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## ASPECTS OF EXTERNAL MEASURES BY THE COMMUNITY IN THE ENERGY SECTOR

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(Communication of the Commission to the Council)

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## SUMMARY

In its communication to the Council on the "Energy objectives for 1990 and programmes of the Member States" (doc. COM(78)613 final of 16 November 1978) the Commission listed an initial set of external measures to be carried out between now and 1990.

In short, this will take the following form:

- limiting the Community's dependence on imports;
- diversifying supplies;
- increasing stability;
- stepping up cooperation with the developing countries.

This document sets out to explain the way in which these objectives may be achieved sector by sector (coal, oil and gas, uranium), taking into account all the factors making up an external energy policy (relations with the producer States, R&D, international organisations), and to determine the main features of Community measures in this field.

It appears inevitable that, in view of the new conditions which have been imposed on the world energy market in recent years, the Community initiative will supplement and reinforce the Member States' supply measures.

ASPECTS OF EXTERNAL MEASURES BY THE COMMUNITY IN THE  
ENERGY SECTOR\*

Since the Treaties were signed, the role of energy in world economic development has proved decisive and each Member State of the Community has, in line with its interests, adopted a policy or a line of behaviour towards the producer States enabling it to cope with its energy requirements.

The Member States have established close and friendly relations, some of long standing, with non-member countries, in particular with those countries producing oil or uranium, based on economic interests or historical links. They rightly consider that the relations allow them - and continue to allow them - to cope with the difficulties which could arise in their energy supply.

However, at a moment when there are still serious effects of the 1973-1974 crisis (during which, it may be recalled, solidarity between the Member States was hardly evident) and when possible risks of tension may be detected in the more or less near future (in particular as regards oil), it is necessary to identify the aspects of Community action which would give the policies hitherto pursued by the Member States in the external sector the consistency which they sometimes lack.

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\*This document should be read in the light of the reflections contained in the document "Energy objectives for 1990 and programmes of the Member States", and in particular paragraphs 18-20 thereof.

Whatever the differences in their respective situations, they share certain basic interests and in the first place the security of their energy supplies. Furthermore, the increase in their exports of energy products and equipment will help them to balance their trade figures. The Community's role in each of the main sectors - coal, oil and gas, uranium - must be assessed on the basis of these interests. More general energy developments must also be taken into consideration: international discussions and negotiations, development of alternative sources, research and development and, of course, cooperation with the developing countries.\*

## COAL

### 1. Supply

Coal supply raises few problems as regards imports from non-member countries. In 1978 the Community consumed around 287 million tonnes of coal, of which 46 million tonnes - 16% - were imported. Internal production is spread unequally among the Member States of the Community (88% concentrated in Germany and the United Kingdom) whereas imports are more diversified:

- Poland	33%
- United States	16%
- Republic of South Africa	23%
- Australia	15%
- USSR	9%
- other countries	4%

### 2. Trade system

Most coal products\*\* are subject not to a CCT but to national duties, all of them consolidated. These duties are often zero duties, except in the Federal Republic of Germany where there are specific duties on coals and agglomerates, in Italy on agglomerates, in France on brown

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\*Communication from the Commission to the Council (COM(78)355 final of 1 August 1978): cooperation with developing countries in the field of energy.

\*\*CCT headings 27.01, 27.02 and 27.04.

coals and agglomerates. Except for the German and Italian duties, these duties are low. France and Benelux have a system of import licences and Germany an import quota (5.5 million tonnes a year until 1981).

Under Chapter X of the ECSC Treaty the Member States retain responsibility for their commercial policy as regards coal. However, in certain circumstances, the Commission is authorised to take measures or address recommendations to the Member States regarding customs duties, the administration of licences, dumping practices and the quantitative restrictions concerning non-member countries.

### 3. Outlook

The Commission has already stressed the need to take account of the varying situations within the Community and to reconcile the diverging interests of the Member States.\* To date, these have proved too contradictory for a compromise to be found on commercial policy. However, it is more than ever indispensable to take into account both the long-term structural problems of coal supplies and the short-term cyclical difficulties concerning outlets for Community coal.

