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**REVIEW OF ACTION TAKEN IN THE FIELD OF ENERGY SINCE THE SIXTH
SESSION OF THE COMMITTEE ON ENERGY**

**PROGRESS MADE IN CARRYING OUT ENERGY-RELATED ACTIVITIES
WITHIN THE FRAMEWORK OF ESCWA'S PROGRAMME OF WORK
SINCE THE SIXTH SESSION OF THE COMMITTEE ON ENERGY**

Summary

Since the sixth session of the Committee on Energy, the Economic and Social Commission for Western Asia (ESCWA) has carried out a set of activities under subprogramme 1 of its strategic framework for 2006-2007 and 2007-2008: "Integrated management of regional resources for sustainable development". These activities focused on enhancing national capabilities and providing advisory services in the energy area, producing technical studies and implementing field projects on energy for sustainable development, working with member countries on how best to formulate policies and take measures to help improve the sustainable management of energy resources and achieve the Millennium Development Goals (MDGs).

This document contains a review of the progress achieved in implementing these activities which have been classified according to their expected accomplishments as laid down in the programme of work of the biennium 2006-2007, endorsed by ESCWA at its twenty-third session, and in the programme of work of the biennium 2008-2009, endorsed by ESCWA at its twenty-fourth session, both approved by the United Nations General Assembly.

This document is submitted to the Committee on Energy so that it may review and discuss the progress made in the implementation of ESCWA's energy-related activities and put forward proposals for following up on the results of these activities.

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Introduction

1. The Economic and Social Commission for Western Asia (ESCWA) has assumed responsibility for implementing programme 18 of the United Nations strategic framework, concerned with fostering economic and social development in Western Asia. The general orientation of programme 18 in the proposed Strategic Framework for 2006-2007¹ was the strengthening of sustainable, comprehensive, equitable and integrated development and of economic and social cooperation in the region, and the establishment and consolidation of economic relations between ESCWA member countries and the rest of the world. The general orientation of programme 18 in the proposed strategic framework for 2008-2009,² on the other hand, is to encourage the adoption of economic and social development policies that reflect the commitments made at major United Nations summit meetings and other conferences with the aim of achieving the Millennium Development Goals (MDGs).
2. Between the sixth session of the Committee on Energy, held in Doha on 4-5 February 2007, and the current session, ESCWA has implemented a set of activities in the framework of the expected accomplishments laid out in subprogramme 1, for which ESCWA's Sustainable Development and Productivity Division (SDPD) is responsible. These activities cover part of the 2006-2007 biennium and part of the 2008-2009 biennium, and are related to accomplishment (a) of subprogramme 1 of the programme of work for 2006-2007 and accomplishments (a), (b) and (c) of subprogramme 1 of the programme of work for 2008-2009.
3. These activities had as their purpose to enhance the capacity of member countries to sustainably manage their natural resources, with particular emphasis on the water, energy, environmental protection and production sectors. They were therefore focused on capacity-building, the provision of advisory services and the conduct of field studies on energy, in order to work with member countries to best formulate, adopt and implement policies for achieving the sustainable and integrated management of energy resources and for attaining the MDGs.
4. This document contains a review of the progress achieved in implementing these activities, classified according to their expected accomplishments as laid down in the programme of work for 2006-2007,³ endorsed by ESCWA at its twenty-third session, and in the programme of work for 2008-2009,⁴ endorsed by ESCWA at its twenty-fourth session, both approved by the United Nations General Assembly.

I. ENHANCED CAPACITY OF MEMBER COUNTRIES TO FORMULATE AND ADOPT INTEGRATED, ENVIRONMENTALLY-SOUND POLICIES, AND TO INTRODUCE MECHANISMS FOR IMPROVING THE SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES, WITH PARTICULAR EMPHASIS ON THE WATER, ENERGY, ENVIRONMENTAL PROTECTION AND PRODUCTION SECTORS

5. Achieving this expected accomplishment means increasing awareness and knowledge among those concerned with the basic issues involved in energy for sustainable development, especially as concerns alleviating poverty, changing unsustainable practices in the production and consumption processes, conserving and managing resources in the service of development, and defining the policies and measures needed to increase energy use efficiency and demand management.

