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PREPARATORY COMMITTEE FOR THE UNITED  
NATIONS CONFERENCE ON NEW AND  
RENEWABLE SOURCES OF ENERGY  
Third session  
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Item 5 of the agenda

PRELIMINARY DRAFT OUTLINE OF A  
PROGRAMME OF ACTION \*

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\* Document is being issued as submitted.

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Introduction to the preliminary draft  
outline of a programme of action

1. In pursuance of the resolutions of the Preparatory Committee and the General Assembly, this Secretariat wishes to provide delegations at this third session with an outline that may serve as a basis for your preliminary discussions on the structure and content of the Programme of Action.
2. This outline is not a Programme of Action and should be regarded only as a preliminary conceptual framework designed to elicit such comments and suggestions as will enable the Secretariat to find out the views of governments and their representative groups, and, on the basis of those views, if you so decide, to draw up a Programme of Action proposal for your discussions at the fourth session of this Committee.
3. In preparing this outline, the Secretariat bore in mind the results of the technical preparatory phase of the Conference and, more particularly, the comments and suggestions of the agencies of the United Nations system, whose constant and invaluable assistance the Secretariat once again wishes to acknowledge.
4. During the first week of deliberations, both the statements which delegations made to the Plenary Committee and their informal comments to the Secretariat were particularly useful.

I. STRUCTURE

5. The General Assembly in establishing the objectives and scope for the Conference provided the basis for the preparation of a Programme of Action when it decided that the Conference "should have the objective of elaborating measures for concerted action designed to promote the development and utilization of new and renewable sources of energy, with a view to contributing to meeting future overall energy requirements, especially those of the developing countries, in particular in the context of efforts aimed at

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accelerating the development of developing countries".

6. To this end, the Programme of Action should:

- a) Devise specific measures for action;
- b) Promote the greatest possible contribution of NRSE to expanding the supply of energy sources;
- c) Direct efforts specifically towards developing countries with a view to accelerating their development process.

7. Any effort to organize a Programme of Action in this field encounters certain difficulties which are no doubt well known to delegates. These include among others, the variety of sources identified by the General Assembly; very widely varying degrees of technological advancement; different potential for market penetration, etc. In order to establish a flexible framework for dealing with all these constraints, the Secretariat proposes to structure the Programme into three main chapters:

- a) A general overview of the challenge to develop and utilize NRSE;
- b) A definition of the objectives that governments and the international community may wish to adopt as a framework for action and, hence for the work of the Conference;
- c) A number of measures to encourage national, sub-regional, regional and world actions.

8. The Secretariat would like to suggest to governments that the text of the Programme of Action be brief and concise and contain both a political message on the role of NRSE in mankind's energy future and those concrete actions that this Conference could promote.

## II. THE CHALLENGE

9. The Secretariat suggests that the challenge presented by NRSE should be placed within a framework stressing five areas:

The relationship between development and energy, in order to emphasize the role played by energy in the context of overall development problems. The international development strategy has stated the need for changes in the world

economy and in the economies of developed and developing countries, and has called for structural and institutional changes to be made in international economic relations.

Although the Nairobi Conference is not a meeting on development problems, it should consider energy as an input to the development process and deal in particular with the way in which this process can help to enhance future energy opportunities within the context of the main objectives established by the New International Development Strategy.

10. It is well known that the overall development process should promote structural adjustments involving different aspects of the current economic and social policies, among which energy plays a significant role. The contribution of energy to development is well known and any effort to accelerate economic and social development in the developing countries would therefore require increasingly large quantities of energy. This heightens the need for a new energy system for all countries, based on greater diversification and energy self-reliance.

11. This prompts us to highlight the importance of NRSE in the energy balance of mankind and especially in that of the developing countries. The role of NRSE should not, however, detract from the importance of accelerating efforts in the field of conventional sources in developing countries, nor should it constrain those countries to use NRSE more than other sources or limit their access to conventional sources of energy which will continue to play an important role in supplying energy to those countries and especially to their industrialization processes.

12. The energy transition. Starting from the global energy situation and from the transitions which took place in the past, the international community might stress in this Programme of Action the need to make an orderly, progressive, integral and equitable transition from the current predominance of hydrocarbons to a new mixture of energy sources. In order to be efficient and equitable, this mix should be based on a pluralistic energy supply in which each country must have access to all energy resources required by its

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development as well as the opportunity to diversify its own energy structure according to its development needs. NRSE find their proper place within the context of such diversified, decentralized and more self-sufficient energy supply. Hence, the need to plan the energy transition within the context of a set of national, regional and international measures that include the development of conventional energy sources, conservation and efficiency in energy use and the acceleration of NRSE development.