The Community's basic task is still therefore to ease the short-term cyclical difficulties currently facing Community producers. The Commission has thus proposed support measures for the intra-Community trade in coking coal and power station coal without adopting any restrictive measures on international trade.

Nevertheless, a system for monitoring imports of power station coal was set up in 1977 so that the Commission could closely follow the import trend and always be informed of the situation. Quantitative restrictions would not necessarily lead to greater consumption of Community coal but to increased dependence on oil, to the extent that Community coal is not competitive at international level.

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\*Medium-term guidelines for coal 1975 to 1985 O.J. C 22 of 30.1.1975.

Three types of measure should be systematically encouraged:

- the participation of European coal companies in joint ventures in non-member countries, particularly by means of ECSC loans.
- the conclusion of long-term contracts between Community users and overseas producers.
- whenever called for by commercial interests, the organisation of technical cooperation with non-member countries to develop processes for converting coal into hydrocarbons (liquefaction, gasification).

## OIL

### 1. Supply

The Community's dependence on outside sources appears most evident as regards oil: in 1977 the Community's crude oil imports (485 million tonnes) represented more than 50% of gross energy consumption and more than 92% of the Community's gross oil consumption.\*

The following table lists the main suppliers and the proportion of Community imports accounted for by each of these countries.

Saudi Arabia	148.9 mt	30.7%
Iran	77.9 mt	16.0%
Iraq	47.8 mt	9.8%
Libya	39.3 mt	8.1%
Kuwait	30.3 mt	6.2%
Nigeria	29.6 mt	6.1%
Abu Dhabi	25.3 mt	5.2%
Eastern Europe	21.2 mt	4.6%
Algeria	17.3 mt	3.5%
Qatar	8.5 mt	1.7%
Norway	7.0 mt	1.4%

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\*The 1978 figures are not yet available.

For some of these countries, exports to the Community form a high proportion of their production (Norway 51%, Iraq 43%, Qatar 40%, Libya 39%).

The Community's position of dependence is not likely to change appreciably since net oil imports in 1990, as in 1985,\* could still account for around 40% of the Community's gross energy consumption and 80% of its gross oil consumption.

Imports and exports of petroleum products, now practically balanced at around 40 million tonnes, are of marginal importance, representing less than 8% of the Community's gross oil consumption. The problem of imports of those products arises more in the medium term in the twin context of current refining surpluses in the Community and the desire of the exporting countries gradually to make greater on-the-spot use of their natural resources.

The proportion of gross energy consumption accounted for by oil varies appreciably from Member State to Member State (reaching 80% in the case of Denmark). There is no real Community policy on supplies of crude oil and petroleum products. However, a consistent approach to the Community's oil supply problems will be facilitated by the preparation of annual import forecasts and medium-term balance sheets following consultations between the interested parties (Member States - oil companies - Commission).

## 2. Tariff system\*\*

The tariff system has been changed several times since the establishment of the EEC. The customs duty on crude oil was zero-rated in the EEC Treaty (List F in an Annex to the Treaty).

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\* Estimates based on the Member States' forecasts communicated as part of the examination of the national programmes.

\*\* CCT headings 27.09-27.16.

The customs duties on refined petroleum products listed in the CCT were thus reduced or suspended. At present, imported refined products are exempt from duty when they are to be processed in a Community refinery or chemically converted in a petrochemical plant. There are positive duties of 6% on light and medium oils and 3.5% on heavy oils.

Following the conclusion of association, free trade or cooperation agreements, the Community has granted a large number of countries preferential tariffs, either up to a certain ceiling (the Maghreb countries, Egypt, Syria, Spain, Turkey) or without any quantitative restrictions (EFTA, ACP, Malta, Lebanon, Jordan).

The Community has also autonomously granted all developing countries tariff exemptions for petroleum products imported from these countries up to an overall ceiling for each product which is fixed annually (now 2.6 million tonnes). In addition, each country receiving these tariff benefits has its exports restricted by a cut-off of 20% of the overall ceiling. If the ceiling or cut-off is exceeded, the duty may be restored at the request of the Commission or a Member State.

In 1977 imports of refined products represented about 6% of the Community market within which the refining industry is currently facing difficulties of a size which escapes nobody's attention. The Commission intends to prepare medium-term import forecasts and enter into consultations with the supplier countries and the companies so that the development of this trade may be monitored more carefully and understood more effectively.

