

COMMISSION OF THE EUROPEAN COMMUNITIES

COM (76) 508 final

Brussels, 30th September 1976

COMMUNITY ENERGY POLICY

Communication from the Commission to the Council

COM (76) 508 final

COMMUNITY ENERGY POLICY

Communication from the Commission to the Council

INTRODUCTION

Community energy policy has two principal objectives :

- (a) to reduce dependence on imported energy (Part I of this paper);
- (b) to improve security of those supplies which we inevitably have to import (Part II).

Nearly three years have passed since the oil crisis of 1973, but progress towards these objectives remains very modest, in contrast with the urgency that the present situation should command.

It is essential that the Council has a broad and substantive discussion on future energy prospects and give guidance on how he wishes to make further progress in Community policy.

I. REDUCED DEPENDENCE

1. The Council decided on 17 December 1974 to reduce dependence on imported energy from 60 % to 50 % by 1985 (*). (It is clear that the more ambitious target of 40 % adopted at the same time is now beyond the Community's reach).

The latest figures in Annex I, - though highly tentative because it is particularly difficult at the moment to forecast so far in the future - show that the 50 % is now in doubt, even though (following our experience of lower energy demand growth during the last two years) we have reduced the 1985 forecast energy requirement itself by some 8 %. Imported oil may still represent around 45 % of our energy supplies (as against the 37 % which

(*) OJ N° C 135 of 9.7.1975, p.2.

we were aiming at). These forecasts assume an annual economic growth rate of 4 ½% to 5 %, a figure which Ministers might regard as the lowest allowing reasonable social and economic progress. Failure to achieve this growth would ease our energy problems - but in an unwelcome way.

2. The reasons for this disappointing prospect are several. It will be difficult to sustain domestic coal production because of increased costs and a prospective reduction in power station coal requirements. Unless more coal-fired generating stations are ordered, coal-burning capacity might fall by some 30 GWe by 1985. Oil and natural gas production may fall short of earlier expectations.

3. The main change, however, is that nuclear programmes have gone forward more slowly than earlier planned, partly because of technical and environmental factors and partly because of a fall in electricity demand which may prove to be only temporary. In mid-1974, a nuclear generating capacity of 176 MWe in 1985 was forecast (*). Current forecasts amount to 125 GWe, of which almost 90 GWe are currently operating, being built or on order : for at least 35 GWe decisions are still to be taken.

If shortfalls in the supply of nuclear electricity are to be met by increasing oil imports, this will jeopardize further the reduced dependence objective and helping to strenghten oil prices.

4. Looking at the short term, as a result of the economic recession, we were able in 1974 and 1975 to show a falling demand for energy and oil; but consumption in the first half of 1976 was 9 % higher than a year earlier, and the trend is continuing. With an oil price increase likely by the end of this year, this rising trend is a matter of serious concern.

(*) At the end of 1974, targets were set at 160 GWe-200 GWe, corresponding respectively to the 50 % and 40 % dependence objectives set for 1985.

An upturn in oil imports will certainly be a heavy charge for the balance of payments. If, in addition, the price of oil is to rise, the terms of trade will also deteriorate. All this will certainly compromise the efforts of member States to restore stability to their economies.

Annual figures are as follows :

	1973	1974	1975	1976 (forecast)
Total energy consumption (in Millions of tons of oil equivalent - M Toe)	936	918	861	907
Percentage change over previous year	+ 6%	- 2%	- 9%	+ 5%
Oil consumption in M Toe	555	520	472	500
Percentage change over previous year	+ 6%	- 6%	- 9%	+ 6%

(See also Annexes 2 and 3)

5. The longer term oil supply situation is likely in any case to present problems. Oil consuming areas, notably the Community, the USA and Japan, will have to rely on OPEC countries for a large part of their incremental oil demand; the world might need as much as 38 million barrels per day of OPEC oil by 1985 compared with 28 millions this year. Of the 38 millions in 1985, the Community may need as much as 12 million barrels a day (as compared with 10 at present), after allowing for North Sea production.

