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ENERGY POLICY IN THE EUROPEAN COMMUNITY : Perspectives and achievements

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ENERGY POLICY IN THE EUROPEAN COMMUNITY:

Prospects and achievements

I. Introduction

Energy policy is one of the key factors in solving the economic problems facing the Community. The crisis of 1973-74 and the events of the last two years have drastically shown the need for reducing dependence on imported oil.

The world oil market has entered a period of permanent uncertainty and instability which threatens to become worse unless consumers and producers cooperate to take the requisite measures.

An agreement exists within the Community on the basic principles of energy policy: it takes the shape of measures undertaken both by the Member States and by the Community itself.

After a brief account of the recent energy situation and its prospective development, this memorandum describes the contribution which the Community makes to solving the energy problem. Although not entirely satisfactory in their scope, these efforts are a step in the right direction.

II. Energy situation: recent developments and prospects

Current oil prices are now about twelve times higher than in 1973. The Community's oil imports fell from 573 m tonnes in 1973 to 475 m tonnes in 1979, but the oil bill has continued to increase: 10 000 m EUA in 1973, 50 000 m EUA in 1979 and probably 77 000 m EUA in 1980, even if there are further price increases.

OPEC is trying to harmonize its prices, hitherto without success. There is an increasing tendency for the exporting countries to limit their production, thus encouraging price increases. There is a great risk of OPEC oil supply falling behind demand towards 1985-1990.

Oil consumption must be cut back in the light of this prospect. To achieve this without jeopardizing economic and social objectives, energy must be conserved and used more rationally and greater use must be made of alternative sources of energy.

Action taken by the Community at these two levels has borne fruit.

Between 1973 and 1978 energy consumption in the Community remained practically stable although GDP increased by 12%. In 1979 it increased by 5% while GDP rose by 3.3%. This is because of the unusual situation caused by a hard winter and a certain upturn in economic activity. But this also shows that the effort to be expended to dissociate the growth in energy demand from economic growth will be long and exacting.

Oil, which accounted for 61% of gross energy consumption in 1973, represented no more than 55% in 1979. Internal supply has increased considerably because of the increase in production from the North Sea oilfields, now covering about 16% of oil demand.

Gas production, on the other hand, levelled out some years back and imports are relied on to maintain the relative market share accounted for by this energy source. However, there is the question - recently become particularly acute - of whether it will be possible to obtain these supplies from external sources at an acceptable price and with sufficient assurance of regularity.

In the long term, coal and nuclear energy are the main alternatives to oil imports. The 1973 crisis has not halted the decline in Community coal production, but it has stabilized recently. Imports have risen from 29 m tonnes to 57 m tonnes; it is thought that they could quadruple between now and the end of the century. However, this requires the establishment of suitable infrastructure capacity and the encouragement of technologies permitting greater utilization of coal.

The proportion of nuclear electricity rose from 6% to 11% between 1973 and 1979, but there are uncertainties surrounding the prospects of developing this source, the only one apart from coal which could have a considerable influence on reducing dependence on oil in the medium term. Some of the uncertainties relate to the opposition which this energy source encounters in one section of public opinion, others to the problems which it raises in the international context, e.g. uranium supplies, the non-proliferation treaty, etc.

II.(a) The Commission's measures

The Commission's energy policy measures have been guided by three concerns. Firstly, it has paid particular attention to ensuring compliance with the principles on which the Community is based, especially the principle of free movement of goods. Secondly, it has sought to resolve the difficulties caused by the upheavals on the world oil market. Thirdly, the Commission has endeavoured to provide appropriate means of meeting the medium- to long-term uncertainties which lie ahead.

The Commission does not claim that everything in the energy sector should be regulated on a centralized basis at Community level. A large part of the strategy on which the Member States have agreed can be implemented only at national level. But - and this has always been the Commission's intention - these measures must be coordinated and, where necessary, supplemented and reinforced by Community measures.

The Commission has continuously monitored the compatibility of the national energy policies with the pursuance of the objectives for 1985, laid down by the Council in 1974.

In June 1980, the Council adopted a resolution concerning the objectives for 1990 and the convergence of the policies of the Member States, together with a resolution concerning new lines of action in the field of energy saving. These texts provide a reference framework to guide national policies and a gauge of the effort which the Community is undertaking to help solve the world energy problem. They give the Commission the basis for coordinating, stimulating and, if necessary, complementing national measures more effectively.

This strategy involves the following guidelines:

- (a) the reduction in the ratio between the rate of growth in primary energy consumption and the increase in the gross domestic product by means of a policy of energy saving and rational utilization of energy;
- (b) the reduction in the proportion of the energy balance-sheet accounted for by oil; this should drop to 40% in 1990;
- (c) an increase in the role of coal and nuclear energy in electricity generation;
- (d) increased use of renewable energy sources;
- (e) a prices policy encouraging the achievement of the Community's energy objectives.

III. Rational utilization of energy and energy savings

The policy on the rational utilization of energy is one of the pillars of Community energy policy: the European Council has repeatedly stressed this (Bremen, July 1978; Paris, March 1979; Strasbourg, June 1979; Luxembourg, April 1980).

This political intention was given firm shape at the Council meeting of energy ministers on 13 May 1980 which adopted a resolution concerning new lines of action by the Community in the field of energy savings.

This resolution lays down the framework for the policy of energy conservation. It approved the objective of reducing to 0.7 or less by 1990 - for the whole of the Community - the average ratio between the rate of growth in gross energy consumption and the rate of growth in the gross domestic product. The resolution further asks the Member States to adopt by the end of 1980 energy-saving programmes covering all the sectors of energy use and to conduct an appropriate energy-pricing policy in line with the measures recommended by the Council. Finally, it expresses the wish for the work to be speeded up, particularly in international organizations, on the drafting of harmonized methods for measuring energy consumption and on performance standards for appliances.

Since the 1973 crisis, the efforts undertaken at Community and national level to save energy have led to a reduction in energy consumption, albeit partly due to the economic crisis. It has been calculated that energy consumption has dropped by some 7-8% a year since 1973, i.e. the equivalent of 70 m tonnes of oil a year, which represents \$10 000 million at 1979 prices.

The Commission is conducting a policy of information concerning the national energy-saving programmes and the progress achieved by various Member States (Third report on the Community's programme for energy saving). On a more general level, the Commission has commissioned a study from a team of experts headed by Mr Jean Saint Geours on the means for achieving in the long term the Community's economic, social and environmental objectives in restricting as far as possible its primary energy consumption. Some specific aspects of this study are now being examined in greater detail.

Alongside these general measures, the Commission has had specific financial and regulatory measures adopted.

The financial measures concern support for demonstration projects in the field of energy saving in the form of a financial contribution which is repayable under certain conditions.

