and so to encourage investment, even when in the short run world prices for oil are stable or falling.

Within the Community there should be a common market in primary energy. Differences in the prices at which coal, crude oil and gas are made available to the energy industries should be limited to those arising from differences in transport costs. This does not, however, mean that consumer prices can or should be identical throughout the Community. On the contrary, it is right that prudent investment in energy transformation (refining, transport, distribution and — especially — electricity generation) within individual Member States should be reflected in advantageous consumer prices. However, consumer prices are determined not only by comparative costs, but also by important differences in policy, notably as regards taxation, price control and the financing of public utilities.

Consistency in energy pricing and taxation policies, in accordance with energy supply and demand objectives, requires first of all an improvement in transparency of energy prices and tariffs and a common effort to adapt oil taxation to the aims of energy and economic policy.

# A mechanism to avoid instability on the markets

18. The objectives of security and stability of supply apply to all forms of energy, and their pursuit is a key feature of Community strategy. They are of particular importance as far as oil is concerned given the dominant role played by oil prices and the less flexible nature of the oil market compared with the past.

19. The lesson of 1979 was that even very limited shortfalls in oil supply over a brief period — and even the risk itself of such a development — can have serious and disproportionate effects on oil price movements. A repeat of those events would have damaging consequences. The relative slackness of the market in recent months could mean that this danger will be underestimated even though the rise in the dollar has increased considerably the cost of the Community's imported oil.

The Community would be failing in its task if it did not manifest solidarity in the face of such

<sup>&</sup>lt;sup>1</sup> Bull. EC 10-1980, points 1.2.2 to 1.2.4.

<sup>&</sup>lt;sup>2</sup> Bull. EC 9-1981, points 1.1.6 to 1.1.8.

<sup>3</sup> OJ C 214, 21.8.1980.

<sup>4</sup> OJ C 149, 18.6.1980.

difficulties. This solidarity would be more difficult to achieve if it were not established beforehand in a period of calm. A mechanism already exists to deal with serious supply difficulties. But it is vital that the Community should arm itself ahead of time with procedures and means to soften the impact of any future oil supply shortfalls, especially on prices.

20. The Commission has accordingly proposed a procedure to handle situations of limited shortfalls on the oil market, together with a series of measures from which the Council could choose the most appropriate in the light of circumstances.

To be effective the set of actions proposed would have to be closely coordinated in a wider framework involving the USA and Japan. But as the preparation of Western Economic Summits has shown — and especially those in Tokyo in 1979 and Venice in 1980 — the Community can helpfully give a lead to the other major oil consumers by virtue of its position as collectively the single largest buyer on world markets.

The Community is more vulnerable than other consuming groups as far as external oil supplies are concerned. It must therefore protect itself against the risk of fortuitous tension on the world oil market. Even if measures to that end are taken only on a contingency basis, agreement on the conditions and procedures under which they would be applied, without prejudice to the precise decisions required by particular circumstances, would be proof of the credibility of the Community strategy.

# Research and development; technological demonstration

### Research and development

21. The logic of action at Community level on energy research and development is self-evident. It enables the Community to support large-scale activities beyond the financial reach of individual Member States (e.g. the development of controlled thermonuclear fusion); it avoids costly multiplication of effort; and it works as a catalyst in promoting the cross-fertilization of ideas and the more rapid diffusion of

results. In each of these ways, it helps the Community to make up for the natural benefits enjoyed by the USA and Japan.

22. The Community has been involved in support for energy R&D since its inception, first in coal under the ECSC Treaty, then in nuclear fission and fusion under the Euratom Treaty, finally in energy conservation and new energy sources under the simulus of the first 'oil crisis' of 1973-74.

The result is that energy already absorbs some 70% of total funds in the Community's R&D budget. The annexed tables show how much has been committed under the various heads. The Community budget provides thereby the equivalent of some 10% of total public support (Member States and Community) for the financing of R&D in the energy and related fields, and the overall effort coordinated within the Community framework is still greater.