¹ United Nations, fifty-ninth session of the General Assembly, Proposed strategic framework for 2006-2007, part two, Programme 18, Economic and Social Development in Western Asia (Prog. 18, A/59/6).

² United Nations, sixty-first session of the General Assembly, Proposed strategic framework for 2008-2009, part two, Programme 18, Economic and Social Development in Western Asia (Prog. 18, A/61/6).

³ ESCWA, twenty-third session, draft programme of work for 2006-2007 (E/ESCWA/23/7).

⁴ ESCWA, twenty-third session, draft programme of work for 2006-2007 (E/ESCWA/23/7).

A. STUDY ON RATIONALIZING ENERGY CONSUMPTION AND IMPROVING ENERGY EFFICIENCY IN THE MAJOR ENERGY PRODUCTION SECTORS IN SELECTED ESCWA MEMBER COUNTRIES (E/ESCWA/SDPD/2007/8)

6. Until 2006, ESCWA's activities in the area of improving energy efficiency and rationalizing energy consumption were concentrated on the highest energy-consuming sectors, namely, construction, transport, manufacturing and electric power production. To supplement previous studies on production and consumption, and pursuant to the recommendations of the Committee on Energy at its fifth and sixth sessions, ESCWA's programme of work for 2006-2007 included the publication of a study on rationalizing energy consumption and improving energy efficiency in the major energy production sectors of selected ESCWA member countries. This study, prepared and published by ESCWA in 2007, focuses on the oil and gas sector, the main energy production sector in the region.

7. The study aims to familiarize member countries with measures used elsewhere to improve energy use efficiency in the oil and natural gas production sector which could potentially be applied in the ESCWA region. The study describes the basic technologies used in this sector and ways of rationalizing energy consumption and improving its efficiency that are already in use, including those available internationally and potentially applicable. It also describes measures adopted by some countries of the region in their oil and gas production processes to preserve the environment. In this context, the methodology employed in the study is based mainly on the following: (a) review of published research and data on oil and gas sector activities in the region, and the efforts being made to increase energy use efficiency in the production process in this sector; (b) design of a questionnaire and its distribution to member countries to collect relevant data; and (c) analysis of the data and information submitted. The study includes three case studies on measures adopted in Kuwait, Qatar and the Syrian Arab Republic.

8. The study reaches a number of conclusions which demonstrate: the current level of relevant expertise in the countries of the region; the techniques used, and potentially applicable, to rationalize energy consumption in the different stages of oil and gas production; and measures and standards adopted in this important sector to preserve the environment. Following are the most important conclusions reached:

(a) Most member country oil and gas companies have kept pace with state-of-the-art technologies in this industry and are continuing to develop their production processes, including the adoption of measures to improve energy efficiency in the different stages of production;

(b) Advanced drilling technologies have contributed to reducing both energy consumption and drilling costs as well as helping to protect the environment. Directional drilling has reduced drilling costs by between 50 and 75 per cent while the reduction attributable to small diameter drilling is 30 to 40 per cent;

(c) Since electric power is one of the main energy sources for production operations in the oil and gas sector, improving the efficiency of electrical equipment used and rationalizing electricity consumption in production processes can improve the economics of these operations;

(d) Energy efficiency can be improved by replacing small-diameter pipes with larger pipes in oil and gas transport operations and pipeline networks by using high-pressure transport pipelines. Moreover, the use of photovoltaic (PV) cathode protection systems can increase the service life of oil and gas pipeline networks;

(e) The implementation of energy consumption rationalization programmes in the oil and gas sector requires a number of measures, most importantly: providing a basic information infrastructure; offering advanced training to professionals in relevant areas; enhancing the capabilities of existing energy service companies and/or setting up national energy service companies;

(f) It is proposed that the regional organizations concerned, including ESCWA and the Organization of Arab Petroleum Exporting Countries (OAPEC), develop regional training programmes in the relevant areas in coordination with those countries of the region possessing the appropriate expertise in developing the different processes in this sector.