13. In the light of the above considerations, the Secretariat suggests that governments single out three main challenges for their agreed action:

- the urgency for change in the conventional patterns of energy production and utilization;
- the crisis of traditional energy systems;
- the potential role of NRSE.

14. The special emphasis which the Secretariat is suggesting to governments by singling out the crisis of traditional energy systems is prompted both by the seriousness of the problem affecting millions of people in developing countries and especially in rural areas, and by the urgent need to back up ongoing national efforts by international co-operation.

We are aware that this action can be taken only within the context of each country's development problems and, in particular, within the framework of integrated rural development objectives. However, effective international co-operation over and above existing co-operation is especially necessary and is indeed advocated by a significant number of countries.

15. In the Secretariat's view, the potential of NRSE must be seen from two standpoints:

- NRSE must contribute effectively to increasing the energy supply in order to meet, particularly in the developing countries, the needs of both the modern and the traditional sectors in agriculture, industrial, transport and urban development;

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- Like any energy source or product, NRSE are themselves both an "input" and an "output" of the development process and not tangential to it. Hence, the need to single out the role which they must play in the socio-economic development of the developing countries. The potential of NRSE should not be over- or under-estimated, but put in the context of a permanent realistic and updated assessment. In the final analyses, the role of NRSE should be perceived as a dynamic interaction between resources, technologies and present and future requirements of energy.

16. Finally, a call for action on the part of international co-operation shall be the main challenge of the Programme of Action. This appeal must be based on the following facts:

- Actions in favor of enhancing the role of NRSE must be viewed in the context of the energy transition and therefore, commit all countries of the world.
- The energy transition can be achieved successfully only if there is a real convergence of interests and actions on the part of all the industrialised countries - market as well as centrally planned economies-and all the developing countries.
- If it is based on open and equitable co-operation, this transition process will offer new and varied opportunities for accelerating the **economic and social development** in particular of the developing countries, reducing their present economic and technological dependence.
- By helping to accelerate the development of developing countries, international action based on a climate of constructive co-operation will serve as an essential tool for ensuring the sustained growth of the international economy and for safeguarding world peace and stability.

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### III. OBJECTIVES

17. The Secretariat has proposed four main objectives which could provide a frame of reference for the corresponding actions:

- a) to increase and sustain awareness of NRSE and their potential, taking special account of the stage reached in the various technologies and of their socio-cultural impact;
- b) to strengthen national capability and institutional infrastructures for the effective incorporation of NRSE into national policy and planning processes;
- c) to establish concerted NRSE programmes at national, sub-regional, regional and international level, on the basic premise that they must reinforce one another;
- d) to mobilize resources at sub-regional, regional and international level in order to promote the development and use of NRSE.

### IV. ACTION PROPOSALS

18. The action proposals allow for various kinds of disaggregation: by level (national, regional, world); by policy issues (information, transfer of technology, R+D+D, finance); by source and use (solar, biomass, geothermal, etc.). The Secretariat is making a suggestion which obviously leaves room for improvement. In designing the outline, three specific criteria were taken into account:

- a) approach action proposals ranking them by levels: (national, sub-regional, regional and international), given the ample opportunity which a programme of this kind offers for co-operation by groups of countries and for decentralized programme implementation;
- b) rank the action proposals in their short, medium or long term urgency and impact;
- c) give special consideration for future action to the main constraints identified by ad hoc preparatory groups (information, training, etc.).

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19. At this stage, the Committee should instruct the Secretariat as to how it wishes to reflect the specific recommendations by source emerging from the preparatory process in the Programme of Action.

Although specific actions for the various sources of energy would be desirable, this Preparatory Committee will have to decide on the degree of specificity it wishes to have in the Programme of Action or to what extent such specific actions should be determined in the implementation stage. We would like to recall that the General Assembly, in resolution 35/204, requested the Secretariat to prepare by mid-May a synoptic table classifying conclusions and recommendations into those of common concern to all regions, those of concern to some regions and those specific to one region, with an indication of their origin.

Such a table could be considered as an annex to the Programme of Action to assist governments and organizations in its implementation. Another alternative could be the insertion, by way of example, of specific programmes for the generalized application of NRSE (such as generalized application of mini-hydropower, use of solar energy in crop drying, water-heating, etc.).

20. In this respect, the Secretariat wishes to make a number of specific suggestions in connection with the organization of the Nairobi Conference to be presented for discussion at the fourth session of the Preparatory Committee.

21. The awareness objective is directed towards making public opinion and political decision-makers permanently aware of NRSE by means of dissemination of information, promotion of social acceptability, etc.