In its communication to the Council of 23 February 1978 on productivity in the Community oil-refining industry and possible solutions, the Commission stated that, as soon as the refining situation in the Community had improved, part of the annual increase in the Community's demand for petroleum products could be covered by an increase in imports from oil-producing countries.



### 3. Outlook

The oil sector appears to be the sector in which the Community could consider taking new initiatives. Governments and companies have to date used the existing market structure; because of the conditions which should prevail in the next few years, the Community will doubtless have to set up additional machinery:

- (a) The main feature of the period to come is the possibility of tension on the oil market between 1985 and 1990 because production will be somewhat out of step with consumption. This tension will mean that oil prices will be increasingly fixed in line with the free play of supply and demand on a seller's market.

The Community must therefore put itself in a position to cope with these market conditions: the establishment of objectives such as net oil imports not exceeding 500 million tonnes in 1985 is a step in this direction.

In practical terms, this means that the Community must establish regular relations with the producer countries and their organisations (OPEC, OAPEC). The first meeting has already taken place between the Commission and the latter organisation. Further meetings are planned every six months. The Community must also make better use of the existing possibilities in the agreements already concluded with non-member countries (such as Algeria) and consider the advisability of negotiating new agreements (containing a section on energy) with other producer countries.

- (b) Now that oil is expected to become scarcer in the years to come and it is known that no alternative energy (including nuclear energy and coal) will completely fill this gap in the next ten years, it is evident that everything must be done to try to reduce the deficit;

at present only new prospecting operations leading to new discoveries (such as those recently made in Mexico) can solve this problem. Deposits in some ACP countries have to date not been adequately utilised as they are situated in difficult areas or present difficult prospecting conditions (such as great depths).

In this general context, the Community could consider an extensive range of measures based on two essential aspects:

discussions with the non-member countries concerned so that they can decide on various incentives (on the administrative or tax level, etc.) to make prospecting and exploitation more attractive to the European oil companies.

the development, for application in the non-member countries, of a Community incentive mechanism (subsidies to be repaid in the event of success, possibly a system of credit guarantees) for oil prospecting, based on the mechanism which is currently being discussed by the Council for oil prospecting in the Community, but which could be more promising if applied to less well-developed regions.

In this connection, the conclusion of a Euro-Arab convention to promote and protect investment, approved in principle by the fourth meeting of the General Committee of the Euro-Arab Dialogue of 9 December 1978, could offer a real advantage.

- (c) Finally, the Community would have an interest in encouraging non-member producers to develop adequate technology for using their resources to their best advantage.

Although appreciating the fact that the transfers of technology are covered by industrial contracts between economic operators, the Community could exert its influence in two ways:

- i) Encouraging the dissemination of information obtained by the companies in implementation of Regulation (EEC) No 3056/73, under which technological development projects put forward by the industry benefit from Community aid which is repayable in the event of success. The oil technology conference to be organised by the Commission in April 1979 is a good example of what can be achieved in this sector.

The Euro-Arab Centre for the Transfer of Technology, the establishment of which <sup>in principle,</sup> was approved by the last General Committee of the Euro-Arab dialogue, could possibly prove a useful means towards this end.

- ii) Aid for the training of qualified staff, either by organising various training courses in the Community or by providing teaching or training staff for the training centres which already exist or which are to be set up in the non-member countries.

## GAS

### 1. Supply

In 1977 the Community's natural gas requirements amounted to almost 160 million toe, 17% of the Community's primary energy requirements. The Netherlands covered 52.5% of this amount and imports from non-member countries accounted for 11%, the remaining 36.5% coming from other production regions within the Community, in particular the North Sea.

This supply structure is changing rapidly with the gradual exhaustion of the Community fields which are currently being exploited.

Dependence on imports from non-Community countries is increasing rapidly; it will probably reach 25% in 1980, 38% in 1985 and almost 50% in 1990. Import contracts have been concluded for a total of 93 million toe a year, of which around 30% will be transported by methane tankers in the form of LNG.\* These long-term contracts offer a better guarantee of supply than import contracts for other types of energy, without however being completely free of risk.

