

COMMISSION  
of the European Communities

**Necessary progress  
in  
community energy policy**

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## I. INTRODUCTION

1. On 18 December 1968, the Commission submitted the "First Guidelines for a Community Energy Policy" to the other organs and institutions of the European Communities and to the various interested parties among the general public. It thus provided a framework, still valid, for action on energy policy.

Since then, and despite all difficulties, there has been a progressive implementation of the Community energy policy has been effected. This has been made possible by cooperation with Parliament, the Council and the Community advisory bodies, and by continuous discussion with all the business and social sectors concerned. This progress has been reflected in specific Council decisions. At the same time numerous information and consultation procedures have been established which have been equally effective in facilitating the necessary control over developments in the energy field.

2. Since 1969, however, the energy policy context has altered considerably. The following are just the main factors in this highly complex process:

- (a) The changing attitude of the energy-exporting countries, as clearly evidenced by the Teheran and Tripoli Agreements in early 1970.
- (b) The current debate in all the industrial countries on how to improve the quality of life, which has found its first practical and effective expression in efforts to achieve adequate environmental protection.
- (c) The clear emergence of a sellers' market for most energy products, resulting in changed cost and price conceptions among all concerned.
- (d) The imminent enlargement of the Community, which will have the effect of altering both the pattern of the energy sector and ideas on energy policy.
- (e) The working-out and rapid implementation in the large extra-Community consumer regions of a supply strategy which, moreover, is closely related to the foreign policies of the countries concerned.

3. In the other industrial nations too a lively discussion is in progress on the long-term satisfaction of energy needs, which is generally admitted to be an urgent problem. In the USA, Japan, and also Eastern Europe, decisions have been made on this matter which the Community will have to take into account one way or another. Energy supply problems are today so largely world problems that attempts to solve them at the national level appear doomed in advance. But in order to protect our own interests effectively, even Community-level decisions require constant attention to what is happening in other countries.

4. An analysis of the factors outlined above, which have dominated developments in the recent past as they will those in the years ahead, provides in the first place remarkable confirmation of the basic arguments in "First Guidelines".

At the same time, new trends in the energy economy will inevitably lead to shifts of emphases in energy policy. To this extent "First Guidelines" need to be updated and amplified.

5. In the first place, it should be clearly realised that the role of the public authorities on the Community energy market needs to be strengthened, albeit without endangering the unity of the market. The growing economic strength of a few undertakings and the widely perceptible trends towards horizontal and vertical integration, call for increased vigilance on the part of the Commission, since a balanced and competitive industrial structure is now, as ever, in the interests of a large consumer region such as the Community. Nor can basic problems of adequate investment in the energy sector be solved by the operation of market forces alone. This applies both to the satisfaction of the vast capital requirements (and hence, *inter alia*, to the shaping of the prices of the various energy products) and to the increasingly difficult problems of siting major plants for the production, processing and distribution of energy.

Similarly the improvement of environmental protection is an objective which will oblige public authorities at national and Community level to intervene increasingly in the market process, either by laying down standards laws or by taxation measures. It will be particularly important in this field, however, to avoid theoretical preconceptions, and to advance in cooperation with all concerned towards the goals of adequate energy supplies and a high-quality environment.

6. Secondly, in framing the commercial, economic and cooperative aspects of its foreign policy the Community will have to pay more regard than hitherto to its increasing dependence on energy imports. The primary problem here is the supply of hydrocarbons and uranium, but one should not forget the capital transfers concerned, the size of which may affect both balances of payments in Western Europe and the future development of our capital market.

The guiding principle of the Community's foreign policy should be to regularize relationships as far as possible and secure maximum cooperation with all States and regions which have an interest in it. The aim must be through responsible cooperation on equal terms to create a climate of security for existing economic activities and freedom and encouragement for new ventures.

7. The prospects for primary energy requirements, the Second Illustrative Nuclear Energy Programme, and the medium-term forecasts and guidelines for the oil and gas sectors must also be seen against this political background. These were envisaged in "First Guidelines" and can now be presented. They will form an essential basis for the progressive implementation of a Community energy policy.

The forecasts and guidelines refer in general to the period up to 1985. They cannot take into account all the changes which will occur and which may already be having important effects during the reference period.

On the other hand, the characteristics of the energy sector, and in particular the medium-term investment structure, are such that decisions have continually to be taken the economic and social effects of which will often become apparent only after more than ten years have elapsed, i.e., at a time on which the forward analysis cannot focus clearly.

8. These specific difficulties were for a long time the cause of a political vacuum in the energy sector. The unsatisfactory nature of this situation is now generally acknowledged.

But it would also be irresponsible to ignore the need for and possibilities offered by a medium-term energy policy because of the long-term risks inherent in exponential growth. Only such a policy can promote a strategy of balanced growth, environmental improvement and technological progress.

9. Against this background the Commission is presenting to the Council, the other institutions and organs of the European Communities, and those sectors of public opinion concerned the following communication, together with the document "The Problems and Resources of the Energy Policy for the Period 1975-85". Without prejudice to the special powers assigned to it under the Treaties, the Commission will from time to time make individual proposals to the Council, as recommended in this communication or already proposed in "First Guidelines", which continues to be the basis of the Community energy policy. The preparatory work on some of these proposals has already been started or completed; the proposals in question will shortly be presented to the Council.