On the basis of Regulation (EEC) No 1303/78 of 12 June 1978 laying down the conditions for the granting of financial support and of Regulation (EEC) No 725/79 of 9 April 1979 laying down a sum of 55 m EUA for the whole the four-year programme, the Commission has several times invited the submission of projects; several applications for support have been sent in by interested firms or organizations. Of the 324 applications under the first invitation to submit projects, the Commission adopted 53, involving a sum of 21.4 m EUA. Some 299 applications were received under the invitation and are now being examined pending a Commission decision in the near future. The 55 m EUA allocated to the four-year programme will not be sufficient in view of the interest aroused by this measure and by the end of the year the Commission will ask the Budgetary Authority for an increase in this amount.

The regulatory measures are listed in Annex 4 of the abovementioned third report.

They cover several sectors of industrial or domestic activity.

In particular, they include a Directive on the performance of heat generators for space heating and the production of hot water in new or existing non-industrial buildings. This Directive of 13 February 1978 is about to be supplemented by provisions concerning generators which cannot be inspected at the production stage.

These regulatory measures also include recommendations on the regulation of heating and the production of hot water in new buildings, the rational utilization of energy in industrial undertakings, the combined production of heat and power, the thermal insulation of buildings, driving habits and the operation of electric household appliances.

Of the most recent measures, mention ought to be made of the Directive of 14 May 1979 on the indication of the energy consumption of household appliances by labelling. A Directive applying these measures to electric ovens was adopted on 14 May 1979. In May 1980 the Commission sent the Council proposals applying these measures to other household appliances with a high energy consumption, such as washing machines, dishwashers, refrigerators and freezers.

IV. OIL

IV a Imports

The Community has made firm and specific commitments to reduce its dependence on imported oil. When they met in Strasbourg in June 1979 the European Council agreed to hold net oil imports into the Community between 1980 and 1985 at or below their 1978 level (472 m tons). This prior commitment by the Community played an important role in encouraging the other participants in the Tokyo Economic Summit a few days later to agree on similar measures of restraint. Later in the year the Community reached agreement on specific national ceilings for 1980 and 1985 within the overall Community total.

The Community has established procedures for quarterly monitoring of the trends in net oil imports against the annual ceiling. All the indications are that we shall be well within the ceiling for 1980. We have been helped in part by a very low level of economic activity which has reduced the total demand for energy. We have been aided also by growing oil production from the North Sea which now meets some 16% of our total oil demand. But, most clearly of all, we have been aided by a more vivid and more widespread recognition in Member States of the dangers inherent in continuing to depend so heavily on imported oil.

IV b Surveillance of the oil markets

Those dangers have been heightened over the past 18 months by marked instability on the world oil markets. The loss of Iranian production following the revolution led to some uncertainty over supplies, temporary shortages for some companies, heavy stock-building by others, and considerable pressure on the spot markets. Despite the easing of the latter the market has remained somewhat nervous because of continuing uncertainty about supply levels and prices. There is a continuing risk that some companies will be tempted to pay excessive prices for supplies.

Well before Iran the Commission had emphasised the risks of instability on the markets and the need to increase the transparency of transactions. Recent events have underlined the importance of maintaining the progress in this area which has already been made.

Since early 1979 the Commission has been receiving weekly information on consumer prices for oil products, a summary of which is now published weekly. In addition, following a decision by the European Council in Strasbourg the Community has introduced registers covering imports of crude oil and of petroleum products. These registers, operated with appropriate safeguards for commercial confidentiality, show types of oil, quantity, price etc. imported into each Member State over the previous quarterly period. Finally, the Commission has carried out specific studies of transactions on the Rotterdam and Mediterranean spot markets which have facilitated a better general understanding of the operations involved.

The more information we have about oil purchases and the greater the degree of transparency of prices in particular, the better the prospects for avoiding "panic buying" and renewed and unnecessary upward pressure on prices. The existing measures described above are an important start in the right direction.

As part of the same exercise the Commission has also been considering the implications of the growing incidence of "state to state" deals - trade deals or other bilateral agreements with individual oil producers, in which oil supplies often figure as one element in a complicated set of planned transactions. Such deals may disguise the real cost of the oil involved and make it more difficult to achieve price transparency.

Vc. Emergency measures

A directive of July 1973 requires all Member States to ensure that they are able and have the necessary powers to draw on and manage oil stocks (with Community coordination), to restrict oil consumption, to allocate supplies and to regulate oil prices. Community legislation also obliges Member States to maintain a minimum of 90 days' stocks of oil or oil products.

Two Council decisions were adopted in 1977, providing for further measures in the event of oil supplies difficulties. The one is meant to set a Community target for reduction in the consumption of primary sources of energy, in order to safeguard the unity of the market and to ensure that all consumers within the Community bear a fair share of the difficulties arising from the crisis.

The other enable a Community procedure of surveillance on the exporting of crude oil and petroleum products from one member country to another, to be implemented under various circumstances.

The administrative machinery for these contingencies has been set up in such a way as to be compatible with the parallel IEA machinery.

Community emergency measures may come into operation as soon as the gap between oil supply and demand reaches 7%. They are designed therefore to deal with a very significant shortfall in supplies. Recent developments on the oil markets suggest that even a much smaller gap between overall supply and demand can cause serious problems. Preventive surveillance of the oil market, as described in the paragraph above, can help to avoid "sub-crises" of this kind. But in addition to preventive measures the Community must have in place effective instruments to mitigate the effects of limited shortfalls in supply and upward pressure on prices.

The Commission has submitted to the Council a report on this issue with a number of possible "sub-crisis" measures to be considered.

These include discouraging oil companies from making purchases at excessive prices; using oil and oil products stocks to help even out supply and demand imbalances; oil sharing and consumption reduction; measures to increase hydrocarbon production in the Community.

IVd. Aid oil technology and oil production

Community oil production reached nearly 90 m tons last year and natural gas 137 m tons. By 1990 it is hoped to raise oil production to around 125 m tons and to maintain the production of natural gas at around this same level.

This will not occur without a sustained exploration and development effort. In support of that effort the Community operates a scheme of financial aid for the development of new technology for the prospecting and exploitation of hydrocarbons. So far there have been five successful annual allocations of aid amounting to 185 m EUA, covering about 170 projects involving investment of

more than 500 m EUA. In addition the Community is giving financial aid to preliminary exploration for hydrocarbons in offshore Greenland.

V. GAS

Natural gas had steadily increased its share of the total primary energy consumption. Currently it supports 18% of the Community's energy requirements, which is comparable to the share of coal. This growth in the use of natural gas has largely been based on increased production within the Community itself.

Natural gas has played an important role in achieving a lesser reliance on oil. The 1974 energy policy objectives foresaw by 1985 a share of natural gas in the energy supply of 18%. This share has already been reached, and could still increase to about 20% in 1985. Thereafter the share of natural gas in the energy balance could start to decline. Natural gas imports will have to cover an increasing part of consumption. Currently gas import dependence is at 25% and expectations point at 50% import dependence in 1990. At this level prices of imported gas would have an increasing impact on the natural gas market in the Community.