6. The danger lies in the fact that although Saudi Arabia, the largest of the OPEC producers, has the capacity to increase output to cover possible world requirements up to 1985 and beyond, her production would then be far in excess of that required to meet Saudi revenue needs. The Saudi government has already said that production will not be allowed to rise beyond 8½ million barrels per day, whereas, if the world requirement rises to 38 million barrels by 1985, at least 10 million barrels will have to come from Saudi Arabia.

A decision to produce at this level will be essentially **political** rather than economic in character. The situation would at best lead to pronounced upward pressure on oil prices and would at worst limit plans for economic growth in the Community and other parts of the industrialized world.

7. There is indeed the danger that, unless present world economic recovery proves shortlived, we may face an awkward period as early as 1977, with demand for Saudi Arabian oil rising beyond their 8½ million barrel limit for a limited period before North Sea and Alaskan oil start to flow in quantity.

7 a. The following paragraphs discuss how we should deal with this situation. The development of unconventional energy sources (wind, solar, wave power, etc.) is not covered in detail since these are unlikely to contribute much during the next 10 years or so. But we must continue to devote adequate resources to them, and keep in close touch with work in other industrial countries, since we may have to rely heavily on unconventional sources towards the latter part of the century, particularly if difficulties increase for nuclear energy.

PROTECTION AND ENCOURAGEMENT OF COMMUNITY ENERGY RESOURCES

8. Following the European Council met in Rome in December 1975, the Commission proposed a balanced package of measures to help towards reduced dependence (*) :

(a) An agreement in principle was suggested for :

- lightening the financial burden of cyclical stocking of coal; such a proposal might cost a maximum of 50 m u.a. per year;
- extending until 1985 and improving the existing aid scheme for coking coal and coke (some 36 m u.a. per year to be shared between Community budget, governments and steel industry);

(*) COM(76) 20, 16 January 1976.

- 4bis -

- adopting a safeguard system to protect domestic energy sources, including oil, against a precipitate drop in imported energy prices (minimum safeguard price);
- granting Community aid to oil exploration (50 m u.a. to be spent over 3 years).

(b) A 500 million u.a. Euratom loan scheme for the financing of nuclear power stations and fuel cycle installations.

(c) Further studies were proposed on other measures :

- promoting the use of coal in power stations to avoid the shortfall referred to in paragraph 2 (maximum 50 m u.a. per year);
- guarantees or loan schemes for new energy investments in cases where special difficulties arise. The Commission believes that the Community's fund raising capacity might be further exploited to this end.

9. The common object of these measures is to help reduce dependence by encouraging Community oil and gas exploration and production, coal consumption and coal production, nuclear energy and new energy sources. Not all of the proposals are of equal importance. Some may require deeper examination, while others are ready for quick decision, and supplementary ones might later appear desirable. Attempts to link the various measures closely and to reach all decisions on the package at the same time will impede progress severely.
10. However, at present, Member States have declined to accept the general outlines of the package as the basis for later decisions on the individual measures contained within it.

Energy Savings

11. To achieve the Community objective of reducing energy consumption by 15 % in 1985, compared to 1973's forecast (*), means that considerable pressure over a number of years must be exerted to alter consumption patterns. But the strong impetus given by the 1973/1974 crisis is now losing strength.

(*) Council Resolution of 17.12.1974. The 1985 objectives and forecasts discussed earlier assume that we meet this 15 % savings target.

12. Community actions in this field should :
 - help exchange of experience between national administrations and encourage new ideas;
 - avoid distortions of competition and obstacles to free circulation;
 - help public acceptance;
 - help strengthen our external bargaining position.

13. Groups of experts will shortly recommend a second batch of specific measures but we now need to review if our 15% target can be held, and the extent to which we can relate it to national plans or targets.

14. Pricing will, of course, remain the most effective instrument of an energy savings policy. But the use of it is limited by counterinflationary policies and the problem of maintaining price differentials between competing energy sources. Further, if price increases for domestic energy can be passed on in the form of higher ^{wage} claims, the effects are nullified. The present level of oil product prices, in many of the Member States, is 5-10 % lower in real terms than it was at mid-1974 (when governments had allowed for the sudden crude oil price increase to be reflected in product prices),

15. Difficult as all the policy implications may be, energy saving is cheaper than energy investment, which already absorbs some 25 % of the total industrial investment of the Community.