The Commission hopes that in this way the implementation of the Community energy policy, i.e., essentially a supply policy, will proceed rapidly after the enlargement of the Community. This will entail the joint definition of a supply strategy and of all the requisite Community instruments.

The Commission is convinced that the Conference of Heads of State and Government could give a decisive stimulus to these efforts.

## II. GENERAL PROPOSALS

The main problem for the Community in the field of energy lies in maintaining a regular, stable supply which will meet the demand in terms of both quality and quantity. In the future this problem will remain of major importance in the medium and long term.

The Community itself possesses only a relatively small percentage of the energy it consumes and participates only to a very small degree in the exploitation of energy resources elsewhere in the world. To a very large extent, therefore, it is dependent for its supplies on non-member countries and hence on the world market.

Whereas during the period 1960-70 there was a relative surplus of energy, the market in the future will be subject to more difficult conditions which would lead to major problems of supply at certain times and in certain areas. While various energy sources have for a long time been reserved for specific applications, it is now also probable that in the near future technical and economic requirements will favour an acceleration of substitution processes between various energy sources. This phenomenon will become evident throughout the world, where we shall witness new orientations and even sudden and radical changes in supply lines.

The energy market—both in the Community and world-wide—will therefore become more insecure than it has been in the past. The most difficult period may well be the next 10-15 years. In particular, additional petroleum imports required by the three great consumers—the USA, Japan and Western Europe—will in 1980 run to 1 300 million tons compared with 1970; this figure is so high that the question inevitably arises as to whether and how the available geological reserves can be discovered and exploited in time.

The Community's dependence on non-member countries will further increase in the near future. Imports of petroleum especially will be approximately 900 million tons in 1985, covering 65 % of total requirements.

In the short run there is little likelihood of this situation improving. However, an increase in natural gas and coal imports from non-member countries, combined with a certain speeding-up in the use of nuclear energy, could reduce the Community's oil requirements by about 5 % as from 1980; if other major oil consumers were to take similar action, the world market might become more flexible. Later, and particularly if a clear-cut decision to develop nuclear energy is taken, the reduction in oil requirements could be considerably larger and might increase rapidly.

Such strategy aimed at decreasing dependence on oil could, however, lessen the flexibility of the other energy sources, for which there would then be an increased demand. But these sources are subject to different supply conditions from oil, and even if the importation of coal and natural gas does not reduce dependence on imports as such, the nature of this dependence will nonetheless be changed for the better. As far as nuclear energy is concerned, its security of

supply and its price characteristics make every possible acceleration of its development desirable. If the proportion of imports, which are bound to continue to rise in absolute value at least until the end of the century, can be levelled off as from 1980-85, the main credit will be due to nuclear energy.

Thus the future trend of Community energy supplies is subject to such risks and uncertainties as to call for great vigilance, and where necessary guidance, at Community level.

The Commission will periodically update, by supplementing them, scrutinizing them and adjusting them to the circumstances created by the enlargement of the Community, the forecasts and recommendations contained in "First Guidelines".

In order to improve knowledge of facts and problems and provide more accurate information about them, the Commission will also improve the information media at its disposal by forming closer and more direct relations with interested parties in the various sectors of energy both inside and outside the Community.

Public authorities have recently exerted an increasing influence on the energy sectors activities. In addition to the existing taxation laws and the direct and indirect measures dictated by the consumer countries' interests, there is the fact that the exporting countries are now increasingly taking over control by way of participation or nationalization.

The Community energy industry is dominated by public undertakings and large firms of international class whose capital is entirely or in part privately owned and whose decision-making centres usually lie outside the Community.

Furthermore a few large firms have for some time been expanding their activities; after originally operating mainly in the oil sector, they have turned to natural gas, and at the same time are acquiring interests in coal and nuclear energy. Some firms are therefore now emerging as "energy companies".

This widening of their activities naturally increases their influence and responsibility, and raises the question whether their way of regulating competition as between the various energy sources is really as much in the public interest as it might be. The energy firms are gigantic in size and few in number, and increasing intervention by the public authorities is gradually transforming this oligopolistic set-up. The private interest motive will therefore have very little scope in future, and will be unable to play its regulatory role as in the past.

The Commission takes the view that in addition to keeping a watch on conditions of competition the Community must be able to influence competitiveness necessary, while complying with the relevant Treaty provisions. The Commission has compiled a schedule of the Member States' provisions concerning the shaping of mineral oil prices, which will make it possible to detect and remedy distortions. It will prepare similar schedules for the other energy forms. It has also devised a procedure for the regular collection of



information concerning the prices actually applied for the various energy forms, based on voluntary cooperation from firms at the various stages of production, marketing and consumption.

The next few years are expected to be difficult ones; weathering this period and finding long-term solutions will call for very considerable investments. The availability of very large amounts of capital is therefore a basic condition for a successful energy supply policy.

The Commission emphasizes the special relevance to the Community energy supply problem of adopting the legal form of "European Company",<sup>1</sup> and also of the proposals concerning the application of Joint Undertakings Status,<sup>2, 3</sup> which would provide a suitable framework for the indispensable regrouping of activities. It again draws attention to the urgent need for a favourable decision on these proposals.

