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CONSIDERATION AND ADOPTION OF THE DRAFT PROGRAMME OF ACTION

INTRODUCTION, CHAPTERS I (A), (B), (C) OF
THE DRAFT PROGRAMME OF ACTION

Submitted by the Chairman of the First Committee
as a result of informal consultations

INTRODUCTION

1. A fundamental purpose of the United Nations is to achieve international co-operation in solving global problems of an economic, social, cultural or humanitarian character. The Declaration and the Programme of Action on the Establishment of a New International Economic Order, the Charter of Economic Rights and Duties of States and the resolutions on development and international co-operation (General Assembly resolutions 3201 (S-VI), 3202 (S-VI), 3281 (XXIX) and 3362 (S-VII)) call, inter alia, for the equitable, full and effective participation on the basis of sovereign equality of all countries in the solving of world economic problems in the common interest of all countries, bearing in mind the necessity to ensure the accelerated development of all developing countries.

2. The adoption of the International Development Strategy for the Third United Nations Development Decade was an important step in the promotion of international co-operation for development and reaffirmed the commitment of the international community to accelerate the development of developing countries. In this context, it was, inter alia, agreed that:

"In order to create conditions more favourable to the development of the developing countries and the growth of the world economy in general, efforts for the development and expansion of all energy

resources of the world should be intensified in search of a long-term solution to the energy problem. The international community will have to make substantial and rapid progress in the transition from the present international economy based primarily on hydrocarbons. It will have to rely increasingly on new and renewable sources of energy, seeking to reserve hydrocarbons for non-energy and non-substitutable uses. In view of the finite supply of fossil fuels in the world economy and the often wasteful and inefficient utilization of those resources, effective measures for their conservation will have to be urgently adopted and/or improved, in particular by developed countries which consume the major share of the world's hydrocarbon production."

3. In convening the United Nations Conference on New and Renewable Sources of Energy, the General Assembly defined its objectives in resolution 33/148^{1/} and called, in particular, for the elaboration of measures for concerted action designed to promote the development and utilization of new and renewable sources of energy,^{2/} with a view to contributing to meeting future over-all energy requirements, especially those of the developing countries, in particular in the context of efforts aimed at accelerating the development of the developing countries.

4. The General Assembly subsequently decided that the Conference should consider the adoption of a programme of action in the area of new and renewable sources of energy that would, inter alia, contain concrete operational measures for subregional, regional and international co-operation in this area.^{3/}

^{1/} See Annex 1.

^{2/} Defined for the purposes of the Conference to include solar, geothermal and wind power, tidal power, wave power and thermal gradient of the sea, biomass conversion, fuelwood, charcoal, peat, energy from draught animals, oil shale, tar sands and hydropower.

^{3/} General Assembly resolution 35/204.

5. The Conference had before it for consideration the reports of technical panels and consultants on the new and renewable sources of energy, the report of the Ad Hoc groups of experts on selected policy issues, the report of the Synthesis Group, comprehensive reports of the relevant organs and organizations as well as the regional commissions of the United Nations system. In addition, national papers were presented by Governments wishing to do so.^{3/}

6. It is in this context that the United Nations Conference on New and Renewable Sources of Energy met in Nairobi from 10 to 21 August 1981 and adopted this Programme of Action, to be called the "Nairobi Programme of Action for the Development and Utilization of New and Renewable Sources of Energy."

I

A. ENERGY TRANSITION

7. The challenge and the opportunity confronting the international community is to achieve an orderly and peaceful energy transition from the present international economy based primarily on hydrocarbons^{4/} to one based increasingly on new and renewable sources of energy in a manner which, consistent with the needs and options of individual countries, is socially equitable, economically and technically viable and environmentally sustainable. The transition must be based on technological, commercial, financial and monetary modalities consistent with the determination of Governments to establish a New International Economic Order, to accelerate the development of developing countries and to promote balanced global development. An effective energy transition must conform with the principle of full and permanent sovereignty of each country over its natural resources and should be implemented in accordance with its national plans and priorities.