The following table breaks down the Community's natural gas imports by country of origin and shows their development.

	(*000 million m <sup>3</sup> Groningen quality)		
	1 toe = 1 300 m <sup>3</sup>		
	<u>1978</u>	<u>1985</u>	<u>1990</u>
Algeria	4.7	48.7	61.2
Libya	2.9	3.3	3.3
USSR	17.1	23.8	25.6
Norway	17.0	35.2	46.2
Iran	-	8.1	10.0
Others	-	-	4.4
<b>Total</b>	<b>41.7</b>	<b>119.1</b>	<b>150.7</b>

Other types of gas, in particular LPG\*\* (9.8 million toe in 1976), account for a modest proportion of the Community's energy balance. However, there is every indication of surpluses on the world market in the years to come, which could change the position of these types of gas on the Community market.

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\*Liquefied natural gas.

\*\*Liquefied petroleum gas.

2. Trade system

All gas is admitted into the customs territory of the Community at zero duty and without a quota. The market is therefore completely free and open, ensuring an excellent trading position for these products.

3. Outlook

The natural gas market will continue to expand despite the levelling off of Community production. Imports will thus play an increasingly important role in covering the Community's gas requirements. For the foreseeable future, the world reserves of natural gas are high enough to permit this trend. Furthermore, the United States' energy policy in the gas sector should strengthen the Community's position on the world market.

This favourable trend nevertheless raises a number of worries about the security and continuity of supply and the high costs of long-distance transport. There are also technical problems in exploiting natural gas in the exporting countries and problems in financing the export channels. The Community should examine all these questions with the producer countries in an appropriate forum. Five points call for particular attention:

1. Using the financing techniques which the Community now has at its disposal to avoid delays in supplies to the Community as a result of lack of timely approval of the necessary investment.
2. Rationalising the construction of methane tankers (the Commission is already granting financial support to the Verolme project for building a methane tanker of 300 000 m<sup>3</sup> permitting considerable economies of scale).

3. Encouraging associations of importers, at least on some parts of the transport route (e.g. utilisation of LNG terminals or joint gas storage installations), failing consortia of the conventional type.
  
4. Implementing the necessary measures (transport and storage) to recover the gas flared off in the countries of the Persian Gulf (120 million toe in 1977).
  
5. Interesting the gas industry in using future surpluses of LPG to increase the calorific power of poor gas and as a raw material in peak lopping installations.

Although this subject was raised by the European side at the Euro-Arab dialogue, the problem has not yet been examined. A fresh effort should be made in this direction to interest the Arab side in cooperation in this sector.

URANIUM

1. Supply

In 1978 the Community consumed about 10 000 tonnes of natural uranium while its own production, concentrated almost entirely in one Member State (France) amounted to less than 2 500 tonnes. In 1985 and 1990 Community requirements could amount to more than 20 000 and 30 000 tonnes respectively. Internal production at the time would be no more than 4 000 tonnes, the Community's total resources now being estimated at 120 000 tonnes.\*

(Non-Community) production of natural uranium is now mainly concentrated in the United States (20 000 tonnes of capacity in 1978), South Africa (9 000 tonnes), Canada (6 500 tonnes), Niger and Gabon (3 500 tonnes). Australia should join this list some time during the next decade (reaching 6 000 tonnes in 1985).

The Community's main suppliers at present are Canada, Namibia, Niger and South Africa. These countries and Australia will provide the majority of our imports in the years to come. This list shows the diversification of our sources, an obvious condition for security of supply. The list does not appear to include other substantial suppliers for the next decade. with the possible exception of the United States which will be a net importer of natural uranium. Some South American and African countries could join the list of countries supplying us in the nineties. China, with whom we now have a cooperation agreement, could also become one of our uranium suppliers.

Consequently, it is with the abovementioned countries that the main channels for supplying Community undertakings with natural uranium should be established in the short and medium term. These countries vary in their control of supply conditions for essentially domestic reasons which are thus difficult to forecast: quantities produced (in particular Canada and Australia), and exportable (Canada), price conditions, conditions of use, etc., not to mention conditions connected with the wish for non-proliferation (reprocessing).