Independently of these general considerations, various developments give rise to particular concern and call for appropriate energy policy measures.

## 1. Environmental Protection

The desire to improve the quality of life finds expression in the energy sector in preoccupation with problems of pollution and environmental protection. While "First Guidelines" made it clear that a secure energy source is at the same time a cheap energy source, it is now perceived that the energy sources which are best from these standpoints—natural gas and nuclear energy—also entail the least threat to the environment.

But there are also immediate problems, particularly atmospheric pollution by sulphur compounds and vehicle emissions, temperature rises in watercourses or lakes due to coolant-water discharge from power plants, nuclear power plant safety and the storage of radio-active wastes.

These urgent problems must be solved in the general context of the environmental protection measures specified by the Commission in the principles and proposals set out in its communications to the Council dated 22 March 1972.<sup>4</sup>

The Commission considers that the following action is necessary:

- (1) Speedy solutions to the following specific environmental problems must be sought by laws or regulations, and by concerted action at Community level:
  - (a) Sulphur dioxide in emissions from fixed combustion plants.

<sup>1</sup> OJ C 124/1 of 10.10.1970.

<sup>2</sup> OJ C 106/2 of 23.10.1971.

<sup>3</sup> OJ C 107/15 25.10.1971.

<sup>4</sup> Communication from the Commission to the Council concerning an environmental protection for the European Communities (OJ C 52/1 of 26.5.1972).

- (b) Vehicle emissions.
  - (c) Thermal discharge from power plants into surface waters.
  - (d) Possible environmental damage from the increasing number of nuclear power plants, both in the normal course of operation and in the event of accidents.
  - (e) The optimum conditions for the permanent storage of radio-active wastes.
- (2) Intensification of research on the combating of pollution and other nuisances associated with the use of particular energy sources.

## 2. Rational Use of Energy

The expected rise in costs will stimulate progress in the rational use of energy and thus play an appreciable part in alleviating problems of energy supply and environmental protection. The rational use of energy helps to conserve resources. This should be encouraged without relying on cost increases, especially the social cost of energy, to be included in consumer prices.

The Commission considers the following action necessary:

- (3) To promote the following aims in the Community by all appropriate measures and as speedily as possible:
- (a) Recovery of residual heat produced by thermal conversion in district heating plants.
  - (b) Premature renewal of old thermal plants with a low utilization factor.
  - (c) Improved insulation of industrial furnaces.
  - (d) Thermal insulation of buildings or individual houses.
  - (e) Limitation of vehicle fuel consumption by appropriate techniques.

## 3. Scientific and technical research

Technical innovation could improve the energy supply position. For the next 10-15 years new techniques will be only one factor among others, but in the long run they will play a decisive part in easing market pressures and ensuring a better regional balance between demand and supply.

The scale of energy research in the US underlines its importance. Expenditure in this field will this year total \$ 750 million and thus far exceed the corresponding European outlays; in this vital sector, therefore, the technological gap could widen even further.

In the Community, two forms of research must be intensified:

1. Research leading to a better utilization factor in the production, conversion, transport, storage or use of energy.
2. Research directed to discovering new energy sources, new deposits or new uses for already known deposits.

The Commission is of the opinion that the success of a common energy policy calls for concerted efforts by the Community in the field of scientific research. From a practical standpoint and subject to more detailed studies, certain areas seem to call for priority.

In Europe's present energy situation, nuclear energy is the form which must be encouraged. At present it is used mainly for the generation of electricity; it is therefore advisable first of all to look for new uses for electrical energy, e.g., the electric car. Nuclear energy can also be used for other purposes than electricity generation; consideration should be given, for example, to developing a new energy vector such as hydrogen. If nuclear energy is to become the dominant and perhaps in the long run the almost exclusive energy source, then it is necessary to give attention to the supply of fissionable materials. Development of the fast-breeder technique and also study of the practical possibilities of achieving controlled thermonuclear fusion are therefore of particular importance.

Reference has already been made to the problem of permanent storage of radioactive wastes, which will be produced in considerable quantities when nuclear energy is used on a large scale. Apart from the need for a concerted short-term policy in order to ensure that such storage is performed in the best possible technical and economic conditions, research on the improvement of the currently envisaged solutions is required.

Despite the use of nuclear energy, the search for new energy sources must continue, and it appears that as regards both uranium and hydrocarbons or other minerals, remote detection by aircraft or satellites could be a very promising technique.

Developments in the coal industry are leading to very large energy deposits remaining in the ground, particularly in the Community. It would therefore be very desirable to develop techniques for their exploitation in a form acceptable to the existing distribution and consumption structures.

The Commission considers the following action necessary:

- (4) A review of current research in the Community energy industry, followed by a study of the possibilities of cooperation with other countries.
- (5) In addition, as regards each of the foregoing subjects the following would be necessary:
  - (i) To evaluate techniques as regards chances of success, effort required and effects on the energy situation.

- (ii) To prepare, where appropriate, specific research programmes on the basis of the results of these pilot studies.

#### **4. Relationships between the importing countries**

Some interrelationships exist between the importing countries as regards their energy supplies, as became evident during the tension on the coking coal market in 1970 due to the rapid increase in Japanese imports. These links will in future become much stronger, particularly if the US makes heavier demands on the world oil and natural gas markets. The massive influence of this very large consumer may be still further reinforced by the consequences of the decisions taken by the developing countries on economic and energy policy.