^{4/} Defined for the purposes of this paper as petroleum and gas.

8. The issue is not whether an energy transition will take place but whether the international community will achieve it in an orderly, peaceful, progressive, just and integrated manner. This transition entails the rationalization of the energy development process. In view of the often wasteful and inefficient utilization of hydrocarbon resources by some countries as well as their finite supply and depletable nature it has become clear that the previous assumption of abundant and cheap energy is not valid any longer. Hydrocarbon resources will no longer be available at the traditionally low levels of earlier years. At the same time, future demand for energy will increase not only in industrialized countries but also much more dramatically in developing countries. If the global demand for energy is to be met, it will require a shift away from the current excessive reliance on hydrocarbons towards a more diversified mix of energy sources. It will also require significant and continuing progress in the efficient and rational use of available resources. In this context, energy planning should play a significant role.

9. It is equally clear that patterns of consumption with the effect of giving access to energy to a limited number of countries or to a few within countries are not compatible with the agreed goals of the international community.

10. There is a common interest shared by all countries in ensuring an effective energy transition, which is of critical importance to the future of all mankind. Such a transition, if based on equitable and open co-operation, would offer new opportunities for accelerating economic and social development of developing countries in particular, and reducing the present pattern of economic and technological dependence. Therefore, continuing adjustments and institutional and structural changes in international economic relations are required, taking into account the goals and objectives of the New International Economic Order. What is needed now is for nations to demonstrate the necessary political will to respond to the challenge and seize the opportunities presented.

11. In this regard the developed countries have a particular responsibility to manifest their political will and use their economic and managerial potential to support efforts aimed at an effective energy transition. All countries should adapt themselves to such a transition, which often involves high-cost adjustments required to sustain and raise levels of economic growth. For developing countries an effective energy transition may involve the question of economic survival and increased energy availabilities will be essential if a rate and pattern of growth necessary to meet their social and economic development objectives is to be attained. Effective achievement of this energy transition should be viewed as an essential element for assuring sustained growth of the international economy, in a manner that, consistent with the needs and options of individual countries, is technically and economically feasible, socially equitable and environmentally sustainable and for safeguarding world peace and stability. Attention is also drawn to the interrelationship between the development of NRE and broader issues, such as genuine disarmament. In this regard, concrete progress towards the goals of general and complete disarmament under effective international control, including the urgent implementation of measures of disarmament, would release substantial additional resources which could be utilized for social and economic development - including NRE - particularly for the benefit of the developing countries.

12. Bearing in mind the importance of energy for development and the growing energy requirements of the developing countries, it is recognized that these requirements, if not met adequately, will hinder the process of their economic and social development. Efficient use of energy should be an objective for all countries, it should be kept in mind that the exploration, development, expansion and processing of all energy resources of the developing countries must be intensified in a manner commensurate with their development objectives and thereby contribute to the growth of the world economy. For this purpose, adequate financial, technical and human resources should be generated. It is recognized that the success of an effective energy transition will depend, inter alia, upon the extent to which the critical issues of mobilization of financial resources for, and transfer of technology available to, in particular, developing countries can be effectively tackled.

13. The ultimate aim of socio-economic development is the constant improvement of the living conditions of the entire population. The successful achievement of the energy transition has direct implications for shelter, physical infrastructure, health, sanitation, nutrition and general well-being in rural and urban communities. It should aim at the generation of improved productivity, better income earning opportunities and increased employment through local manufacture and maintenance services, in both rural and urban sectors. At the same time, it should include, where appropriate, provisions to ensure adequate supplies of energy in case of acute shortage of energy for subsistence. The energy transition must include consideration of the social dimensions, including the role of women as agents in and beneficiaries of the process of development, in view of their special burdens as producers and users of energy, particularly in rural areas. The energy transition should take place in a manner which recognizes the existence of competing demands for basic resources and the need to optimize their usage.