B. COOPERATION AGREEMENT BETWEEN ESCWA AND QATAR ON IMPROVING ENERGY
EFFICIENCY IN THE QATARI ELECTRICITY SECTOR

9. On 1 February 2006, ESCWA signed an agreement with Qatar General Electricity and Water Corporation (KAHRAMAA) aimed at establishing the Cooperation Programme on Energy Efficiency for the Qatari Electricity Sector within the framework of activities to improve energy efficiency and to support the contribution of the energy sector to achieving sustainable development in member countries. The Committee on Energy had reviewed at its sixth session, held in Doha on 4-5 February 2007, the general framework, scope of work, implementation phases, and progress made in the implementation of this agreement as well as the initial results reached.

10. At its current session, the Committee will be presented with the document E/ESCWA/SDPD/2009/IG.1/5(Part III) which provides a brief background to the general framework, scope of work, implementation phases, and progress made up to February 2007. The document goes on to describe the activities carried out since the Committee's sixth session and the results achieved, especially those relating to electricity demand management measures, peak loads and emissions up to 2020. The document also describes the main components of the proposed programme for improving electric power consumption efficiency in Qatar.

C. THE FOURTH MIDDLE EAST AND NORTH AFRICA RENEWABLE ENERGY CONFERENCE

11. The Fourth Middle East and North Africa Renewable Energy Conference (MENAREC4) was held in Damascus and Palmyra in the Syrian Arab Republic on 21-24 June 2007. The conference was organized thanks to cooperation among ESCWA, the Syrian Ministry of Electricity, represented by the National Energy Research Center, and other organizing bodies, including Germany's Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, and the United Nations Environment Programme (UNEP). Further support was provided by Egypt's New and Renewable Energy Authority, Jordan's National Energy Research Center and the Arab European Cooperation Centre in the Syrian Arab Republic.

12. The main theme of the conference was "The way forward for renewable energy development, technology transfer and assimilation, and enhanced cooperation between the European Union and the Middle East and North Africa (EU-MENA)". The conference sought to increase EU-MENA cooperation in developing renewable energy technologies and transferring them to the countries of the region. It provided a good opportunity for national, regional and international energy experts to discuss and exchange opinions, information and expertise about developing renewable energy technologies and transferring them to the countries of the region, focussing on the following topics:

- (a) Results of MENARAC 1, 2 and 3;
- (b) Surveys, assessments and prospective uses of renewable energy resources in the MENA countries;
- (c) Review of world developments in renewable energy technology and efficiency;
- (d) Enhanced EU-MENA cooperation in renewable energy technology transfer and assimilation;
- (e) Policies and legislation needed to promote the use of renewable energy in the countries of the region;
- (f) Tools for financing and raising awareness about using renewable energy at the local and regional levels;
- (g) Policies and measures needed to increase the contribution of renewable energy to the overall energy balance in the countries of the region.

13. During this conference, ESCWA organized a discussion about renewable energy and technology transfer to the MENA countries in which experts from both European and Arab countries took part. The participants were presented with the results of four surveys conducted in Egypt, Jordan, the Syrian Arab Republic and Yemen. There was discussion of the current status of renewable energy and its manufacturing technologies, and the opportunities and challenges which its manufacture presents for the MENA countries. Discussion further covered ways to enhance EU-MENA cooperation in renewable energy technology transfer.

14. At the end of the conference, participants issued the Damascus Declaration which stressed the importance of energy diversification given its potential contribution to sustainable development; called on participant countries to set down national objectives for developing renewable energy, improving energy efficiency and devising and implementing plans in line with each country's resources and needs; emphasized the need for cooperation with the advanced countries and with regional and international funding bodies in transferring renewable energy technology and its applications to the MENA region and in developing strategies and policies able to promote the role of the energy sector, especially the renewable energy sector, in achieving sustainable development.