The Community's efforts to improve its supply structure will scarcely make any impression on the world market unless backed by similar measures in the other large consumer regions. Energy supplies are thus already a worldwide problem, and in future will be even more so. No country and no group of countries, however great its geographical, economic or political importance, can solve this problem alone.

The Commission considers the following action necessary:

- (6) To supplement the talks on energy questions which are to take place regularly in future with the United States by similar talks with Japan and other interested countries or groups of countries.
- (7) To improve the existing OECD procedure in order to provide better reciprocal information concerning both problems and proposed solutions, and to work out joint decisions on security and stockbuilding, which can also be applied by those countries outside the European area of the OECD.

#### **5. The relations between exporting and importing countries**

The Commission is of the opinion that the economies of the developing countries must be helped to get on their feet. This process will assume different forms in the various countries and depends in particular on the development of their natural resources and advantages.

The oil-exporting countries are well placed in this respect and have also recently become more conscious of their power to influence the market and thus acquire the resources they need for their economic and social development.

Europe is the main market for the most important of these countries' exportable products; these products are also of primary importance for Europe, so that we thus have a situation of mutual dependence. This complementarity of interests extends beyond the energy field.

The exporting countries are trying to diversify their economic activities in order to escape from exclusive dependence upon a single export. Furthermore, most of the large oil-producing countries are situated in areas relatively near to the Community—the Mediterranean and the Middle East; they should therefore have an interest in utilising Europe's economic capacities in the fields of commerce, economic cooperation, manpower, know-how, the capital market and tourism.

Economic and social cooperation between these two groups of countries in all areas of common interest, based on mutual advantage, could facilitate the industrial and economic development of the oil-producing areas and the attainment of a stable relationship between equal partners—a desirable goal.

Nor need this policy be limited to the oil-exporting countries; it also holds good for other products. In addition, some countries which possess considerable reserves of various energy sources appear capable of increasing their output and making an important contribution to the diversification of the Community's supplies, given financial or technical support. The areas concerned are primarily Eastern Europe, Central Africa and South America.

The increasing importance of the oil industry to the exporting and importing countries has prompted public authorities on both sides to assume greater responsibilities in this field. The Commission is of the opinion, however, that the essential problem is to create a political framework in which industrial initiatives can develop satisfactorily.

The Commission considers the following action necessary:

- (8) To create a consultative procedure with the exporting countries permitting better reciprocal information and discussion; the Joint Committee provided for in the agreements between the Community and some of these countries could be used for this purpose.
- (9) At the same time to stimulate the sending of groups of industrialists from the Community to the exporting countries and vice-versa, in order to determine practical ways of economic cooperation.
- (10) To negotiate cooperation agreements which incorporate in particular the following points:
  - (i) An undertaking by the Community to promote the economic and social development of the exporting countries by the provision of technical and, where appropriate, financial assistance, and also by opening up markets for the industrial and agricultural products of these countries.
  - (ii) An undertaking by the exporting countries and the Community to apply rules and guarantees yet to be worked out, to their enterprises commercial transactions and industrial investments.

### III. PROPOSALS FOR THE INDIVIDUAL SECTORS

#### 1. Oil

##### (A) *General Problems*

The fundamental problem lies in the important part played by oil in energy supplies, and the related dependence of the Community and the whole of Western Europe on imports.

Admittedly there appears to be no danger of exhausting the world's geological reserves, even assuming continued rapid growth over the next twenty years. But the necessary resources must be discovered and tapped, and this calls for greatly increased investment. Since the political and economic structures of the exporting countries are changing rapidly, and average investment costs are tending steadily upwards, it is not certain that investments will be forthcoming on the scale which is essential to ensure the necessary export availabilities.

Apart from such investment problems, the present situation and the expected trend raise the question of security of supply, i.e., regularity of deliveries. In the future even more than in the past, these will be threatened by more or less widespread interruptions, and these do not, of course, rule out local breakdowns. The position will depend upon the attitude of the exporting countries, who may, for example, decide to exploit the situation by limiting output and raising prices until such time as the development of other energy sources reduces the role of oil.

These circumstances are making the public authorities in the importing countries increasingly aware of their responsibilities, and call for a Community supply policy which must make it possible to ascertain by suitable procedures whether the attainment of the aims of the energy policy<sup>1</sup> is adequately ensured. Concern for long-term security must be given priority over a desire to make a quick profit from a favourable market.

##### (B) *Specific Problems*

###### (a) *Reciprocal information*

The two regulations approved by the Council concerning the notification of investment projects and hydrocarbons imports<sup>2</sup> will serve to provide information on the oil market. In addition, the information already available on current prices will be further expanded by regular and comprehensive surveys.

<sup>1</sup> See "First Guidelines", page 10.

<sup>2</sup> Regulations (EEC) 1056/72, and 1055/72, 18.5.1972, OJ L 120/3 pp, 25.5.1972.

The importance which will be assumed by oil exploration on the continental shelf of the enlarged Community makes it essential for the Community to receive specific and more detailed information about the size of the reserves discovered (measured, indicated and inferred) and the technical and financial prospects for their exploitation.