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\*Resources "reasonably assured and estimated additional"

In accordance with the provisions of the Euratom Treaty and taking into account the recent development of supply structures in the Community a joint approach is the only way of guaranteeing security of supply on economically reasonable conditions and for withstanding outside pressures. An approach of this type should lead at Community level to agreements laying down the framework for contracts to be negotiated between suppliers and users. It follows that the position of users would be strengthened if they adopted an agreed line. In fact, essentially bilateral relations between Member States of the Community and the supplier countries are not the best guarantee for the security of supplies to EEC undertakings.\*

Acceptance of conditions negotiated bilaterally is, after all, likely to compromise the continued existence of the common market and the equality of access by Community users to outside sources of supply.

2. Tariff system

The autonomous duties for the Euratom headings are generally zero.\*\* There are some partial bindings to zero duty or a ceiling rate.

3. Outlook

The production of the nuclear energy needed by the Community requires active cooperation with non-member countries and international organisations as regards supply, the assessment of resources, investments, control of security and research.

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\*The Commission's communication to the Council on the "encouragement of European investment in developing countries" (COM(78) 23 final of 26 January 1978) should be recalled in this connection.

\*\*CCT headings 28.50-28.52 and 81.04.



The Community currently has agreements with the USA, Canada, Brazil and Argentina on the supply of natural and enriched uranium. Unlike the case of the USA and Canada - which have played a major role in supplying the Community for the past twenty years - the supply clauses in the Euratom-Brazil and Euratom-Argentina agreements have not yet produced any appreciable results.

- (a) All these supply agreements are accompanied by conditions of use, basically a commitment to use nuclear material and equipment exclusively for peaceful purposes. Until the entry into force of the non-proliferation treaty only the Euratom control guaranteed the exclusively peaceful use of imported materials in the Community. Since the entry into force of the NPT, outside suppliers require the application of the International Atomic Energy Agency's controls (or "guarantees") to nuclear material which they send to the Community. These guarantees are applied in accordance with the three verification agreements concluded by the Community and its Member States with the IAEA.\*

For a number of years some suppliers of the Community have no longer been satisfied with IAEA guarantees alone but seek to subject the transfer of nuclear materials and equipment to additional conditions which either restrict the possible usage of the nuclear materials supplied to the Community (prior consent demanded by the supplier before "sensitive operations") or increase the operating cost of the installations (e.g. by stepping up of the IAEA "verification", sometimes without excluding a certain retroactive nature of the commitments to be entered into.

These restrictions on freedom of use could in some cases compromise the Community's nuclear industrial strategies if their implementation were to be subject to decisions taken by non-member countries.

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\*Euratom/7 NWS/IAEA agreement of 5 April 1973; Euratom/UK/IAEA agreement of 6 September 1976 and Euratom/France/IAEA agreement of 27 July 1978.

The following points are in line with these preoccupations:

- . the requests made by the USA and Canada to renegotiate the nuclear cooperation agreements concluded by these countries with third countries;
- . the negotiation of multilateral agreements (NPT, international convention on physical protection);

a recent ruling by the Court of Justice (14 November 1978) states that the participation of the Member States in a convention on the physical protection of nuclear materials, installations and consignments, such as the convention currently being negotiated under the aegis of the International Atomic Energy Agency, is compatible with the provisions of the EAEC Treaty only if the Community as such as party to the convention in the same capacity as the States for those fields falling under its jurisdiction;

- . adoption of codes of good conduct for the exporters of nuclear materials (the London Club);
- . international nuclear fuel cycle evaluation (INFCE).

At present, it is difficult to forecast the results of INFCE. However, it is certain that this technical exercise will be part of a process laying the foundations for an international system to make nuclear development compatible with the requirements of non-proliferation.

We are now entering a new period in which international collaboration will play an even more essential role in the nuclear sector than in the past.

In this connection, the understandable interest of the Member States favours increased Community consolidation, as this would not raise external barriers at all, while attaching greater significance to the special nature of the Community's energy situation.

The Commission is fully aware that the energy situation of the Member States varies considerably. It is nevertheless convinced that, in the medium and long-term view in which the development of peaceful uses of nuclear energy will be based, the considerations behind the effort towards European integration - the gradual assertion of a separate identity, coupled however with preparedness for a dialogue with the super-powers and the other countries of the world - should continue to play a full role.