II. ENHANCED CAPACITY OF MEMBER COUNTRIES TO FORMULATE, ADOPT AND IMPLEMENT POLICIES FOR IMPROVING THE SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES, WITH PARTICULAR EMPHASIS ON THE FULFILMENT OF THE MDGS

15. In the context of realizing this accomplishment, especially as it relates to achieving sustainable patterns of energy production and consumption and developing renewable energy uses in the different economic sectors, ESCWA issued a number of technical documents and studies in 2007 and 2008. It also organized and took part in a number of related workshops. These documents and activities aimed to make available to those working in the energy sector technical information about particular energy-related issues and to offer recommendations on the measures needed for the adoption and implementation of policies to improve the sustainable management of the energy sector which could contribute to achieving sustainable development in the countries of the region. Following are the main activities carried out by ESCWA in this area:

A. EXPERT GROUP MEETING ON "SUSTAINABLE CONSUMPTION AND PRODUCTION" IN AL-AIN, ABU DHABI, 17-19 MARCH 2008

16. ESCWA organized this meeting, hosted by the Federal Environment Authority of the United Arab Emirates, in cooperation with the League of Arab States, UNEP and the United Nations Commission on Sustainable Development. The first meeting on sustainable consumption and production for experts from the Arab region, it aimed to: identify the main regional priorities for sustainable consumption and production; review current initiatives in the area of sustainable production and consumption in the Arab region; participate in the Marrakech Process and assess the regional situation with a view to elaborating a ten-year framework of programmes on sustainable consumption and production; strengthen cooperation among the Arab region, the Marrakesh Process team and other partners such as development organizations, business sector and non-governmental organizations (NGOs) in carrying out activities relating to improving the sustainability of production and consumption processes in various sectors, including the energy sector. The meeting concluded with a set of recommendations, of which the most important were:

(a) Entrust the secretariat of the Council of Arab Ministers Responsible for the Environment (CAMRE) of the League of Arab States⁵ to prepare the draft Arab report on sustainable production and consumption, based on the results of this meeting, within the Marrakesh 10-year plan for sustainable production and consumption, and in the context of the sustainable development initiative in the Arab region;

⁵ The secretariat works in the area of sustainable development through the existing partnership among the League of Arab States, ESCWA and UNEP.

(b) Request the Marrakesh Process team to consider establishing an action team on transferring technologies related to sustainable production and consumption with particular reference to small and medium enterprises (SMEs), within the framework of regional and international cooperation among countries of the South, and between the South and the North;

(c) Entrust UNEP and the United Nations Industrial Development Organization (UNIDO) to create an Arab network linking national centres for clean production in the Arab region to facilitate the exchange of expertise and experience and to support Arab resolutions on clean production;

(d) Urge Arab funding bodies to provide support for sustainable production and consumption programmes in the Arab region while insisting on the need for the advanced countries to fulfil meet their commitments to provide technical and financial support to developing countries, including Arab countries, in compliance with Agenda 21 and the Johannesburg Plan of Implementation.

B. TECHNICAL SUPPORT ACTIVITIES UNDERTAKEN FOR YEMEN

17. Within the framework of technical support programmes undertaken by ESCWA in the service of member countries, ESCWA carried out a number of such activities in Yemen in response to technical support requests made by relevant Yemeni bodies. Following is a review of these activities:

1. *Workshop on Energy Efficiency Improvement (Sana'a, 26-28 January, 2008)*

18. In collaboration with the Yemeni Ministry of Electricity, ESCWA organized this workshop to promote improvements in energy efficiency and demand management. The workshop was attended by 60 experts from relevant ministries, especially Ministry of Electricity and Ministry of Oil and Minerals. ESCWA participated in the preparation and presentation of working papers, which examined the following issues:

(a) The integrated management of energy resources and demand, including: the energy balance; prerequisites for integrated energy resource management and the constraints impeding its realization; procedures, evaluation criteria and implementation guidelines for managing electric power demand at the national level;

(b) Methods for auditing energy, energy audits of industrial processes and thermal systems, and systems for managing the environment.

17. The workshop concluded with a number of recommendations, including:

(a) Perform energy audits in locations representative of different consumption sectors;

(b) Support the private sector in the establishment of energy services companies (ESCOs) to participate both in energy audits and in the implementation of recommendations arising from these audits;

(c) Organize specialized courses on ways of improving energy efficiency and energy demand management, such as improving the electrical capacity coefficient, and ways to develop the electricity tariff;

(d) Organize awareness-raising campaigns on rationalizing energy consumption, improving energy efficiency and managing energy demand, targeting different segments of society, especially professionals in various sectors and students at all levels. Incorporate into school curricula issues surrounding the rationalization of energy consumption;

(e) Work towards applying energy efficiency labels and codes, especially on household appliances.