In anticipation of these developments the Commission's action since 1977 has been orientated in three directions : increase the security of supply, development of natural gas resources and improving the market transparency,

In June 1980 the Commission has fixed in a communication the Council proposals guidelines for national and Community action in three fields : development of indigenous production, diversification of gas imports from third countries and development of substitute gas.

Endorsement of these guidelines would help assure a necessary degree of convergence at Community level of the Member States policies on gas supply.

A suitable price policy and appropriate tariff structures in the natural gas sector would help improve supply security and would encourage the national use of this source of energy. The Commission will submit to the Council before the end of the year a recommendation concerning prices and tariffs of natural gas.

VI. COAL

In June 1979 the European Council in Strasbourg reiterated the policies for coal set out in the 1974 and 1975 resolutions as follows : " In view of the necessary change in oil imports, the use of coal in power stations must be stepped up without delay; its use in industry must also be encouraged".

In fact the role of coal in the Community is expected to change significantly between now and the year 2000. In a report to the Council the Commission offers an outlook for the long term coal supply and demand in the Community. The most striking features are that coal consumption in the Community should nearly double to 580 million tons/year by the year 2000 from the present level of 305 millions/year and that coal imports should increase more than fourfold to 280 million tons/year from the current level of about 60 million tons/year, and finally that production of coal in the Community should increase by 25% from its current level of 240 million tons/year.

In view of the rapidly increasing importance of coal in covering the Community energy requirements the Commission has proposed a series of measures to encourage and aid coal use and production. These measures cover : aid for the construction of new coal burning power stations; subsidies for intra-Community coal trade and Community aid for the financing of cyclical coal stocks. However, the proposals on specific Community measures in these areas have not found the necessary support in the Council.

The only support scheme in operation at Community level is for the production of coking coal. This scheme was initiated in 1967. It has been prolonged several times. At present its lifetime extends to the end of 1981.

The Community provides further finance for capital investments in the coal industry - ECSC loans on commercial terms totalled 784 million EUA between 1977 and 1979.

Coal research and development programmes in the fields of mining techniques and coal upgrading, received a Community support totalling 65 million EUA in the period 1977-1980.

Beyond the R & D effort the Community also supports demonstration projects in the field of coal gazification and liquefaction. The Community measures adopted in this field has been described in chapter X.

VII. NUCLEAR POWER

Nuclear energy, coal and energy saving are those principal means by which the Community can significantly reduce its dependence on imported oil. During 1979 nuclear power contributed 11 % to total electricity production and hence some 3,2% to the Community's total energy needs. That is equivalent to almost 30 million toe. Nuclear power, thus, already contributes significantly to the Community's energy balance and to the basic policy of oil substitution.

Nuclear power offers a production cost advantage over coal and oil for base load electricity generation. Apart from the supply security aspect there is therefore also an economic incentive for nuclear power expansion. But in spite of this, the state of nuclear power development presents an uneven picture throughout the Community. Existing nuclear programmes have faced serious delays and decisions to introduce nuclear power have been postponed indefinitely in some member states. The result is a gap between the forecast and effectively installed nuclear capacity.

Under these circumstances one important part of the Commission's work has been to deal with the obstacles to nuclear power development, the other part being the maintenance and development of the nuclear option in ways adapted to the Community's needs.

Obstacles to nuclear power development have been particularly pronounced in the following areas : insufficient public acceptance of nuclear power due to concerns about reactor safety and nuclear waste disposal and instability in the nuclear fuel supply relationships, due to supplier nations concerns about the spread of nuclear weapons.

VII a. Hearings

In order to enhance public awareness of the facts relating to nuclear power development in the context of the Community's energy situation, the Commission arranged two sessions of public hearings during 1977 and 1978. These hearings were largely attended from throughout the Community and

represented the whole spectrum of opinion related to the use of nuclear power. They provided a useful forum for open debate at Community level.

VIIb. Reactor Safety and Nuclear Waste disposal

The Commission has been anxious to promote greater research into reactor safety questions and waste disposal problems. The objective is to help ensure that there be no objective basis for doubts about the safety of nuclear programmes. Research into reactor safety is a big and increasing item in the Commission R & budget. The 1980-1983 JRC budget allocation in this area alone increased by 96% over the previous programme allocation.

The Commission is well aware of the need for sustained progress in the field of safe disposal of nuclear wastes. The Council has adopted two resolutions in February 1980 embodying a plan of action running over 12 years (1980-1992), which will pursue the existing R & D effort and expand Community collaboration with respect to the management of nuclear wastes. This must be seen in the context of the Community strategy - adopted simultaneously and known as the nuclear 'Trilogy' - of closing the fuel cycle through the reprocessing of nuclear fuels and development of the fast breeder option.

VIIc. International nuclear developments

Increased concerns about the diversion of nuclear materials and technology on the part of some nuclear suppliers notably USA, Canada and Australia have been underlying efforts to reduce the proliferation risk associated with international nuclear commerce. Unfortunately, these efforts have also brought a measure of instability in the Community's supply relationship with these countries.

Therefore, in order to assure continued supplies of nuclear fuels to the Community the Commission has concluded negotiations in January 1978 of an amendment to the EURATOM/CANADA Cooperation Agreement of 1959. A Euratom/Australian cooperation agreement is currently being negotiated and negotiations with respect to the EURATOM/USA agreement are in the course of preparation.

INFCE

On US initiative the International Fuel Cycle Evaluation programme was set up in 1977 and it concluded its activities in February 1980. The Commission participated actively in the works of the Conference on an equal footing with more than 50 nations and 4 international organisations.

The conclusion of the Conference confirmed the technical soundness of the Community's position with regard to the reprocessing of nuclear fuels and the maintenance and pursuit of the fast breeder option. It also underlined the Commission's view of the necessity for increased international cooperation in the assurance of nuclear fuel supplies and in the minimisation of the risk of further nuclear weapons proliferation.

VII c. Safeguards and Physical protection of nuclear materials

In the latter respect the Commission continues to contribute significantly through the exercise of the powers conferred to it under Chapter VII of the EURATOM Treaty, which concerns nuclear safeguards. In addition full implementation in the 7 non-weapon states of the Community's safeguards agreement with the International Atomic Energy Agency (IAEA) has been most achieved. Progress is also being made in the implementation of the voluntary safeguards offer of the United Kingdom. The Euratom/France/IAEA safeguards agreement signed in July 78 is currently undergoing internal procedure in France in view of its entry into force. As a consequence of the Commission's increased international safeguards obligations, its team of nuclear inspectors which in 1977 numbered 65 will in 1980 approach 100.

Also in the framework of the IAEA the Community as such as well as member states are signatories to the Convention on the Physical Protection of Nuclear Materials. The Commission signed the Convention on behalf of the Community in June 1980. Through this convention the security of nuclear materials will be enhanced in particular during international transfers.

