Report

drawn up on behalf of the Committee on Energy, Research and Technology

on the Communication from the Commission of the European Communities to
the Council (Doc. 314/74): 'Energy for Europe: Research and Development'

Rapporteur: Mr M. VANDEWIELE
By letter of 21 October 1974 the President of the Council of the European Communities optionally requested the European Parliament to deliver an opinion on the communication from the Commission to the Council entitled 'Energy for Europe: Research and Development'.

The President of the European Parliament referred this communication to the Committee on Energy, Research and Technology, as the committee responsible, and to the Committee on Economic and Monetary Affairs for its opinion.

The Committee on Energy Research and Technology appointed Mr Vandewiele rapporteur on 18 November 1974.

It considered the communication at its meetings of 18 and 28 November 1974.

At its meeting of 6 January 1975 the Committee unanimously adopted the motion for a resolution and explanatory statement.

Present: Mr Springorum, chairman; Mr Bousch, vice-chairman; Mr Vandewiele, rapporteur; Mr Giraud, Mr Van der Gun, Mr Van der Hek, Mr Hougardy, Mr Krall, Mr Memmel, Mr Willi Müller, Mr Noë, Mr Normanton and Mrs Walz.

The opinion of the Committee on Economic and Monetary Affairs is attached.
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OPINION OF THE COMMITTEE ON ECONOMIC AND MONETARY AFFAIRS 15
The Committee on Energy, Research and Technology hereby submits to the European Parliament the following motion for a resolution together with explanatory statement:

MOTION FOR A RESOLUTION

embodying the opinion of the European Parliament on the communication from the Commission of the European Communities to the Council entitled: 'Energy for Europe: Research and Development'

The European Parliament,

- having regard to the communication from the Commission of the European Communities to the Council (SEC (74) 2592 final);
- having been consulted by the Council (Doc. 314/74);
- having regard to the report of the Committee on Energy, Research and Technology and the opinion of the Committee on Economic and Monetary Affairs; (Doc. 447/74);
- recalling its earlier resolutions on the safeguarding of energy supplies and the promotion of Community research, particularly
  - on the progress necessary in Community research, embodying the opinion of the European Parliament on the proposals from the Commission of the European Communities to the Council for a scientific and technological policy programme¹,
  - the opinion of the European Parliament on the communication and proposals from the Commission to the Council concerning a new energy policy strategy for the European Community²,

1. Takes the view that the problem of overcoming the energy shortage cannot be solved by 1985 partly because insufficient progress will have been made on the envisaged nuclear-generating capacity and desires that account be taken of this in an energy research and development policy;

2. Believes also that research and development, as part of the proposed general energy strategy, should not be regarded as final and unalterable but should be constantly developed in the light of changing circumstances and newly acquired knowledge;

¹OJ No. C108, 10 December 1973, p.58
²OJ No. C93, 7 August 1974, p.79
3. Approves the Commission's communication provided that the planned activities are arranged by the Commission in an order of priority corresponding to their respective importance in guaranteeing the Community's energy supply; in this connection research on the exploitation of fossil fuels should be given first priority;

4. Urges the Commission to fix objective criteria for determining the priority to be given to the various sectors;

5. Also urges the Commission to contribute, by supplying relevant information on the safety of nuclear power stations, to the creation of a climate of confidence to counter in a positive manner certain unfavourable reactions;

6. Finally urges the Commission in connection with practices of energy research and development to arouse and strengthen public consciousness of the need to save energy;

7. Urges the Council to see that the Member States submit to Community coordination all their research activities in the energy field;

8. Believes it essential to use existing Community structures for the organization, administration and development of the activities referred to above;

9. Requests the Council to make any organization created for this purpose responsible to the Commission in the same way as the Joint Research Centre under the Treaties; third countries, however desirable their participation might be, should only be allowed to take part if they recognize this legal situation;

10. Instructs its President to forward this resolution and the report of its committee to the Council and Commission of the European Communities.
EXPLANATORY STATEMENT

1. General

1. The document under consideration is based on the action programme drawn up by the Commission in 1973 for Community research in science and technology. This action programme (Doc. 166/73) was examined by our committee as the committee responsible, and considered by the Parliament (report by Mr Flämig Doc. 219/73).

Parliament approved the action programme in its resolution of 15 November 1973. Paragraph 6 of this resolution calls for application of Article 235 of the EEC Treaty and paragraph 12 requests the Commission to submit proposals consolidating and extending the initial progress towards the Community research and development policy.