2. *Seminar on "Clean Fuels National Policy in Yemen", Sana'a, 15-16 October, 2008*

20. ESCWA organized this seminar in collaboration with Yemeni Ministry of Water and the Environment and the Ministry of Oil and Minerals. The two ministers concerned attended both the opening and closing

sessions of this seminar, in which 25 national experts and officials from relevant ministries participated. The seminar provided an opportunity to gather data and exchange views in order to prepare the required document, and for discussing issues relating to clean fuel production and use in Yemen, including:

- (a) The importance of a national clean fuels policy document;
- (b) The current situation with regard to fuel oil specifications and potential improvements in its quality;
- (c) Feasible options for deleading gasoline;
- (d) Statutes and laws relating to fuel oil production and use;
- (e) Benefits of and impediments to carrying out clean fuels projects;
- (f) Overall framework for the document and its components.

3. *Training of Trainers Workshop in Performing Energy Audits, Sana'a, 18-22 October, 2008*

21. ESCWA organized this workshop at the request of the Yemeni Ministry of Electricity and in cooperation with the Ministry's Public Electricity Corporation. Sixteen engineers were trained to perform energy audits in different sectors so that they could in turn train other experts and thus spread the benefit of this knowledge. This will enable the Ministry of Electricity to establish a special directorate to deal with the rationalization of energy consumption and to organize, in collaboration with those experts, an extensive educational campaign to raise Yemeni citizens' awareness of the economic and social benefits of rationalizing energy consumption at both the household and national levels. The training programme covered three main areas:

(a) Theoretical review of energy audits explaining: the requirements, steps, procedures and information needed to perform such audits; opportunities and procedures for improving energy efficiency, including that of lights, air-conditioners, air compressors and pumps; opportunities and measures for improving heat efficiency such as heat insulation, burn efficiency control, high-efficiency steam systems, heat recovery and combined generation, and use of renewable energy in buildings;

(b) Energy audits in the field, at the Amran Cement Plant and the Sheraton Sana'a Hotel, where the trainers were instructed in field measurements, data gathering, oversight of energy systems in the field, monitoring and identifying opportunities to rationalize power consumption and improve energy efficiency, and preparing energy audit reports;

(c) Analysis of measurements taken and data collected during the field audits and presentation of findings, where the participants presented the most important findings and put forward relevant recommendations.

C. EXPERT GROUP MEETING ON BEST PRACTICE AND MEASURES FOR PROMOTING RENEWABLE ENERGY APPLICATIONS IN THE ESCWA REGION, BEIRUT, 3-4 FEBRUARY, 2009

21. It was decided, pursuant to the 2008-2009 programme of work in the field of energy, that this meeting should coincide with the seventh session of the Committee on Energy. During this meeting, technical papers will be presented examining: best practice in implementing renewable energy technologies in the countries of the region and the feasibility of replicating them in other countries; examples of projects implemented; and the role of renewable energy in reducing the impact of climate change in the countries of the region.

D. OCCASIONAL PUBLICATIONS ON ENERGY FOR SUSTAINABLE DEVELOPMENT

22. ESCWA's programme of work in the field of energy for 2008-2009 included the preparation of booklets presenting the best practices and tools available in the area of energy use for sustainable

development. A number of booklets and pamphlets were published on potential ways to improve energy use in the service of sustainable development in the Arab region, including:

- (a) Climate change and carbon capture and storage techniques;
- (b) Improving energy efficiency and rationalizing consumption in different economic sectors.

23. A CD-ROM was produced on the Clean Development Mechanism (CDM), containing the most important information about the use of this mechanism and a summary of discussions about its future which came up during the United Nations Climate Change Conference – COP 14 in Poznan, Poland, on 1-12 December 2008.

E. FOLLOW-UP OF ELECTRICITY AND NATURAL GAS SECTOR REGIONAL INTEGRATION PROJECTS

24. ESCWA prepared a report on the implementation status of all electricity linkage projects, especially those between Arab countries in general and the countries of the ESCWA region, as well as the most important developments in this field during the period 2007-2008. This report is included in E/ESCWA/GRID/2007/14, Annual Review of Developments in Globalization and Regional Integration in the Arab Countries, 2007.