National Programmes

16. A first attempt was made early this year to review national energy programmes, in the light of 1985 objectives, to identify gaps and problems, and to see where policies conflict. Financing aspects were given special attention and - not without difficulties and uncertainties - it was possible to evaluate the large amount of investment necessary if current national plans are to be achieved (see Annex 4).

17. The Commission believes that such reviews should be continued on a regular basis.

II. SECURITY OF IMPORTED SUPPLIES

18. The Community is likely to remain the world's biggest oil importer, and we need to foster good relations with the oil producers (OPEC) as well as good mutual understanding with other industrialized countries.

Discussions with the producers are now going on in the Paris Dialogue (CIEC), and certain aspects of energy are being covered in the Euro/Arab Dialogue and in negotiations with individual countries.

19. For the present, by far the most important forum is of course the Paris Dialogue. Our aim here is to increase the security for future oil supplies, and if possible encourage moderation on oil prices, by trying to develop an atmosphere of mutual understanding; by identifying the mutual interests of ourselves, the oil producers, and the poorer developing countries in an orderly world energy market; and by working towards arrangements for continued consultation on energy/oil. To a great extent, the climate in the Energy Commission in CIEC will be affected by progress made in other areas such as aid and developing countries' debt. Despite our best efforts, we can expect the producers to continue to press unacceptable demands, like oil price indexation, and to increase oil prices again at the end of this year.
20. Most of the oil exporting countries plan to construct refineries within their own territories. The implementation of this policy would create difficulties for the Community where there exists a surplus of refining capacity. This question is presently under careful study by the Commission with the help of national experts from the Member States.

21. Uranium, too, could become a problem as there is a danger of shortage in the early 1980s. One of the major suppliers, Canada, could limit exports and Australia has yet to make decisions on whether and how much natural uranium to export. Some other supplies are from politically unstable areas. In these circumstances, it is important to promote uranium exploration and to continue discussions with the major uranium producing countries with a view to obtaining secure supplies.
22. All these uncertainties mean that, whatever difficulties we find in implementing individual parts of the present Commission package, major efforts are necessary to reduce dependence on external supplies on the lines discussed in Part V of this paper. We also need to reach early agreement on measures required in the event of a new supply crisis. Recommendations about our refinery capacity and about uranium supplies will be brought forward at the appropriate time.

III. CONCLUSION

23. Faster progress on all fronts is badly needed to make Community energy policy a political reality, both internally and externally.
24. The Council will, to this end, wish to discuss :
 - The disturbing rising trend of energy and oil consumption,
 - The problem of reducing dependence and how we move ahead (including a timetable). Ministers might also wish to consider whether further measures should be added to the Commission's package,
 - The importance of energy savings, and the instructions to be given to officials in the future development of this work, including consideration of the rôle of pricing policy.

25. The Council should also take note of:

- the progress being made in CIEC and other external discussions,
- the need for early decisions on emergency measures.

Brussels, September 1976

*
* * *

- Annexes:
- 1: A comparison between 1985 objectives for the Community and current estimates for 1985.
 - 2: Recent trends on the energy market.
 - 3: Community energy situation 1972/1976.
 - 4: Energy investments in the Community 1976-1985.

**A comparison between 1985 objectives for the Community (1) and
current estimates for 1985 (2)**

	<u>1985 objective</u>		<u>1985 forecast</u>
I. Total energy needs of which gross internal consumption represents	1.475 m.toe		1.350 m.toe (3)
	1.400 m.toe		1.300 m.toe
II. Import dependency	50 %	40 % if poss.	55% to 50%
III. Nuclear objective	160 GWe	200 GWe	125 GWe (of which decisions are still to be made on 30-40 GWe)
IV. Supply : Internal production (in m.toe) of which nuclear energy represents	800 190	900 240	590 - 690 120 (4) - 160
Import (in m.toe) of which imported oil (crude and refined products)	675 540	575 420	760 - 660 635 - 535
V. Contributions of the different forms of energy (in %)			
- solid fuels	17	17	16,0
- oil	49	41	55,0 - 52,5
- natural gas	18	23	17,5 - 18,00
- electricity (including hydro-electricity and geothermal)	3	3	2,5
- nuclear	13	16	9 (4) - 12
	100	100	100

(1) Council Resolution of the 17 December 1974 (O.J. C. 153, 9/7/75)

(2) Compiled in mid 1976 from the most recent figures supplied by the member States.

