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WHITE PAPER

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**AN ENERGY POLICY  
FOR THE EUROPEAN  
UNION**

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(Presented by the Commission)

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## FOREWORD

1. The conditions under which energy products are produced, transported, distributed and consumed, whether they enter into industrial-production systems, the generation of electricity or in the organization of social systems, determine the economic, social and political environment of both business and the man in the street. Moreover, the regulatory framework determines the conditions under which investments are made in energy-producing and consuming companies.
2. Whatever the level of intervention by the public authorities, those politically responsible in the Member States are interested in, and indeed influence, the options as a function of national, regional or local priorities. These options are dictated by the aims of economic competitiveness and security of supplies which take account of both the social and regional dimension and of environmental-protection policy. This intervention by the public authorities may depend upon Community instruments, whether financial or trade-policy, or may affect the operation of the market and the conditions of competition which form the core of the Community's powers. This intervention must therefore, comply with Community obligations.
3. The Commission thus feels that it is essential for the effectiveness of the policies conducted at national level, that the responsibilities deriving from energy policy should form part of common aims that have been defined at Community level. The Commission is thus prepared to use all of the provisions of the Treaties to that end in order to establish, first of all, a framework for the discussion of energy policy that involves all of the public and private operators concerned, secondly, a framework for consultation on energy policy guidelines and on activities in this area and, finally, a framework for cooperation with the Member States in order to achieve jointly-defined aims.
4. It is indeed important that all Community instruments should be activated by common aims. The central aim of the Green Paper had been to usher in a broad debate on what those aims must be. That debate brought reactions from all of the Community institutions, the Member States, national parliaments and more than 40 national or Community bodies representing all of the economic, industrial and social interests concerned. The Green Paper allowed Parliament, in particular, to debate openly energy policy options and to define action guidelines which have contributed to this White Paper. In parallel and in consultation with the Member States, the energy industry and academic circles, the Commission has developed an analysis of the energy outlook up to the year 2020, together with scenarios. The results of those debates and studies will be published alongside this White Paper.
5. Energy policy must form part of the general aims of the Community's economic policy based on market integration, deregulation, limiting public intervention to what is strictly necessary in order to safeguard the public interest and welfare, sustainable development, consumer protection and economic and social cohesion. However, beyond those general

aims energy policy must pursue aims that reconcile competitiveness, security of supplies and protection of the environment while bearing in mind that the Union's central concerns are, on the one hand job creation and the quest for greater efficiency in the general business environment that also includes the organisation of energy systems, and on the other hand the protection of the environment.

6. In pursuing these aims the Community cannot be unaware that its forecast energy dependence will increase and that the choices to be made as regards protection of the environment in particular may heighten that dependence. Nor may it disregard the fact that the integration of the Community involves greater solidarity in the energy choices made by each of the Member States. Finally, it cannot ignore the fact that the energy scene is marked by changes in outlook and crises which justify flexibility and adaptation in defining and implementing an energy policy.
7. In considering these various constraints the approaches put forward in this White Paper are based on the following factors:
  - Market integration is the central, determining factor in the Community's energy policy. Without such integration other activities lose their justification since their essential aim is to use Community support instruments, such as the Trans-European Networks, in order to help in providing production, transport and distribution infrastructures enabling the European market to respond to demand, or to make supplies to that same market dependable. A fragmented market refers all such activities back to national level, and could undermine efforts to improve the Community's competitiveness. Against this background the White Paper must, during the current process of integrating the electricity and gas markets, address, in particular, the concerns expressed with regard to the contributions which the Community may make towards safeguarding public service obligations, towards economic and social cohesion and towards security of supply;
  - The concerns regarding competitiveness and environmental protection require a balanced approach in the medium or long term that is based on internalisation of costs. Irrespective of fiscal harmonisation which is necessary for the proper working of the internal market, the fiscal instrument is clearly an efficient method of internalising these costs that affect every level of production. However, that method is difficult to implement owing to the need to take account of its impact on industrial competitiveness and of its effects on the energy policy choices that currently differ within the Community. If the Commission is to continue to work on fiscal instruments by helping the Member States to restructure their own taxation policies with a view towards convergence while taking account of the aim of reducing taxation pressure on business; this must not undermine efforts to meet environmental challenges by taking into account energy efficiency at consumer-product level, by promoting in the generation of electricity cleaner and more efficient technologies, particularly renewable energies, by developing voluntary agreements between enterprises and by exchanges of experience and by cooperating on research and technological development and on demand-management projects;