Development of the nuclear option

The Community's reserves of natural uranium only accounts for 3-5 % of world reserves. Currently 80 % of the Community's supply in nuclear fuels is imported. In order to reduce the dependence on imported energy, it is therefore important, that the Community makes the most out of its reserves. This means the optimal utilization of available resources through the reprocessing of nuclear fuels and through the development of the fast breeder option as well as a development of uranium resources within the Community.

VIII. Reprocessing and fast breeder option - Uranium exploration

In February 1980 the Community has taken action in both these areas by

- adopting a resolution and a decision on the reprocessing of nuclear fuels, which will enhance coordination at Community level of the current programmes and assure the compatibility with the aims of safety, protection of the environment and reduction of the risk of diversion of nuclear materials;
 - adopting a resolution concerning fast reactors, which will help maintain the continuity of the current demonstration programmes. This with a view of keeping open a viable option for commercialisation and to the optimisation of the demonstration programmes with respect to their safety and the protection of the environment.
- and further by
- promoting uranium exploration activities under article 70 of the EURATOM Treaty, through the issue of grants. Community supported programmes have been successful in identifying new resources in Italy and Greenland and promising areas in Ireland and Germany. So far the value of the resources discovered in the past 4 years exceeds the aid granted more than a hundred

VIIg. Euratom Loan Facility

In financial terms the Community has equally been active in facilitating nuclear investments through the establishment of the EURATOM loan facilities. The Council empowered in 1977 the Commission to borrow money on the international capital market and lend it to Community investors in nuclear power stations and fuel cycle facilities. From two authorizations totalling 1000 million units of account the Commission had by mid 1980 lent some 385 million EUA to nuclear power station projects in Belgium, France, Germany and Italy. The balance up to 1000 million EUA should shortly be committed and the Commission intends to propose a third tranche before the end of the year.

VIIh. Institutional Questions

It is of primary importance to the Community that the Commission's role in exercising the Euratom Treaty obligations are effectively carried out. In particular the existing difference between the legal powers and the practical implementation of nuclear fuel supply provisions of the Euratom Treaty gives rise to difficulties and some uncertainties. In order to resolve this matter a new attempt has been made, following the unsuccessful ones in 1965 and 1977 to amend the Euratom Treaty's supply provisions. The matter was subject to a frank discussion in the Council in September 1979 and the Commission pursues its efforts to find an acceptable solution to remove uncertainties.

VIII. Electricity

The electricity sector plays a vital role in enabling the Community to reduce its dependence on imported oil, since at the present time nuclear energy and in a large measure coal energy can only reach the consumer via electricity.

The Commission has carried out the surveillance of the Council directives of 1975 to restrict the use of hydrocarbons in power stations and to maintain security fuel stocks in power stations. These directives have been observed with hardly any exception.

A major energy saving potential exists in utilising the waste heat from electricity generation and the Commission promotes actively a number of the demonstration projects in this area.

The further development of electrical energy has to face the problem of the selection and acceptance of suitable sites for power stations of all sorts. A procedure for information exchange on power station siting has been established at Community level through a Council resolution adopted November 1978. The Commission has made an attempt to facilitate further the solution of this problem through a proposal for a 'Community consultation procedure in cases where power stations would have to be placed near member States' frontiers.

Finally the Commission has proposed to the Council a Community wide harmonisation of electricity tariffs structures. This proposal will help to make electricity prices more comparable and enable consumers to make a rational choice for their energy needs.

IX. Energy Research and Development

The Community's energy research programme has three main objectives :
(a) improved knowledge of nuclear technology and improved techniques and standards for safe operations in the nuclear field (reactors, fuel cycle), (b) improvements in energy saving techniques and (c) improved knowledge of new energy sources (in particular solar, geothermal and nuclear fusion).

Community action in the R & D field is organised through : the direct action programme under the Joint Research Centre (JRC), the indirect and concerted action programmes carried out in association with national research and development bodies, and finally through the 'Joint Undertaking' established for the construction and operation of the Joint European Torus (JET).

Energy has a dominant place in the Community's R & D programme. In 1979 energy R & D accounted for more than 70% of total funds in the R & D budget, and it is expected that energy will keep its overall importance in Community R & D. The Commission's energy research and development effort has, however, in itself undergone several important developments in recent years.

First, energy R & D has traditionally been concentrated in the nuclear field. Although nuclear research still occupies an important place, standing needs of the Community's energy policy in the fields of increased/conservation and development of oil alternatives have led to a broadening of the Commission's R & D programmes and associated spending.

The JRC research and development programme was diversified in 1973 to include solar energy and hydrogen production from water. New energy sources have since seen their role increase in the JRC's multiannual R & D programmes (1977/80 and 1980/83).

In a parallel development came the implementation of the first four year energy R & D programme (indirect action) dealing with new forms of energy (solar, geothermal) and energy conservation. Also this action was further strengthened with the adoption of the second energy R & D programme (1979/83) with funding increased to 105 million EUA from the previous 59 million EUA.

Second, in the nuclear field more emphasis is being placed on research in safety problems in particular reactor safety and waste disposal. Under the new research programme for the JRC adopted by the Council in March 1980 and totalling 511 million EUA, nuclear reactor safety alone receives one third or 151 million EUA. That corresponds to an increase of 96% over the previous budget while total budget allocation only increased by 47%. In the waste disposal field R & D effort in the period 1980/84 will more than double the effort undertaken in the previous five years. Continuous attention is given to research into the biological and ecological effects of the various nuclear applications.

Thirdly, an important step towards the long term assurance of energy supplies was taken through the establishment of the JET 'Joint undertaking' in June 1978. Adding this advanced programme to ongoing efforts the Community as such will be on the forefront internationally of controlled thermonuclear fusion research. The Community finances 80% of JET, whose construction cost is estimated at 200 million EUA.

Fourthly, the Community's participation in international cooperation in the energy R & D field is becoming more extensive. The Commission has in recent years concluded 9 R & D cooperation agreements in the fields of nuclear energy biomass solar energy and hydrogen technology. Where appropriate such cooperation enhances significantly the efficiency of the Commission's own research effort.

X. Demonstration projects for alternative energy sources

To achieve its objective of reducing its dependence on imported energy, the Community must develop those resources available on its own territory.

As the exploitation of alternative energy sources may be delayed because of the financial risk involved in new methods and technologies or by reason of the high cost of investment, the Commission has launched a scheme to assist the financing of demonstration projects in this sector. These projects aim to demonstrate the industrial and commercial viability of the methods, in order to encourage utilization and promote their spread within the Community.

Acting on a proposal by the Commission, the Council adopted in June 1978 an outline Regulation on the granting of financial support for projects to exploit alternative energy sources.

In April 1979 the Council adopted implementing Regulations in respect of solar energy, the solid fuel liquefaction and gasification sectors and the geothermal energy sector. It also allocated 95 m EUA for the whole of the five-year programme concerning these sources - 50 m EUA for liquefaction and gasification, 22.5 m EUA for geothermal energy and 22.5 m EUA for solar energy.