22. The strengthening of national institutions and the mobilization of national human and financial resources should be reinforced both by the national impact of the Conference itself and by international co-operation which should develop in support of national objectives and programmes. The central purpose therefore, is to stimulate action in those instances where NRSE have yet to be developed sufficiently, each country remaining free to choose how it wishes to do so.

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23. The aim of the Conference and the Programme of Action should be to agree on programmes at all levels (national, sub-regional and international) and to mobilize international co-operation to promote and implement them. The outline proposed focuses on:

- a) programmes needed to meet urgent challenges, for instance, the challenge of traditional energy sources or the one presented by tested and available technologies; programmes to accelerate research and demonstration of those technologies which still require a process of maturation and common efforts; etc.
- b) the main constraints identified by the preparatory ad hoc groups (information, training, technologies, etc.).

24. The mobilization of international resources is oriented specifically to sub-regional, regional and international efforts.

Special emphasis is put on the merits of a major institutional and financial effort on the part of regions and sub-regional groups, backed up by co-operative programmes agreed by the countries of the region and supported by international co-operation.

Some regions, and Latin America in particular, have emphasized the usefulness of some of their energy institutions (e.g. OLADE), which would obviate the need for new institutional machinery. Others have drawn attention to the advantages of certain additional institutional efforts in the field of technological or financial co-operation at sub-regional level and within groups of countries with similar problems.

25. At the international level, the Secretariat is limiting itself at this preliminary stage to indicating those areas which the Committee could agree should be analyzed and discussed in the fourth session of the Preparatory Committee.

26. The proposed outline is intended to be sufficiently comprehensive to serve as a framework for all government proposals and at the same time to be sufficiently organic to preserve the clarity of the programme's political message and of its guidelines for action.

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The Secretariat is aware that this exercise is essentially political and that it is therefore up to governments to adopt decisions which meet with general agreement. It is in this spirit that the Secretariat is placing itself at the disposal of the Committee in order to continue its co-operation in this progressive effort to build gradually a global consensus which, in the final analysis, will be crucial for the success of the Nairobi Conference.

A. THE CHALLENGE

To enhance the contribution of new and renewable sources of energy in order to provide speedily and equitably a sustainable supply of energy, in particular in the context of meeting growing energy requirements in developing countries in order to accelerate their economic and social development.

I. Energy and Development

II. The energy transition: the urgency for change in the conventional patterns of energy production and utilization.

III. The crisis in the traditional energy systems of rural areas.

IV. Potential role of new and renewable sources of energy and related technologies:

- increasing and diversifying energy supplies for industrial, urban and rural development;
- contributing to economic and social development and increased self-reliance.

V. The call for action.

B. THE PRINCIPAL OBJECTIVES

- I. Increase and maintain awareness and understanding at national, regional and international level of the role of new and renewable sources of energy in the energy transition, with due consideration to the state of advancement of different technologies and to social and cultural factors.
- II. To strengthen national capability for the effective incorporation of new and renewable sources of energy into national energy policy and planning processes through the strengthening of relevant institutional infrastructures:
  - for the assessment of energy resources, needs and options;
  - for the formulation of integrated policies and programmes, in relation to sectoral development plans;
  - for the mobilization of national resources.
- III. Establish concerted programmes to promote the wider use of new and renewable sources of energy which contribute to the achievement of overall development objectives:
  1. Increase quantity and efficiency of traditional and new and renewable sources of energy to meet the energy demand for rural development.
  2. Increase the access to and the application of new energy technologies that are already proven and available.
  3. Accelerate research and development of incipient technologies.
  4. Enhance overall planning for the development of large scale resources in the developing countries (for example, hydroelectric, geothermal, oil shale, and others).
  5. Promote and enhance wider programmes of information, dissemination, demonstrations and training activities.
- IV. Mobilize sub-regional, regional and international resources to foster increased use of new and renewable sources of energy and improve the effectiveness of existing activities.

C. ACTION PROPOSALS (Illustrative)

Detailed formulation of proposals would include a break-down into short-, medium- and long-term actions and taking into account existing activities at national, regional and international level.

Objective I:

Increase and maintain awareness and understanding, at national, regional and international level, of the role of new and renewable sources of energy in the energy transition, with due consideration to the state of advancement of different technologies and to social and cultural factors.

- (i) Collection of information on contribution of new and renewable sources of energy to energy supplies;
- (ii) Collection and dissemination of information on progress achieved in the development of new and renewable sources of energy;
- (iii) Collection and dissemination of information on conservation and efficient use of new and renewable sources of energy;
- (iv) Promotion of social acceptability (at the national, rural and community levels).