- The external dimension is considered in general to be the most important vehicle for action, first of all because the Community's supplies mainly come from outside producers and, above all, because the growth of consumption in non-member countries will be the main cause for concern during the years ahead. Community funds, and the bilateral and multilateral agreements must be activated in order to provide a coherent approach to energy matters with our major partners. These fora for dialogue are already in place and must be used in order to implement that approach. It must, indeed, be borne in mind that the energy sector, in view of its strategic function, must aim at making investments secure, facilitating technology transfers and broadening consultation and cooperation;
- Security of supply must continue to be a constant concern of the public authorities; it also justifies a common approach at Community level in view of the level of integration of the consumer markets, of its external responsibilities and of the growing integration of the energy market itself. That approach must be based on bolstering the management of the oil crisis measures, by monitoring the operation of the energy market via more efficient use of existing tools and by an overall balance of fuels on the market, particularly for electricity generation and for transport, which takes account of the diversity of the national and regional situations.

8. This White Paper provides an indicative work programme for the Commission for the years ahead which takes account of the limits to Community action for reasons linked to either subsidiarity or to budgetary constraints. It does not go beyond the limits set out by the present Treaties and stays within the framework of the budgetary forecasts. It therefore does not involve any transfer of powers or any new budget spending. Implementation of that programme will pass through the Community's normal decision-making process via proposals and Communications or new management approaches towards existing machinery. However, since all action in the energy sector must adapt to changing conditions, on the basis of a common perception of the problems and their consequences, this work programme will be monitored and adjusted every two years as part of a report on energy which will enable the various institutions of the Community to provide an update on the aims pursued.

9. This White Paper provides a convincing case for a Community energy policy, but also identifies some limits to Community action in this area. The approach developed by the Commission in this White Paper in no way prejudices the action that it will be called upon to take in the framework of the Inter-governmental Conference which will be the subject of a report by the Commission in 1996 as foreseen in the declaration n°1 to the Treaty.

## I. INTRODUCTION

### 1.1 Why a White Paper on Energy Policy?

10. Energy is a key sector in the European Community which is becoming increasingly integrated both politically and economically and whose geopolitical responsibilities are widening. Although the Treaties already provide for an important Community role in the energy field, the Commission has come to the conclusion, on the basis of past experience and in light of energy trends, that it is only within a sound and coherent energy policy framework at Community level, that maximum benefits can be realised from actions at both Community and Member State levels and a full contribution made to other policy objectives.
11. The need for such a framework is due to a number of forces that will have important consequences on the future of the Community's energy sector. First and foremost, as the Community moves towards an integrated and more competitive energy market, it will need to have increased solidarity on energy matters. It is at the Community level that an effective and balanced approach to energy policy issues can be achieved, such as the external energy role of the Community or the social and regional dimension of energy or the necessity to ensure that the Community's energy supplies remain affordable, stable and diverse.
12. Energy is of considerable importance given its strategic relevance as a raw material for industry, particularly energy intensive industries, for the quality of life and for the creation of jobs. In the current economic and social situation the level of energy prices is a positive factor in lowering production costs and prices and an important element in the process of economic convergence and progress towards economic and monetary union. However, the present favourable energy situation cannot always be taken for granted and a framework is necessary to ensure that its stabilising benefits are not lost. The energy situations and energy policies of Member States are quite different and it is likely that a sharp shift away from the present favourable energy situation would lead to different reactions. A Community energy policy framework in which Member States are working towards agreed common objectives would enable the Community to respond effectively to the destabilising effects of changes in energy prices.
13. The need for consistency is particularly acute for complex problems such as the relation between energy and environmental protection. On this issue there is a growing commitment at all levels - industry, governments, international organisations and general public - to sustainable development. This was an objective endorsed by the Community in its Fifth Environmental Action Programme - Towards Sustainability<sup>(1)</sup>. Given the significance of energy in economic development, an important aim of a Community energy policy will be to ensure that measures in the energy sector do not conflict with and indeed enhance