The Regulations state that the Community's financial contribution may not exceed 40% of the total cost of the assisted project and that half the support is repayable by the recipient if the methods developed are exploited for industrial and commercial purposes.

The first invitation to submit projects issued in 1979 aroused great interest. The Commission received 183 requests for finance (135 for solar energy, 36 for geothermal energy and 12 for liquefaction or gasification). 43 of these projects were financed to the tune of 31 m EUA. A second invitation to submit projects in early 1980 led to 151 requests for solar energy and 33 for geothermal energy. The second invitation to submit projects for the liquefaction and gasification will not close until later. In view of the success encountered, the Commission has already asked the Council to raise the amount provided for liquefaction and gasification.

projects from 50 to 100 m EUA. By the end of 1980 it will ask for an increase in the appropriations for solar energy and geothermal energy projects. The Commission will also put forward a draft Regulation for the financing of wind and tidal energy projects by the end of the year.

XI. External relations

The Community's attachment to the search for a durable solution to the world energy problem has been manifested on several occasions.

With the adoption in May 1980 of the resolution on the 1990 energy policy objectives referred to in chapter II the Community has made a further step to decrease its dependence on oil, assure that economic growth be non-oil based and thereby contribute to more far reaching moderation in the world demand for oil.

The cooperation between oil consuming nations has developed fruitfully in response to the still more difficult oil supply situation. But it equally is important that cooperation be developed and pursued with oil producing countries as well as with non-oil producing LDC's.

The opening of the global negotiations in the UN framework at the beginning of 1981 will present a new and valuable opportunity for discussion and advance international cooperation in the field of energy. The Commission participates actively in the preparation of these negotiations.

Within the UN Economic Commission for Europe, the Commission is equally engaged on the preparations for a continuation of the discussions on energy with the Eastern European Countries.

The Community has established bilateral contacts with OPEC and OAPEC as well as with some of the oil producing states in the Arabian Gulf. These contacts had an informal character and were confined to longer term economic issues.

The non-oil producing LDC's have been particularly hard hit by the steep increases in the price of oil. There is an urgent need to help them increase the effort to develop indigenous energy resources.

This need is recognized by the Community and its member States. Development in the energy field from the Community and its member States is only second to world bank aid. In 1979 it totalled 500 MEUA and will further rise to 700 MEUA in 1980. Community aid alone will increase from 100 MEUA to 190 MEUA.

It should also be recalled that under the LOME I convention, the Community aid to energy projects in the ACP countries has totalled 110 MEUA and expenditure will continue under LOME II.

Further to that the Commission is developing a programme initiated in 1973 of technical assistance to developing countries.

The Community's external relations in the field of nuclear fuel supplies have been dealt with in the nuclear chapter.

XII. CONCLUSION: a new initiative

As early as 1974 the Community set objectives adapted to the new energy situation. The Member States adjust their policies thereto to varying degrees and take measures to reach the objectives. The Community too has taken measures of its own. Altogether, there has been an appreciable effort which is now gradually bearing fruit.

However, there is still a lot to do and it is to be regretted that the Council has not yet approved several Commission proposals, e.g. that in respect of coal.

In view of this situation and the increased threats to oil supplies - an energy source which, even if it no longer accounts for 40% of consumption in 1990, will long remain a key factor in the energy balance-sheet - the Commission considered that a more ambitious approach was necessary. That is the intention of the communication which it presented to the Council in March 1980: "Energy: Community initiative".

The communication first stresses the need for responding to the energy challenge if it is wished to resolve the major economic and social questions which have now arisen.

The first steps to be taken should deal with price and energy taxation policies. Price policies must be made mutually consistent so that rises are passed on to the consumer, providing the incentive to save energy. These policies should then be gradually harmonized, along with energy taxation, in order to avoid distortion of the market and to make the general economic policy objectives more consistent.

The second step, as important as the first, concerns investment. Between 1980 and 1990 the Member States are planning to invest 400 000 m EUA, i.e. 2% of Community GDP. However, the proportion of total investment accounted for by energy investment differs considerably from one Member State to the next. To maintain oil imports at their current level, the Commission considers that an additional 50 000-100 000 m EUA, i.e. 0.25-0.50% of Community GDP, should be invested.

The Community also possesses financial instruments of a general nature which may be used in the energy sector. These are the loans granted by the European Investment Bank or under the New Community Instrument.

A large proportion of this investment finance will be raised on the free market; but various obstacles, both financial and non-financial, may be encountered. The Commission feels that the public authorities, especially those in the Community, have a role to play in eliminating these obstacles. This is the case for instance with investments which are judged uneconomic by the consumer or producer, but are economic for society at large as they save energy or replace oil. Investment of this type should be encouraged or accelerated.

The aid which the Community could give to these investment plans would take various forms and would mainly be intended to supplement the national programmes. Several formulae may be considered for providing the funds required: specific Community loans, an increase in own resources or the introduction of a specific Community tax on energy, which could be imposed on energy consumption, energy production or energy imports.

A N N E X

Communications, proposals and decisions in the field of energy

1. January 1977 - 30. June 1980

E N E R G Y

1. GENERAL

- Community energy policy
- External relations
- Information

2. DEMAND, RATIONAL USE OF ENERGY AND ENERGY SAVINGS

3. OIL AND GAS

- General
- External exchanges
- Prices
- Stocks
- Measures in the event of supply difficulties
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4. ELECTRICITY

5. COAL

- General
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6. NUCLEAR ENERGY

- General
- Investments
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7. ALTERNATIVE ENERGY SOURCES

8. RESEARCH AND DEVELOPMENT

(Revision as at 20 June 1980)

	<u>Commission</u>	<u>European Council</u>
	P = proposals D = decisions/regulations C = communications	- = no formal action taken By or required to the Council * = being considered
1. <u>GENERAL</u>		
<u>Community energy policy</u>		
- Report on the realization of the Community energy policy objectives for 1985 (2nd report).	C COM (77) 395 final	-
- Energy situation of the Community.	C COM (77) 38 final / 3	-
- The energy situation in the Community. Projects and policy.	C COM (78) 464 final	-
- Energy objectives for 1990 and programmes of the Member States.	C COM (78) 613 final	-
- Energy policy of the Community. (Commission communication to the European Council, Paris - 12 and 13/3/79).	C COM (79) 118 final	-
- Communication from the Commission to the Council concerning the Energy objectives of the Community for 1990 and convergence of policies of Member States.	C COM (79) 316 final	-
- Council Resolution of 9 June 1980 concerning the objectives of energy policy of the Community for 1990 and convergence of policies of Member States.	P COM (79) 316 final	OJ C 149/1, 18/6/80
- Energy (Communication to the European Council - Strasbourg 21 and 22 June 1979).	C COM (79) 325 final	-
- The energy programme of the European Community.	C COM (79) 527 final	-