Objective II:

To strengthen national capability for the effective incorporation of new and renewable sources of energy into national energy policy and planning processes through the strengthening of relevant institutional infrastructures.

- National Level

- (i) Establishment or strengthening of government offices designed to deal with overall energy assessment, planning and policy formulation, closely linked with global development planning.
- (ii) Integration of NRSE within overall energy planning offices or establish co-ordinating mechanisms between offices dealing with energy planning and those dealing with NRSE.
- (iii) Establishment or strengthening of institutional mechanisms designed to secure an adequate role for NRSE in an integrated rural development system.
- (iv) Establishment of institutional mechanisms designed to deal with project identification and implementation in such a way as to give clear delineation of priorities vis-à-vis other projects.
- (v) Make provisions within such organization for adequate operation and maintenance requirements.
- (vi) Establish adequate institutional mechanisms for the assessment of manpower needs and training requirements, and for the formulation and implementation of training programmes.
- (vii) Establishment of institutions dealing with R + D.
- (viii) Establishment or strengthening of institutions dealing with information and data collection and dissemination.
- (ix) Identification of economic, social, financial, environmental or other constraints which hamper the introduction of NRSE.
- (x) Mobilization of resources for national institutions dealing with research, training and information activities and programme formulation related to NRSE;
- (xi) Mobilization of human, technical and financial resources for pre-investment and investment projects in the field of NRSE within global investment plans, aimed at determining whether attractive investment opportunities exist, the extent of equipment adaptation necessary and problems of acceptability.
- (xii) Promote legislative measures and incentive policies to foster and promote widespread use of NRSE in the context of effective national property systems.
- (xiii) Adequate pricing systems and appropriate allocation of resources for the different investment purposes both through private and public channels.

Objective III:

Establish concerted programmes to promote the wider use of new and renewable sources of energy which contribute to the achievement of overall development objectives.

- National Level

Establishment and promotion of programmes aimed at:

- (i) Developing and using methodologies for data collection and planning;
- (ii) Strengthening R + D + D activities in the field of NRSE, including adaptation and testing of new technologies;
- (iii) Increased access to and application of new energy technologies that are already proven and available;
- (iv) Enhancing the development and utilization of traditional and new and renewable sources of energy in the rural areas through integrated rural development systems;
- (v) Training of specialists including personnel for the exploitation and utilization of new and renewable sources of energy and for manufacture, operation, maintenance and repair activities;
- (vi) Establishing information networks;
- (vii) Promote research in the field of social and cultural constraints to the wider use of NRSE and programmes designed to overcome them.

- Regional / Subregional Level

Promote programmes, particularly through ECDC / TCDC, aimed at supporting national efforts with respect to:

- (i) Development of methodologies for energy assessment and planning;
- (ii) Establishment of information exchange networks (including data collection, analysis and dissemination);
- (iii) R + D + D, including the establishment of subregional / regional testing and standards facilities;
- (iv) Training;
- (v) Establishment of subregional / regional manufacturing facilities for the production of equipment and devices.

- International Level

Promote international co-operation efforts including ECDC / TCDC, aimed at supporting national, subregional and regional programmes in:

- (i) Energy assessment and planning:
- (ii) Education and training:
- (iii) Transfer of technology:
- (iv) Research and development:
- (v) Information flows.

Objective IV:

Mobilize subregional, regional and international resources to foster increased use of NRSE and improve the effectiveness of existing activities.

- Regional / Subregional Level

- (i) Create regional and subregional institutions where appropriate to promote technical and economic co-operation in the field of NRSE;
- (ii) Mobilize financial resources and supporting funds within regional institutions to promote pre-investment and investment activities on NRSE;
- (iii) Establish regional and subregional research centres in developing countries to promote self-reliance and technical co-operation among developing countries;
- (iv) Promote multinational industrial programmes for the manufacturing of NRSE capital goods.

- International Level

- (i) Mobilize political support to NRSE development through its continued consideration by political fora of the United Nations;
- (ii) Co-ordination of co-operative efforts of international organizations;
- (iii) Support existing programmes in international organizations and improve their effectiveness in accordance with objectives and priorities of this programme of action.
- (iv) Increase the financial resources and revise the priorities of financial institutions and bi-lateral mechanisms aimed at
  - additional support for concerted national, regional and international programmes in the field of NRSE;
  - financing of demonstration, prototypes, pre-investment and investment activities;
  - financing investment activities for energy development in rural areas.
- (v) International assistance and support to continued expansion of ECDC and TCDC activities at interregional level to promote self-reliance and co-operation among developing countries.