2. The Council adopted this action programme on 14 January 1974, supplementing it with three additional resolutions. In paragraph 4 of the main resolution the Council welcomes with interest the Commission's intention to put forward specific proposals for measures drawn up on the basis of the outline programmes submitted by the Commission and designed to support the sectoral policies of the Communities.

3. The document under consideration relates to an outline programme of this kind. Implementation of the programme requires the submission and adoption of those concrete proposals which Parliament has repeatedly called for.

4. Outline programmes and the specific proposals developed from them must be based on political facts, the main one in this case being the energy crisis; it is immaterial whether this crisis is acute or imminent and whether the shortage of energy sources actually exists or is expected to occur. One undeniable fact is the rapid increase in the price of imported energy sources leading to an excessive outflow of convertible funds. All these problems must be counteracted by measures of economic policy. Such measures are extremely important in the case of excessive increases in the price of imported primary energy sources since in the long run a 'recycling' of these funds for the purchase of new imported

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1 OJ No C 108, 10 December 1973, page 58
2 OJ No C 7, 29 January 1974, pages 2ff, especially pages 6 and 7.
energy sources will lead to increasing debts in the consumer countries with all the consequences resulting from this.

5. In this context the present outline programme should be regarded as a strategic document. It deals with research measures as part of the general strategy for a Community energy policy (Doc. 136/74). A report on the latter document was submitted to Parliament by Mr Pintat, also on behalf of the Committee on Energy, Research and Technology (Doc. 184/74). Paragraph 3 of the resolution on this subject adopted by Parliament on 11 July 1974¹ expresses the view that every effort should be made to develop Community energy sources and to encourage coordinated research into new energy sources and that, where necessary, appropriate measures, including long-term investment and comprising the development of domestic energy sources, should be encouraged and supported. The development of the Community's own energy sources is an important part of this.

The following appraisal of the outline programme takes these principles as its basis.

6. Research measures within the meaning of paragraph 3 of the above resolution of 11 July 1974 contribute by their very nature to the fulfilment of this requirement. Parliament therefore agrees in principle to the idea of a research and development programme designed to increase the Community's energy production from relatively secure sources.

2. Energy Research and development in the context of a general energy policy strategy

7. In its statements to this committee, the Commission stressed that the document under consideration contained two basic assertions:

(a) The Community will make progress only if the Member States are ultimately prepared to coordinate all their research activities. In other words all these activities must be harmonized and carried out with an appropriate division of labour.

(b) A suitable strategy is required for achieving the objectives of the energy policy. Research and development policy should not be an end in itself. Its raison d'être should be to contribute as much as possible to the achievement of the objectives of this energy policy.

¹OJ No C 93, 7 August 1974, page 79.
These statements can be approved.

8. In order to achieve this objective a research and development strategy is required. Such a strategy cannot of course be restricted to what is required in the next ten years, i.e. up to 1985. Short-, medium- and long-term energy research and development measures are necessary to ensure that in ten or twenty years time the Community will be in a position to offer alternatives in the event of possible further unexpected developments.

9. Hence, the Commission indicates in the present document what policy it believes should be pursued and what relevant measures taken. It takes the view that strategic importance also attaches to the development of forms and sources of energy, such as hydrogen and solar energy, which cannot at present be exploited. The practical exploitation of such energy is difficult but this is not a new problem.

In this connection, research and further development in respect of energy sources that are already available or could be used to better advantage in the short term should not be neglected since this might prolong the already inevitable period of economic and energy shortages so much that it would be impossible to survive it.

10. Mention should be made in this connection of paragraph 6 of the resolution of 11 July 1974, where Parliament states that it shares the Commission's view that this energy policy should not be regarded as final and unalterable but should be continued in the light of newly obtained knowledge and of changing political, economic and social conditions; if necessary further proposals should be submitted for the implementation of all other measures needed to achieve this stated objective.

11. Although the present document only forms part of this energy strategy, it should also be subject to the principle of further development and adaptation. Long and medium-term research and development projects should take more account than short-term measures of the need for change. As they continue for a longer period, account should be taken of knowledge gained during that period.

This should not be neglected when drawing up practical programmes.

3. Energy supply prospects as a starting point for the necessary measures

12. Almost all programmes are based on the premise that by 1985 nuclear power will cover the greater part of any energy shortages that have arisen in the interim. There are many indications, however, that the period of scarcity will not have ended by 1985, as there will not be an adequate number of nuclear power stations. Delays in the nuclear sector are due in no small measure to hesitation by parliaments in the face of well-organized pressure groups and environment organizations and their opposition.
of a minority to the construction of planned nuclear power stations.
In the Committee's view the future lies with nuclear energy, but the planned reactor programme will not be completed by 1985 because too much time has been wasted up to now.

