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GENERAL DISCUSSION ON THE VISION AND POLICIES OF THE ARAB COUNTRIES IN THE FIELD OF ENERGY FOR SUSTAINABLE DEVELOPMENT

Summary

The fifteenth session of the United Nations Commission on Sustainable Development (CSD-15) will be held at United Nations headquarters, New York, from 30 April to 11 May 2007, and will be chaired by Qatar. The focus will be on the review and discussion of policies and obstacles related to the achievement of the Johannesburg Plan concerning the four issues of the Commission's 2006-2007 implementation cycle, namely, energy for sustainable development, industrial development, air pollution/atmosphere and climate change.

As part of the Arab regional preparations for participation in CSD-15 which are being undertaken by ESCWA in coordination with the Council of Arab Ministers Responsible for the Environment (CAMRE) of the League of Arab States, ESCWA has prepared a proposal relating to the policies in the above-mentioned four fields that member countries are either pursuing or have identified and successfully pursued in the countries of the region, and other policies that have been proposed, or concerning the implementation of which legislation has been adopted. The proposal was submitted to the eighth session of the Joint Committee for Environment and Development for the Arab Region, which was held in Cairo on 24 and 25 November 2006, where it was discussed and amended by experts from member countries.

On the basis of the foregoing, and with a view to enriching and broadening discussion on the above-mentioned proposal, and providing information for the representatives of member countries who will take part in the Intergovernmental Preparatory Meeting for CSD-15, which will take place at United Nations headquarters in New York from 26 February to 2 March 2007, this document reviews a set of suggested policies in the field of energy for sustainable development and related to the energy sector, air pollution/atmosphere and climate change. The aim is to promote discussion of those policies and explore the views thereon of Committee on Energy members, in the light of the policies and programmes adopted by their countries, before making them available to member country representatives at the Intergovernmental Preparatory Meeting.

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CONTENTS

Chapte	er e e e e e e e e e e e e e e e e e e	Paragraph	Page
I.	INTRODUCTION	1-3	3
II.	THE FIFTEENTH SESSION OF THE UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT (CSD-15): BACKGROUND, PROGRAMMES AND GOALS	4-7	3
III.	REPORT OF THE FOURTEENTH SESSION OF THE UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT (CSD-14): REGIONAL DISCUSSIONS HELD BY THE COUNTRIES OF WESTERN ASIA	8-9	4
IV.	SET OF POLICIES WHICH IT IS PROPOSED THE ARAB COUNTRIES SHOULD ADOPT DURING CSD-15	10-26	5
	A. In the field of energy for sustainable development	12-13	5
	B. In the fields of air pollution, climate change and industrial development	14-19	6
	C. Achievements and successful practical procedures proposed for or being implemented in the countries of the region	20-26	8

I. INTRODUCTION

- 1. Over the past 20 years, the Arab electricity sector has exerted strenuous efforts to formulate and apply a variety of policies aimed at contributing to the achievement of sustainable development in the countries of the region. Those policies largely concentrate on changing unsustainable patterns of energy production and consumption in various sectors and, in particular, on the five basic issues in the field of energy that were identified by the Johannesburg Plan for sustainable development, namely, enhancing access to energy services; energy efficiency; renewable energy; cleaner fossil fuel technologies; and energy and transport. To varying degrees, the Arab countries have achieved perceptible progress, albeit insufficient, in each of those fields.
- 2. The Arab regional report which was submitted to the fourteenth session of the United Nations Commission on Sustainable Development (CSD-14) in 2006 contains a summary of the progress that has been made by the Arab countries in the field of energy for sustainable development and the obstacles to the achievement of related aims. The document submitted under agenda item 7 of the Committee on Energy comprises a full report on the progress that has been made by ESCWA member countries in that field.
- 3. In view of the importance of affirming the particularities of the Arab region in respect of the policies and measures taken in the field of energy for sustainable development, which could be adopted through international mechanisms and, in particular, CSD-15, this document presents to the Committee the basic information that is necessary for the Arab countries to take part in that session. It comprises a summary of the programme and aims of CSD-15, and sets forth the outcomes of the regional discussions held by the countries of Western Asia at CSD-14 and the set of policies proposed for adoption by the Arab countries, which were agreed upon in the course of many consultations at the Arab level, after they had been discussed and the views thereon, in the light of the policies and programmes pursed by their countries, of the members of the Committee on Energy had been obtained. They were then made available to member country representatives at the Intergovernmental Preparatory Meeting for CSD-15.