The energy transition should take place in a manner which would not cause harmful changes in the environment but would, in so far as possible, improve environmental conditions.

14. In order to ensure the energy transition, in addition to actively developing all types of energy sources, effective measures for the conservation of energy, including the maximum efficiency of energy utilization, will have to be urgently adopted and/or improved, in particular in developed countries. The benefits to be derived from a more rational use of energy can, in some cases, contribute significantly to the effect brought about by the development of new and renewable sources of energy.

15. The development and utilization of new and renewable sources of energy must be viewed in the context of the energy transition. New and renewable sources of energy can make a significant contribution, but their role and potential in the short term should not be overstated. It has been estimated that new and renewable sources of energy at present meet some 15 per cent of global energy requirements. In the foreseeable future, hydrocarbon supplies will continue to play a very important role in meeting the global energy demand, but, over time, that role will decline. To facilitate the energy transition, a process should now be set in motion to ensure the most efficient identification, exploration, assessment, development and utilization of energy sources, including new and renewable sources of energy. In this context, the potential of new and renewable sources of energy must be considered as a dynamic variable, that will tend to increase with the refinement, development and popularization of technologies.

16. The concept of new and renewable sources of energy as embraced by the General Assembly in resolution 33/148 on the Conference in Nairobi encompasses a heterogeneous range of energy forms, as well as a wide range of associated technologies of different degree of maturity, from those proven and in operation to those on the frontier of scientific knowledge. It is clear that the dynamic scientific and technological progress in the field, in conjunction with the developments in the over-all energy situation are essential factors to be constantly examined in the process of assessing the new and renewable sources of energy potential. In this context,

there is a need to utilize the proven technologies to the fullest extent possible. Of equal importance is an early involvement of all countries commensurate with their abilities, in the research and development, assimilation, adaptation development and utilization of the new and renewable sources of energy. To this end, effective and efficient international co-operation should be undertaken to assist national action at the governmental and, where appropriate, at the non-governmental level in recipient countries in research, development, pre-investment and investment efforts, as required, so that the full potential of new and renewable sources of energy is realized.

17. The development and utilization of new and renewable sources should be a common objective for all countries of the world. New and renewable sources of energy are not necessarily more suited to satisfy the energy needs of developing countries than those of industrialized countries. The development of such sources should, therefore, not be interpreted as a rationale for limiting the access of developing countries to conventional sources of energy which will continue to play a very important role in their development.

18. The development of new and renewable sources of energy opens up the prospect of increasing indigenous energy supply and thereby contributing to greater self-sufficiency. The development of new and renewable sources of energy also creates new options to respond to the energy requirements of the rural, industrial, transport and other domestic sectors, in accordance with national goals and priorities and provides for a more diversified and decentralized pattern of energy supply.

19. Like any energy source or product, new and renewable sources of energy are themselves both an "input" and an "output" of the development process. The role of new and renewable sources of energy should be perceived as a dynamic interaction between resources, technologies and present and future requirements for energy, all serving national objectives for economic and social development.

B. FRAMEWORK FOR NATIONAL ACTION

20. All Governments recognize the need to undertake efforts to promote the development and utilization of new and renewable sources of energy in accordance with their national plans and priorities.^{2/} The primary responsibility for promoting the development and utilization of new and renewable sources of energy rests with individual countries. The strengthening of national capacities should embrace elements such as:

(a) Assessment of new and renewable energy sources, including surveying and mapping programmes, to provide the necessary information and data base for planning and decision-making with respect to over-all energy development;

(b) Preparation of a policy framework for defining the role of new and renewable sources of energy and determining priorities;

(c) Establishment or strengthening of appropriate national institutional arrangements;

(d) Adequate research and development programmes to support the scientific and technical capacity to develop, choose and adapt technologies, to include testing and demonstration facilities and research focal points in new and renewable sources of energy;

(e) Specific programmes to promote the exploration, development and utilization of new and renewable sources of energy, taking into account, as appropriate, social, economic and environmental considerations;

(f) Programmes to encourage the efforts of national public and private entities in interested countries, as appropriate, to expand the development and utilization of new and renewable sources of energy;

Energy trains for the Conference included the presentation of national papers which indicated, *inter alia*, the nature of actions already taken and planned by individual countries in this respect, thus enabling countries to benefit from the sharing of their national experiences.