F. MIDDLE EAST AND NORTH AFRICA RENEWABLE ENERGY CONFERENCE-MENAREC 5 (to be held in Morocco on 3-4 June 2009)

25. ESCWA is organizing this conference in collaboration with the Renewable Energy Development Center (REDC) in Morocco and UNEP and its Regional Office for Western Asia (UNEP/ROWA). ESCWA intends to prepare two technical papers on renewable energy for achieving the MDGs and to organize a seminar on best practice in promoting high-capacity renewable energy applications to reduce the effects of climate change.

III. STRENGTHENING COOPERATION BETWEEN MEMBER COUNTRIES ON ENERGY AND WATER ISSUES, INCLUDING PREVENTING WATER- AND ENVIRONMENT-RELATED DISPUTES

26. ESCWA's activities in 2007-2008 towards fostering cooperation between member countries were based on the ongoing partnership between ESCWA and UNEP in carrying out programmes and activities of the Joint Committee on Development and Environment in the Arab World; the Council of Arab Ministers for Environment, League of Arab States; and the Council of Arab Ministers for Electricity, League of Arab States, in addition to cooperation and coordination with United Nations organizations working in the Arab region on climate change activities. The most important activities were focused on the following fields:

A. PARTICIPATION IN THE PROGRAMMES OF THE COUNCIL OF ARAB MINISTERS FOR ELECTRICITY OF THE LEAGUE OF ARAB STATES

1. *Preparation of terms of reference for the comprehensive Arab electricity linkage project and evaluation of the use of natural gas to export electricity until 2030*

27. During 2006-2007, ESCWA was part of the working team given responsibility by experts from the executive bureau of the Council of Arab Ministers for Electricity, League of Arab States, for preparing the terms of reference for this project, pursuant to a resolution to that effect adopted by the Arab Summit in Algeria, 22-23 March 2005.

2. *Working teams in charge of preparing proposals to be presented to the Arab Economic, Development and Social Summit*

28. ESCWA participated in the preparation of three proposals on: (a) diversifying electrical power resources and improving energy production and efficiency; (b) enhancing Arab integration and encouraging investments in the field of electrical equipment and replacement parts manufacturing; and (c) the

comprehensive Arab electricity linkage project. This last proposal was selected for submission to the summit.

3. *The seventh session of the Council of Arab Ministers for Electricity, League of Arab States, Cairo, 25 April 2007*

29. ESCWA participated in this session at which were discussed: the Arab electricity linkage; new and renewable forms of energy; support for the manufacture of electrical equipment for the production, transport and distribution of electricity in the Arab countries; and the exchange of information, expertise and training in the field of electricity between Arab countries.

4. *Workshop on policies and measures for promoting the use of new and renewable forms of energy*

30. ESCWA organized this workshop in collaboration with the secretariat of the Council of Arab Ministers for Electricity, League of Arab States, and the Arab Union of Producers, Transporters and Distributors of Electricity. Participants included 55 renewable energy experts from Arab and regional organizations as well as representatives of 12 Arab countries. The workshop focused on the following four points: (a) the institutional and legislative framework; (b) new and renewable forms of energy: research and development (R&D), technology transfer and funding; (c) renewable energy use in Arab countries and lessons drawn from past experiences; and (d) new and renewable energy technologies and the feasibility of their use in the Arab region. ESCWA prepared a technical paper on the first point. The workshop concluded by advancing a number of recommendations for promoting various uses of new and renewable forms of energy, covering: strategies and policies; R&D; technology transfer and assimilation; human development and capacity-building; awareness-raising and the media. ESCWA is continuing to work with the Council secretariat on the formulation of an Arab strategy to develop uses for renewable energy.