(3) Based on the assumption of a GNP growth rate of 4,5/5 % per year. Plus or minus one percent corresponds to a difference in gross internal consumption of approximately 120 M toe by 1985 of which 80/100 Mtoe of oil.
The difference between objectives (1.475 Mtoe) and forecasts (1.350) is a consequence of the poor economic situation of 1974/76.

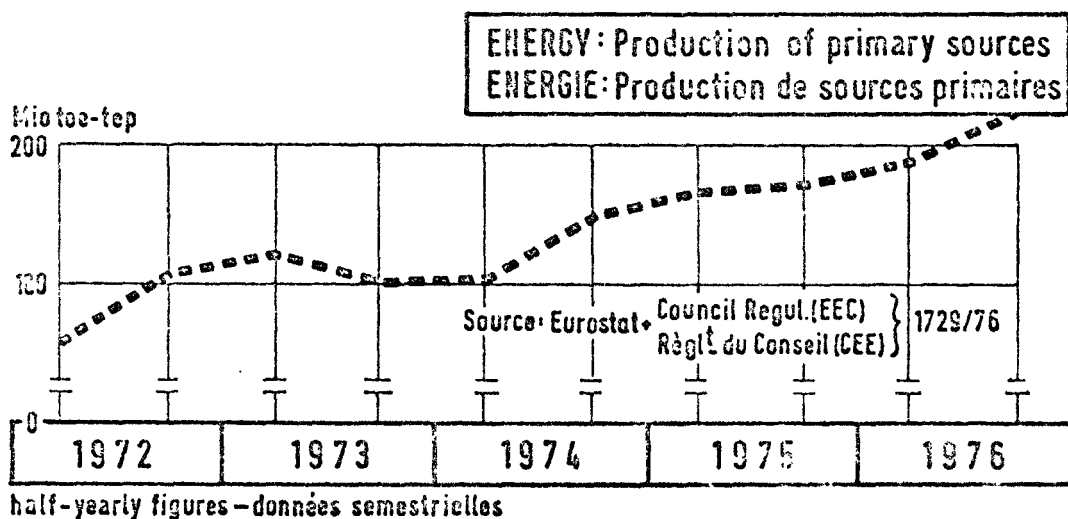
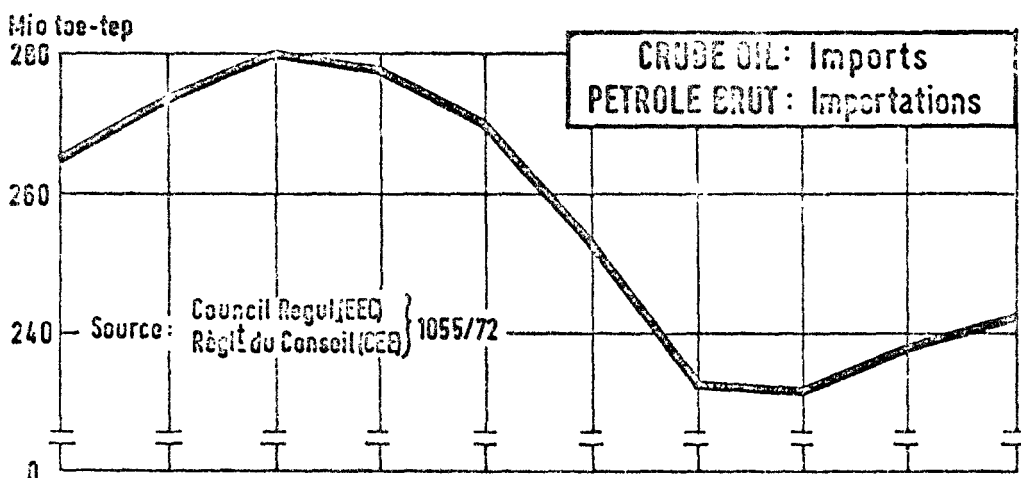
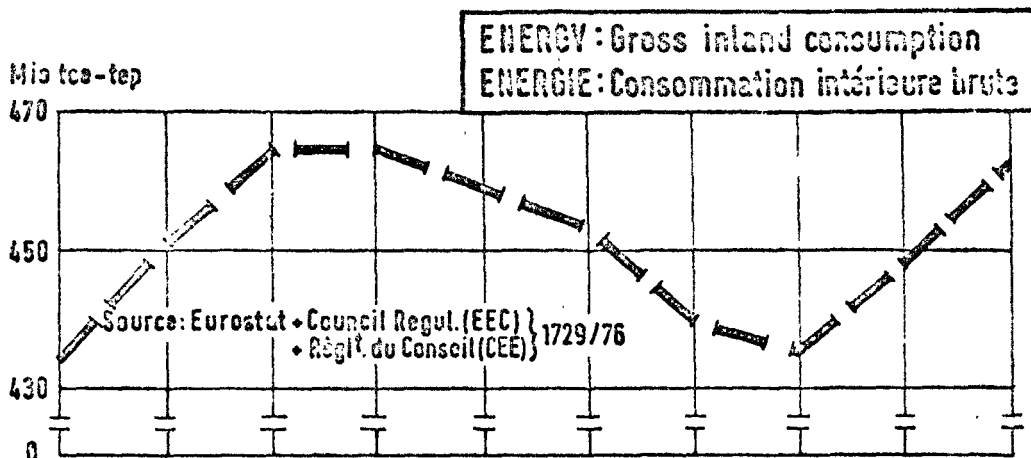
(4) Plants in operation, in construction and ordered only.