The Commission considers the following action necessary:

- (11) To provide for the regular dissemination in accordance with uniform criteria, of information on oil prospecting and exploitation in the Community.

(b) *Unity of the Market*

The implementation of a common oil supply policy calls for the greatest possible unification of the markets. Although their aims are not necessarily divergent, the Member States apply regulations in various fields which result in disparities. It is therefore important, over and above the application of the Treaty rules, to introduce by progressive stages uniform procedures for the whole Community.

The Commission, together with experts from the Member States, is studying national laws on the pipeline transport, refining and distribution of fuel. This work is preparatory to the implementation of the harmonization principles set out in "First Guidelines".

The Commission again draws attention to the directive which it proposed to the Council on 5 August 1968<sup>1</sup> for the harmonization of safety rules governing oil transport by pipeline; it hopes that work on this directive may be resumed and speedily completed.

The Commission considers the following action necessary:

- (12) On the basis of the programme for removing technical barriers to trade, to harmonize in order of priority:
  - (i) Technical specifications for oil products.
  - (ii) Safety rules and construction regulations for refineries and storage plants.
  - (iii) Safety rules and construction regulations for filling stations.
- (13) To draw up Community rules for:
  - (i) Pipeline transport, with the aim of making it compulsory for pipelines of general interest from a Community standpoint to transport fuel on behalf of outsiders at non-discriminatory prices and on non-discriminatory conditions.<sup>2</sup>

<sup>1</sup> OJ C 123/6 of 26.11.1968.

<sup>2</sup> Proposal.

(ii) The constructions of filling stations, particularly on motor roads.

(c) *Measures in the event of supply difficulties*

The Community must take immediate measures to combat the damaging effects of interruptions of certain supply flows.

The Commission is of the opinion that measures in this field must be planned in the dual context of a stockbuilding policy and of general regulations.

The Commission considered the following action necessary:

- (14) To develop the Community stockbuilding policy further by:
- (i) Harmonization of the stockbuilding policies of the Member States (particularly their financial aspects) at Community level.
  - (ii) Formation of Joint Undertakings for stockbuilding projects of Community interest, particularly in respect of underground storage.
  - (iii) Study of the technical and financial problems inherent in a subsequent raising of the compulsory stocks level to 120 days.
- (15) To adopt, pursuant to Article 103 of the EEC Treaty, a directive obliging the Member States to pass laws and regulations enabling the entire Community to act jointly to cope with possible supply difficulties.<sup>1</sup>

(d) *Investment and financing*

These are very important problems, the solution of which is mainly a matter for the oil companies. Community action can nonetheless be helpful.

The first necessity is to introduce a common system of guarantees against economic and political risks for investment by Community undertakings in non-member countries.

Secondly, it is necessary to utilize the possibilities offered by Joint Undertaking statute<sup>2</sup> in order to introduce various measures (tax reliefs, granting by the Community of subsidies, investment guarantees and interest rebates) to encourage forms of investment which contribute to security of supplies.

The Commission also draws attention to its proposal (now under discussion) concerning the world profit principle,<sup>3</sup> the acceptance of which would be of particular benefit to the oil industry.

The Council regulation concerning the notification of investment projects should at last make it possible to facilitate cohesion of investment, and to avoid global or regional over- or under-investment in the fields of intra-

<sup>1</sup> Proposed directive.

<sup>2</sup> Proposed regulation OJ C 106/2 of 23.10.1971.

<sup>3</sup> OJ C 39/7 of 22.3.1969.



Community transport, processing, storage and distribution of oil products. A similar procedure is required concerning investment in oil port installations, on which there should be prior consultation at Community level.

The Commission considers the following action necessary:

- (16) The creation of a suitable framework for ensuring cohesion at Community level of investments in oil port installations.

*(e) Search for new supply sources*

It is already apparent that the oil companies are directing some of their activities to areas in which, while there are few political uncertainties, prospecting is substantially more expensive than in the traditional production areas. Everything possible must be done to encourage this trend, which is in line with the aims of security and dispersion of supply sources.

The Commission considers the following action necessary:

- (17) To stimulate major prospecting projects, particularly on the Continental shelf and in deep-sea waters, in particular by means of Joint Undertaking status.
- (18) The introduction of a Community system which, in return for an undertaking to produce and market for the benefit of the Community whatever oil may be discovered, embodies:
  - (i) provisions for speeding up and securing widespread adoption of the granting of prospecting licences in areas of interest to the Community.
  - (ii) improvement of conditions for the granting of concessions in the context of harmonization at Community level.
  - (iii) adaptation of the taxation system in order to ensure neutrality or even advantages by comparison with tax laws in exporting countries.
  - (iv) abolition of the obligation to maintain emergency stocks.

*(f) Common import system*

One factor in a general supply policy must be an import policy reconciling as far as possible supply security requirements and low costs.

Such an import policy must take into account both the need to ensure dispersion of sources and the need to establish stable relationships with the non-member countries from which the Community obtains much of its oil supplies.

The Council regulation concerning hydrocarbon imports will make it possible to create a flexible procedure for consultation with the Member States and undertakings concerned, and hence to ensure the desired diversification of Community supply sources.