13. Now objective and positive information for the people is a prime requirement. Every day we hear of campaigns in which people 'are in favour, in principle, of the construction of nuclear power stations,' but immediately stipulate that they should not be built in their immediate vicinity. A supplementary measure is therefore required in the form of a general Community siting policy for the construction of nuclear power stations in which internal frontiers play no part. As its contribution to this the Committee on Energy, Research and Technology will submit to Parliament in the foreseeable future an own-initiative report containing appropriate proposals.

14. The Committee also believes that the initial enthusiasm for natural gas was ill-founded. It will deal with the supply policy problems of this rare form of energy in a further own-initiative report. It can already be said at this stage, however, that natural gas will have to be used sparingly.

15. In these circumstances an energy policy strategy must be aimed at helping to cover as soon as possible the new shortage that threatens to arise by 1985 as a result of the factors mentioned above. Research and development in the energy sector must be adopted to this objective.

4. The selection of measures and the criteria used

16. While recognizing the importance of the strategic areas listed in the document under consideration, the Committee on Energy, Research and Technology takes the view that the proposed activities briefly summarized on page 19 of the document should be arranged in an order of priority based on their significance with regard to the Community's energy supply.

17. In the light of political and economic energy prospects, this means that special priority should be given to those measures aimed at rationalizing and improving the exploitation of Community resources and/or forms of energy that can be imported from relatively safe areas. However, the committee takes the view that it is the Commission's responsibility and not its own to set the individual priorities on the basis of the above outline.
18. It would, however, like to make one exception to this. Since, as stated before, nuclear energy will not, from a purely quantitative point of view, fulfil expectations by 1985 and a lean period is almost unavoidable, the committee would recommend that first priority should be given to research and development for the exploitation of fossil fuels. It is still by no means certain that the hopes placed in the importation of solid fossil fuels will be fulfilled.

19. When setting priorities it should be remembered that none of the energy policy sectors which are at present being neglected can be expected to show new promise in the near future.

20. The committee requests that first consideration should be given to medium-term research projects. Nevertheless it stresses the need for long-term measures to provide for requirements extending far beyond 1985 by the development of new and often seemingly futuristic energy sources such as solar hydrogen and geothermal energy. Hence, careful evaluation and is necessary, bearing in mind the available experts and funds. In this connection it should be remembered that extra funds will be easier to find than suitable experts.

5. The instruments of selection

21. Leaving aside general investigations (survey of research funds, developing systems models etc.), the method for considering the various sectors should therefore be based on certain objective criteria established in advance - in particular the time taken to obtain practical results from the proposed activities and the quantitative effects of these activities. In this connection due attention should also be given to the Commission's inventory of energy research and development activities promoted by the public authorities of the Member States.

22. The Commission believes that, in the present economic situation, the Community's total expenditure on research and development measures should amount to some 1.5 thousand million units of account.

The committee cannot give its opinion on this figure or the thinking behind it until practical proposals have been made on the basis of the desired list of priorities.

23. Environmental aspects have hitherto represented a major criterion of selection, particularly in view of the campaigns against the construction of nuclear power stations. From the point of view of energy policy, this may have a very favourable effect. A positive example is the reciprocity of interests between the calls for increased use of public transport and less use of individual transport.
24. However, it is obviously not always possible to strike a balance between a secure energy supply and environmental protection. In such circumstances careful consideration should be given to the consequences of choosing one in preference to the other. This is another broad area of activity in which research and development measures can play a part. Supplying the general public with appropriate information should create an atmosphere of confidence among the Community's citizens. The appropriate services of the Commission are requested to take this into account in their work.

25. Similarly, the provision of information could also be used to inspire confidence as regards the complex problem of the rational use of energy, which is often referred to as energy saving. It is not only a matter of convincing the individual consumer of the necessity of using available energy more sparingly. A more positive measure would be continuous provision of information aimed at a more rational use of the various sources of energy. Research in this field has already produced many useful results. Thus, for example, quite astonishing savings have been made in the design of motor vehicles and electric motors without any loss of performance. Transistor technology has resulted in enormous savings of energy in the field of radio. The same applies to the evolution from carbon filament lamps to fluorescent tube lighting. These examples represent a few among many. Specific information of this kind could have favourable results where the general public is concerned.

6. Organization and administration of activities

26. In view of the recent OECD energy policy measures the organization and administration of activities are extremely important. Paragraph 7(b) of the Council resolution of 14 January 1974 on an initial outline programme of the European Communities in the field of science and technology\(^1\) states that all possible and available means should be taken into account.

The structures chosen should be flexible. Their selection should depend on the nature of the individual projects and take account of the specific proposals still to be submitted.