II. THE FIFTEENTH SESSION OF THE UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT (CSD-15): BACKGROUND, PROGRAMMES AND GOALS

- 4. The fifteenth session of the United Nations Commission on Sustainable Development (CSD-15) will be held at United Nations headquarters, New York, from 30 April to 11 May 2007, and will be chaired by Qatar. High-level session meetings will be held from 9 to 11 May 2007, while the Intergovernmental Preparatory Meeting will be held from 26 February to 2 March 2007, also at United Nations headquarters.
- 5. The concern of CSD-15 will be to discuss policies linked to the four issues of the Commission's 2006-2007 implementation cycle, with the focus on the policies that countries have previously pursued and those which are proposed with a view to overcoming obstacles to progress in achieving the pertinent aims of the Johannesburg Plan, in order to enable the high-level meeting to announce an approach towards such policies. For more information on CSD-15, see the Commission Internet site at http://www.un.org/esa/sustdev/csd/review.htm.
- 6. At its fifteenth session, the Commission bureau will comprise 54 countries, including seven Arab countries, namely, Algeria, Djibouti, Kuwait, Saudi Arabia, the Sudan, Tunisia and Qatar.
- 7. Under the chairmanship of Mr. Abdulla Ibn Hamad Al-Atiyyah, Second Deputy Prime Minister and Minister of Energy and Industry of Qatar, the Commission bureau held a number of preparatory meetings between October and December 2006 which clarified that provisional procedures had been taken with a view to establishing the programme for CSD-15 on the basis of the approach adopted by the CSD-14 intergovernmental meeting and achieving a balance between the four issues of which the Commission was seized. The meeting underlined the following:

- (a) The importance of decision-makers attending the high-level meeting that would be held as part of the session, in order to stress efficiency in following-up implementation of the recommendations issued in respect of relevant policies;
- (b) Mr. Al-Atiyyah insisted upon the importance of including the issue of water and energy in Commission discussions, and called for side events related to that field to be organized;
- (c) Organizations should be encouraged to exploit the convening of CSD-15 to announce regional initiatives and partnerships in respect of the four issues.

III. REPORT OF THE FOURTEENTH SESSION OF THE UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT (CSD-14): REGIONAL DISCUSSIONS HELD BY THE COUNTRIES OF WESTERN ASIA

- 8. In the light of the foregoing, this section reviews the most important components of the CSD-14 report concerning the regional discussions held by the countries of Western Asia, in order to enable the members of the ESCWA Committee on Energy to consider and take them into account in their discussions.
- 9. Regional discussions at CSD-14 were based on the reports on the outcomes of the regional implementation meetings that were organized by regional committees before CSD-14 and the proposals put forward by members invited to round-table discussions. It should be noted that the Arab intergovernmental implementation meeting was held in association with the seventh session of the Joint Committee for Environment and Development in the Arab Countries (JCEDAR), from 13 to 15 November 2005. The parts of the CSD-14 report which relate to the countries of the region set forth the following information:
- (a) Participants noted the wide discrepancies between oil-producing and non-oil-producing countries in respect of resources for energy and development. Notwithstanding the fact that oil and natural gas constitute the biggest economic sector in the region, more than 20 per cent of the population of ESCWA member countries have no access to modern energy services. Providing the population with energy and ensuring dependable supplies of energy to the global market constitute growing challenges;
- (b) Certain delegations stressed that meeting the global demand for cheap energy while curbing its impact on the environment made it essential to encourage the balanced and intelligent use of cleaner fossil fuels and renewable energy. The use of such advanced fossil fuel technologies as carbon extraction and storage will be essential in curbing greenhouse gas emissions and require the development and transfer of technology through a number of measures, including development cooperation and technical assistance. A variety of projects have established the ability of such renewable energy resources as solar-powered water heaters and small-scale photo-voltaic applications to provide services to poor persons living in urban and rural areas. Albeit large wind farms and solar power generation stations that operate on the basis of combined cycles are afforded the necessary opportunities, renewable energy constitutes a mere 0.1 per cent of all energy consumed in the region. Lack of political support, high cost, lack of the necessary capital for investment and lack of awareness of new technologies all constitute obstacles to the increased use of renewable energy;
- (c) Many of the programmes that are applied in the region with the aim of improving energy use efficiency have increased levels of local expertise. The general policy options that have been adopted in order to improve energy use and efficiency include the following: the changeover from the use of oil to the use of natural gas; increased levels of technology; advanced fossil fuel exploration and refining technology transfer; strengthening regional cooperation over electricity grid links and gas pipelines; and the implementation of programmes for testing and maintaining vessels in the transport sector. Four fields have been identified as having priority in discussions, namely, alleviating poverty by improving access to energy; improving energy efficiency; continuing efforts to discover new resources; and expanding the use of types of fuel that are more environmentally sustainable;

¹ E/2006/29-E/CN.17/2006/15, paragraphs 194-198.