A common import policy will, however, also need to be based on other measures, particularly of commercial policy, in order to gradually attain the efficacy and coherence which it still lacks at Community level.

The Commission considers the following action necessary:

- (19) To liberalize imports of crude oil and oil products.<sup>1</sup> This Community system will be based on the general procedures<sup>2</sup> already approved by the Council, but will adapt them to the aims of oil supply policy.
- (20) To define common principles in order to ensure satisfactory coherence of the preferential trade agreements and the generalised preferences relating to oil products.

The Commission desires to emphasize that the implementation of a supply policy for hydrocarbons in accordance with the aims laid down in "First Guidelines" and the present communication to the Council will inevitably involve procedures for joint consultation with the Member States and the companies concerned so as to facilitate, where appropriate, the guidance of hydrocarbon supply policy at Community level.

The Commission intends to study this question and to draw up the requisite proposals as soon as possible.

## 2. Natural gas

### (A) *General Problems*

Natural gas has the advantage of being easy to use for a wide range of heating purposes, and also of causing little pollution. Thus it is being better suited than oil to the requirements of environmental protection.

It represents a dependable source of energy for the enlarged Community, with extensive reserves which will probably continue to increase over the next few years. The abundance of these reserves has, produced a rapid increase in demand, which is causing some concern. If deliveries are based initially on Community reserves, the part played by natural gas in the Community's overall energy supply system will remain limited, but if large quantities are imported, then natural gas can make a larger contribution and bring about a corresponding reduction in dependence on oil products.

As with oil, so in the case of natural gas a joint policy must be viewed against the wider background of energy and industrial policies.

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<sup>1</sup> Proposed regulation.

<sup>2</sup> Regulation (EEC) 1025/70 of 25.5.1970, OJ L 124/6 of 8.6.1970.

(B) *Specific Problems*

(a) *Reciprocal information*

The regulations concerning the notification of investment projects and hydrocarbon imports will ensure the provision of information on the natural gas market: It is also necessary to obtain accurate information concerning the Community's gas reserves (measured, indicated and inferred), intra-Community exchanges of natural gas, the import agreements concluded with non-member countries and also investment in prospecting.

The Commission considers the following action necessary:

- (21) To arrange for regular communication, in accordance with uniform criteria, of information concerning the natural gas industry.

(b) *Unity of the market*

In addition to the removal of any discrimination it is essential that the prospecting, transport and marketing of natural gas should not suffer from any technical or legal impediments.

The Commission considers the following action necessary:

- (22) To harmonize the safety and constructional standards for natural gas pipelines in accordance with the programme for the removal of technical barriers to trade.
- (23) To introduce Community regulations for gas-pipeline transport with the aim of making it compulsory for pipelines of general interest from a Community standpoint to be used to transport gas on behalf of outsiders at non-discriminatory prices and on non-discriminatory conditions.<sup>1</sup>
- (24) To replace, in respect of gas produced in the Community, without prejudice to the application of Article 34 of the EEC Treaty, the existing national pre-emption rights by a Community pre-emption right.

(c) *Supply policy*

The Community's foremost aim continues to be to encourage prospecting activity on its territory and to ensure that the best use is made of intra-Community resources.

The application of Joint Undertaking status, the harmonization of concession arrangements and, possibly, the introduction of specific taxation measures can make prospecting in the Community more attractive. In addition, consideration could be given to the rational alignment of natural gas prices with those of other competitive energy sources.

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<sup>1</sup> Proposal.

A further aim is to encourage the development of those imports which will be required by the Community market on the likely assumption that intra-Community natural gas supplies prove insufficient. These imports are at present still marginal, and can be developed without engendering a comparable dependence to that on oil. For this purpose the gas undertakings would have to make long-term agreements concerning their requirements for the next fifteen or twenty years, under a procedure coordinated at Community level.

On top of this, advantage must be taken of the fact that natural gas is still an expanding industry in the Community to create coherent structures in the transport and storage fields so as to ensure flexibility of Community supplies.

The realisation of these aims presupposes an interchange of information between Community prospecting, transport and distribution undertakings. The Commission believes that a European association of these undertakings could facilitate this indispensable exchange of information.

The Commission considers the following action necessary:

- (25) To create a procedure for systematic back-up of prospecting in the Community.
- (26) To improve, in the context of a harmonization at Community level, the conditions governing the granting of concessions.

### 3. Coal

#### (A) *General problems*

Even taking a very long-term and worldwide view, there is no problem as regards physical availabilities. However, although some regions of the world may still be able to count on further development of their coal production and consumption, extracting conditions in the Community are such that coal can scarcely contribute to covering future increases in energy requirements.

The development of pit coal production in the Community continues to be conditioned by the decisions of the Member States and the Community institutions. These decisions not only derive from social and regional considerations, but also take into account the importance of this form of production for Community energy supplies. In these circumstances it is important to form a clear picture of the part which coal—Community and imported—will play in the Community's energy supplies.

The Commission considers the following action necessary:

- (27) To prepare medium-term guidelines for the coal sector.