23. An increased research effort is needed to help reduce more rapidly the Community's dependence on oil (energy saving and substitutes) and to make it easier for Community industry to adapt to changes in the energy market. This will mean a need for increased financial resources. Community intervention will enable expenditure to produce the maximum possible benefit, to avoid waste of resources and to ensure the widest dissemination of research results.

Against this background the Commission has begun to reorganize its services involved in research and is examining the different programmes. It will make proposals to intensify research on the more rational use of energy and renewable energy sources, not only in its own interests but so as to meet the needs of the LDCs.

It will do the same in the field of coal research to reflect the growing importance of coal.

#### Technological demonstration

24. The involvement of the Community in coordinating and financing support for projects to demonstrate the industrial and commercial viability of new methods and technologies is more modest than that in R&D and now requires renewed attention. The demonstration phase provides the essential bridge to the full-

scale commercialization of new techniques, thereby supporting industrial as well as energy policy in encouraging the launching of new industries, processes and products.

It has been clear for some time that the Community's multiannual programmes of support for such projects in energy saving and in alternative energy sources which began in 1979 would be insufficient to meet demand. In 1980 therefore the Commission made precise proposals to the Council involving a doubling of the financial ceilings. The Commission's reports on the existing programmes underline the positive experience of the operation of the existing Regulations to date. The Commission will take all the steps necessary to ensure effective dissemination of the results of the programmes so as to maximize the benefits throughout Community industry.

25. As a further element in the encouragement of innovation in and through the energy sector, the Commission intends also to help ensure that those involved in the development and exploitation of new energy technologies are able to secure the full benefits of the common market, and in particular that markets for high-performance but relatively high-cost equipment can be fully developed. Particular attention will be paid to the development of common standards so as to avoid the creation of non-tariff barriers to trade.

Innovation is a necessary part of energy strategy. Financial action and coordination at the level of the Community are vital to the achievement of the most effective results in research and development and in technological demonstration. The potential in this field must be better exploited and exploited to the full.

### External relations

26. Community energy strategy must inevitably be pursued within a wider international framework involving the other main consuming nations, the energy-exporting (and especially the oil-exporting) countries, and the oil-importing developing countries. The Community alone offers a credible basis for the expression of the interests of Member States vis-à-vis each of these groups, developing relations with each

as far as possible in a balanced way and making use of a variety of methods and frameworks for action.

The benefits of Community coordination have already been amply demonstrated in the preparation of Western Economic Summits, meetings of the International Energy Agency (IEA) and most recently in the UN Conference on New and Renewable Sources of Energy. The Community must build on this experience, both to enhance Community cooperation in the fields of hydrocarbon supplies, the international coal trade and supplies of nuclear fuels, and, most importantly, cooperation with the developing world.

- 27. Cooperation among Member States in securing supplies of natural gas from outside has been less than satisfactory in the past. It can and should be enhanced. The negotiation and conclusion of new contracts should be pursued within the framework of a common approach to Community requirements and objectives, and the Commission has put forward to the Council specific proposals to this end.<sup>1</sup>
- 28. In the fields of coal and nuclear fuels the aim of the Community must be to develop a framework of relations with the exporting countries which can likewise ensure stable and secure supplies. This cannot be achieved satisfactorily by individual Member States acting alone. The essential need for Community action in securing supplies of nuclear fuels is already well established and has led to the satisfactory conclusion of cooperation agreements with the main suppliers, notably Australia, Canada and the United States. This position must be maintained and developed so that new negotiations of renegotiations that may prove necessary in the light of changing circumstances can follow a similar course.
- 29. The Community and its Member States have already made a substantial contribution to the development of energy resources in the developing world, with total aid (grants and loans) amounting to over 700 million ECU in 1980 alone. Of this total nearly one third (over 200 million ECU) was accounted for by loans from the European Investment Bank, which is one of the main sources after the World Bank

<sup>&</sup>lt;sup>1</sup> OJ C 280, 30.10.1980.