- (d) The need has been accepted for the formulation of the programmes necessary to improve monitoring and control of air pollution, supported by the transfer of technology, establishment of partnerships and interchange of information. With respect to industrial development, there is a need to strengthen the participation of the private sector and improve and support waste management by evaluating the life cycle of products, establishing national waste recycling centres and exchanging information on best practices;
- (e) Emphasis was placed on the need for heavy investment in order to meet the growing demand for energy in the region, and on the important role played by regional banks. There is a need to formulate plans for micro credit and other innovative funding mechanisms in order to increase access to energy services in rural and remote regions. Delegations were of the view that regional and international funding was essential.

IV. SET OF POLICIES WHICH IT IS PROPOSED THE ARAB COUNTRIES SHOULD ADOPT DURING CSD-15

- 10. As part of the Arab preparations for CSD-15, the eighth session of JCEDAR, which was held in Cairo from 21 to 23 November 2006, discussed the proposal put forward by ESCWA concerning alternative policies that could be pursued by member countries, or which have been identified by those countries in respect of the four issues of the Commission's 2006-2007 implementation cycle, and the relevant practical measures that have been successfully applied or proposed in the countries of the region. The proposal was discussed and amended by experts from member countries. Subsequent to the adoption of the amended proposal by the Council of Arab Ministers Responsible for the Environment (CAMRE) at its eighteenth session, which was held in Algeria on 19 and 20 December 2006, as part of its resolution 250 of 18-20 December 2006, ESCWA sent the relevant document to the secretariat of the Commission on Sustainable Development, in order to provide the basis for information related to the region in the report of the Secretary-General of the United Nations to the Intergovernmental Preparatory Meeting, which will be discussed by country representatives before a negotiated draft document is issued by CSD-15.
- 11. Set forth below is a review of the policies and practical measures that have been applied in respect of each of the four issues and, in particular, the field of energy.

A. IN THE FIELD OF ENERGY FOR SUSTAINABLE DEVELOPMENT

- 12. The Arab energy sector plays an important role at the regional and global levels, making as it does a significant contribution to guaranteed international energy requirements and providing the region with an essential source of income that is represented by revenues from oil and natural gas exports, as well as ensuring the supply of energy requisite for social and economic development in the countries of the region. Notwithstanding its vital role, the sector faces a number of problems that affect the chances of achieving energy for sustainable development-related goals. Those problems include the increasing demand for energy; the insufficient and irregular supply of electricity to impoverished areas; the need to improve energy production and consumption efficiency; lack of support for the development of the use of renewable energy; and the lack of the mechanisms necessary for the support of the transfer and adaptation to the region of advanced energy technologies.
- 13. Over the past 20 years, the Arab countries have exerted strenuous efforts in order to improve the electricity sector and involve it in the achievement of sustainable development. Perceptible but insufficient progress has been made. Set forth below is a review of the core policies and measures that have been involved in Arab country endeavours or are being steadily applied. However, greater regional and international support remains necessary if implementation is to be extended.
- (a) Supplies of reasonably-priced modern energy must be extended to the whole population, particularly in poor and rural areas, using a mixture of the available traditional and renewable resources, as appropriate to the circumstances of each country;