(b) Besides these political aspects, commercial preoccupations have assumed an increasingly large place in the past fifteen or so years (in fact since the beginning of nuclear-generated electricity), putting uranium and nuclear products among the major items of many countries' trade balance:

- . supply of natural uranium (and, for some, enriched uranium) on the import side;
  
- . on the export side, enrichment of the uranium, fuel reprocessing, supply of plants and nuclear materials are essential to the economic life of an increasingly large number of countries, including in first place the Community countries.

#### Enriched uranium

As two industrial groups in the Community decided to set up enrichment plants at the beginning of the seventies - with the prospect of new enrichment capacity from 1987 - the Community's supply situation as regards enriched uranium is likely to show a surplus. The long-term contracts concluded with outside sources of supply and the capacities of the enrichment plants set up in the Community suggests that a certain quantity of SWU\* could appear in the mid-eighties and this could be exported by the Community producers. However, exports of this type must be subject to the prior authorisation of the Commission which ensures respect for the general interests of the Community and the international commitments entered into.

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\* Separate work unit.

The Community as such, and the Commission in particular, must spare no effort in promoting these exports.

### Reprocessing

Reprocessing too is an essential service for the Community as regards exports. Without anticipating the examination of this subject to be made at the end of INFCE, it should be recalled that the Community is at present - and doubtlessly for a number of years to come - the only body able to offer reprocessing services to those States whose nuclear installations require it. This is an asset which justified all efforts made for preserving such an exceptional advantage.

### RESEARCH AND DEVELOPMENT

1. About two thirds of the Community's programmes in the energy R&D sector takes the form of projects involving outside contractors (indirect programmes). The Community may not freely dispose of the results of these programmes; its contractors are thus not obliged to grant operating licences for their inventions, whether patented or not, to a non-member country, a national of a non-member country or an international organisation.\* This considerably restricts the possibility of the Community engaging in international cooperation relating to its indirect R&D programmes. On the other hand, some countries do not allow their contractors any property rights on the results of research financed from public funds and often demand the same from their partners in cooperation agreements.
2. The Community is in full possession of the results of its own programmes (direct programmes). It can therefore pass them on under international agreements which may have an overall balance. Sometimes some elements of

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\*However, the Commission is entitled to send some reports on these indirect action research projects (e.g. the final reports) to non-member countries or international organisations with which the Community has concluded agreements in accordance with Article 228 of the EEC Treaty.

this overall balance are economic (the acquisition of oil or uranium) or even political. But the direct programmes form a limited part of the Community's energy R&D programme, which itself accounts for only around 10% of total public expenditure in this sector in the nine Member States.

Despite these limitations, the Community's international relations in the energy R&D sector continue to develop both multilaterally and bilaterally:

- (a) Multilaterally, the Commission, along with its Member States, contributes to the work of the INFCE, the OECD's NEA, the OECD's IEA and the IAEA. Special mention should be made of cooperation with the International Energy Agency on energy R&D. The Commission, on the Community's behalf, has concluded eight agreements with the IEA for implementing this Agency's energy R&D programme. This cooperation has led in particular to the agreements implementing thermonuclear fusion (textor and superconducting magnet) and the agreements on hydrogen research in which the Community plays the role of pilot organisation.

The agreements which the Community has concluded with the IEA to date ensure a suitable balance of trade, satisfying the Commission's contractors. The problems of industrial property have been resolved case by case. This shows that the difficulties of engaging in international cooperation based on indirect programmes are not insurmountable.

- (b) Bilaterally, a distinction should be made between cooperation with advanced-technology countries and cooperation with other countries.

If it considers this valuable and if, in the case of indirect programmes, its co-contractors agree, the Community engages in profitable cooperation with highly-industrialised non-member countries such as Sweden, Switzerland and the United States. When it is a case of oriented basic research (cooperation between Euratom and Sweden and Euratom and Switzerland on thermonuclear fusion) and when the problems of industrial property can be resolved in respect of R&D closest to the marketing stage, bilateral cooperation with highly-industrialised

countries might sometimes be preferred if it presents the opportunity of going further than cooperation in a multilateral framework, while still remaining balanced. It is in this spirit that the Commission is examining the possibility of proposing to the Council cooperation on a number of aspects in the energy R&D sector with Canada and the United States.