(7) Mobilization of adequate resources.

(8) Availability of qualified personnel, to include specialized education and training programmes equally accessible to men and women.

(9) Development or strengthening of industrial capacity to manufacture, adopt, repair and maintain energy related equipment.

In this regard, international co-operation is indispensable and should be directed to assist and support national efforts. Developed countries bear a special responsibility to ensure that both their bilateral and multilateral efforts contribute actively to this end. Other countries in a position to do so should also continue to promote efforts in this regard.

21. Efforts designed to explore and develop conventional energy resources must be continued, together with efforts designed to explore and develop new and renewable sources of energy. This must also be accompanied by efforts aimed at the rational use of energy wherever possible and particularly in the developed countries.

C. OBJECTIVES

22. The fundamental objective of this programme of action is to promote concerted action in the context of the energy transition, the development and utilization of new and renewable sources of energy with a view to helping meet future overall energy requirements, especially those of developing countries. This programme of action should be viewed as an integral part of the efforts of the international community to accelerate the development of developing countries as set forth, inter alia, in the International Development Strategy for the Third United Nations Development Decade, and the relevant declarations and resolutions related to the establishment of the New International Economic Order.

23. The Programme of Action is directed to the achievement of the following objectives:

(a) To strengthen international co-operation for the promotion and intensification of research and development of technologies related to new and renewable sources of energy and to facilitate the transfer and adaptation of technology from developed to developing countries, in particular, as well as exchange of technology among developing countries, in order to strengthen the indigenous scientific and technological capacity, including the capacity for the production of capital goods in developing countries.

(b) To stimulate the mobilization of additional and adequate financial resources from developed countries, international financial institutions and other international organizations and the private sector, as appropriate to the developing countries for the development of new and renewable sources of energy through programmes and projects at the national, subregional, regional and international levels. Other countries in a position to do so should also continue to make efforts in this regard.

(c) To provide, through international co-operative efforts, for the exchange of information and manpower training, particularly in the developing countries, as well as to promote their ability to undertake energy resource evaluation and energy planning in order to accelerate the introduction of new and renewable sources of energy in their energy balances.

(d) To promote and provide support for:

(i) The attainment of the national objectives and priorities established by developing countries in the field of new and renewable sources of energy, related to the strengthening of their national capabilities and institutional infrastructures for the effective incorporation of new and renewable sources of energy into national policy and planning processes;

(ii) The drawing up and implementation of new and renewable sources of energy programmes and projects in the context of over-all energy plans by all countries and, in particular, by developing countries.

(e) To provide, as requested, and as appropriate, assistance and support for co-operative efforts among developing countries.

(f) To specify measures designed to heighten international awareness of the advantages, potential and economic viability of new and renewable sources of energy, and to support efforts of all countries to take necessary steps to bring about the maximum feasible development of new and renewable sources of energy, taking special account of the stage of development reached in the various technologies and of their socio-cultural and environmental impact.

24. The successful implementation of the Programme of Action will require the continuing commitment and efforts of Governments. The organs, organizations and bodies of the United Nations system will assist appropriately in the implementation of the Programme. In certain countries, non-governmental entities will also have a significant role to play. All these measures should be taken with due regard to the necessity to promote the full participation of men and women on an equal basis in the realization of the foregoing objectives. Such participation should thus receive due consideration in any national energy strategy or implementation thereof.

25. In this context, it is necessary to designate adequate mechanisms for the implementation, monitoring, follow-up and evaluation of the action taken to carry out the Programme of Action.