(B) *Specific Problems*

(a) *Aid policy*

In view of its competitive position as compared with imported coal and other energy sources, Community coal will be unable to dispense with aid in the foreseeable future. Forms of aid differ in the various Member States, and it is necessary to achieve a better coordination of the national aid systems over and above the provisions of Decision 3/71/ECSC.<sup>1</sup>

In addition to the regional aspects underlying Decision 3/71/ECSC, considerations of energy policy and supply stability may prompt the maintenance of a higher production level, which of course will necessitate higher aid per ton. This applies in particular to coking coal, where the regularity and qualitative consistency of deliveries from Community sources are important factors in the Community steel industry's supply system.

The Commission considers the following action necessary:

- (28) To introduce as from 1 January 1973 a new aid system for the supply of coking coal and coke to the Community steel industry.<sup>2</sup>
- (29) To carry out at the appropriate time the necessary improvements to the general body of measures in favour of the coal industry.

(b) *Storage*

The Community's coal production is scarcely capable of following market fluctuations in demand; it is not flexible enough to be able to offset the effects of possible supply difficulties on the world energy market. Article 8 of Decision 3/71/ECSC already authorizes the granting of aid by the Member States to assist the formation and maintenance of pit-head stocks, and thus increase the elasticity of Community coal supplies. It would be advisable to make these provisions more general in character.

The Commission considers the following action necessary;

- (30) To determine, within the scope of Decision 3/71/ECSC, specific joint provisions for the maintenance of Community coal stocks.

(c) *Imports*

The volume of coal imports depends essentially upon the cost of competitive forms of energy. In addition, the expansion of external coal purchases depends upon the availability of adequate quantities of the required qualities. It might also be necessary for Community importers, particularly the coking coal consumers, to participate financially in both exploitation and transport of the external resources.

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<sup>1</sup> OJ L 3/7 of 5.1.1971.

<sup>2</sup> Proposal.

Coal imports are still subject to restrictions in several Member States. The Commission is of the opinion that a coordinated import policy, coupled with measures for ensuring regular supplies, should make it possible to abolish these restrictions.

The Commission considers the following action necessary:

- (31) To set up by stages a coordinated coal import policy by concerting national policies and programmes in conjunction with the removal of the outstanding import restrictions.
- (32) To introduce for coal imports provisions on emergency stocks similar to those obtaining in the mineral oil sectors.

#### 4. Electricity

##### (A) *General problems*

The electricity sector is one of the most important primary energy consumers and secondary energy producers, and will play an increasing part in covering end-consumption. In addition, large quantities of capital are tied up for long periods in this sector.

In order to be able to meet the rapidly increasing demand in favourable economic conditions, it is necessary to commission ever-larger production units, thus leading to a progressive increase in reserve capacities, particularly where nuclear power plants are concerned, their reliability not yet being comparable with that of conventional power plants.

In addition, the present structures of the electricity economy in the Community limit the possibilities of installing and operating large units. In order to make the best use of investment, the interconnection between existing networks would have to be strengthened, and the boundaries between them reviewed, in order to create more rational supply areas irrespective of the boundaries between Member States.

An effort must also be made to create conditions propitious to the optimum siting of production units, special regard being paid to consumption structures and also to the requirements of environmental protection.

The Commission considers the following action necessary:

- (33) To investigate the possibilities of improving the coordination of national policies and programmes for the development of the electricity economy, and to work out appropriate measures, particularly concerning the choice of sites and the interconnection of networks.

(B) *Specific problems*

(a) *The unity of the market*

One basic condition for the harmonious development of the electricity industry is the establishment of the common market in equipment. The liberalization of markets and the intensification of trade within the Community call for the removal of technical barriers, which are due mainly to the differences in technical or safety regulations and standards, and also for harmonization of national regulations and administrative procedures concerning the siting, construction and operation of plants.

In all Member States there are undertakings which produce electricity for their own consumption and deliver their surpluses to the grid. It is advisable to harmonize the regulations concerning in the Member States so as to put an end to differences in the treatment of consumers supplying their own needs in comparable situations and to the resulting distortions of competition.

The price of electricity influences the choice of site and the competitive situation of undertakings with a high electricity consumption. The Commission is of the opinion that the creation of a supply system governed by common rules would contribute to the optimum siting of these undertakings and the removal of distortions of competition.

The Commission considers the following action necessary:

- (34) To harmonize safety criteria and technical standards by pooling experience gained.
- (35) To harmonize national regulations and administrative procedures in the following fields:
  - (i) The siting, construction and operation of production and transport installations.
  - (ii) The granting of concessions for the production, transport and distribution of electricity.
- (36) To draw up common regulations governing supply conditions for industrial consumers.

(b) *Fuel supplies*

The supply of fuel to thermal power plants ensures regular deliveries of electricity, and it would therefore be advisable to cushion cyclical or random fluctuations in supplies by the maintenance of stocks at power plants.

All energy sources can be used for electricity production, and the choices made in respect of power plants thus have their effects on the entire energy sector. A problem arises concerning natural gas, the use of which in power plants is liable, owing to the limited supplies available, to prejudice the development

of applications better suited to its particular characteristics. Another problem is whether it is advisable to maintain, or under certain circumstances to develop, a coal consumption capacity in power plants.

The Commission considers the following action necessary:

- (37) To develop a policy for the building-up of fuel stocks at conventional thermal power plants.
- (38) To prepare guidelines for power plant's fuel supplies, and in this connection to examine under what conditions it would be possible to maintain or develop a coal consumption capacity.