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(1) Com(92)93, Fifth Environmental Action Programme - "Towards Sustainability".

sustainable development. In general, the pursuit of competitiveness and environmental protection should be complementary and should not create any major tensions, as mapped out in the Commission's White Paper - "Growth, Competitiveness and Employment - The Challenges and Ways Forward into the 21st Century."<sup>(2)</sup>

14. The need for a consistent approach is also justified by the responsibilities exercised at national or regional level on energy and environment choices. In full respect of the subsidiarity principle, a cooperation process between the Community level and the national level should ensure that these responsibilities are carried out in a coherent way on the basis of common objectives. Last but not least, clear energy objectives agreed between the Community institutions would facilitate the use of existing instruments and thereby contribute to achieving these energy objectives.
15. Faced with these challenges the Commission, with the full support of the European Parliament and the Council, and in close consultation with interested parties in the energy sector, felt that there was a pressing need to relaunch the debate on the future shape of a Community Energy Policy and to present in a White Paper a strategy within a political framework for achieving it.

## **1.2 The Debate on the Green Paper**

16. Energy policy guidelines based on the widest possible support have the best chance of succeeding. To this end, the Commission opened a broad debate in 1993 between all interested parties culminating in the adoption of a Green Paper<sup>(3)</sup> by the Commission on January 11, 1995 that sets out the challenges of and possible solutions to the development of a Community energy policy framework.
17. The Green Paper has produced many different reactions. The Community institutions have delivered detailed comments on the Green Paper as well as opinions on what should be the major guidelines for a future Community Energy Policy and the role of the Community in this process. The Council<sup>(4)</sup> is generally positive as regards the need to establish new energy policy guidelines. It wants a rapid completion of the internal energy market and takes the view that security of supply should be based on increased diversification and supply flexibility, rational use of energy in all sectors and research and technological development and that environmental policy and energy policy need to be considered in an integrated manner.

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(2) Growth, Competitiveness and Employment - The challenges and Ways Forward into the 21st Century.

(3) COM(94) 659 Final 11 January 1995 - European Commission Green Paper - "For a European Union Energy Policy".

(4) Council Resolution n° 7802/95 of 13 June 1995.

18. The European Parliament<sup>(5)</sup>, while advocating the liberalisation of the energy markets also emphasised the need to guarantee security of supply, public services missions and environmental protection. It wants the Community to pursue a strong policy of diversification and sees the need to maintain a nuclear component. For environmental reasons, it wants the Community to define a programme with priority given to energy efficiency, energy savings and renewable energies and which could contribute to the fulfilment of the Community's international environmental commitments.
19. The Economic and Social Committee<sup>(6)</sup> and the Committee of Regions<sup>(7)</sup> focus on social and economic cohesion and policies that favour employment which must, in their view, be paramount in the development of a future energy policy. The major energy producing and consuming industries, a number of trade unions and some environmental associations have made substantial contributions to the debate and also provided, in many cases, detailed written comments<sup>(8)</sup>.
20. It would not be appropriate to summarise the complete debate on the Green Paper in this White Paper but it is worthwhile highlighting a few key points. Many contributors take the view that the Community energy dimension is important and that there is a need for Community policy guidelines. There is a recognition that the Community already possesses a large range of competencies on energy matters based on the Treaties and that a Community dimension to energy policy, while respecting subsidiarity, can bring added value in some areas, particularly in the areas of Research and Technological Development (RTD), international relations and environmental protection. All participants welcomed the opportunity of continued dialogue on the many important energy issues raised by the Green Paper.
21. In conclusion, the debate on the Green Paper demonstrated that there is a wide range of views as regards the priority to be given to basic objectives, the desired degree of Community intervention in the energy market and in particular the instruments to be used but that it is not going to be possible to satisfy all interested parties on all their preferences and choices will have to be made. Overall, the debate on the Green Paper and the many contributions from all sides has provided a valuable input for the Commission in drafting this White Paper, in particular the energy policy guidelines and the measures that need to be implemented in order to give these guidelines effect.

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(5) European Parliament, Report n° A4-0212/95 and Resolution of 10 October 1995.

(6) CES 804/95 of 5 July 1995, Opinion of the Economic and Social Committee.