<p>- Energy policy (Communication from the Commission to the European Council - Luxembourg 27 and 28 April 1980).</p>	<p>C COM (80) 130 final</p>	
<p>- A Community programme for the promotion of investment in energy.</p>	<p>C COM (80) 220 final</p>	
<p>- Energy (Communication from the Commission to the European Council - Venice 22 and 23 June 1980).</p>	<p>C COM (80) 301 final</p>	
<p><u>External relations</u></p>		
<p>- Cooperation with developing countries in the field of energy.</p>	<p>C COM (78) 355 final</p>	
<p>- Aspects of external measures by the Community in the energy sector.</p>	<p>C COM (79) 23 final</p>	
<p>- Instruments of mining and energy cooperation with the ACP countries.</p>	<p>C COM (79) 130 final</p>	
<p>- First action of cooperation with certain developing countries in the field of energy.</p>	<p>C COM (79) 155 final</p>	
<p>- Energy cooperation with developing countries and the role of the Community.</p>	<p>C COM (80) 96 final + Annex. SEC (80) 456</p>	
<p><u>Information</u></p>		
<p>- The energy situation in the Community and in the world.</p>	<p>C COM (77) 483 final C COM (78) 101 final C COM (79) 142 final C SEC (78) 1448 final C COM (80) 235 final</p>	
<p>- The energy situation in the Community. Situation 1977 - prospects 1978. Situation 1978 - prospects 1979. Situation 1979 - prospects 1980.</p>	<p>C COM (78) 101 final C COM (79) 142 final C COM (80) 142 final</p>	

B. DEMAND, RATIONAL USE OF ENERGY AND ENERGY SAVING		
- Council Recommendation of 25 October 1977 on the regulating of space heating, the production of domestic hot water and the metering of heat in new buildings (77/712/EEC).	P COM (77) 185 final	OJ L 295/1, 18/11/77
- Council Recommendation of 25 October 1977 on the rational use of energy in industrial undertakings (77/713/EEC).	P COM (77) 185 final	OJ L 295/3, 18/11/77
- Council Recommendation of 25 October 1977 on the creation in the Member States of advisory bodies or Committees to promote combined heat and power production and the exploitation of residual heat (77/714/EEC).	P COM (77) 185 final	OJ L 295/5, 18/11/77
- Council Directive of 13 February 1978 on the performance of heat generators for space heating and the production of hot water in new or existing non-industrial buildings and on the insulation of heat and domestic hot-water distribution in new non-industrial buildings (78/170/EEC).	P COM (77) 185 final	OJ L 52/32, 23/2/78 OJ L 30/20, 6/2/79
- Council Regulation (EEC) n° 1303/78 of 12 June 1978 on the granting of financial support for demonstration projects in the field of energy-saving.	P COM (77) 187 final	OJ L 158/6, 16/6/78
<u>Application procedures :</u>		
- Council Regulation (EEC) n° 725/79 of 9 April 1979 fixing the maximum amount of aid to be made available pursuant to Council Regulation (EEC) n° 1303/78 on the granting of financial support for demonstration projects in the field of energy saving.	P COM (78) 672 final	OJ L 93/1, 12/4/79
- Council Recommendation of 5 February 1979 on the reduction of energy requirements for buildings in the Community (79/167/EEC, EEC, Euratom).	P COM (77) 186 final	OJ L 37/25, 13/2/79
- Council Directive of 14 May 1979 on the indication by labelling of energy consumption of household appliances (79/130/EEC).	P COM (78) 358 final + final 2	OJ L 145/1, 13/6/79

<p>- Council Directive of 14 May 1979 applying to electric ovens. Directive 79/530/EEC on the indication by labelling of the energy consumption of household appliances (79/531/EEC).</p>	<p>P COM (78) 358 final + final 2</p>	<p>CS L 145/7, 13/6/79</p>
<p>- Commission Decision implementing Council Regulation (EEC) n° 1303/78 on the granting of financial support for demonstration projects in the field of energy-saving.</p>	<p>D COM (78) 672 final D C (79) 229 final (not published in CJ)</p>	<p>-</p>
<p>- Communication from the Commission to the Council concerning New lines of action by the European Community in the field of energy savings.</p>	<p>C COM (79) 312 final</p>	<p>-</p>
<p>- Council Resolution of 9 June 1980 concerning the new lines of action by the European Community in the field of energy saving.</p>	<p>P COM (79) 312 final</p>	<p>CS C 149/3, 18/6/80</p>
<p>- Periodical report on the Community action programme for the rational use of energy and drafts recommendations of the Council. (see above) 1st report. 2nd report. 3rd report.</p>	<p>C COM (76) 10 final + Annex C COM (77) 185 final C COM (79) 313 final</p>	<p>- - -</p>
<p>- An intensification of the Community's programme for energy saving.</p>	<p>C COM (77) 39 final</p>	<p>-</p>
<p>- Proposal for Council Directives on : • electric washing machines ; • electric dishwashers with cold water supply only ; • electric refrigerators, frozen food cabinets, freezers and their combinations ; implementing Council Directive 79/530/EEC on the indication by labelling of the energy consumption of household appliances.</p>	<p>P COM (80) 193 final</p>	<p>-</p>
<p>- Proposal for a Council Directive amending Directive 78/170/EEC on the performance of heat generators for space heating and the production of hot water in new or existing non-industrial buildings and the insulation of heat and domestic hot-water distribution in new non-industrial buildings.</p>	<p>P COM (80) 108 final</p>	<p>-</p>

<p>Report from the Commission to the Council Community on the refining problems of the Community</p>	C	COM(77)71 final -
<p>- Communication from the Commission to the Council First reflections on the development and the protection of energy investment in the Community</p>	C	CO (77)104 final -
<p>- Communication from the Commission to the Council on problems connected with the profitability of the refining industry in the Community and on ways of resolving them</p>	C	COM (78)71 final -
<p>- Developments in the refining sector of the Community oil industry</p>	C	COM(78)697 final -
<p><u>External changes</u> - Council Regulation (LFC) n° 1093/79 of 28 August 1979 introducing registration for crude oil/or petroleum product imports in the Community</p>	P	COM(79)335 final OJ L 220/1, 30 8.1979
<p><u>Amended by</u> - Council Regulation (EEC) n° 1149/80 of 6 May 1980</p>	P	COM(80)157 final OJ L 118/1, 9 5 1980
<p><u>Supplementary Regulations</u> - Council Regulation (EEC) n° 2592/79 of November 1979 and n° 649/80 of 17 March 1980 laying down the rules for carrying out the registration of Crude oil/or petroleum products imports in the Community provided for in Regulation (LFC) n° 1093/79</p>	P	- - OJ L 297/1, 24 11.1979 OJ L 73/1, 19. 3 1980
<p><u>Application procedure</u> - Council Regulation (EEC) n° 2129/79 of 4 December 1979 and n° 73/80 of 26 March 1980 applying Council Regulations (EEC) n° 1092/79 and n° 649/80 (see above)</p>	D D	OJ L 314/1, 10.12.1979 OJ L 81/15, 27. 3.1980 - -

