



UNITED
NATIONS

A



United Nations Conference
on New and Renewable Sources
of Energy

Nairobi, Kenya
10-21 August 1981

UN LIBRARY

JUL 2 - 1981

Distr.
GENERAL

A/CONF.100/NR/43 (SUMMARY)
3 June 1981

ORIGINAL: ENGLISH

~~UN/CA COLLECTION~~

SUMMARY OF THE NATIONAL REPORT SUBMITTED BY GERMAN DEMOCRATIC REPUBLIC*

* The designations employed, the presentation of material and the views expressed in this paper are those of the submitting Government and do not necessarily reflect the practices and views of the Secretariat of the United Nations in any of these respects.

1. Fuel and energy problems are complex in nature. They can be solved successfully only through the world-wide political, economic and scientific/technological co-operation of States.
2. The preparation and the meetings for the United Nations Conference on New and Renewable Sources of Energy have shown that it is necessary and possible to tackle the present problems. Further international, mutually advantageous co-operation in the field of new and renewable energy sources can substantially contribute to economic and social progress, in particular in developing countries. The United Nations Conference should aim to help implement the Charter of Economic Rights and Duties of States, especially the principle of the full and permanent sovereignty of every State over its natural resources, and thus contribute to developing stable and just international economic relations.
3. No State has the right to obtain access to foreign energy resources by force and jeopardize peace. It would, therefore, be in the interest of all States if problems be resolved with reason and realism.
4. Energy consumption, on the one hand, and economic growth, industrialization, labour productivity etc., on the other hand, are interrelated. Further economic growth can be achieved only by expanding the national energy basis.
5. It has been the energy policy of the German Democratic Republic for years to make maximum use of national energy resources, to use energy as efficiently as possible and to participate in the development of socialist economic integration programmes within the framework of the Council for Mutual Economic Assistance. The German Democratic Republic will redouble these efforts.
6. In contrast to other countries, the German Democratic Republic has virtually no crude oil and only limited natural gas resources. However, there are still sizable lignite deposits there. But mining is becoming more and more difficult, because of the worsening geological and hydrological conditions encountered. The world-wide shift to other primary energy sources is taking place in the German Democratic Republic under those specific circumstances. Raw lignite will remain the most important source of energy for many years to come.
7. In search of alternative energy sources to replace fossil fuel, non-conventional and non-nuclear forms of energy are being investigated for their potential and economic viability.
8. There is no or limited potential in the German Democratic Republic for some of the new and renewable energy sources. Despite this fact, the German Democratic Republic is engaged in systematic research and development, and it participates in international activities. The German Democratic Republic can draw on relevant scientific/technological experience and operation expertise acquired in utilizing other energy resources of low calorific value and in integrating them in an optimum way into the energy sector.
9. Raw lignite and its derivative products (briquettes, coke, gas, petrol) can be of future importance for the advancement of the national economies of many

developing countries which have that source of energy but do not yet use it. Taking account of this aspect, chapter 1 of the national report describes the role of raw lignite in the power industry of the German Democratic Republic.

10. Chapter 2 of the national report deals with rational energy use. Right from the beginning and not just since energy prices rose on the world market in 1973-1974, it has been a major objective of socialist energy policy in the German Democratic Republic to use the different sources of energy economically as an indirect way to broaden the national energy basis. Recent developments have shown, though, that streamlining energy conversion, transmission and uses is becoming more and more important for the national economy.

11. A system was worked out in the German Democratic Republic and pertinent legislation passed to ensure that such economies are made nation-wide. The results achieved so far have been gratifying, especially in the past few years. The system is based on central governmental energy planning and comprises, for instance, approval procedures for the use of the various energy sources, energy consumption guidelines to be observed in production processes and the operation of plants, measures to manage, supervise and encourage economical energy use, and the training and advanced training of personnel in energy conservation. Thus the German Democratic Republic succeeded in increasing the national income. Primary energy consumption rose, too, but at an appreciably slower rate.

12. The goal-oriented reduction of specific energy consumption will continue to be considered as a way of meeting the increasing demand for energy more efficiently than is possible by providing more primary and useful energy. Simultaneously, huge funds will, however, be required to be systematically spent on the necessary expansion of the energy basis.

13. In an effort to make increasing use of domestic energy resources, more attention has been paid since 1976 to renewable forms of energy. The various activities undertaken are illustrated in chapter 3 of the national report:

- (a) Exploration of the potential of those forms of energy, taking into account the meteorological and geophysical conditions of the country;
- (b) Technical and economic feasibility studies of promising unconventional technologies for suitable end-users;
- (c) Technological development of elements and systems for converting renewable energy resources into conventional forms of energy for utilization;
- (d) Testing of useful technologies under experimental and field conditions;
- (e) Gradual introduction of unconventional technologies into the national energy sector.

14. Chapter 4 of the national report deals with scientific/technological co-operation projects of the German Democratic Republic with developing countries in the energy field. The German Democratic Republic supports those countries in

building a fuel and power industry of their own. The assistance the German Democratic Republic renders in the field of new and renewable energy sources consists mainly in providing and exchanging scientific/technological expertise and in educating and upgrading personnel for the energy sector.

15. From today's perspective up to the year 2000, the German Democratic Republic will have a useful potential of renewable energy resources which could account for approximately 1 per cent of its primary energy needs and which would include unconventional forms of energy such as solar energy, ground heat, ground-water heat, surface-water heat, ambient-air heat, wind energy, geothermal depth energy as well as the conventional hydropower.

16. At present, it is much more expensive to harness those resources than conventional forms of energy. Exceptions are hydropower and low-temperature heat from ground heat, ground-water heat and surface-water heat, which could become economically viable by 1990.

17. The German Democratic Republic believes that the demanding national, regional and international tasks resulting from the utilization of new and renewable energy sources can be fulfilled only to the extent peace is maintained, the danger of war averted, the arms race curbed and part of the means freed by disarmament used to make headway in harnessing new and renewable energy sources and to solve other global problems.