3. Those countries which are moderately or little developed in the R&D sector are eager to conclude energy R&D agreements with the Community. The specific nature of direct programmes currently concentrated on matters of concern to the Community, a certain technological backwardness, the reluctance of some Community's contractors to see the Community committing the results of the indirect programmes in agreements of this type or the political nature of some technologies have so far ruled out any meaningful reply to these increasingly numerous requests, in particular as regards solar energy and some aspects of nuclear R&D. However, the Commission believes that the Community has a role to play vis-à-vis the developing countries in the energy R&D sector. The role would be that of an intermediary between the research institutes and European technology owners and the developing countries. The developing countries could announce their specific requirements and thus permit the Europeans to steer their R&D activities more effectively. These contacts could even reveal the value of joint R&D projects. To this end, the Commission is organising the Varese conference on solar energy in 1979.

#### DEVELOPMENT OF NEW SOURCES

The Community, in line with what was decided at the latest summit meetings in Bremen and Bonn, must give an important place to the development of alternative energy sources and to cooperation in this sector.

It is a question not only of considering these problems from the angle of strictly Community objectives but also of examining the extent to which it is possible to consider the development of renewable energy sources as part of an

overall strategy, taking into account the requirements and potential of the developing countries. In the solar sector in particular, and in the case of geothermal energy and biomass techniques, many developing countries certainly offer more suitable operating conditions than the Community countries.

In the communication on cooperation with the developing countries in the field of energy, the Commission has stressed the value of cooperation of this type. In all the contacts which it has with countries or groups of countries with which it is linked by special relations, the Community must propose the establishment of cooperation in this sector. Apart from the partner countries of the Lomé Convention, this problem has already been mentioned in contacts with OAPEC, some Latin American countries and the ASEAN countries, all of whom have given a favourable answer. While taking account of similar activities already undertaken by other international organisations (the list is currently being drawn up), it should be systematically proposed that these countries or groupings should engage in cooperation to develop the use of renewable sources and the rational utilisation of energy at the same time as exploiting conventional sources more efficiently.

The Commission proposes to tackle the problem in all the joint committees it attends with the countries with whom the Community has agreements.

#### INTERNATIONAL ORGANISATIONS

The problem of the Community's relations with organisations such as the IAEA or the role of the Community in discussions such as the INFCE has already been mentioned. An increasing number of international organisations now deal with energy problems and the Community as such must play an active role in them all.

#### - International Energy Agency/OECD -

We must maintain close links with the IEA even if the participation of only eight of the nine Member States rules out the adoption of Community positions except in the R&D sector.

The recommendations currently being drawn up about coal provide a good example of the need to try to harmonise the positions adopted on this matter by the eight other Member States, taking into account the interests of the Community and of all its Members and of course of the powers given to the Community under the Treaties.

Similarly, as regards cooperation with the developing countries, an ad hoc group has been set up within the OECD to examine jointly the cooperation activities of all the countries belonging to this organisation, particularly by the nine Member States of the Community, as envisaged in the Bonn communique. This group's activities will link up with those currently being undertaken by the Commission at the Council's request.

- United Nations General Assembly

Although the plenary committee of the United Nations has not yet tackled energy problems, preparations should be made to resume the dialogue on this subject when the moment comes. The proposed conference on new or renewable energy sources may offer the opening for such a dialogue. The preparation of the development strategy may also provide an opportunity to discuss this. Without yet taking a procedural decision which will depend on the outcome of the current or future discussions at the United Nations, the Community should state its basic readiness to tackle energy problems with the interested countries in a spirit of solidarity and cooperation.

- Development Committee (IMF/IBRD)

The Community should also support the initiatives taken by some industrialised countries - including several Member States - to reinforce the World Bank's activities in respect of cooperation and the development of energy sources in the developing countries, and recommending that these questions should be examined by the IMF/IBRD joint committee (Development Committee) which is formally better suited than other bodies to deal with the technical and financial aspects of these problems.