Recent trends on the energy market

	1973	1974	1975	1976(estim.)
I. <u>Energy consumption and production</u> (in m.toe)				
a) <u>internal crude consumption of primary energy</u> of which oil	936	918	861	907
b) <u>internal crude production of primary energy</u> of which oil	365	368	386	405
	12	11	12	25
II. <u>Energy market trends</u>				
a) <u>Energy dependence in terms of imports</u> (in %)	63 %	62,5 %	57 %	57 %
b) <u>Annual variation rates</u>				
in relation to the preceding year (in %)				
GNP	+ 5,3 %	+ 2,1 %	- 2,5 %	+ 4,5 %
Internal energy consumption	+ 6 %	- 2 %	- 6 %	+ 5 %
of which oil represents	+ 6 %	- 6 %	- 9 %	+ 6 %
Internal energy production	+ 3,5 %	+ 1 %	+ 5 %	+ 5 %
Net energy imports	+ 7 %	- 3 %	- 12 %	+ 3 %
of which crude and refined oil represents	+ 7 %	- 4 %	- 15 %	+ 4 %
c) <u>Indices</u> (1970 = 100)				
GNP	113	116	113	118
Internal energy consumption :	112	110	103	109
oil	118	110	100	106
Internal energy production	106	107	112	118
Net energy import :	117	113	100	103
crude and refined oil	118	113	97	101

COMMUNITY : Situation COMMUNAUTE :

TREND: (Seasonally adjusted)
TENDANCE: (données désaisonnalisées)



Energy Investments in the Community (1)
1976-1985

(Milliard Units of Account) (2)

	1976-1985
COAL	
A. Production	10
HYDROCARBONS	
A. Production	22
B. Refining and distribution	18
TOTAL	40
NATURAL GAS	
A. Production	9
B. Distribution infrastructure	20
TOTAL	29
NUCLEAR ELECTRICITY	
A. Production	62
CONVENTIONAL ELECTRICITY	
A. Primary production	2
B. Secondary production	18
TOTAL	20
B. Transmission and distri- bution of electricity	49
TOTAL	
Investments A	105
Investments B	105
Investments A+B	210

(1) Source : Based on document XVII/135/76, 7 May 1976

(2) In constant terms: Exchange rates as of the 30 December 1974.