27. It would be desirable if energy research could be organized within the framework of existing Community structures. The establishment of an institution in the form of yet another international organization outside the Community should be avoided.

\(^1\) OJ No C 7, 29 January 1974, p.6
28. The Commission's document hints at the question of an agency as a possible independent body for organizing and administering the activities. The Commission told the committee during the latter's discussion of the matter, that it believed that if such a body with real powers were not created by political decisions the measures taken would not be fully successful.

A positive decision is made more difficult, however, by the circumstances under which the international energy agency was established on 18 November 1974 by 16 Member States of the OECD, including 8 Member States of the Community.

29. In these circumstances a research and development agency should be set up only as an auxiliary organ of the Commission and should be the latter's exclusive responsibility in the same way as the Joint Research Centre. The Joint Research Centre is concerned with direct measures which are the Commission's immediate responsibility under the treaties. It would be illogical and contrary to the spirit of the treaties if indirect measures and the coordination of national activities were based on different principles. This is particularly important since paragraph 7(c) of the above resolution emphasizes that whenever necessary or desirable non-member countries, particularly European ones, should be associated in these projects and that steps should be taken to make this possible, the Council adopting the decisions required to this end.

30. In this event third countries should not be allowed to participate in the agency by Council decision unless they can actually make contributions and not simply reap the benefits of such participation. In this instance too, however, the agency should remain the Commission's responsibility in the same way as the Joint Research Centre. The European Parliament could agree to the creation of such an agency only if this political condition were met. Care should be taken to avoid a similar political situation as the one which arose in respect of the establishment of the OECD energy agency. It would be much better to direct all our efforts towards the strengthening of Community structures. Those third countries that wish to participate in the measures taken must also recognize this. In the context of research and development the Community must speak with one voice, since science knows no political boundaries!

7. Conclusions

31. In conclusion, the Committee on Energy, Research and Technology approves the communication from the Commission to the Council entitled 'Energy for Europe: Research and Development', provided the following requirements are met.
- The Member States must be prepared to coordinate jointly all their research activities in the energy field;

- Energy research and development, which forms part of the overall energy policy strategy, should not be regarded as final and unalterable but should be adapted to changing circumstances and new knowledge;

- The planned measures should be arranged in an order of priorities corresponding to their importance for the security of the Community's energy supply; first priority should be given to research and development methods concerning the extraction of fossil fuels since the as yet unexploited sectors of energy sources can hardly bear fruit for at least 10 years;

- The method for considering the various sectors should be based on certain objective criteria fixed in advance;

- Supplying information to the general public should strengthen the confidence of citizens in the planned measures even in the nuclear field; energy and environmental considerations should be clearly weighed in the balance and explained in a way which can be generally understood;

- The concept of the rational use and saving of energy should in the same way be explained to the general public;

- Any agency established for the organization and administration of the planned activities must be an auxiliary institution of the Commission and must fall under the latter's exclusive responsibility in the same way as the Joint Research Centre; third countries should be allowed to participate in this agency only if they recognize this legal situation.
Dear Mr Springorum,

The Committee on Economic and Monetary Affairs, consulted for an opinion for your Committee on Document 314/74, examined this communication from the Commission of the European Communities to the Council concerning energy for Europe: Research and Development, and have asked me unanimously to convey the following opinion.

In view of the rising prices of imported energy and the resulting damage to the competitiveness of European industry on world markets, the intention of the Commission to intensify research in the field of energy should be warmly welcomed. This Committee is acutely conscious of the seriousness of the economic situation which is illustrated by growing deficits in the balance of payments of many Member States and wonders if a Communication to the Council is the most appropriate instrument to stimulate action by the Community which is now so very necessary in this field.

Because of the short time envisaged by the Council for consideration by the European Parliament of this important topic, this Committee is unable at the moment to give as comprehensive an opinion as it would like. However, the implications of
energy costs on the Community's economy are a matter which the Committee has had under consideration, and the topic will be discussed by this Committee with particular reference to the Commission's communication in the near future.

Yours sincerely,

Sir Brandon Rhys-Williams
Vice-Chairman

Members present on 29 November:

Sir Brandon Rhys-Williams, MM Adams (deputizing for Mr van der Hek), Artzinger, Berthoin (deputizing for Mr Hougardy), Boano (deputizing for Mr Mitterdorfer), Bousch, Burgbacher, Carpentier, Delmotte, Flämig, Leonardi, Noé (deputizing for Mr Bersani), Normanton, Nørgaard, Scholten, Thornley (deputizing for Cifarelli) and Walkhoff.