I

- (b) Energy production and use efficiency must be improved in all sectors and, in particular, in energy-intensive industries, the transport sector and the electricity-generation sector, and an energy labelling system must be promoted;
- (c) There must be greater investment in oil and gas exploration and production activities, using cleaner technologies and taking the necessary measures to reduce the environmental impact of the sector;
- (d) The development and use of cleaner types of fuel and, in particular, natural gas, must be increased, especially in the transport and electricity sectors;
- (e) Attention must be paid to the development of renewable energy technologies, and their application must be supported wherever possible, in accordance with the circumstances of each country in the region;
- (f) The economic management of the energy sector must be supported through a gradual review of energy prices, while energy supplies for poor persons remain subsidised;
- (g) The private sector must be encouraged to take part in establishing and managing energy facilities and, in particular, electricity-generation stations and distribution networks, and in establishing energy service companies;
- (h) The resources necessary for capacity-building, technology transfer and energy systems must be made available in order to meet the growing need for energy;
- (i) Action must be taken to strengthen regional and sub-regional cooperation and existing relevant mechanisms must be supported;
- (j) Action must be taken to strengthen cooperation with funding agencies, particularly with respect to training programmes, capacity-building and technology transfer and harmonization. Available mechanisms, including the Clean Development Mechanism (CDM) and the Global Environment Facility (GEF), must be exploited and capacities in that field improved.
 - B. IN THE FIELDS OF AIR POLLUTION, CLIMATE CHANGE AND INDUSTRIAL DEVELOPMENT
- 14. In view of the close connection between achieving the goals of energy for sustainable development and the three other CSD-15 issues, this section of the report presents the members of the ESCWA Committee on Energy with basic information and the relevant policies contained in the above-mentioned Arab proposal.

1. In the field of air pollution

- 15. Most Arab countries have promulgated laws aimed at protecting the environment, and many of them have formulated measures relating to air quality that are consistent with the guiding international principles. The issue of air quality and pollution has been approached in the Arab region through research into methods of energy production and use. Many of the countries of the region have also prepared surveys of emissions. Institutional capacities in respect of managing and arresting air pollution vary from country to country. The adoption of clean energy programmes, the use of efficient modern technology and the adoption of environmental standards have led to a noticeable improvement in the quality of the air in the region. Set forth below are a number of energy sector-related policies and arrangements, which the region needs greater support in promoting:
- (a) Adoption of advanced and environmentally sound methods of urban planning which use low levels of energy;
- (b) The use of sustainable transport programmes, including modern and effective traffic management systems that will help to reduce time wasted in city traffic, which increases emissions;

- (c) Efforts must continue to phase out leaded petrol, replace vehicles, modernize antiquated production installations, provide cleaner fuels and, in particular, natural gas, and increase the number of trees in urban areas.
- 16. It should be noted that Arab countries must request the international community to provide them with technical and financial assistance in dealing with air quality and pollution issues, including trans-national air pollution, and to support the formulation of joint programmes for dealing with priorities common to the countries of the region in respect of monitoring and arresting air pollution and evaluating its impact.

2. In the field of climate change

- 17. The hot and humid climates prevalent in the Arab region mean that air conditioning is heavily used. Furthermore, the scarcity of rain and water resources, particularly in the Gulf Cooperation Council (GCC) States, makes it necessary to build water desalination-related capacities to a high level. Those factors lead to a relatively high consumption of electricity and high levels of carbon dioxide emissions. Varying levels of greenhouse gas emissions reflect the varying levels of energy consumption in the Arab countries, varying levels of growth, the quality of the fuel used and changes in climatic conditions. With a view to curbing the effects of climate change, the Arab countries are exerting a number of endeavours that should be supported by the international community by the following means:
- (a) Support for the efforts of the Arab countries to build institutional capacities in the field of climate change and assistance in evaluating the economic and environmental impact of climate change and the arrangements necessary in order to adapt thereto;
- (b) The international community and, in particular, GEF, must assist the Arab countries in adapting environmentally sound technologies and transferring them to the region;
- (c) Support for regional cooperation in arresting climate change and strategies for curbing its impact; assistance in joining Arab to international efforts in that regard;
- (d) Mitigating the impact of policies and measures adopted by the industrialized countries in order to comply with the United Nations Framework Convention on Climate Change and the Kyoto Protocol to the Convention, and providing compensation for the losses sustained by Arab countries as a result of those measures.