## 5. Nuclear Energy

### (A) *General problems*

It is generally recognized today that from the medium-term standpoint nuclear energy is one of the most important means of reducing dependence on imported oil; from a long-term standpoint it is the only genuine alternative to the fossil fuels. It is already a comparatively cheap and clean method of electricity production. In addition, it is an important factor in the diversification of supplies, as between both primary sources and their geographical origins. It is therefore important for the European industry to be able to construct reactors and carry out the fuel-cycle operations under favourable conditions. At the present moment, however, there are too many undertakings engaged in too many activities in the Community nuclear industry, with hardly any links between them. They have a low profitability factor, and depend in some measure on US light-water reactor technology.

In view of the prospects for the nuclear energy market, it is essential to make the Community industry competitive and put it in a position to cover demand by perfecting its own technology and developing advanced-reactor series.

The electricity producers, and the governments also where they are concerned, are determined to enable nuclear energy to develop as rapidly as possible. The aims of the Second Nuclear Energy Illustrative Programme spell this out for the Community.

One of the difficulties facing such development consists in the additional investments required for nuclear power plants as compared with conventional plants. The public authorities can temporarily facilitate financing, in anticipation that this problem loses significance through the growing reliability of the nuclear plants combined with the effects of a certain degree of standardization.

The existence of a volume of orders sufficient to permit the emergence of large undertakings, together with series manufacture and its associated advantages in the nuclear industry, presupposes the stimulation of export capacities by the offer of credit facilities comparable to those enjoyed by the US industry.



The Commission draws attention to its proposal to apply Article 172(4) of the Euratom Treaty<sup>1</sup> and emphasizes the need to speed up discussion of this subject.

The Commission considers the following action necessary:

- (39) To make use of the Treaty provisions in order to stimulate the introduction of nuclear energy, and especially to increase the part played by the European Investment Bank, with the following aims:
- (i) To facilitate the financing of the additional investments required for nuclear as compared with conventional power plants.
  - (ii) To facilitate the financing of plants, especially in the field of electricity transport, the construction of which would further the switching of very-large-capacity nuclear power plants to the grid.
  - (iii) To make it possible, by granting export credits on favourable terms, for the European equipment industry to develop its export potential.

(B) *Specific problems*

(a) *Unity of the market*

To achieve the desired aim of opening up the market for electro-nuclear equipment, it will be necessary to supplement the proposals already made in connection with the electricity industry in order to remove certain impediments deriving in particular from the specific criteria and standards governing the design, construction and operation of nuclear power plants. These criteria and standards, which affect industrial safety, public health and environmental protection, would be identical in all Member States.

The Commission considers the following action necessary:

- (40) To secure better integration of the existing national and Community provisions into a common policy on nuclear power plant safety.
- (41) To determine, in cooperation with experts from the sectors concerned, the fields in which, in the light of technical progress, it is possible to harmonize the specific criteria and standards applying to the construction and operation of nuclear power plants and fuel cycle installations, and also the administrative procedure for granting permits and authorizations.

(b) *Nuclear fuel supplies*

Despite the rapid increase in demand, there is no likelihood of a worldwide shortage of uranium in the foreseeable future. Demand having hitherto been slight, research has lacked system and depth. There are good reasons

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<sup>1</sup> OJ C 106/5 of 23.10.1971.

for believing that new uranium-bearing areas, and deposits as yet untapped, will make it possible to meet the medium and long-term increase in demand at costs little higher than those prevailing at present. The Community will not, however, be able to cover its requirements from its indigenous reserves, and will have to enter world market.

In order to ensure a continuous supply of fuel for nuclear power plants, it will be necessary to take measures comparable with those proposed for the oil sector, so as to foster the development of Community natural uranium production as well as of the most reliable external sources.

As regards the supply of enriched uranium, the Commission draws attention to its proposal to the Council concerning the creation of enrichment capacities within the Community.<sup>1</sup> It would also be advisable for the Community to diversify its external sources and to improve supply conditions.

As regards the use of the plutonium produced in nuclear power plants, a concerted recycling policy would create more favourable economic conditions for the development of a plutonium industry and of a market for plutonium-containing fuel elements; it would help to avoid a technically and economically undesirable dispersion of small quantities of plutonium over too many recycling plants, each having different requirements.

Furthermore, the building-up of stocks of natural and enriched uranium would serve to ensure regular supplies and iron out market fluctuations.

The Commission considers the following action necessary:

- (42) To keep track of the development of natural uranium reserves and resources in the Community, and throughout the world, in relation to demand, and to examine what measures are necessary in order to ensure the development of new resources.
- (43) To give Community undertakings incentives to prospect for and produce natural uranium, particularly by encouraging the formation of Joint Undertakings, within the meaning of the Euratom Treaty, in which the Member States' uranium-mining undertakings would be merged.
- (44) To take, where necessary, the measures provided for in Articles 68 and 69 of the Euratom Treaty with regard to pricing practices.
- (45) To assist, particularly by means of financial help, the conclusion of an agreement between electricity producers so that certain reactors specialize in plutonium recycling, in order to speed up the development of this technique.
- (46) To build up within the Community commercial stocks of natural and enriched uranium.

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<sup>1</sup> Document COM(72) 693 final of 23.6.1972.