<sup>&</sup>lt;sup>1</sup> Bull. EC 9-1981, point 2.1.122.

in the provision of loan finance for energy development. In addition to direct support for the financing of energy investment by this means, the Community has also helped with the evaluation and planning of energy supply and demand in a large number of developing countries.

- 30. The Commission proposes the following approach to intensify energy cooperation with developing countries. Firstly, there must be closer coordination between the aid programmes of Member States and those of the Community. Secondly, more use must be made of the specific means available to the Community by virtue both of the Lomé II Convention and of agreements with non-associated countries. It should be noted in this respect that Lomé II emphasizes projects involving regional cooperation and increases the aid available to projects developing alternative energy sources in the associated countries.
- 31. There must be a global approach to energy cooperation with developing countries, taking full account, however, of the particular situation and priorities of each country concerned and of the nature of its relations with the Community. This approach should cover the following areas in particular:
- (a) development of guidelines for aid in energy programming (the evaluation of resources and requirements);
- (b) assistance in the form of information required for investment decision-making (project evaluation; specialized techniques, for example in prospecting; R&D, including more recourse to the Joint Research Centre and association between research centres in the Member States; access to data banks);
- (c) technical and professional education;
- (d) exchanges of information on techniques that might be applied in developing countries, especially as regards the rational use of energy, and the encouragement of their use in these countries:
- (e) extension of the practice of cofinancing which has already been used with other institutions such as OPEC, the Arab Funds, the World Bank, etc;
- (f) encouraging industry to adapt a constructive investment policy towards LDCs, with recourse as necessary to the possibilities offered by Lomé II in this respect;

(g) encouraging the use of new and renewable sources, especially linked to programmes of rural development and environmental protection

The Commission will present proposals to the Council covering the whole of this approach.

The Community alone provides the necessary dimension for the expression of the interests of Member States on the world stage. It must establish, with those countries which supply its energy imports, a framework of relations which ensure stable supplies, particularly of coal and natural gas, just as it has already done in the nuclear field in general. Priority must also be given to energy cooperation with the developing countries both to meet their own needs and to help reduce pressure on world oil supplies. To that end the possibilities offered by the Lomé Convention must be fully exploited and efforts must be increased towards the other developing countries, especially those with whom the Community has contractual relations.

## Conclusions

32. (a) The adoption of common objectives, the pursuit of these objectives by means of coordinated action by Member States and the acceptance of collective discipline are the basis for the Community policy proposed above. In the absence of such an approach the Community will not be in a position to meet the energy challenge.

The essence of this approach lies in efforts at Community level to anticipate developments. Instead of simply reacting to events in the energy field we must prepare the way, in the best possible conditions, for the changes that are most likely to be required by future developments on the energy markets, while minimizing the economic and social consequences of those developments. Such a forward-looking approach has the added advantage of supporting the objective of economic revival and increasing employment.

(b) Energy objectives have already been adopted by the Community. This development will remain of use only if the objectives are constantly brought up to date and if there can be a regular examination of how far they are

reflected in national policies, followed as necessary by an adjustment of those policies. The first role for the Commission in developing energy strategy is therefore one of guidance and monitoring.

The Commission can also take action on its own account in certain fields: those prescribed by the Treaties; those where no other means exist to meet common objectives; and those where to exploit the Community dimension is likely to bring results that go beyond those that can be achieved by Member States acting alone or even in coordination.

In some cases Community action will require financial resources. These must be adequate for the tasks involved. Various instruments already exist which need to be refined or developed in the light of the Community's needs and other objectives.

- (c) There are five priorities in what must be done to reduce the Community's dependence on oil by a better use of all available resources and a broader diversification of supplies. These are: investment; pricing and taxation policy; stability of supply; development of the potential for technological innovation; and relations with third countries. The Member States and the Community have taken a number of steps in some of these fields. But these have been inadequate or uncoordinated. The Commission has already made a number of proposals to increase the Community commitment. Others will follow. Such an increased commitment would be a major step forward in the development of our common strategy.
- (d) The Commission requests the Council to approve the strategy described above; to agree on the objectives; and, on that basis, to state its position on the various proposals already put to it and on those that will follow.