3. In the field of industrial development

- 18. Oil and gas resources play an important role in the economies of the Arab region as a basic input to the energy-intensive value-added industries that are largely found in oil-producing countries. The mining and processing of industrial minerals, which has kept pace with the growth in fossil fuel extraction, constitute an important source of foreign currency in the region. Sustainable industrial development continues to face several challenges in the region, including protection against competing imports, financial subsidies and discrimination by Government procurement in favour of public sector industries. Such challenges impede the changeover to cleaner production methods.
- 19. The countries of the region have increasingly begun to consider the environmental management of industry as an effective method of improving production processes and materials and reducing the waste generated thereby, particularly in large-scale industries. The Arab countries need greater clean production technology transfer and to develop such technology through policies and measures that will promote the following:
- (a) Development of private sector participation, particularly in sustainable industries and the provision of financial and technical support to small and medium-sized enterprises, enabling them to meet environmental requirements;

Γ

- (b) Recovery and recycling of waste and establishment of national centres for grading and sorting waste for recycling purposes; the sustainability of processes and products by adopting the methodologies necessary for life-cycle assessment and the environmental management of industries;
- (c) Adoption of the methods necessary to improve sustainable consumption, clean production and ecolabelling, in addition to the establishment of innovative funding mechanisms to promote the involvement of the private sector;
- (d) Support for research and development aimed at improving industrial practices, by developing and encouraging the use of environmentally sound technologies and reducing their cost; the introduction of voluntary initiatives to encourage the use of those technologies, while enforcing compliance by the industrial sector with emission standards;
- (e) Integration of sustainable approaches in the industrial sector with similar efforts in the services, infrastructure and resource and, in particular, energy and water resource, management sectors;
- (f) Establishment of a regional system for information networks, with the aim of disseminating information on legislation, emissions standards, clean technologies, waste reduction and the environmental management of industry;
- (g) Increased public awareness and participation through the facilitated flow of information from the industry sector and Government to the public and other stakeholders and vice versa;
- (h) Adoption of internal and external monitoring systems, self-monitoring and auditing schemes to achieve international environmental commitments and improve efforts aimed at maintaining a clean environment for the benefit of workers and surrounding communities.

C. ACHIEVEMENTS AND SUCCESSFUL PRACTICAL PROCEDURES PROPOSED FOR OR BEING IMPLEMENTED IN THE COUNTRIES OF THE REGION

1. *In the field of improved energy efficiency*

20. Several Arab countries have adopted successful programmes for improving the efficiency of energy production and consumption, particularly in the electricity production, industrial and housing sectors. Such programmes have led to an increase in the capacity of large groups of nationals, including energy programme managers, engineers and technicians, and the establishment of energy service companies. ESCWA is currently implementing a project for energy efficiency in the Qatari electricity sector.

2. Regional cooperation projects

21. In recent years, the Arab countries have made perceptible progress in the linking of electricity grids and establishment of natural gas pipelines. A number of regional and sub-regional projects are at various stages of implementation: some have been running successfully for years. Once all those projects are complete, most of the Arab countries will have inter-linked electrical grids.

3. Partnership on energy for sustainable development

22. Through CAMRE, in cooperation with ESCWA and the United Nations Environment Programme-Regional Office for Western Asia, JCEDAR was established and has taken initiatives and issued a number of Arab declarations expressing the concerns and commitments of the Arab countries in respect of sustainable development, foremost among which are the 2002 Arab Initiative for Sustainable Development and the 2003 Abu Dhabi Declaration on the Environment and Energy.

- 4. Support for regional cooperation in the filed of energy for sustainable development
- 23. In 2000, ESCWA established the regional mechanism for the development of energy systems for sustainable development, which is a regional mechanism that aims to achieve a network of relevant national institutions in the countries of the region, in order to exchange expertise. It has proven effective in supporting regional cooperation, particularly in the field of developing systems of renewable energy and promoting their application, and in improving energy efficiency and optimum use, by implementing training programmes and building and supporting relevant capacities.
 - 5. In the field of projects related to the Clean Development Mechanism
- 24. Several Arab countries have established national programmes to promote participation in CDM, and have set up specialized national bodies, implemented projects as part of CDM in cooperation with the industrialized countries, and prepared projects for submission to CDM. Capacity-building programmes have been inaugurated: the first was administered by ESCWA in late 2006. Nevertheless, equitable geographical distribution between the various regions of such projects must be ensured.
 - 6. In the field of advanced fossil fuel technologies
- 25. Arab countries have achieved remarkable success in introducing advanced fossil fuel technologies, including the use of cleaner types of fuel and, in particular, natural gas, and in developing possibilities for cleaner fuel production in oil refineries, improving fossil fuel specifications and adopting a system for inspecting and maintaining vehicle engines.
- 26. This document is submitted to the Committee for its consideration and discussion and for the use of members of the Arab bureau and delegations who will participate in the Intergovernmental Preparatory Meeting and the meetings of CSD-15.