Despite the practical difficulties to which the system of representation to this Committee may give rise, it would be advisable in this connection to establish a Community position on these matters.

#### Economic Commission for Europe

This United Nations body represents a good forum for an exchange of information and views and, possibly at a later stage, for joint studies on the development of energy links between East and West.

For various reasons - which are political in nature - the Economic Commission for Europe does not even have an energy committee where these problems could be discussed.

All the activities of the Economic Commission for Europe in this sector have been dominated since 1976 by the Soviet proposal to convene three high-level pan-European conferences on energy, environment and transport. The Community first rejected this initiative, which fell outside the framework of the Economic Commission for Europe. After ensuring that the conference on the environment took place within this framework, it adopted a favourable position on examination of energy within the framework. It therefore called for the establishment of a group of Government advisers on energy with the study of information problems as one of its first tasks.

The question of convening a pan-European conference cannot of course be seriously examined until a sufficiently broad exchange of information has taken place. It is therefore in the Community's interest to support once again, at the next session - in April 1979 - of the European Commission for Europe, the idea of setting up a group of government advisers on energy. The USSR and the other Socialist countries are of considerable importance in the world energy sector not only as suppliers of energy to the Community (particularly gas) but also as a major element in the world energy balance and (possibly) in the programmes of aid to the developing countries.

## CONCLUSION

In the two sectors in which external initiatives are of greatest significance in view of the fact that it is therein that Community dependence is greatest - oil and uranium - the Governments and companies have taken effective measures. However, in the wake of a crisis which has revealed the fragility of the system it may now be considered necessary to go further in the direction of Community action.

As regards oil, some European companies claim that the costs incurred as a result of some of their activities (refining, transport) no longer assure them the funds needed for prospecting at the moment when this is most necessary.

As regards uranium, the negotiations under way with most of the producer countries show that, apart from commercial and financial aspects, the political considerations assume increasing importance and require the intervention of the public authorities as the only body capable of ensuring proper use of this product.

In both cases, Community action is clearly the best guarantee for safeguarding the interests of its Member States, either by helping the operators to intensify their supply efforts by providing the framework for giving their activities the maximum of effectivity.

The Commission therefore submits the following proposals to the Council:

### Coal

The Community should :

- . encourage the development of joint ventures between European companies and the producer countries (for instance, by means of ECSC credits);
- . encourage Community users to conclude long-term contracts with their suppliers to allow them to consider the necessary investment;
- . develop, in collaboration with the non-member countries interested, its R&D activities relating to the liquefaction and gasification of coal, and of interest for the European industry.

Oil

The Community will endeavour to establish regular contacts with the groups of producer countries and include examination of energy problems in its bilateral talks with all the producer States, and in the agreements it will conclude. The Community will further attempt, by appropriate means, to encourage the oil companies to increase prospecting throughout the world; it will encourage the exchange of technology and the training of experts from all the countries interested by means of the instruments at the disposal of the Member States.

Gas

The Community will express its interest in the development of the utilisation of natural gas and will study the means of solving the problems arising as regards exploitation, transport (construction of methane tankers) and storage (LNG terminals).

It will study the possibility of using the means of finance at its disposal to promote the use of gas in the Community.

It will encourage the gas industry to study possible ways of using future surpluses of LPG.

Nuclear energy

The Community will attempt to find a solution within the Euratom Treaty to the problems raised by the supply of natural uranium to users in the Member States: in this connection, the conclusion of agreements under which the operators would sign the necessary supply contracts appears to be the best means for reconciling commercial interests and political imperatives.

The Community will do all in its power to defend the export interests of the Member States within existing international organisations or as part of discussions on various aspects of the nuclear cycle; enrichment of uranium, reprocessing of fuel, export of nuclear techniques and material.

Research and development

By concluding agreements with the highly-industrialised non-member countries, the Community will attempt to extend its research and development activities in the energy sector.

It will increase its cooperation with the developing countries in order to provide them as soon as possible with processes enabling them to make maximum use of their various energy sources, including new and renewable energy sources.

International organisations

In all the international organisations in which it plays an active role, the Community will display its desire to continue discussion of energy problems in a spirit of solidarity and cooperation.