### Annex

Five tables follow setting out the Community's financial interventions in the energy sector.

Tables 1, 2 and 3 show the loans granted to the energy sector between 1974 and 1980 by the Community's various financial instruments.

Table 4 shows the amounts committed to energy in the budget for 1978 to 1981.

Table 5 shows budgetary resources in support of energy development projects for 1978 to 1981.

Table 1 — Distribution of loans signed by energy sector (EIB, Euratom, NCI)

EUR9 (million ECU) 1974 1975 1976 1977 1980 1978 1979 Electricity 161.9 183.7 271.8 392 - 19 1 092 · 6 967 - 24 622 - 24 Nuclear 123 - 3 126.5 111.3 366.59 322-44 453 - 4 618-14 Thermal power stations 29.4 30.4 128.7 12.8 141.0 125.4 Hydro, geo. power stns, etc. 99.6 42.0 64.8 313.0 180.2 Distribution, transport 19.5 35.4 12.8 106.3 185.2 43.5 Solid fuels 24.6 3.3 11.7 26.6 Hydrocarbons 187.0 189 - 3 39.2 128.7 180.3 276.9 167.5 Production 41.6 80.5 54.2 39.2 50.0 25 - 7 42.3 Transport 87 - 1  $106 \cdot 5$ 135.1 130.3 141.8 171.7 Refining 62.9 Energy saving  $6 \cdot 2$ 5.5 20.9 134.5 Urban heating 11.4 59.2 Rational use of energy in industry 6.2 5.5 9.5 75.3 Total  $406 \cdot 7$ 373.5 376.3 431.39 808.04 1 292.7 1 405 - 24 Total lending by ECSC 73.45 160.87 179.85 216.85 297.56 275.33 323 - 22

Table 2 — Percentage breakdown of the distribution of loans signed by energy sector (EIB, Euratom, NCI)

EUR 9							(%)
	1974	1975	1976	1977	1978	1979	1980
Electricity	66 · 8	43 · 3	48.8	90.9	77.0	84.5	68.8
Nuclear	30 - 3	33.9	29.6	85.0	39.9	35 · 1	44.0
Thermal power stations	7.2		8.1	3.0	15.9	10.9	8.9
Hydro, geo. power stns, etc.	24.5		11.2		8.0	24.2	12.8
Distribution, transport	4.8	9.5		3.0	13.2	14.3	3 · 1
Solid fuels		6.6	, 0·9			0.9	1.9
Hydrocarbons	31.6	50 - 1	50-3	9.1	22.3	13.0	19.7
Production	10.2	21.6	14.4	9 · 1	6.2	2.0	3.0
Transport Refining	21 · 4	28.5	35.9		16.1	11.0	12·2 4·5
Energy saving Urban heating	1.5				0.7	1·6 0·9	9·6 4·2
Rational use of energy in industry	1.5				0.7	0.7	5 · 4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 3 — Loans to the energy sector by the financial organs of the Community

EUR9 (million ECU) 1975 1976 1977 1978 1979 1980 1974 EIB 406.7 373-5 376.3 338.5 737-8 991.6 1 115.9 **Euratom** 92.9 70.2 151.6 181.3 NCI 149.5  $108 \cdot 0$ **ECSC** 179.9 216.9 297.6 275.3 323.2 73.5 160.9 480-2 648.3 1 568 - 0 1728-4 Total 534.4 556.2 1 105 · 6

Table 4 — Commitments to energy research from the Community budget

# Direct and indirect action <sup>1</sup> Coal research <sup>2</sup>

			(million ECU)		
1978	1979	19803	19813		
158	205	323	228		

General budget.

Table 5 — Amounts committed from the general Community budget to the support of energy development projects

(This covers technological development in the hydrocarbons sector, demonstration projects in energy saving and new sources of energy and uranium prospecting within the Community)

			(million ECU)
1978	1979	1980	1981
55	57	96	106

ECSC budget.
 The major increase in 1980 followed by a fall in 1981 reflects principally the launch of the second programme of indirect action.