(7) CdR 241/95, Opinion of the Committee of the Regions.

(8) The contributions received are made available by the European Commission's Services (DGXVII).



## II. THE GENERAL FRAMEWORK

22. In defining energy policy objectives it is necessary to place them within the economic and political framework of the Community. The main actors in this framework are, of course, companies that need to operate in an efficient legal and fiscal framework which encourages investment and innovation and that are protected against undue public and regulatory intervention. This overall framework can be characterised by four key concepts:

- external dimension - globalisation of markets;
- increasing environmental concerns;
- technology developments;
- Community institutional responsibilities.

### 2.1 External Dimension - Globalisation of Markets

23. The most persistent trend in the world economy over the last few decades is that of globalisation of markets. Regional markets, with their specific characteristics as regards both consumer behaviour and needs are becoming less important. There are numerous driving forces behind globalisation; most importantly far reaching changes in communication, transport and technology. Similarly, there are numerous consequences of globalisation, of which intensified world-wide competition is one of the most important.

24. As the Community's economy becomes increasingly subject to globalisation so do the present unexposed sectors of the energy market. The global aspects of energy markets are reinforced by the significant strategic aspects related to energy policy, in particular as regards security of energy supplies, and the considerable international trade in energy products, due to resources often being located in one region and markets in another.

25. The trend towards globalisation of the energy sector has been reinforced by recent political change, particularly in the countries of Central and Eastern Europe and of the Community of Independent States (C.I.S.). At the economic level, the signature of the World Trade Organisation (W.T.O) Agreement signalled a strong commitment by the major economies to trade liberalisation and market-oriented policies. Also of major significance was the signature of the Energy Charter with its commitment to the liberalisation of trade and investments in the energy sector.

26. In establishing new energy policy guidelines, full account must be taken of globalisation and the "One World" concept. Better relations with third countries and the development of the international energy dialogue are central aspects, all the more so because some of these trading partners are not politically stable. But it is even more important to ensure that European industry, including the energy industry, is structurally and technologically well adapted to face up to the increased competition and take advantage of the opportunities

resulting in globalisation. The strong forecast economic growth in certain developing countries and even stronger growth in energy consumption will lead to profound changes and new opportunities. On the positive side Community energy enterprises whose competitive position is being strengthened by the integration of the Community's energy market, should be well placed to take advantage of this new environment.

## 2.2 Environmental Concerns

27. The energy sector must be included in any environmental protection policy, since every energy action has some impact on the environment, be it at the local, regional or global level. In addition to honouring the series of international environment agreements to which the Community is a party, integrating environmental concerns has become one of the key objectives of energy policy. Such an integrated energy/environmental framework contributes to the achievement of sustainable development.
28. At the global level, the increase in emissions of manmade CO<sub>2</sub> and other greenhouse gases creates concern because they have a global warming potential which could result in irreversible climate change. The problems related to spills, waste, noise, amenity damage and atmospheric pollution produced by local emissions, which have environmental and public health implications, are both more conspicuous and more manageable than the global environmental problems and so they tend to get more attention at the local level and are more effectively treated. However, all types of environmental problems, including those which have less perceptible impacts such as global warming, must be the subject of ever increasing efforts to find acceptable solutions. It must also be borne in mind that environmental problems are complex and actions have to be avoided that solve one specific environmental problem, aggravate or even create new environmental difficulties and lead to no net environmental benefit.
29. To meet these environmental challenges, a high degree of coordination and integration is required. Existing measures in the energy sector and in all energy consuming sectors at regional, national, Community and international levels must be properly implemented. Exploring the complementarities between energy and environment must be done in the framework of sustainable development; there is, in particular, scope for a closer interface between competitiveness, job creation and environment. However, the move towards liberalised energy markets within the Community adds to the need to ensure a high level of environmental protection in accordance with the Treaty. The creation of the single energy market can then be an important driving force in achieving environmental goals and responding to public concerns about the environment.

## 2.3 Technology

30. Technology and in particular the development of new technologies will have an important impact on competitiveness and ultimately on the labour market. Furthermore, technology contributes to achieving other energy policy goals, in particular security of supply, by improving access to indigenous energy resources, including renewable energies, by helping to improve the fuel mix and by achieving higher energy efficiency and further energy