<p><u>Prices</u></p> <p>(Application procedure of Council Directive 76/491/EEC of 4 May 1976 (OJ L 140, 28.5.1976))</p> <ul style="list-style-type: none"> - Commission decision of 26 January 1977 implementing Directive 76/491/EEC regarding a Community procedure for information and consultation on the prices of crude oil and petroleum products in the Community (77/190/EEC) 	D OJ L 61/34, 5.3.1977	-
<p><u>Amended by</u></p> <ul style="list-style-type: none"> - Commission Decision of 30 May 1978 amending Decision 77/190/EEC implementing Council Directive 76/491/EEC regarding a Community procedure for information and consultation on the prices of crude oil and petroleum products in the Community (79/607/L'EC) 	D OJ L 170/1, 9.7.1979	-
<ul style="list-style-type: none"> - Protection and promotion of energy-related investments guaranteed minimum price for energy produced in the Community 	C COM(77)188 final	-
<ul style="list-style-type: none"> - Energy prices in the Community 	C COM(77)481 final	-
<ul style="list-style-type: none"> - Report by the Commission to the Parliament and the Council upon the application of Council Directive of 4th May 1976 regarding a Community procedure for information and consultation on the prices of crude oil and petroleum products in the Community 	C COM(78) 416 final C COM(80) 221 final	- -
<ul style="list-style-type: none"> - Communication from the Commission to the Council on transparency of the oil market 	C COM(80)74 final	-
<p><u>Stocks</u></p> <ul style="list-style-type: none"> - Proposal for a Council Directive on the introduction in the Community of joint stocks of crude oil and petroleum products Proposal for a Council Directive concerning the creation in each Member State of organizations responsible for storing crude oil and/or petroleum products and on the financing of these organizations 	P COM(77)158 final P	*

<p>- Proposal for a Council Directive amending Council Directive 68/414/EEC of 20 December 1968 imposing an obligation on Member States of the EEC to maintain minimum stocks of crude oil and/or petroleum products</p>	<p>P COM(77)663 final</p>	<p></p>
<p><u>Measures in the event of supply difficulties</u> - Council Decision of 14 February 1977 on the exporting of crude oil and petroleum products from one Member State to another in the event of supply difficulties (77/186/EEC)</p>	<p>P COM(74)1964 final</p>	<p>OJ L 61/23, 5.3.1977</p>
<p><u>Amended by :</u> - Council Decision of 22 October 1979 (79/879/CEE)</p>	<p>P COM(78)415 final</p>	<p>OJ L 270/58, 27.10.1979</p>
<p>- Proposal to a new amendment of Council Decision of 14 February 1977</p>	<p>P COM(80)346</p>	<p></p>
<p><u>Application procedure :</u> - Commission Decision of 28 September 1978 applying Council Decision 77/186/EEC on the exporting of crude oil and petroleum products from one Member State to another in the event of supply difficulties (78/890/EEC)</p>	<p>D OJ L 311/13, 4.11.1978</p>	<p></p>
<p>- Council Decision of 7 November 1977 on the setting of a Community target for a reduction in the consumption of primary sources of energy in the event of difficulties in the supply of crude oil and petroleum products (77/706/EEC)</p>	<p>P COM(74)1964 final</p>	<p>OJ L 292/9, 16.11.1977</p>
<p><u>Application procedure :</u> - Commission Decision of 15 June 1979 laying down detailed rules for the implementation of Council Decision 77/706/EEC</p>	<p>D OJ L 183/1, 19.7.1979</p>	<p></p>
<p>- Measure to mitigate the effects of short-term oil supply problems</p>	<p>C COM(80)247 final</p>	<p></p>
<p>- Communication from the Commission to the Council concerning Community action in the natural gas supply sector</p>	<p>C COM(80)295 final</p>	<p></p>

<u>Support of Community projects</u> (Application of Council Regulation (EEC) 3056/73 of 9.11.1973 OJ L 312/1, 13.11.1973)		
- Council Decision of 25 October 1977 on the grant of support for 40 technological development projects in the hydrocarbons sector	P COM(77)532 final	R/2416/77(ENER 106)
- Council Decision of 30 October 1978 on the grant of support for 49 technological development projects in the hydrocarbons sector	P COM(78)432 final	R/2671/78(ENER 78)
- Council Decision of 29 October 1979 on the grant of support for 24 technological development projects in the hydrocarbons sector	P COM(79)497 final	- 9511/79(ENER 119) - OJ L 281/43, 10.11.79
- Council Regulation (EEC) 1030/79 of 24 May 1979 on Community support for a hydrocarbon exploration project in Greenland	P COM(74)1962 final P COM(77)532 final P COM(78)383 final	OJ L 132/1, 30.5.1979
- Council proposal Regulation (EEC) concerning support to common projects for hydrocarbon exploration	P COM(74)1962 final P COM(77)532 final P COM(78)383 final	*
- Communication from the Commission to the Council on the principles to be applied to financial support of Community projects in the hydrocarbons sector	C COM(80)219 final	-
- Report by the Commission to the European Parliament and to the Council on the application of Council Regulation (EEC) 3056/73 of 9 November 1973, on the support of Community projects in the hydrocarbons sector	C COM(80)260 final	-
- Commission report to the Council on progress of work on Community projects in the hydrocarbons sector and the expenditure on their implementation	C COM(80)257 final	-

<p>4. <u>ELECTRICITY</u></p> <ul style="list-style-type: none"> - Council Resolution of 20 November 1978 concerning the mutual exchange of information at Community level on the siting of power stations. - and updating the explanatory memorandum of above. 	<p>P COM (76) 576 Final</p> <p>C COM (79) 269 Final</p>	<p>OJ C 286/1, 30.11.1978</p> <p>-</p>
<ul style="list-style-type: none"> - Investment projects in the electricity sector of the Community 	<p>C COM (78) 98 Final</p> <p>C COM (79) 719 Final</p>	<p>-</p> <p>-</p>
<ul style="list-style-type: none"> - Communication from the Commission to the Council: Electricity Tariff structures. 	<p>C COM (80) 356 Final</p>	<p>-</p>

5. COAL

General

- General coal market situation - Forecasts.....

C 1977 : OJ C 156, 4.7.1977
 OJ C 5, 1978
 C 1978 : OJ C 118, 22.5.1978
 OJ C 286, 1978
 C 1979 : OJ C 120, 14.5.1979
 OJ C 278, 7.11.1979
 C 1980 : COM (80) 268 Final
 + Final/2

- Commission report to the Council on measures to promote the consumption of coal in the Community. Report by the Commission to the Council on national coal production policies in the Community. Report by the Commission to the Council on national coal import policies and the world coal market.

C }
 C } COM (79) 322 Final
 C }

- Coal policy medium - and long-term perspectives for coal in the Community

C OJ C 161/3, 28.6.1979

- Commission report to the Council. Outlook for the long-term coal supply and demand trend in the Community.