B. PARTICIPATION IN THE PROGRAMMES OF THE COUNCIL OF ARAB MINISTERS FOR ENVIRONMENT OF THE LEAGUE OF ARAB STATES

1. *Arab preparations for participation in the fifteenth session of the Commission on Sustainable Development (CSD)*

31. In view of ESCWA's responsibility within the United Nations system for Arab preparations for CSD sessions, and as part of finalizing activities undertaken up to February 2007, ESCWA carried out the following:

(a) Coordination with the League of Arab States mission and the Egyptian mission at the United Nations in New York, to organize a meeting of the Arab delegations. During this meeting the regional preparations for CSD-15 and the policy document adopted by the Arab group, were presented. This proved very important in harmonizing Arab positions during the negotiation rounds, especially between group members;

(b) Holding the regional session for the Arab region. During this session, ESCWA delivered a presentation on both the regional preparation mechanism and the policy document adopted by the Arab group and responded to points raised during the related discussion.

2. *Development of the Arab Framework Action Plan for dealing with Climate Change*

32. As part of the activities of the Joint Committee on Development and Environment in the Arab Region, League of Arab States, and in cooperation with international and regional organizations, ESCWA contributed to the development of the Arab Framework Action Plan for dealing with climate change. The action plan aims to strengthen the capacity of the Arab countries to take appropriate measures to deal with climate change through the adoption and implementation of policies and programmes which respond to the requirement of sustainable economic and social development while minimizing the region's exposure to the negative economic and social impact of climate change. The framework action plan proposes to: (a) evaluate

the potential impact of climate change on the Arab region and prepare to confront it while maintaining desired development rates; (b) accelerate the pace of sustainable development in Arab countries, including fulfilment of the MDGs; (c) contribute to the preservation and sustainability of natural resources; (d) enhance relevant human, technical and institutional resources; and (e) foster regional and international cooperation to support national programmes. Details of this draft framework action plan, including energy and transport programmes proposed by ESCWA, are found in document E/ESCWA/SDPD/2009/IG.1/4(Part I), entitled: "The role of the energy sector in confronting the potential effects of climate change: Framework for the programmes and activities required", submitted to the Committee on Energy at its current session.

3. *Meetings of the Sub-Committee on Climate Change*

33. ESCWA participated in the meetings of the League of Arab States' Sub-Committee on Climate Change, where the following issues were discussed: the impact of the implementation of the United Nations Framework Convention on Climate Change and the Kyoto Protocol on sustainable development in the Arab countries; follow-up to scientific and technical issues relating to the convention and the protocol; Arab preparations for the thirteenth session of the Conference of the Parties (COP 13) and for the third session of the Conference of the Parties to the Kyoto Protocol (COP/MOP 3), held in Bali, Indonesia, on 3-16 December 2007; recent developments in the light of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC); activities of the Regional Centre for Drought Control and the Early Warning of Acute Air Phenomena; and promotion of mechanisms for the exchange of information on climate, weather forecasting and activities relating to climate change.

C. COOPERATION WITH UNITED NATIONS ORGANIZATIONS ON CLIMATE CHANGE ISSUES

34. Within the context of the "Delivering as One" approach adopted by the United Nations system to harmonize its activities, ESCWA is part of the Climate Change Working Group (CCWG) of UNEP Finance Initiative (UNEP FI) and has carried out the following activities:

(a) Development of a cooperation framework between United Nations organizations working in the region on climate change issues. This framework was submitted to the Twelfth Regional Coordination Mechanism Meeting in Beirut on 13-14 September 2008;

(b) Participation in the first CCWG meeting in Cairo on 26 November 2008, where the responsibilities of different organizations were defined. ESCWA developed the regional programme on high-capacity uses for renewable energy.

IV. ENHANCING THE CAPACITY OF MEMBER COUNTRIES TO IMPLEMENT BEST PRACTICE IN IMPROVING RURAL SUSTAINABLE DEVELOPMENT AND SME COMPETITIVENESS BY USING ENVIRONMENTALLY-SOUND TECHNOLOGIES

35. ESCWA pursued the second phase of the project aimed at expanding the use of renewable energy services to reduce poverty in the rural areas of Yemen. This phase includes the development and implementation of the Ka'awa Village PV Electrification Project. During the preparations for supplying the necessary equipment and implementing the project, ESCWA experts: (a) conducted a technical study on the PV systems need and identified the technical and financial prerequisites for implementation; (b) developed designs, terms of reference and technical specifications for the supply, installation, testing and operation of the necessary PV systems. The bidding has closed, the contractor has been selected and project implementation has begun.