C COM (80) 117 Final

Aids

- Commission Decision No. 751/77/ECSC of 12 April 1977 amending Decision 73/287/ECSC concerning coking coal and coke for the iron and steel industry in the Community

D C (77)408
 OJ L 91/7, 13.4.1977

- Commission Decision No. 1613/77/ECSC of 15 July 1977 amending Decision 73/287/ECSC concerning coking coal and coke for the iron and steel industry in the Community

D C (77) 839
 OJ L 180/8, 20.7.1977

<ul style="list-style-type: none"> - Commission Decision No. 2210/77/ECSC of 3 October 1977 amending Decision No. 3544/73/ECSC implementing Decision 73/287/EGSC on coking coal and coke. 	D COM (77) 511 Final OJ L 256/12, 7.10.1977	- 11
<ul style="list-style-type: none"> - Commission Decision No. 2287/78/ECSC of 29 September 1978 amending Decision No. 3544/73/ECSC on coking coal and coke. 	D C (78) 1117 OJ L 275/78, 30.9.1978	-
<ul style="list-style-type: none"> - Commission Decision No. 3958/79/ECSC of 19 December amending Decision 73/287/ECSC on coking coal and coke 	D COM (79) 753 Final OJ L 344/1, 31.12.1979	-
<ul style="list-style-type: none"> - Proposal for a Council Regulation (EEC) concerning Community aid for financing cyclical stocks of hard coal, coke and patent fuel 	P COM (77) 77 Final P COM (77) 493 Final	*
<ul style="list-style-type: none"> - Proposal for a Council Regulation for a Community aid system for intra-community trade in power station coal. 	P COM (78) 364 Final P COM (79) 127 Final	*
<ul style="list-style-type: none"> - Draft Commission decision concerning coal and steel industry of the Community 	D COM (78) 516 Final	-
<ul style="list-style-type: none"> - Draft Commission decision concerning coal and coke for the iron and steel industry of the Community. 	D COM (79) 263 Final	-
<ul style="list-style-type: none"> - Commission Memorandum to the Council on the financial measures taken by the Member States to assist the coal-mining industry, for the years 1977, 1978 1979. 	C COM (77) 570 Final C COM (78) 367 Final C COM (80) 349 Final	- - -
<p><u>Research</u></p> <ul style="list-style-type: none"> - Memorandum concerning a Community coal and research programme in the field of mining engineering with a view to obtaining financial aid under the terms of Article 55 § 2 c) of the ECSC Treaty. Memorandum concerning a Community coal research programme in the field of product beneficiation with a view to obtaining financial aid under the terms of Article 55 § 2c) of the ECSC Treaty. 	D COM (77) 704 Final D COM (78) 723 Final D COM (80) 34 Final	- - -
<ul style="list-style-type: none"> - Middle-term perspectives for the coal research programme (1981-1985) 	C OJ C 94/3, 17.4.1980	-

<p>6. <u>NUCLEAR ENERGY</u></p> <p><u>General</u></p> <p>- The nuclear problems</p>	<p>C COM (77) 199 Final</p>	<p>-</p>
<p>- Conclusion drawn by the Commission from the public debates on nuclear energy</p>	<p>C COM (77) 129 Final</p>	<p>-</p>
<p><u>Investments</u></p> <p>- Council Decision of 29 March 1977 empowering the Commission to issue Euratom loans for the purpose of contributing to the financing of nuclear power stations (77/270/Euratom)</p>	<p>P COM (74)2070 Final</p>	<p>OJ L 88/9, 6.4.1977</p>
<p>Application procedure :</p> <p>- Council Decision of 29 March 1977, on the implementation of Decision 77/270/Euratom empowering the Commission to issue Euratom loans for the purpose of contributing to the financing of nuclear power stations. (77/271/Euratom)</p>	<p>P -</p>	<p>OJ L 88/11, 6.4.1977 OJ L 12/28, 17.1.1980</p>
<p>- Communication by the Commission to the Council and the Parliament. Euratom borrowing and lending activities. (With DG XVIII);</p> <p>First report Second report</p>	<p>C COM (79) 26 Final C COM (80) 70 Final</p>	<p>- -</p>
<p>- Communication by the Commission to the Council. Annual report of Member States in accordance with Art. 70 of the EAEC Treaty</p>	<p>C COM (80) 56 Final</p>	<p>-</p>
<p><u>Supplies</u></p> <p>- Communication from the Commission to the Council on the progress of the support given to uranium exploration projects in the Community in accordance with Article 70 paragraph 1 of the EURATOM Treaty (Regulation No. 2014/76).</p>	<p>C COM (79) 90 Final</p>	<p>-</p>

7. ALTERNATIVE ENERGY SOURCES

<p>- Council Regulation (EEC) No. 1302/78 of 12 June 1978 on the granting of the finance support for projects to exploit alternative energy sources</p>	<p>P COM (77) 187 Final P COM (77) 708 Final</p>	<p>OJ L 158/3, 16.6.1978</p>
<p>- Commission Decision on the granting of financial support for demonstration projects in the field of energy saving and exploitation of new energy sources (geothermy, solar energy, liquefaction and gasification of coal)</p>	<p>D COM (78) 672 Final D Not published in OJ D</p>	<p>-</p>
<p>- Council Regulation (EEC) No. 726/79 of 9 April 1979 fixing the maximum amount of aid to be made available pursuant to Council Regulation (EEC) No. 1302/78 on the granting of financial support for projects to exploit alternative energy resources.</p>	<p>P COM (78) 672 Final</p>	<p>OJ L 93/2, 12.4.1979</p>
<p>- Council Regulation (EEC) No. 727/79 of 9 April 1979 on the implementation in the solar energy sector of Council Regulation (EEC) No. 1302/78 on the granting of financial support for projects to exploit alternative energy sources</p>	<p>P COM (78) 511 Final</p>	<p>OJ L 93/3, 12.4.1979</p>
<p>- Council Regulation (EEC) No. 728/79 of 9 April 1979 on the implementation in the solid fuel liquefaction and gasification sectors of Council Regulation (EEC) No. 1302/78 on the granting of financial support for projects to exploit alternative energy sources.</p>	<p>P COM (78) 122 Final</p>	<p>OJ L 93/5, 12.4.1979</p>
<p>- Council Regulation (EEC) No. 729/79 of 9 April 1979 on the implementation in the geothermal energy sector of Council Regulation (EEC) No. 1302/78 on the granting of financial support for projects to exploit alternative energy sources.</p>	<p>P COM (78) 122 Final</p>	<p>OJ L 93/7, 12.4.1979</p>
<p>- Proposal for a Council Regulation (EEC) amending Council Regulation No. 726/79 as regards the granting of financial support for projects to exploit alternative energy savings.</p>	<p>P COM (79) 623 Final</p>	<p>*</p>
<p>- Commission Decision of 14 April 1980 on the granting of financial support for demonstration projects in the solar energy sector.</p>	<p>D C (80) 408 Final Not published in OJ</p>	<p>-</p>